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REMEDIAL INVESTIGATION FOR SITE 17 BUILDING 32 GOULD ISLAND VOLUME 2 OF 3
APPENDICES A - D NAVSTA NEWPORT RI
12/01/2006
TETRA TECH NUS

Remedial Investigation

for

Site 17: Building 32, Gould Island

Volume 2 of 3
Appendices A - D

Naval Station Newport
Newport, Rhode Island

Naval Facilities Engineering Command
Mid-Atlantic

Contract Number N62472-03-D-0057
Contract Task Order 35

December 2006

TETRA TECH NUS, INC.

W5206382F

REMEDIAL INVESTIGATION

FOR

SITE 17: BUILDING 32, GOULD ISLAND

NAVAL STATION NEWPORT
NEWPORT, RHODE ISLAND

COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT

Submitted to:
Naval Facilities Engineering Command Mid-Atlantic
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Norfolk, Virginia 19406-1433

Submitted by:
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CONTRACT TASK ORDER 35

December 2006

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BACKGROUND REPORT FOR GOULD ISLAND

Background Summary Report

for

Site 17
Building 32, Gould Island

Naval Station Newport
Newport, Rhode Island

Environmental Field Activity Northeast
Naval Facilities Engineering Command

Contract Number N62467-94-D-0888
Contract Task Order 0842

July 2003

W5202276F

BACKGROUND SUMMARY REPORT

FOR

SITE 17
BUILDING 32, GOULD ISLAND

NAVAL STATION NEWPORT
NEWPORT, RHODE ISLAND

COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT

Submitted to:
Environmental Field Activity Northeast
Environmental Branch Code 18
Naval Facilities Engineering Command
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Lester, Pennsylvania 19113-2090

Submitted by:
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CONTRACT NUMBER N62467-94-D-0888
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1.0 INTRODUCTION

This document was prepared under the Comprehensive Long Term Environmental Action Navy (CLEAN) Contract No. N62467-94-D-0888, Contract Task Order (CTO) 842. The statement of work requires Tetra Tech NUS, Inc. (TtNUS) to perform a Background Report for Study Area 17, which consists of the Building 32 area on Gould Island, which is part of Jamestown, Rhode Island.

Gould Island is located in the East Passage of Narragansett Bay in Rhode Island, approximately 1.5 miles from the Naval Station Newport (NSN) shoreline. Gould Island is located between Aquidneck and Conanicut Islands, and occupies approximately 52 acres (Figure 1-1). Building 32, located on the northeast end of Gould Island, served as a torpedo overhaul shop that has been inactive since the 1950's (Figure 1-2). The electroplating shop, consisting of three rooms located within Building 32 was initially identified as a Study Area (SA 17) in the Federal Facilities Agreement (FFA). Evaluation of data collected in April 2000 resulted in agreement that the SA should be considered a "site" as defined in the FFA and that the site be inclusive of Building 32 and the area surrounding it.

This background memorandum has been prepared to summarize the many activities and data collected at Building 32 and surrounding areas that may be pertinent to the development of a remedial investigation work plan for the site. Several investigation work plans have previously been prepared for the site, however, extensive removal actions, investigations and building demolitions have occurred in recent years, and much of the background information in those work plans has become dated. This background report includes a summary of historical and recent activities conducted and the data collected so that the remedial investigation can be planned without duplication of previous sampling and data collection efforts.

The following major efforts have been summarized for this Background Report:

Tank Closures:

- An underground storage tank (UST) closure and follow-up monitoring was conducted at the former Building 44, located to the north of Building 32. This included two 5,000-gallon steel tanks and five 50,000-gallon concrete tanks. Records show that three concrete tanks stored No. 5 fuel oil, two stored No. 2 fuel oil, while one of the 5,000-gallon steel USTs stored No. 2 fuel oil and the other stored alcohol. The two 5,000-gallon USTs were emptied and removed from the site in 1989. The five 50,000-gallon USTs were also emptied and cleaned and then backfilled in place with clean fill (Tetra Tech NUS, Inc., 1999).

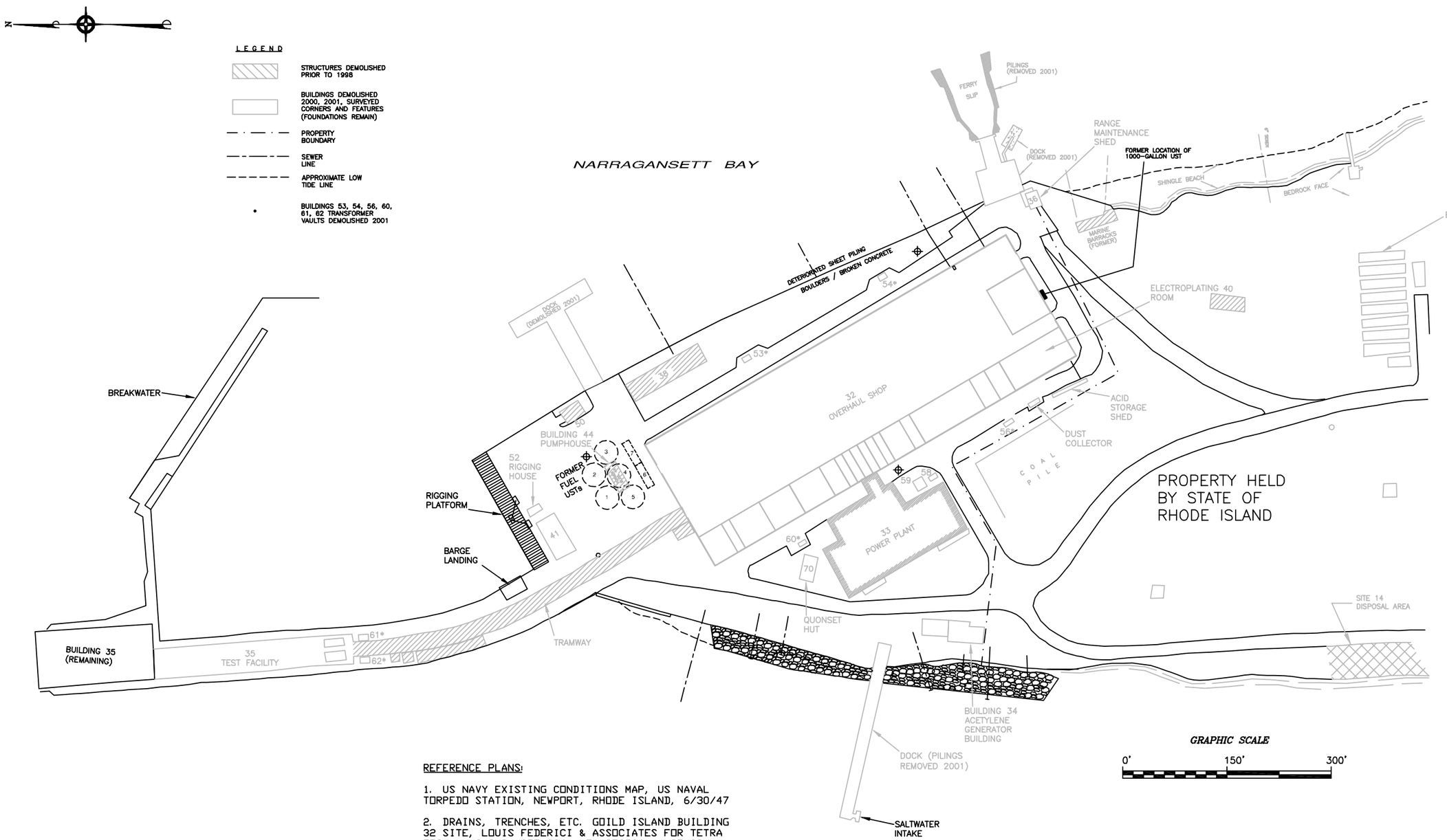
BASE MAP IS A PORTION OF THE FOLLOWING 7.5 X 15 MINUTE U.S.G.S. QUADRANGLE:
PRUDENCE ISLAND, RHODE ISLAND, 1955, PHOTOREVISED 1970 AND 1975

GRAPHIC SCALE
0 0.5 MILE 1 MILE

QUADRANGLE LOCATION

SITE LOCUS		FIGURE 1–1	
BUILDING 32, GOULD ISLAND		TETRA TECH NUS, INC.	
NAVSTA NEWPORT, RHODE ISLAND			
DRAWN BY:	D.W. MACDOUGALL	REV.:	0
CHECKED BY:	S. PARKER	DATE:	OCTOBER 7, 2002
SCALE:	AS NOTED	ACAD NAME:	DWG\5152\0410\FIG_1–1.DWG

55 Jonspin Road Wilmington, MA 01887
(978)658–7899



NOTES:

1. PLAN NOT TO BE USED FOR DESIGN.
2. ALL LOCATIONS TO BE CONSIDERED APPROXIMATE.
3. PHYSICAL FEATURES SHOWN MAY NOT DEPICT CURRENT CONDITIONS

REFERENCE PLANS:

1. US NAVY EXISTING CONDITIONS MAP, US NAVAL TORPEDO STATION, NEWPORT, RHODE ISLAND, 6/30/47
2. DRAINS, TRENCHES, ETC. GOILD ISLAND BUILDING 32 SITE, LOUIS FEDERICI & ASSOCIATES FOR TETRA TECH, NUS INC. CTO 286, LFA#970706, 4/25/00
3. GEOTECHNICAL SURVEY PLAN AT FORMER BUILDING 44 AND 32, US NAVAL BASE ON GOULD ISLAND, LOUIS FEDERICI & ASSOCIATES FOR BROWN & ROOT ENVIRONMENTAL, 9/8/97, DWG#970706-03
4. LOCATION OF MONITORING WELLS AT BUILDING 32 - GOULD ISLAND, U.S. NAVAL BASE NEWPORT, RHODE ISLAND, LOUIS FEDERICI & ASSOCIATES FOR TETRA TECH, NUS INC., 5/9/00

HISTORICAL FEATURES			FIGURE 1-2
SITE 17, GOULD ISLAND			TETRA TECH NUS, INC.
NAVSTA NEWPORT, RHODE ISLAND			55 Jonspin Road Wilmington, MA 01887 (978)658-7899
DRAWN BY:	D.W. MACDOUGALL	REV.: 0	
CHECKED BY:	L. SEYDEWITZ	DATE: APRIL 29, 2003	
SCALE:	AS SHOWN	FILE NO.: DWG\5152\0450\FIG_1-2.DWG	

- A UST closure was conducted in July 1997 on a 1,000-gallon UST on the south side of Building 32. This UST reportedly contained No. 2 fuel oil.

Waste Characterization and Removal:

- A waste inventory was performed in 1992 to determine the contents of miscellaneous drums and other containers in the buildings in this area for disposal. Bulk hazardous materials were subsequently removed.

Environmental Investigations:

- Early sampling efforts identified the presence of metals and cyanide in the sediment and mussels around Gould Island (Loureiro Engineering Associates, 1986).

- As part of the Building 44 closures, groundwater monitoring wells were installed to monitor contamination and a soil gas survey was conducted. Volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs) were detected in the groundwater and similar contaminants were identified in the soil gas surveys, including the VOC trichloroethene (TCE) in both soil gas and groundwater.

- The first phase of a Study Area Screening Evaluation (SASE) was conducted at Building 32 in March and April 2000. The SASE found chlorinated solvents and polynuclear aromatic hydrocarbons (PAHs) in soil gas and found metals in sludge and soil samples collected.

Demolition and Removal:

- A number of buildings were removed due to their deterioration and the physical hazards they presented. This work commenced on May 1, 2000 and consisted of asbestos abatement, hazardous materials removals, and demolition of buildings to the slab elevation only.

- Polychlorinated biphenyl (PCB) sampling was conducted under Toxic Substances Control Act (TSCA) regulations. PCBs were found in concrete and soil in, under, and near transformer buildings, which were demolished in 2001 and 2002.

- Demolition of many of the underwater structures, including the former ferry slip, the fuel docks, and other unnecessary pilings is noted, but not detailed.

2.0 SITE HISTORY AND DESCRIPTION

This section presents a history of the site and general description, including topography, geology, and groundwater characteristics. This description was developed from previous investigations and published reports.

2.1 GENERAL DESCRIPTION

Gould Island is located in the East Passage of Narragansett Bay in Rhode Island, approximately 1.5 miles from the NSN shoreline. Gould Island is located between Aquidneck and Conanicut Islands, and occupies approximately 52 acres. Building 32, located on the northeast end of Gould Island, served as a torpedo overhaul shop that has been inactive since the 1950's. A Navy torpedo testing range is located on the northern tip of the island and is still active. The remainder of the island is inactive.

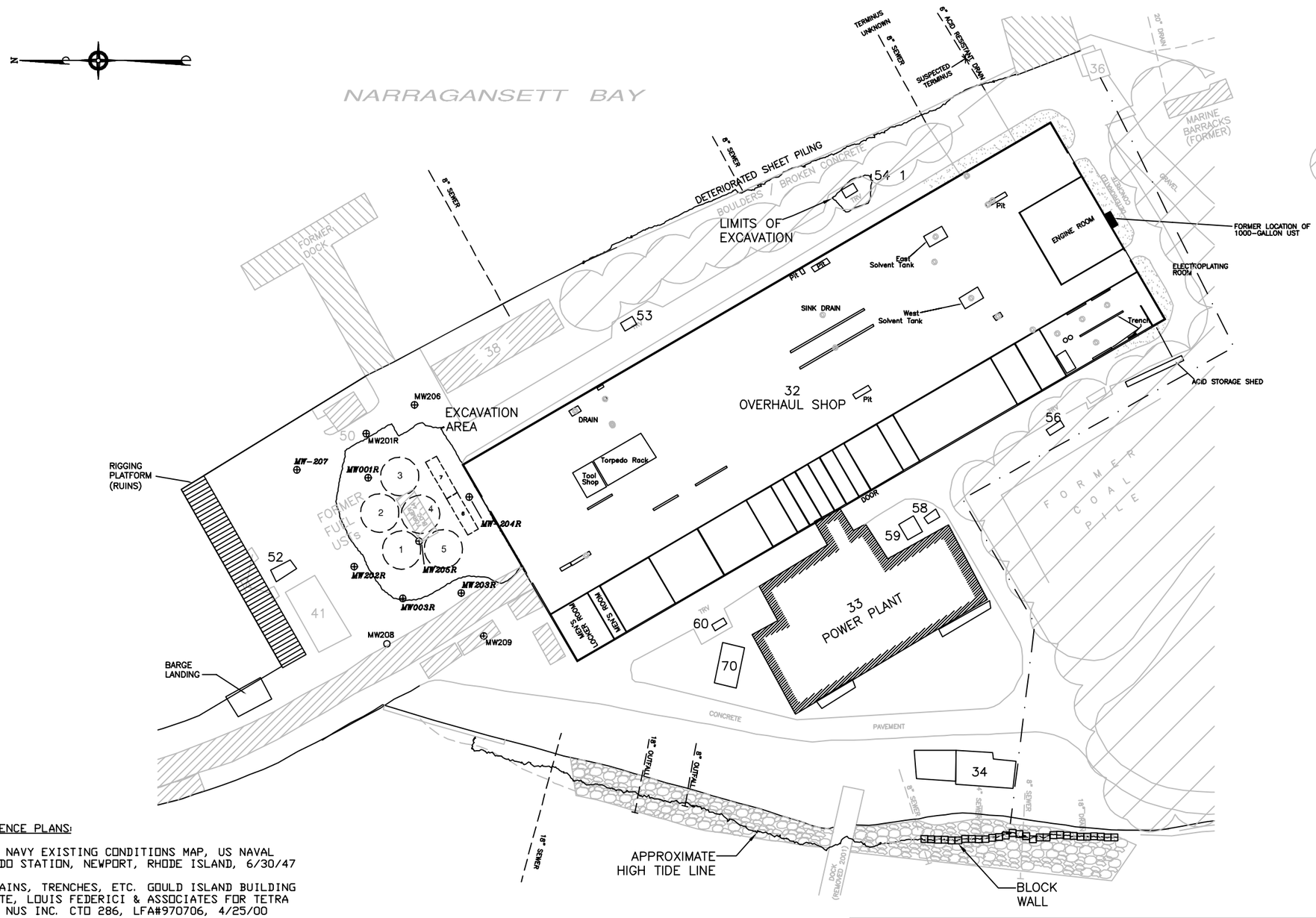
Gould Island was developed in the 1940s as a weapons support center for naval vessels. Photos taken during construction and provided in Appendix A show the island was redeveloped with housing, administration buildings and a seaplane hanger at the south end of the island; the power plant, the torpedo overhaul shop, a covered tramway, and a torpedo test firing pier were at the north end. In addition, fueling docks, two large coal piles, ammunition bunkers, and a number of other structures were present.

Gould Island is only accessible by boat and is off limits to the public, although trespassing by recreational boaters is possible.

Ownership of the southern three-fourths of the island has been transferred from the Navy to the State of Rhode Island. Naval Station Newport retains ownership of the northern end of the island, where Building 32 was located. A fence separates the two areas, as indicated on Figure 2-1.

The following is a list of structures and known activities that occurred on the Navy-held portion of the island.

- Building 32 - Torpedo Overhaul Shop
- Building 33 - Steam Plant
- Building 34 – Acetylene Generator Building
- Building 35 (South) – Support for Torpedo Firing Pier
- Building 36 – Range Maintenance Shop



REFERENCE PLANS:

1. US NAVY EXISTING CONDITIONS MAP, US NAVAL TORPEDO STATION, NEWPORT, RHODE ISLAND, 6/30/47

2. DRAINS, TRENCHES, ETC. GOULD ISLAND BUILDING 32 SITE, LOUIS FEDERICI & ASSOCIATES FOR TETRA TECH, NUS INC. CTO 286, LFA#970706, 4/25/00

3. GEOTECHNICAL SURVEY PLAN AT FORMER BUILDING 44 AND 32, US NAVAL BASE ON GOULD ISLAND, LOUIS FEDERICI & ASSOCIATES FOR BROWN & ROOT ENVIRONMENTAL, 9/8/97, DWG#970706-03

4. LOCATION OF MONITORING WELLS AT BUILDING 32 - GOULD ISLAND, U.S. NAVAL BASE NEWPORT, RHODE ISLAND, LOUIS FEDERICI & ASSOCIATES FOR TETRA TECH, NUS INC., 5/9/00

NOTES:

1. PLAN NOT TO BE USED FOR DESIGN.
2. ALL LOCATIONS TO BE CONSIDERED APPROXIMATE.
3. PHYSICAL FEATURES SHOWN MAY NOT DEPICT CURRENT CONDITIONS

PRIMARY SITE FEATURES			FIGURE 2-1
SITE 17, GOULD ISLAND			TETRA TECH NUS, INC.
NAVSTA NEWPORT, RHODE ISLAND			55 Jonspin Road Wilmington, MA 01887 (978)658-7899
DRAWN BY: D.W. MACDOUGALL	REV.: 0		
CHECKED BY: L. SEYDEWITZ	DATE: APRIL 25, 2003		
SCALE: 1" = 100'	FILE NO.: DWG\5152\0450\FIG_2-1.DWG		

- Building 38 – Administration
- Building 41 – Riggers storage
- Building 44 – Fuel Pump House
- Building 50 – Use unknown
- Building 52 - Riggers House
- Buildings 53, 54, 56, 60, 61, 62 – Transformer Vaults
- Building 59 – Transformer Vault and Switch House
- Building 58 - Deep Well Pump House
- Building 70 – Quonset Hut
- Acid Storage Shed – Storage of material for electroplating
- Covered Tramway – Torpedo transfer from overhaul shop to firing pier
- "T" Dock - fueling, equipment transfer
- Ferry Dock – Personnel transportation
- Salt Water Intake Pier
- Rigging Platform – Heavy equipment transfer

In addition to the above, numerous temporary or portable shed structures are visible on the historic air photos. It is likely that these structures were used for storage of materials or equipment, both during construction and during operation of the facilities on the island.

2.2 SITE OWNERSHIP HISTORY

Gould Island was purchased from private landowners by the Navy in 1918 (Presidential Proclamation 1918). Prior to that date, the land was used agriculturally. Early construction of seaplane facilities at the south end of the island was conducted through the 1920's, and construction of a weapons support center for naval vessels at the north end of the island began in the early 1940s. Air photos from this construction show that most of the vegetation was removed from the island, and the soils were nearly completely reworked. The northern portion of the site included a torpedo overhaul and testing facility, a power plant, a fuel storage facility, and miscellaneous support structures, including a rigging platform, a stillwater basin for boat docks, an acetylene generator building, and what appear to be semi-portable storage sheds.

2.3 SITE USE HISTORY

The Building 32 facility was used for overhaul and storage of torpedoes during WW II. The building included the electroplating shop, a grinding and buffing shop, degreasing units, and equipment formerly used to overhaul torpedoes. Reportedly, extensive electroplating and degreasing operations were performed in the building between 1942 and 1945.

It is not known where or how waste materials generated from the plating and degreasing activities were disposed. It is assumed that most of the wastes (including electroplating shop wastes) from the floor trenches and floor drains were likely to have been discharged through offshore outfall pipes. The electroplating shop wastes were probably discharged through the outfall on the east side of Gould Island (Figure 2-2). The Confirmation Study Report (Louriero, 1986) suggested that the plating sludges were probably discharged in a disposal area (landfill) located on the west side of Gould Island, outside the boundary of the area of interest (Figure 1-2). Additional detail on waste generation and disposal is provided in other sections of this Background Summary Report.

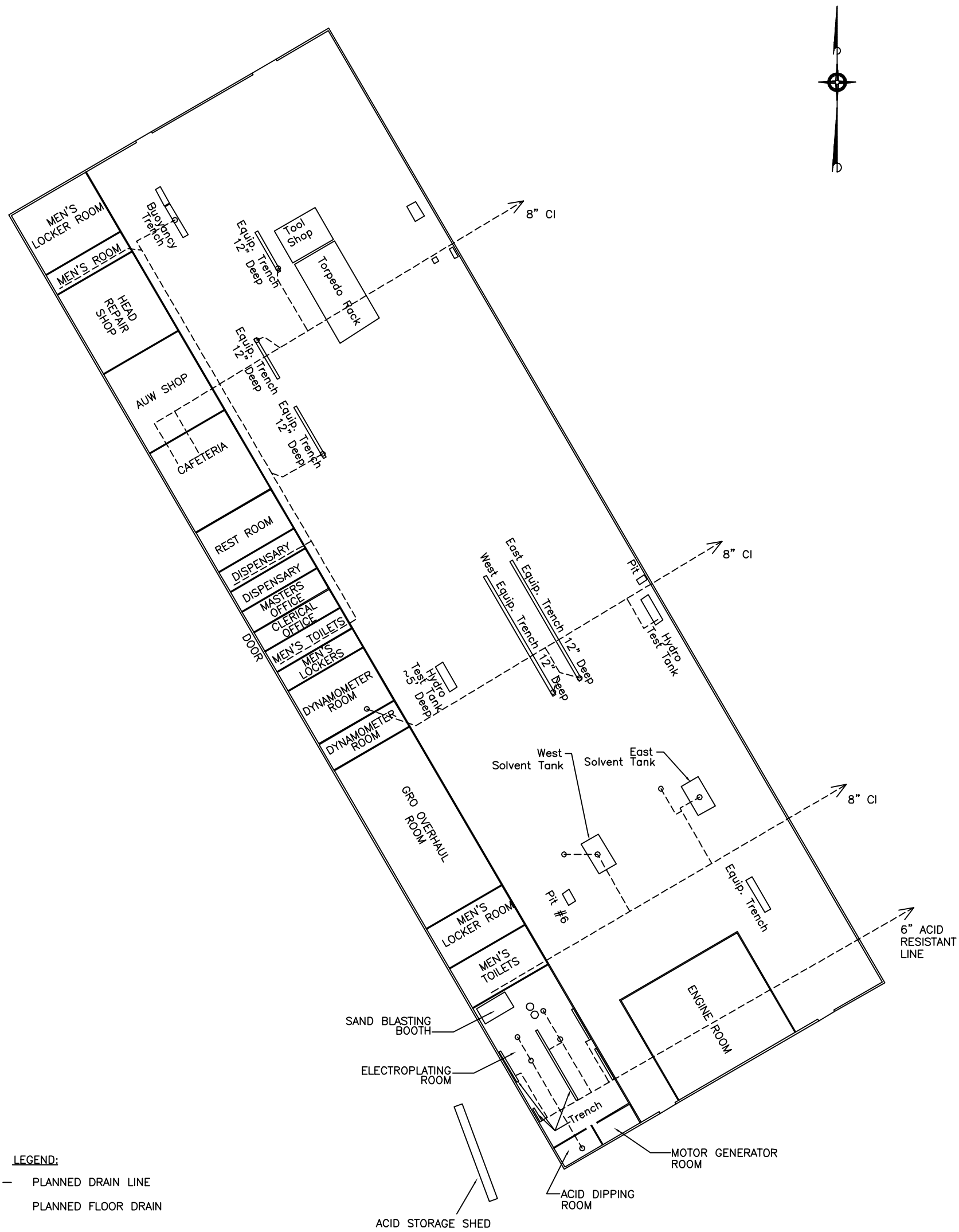
In the 1950s, use of the facility was discontinued. In 1998, the buildings were deemed unsafe and were demolished in 2000. The only structure still remaining is Building 35, located on the firing pier, to the north of former Building 32.

2.4 BUILDING 32 DESCRIPTION

The interior layout of Building 32 is presented in Figure 2-2. The building includes the plating rooms, a grinding and buffing shop, degreasing units, and equipment formerly used to overhaul torpedoes. Construction plans for Building 32 obtained from the NETC Public Works Department (known at the time as US Naval Operating Base, Public Works) were used to identify the interior construction, drainage, and plumbing details.

As shown on Figure 2-2, the building was designed with floor trenches and floor drains in many locations throughout the overhaul shop. There were several trenches and pits installed in the building. Some were used as sumps for mechanical equipment, and others were used to test buoyancy and other aspects of torpedo behavior in the water. In the electroplating rooms, trenches were clearly installed for capturing and disposing the waste from the electroplating tanks and systems. The design drawings indicate that trenches and drains associated with the electroplating shop are connected to a single 6-inch diameter acid-resistant pipeline that discharges to the east side of Gould Island near the former ferry slip.

The plumbing drawings for Building 32 show that floor drains as well as waste drains from the bathrooms and locker rooms were all directed into a series of 8- and 10- inch ID cast iron drain lines that ran north and east, outside the building and into the ocean. No leaching fields are shown on any of the design drawings for Building 32. The drawings also show roof drains connected to these drain lines. Other drawings show roadway drains on a different system, but also discharging storm water runoff through a series of cast iron pipes to the ocean north and east of Building 32.



LEGEND:

------ PLANNED DRAIN LINE

o PLANNED FLOOR DRAIN

NOTES:

1. NOT FOR DESIGN
2. ALL LOCATIONS ARE APPROXIMATE
3. VERTICAL DATUM IS BASED ON THE NAVY BM H-2, LOCATED AT THE NORTHEAST NUT ON VALVE HYDRANT OPPOSITE SOUTHWEST CORNER OF BUILDING #32, ESTABLISHED BY P.W. SURVEY PARTY, DATED 1/3/45, BOOK NUMBER 20-B PAGE 10, MLW ELEVATION (LOCAL) 14.12.
4. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM, R.I. STATE PLANE 1983.
5. U.S. NAVAL OPERATING BASE, NEWPORT, R.I. TORPEDO STATION GOULD ISLAND OVERHAUL SHOP PLUMBING FLOOR PLAN, CONT. NO. 4994, DRAWING P-201, DATED MARCH 14, 1942, BY JOHN BRACKETT, CONSULTING ENGINEER.

GRAPHIC SCALE

0' 60' 120'

1 INCH = 60 FEET

BUILDING 32 LAYOUT AND DRAINAGE PLAN		FIGURE 2-2
SITE 17, GOULD ISLAND		TETRA TECH NUS, INC.
NEWPORT, RHODE ISLAND		55 Jonspin Road Wilmington, MA 01887 (978)658-7899
DRAWN BY: D.W. MACDOUGALL	REV.: 0	
CHECKED BY: S. PARKER	DATE: OCTOBER 30, 2002	
SCALE: 1" = 60'	FILE NO.: DWG\5152\0410\FIG_2-2.DWG	

TtNUS (formerly Brown & Root Environmental (B&RE)) conducted several site walkovers in preparation of first phase investigations, the earliest being in March 1997 (including B&RE, Navy, U.S. Environmental Protection Agency (EPA), Rhode Island Department of Environmental Management (RIDEM), etc.). During this walk, TtNUS confirmed earlier observations of the study area made by TRC (TRC, 1992), which included the following:

- Numerous metal vats were present in the plating room.

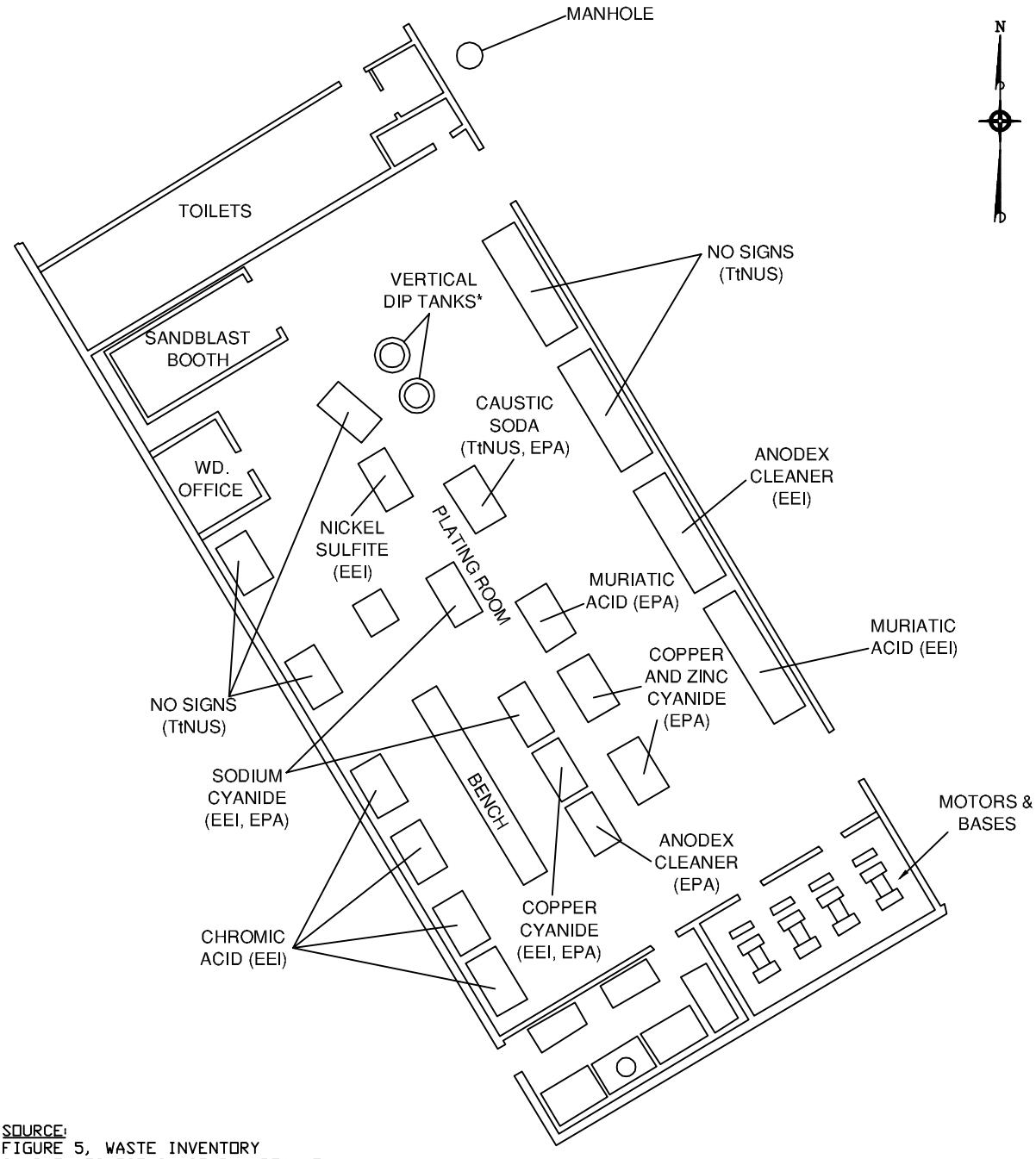
- A series of three trench drains were present running along the floor of the plating room. These drains were located along the long axis of the plating room, one on each side of the room with the third in the middle. These trench drains were partially covered with metal grates (Figure 2-2). Floor trenches were also present in the main area of Building 32.

- Several floor drains were present in the concrete floor of the plating shop and the main areas of Building 32 (Figure 2-2).

- Overhead signs were observed above several tanks. In the plating shop, individual signs read: "Chromic Acid", "Muriatic Acid", "Sulfuric and Nitric Acid", and "Caustic Soda".

Figure 2-3 depicts the layout of the electroplating room. The layout originated from the 1983 Initial Assessment Study (Envirodyne Engineers, Inc. 1983). Additional tanks are identified including: muractic and chronic acid, caustic soda, nickel sulfate, sodium cyanide, and copper cyanide. This layout was likely based on, and reflects, the signage over the tanks in 1996.

In 1997, TtNUS began development of a Study Area Screening Evaluation (SASE) work plan for electroplating rooms, which included evaluation of air photos, construction drawings, and other records for the electroplating shop. As a part of this effort, TtNUS conducted another inspection of Building 32 in March 1998 to confirm existing conditions relative to the construction drawings. At that time it was observed that the trenches and testing tanks shown on the construction drawings were present as specified. However, floor drains and drainway clean outs were not installed where they are shown on the drawings. A close inspection of the building floor found floor drains in the electroplating room, the engine room, and the lavatories. While not observed directly, it was assumed at the time that drains were present in the trenches and testing tanks throughout the building, as there was little or no standing water in these trenches and tanks.



SOURCE:
FIGURE 5, WASTE INVENTORY SAMPLE LOCATIONS, STUDY AREA 17 - GOULD ISLAND ELECTROPLATING SHOP, TRC ENVIRONMENTAL CONSULTANTS, INC., APRIL 1992.

*-STEEL, LINED WITH RUBBER

ELECTROPLATING ROOM LAYOUT	FIGURE 2-3
SITE 17, GOULD ISLAND	
NEWPORT, RHODE ISLAND	

DRAWN BY:	D.W. MACDOUGALL	REV.:	0
CHECKED BY:	L. SEYDEWITZ	DATE:	JUNE 24, 2004
SCALE:	NOT TO SCALE	ACAD NAME:	DWG\5152\0470\FIG_2-3.DWG

TETRA TECH NUS, INC.
55 Jonspin Road Wilmington, MA 01887
(978)658-7899

The main portion (overhaul and storage area) of the building (excluding the plating shop) was mostly open space. Most of the cement floor in the shop area was covered with a non-conductive wood block floor finish that had signs of significant water damage (buckling and staining). Several floor trenches and floor drains were located in the storage area. Debris from the deteriorated ceiling/roof was scattered on the floor area.

Two solvent tanks and washing systems were present in the main shop area, situated partially within two large sumps in the floor. A series of torpedo racks were present in the north central portion of the overhaul shop, and a large quantity of piping covered with asbestos-containing pipe insulation was stacked on the floor in the north section of the building wrapped in polyethylene sheeting.

The plating shop rooms were occupied by: numerous square, metal, open - top vats ("baths"); two concrete, open-top, round, vertical plating tanks ("pits"); several wooden benches; a small sandblasting room; a motor generator room; a small "acid dipping room" with additional baths; a small office; and floor trenches and drains (TRC, 1992). The metal baths were approximately 3 feet wide by 5 to 15 feet long. The two vertical pits were approximately 4 feet in diameter by 8 feet deep and appeared to be constructed of steel, surrounded by a thick layer of rubber. All plating room equipment was visibly empty and clean.

2.5 ENVIRONMENTAL SETTING

This section presents a general description of site features including topography, and geological, groundwater, and surface water characteristics.

2.5.1 Soil and Bedrock Characteristics

Gould Island is located at the southeastern end of the Narragansett Basin. This basin is a complex north-south-trending synclinal mass of Pennsylvanian age sedimentary rocks and is the most prominent geologic feature in eastern Rhode Island and adjacent Massachusetts. The basin is approximately 55 miles long and varies from 15 to 25 miles wide.

The rocks of the Narragansett Basin are non-marine sedimentary rocks, predominately conglomerates, sandstones, shales, and anthracite coal. Total thickness of the strata in the Narragansett Basin has been estimated at 12,000 feet. Many folds and some faults occur throughout the basin, but the character and amount of the folding and faulting are not clearly known. Bedrock of the Narragansett Basin has been divided into five units that include the Rhode Island Formation, which underlies NETC Newport.

The Rhode Island Formation is the most extensive and thickest of the Pennsylvanian formations in Rhode Island. The Rhode Island Formation in the northern portion of the basin is not metamorphosed. However, in the southern portion of the basin, as in the vicinity of NETC, the unit is metamorphosed. Bedrock types include schist of various grades, phyllites, conglomerates, and feldspathic quartzite. Thin beds of metaanthracite and anthracite were mined from many areas within the basin.

No bedrock exposures have been observed at the northern end of Gould Island. However, bedrock is exposed south of Building 32 on the east side of the island, along the shoreline. Bedrock in the vicinity of the site is mainly metamorphic rock, predominately phyllites and schists, which are exposed at outcrops at the main-base area of NETC approximately 2 miles to the east of Gould Island.

Overlying the Pennsylvanian rocks of the Narragansett Basin are surficial deposits of Pleistocene sediments. These sediments owe their origin to the Wisconsin glaciation that covered the area with ice several thousand feet thick. As the glaciers began to recede 10,000 to 12,000 years ago, unconsolidated glacial materials of variable thickness were deposited throughout the Narragansett Basin area. The unconsolidated glacial material ranges from approximately 1 to 150 feet thick; it is thicker in the valleys and thinner in the uplands. Glacial material consists of a loose till and outwash deposits characterized by sands, silty sands, and gravels. These deposits were derived from shale, sandstone, conglomerate, and, in a few places, coal. Metamorphic rock, predominantly phyllite, is also included in glacial materials that lie above the Rhode Island Formation, as observed at the Naval Station.

Soils found at the site and throughout Gould Island are classified as Newport Series by the Soil Survey of Rhode Island. These soils are formed in compact glacial till derived from dark sandstone, conglomerate, argillite, and phyllites. Permeability is generally moderate at the surface and low in the substratum (B&RE, November 1997).

2.5.2 Topographic and Groundwater Characteristics

Historic information (U.S. Navy, 1959) indicates that four water supply wells were drilled on Gould Island in the early 1940s. These wells were installed at different locations in an effort to find a usable fresh water supply. Two of the wells were reportedly advanced to a depth of 330 feet, while the remaining two wells were advanced to a depth of approximately 530 feet. No additional information (construction or boring logs) is available.

The reported flow capacities of the two 330-foot wells and two 530-foot wells were 7 to 35 gallons per minute (gpm) and 6 to 10 gpm, respectively. The wells yield was deemed inadequate to support island needs and therefore a fresh water supply line was extended from Aquidneck Island (U.S. Navy, 1943 and

U.S. Navy, 1959). Plumbing shop drawings also show that salt water was piped through Building 32 for use in fire control systems and as flush water in the sanitary system.

Based upon a review of Gould Island topography and the island setting, shallow groundwater is anticipated to flow radially outward from the center of the island toward Narragansett Bay. Three monitoring wells installed for the UST Closure Assessment Report for the small tank on the south end of Building 32 were used to develop a limited groundwater contour map for that location. These data indicated local groundwater flows north-northeast toward Narragansett Bay with a gradient of 0.021 foot/foot. Groundwater depths at these wells ranged between 0.77 and 2.43 feet below ground surface in August 1997. Data from the Building 44 UST closures were also used to develop a groundwater contour map for the area, at the north end of Building 32. These data indicate that groundwater at this location flows radially north, east and west toward the shoreline. Groundwater elevations range from 0.51 to 1.11 feet above mean sea level (MSL). According to the Initial Assessment Study (IAS) report (Envirodyne, 1983), groundwater on Gould Island "is generally within a depth of 10 feet".

The Prudence Island Broadway well is the closest public groundwater supply well to Gould Island. This well is located approximately 4.5 miles north of the study area across Narragansett Bay. No public supply wells are present on Gould Island.

The groundwater at the site has been classified by RIDEM as a class GA, suitable for public or private drinking water use without treatment. Several specific areas of the island have been classified as GA Non-Attainment (GA-NA). Non-attainment areas are those areas that have pollutant concentrations greater than the groundwater quality standards for the applicable classification. The goal for non-attainment areas is restoration to the groundwater quality consistent with the standards of the applicable class, in this case, GA. The non-attainment areas are apparently the sites and study areas delineated in the IAS study, described elsewhere in this report. One such non-attainment area is shown by Rhode Island Geographic Information System (RIGIS) on the southwest corner of the former Building 32 footprint, which is the former location of the electroplating shop.

2.5.3 Surface Water Characteristics

Gould Island is surrounded by Narragansett Bay. RIDEM has assigned this portion of Narragansett Bay a surface water classification of SA. Class SA waters are protected for the following uses: bathing and contact recreation, shellfish harvesting for direct human consumption, fish and wildlife habitat, boating and other secondary contact recreational activities, industrial cooling, and good aesthetic value.

3.0 OIL AND HAZARDOUS MATERIALS

This section presents information relating to the use, storage, and disposal of oil and hazardous materials at the site.

3.1 STORAGE TANKS

The following sections provide a brief description of storage tanks located at and near the Building 32 site. Findings from related investigations are presented in Section 4 of this report.

3.1.1 Building 44, Fuel Pumphouse Area

Building 44 was located immediately to the north of Building 32. Building 44 served as the pump house for the seven USTs during their use. The USTs consisted of two 5,000-gallon steel tanks and five 50,000-gallon concrete tanks. These USTs were installed in the 1940s to supply fuel to the power generation plant on Gould Island (Building 33). The 50,000-gallon USTs were constructed of reinforced concrete and were cast in place. The UST area is located north of Building 32. The locations of the former USTs and of Buildings 44 and 32 are shown on Figure 2-1.

The UST Closure Assessment report prepared by Environmental Resource Associates, Inc. (September, 1994) indicates that three of the concrete tanks stored No. 5 fuel oil and two stored No. 2 fuel oil. One of the steel USTs stored No. 2 fuel oil and the other stored alcohol. In 1989, a contract was issued by NETC to close the USTs and demolish Building 44. As a result, the two 5,000-gallon USTs were emptied and removed from the site. The five 50,000-gallon USTs were emptied and cleaned, the tank covers were destroyed, and the tanks were backfilled.

After several investigations (described in Section 4.3 of this report), the Building 44 area underwent a soil removal action in 2000. Soils exceeding the RIDEM action level for total petroleum hydrocarbons (TPH) were removed from the ground and removed from the island via dump truck and barge.

3.1.2 Building 32 UST

A 1,000-gallon steel UST containing No. 2 fuel oil was removed from the south of Building 32 in July 1997 by Brown and Root Environmental. The tank contents were removed by a portable vacuum unit, and the concrete pavement above the tank was demolished. During removal, the tank and the bedding material were inspected for evidence of release. Two corrosion holes were noted on the bottom of the tank near the western end. Water collected in the bedding material after UST removal, and a petroleum odor and a

slight sheen were present on the observed groundwater (B&R Environmental, November 1997). A full description of data collected during closure operations is presented in Section 4.4 of this report.

3.2 HAZARDOUS SUBSTANCES

As previously stated, the Building 32 facility was used for overhaul and storage of torpedoes during WW II. Reportedly, extensive electroplating and degreasing operations were performed in the building between 1942 and 1945.

It is not directly known where or how waste materials generated from the plating and degreasing activities were disposed. It is assumed that any wastes (including electroplating shop wastes) released to the floor trenches and floor drains in the building were likely to have been discharged through offshore outfall pipes, as the construction drawings suggest direct discharge to the ocean (Section 2 of this report). Much of the liquid waste from the electroplating shop was probably discharged through an acid resistant drain to an outfall on the east side of Gould Island. The Confirmation Study Report (Louriero, 1986) suggested that the plating sludges were probably discharged in a disposal area, Site 14, located on the west side of Gould Island (Figure 1-2).

Waste Inventory and Sampling Reports (Halliburton NUS and ENSR, February, 1992, and July, 1992) were prepared to inventory and characterize waste materials present in Buildings 32, 33, 34, 35, and 58. The sections that follow describe the findings of these reports.

3.2.1 Waste Inventory and Sampling Report, Building 32- January 1992

Building 32 was inspected for hazardous waste materials in October 1991. Eight samples were collected from within the electroplating shop, and one sample was collected from a manhole located just outside of the doorway leading to the electroplating room from the interior of Building 32 (Figure 2-2). Five of these were liquid samples and were analyzed for corrosivity (pH), reactivity (cyanide and sulfide), flashpoint, PCBs, and all TCLP parameters. Two samples were specifically referred to as "plating solutions" and collected from vats located in the “acid dipping room” portion of the electroplating shop. The TCLP sample results showed concentrations of lead (7.8 mg/l) and cadmium (7,000 mg/l) in samples of plating solutions, which are greater than the hazardous waste characterization regulatory limits (40 CFR Part 261 Subpart C) for lead (5.0 ppm) and cadmium (1.0 ppm).

In addition, composite liquid samples were also collected and analyzed for a broad range of parameters to further characterize the materials for disposal purposes. Composite sample 1 consisted of seven samples. Composite 2 consisted of two samples. A third composite was collected of 9 aqueous sample

aliquots from floor trenches in other portions of Building 32, including liquid from floor trenches near the solvent tanks, a vat in the grinding area, and the manhole outside the electroplating room. Results from the composite sample analyses are summarized in Table 3-1.

Analyses of the composite samples included BTU value, flashpoint, corrosivity (pH), reactivity (sulfide and cyanide), priority pollutant volatiles, priority pollutant semivolatiles, priority pollutant pesticides/PCBs, and metals (antimony, arsenic, cadmium, chromium, lead, manganese, potassium, sodium, and selenium).

The analytical results indicate concentrations of heavy metals in composite samples 2 and 3. Elevated levels of total cadmium (8,080 mg/l) and lead (11 mg/l) were detected in Composite 2. In addition, low levels of a volatile organic compound (bromomethane at 19 µg/l) and semivolatile organic tentatively identified compounds (TICs) at 1,476 µg/l were detected in Composite 2.

The analytical results of Composite 3 identified concentrations of total metals, two volatile organic compounds (chlorobenzene at 14J µg/l and trichloroethane at 16 µg/l), and semivolatile organic compounds (pyridine at 720 µg/l and TICs at 2,368 µg/l). Results from analysis of Composite 3 also indicated the presence of cadmium (2.1 mg/l).

3.2.2 Waste Inventory and Sampling, Building 33

ENSR reported that Building 33 was used to supply compressed air, electricity, and steam for process and heating purposes on Gould Island. The following equipment was believed to be present in Building 33:

- Four diesel engine-driven generators
- Five diesel engine-driven air compressors
- Four synchronous motor-driven air compressors
- One electric motor-driven fire pump
- One gasoline-driven fire pump
- Four low pressure, hand-fired heating boilers
- One high pressure, hand-fired heating boiler

Other file information indicated that one diesel generator and one generator in the boiler house were added in 1942. Additional auxiliary equipment was also present, such as switchboards, accumulators for compressed air, motor generators, network transformers and pumps.

The waste materials found within Building 33 were initially identified as to their likely origin, which included oil, lubrication oil, compressor oil, hydraulic oil, transformer oil, grease, tar, and glycerine, as well as sodium sulfite and sodium phosphate. In addition, two compressed gas cylinders were present, one containing oxygen, and another containing acetylene. From these materials, a series of composite samples were collected in conjunction with the materials found in Building 58. The sample results predictably indicated high concentrations of oils, hydrocarbons and varying contents of metals, including cadmium and lead. Pesticides were not detected in these samples, although low concentrations of PCBs were detected in two samples: Aroclor 1254, 5.9 mg/kg and Aroclor 1260, 13 mg/kg. These results were used for categorization of the waste under RCRA rules and for transport and disposal.

3.2.3 Waste Inventory and Sampling, Building 34: Acetylene Generator Building

Building 34 was reportedly constructed in 1942 with a footprint of approximately 1200 square feet. ENSR staff inspected the building two times in 1992 and found no potential hazardous waste materials that necessitated sampling or removal.

3.2.4 Waste Inventory and Sampling, Building 35: Firing Pier Support Structure

Little information is available as to the use of Building 35, although it included the covered tramway used for transport of the torpedos from the overhaul shop to the firing pier. It is presumed that the pier was also used to load and unload torpedos from smaller warships at dock.

Three composite samples were taken from materials within this building, as well as three discreet waste samples of unknown waste materials. Eleven drums were evaluated and sampled, as well as numerous small containers and storage bins.

One composite sample was found to contain acetone and low concentrations of metals including potassium, sodium, lead and mercury. The second composite sample was found to contain high concentrations of PAHs (napthalene, fluorine, and phenanthrene) as well as barium, chromium and lead at low concentrations. The third composite sample and one waste sample were both found to contain toluene, ethylbenzene and xylenes, as well as napthalene in the 1 % range. Traces of metals were also found in these samples, including cadmium, lead and mercury.

3.2.5 Waste Inventory and Sampling, Building 58: Deep Well House

Building 58 is identified on site maps as the deep well house. This structure is approximately 80 square feet, and had a basement and main floor at ground level. The basement contained the well head and

pumping system for the well. A number of small containers of materials were present in the building and were investigated for the presence of hazardous waste.

These containers were initially evaluated as to their likely contents, which included grease, caulking compound, varnish, corrosion preventer, lubrication oil, motor oil and paints. From these materials, a series of composite samples were collected in conjunction with the materials found in Building 33. The sample results predictably indicated high concentrations of oils, hydrocarbons and varying contents of metals, including cadmium and lead. Pesticides were not detected in these samples, although low concentrations of PCBs were detected in two samples: Aroclor 1254, 5.9 mg/kg and Aroclor 1260, 13 mg/kg. These results were used for categorization of the waste under RCRA rules and for transport and disposal.

3.2.6 PCB Transformers

Buildings 53, 53, 56, 59, 60, 61, and 62 were all identified on historic drawings as transformer vaults. These small concrete buildings were later confirmed to house electrical transformers that contained PCB oil. The PCB transformers were removed prior to building demolition in 2000. Concrete chip sampling for PCB contamination was subsequently conducted on the floors and walls of the transformer vault buildings under TSCA regulations. This effort led to additional soil testing, concrete and soil removal actions, and other investigations, as detailed in Section 5 of this report.

TABLE 3-1
ANALYTICAL RESULTS FOR COMPOSITE LIQUID SAMPLES
FROM THE "WASTE INVENTORY SAMPLING REPORT" (ENSR, 1992)
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND

SAMPLE NUMBER	COMPOSITE 1	COMPOSITE 2	COMPOSITE 3
DESCRIPTION OF COMPOSITES	T-16, T-17, T-24, T-25, T-28, T-29, T-30	T-26, T-27	T-6:(L1, L2), T-7, T-8, T-9, T-10, T-12, T-22, T-23, MH-1
ANALYSIS			
BTU (BTU/LB)	157	0	16
Flashpoint (C)	>60	>60	>60
Corrosivity (SI units)	6.5	6.5	7.5
Reactive Sulfide (mg/l)	<1.0	<1.0	<1.0
Reactive Cyanide (mg/l)	<0.25	<0.25	<0.25
Volatiles (µg/l)			
Bromomethane	ND	19	ND
Chlorobenzene	ND	ND	14 J
Trichloroethane	ND	ND	16
Semivolatiles (µg/l)	ND	ND	ND
Tentatively ID'd Compounds (TICs)	25	1476	2368
1Methyl, 2-Benzene	ND	104	ND
Pyridine	ND	ND	720
Pesticides/PCB (µg/l)	ND	ND	ND
Metals (total) (mg/l)			
Antimony	0.030	0.30	
Arsenic	0.004		0.007
Cadmium	0.580	8,080	2.10
Chromium	0.073	1.10	0.15
Lead	1.500	11.0	1.7
Lithium		0.33	0.62
Manganese	1.870	20.7	2.4
Potassium	66.5	445	397
Silver		0.41	0.10
Sodium	167	6,560	2,260
Strontium	0.140	13.5	0.90

NOTE: - Available sample locations are presented in Appendix D.

Reference: ENSR Consulting and Engineering, February 14, 1992, Waste Inventory and Sampling Report for Buildings 32 and 35 (Inactive), Naval Underwater Systems Center (NUSC), Gould Island Annex, Newport, Rhode Island, prepared for the Northern Division, Naval Facilities Engineering Command under the Comprehensive Long-Term Environmental Action Navy (CLEAN) Program.

4.0 PREVIOUS ENVIRONMENTAL INVESTIGATIONS AND FINDINGS

This section presents a discussion of site use history and the findings of previous environmental investigations performed at the site.

4.1 INITIAL ASSESSMENT STUDY (ENVIRODYNE ENGINEERS, 1983)

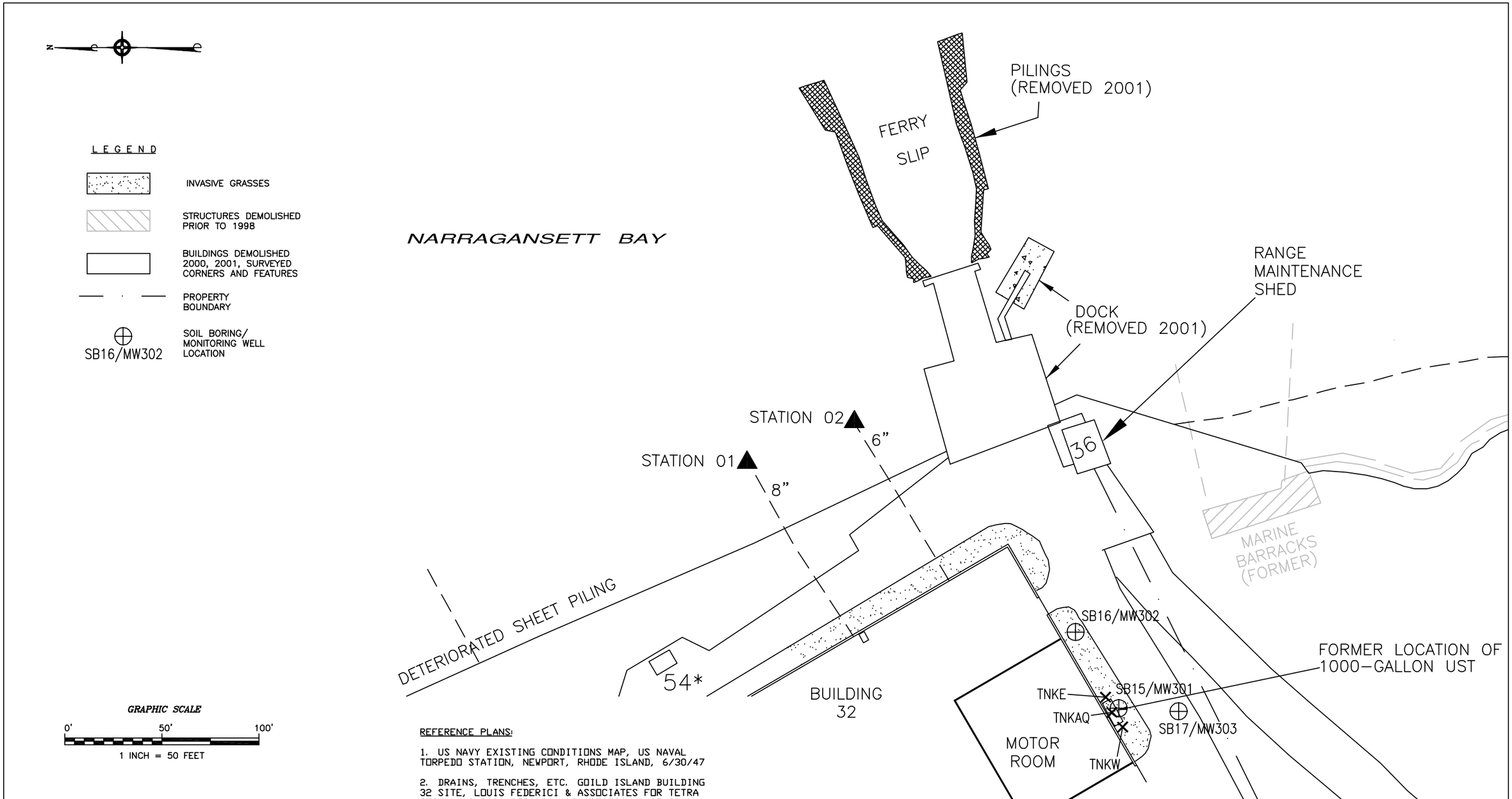
The Initial Assessment Study (IAS) was performed in 1983 by Envirodyne Engineers. The IAS was an evaluation of the entire NETC property to identify possible environmental disposal sites. During this study Envirodyne identified the Gould Island Electroplating Shop as a location where potential contamination from past waste disposal or handling practices may pose human health or environmental risks. During the Envirodyne study, bulk chemicals, including electroplating solutions were still present in some of the tanks and baths located in the unused electroplating rooms of Building 32 (Section 3.2 of this report). Because of the history of use of the chemicals in the electroplating rooms and because the fate of the wastes that were generated was unknown, the IAS recommended the site be investigated further. Therefore, Verification and Confirmation Studies were performed in 1984 and 1986, respectively.

4.2 VERIFICATION STUDY AND CONFIRMATION STUDY (LOURIERO ENGINEERING, 1984 AND 1986)

After the submittal of the IAS, a “verification step” was performed, to verify the presence of contaminants at the “Sites” identified in the IAS. Subsequently a “confirmation study” was also performed two years after the “Verification Step”, both the verification and confirmation studies involved limited sampling programs. The Confirmation Study (CS) indicated that two offshore discharge pipes were present directly east of Building 32 in Narragansett Bay. The general locations of the discharge pipes are shown on Figure 4-1. The end of one of the discharge pipes was located during the CS. The end of the other pipe was not located, reportedly due to the presence of silt and vegetation over the pipe.

Sediment samples were collected from Stations 01 and 02, which were reportedly approximately 25 feet off shore in 1 to 3 feet of water. The sediment deposits, collected from a depth of 0 to 4 inches, were reportedly stony silt and sand. The mussel samples were collected from the intertidal zone shoreward of sediment sampling Stations 01 and 02 (Figure 4-1).

Sediment and mussel samples were analyzed for metals (lead, copper, chromium, nickel, cadmium, mercury, silver) and cyanide (sediments only) as reported in the CS report. Sediment and mussel samples were also collected from two control stations (NI and N2) and were analyzed for metals and cyanide (sediment only). Control Station N-1 was located on Aquidneck Island (end of Corey Lane in Portsmouth) and control station N-2 was located off Conanicut Island (off Route 138 north of the Newport Bridge). It was



GRAPHIC SCALE

0' 50' 100'

1 INCH = 50 FEET

NOTES:

1. PLAN NOT TO BE USED FOR DESIGN.
2. ALL LOCATIONS TO BE CONSIDERED APPROXIMATE.
3. PHYSICAL FEATURES SHOWN MAY NOT DEPICT CURRENT CONDITIONS

REFERENCE PLANS:

1. US NAVY EXISTING CONDITIONS MAP, US NAVAL TORPEDO STATION, NEWPORT, RHODE ISLAND, 6/30/47
2. DRAINS, TRENCHES, ETC. GOILD ISLAND BUILDING 32 SITE, LOUIS FEDERICI & ASSOCIATES FOR TETRA TECH, NUS INC. CTO 286, LFA#970706, 4/25/00
3. GEOTECHNICAL SURVEY PLAN AT FORMER BUILDING 44 AND 32, US NAVAL BASE ON GOULD ISLAND, LOUIS FEDERICI & ASSOCIATES FOR BROWN & ROOT ENVIRONMENTAL, 9/8/97, DWG#970706-03
4. LOCATION OF MONITORING WELLS AT BUILDING 32 - GOULD ISLAND, U. S. NAVAL BASE NEWPORT, RHODE ISLAND, LOUIS FEDERICI & ASSOCIATES FOR TETRA TECH, NUS INC., 5/9/00

PREVIOUS SAMPLING LOCATIONS		FIGURE 4-1
SITE 17, GOULD ISLAND		
NAVSTA NEWPORT, RHODE ISLAND		TETRA TECH NUS, INC.
DRAWN BY: D.W. MACDOUGALL	REV.: 0	
CHECKED BY: S. PARKER	DATE: APRIL 25, 2003	55 Jonspin Road Wilmington, MA 01887 (978)658-7899
SCALE: 1" = 50'	FILE NO.: DWG\5152\0450\FIG_4-1.DWG	

observed at the time that control Station N-1 was located adjacent to a sewage outfall. The control station sediments were reported as being stony at both locations, particularly at Station N-1. Data from this effort is presented on Table 4-1.

The "Verification Step" sediment sample data does show that cyanide was detected at concentrations higher (approximately four times greater) than those detected in the control samples, and copper was detected at an elevated level (above the control sample) in the Station 01 sediment sample. In addition, copper was also detected at a higher concentration in the Station 02 mussel sample (26.3 ppm) than that detected in the Station 01 mussel sample (6 ppm) and the control mussel samples (4.3 and 7.2 ppm).

Under the "Characterization Step" of the CS, the mussels at Station 02 were re-sampled as a check on the metals concentrations detected previously in the "Verification Step". This single mussel sample was analyzed for lead, copper, chromium, and nickel. The sample results indicate that the detected metals concentrations in mussel at Station 02 are similar to those detected in the "Verification Step" control samples.

The CS recommended that "no further studies or remedial actions are needed at this site because the levels of contaminants found are not significantly high" (Louriero Engineering, 1986).

4.3 STUDIES FOR BUILDING 44 - PUMPHOUSE

Several studies have also been conducted to assess the former Pump House (Building 44) which was located approximately 50 feet north of Building 32. These studies included a UST Closure Assessment Report (Environmental Resource Associates, Inc., 1994), Site Investigation -Groundwater Investigation [Quad Three Group (Q3G), 1995], Phase I Environmental Assessment (Q3G, 1996), Supplemental Site Investigation (Q3G, 1997), and Underground Storage Tank Site Investigation Report (B&RE, 1997). Figure 4-2 depicts the Building 44 area discussed in this section.

4.3.1 Building 44 UST Closure Assessment-1994

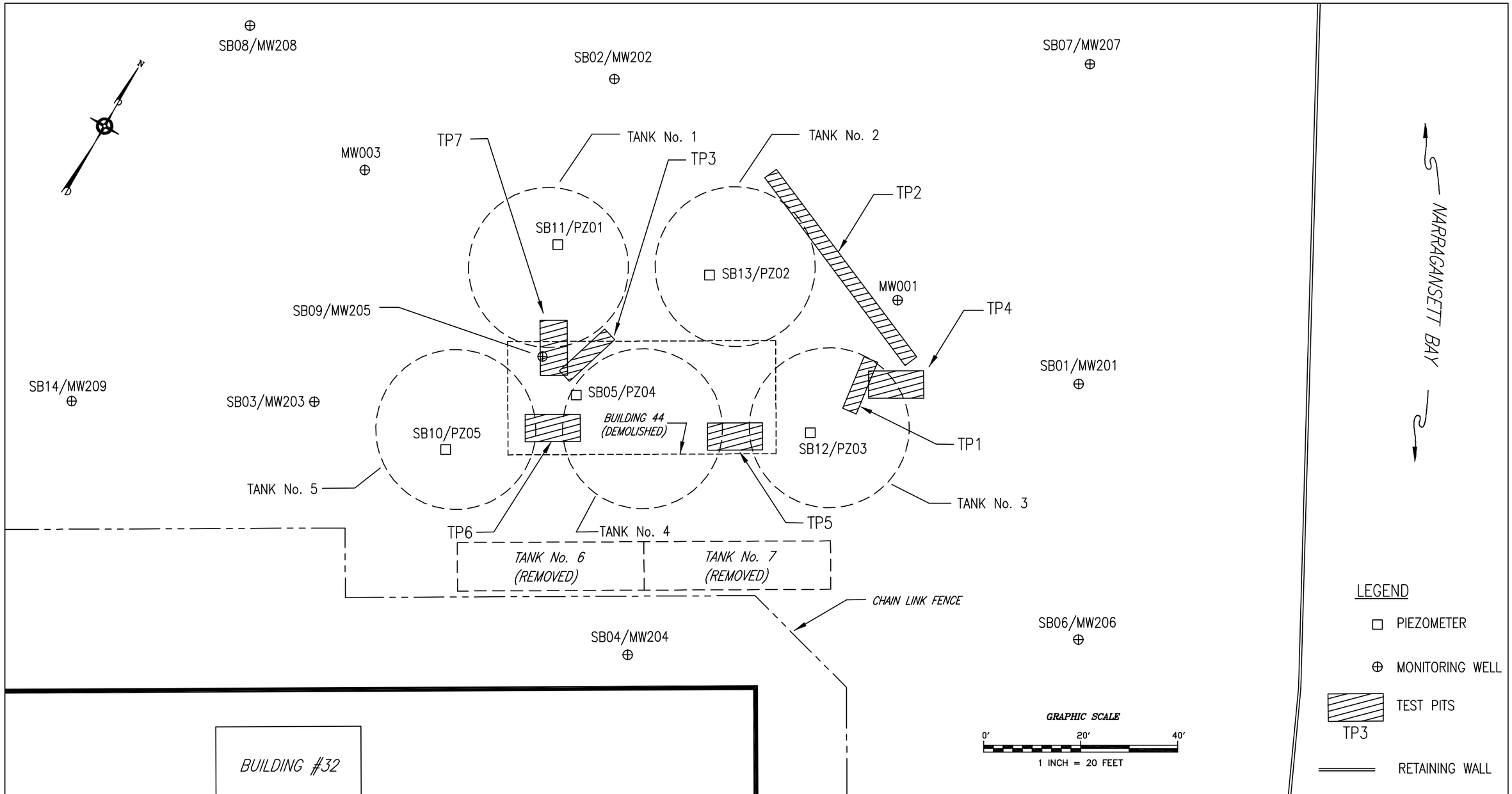
A UST closure assessment report was prepared for the Building 44 area by Environmental Resource Associates in September 1994. This assessment, conducted in July 1994, confirmed that the tanks had been abandoned and recommended that RIDEM issue a Certificate of Closure to the NETC. However, test pits excavated in the vicinity of the former USTs revealed significant free-floating product that appeared to be weathered black oil.

TABLE 4-1
ANALYTICAL RESULTS FOR SEDIMENT AND MUSSEL SAMPLES
FROM THE "CONFIRMATION STUDY REPORT" (LOUREIRO ENGINEERING, 1986)
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND

STATION NUMBER	01	02	N-1 (control station)	N-2 (control station)	N-2 (control duplicate)
MEDIA AND ANALYSIS					
SEDIMENT - December 1983					
Cyanide	0.121	0.111	0.031	0.027	NA
Chromium	<0.25	<0.25	11.5	8.0	NA
Cadmium	<0.05	<0.05	<0.05	<0.05	NA
Lead	<0.5	6.5	27.5	6.8	NA
Mercury	<0.02	<0.02	<0.02	<0.02	NA
Silver	<0.5	<0.5	<0.5	<0.5	NA
Copper	26.0	17.4	18.3	10.3	NA
Nickel	<0.25	<0.25	21.3	11.3	NA
MUSSELS - December 1983					
Chromium	<2.5	<2.5	<2.5	<2.5	NA
Cadmium	<0.5	<0.5	<0.5	<0.5	NA
Lead	<1.0	<1.0	<1.0	<1.0	NA
Mercury	<0.04	<0.04	<0.04	<0.04	NA
Silver	<1.0	<1.0	<1.0	<1.0	NA
Copper	6.0	26.3	7.2	4.3	NA
Nickel	<2.5	<2.5	<2.5	<2.5	NA
MUSSELS - September 1984					
Chromium	NS	1.0	1.1	2.8	1.4
Lead	NS	5.0	4.9	3.8	5.2
Copper	NS	6.6	6.8	8.2	5.4
Nickel	NS	3.9	4.9	5.1	4.9

NOTES:
- All results in ug/gm (dry weight basis).
- Available sample locations are presented in Appendix D.
- Sediments reportedly collected from a depth of 0 to 4 inches.
- NS = not sampled
- NA = not applicable

Reference: Loureiro Engineering Associates, May 15, 1986, Confirmation Study Report on Hazardous Waste Sites at Naval Education and Training Center, Newport, RI, prepared for the Northern Division, Naval Facilities Engineering Command.



BUILDING 44 UST CLOSURE ASSESSMENT SAMPLE STATIONS	FIGURE 4–2
SITE 17, GOULD ISLAND	
NAVSTA NEWPORT, RHODE ISLAND	
DRAWN BY: D.W. MACDOUGALL — REV.: 0	TETRA TECH NUS, INC.
CHECKED BY: S. PARKER — DATE: NOVEMBER 4, 2002	55 Jonspin Road Wilmington, MA 01887 (978)658–7899
SCALE: 1" = 20' — FILE NO.: DWG\5152\0410\FIG_4–2.DWG	

4.3.2 Building 44 Phase 1 Environmental Assessment - 1995 and 1996

A Site Investigation was conducted by Q3G in April 1995, which concluded that groundwater and soil at the former Building 44 site had been impacted by petroleum contamination. Their report published in May 1995 recommended further investigation.

A Phase I Environmental Assessment, dated March 1996, and a Supplemental Site Investigation (SSI), dated September 1996, both conducted by Q3G, followed the May 1995 investigation at Building 44. The SSI report identified the USTs as the source of impact to groundwater and recommended the installation of four groundwater monitoring wells and development of a site-specific corrective action plan (CAP). One of the tasks performed by the Q3G for the SSI was a soil gas survey. This was accomplished in the area North of Building 32 and extending to the base of the Firing Pier. Sixty-nine "Gore-Sorber" modules were placed in a grid formation in this area. This study found petroleum - related compounds, particularly benzene, toluene, ethyl benzene, and xylenes in most of the modules placed within this area. Trichloroethene (TCE) was also detected, with highest concentrations located 75 feet northwest of Building 32, and 150 feet west of the former Building 44 location.

Q3G conducted a supplemental site investigation that focused on underground utility conduits, aboveground and underground storage tanks, and structures within the study area. A Gore-Sorber soil gas screening survey was conducted along with soil sampling to determine if there was a relationship between soil gas and soil contaminants. After a comparison of the Gore-Sorber sample results with the soil analytical results, Q3G concluded that no direct correlation existed between the soil contamination and contaminants in the soil vapor. Q3G concluded that the source of contaminants identified by the Gore-Sorber soil gas survey modules was contaminated groundwater. Q3G concluded that metals found in the soil originated from sources other than the USTs. This investigation recommended that four additional groundwater monitoring wells be installed in those areas identified by the Gore-Sorber modules as being the most severely impacted.

4.3.3 UST Site Investigation of Building 44 Area - 1997

A UST Site Investigation was conducted by B&RE and reported in November 1997. Tasks included overburden soil boring advancement and soil sample collection, monitoring well installation, groundwater sampling, test pitting, hydraulic conductivity testing, groundwater-level measurements, and tidal influence testing. Figure 4-2 depicts the soil testing locations. Table 4-2 presents a summary of the analysis on soil samples collected during this 1997 investigation.

TABLE 4-2
SOIL SAMPLE DATA SUMMARY
FROM THE BUILDING 44 SITE INVESTIGATION REPORT
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND

SAMPLE IDENTIFICATION NO.	SB01-0911	SB02-0911	SB03-0407	SB04-0507	SB04-0507 DUP. SB40	SB06-0810	RIDEM DIRECT EXPOSURE CRITERIA[1]	
							RES[2]	IND/COM[(3]
SAMPLE MEDIUM	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**mg/kg**	**mg/kg**
PARAMETERS (mg/kg)								
Total Petroleum Hydrocarbons	240	1400	3800	140	210	63	500	2500
TCL VOCs (mg/kg)								
Methylene Chloride	0.046	0.072	0.42	0.03	0.03	0.003	45	760
Acetone	0.12	0.12	0.073	0.015J	0.016J	ND	7800	10000
Carbon disulfide	0.0009J	ND	ND	ND	ND	ND	-	-
Chloroform	ND	ND	ND	ND	ND	ND	1.2	940
2-Butanone	ND	ND	ND	ND	ND	ND	-	-
Toluene	ND	ND	0.004	ND	ND	ND	190	10000
Ethylbenzene	ND	ND	ND	ND	ND	ND	71	10000
Total Xylenes	ND	ND	ND	ND	ND	ND	110	10000
TCL SVOCs (mg/kg)								
Naphthalene	0.44	ND	ND	ND	ND	ND	54	10000
2-Methylnaphthalene	2.0	ND	ND	ND	ND	ND	123	10000
Acenaphthene	ND	ND	ND	ND	ND	ND	43	10000
Dibenzofuran	0.24J	0.62	ND	ND	ND	ND	-	-
Fluorene	0.32J	0.65	0.5	ND	ND	ND	28	10000
Phenanthrene	0.31J	0.48	0.42	ND	0.3J	0.19J	40	10000
Anthracene	ND	ND	ND	ND	ND	ND	35	10000
Carbazole	ND	ND	ND	ND	ND	ND	-	-
Di-n-butylphthalate	ND	ND	ND	ND	0.27J	ND	-	-
Fluoranthene	ND	ND	0.44	ND	0.35J	0.58	20	10000
Pyrene	ND	ND	0.55	ND	0.25J	0.53	13	10000
Benzo(a)anthracene	ND	ND	0.32J	ND	ND	0.23J	0.9	7.8
Chrysene	ND	ND	0.32J	ND	ND	0.25J	0.4	780
Bis(2-ethylhexyl) phthalate	0.49	0.63	1.7	0.3J	ND	ND	46	410
Benzo(b)fluoranthene	ND	ND	0.21J	ND	ND	0.22J	0.9	7.8
Benzo(k)fluoranthene	ND	ND	0.18J	ND	ND	ND	0.9	78
Benzo(a)pyrene	ND	ND	0.25J	ND	ND	0.22J	0.4	0.8
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	0.9	7.8
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	0.8	10000

TABLE 4-2 (cont.)
SOIL SAMPLE DATA SUMMARY
FROM THE BUILDING 44 SITE INVESTIGATION REPORT
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND
PAGE 2 OF 3

SAMPLE IDENTIFICATION NO.	SB07-0810	SB08-0709	SB09-0608	SB14-0608	RIDEM DIRECT EXPOSURE CRITERIA(1)	
					RES(2)	IND/COM((3)
SAMPLE MEDIUM	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**mg/kg**	**mg/kg**
PARAMETERS (mg/kg)						
Total Petroleum Hydrocarbons	78	28	2700	ND	500	2500
TCL VOCs (mg/kg)						
Methylene Chloride	0.038	0.008	0.013	0.005	45	760
Acetone	0.027	0.012	0.034	0.006	7800	10000
Carbon disulfide	ND	ND	ND	ND	-	-
Chloroform	0.002	0.002	0.002	ND	1.2	940
2-Butanone	0.007	0.003J	0.011	ND	-	-
Toluene	0.002	ND	0.002	0.002	190	10000
Ethylbenzene	0.0007J	0.0006J	0.006	0.0006J	71	10000
Total Xylenes	0.002	0.003	0.004	0.003	110	10000
TCL SVOCs (mg/kg)						
Naphthalene	ND	ND	0.3J	ND	54	10000
2-Methylnaphthalene	ND	ND	1100	ND	123	10000
Acenaphthene	3.1	ND	ND	ND	43	10000
Dibenzofuran	2.2	ND	0.34J	ND	-	-
Fluorene	3.3	ND	0.6	ND	28	10000
Phenanthrene	7.5	ND	0.82	ND	40	10000
Anthracene	3.1	ND	ND	ND	35	10000
Carbazole	0.73	ND	ND	ND	-	-
Di-n-butylphthalate	0.31J	0.027J	0.29J	ND	-	-
Fluoranthene	8.2	ND	0.26J	ND	20	10000
Pyrene	5.3	ND	0.29J	ND	13	10000
Benzo(a)anthracene	1.9	ND	ND	ND	0.9	7.8
Chrysene	2	ND	ND	ND	0.4	780
Bis(2-ethylhexyl) phthalate	0.32J	0.028J	ND	0.19J	46	410
Benzo(b)fluoranthene	0.81	ND	ND	ND	0.9	7.8
Benzo(k)fluoranthene	0.94	ND	ND	ND	0.9	78
Benzo(a)pyrene	0.91	ND	ND	ND	0.4	0.8
Indeno(1,2,3-cd)pyrene	0.37	ND	ND	ND	0.9	7.8
Benzo(g,h,i)perylene	0.28J	ND	ND	ND	0.8	10000

TABLE 4-2 (cont.)
SOIL SAMPLE DATA SUMMARY
FROM THE BUILDING 44 SITE INVESTIGATION REPORT
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND
PAGE 3 OF 3

SAMPLE IDENTIFICATION NO.	SB01-0911	SB02-0911	SB03-0407	SB04-0507	SB04-0507	SB06-0810	RIDEM DIRECT EXPOSURE CRITERIA(1)	
							RES(2)	IND/COM((3)
SAMPLE MEDIUM	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	mg/kg	mg/kg
INORGANICS (mg/kg)								
Arsenic	0.79	0.99	0.91	1.2	1	2	1.7	820
Barium	16.7	13.8	22.1	12.4	11.7	28.9	5500	10000
Cadmium	0.08	0.07	0.14	ND	0.08	0.21	39	1000
Chromium	11.3	9.2	10.2	7.8	8.6	7.9	390(4)	10000(4)
Lead	5.4	4.6	6.9	4.9	5.4	18	150	500
Mercury	0.03	0.02	ND	0.01	ND	0.1	23	610
Selenium	ND	ND	0.3	0.29	ND	0.36	390	10000

SAMPLE IDENTIFICATION NO.	SB07-0810	SB08-0709	SB09-0608	SB14-0608	RIDEM DIRECT EXPOSURE CRITERIA(1)	
					RES(2)	IND/COM((3)
SAMPLE MEDIUM	SOIL	SOIL	SOIL	SOIL	mg/kg	mg/kg
INORGANICS (mg/kg)						
Arsenic	1.4	1.6	1.4	1.4	1.7	820
Barium	18.2	24.8	27.4	25.0	5500	10000
Cadmium	0.07	0.11	0.15	.008	39	1000
Chromium	8.8	9.6	9.5	10.4	390(4)	10000(4)
Lead	39.7	4.8	11.3	6.2	150	500
Mercury	ND	ND	ND	ND	23	610
Selenium	0.32	ND	ND	ND	390	10000

Notes: (1) Rhode Island Department of Environmental Protection Remediation Regulations - March 31, 1993; Amended August 1996
(2) RES is the Residential Direct Exposure Criterion
(3) IND/COM is the Industrial/Commercial Direct Exposure Criterion
(4) Exposure Criteria for Chromium VI
J - Estimated value
ND - Not detected

The UST Site Investigation found TPH concentrations exceeding RIDEM GA Leachability Criteria (500 mg/kg), RIDEM Residential Direct Exposure Criteria (500 mg/kg) or exceeding RIDEM Industrial/Commercial Direct Exposure Criteria (2,500 mg/kg) at three of the 10 sample locations (SB02, SB03, SB09). One SVOC, benzo(a)pyrene (0.91 mg/kg) exceeded the RIDEM Residential and Industrial/Commercial Direct Exposure Criteria (0.8 mg/kg). The three compounds identified at levels exceeding the residential criteria are benzo(a)anthracene (1.9 mg/kg), chrysene (2 mg/kg), and benzo(k)fluoranthene (0.94 mg/kg). No VOCs were detected in soils exceeding RIDEM Residential or Industrial/Commercial Direct Exposure Criteria, or RIDEM GA Leachability Criteria. For metals analyses, arsenic was identified in soil at one boring location (2 mg/kg at SB06) exceeding the RIDEM Residential Direct Exposure Criteria of 1.7 mg/kg.

A summary of the analysis of groundwater samples collected during this investigation is presented in Table 4-3. Analysis of groundwater samples indicated the presence of TPH in four of the eleven wells tested. TPH was identified at one location at 1,700 mg/L (MW001) and the remaining three locations at 1.8 to 6.4 mg/L. One volatile organic compound was identified (methylene chloride at 73 ug/L at MW001) exceeding the GA Groundwater Objective of 5 ug/L at one well location. One SVOC (naphthalene at 200 ug/L) was detected in excess of the GA Groundwater Objective of 20 ug/L at MW001. For metals analyses, lead was identified in samples obtained from seven of the 10 sampled wells at levels exceeding the RIDEM Groundwater Objective for GA areas of 15 ug/L. Exceedances ranged from 15.8 ug/L (MW204) to 243 ug/L (MW003).

Tidal influence testing was performed on two piezometers (PZ-02 and PZ-05, placed in the UST cavities) and one well (MW-201) to the east of the former tank locations. The piezometers showed no tidal influence, and MW-201, located within 50 feet of the east shoreline, showed a tidal fluctuation of 0.75 feet. Tidal change at the shoreline during the period was measured at 4 feet (B&R Environmental, November 1997).

Also as a part of the 1997 site investigation, a series of test pits were excavated to determine the nature of anomalies detected in the subsurface materials by Q3G in 1996. These were found to be likely a result of fragments of the piping systems that remained in the ground following the UST closures. However, oil-stained soils and non-aqueous phase oil was found in the ground during test pit operations (see below, Section 4.3.4).

4.3.4 Building 44 Corrective Action Excavation – 2000

A corrective action plan prepared by TtNUS recommended removal of the affected soils and long-term groundwater monitoring. In the fall of 2000 Foster Wheeler Environmental Corporation completed the UST removal and soil excavation phase in conjunction with the Building 32 demolition activities.

TABLE 4-3
GROUNDWATER SAMPLE DATA SUMMARY
FROM THE BUILDING 44 SITE INVESTIGATION REPORT
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND

SAMPLE IDENTIFICATION NO.	MW201	MW202	MW203	MW204	MW205	MW206	MW207	GA GROUNDWATER OBJECTIVE[1]
SAMPLE MEDIUM	**AQ**	**AQ**	**AQ**	**AQ**	**AQ**	**AQ**	**AQ**	**µg/l**
PARAMETERS (mg/L)								
Total Petroleum Hydrocarbons	1.8	1.8	6.4	ND	-	ND	ND	-
TCL VOCs (µg/L)								
Methylene Chloride	1	2	3	3	2	3	3	5
Acetone	ND	4J	3J	ND	8	4J	ND	-
Carbon disulfide	ND	ND	ND	ND	ND	ND	ND	-
Chloroform	ND	ND	ND	4	0.8J	3	ND	100[2]
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	100[2]
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	5
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	100[2]
Benzene	0.8J	ND	ND	ND	ND	ND	ND	5
Toluene	ND	ND	ND	ND	ND	ND	ND	1000
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	700
Total Xylenes	ND	0.7J	ND	0.7J	ND	ND	ND	10,000
TCL SVOCs (µg/L)								
Naphthalene	ND	ND	ND	ND	ND	ND	ND	20
2-Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	-
Acenaphthene	ND	ND	ND	ND	ND	ND	15	-
Dibenzofuran	ND	ND	ND	ND	ND	ND	ND	-
Fluorene	ND	ND	ND	ND	ND	ND	ND	-
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	-
Bis(2-ethylhexyl) phthalate	5J	69	8J	17	11J	19	5J	-

TABLE 4-3 (cont.)
GROUNDWATER SAMPLE DATA SUMMARY
FROM THE BUILDING 44 SITE INVESTIGATION REPORT
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND
PAGE 2 OF 3

SAMPLE IDENTIFICATION NO.	MW208	MW209	MW210 DUP. MW201	MW211 DUP. MW 203	MW001	MW003	GA GROUNDWATER OBJECTIVE(1)
SAMPLE MEDIUM	**AQ**	**AQ**	**AQ**	**AQ**	**AQ**	**AQ**	**µg/l**
PARAMETERS (mg/L)							
Total Petroleum Hydrocarbons	ND	ND	2.6	5.9	1700	ND	-
TCL VOCs (µg/L)							
Methylene Chloride	2	1	1	3	73	2	5
Acetone	3J	3J	3J	5J	79J	3J	-
Carbon disulfide	ND	ND	ND	3	ND	ND	-
Chloroform	ND	1	ND	ND	ND	ND	100(2)
Bromodichloromethane	ND	1J	ND	ND	ND	ND	100(2)
Trichloroethene	ND	1	ND	ND	ND	ND	5
Dibromochloromethane	ND	0.8J	ND	ND	ND	ND	100(2)
Benzene	ND	ND	0.9J	ND	ND	ND	5
Toluene	ND	ND	ND	ND	69	ND	100
Ethylbenzene	ND	ND	ND	ND	37	ND	700
Total Xylenes	ND	ND	ND	ND	120	2	10,000
TCL SVOCs (µg/L)							
Naphthalene	ND	ND	ND	ND	200	ND	20
2-Methylnaphthalene	ND	ND	ND	ND	720	ND	-
Acenaphthene	ND	ND	ND	ND	ND	ND	-
Dibenzofuran	ND	ND	ND	ND	60	ND	-
Fluorene	ND	ND	ND	ND	42	ND	-
Phenanthrene	ND	ND	ND	ND	65	ND	-
Bis(2-ethylhexyl) phthalate	18	6J	12	17	ND	7J	-

TABLE 4-3 (cont.)
GROUNDWATER SAMPLE DATA SUMMARY
FROM THE BUILDING 44 SITE INVESTIGATION REPORT
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND
PAGE 3 OF 3

SAMPLE IDENTIFICATION NO.	MW201	MW202	MW203	MW204	MW205	MW206	MW207	GA GROUNDWATER OBJECTIVE(1)
SAMPLE MEDIUM	**AQ**	**AQ**	**AQ**	**AQ**	**AQ**	**AQ**	**AQ**	**µg/l**
INORGANICS (µg/L)								
Arsenic	14	3	14	6.2	14.1	8.8	8.3	-
Barium	212	65.7	179	99.2	164	168	144	2000
Cadmium	ND	0.20	ND	ND	ND	ND	0.25	5
Chromium	49.4	5.9	50.7	21.1	30	21	36.5	100
Lead	30	10.2	38.1	15.8	49.9	37.3	35.7	15
Mercury	0.01	0.03	ND	ND	0.02	0.07	0.03	2
Silver	ND	ND	ND	ND	ND	ND	ND	-

SAMPLE IDENTIFICATION NO.	MW208	MW209	MW210 DUP. MW201	MW211 DUP. MW203	MW003	GA GROUNDWATER OBJECTIVE(1)
SAMPLE MEDIUM	**AQ**	**AQ**	**AQ**	**AQ**	**AQ**	**µg/l**
INORGANICS (µg/L)						
Arsenic	4.4	4.2	18.4	12.3	20.7	-
Barium	53.1	98.9	317	171	258	2000
Cadmium	ND	ND	ND	ND	8.8	5
Chromium	8.5	24.6	80	43.4	16.2	100
Lead	12.7	12.7	48.4	31	243	15
Mercury	0.05	0.03	0.01	ND	0.33	2
Silver	ND	ND	ND	ND	2	-

Notes: (1) Rhode Island Department of Environmental Protection Remediation Regulations - March 31, 1993; Amended August 1996
(2) Total Trihalomethanes GA Groundwater Objective
J - Estimated value
ND - Not detected

Demolition debris (red brick and crushed concrete) was used to back-fill the USTs excavation at the former Building 44 site. Some monitoring wells destroyed during this effort were subsequently replaced for subsequent groundwater monitoring. The approximate excavation area is depicted on Figure 2-1.

4.3.5 Building 44 Interim Monitoring – 2001 and 2002

The groundwater monitoring program was undertaken to confirm residual contamination is not entering the surficial aquifer and to recover mobile free product, if detected. In addition, the monitoring results will be used to determine if the existing network of wells is adequate to monitor any contaminant migration. This section summarizes evaluation of the data from the three rounds of corrective action groundwater monitoring.

Three semi-annual groundwater sampling rounds were conducted at the site, beginning in April 2001. Site monitoring wells are shown in Figure 4-2. The designated wells for the corrective action groundwater monitoring program consisted of seven of the eleven overburden wells that existed at the site prior to the soil remediation. A summary of data from the first three rounds of groundwater monitoring is presented in Tables 4-4 and 4-5.

During each sampling round, designated wells were sampled using bailers and groundwater levels were measured using an electronic oil/water interface probe. The probe was also used to check for the presence of dense or light non-aqueous phase liquid (DNAPL or LNAPL) or free product layers in all serviceable monitoring wells. Samples were shipped to an off-site laboratory to be analyzed for VOCs (USEPA SW-846 Method 8260B); SVOCs (USEPA SW-846 Method 8270C); GRO (USEPA SW-846 Method 8015M); DRO-TPH by USEPA SW-846 Method 8015M/8100M; and total and dissolved metals by USEPA SW-846 Methods 6010B/7471A.

Groundwater elevation measurements during Rounds 1 and 2 indicated that the groundwater flows away from the former UST area to the north, east and west, toward Narragansett Bay. Measurements during Round 3 show a slightly different groundwater pattern at the site in which the highest groundwater elevation was measured in a monitoring well west of the former USTs. Generally, the groundwater flow is toward the north and east through the tank grave with some groundwater flowing west, with all of the groundwater eventually discharging into Narragansett Bay.

TABLE 4-4
GROUNDWATER VOCS AND SVOCS ANALYTICAL SUMMARY
BUILDING 44 GROUNDWATER MONITORING ROUNDS 1 THROUGH 3
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND

Monitoring Well			MW204R (Upgradient)						MW001R (Source Area)						MW203R (Source Area)					
Round			1		2		3		1		2		3		1		2		3	
Date Sampled	GWQS	PAL	Apr 01		Oct 01		Apr 02		Apr 01		Oct 01		Apr 02		Apr 01		Oct 01		Apr 02	
Volatile Organic Analysis (UG/L)																				
2-Butanone			5	U	5	U	10	U	12	U	6		10	U	5	U	5	U	10	U
4-Methyl-2-Pentanone			5	U	5	U	10	U	3	J	2		2	J	5	U	5	U	10	U
Acetone			5	U	5	U	10	U	67	U	35		29	U	5	U	9	U	10	U
Toluene	1000	500	5	U	5	U	10	U	1	J	1		2	J	5	U	5	U	10	U
Semivolatile Organic Analysis (UG/L)																				
2,4,5-Trichlorophenol			20	U	20	U	20	U	1	J	180	U	20	U	20	U	20	U	20	U
2,4-Dichlorophenol			10	U	10	U	10	U	10	U	90	U	10	U	10	U	10	U	10	U
2,4-Dimethylphenol			10	U	10	U	10	U	8	J	16		8	J	10	U	10	U	10	U
2-Chloronaphthalene			10	U	10	U	10	U	10	U	90	U	10	U	10	U	10	U	10	U
2-Methylnaphthalene			10	U	3	J	10	U	1	J	90	U	2	J	2	J	10	U	10	U
2-Methylphenol			10	U	10	U	10	U	4	J	90	U	4	J	10	U	10	U	10	U
4-Methylphenol			10	U	1	J	10	U	36		71		33		10	U	10	U	10	U
Acenaphthene			3		6	J	10	U	4	J	90	U	5	J	8	J	10	U	1	J
Acenaphthylene			10	U	10	U	10	U	10	U	90	U	10	U	10	U	10	U	10	U
Anthracene			3		3	J	10	U	4	J	90	U	3	J	18		1	J	2	J
Benzo(a)anthracene			10	U	10	U	10	U	3	J	90	U	3	J	32		2	J	7	J
Benzo(a)pyrene	***0.2***	*0.1*	10	U	10	U	10	U	***3***	***J***	90	U	***3***	***J***	***26***		***1***	***J***	***7***	***J***
Benzo(b)fluoranthene			10	U	10	U	10	U	4	J	90	U	4	J	34		2	J	9	J
Benzo(g,h,i)perylene			10	U	10	U	10	U	10	U	90	U	2	J	15		10	U	4	J
Benzo(k)fluoranthene			10	U	10	U	10	U	1	J	90	U	1	J	12		10	U	4	J
bis(2-Ethylhexyl)phthalate	6	3	10	U	10	U	10	U	10	U	90	U	2	J	10	U	10	U	1	J
Carbazole			4		54	J	10	U	5	J	33		5	J	11		3	J	1	J
Chrysene			10	U	10	U	10	U	3	J	90	U	3	J	33		2	J	8	J
Dibenzo(a,h)anthracene			10	U	10	U	10	U	10	U	90	U	10	U	4	J	10	U	1	J
Dibenzofuran			1		4	J	10	U	2	J	90	U	2	J	5	J	10	U	10	U
Diethylphthalate			10	U	10	U	10	U	10	U	90	U	10	U	10	U	10	U	10	U
Fluoranthene			2		1	J	10	U	8	J	90	U	7	J	68		5	J	17	J
Fluorene			1		4	J	10	U	2	J	90	U	2	J	9	J	10	U	1	J
Indeno(1,2,3-cd)pyrene			10	U	10	U	10	U	2	J	90	U	2	J	16		10	U	4	J
Naphthalene	***20***	*10*	3		***22***		10	U	*11*		***22***		*15*		4	J	10	U	10	U
Pentachlorophenol	***1***	*0.5*	***6***		*1*	*J*	20	U	***34***		***77***		***30***		***4***	***J***	20	U	20	U
Phenanthrene			1		4	J	10	U	7	J	90	U	7	J	52		5	J	11	
Phenol			10	U	10	U	10	U	230	*J	980		280	*	10	U	10	U	10	U
Pyrene			2		10	U	10	U	7	J	90	U	6	J	59		4	J	15	J

Bold italics – GWQS exceeded; Italics – PAL exceeded; U – not detected; J – quantitation approximate; UJ – detection limit approximate

TABLE 4-4 (cont.)
GROUNDWATER VOCS AND SVOCS ANALYTICAL SUMMARY
BUILDING 44 GROUNDWATER MONITORING ROUNDS 1 THROUGH 3
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND

Monitoring Well			MW205R (Source Area)						MW003R (Downgradient)				MW202R (Downgradient)			
Round			1		2		3		2		3		2		3	
Date Sampled	GWQS	PAL	Apr 01		Oct 01		Apr 02		Apr 01		Oct 01		Apr 01		Oct 01	
Volatile Organic Analysis (UG/L)																
2-Butanone			5	U	5	U	10	U	5	U	10	U	5	U	10	U
4-Methyl-2-Pentanone			5	U	5	U	10	U	5	U	10	U	5	U	10	U
Acetone			8	U	5	U	10	U	5	U	10	U	5	U	10	U
Toluene	1000	500	5	U	5	U	10	U	5	U	10	U	5	U	1	J
Semivolatile Organic Analysis (UG/L)																
2,4,5-Trichlorophenol			20	U	20	U	20	U	20	U	20	U	20	U	20	U
2,4-Dichlorophenol			10	U	1	J	10	U	10	U	10	U	10	U	10	U
2,4-Dimethylphenol			10	U	1	J	10	U	10	U	10	U	10	U	10	U
2-Chloronaphthalene			10	U	3	J	10	U	10	U	10	U	8	J	10	U
2-Methylnaphthalene			2	J	5	J	2	J	10	U	10	U	10	U	10	U
2-Methylphenol			10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-Methylphenol			10	U	10	U	10	U	10	U	10	U	10	U	10	U
Acenaphthene			6	J	9	J	4	J	10	U	10	U	1	J	10	U
Acenaphthylene			10	U	10	U	10	U	10	U	10	U	10	U	10	U
Anthracene			4	J	4	J	2	J	1	J	10	U	3	J	10	U
Benzo(a)anthracene			1	J	2	J	1	J	10	U	10	U	10	U	10	U
Benzo(a)pyrene	***0.2***	*0.1*	10	U	***1***	***J***	10	U	10	U	10	U	10	U	10	U
Benzo(b)fluoranthene			1	J	2	J	1	J	10	U	10	U	10	U	10	U
Benzo(g,h,i)perylene			10	U	10	U	10	U	10	U	10	U	10	U	10	U
Benzo(k)fluoranthene			10	U	10	U	10	U	10	U	10	U	10	U	10	U
bis(2-Ethylhexyl)phthalate	6	3	10	U	10	U	2	J	10	U	10	U	10	U	1	J
Carbazole			4	J	36	J	4	J	3	J	10	U	18	J	5	J
Chrysene			1	J	2	J	1	J	10	U	10	U	10	U	10	U
Dibenzo(a,h)anthracene			10	U	10	U	10	U	10	U	10	U	10	U	10	U
Dibenzofuran			4	J	6	J	3	J	10	U	10	U	3	J	1	J
Diethylphthalate			1	J	2	J	10	U	10	U	10	U	10	U	10	U
Fluoranthene			4	J	5	J	3	J	10	U	10	U	10	U	1	J
Fluorene			2	J	7	J	3	J	10	U	10	U	3	J	2	J
Indeno(1,2,3-cd)pyrene			10	U	10	U	10	U	10	U	10	U	10	U	10	U
Naphthalene	***20***	*10*	5	J	***24***		*12*		4	J	10	U	1	J	9	J
Pentachlorophenol	***1***	*0.5*	***16***	***J***	***3***	***J***	***2***	***J***	***4***	***J***	***3***		20	U	20	U
Phenanthrene			1	J	5	J	6	J	10	U	10	U	10	U	10	U
Phenol			10	U	10	U	10	U	10	U	10	U	10	U	10	U
Pyrene			3	J	4	J	2	J	10	U	10	U	10	U	1	J

Bold italics – GWQS exceeded; Italics – PAL exceeded; U – not detected; J – quantitation approximate; UJ – detection limit approximate

TABLE 4-4 (cont.)
GROUNDWATER VOCS AND SVOCS ANALYTICAL SUMMARY
BUILDING 44 GROUNDWATER MONITORING ROUNDS 1 THROUGH 3
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND

Monitoring Well			MW207 (Downgradient)					
Round			1		2		3	
Date Sampled	GWQS	PAL	Apr 01		Oct 01		Apr 02	
Volatile Organic Analysis (UG/L)								
2-Butanone			5	U	5	U	10	U
4-Methyl-2-Pentanone			5	U	5	U	10	U
Acetone			5	U	5	U	10	U
Toluene	1000	500	5	U	5	U	10	U
Semivolatile Organic Analysis (UG/L)								
2,4,5-Trichlorophenol			20	U	20	U	20	U
2,4-Dichlorophenol			10	U	10	U	10	U
2,4-Dimethylphenol			10	U	10	U	10	U
2-Chloronaphthalene			10	U	1	J	10	U
2-Methylnaphthalene			10	U	10	U	10	U
2-Methylphenol			10	U	10	U	10	U
4-Methylphenol			10	U	10	U	10	U
Acenaphthene			10	U	3	J	20	
Acenaphthylene			10	U	10	U	1	J
Anthracene			10	U	2	J	2	J
Benzo(a)anthracene			10	U	2	J	8	J
Benzo(a)pyrene	***0.2***	*0.1*	10	U	***1***	***J***	***9***	***J***
Benzo(b)fluoranthene			10	U	2	J	13	
Benzo(g,h,i)perylene			10	U	10	U	6	J
Benzo(k)fluoranthene			10	U	10	U	5	J
bis(2-Ethylhexyl)phthalate	6	3	10	U	10	U	10	U
Carbazole			10	U	10	J	7	J
Chrysene			10	U	2	J	11	
Dibenzo(a,h)anthracene			10	U	10	U	10	U
Dibenzofuran			10	U	3	J	8	J
Diethylphthalate			10	U	10	U	10	U
Fluoranthene			1	J	6	J	22	
Fluorene			10	U	2	J	5	J
Indeno(1,2,3-cd)pyrene			10	U	10	U	6	J
Naphthalene	***20***	*10*	10	U	10	U	***39***	
Pentachlorophenol	***1***	*0.5*	20	U	20	U	20	U
Phenanthrene			10	U	4	J	13	
Phenol			10	U	10	U	10	U
Pyrene			10	U	4	J	19	

Bold italics – GWQS exceeded; Italics – PAL exceeded; U – not detected; J – quantitation approximate; UJ – detection limit approximate

TABLE 4-5
GROUNDWATER GRO, DRO-TPH AND METALS ANALYTICAL SUMMARY
BUILDING 44 GROUNDWATER MONITORING ROUNDS 1 THROUGH 3
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND

Monitoring Well			MW204R (Upgradient)						MW001R (Source Area)						MW203R (Source Area)					
Round			1		2		3		1		2		3		1		2		3	
Date Sampled	GWQS	PAL	Apr 01		Oct 01		Apr 02		Apr 01		Oct 01		Apr 02		Apr 01		Oct 01		Apr 02	
Gasoline Range Organic Analysis (UG/L)																				
Gasoline Range Organics			250	U	250	U	50	U	250	U	250	U	57		250	U	250	U	50	U
Total Petroleum Hydrocarbon Analysis (MG/L)																				
Total Petroleum Hydrocarbons			2.0		1.5		0.69		6.2		5.5		3.5		20		2.2		3.4	
TAL Metal Analysis (UG/L)																				
Arsenic	50	25	3.8		6.4	U	3.0	U	14.5		8.3	U	4.3	J	9.9		11.5	U	9.1	
Barium	2000	1000	70.0	U	57.7		67.9		144	U	177		111		250		162		225	
Cadmium	***5***	2.5	0.88	U	0.56	U	2.0	U	4.1	U	2.6	U	2.0	U	2.3	U	2.4	U	2.0	U
Chromium	100	50	5.6	U	2.4	U	3.7	UJ	11.3	U	8.8		4.8	UJ	6.5	U	1.6	U	35.2	
Lead	***15***	7.5	***16.0***		2.0	U	***29.7***		***278***		***230***		***135***		***123***		2.0	U	***45.9***	
Mercury	***2***	1	0.14	U	0.14	U	***2.1***		1.0		0.42		0.40		0.13	U	0.14	U	0.14	U
Dissolved Metal Analysis (UG/L)																				
Arsenic	50	25	2.6		4.8	U	3.0	U	7.9		7.2	U	3.7	J	6.2		10.7	U	3.0	U
Barium	2000	1000	41.9	U	60.1		53.5		84.6	UJ	82.8		67		169	UJ	152		89.0	
Chromium	100	50	1.8	U	2.3	U	3.0	U	0.61	UJ	0.86	U	3.0	U	0.91	UJ	2.0	U	3.0	U
Lead	***15***	7.5	2.0	U	2.0	U	2.6		***37.0***		***15.2***		6.8		2.0	U	2.0	U	1.0	U
Mercury	2	1	0.13	U	0.16	U	0.14	U	0.15	J	0.36		0.14	U	0.13	U	0.15	U	0.13	U
Silver			1.0	U	1.0	U	2.3	J	1.0	UJ	1.0	U	2.0	U	1.0	UJ	1.0	U	2.2	J

Bold italics – GWQS exceeded; Italics – PAL exceeded; U – not detected; J – quantitation approximate; UJ – detection limit approximate

TABLE 4-5 (cont.)
GROUNDWATER GRO, DRO-TPH AND METALS ANALYTICAL SUMMARY
BUILDING 44 GROUNDWATER MONITORING ROUNDS 1 THROUGH 3
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND

Monitoring Well			MW205R (Source Area)						MW003R (Downgradient)				MW202R (Downgradient)			
Round			1		2		3		2		3		2		3	
Date Sampled	GWQS	PAL	Apr 01		Oct 01		Apr 02		Apr 01		Oct 01		Apr 01		Oct 01	
Gasoline Range Organic Analysis (UG/L)																
Gasoline Range Organics			250	U	250	U	50	U	250	U	50	U	250	U	140	
Total Petroleum Hydrocarbon Analysis (MG/L)																
Total Petroleum Hydrocarbons			2.1		2.3		1.4		2.1		0.76		2.1		3.4	
TAL Metal Analysis (UG/L)																
Arsenic	50	25	5.9		5.2	U	3.0	U	24.3		11.9		7.7	U	3.0	U
Barium	2000	1000	31.9	U	58.6	U	43.4		166		107		119		92.9	
Cadmium	***5***	2.5	0.40	U	0.40	U	2.0	U	4.3		2.0	U	***5.6***		2.0	U
Chromium	100	50	6.9	U	5.6		3.6	UJ	57.3		34.0		17.0		3.0	U
Lead	***15***	7.5	4.0	U	2.0	U	8.5		***30.6***		***26.6***		6.8		12.8	
Mercury	***2***	1	0.13	U	0.15	U	0.16	UJ	0.14	U	0.16	U	0.14	U	0.13	U
Dissolved Metal Analysis (UG/L)																
Arsenic	50	25	5.4		6.1	U	3.0	U	5.0	U	3.4		2.0	U	3.0	U
Barium	2000	1000	29.2	UJ	58.6		40.0	U	51.1		25.4	U	89.5		66.7	
Chromium	100	50	3.2	UJ	5.5		3.2	J	2.4	U	3.0	U	1.3	U	3.0	U
Lead	***15***	7.5	2.0	U	2.0	U	1.9	J	2.0	U	1.0	U	2.0	U	1.0	U
Mercury	2	1	0.13	U	0.14	U	0.13	U	0.13	U	0.14	U	0.15	U	0.14	U
Silver			1.0	UJ	1.0	U	2.0	U	1.0	U	2.0	U	1.0	U	2.0	U

Bold italics – GWQS exceeded; Italics – PAL exceeded; U – not detected; J – quantitation approximate; UJ – detection limit approximate

TABLE 4-5 (cont.)
GROUNDWATER GRO, DRO-TPH AND METALS ANALYTICAL SUMMARY
BUILDING 44 GROUNDWATER MONITORING ROUNDS 1 THROUGH 3
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND

Monitoring Well			MW207 (Downgradient)					
Round			1		2		3	
Date Sampled	GWQS	PAL	Apr 01		Oct 01		Apr 02	
Gasoline Range Organic Analysis (UG/L)								
Gasoline Range Organics			250	U	250	U	50	U
Total Petroleum Hydrocarbon Analysis (MG/L)								
Total Petroleum Hydrocarbons			2.2		2.0		2.7	
TAL Metal Analysis (UG/L)								
Arsenic	50	25	2.0	U	9.8	U	11.9	
Barium	2000	1000	93.2	U	230		364	
Cadmium	***5***	2.5	0.53	UJ	3.3		4.5	
Chromium	100	50	0.91	UJ	3.8	U	18.4	U
Lead	***15***	7.5	13.1		***256***		***1380***	
Mercury	***2***	1	0.14	U	0.14	U	0.48	
Dissolved Metal Analysis (UG/L)								
Arsenic	50	25	2.0	J	9.3	U	3.0	U
Barium	2000	1000	85.6	UJ	185		133	
Chromium	100	50	0.50	UJ	0.99	UJ	3.0	U
Lead	***15***	7.5	2.0	U	2.0	U	1.0	
Mercury	2	1	0.13	U	0.14	U	0.13	U
Silver			1.0	UJ	1.0	U	2.0	U

Bold italics – GWQS exceeded; Italics – PAL exceeded; U – not detected; J – quantitation approximate; UJ – detection limit approximate

Based on three rounds of groundwater monitoring, it appears that the tank closure and corrective action activities were successful in removing most petroleum-related contamination at the former USTs. No free product was observed in these rounds, therefore product recovery efforts are not necessary. The analytical results indicate that low-level residual petroleum in the subsurface is potentially being released to the groundwater, based on the detection of low-level DRO-TPH in all monitoring wells.

However, even though the soil removal has resulted in a decrease in petroleum-related groundwater contamination, six contaminants were found at levels exceeding the (GWQS) for GA areas. The observed changes in these concentrations occurred after the removal of the USTs at Building 44 and placement of demolition debris backfill in the UST excavation. These six contaminants consist of three SVOCs (benzo(a)pyrene, naphthalene, and pentachlorophenol) and three metals (cadmium, lead, and mercury).

Based on the above findings, it was recommended that three additional semi-annual sampling rounds be conducted, and that they include the same designated wells sampled in Rounds 2 and 3.

4.4 BUILDING 32 UNDERGROUND STORAGE TANK (UST) SITE INVESTIGATION REPORT (B&RE, 1997)

A UST Site Investigation Report describes tank closure and related investigative activities conducted at Building 32 by Brown & Root Environmental (B&RE, 1997). A 1,000-gallon steel UST containing No. 2 fuel oil was removed from the south of Building 32 in July 1997 (Figure 4-1). The investigation included soil borings and installation of 3 groundwater monitoring wells. Soil samples from the soil borings were analyzed for TPH. A summary of chemical results from samples collected during this effort is presented in Tables 4-6 and 4-7.

No TPH concentrations were identified exceeding RIDEM residential Direct Exposure Criteria (500 mg/kg) or exceeding RIDEM Industrial/Commercial Direct Exposure Criteria (2,500 mg/kg). Positive detections ranged from 37 mg/kg for SB16 to 260 mg/kg for sample TNK-W.

Results from groundwater samples collected from the three wells and one groundwater sample collected from the tank grave (TNK-AQ) were submitted for TPH, VOCs, SVOCs, and RCRA metals. TPH was identified in the sample from MW303 at 1.1 mg/L. TPH was not identified in the samples from MW301, MW302, and TNK-AQ. One volatile organic compound was identified at a level above the RIDEM Groundwater Objective for GA areas in the sample obtained from MW301. For this sample, trichloroethene was identified at 6 ug/L, exceeding the GA Groundwater Objective of 5 ug/L. No other VOCs were identified at levels in excess of the RIDEM Groundwater Objective for GA areas. No SVOCs or metals were identified at levels in excess of the RIDEM Groundwater Objective for GA areas.

TABLE 4-6
SOIL SAMPLE DATA SUMMARY
BUILDING 32 TANK CLOSURE ASSESSMENT
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND

SAMPLE IDENTIFICATION NO.	TNK-E	TNK-W	SB16-0305	SB17-0305	RIDEM DIRECT EXPOSURE CRITERIA (1)	
					RES(2)	IND/COM(3)
SAMPLE MEDIUM	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**mg/kg**	**Mg/kg**
PARAMETERS (mg/kg)						
Total Petroleum Hydrocarbons	140	260	37	ND	500	2500
Gasoline Range Organics	2.9	NA	ND	ND	-	-

Notes:
1) Rhode Island Department of Environmental Protection Remediation Regulations – March 31, 1993; Amended August 1996
2) RES is the Residential Direct Exposure Criterion
3) IND/COM is the Industrial/Commercial Direct Exposure Criterion

J - Estimated value
ND - Not detected
NA - Not Analyzed

TABLE 4-7
GROUNDWATER SAMPLE DATA SUMMARY
BUILDING 32 TANK CLOSURE ASSESSMENT
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND

SAMPLE IDENTIFICATION NO.	TNK-AQ	MW301	MW302	MW303	GA GROUNDWATER OBJECTIVE(1)
SAMPLE MEDIUM	**AQ**	**AQ**	**AQ**	**AQ**	**µg/L**
PARAMETERS (mg/L)					
Total Petroleum Hydrocarbons	ND	ND	ND	1.1	-
TCL VOCs (µg/L)					
Methylene Chloride	NA	0.8J	1	4	5
Acetone	NA	6	5J	8	-
cis-1,2-Dichloroethene	NA	10	1J	ND	70
trans-1,2-Dichloroethene	NA	4	ND	ND	100
Chloroform	NA	0.7J	ND	0.9J	100(2)
Trichloroethene	NA	6	ND	0.8J	5
Toluene	NA	ND	5	ND	1000
Ethylbenzene	NA	ND	2	ND	700
Total Xylenes	NA	ND	8	ND	10000
TCL SVOCs (µg/L)					
Bis(2-ethylhexyl)phthalate	NA	12	6J	32	-
INORGANICS (µg/L)					
Arsenic	NA	5.6	2.3	ND	-
Barium	NA	44.8	64.8	106	2000
Cadmium	NA	0.29	ND	0.55	5
Chromium	NA	9.9	14.6	5.2	100
Lead	NA	8.5	4.0	6.5	15
Mercury	NA	0.01	ND	ND	2

Notes:

1) Rhode Island Department of Environmental Protection Remediation Regulations – March 31, 1993; Amended August 1996.
2) Total Trihalomethanes GA Groundwater Objective
3) IND/COM is the Industrial/Commercial Direct Exposure Criterion

J - Estimated value
ND - Not Detected
NA - Not Analyzed

4.5 STUDY AREA SCREENING EVALUATION (SASE) FOR BUILDING 32 (TtNUS, 2000)

The SASE was performed to determine the presence of any environmental contamination, and to determine if the site conditions warrant a Remedial Investigation (RI). The SASE was conducted in the early months of 2000, and a single draft report was prepared. The SASE included:

- Building 32 Interior Survey, Inspection, and Onshore Survey
- Soil Gas Sampling
- Concrete Sample Collection
- Drain Investigation
- Surface Soil Sampling

The results of the soil gas survey are presented in Appendix B. The analytical results from the concrete, drain residue, and soil sampling are presented in Tables 4-8A, 4-8B, and 4-8C, respectively.

Results of soil gas sampling indicated the possible presence of trichloroethene, naphthalene and diesel range organic compounds in most of the soil gas detectors installed. The extent of the detections presented in the graphic plots showed relative high and low values detected. These plots indicated that soil gas with these contaminants appeared to be captured under the slab foundation of Building 32. However, relative high concentrations of TCE were focused under the northwest corner of the building, and relative low concentrations were present under the rest of the building footprint. This supports the findings of the adjacent soil gas investigation conducted by the Quad Three Group (section 4.3.2 of this report) which reported indications of TCE contamination in the ground with relative high concentrations at the northwest portion of Building 32. Petroleum hydrocarbons were detected in soil gas with relative high concentrations outside the northwest corner of the building, which is consistent with the presence of petroleum associated with the Building 44 releases (Section 4.3 of this report). Naphthalene was present in soil gas throughout the building footprint, without apparent “hot spots”.

Results from analysis of concrete chip samples and residue from floor drains indicated the presence of traces of volatile organic compounds including TCE, benzene, toluene, and xylene. Semivolatile organic compounds were detected in some samples at low concentrations, however, some samples had high detection limits. A trace of one PCB compound was detected in one sample (0.3 mg/kg) in the electroplating room. Elevated concentrations of metals were detected in concrete samples from the drainage trenches in the electroplating room, including copper (699 mg/kg), cadmium (482 mg/kg) chromium (2,720 mg/kg), and cyanide (24 mg/kg).

Analytical results from drain residue samples reported VOCs, SVOCs, and metals. Primarily of note was the presence of toluene at a concentration of 7,700 ug/kg, and trichloroethene, detected at 250 ug/kg. The trichloroethene concentrations were highest in the pits beneath the east and west solvent tanks. Semivolatile organic compounds in the drain residue samples were dominated by the presence of PAH compounds, particularly in the electroplating room. Metals in the floor drain residue samples were dominated by iron and zinc, although cyanide, cadmium and copper were detected at high concentrations in the samples taken from the electroplating room.

Results from surface soil samples indicated the presence of PAH compounds and metals exceeding the Rhode Island Direct Exposure Criteria for residential soils.

TABLE 4-8a
ANALYTICAL RESULTS - DETECTED COMPOUNDS IN CONCRETE SAMPLES, BUILDING 32 SASE
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND

Sample Number	G32-CO-01-03IN		G32-CO-02-03IN		G32-CO-03-03IN		G32-CO-04-03IN		G32-CO-05-03IN		G32-CO-06-03IN		G32-CO-07-03IN		G32-CO-08-03IN		G32-DUP1	
Date Sampled	4/18/00		4/18/00		4/18/00		4/18/00		4/18/00		4/26/00		4/27/00		4/27/00		4/18/00	
QC Identifier	None		None		None		None		Field Dup. G32-CO-05-03IN		None		None		None		Field Dup. G32-CO-05-03IN	
Matrix	Concrete Dust		Concrete Dust		Concrete Dust		Concrete Dust		Concrete Dust		Concrete Dust		Concrete Dust		Concrete Dust		Concrete Dust	
Percent Solids	90.2		94		97.8		96.4		95		96.3		93.4		93.2		96.5	
Volatile Organic Analysis (UG/KG)																		
2-Butanone	38		17		19	U	6.0	J	14	U	11	UJ	12	UJ	20	J	14	U
2-Hexanone	14		15	U	19	U	18	U	14	U	11	UJ	12	UJ	15	UJ	14	U
4-Methyl-2-Pentanone	9.0	J	15	U	19	U	5.0	J	14	U	11	U	12	U	15	U	14	U
Acetone	67	J	40	J	24	J	27	J	21	J	31	J	24	J	53	J	23	J
Benzene	2.0	J	15	U	19	U	18	U	14	U	11	U	12	U	15	U	14	U
Carbon Disulfide	5.0	J	3.0	J	19	U	18	U	14	U	11	U	12	U	15	U	14	U
Ethylbenzene	2.0	J	15	U	19	U	18	U	14	U	11	U	12	U	2.0	J	14	U
Isopropylbenzene	12	U	15	U	6.0	J	18	U	14	U	11	U	12	U	15	U	14	U
Methylcyclohexane	12	U	15	U	19	U	18	U	14	U	11	U	12	U	2.0	J	14	U
Methylene Chloride	12	U	15	U	19	U	18	U	14	U	8.0	J	4.0	J	6.0	J	14	U
Toluene	7.0	J	2.0	J	19	U	18	U	14	U	11	U	12	U	7.0	J	14	U
Total Xylenes	11	J	4.0	J	9.0	J	18	U	14	U	11	U	3.0	J	10	J	14	U
Trichloroethene	3.0	J	15	U	19	U	18	U	14	U	11	U	12	U	15	U	14	U
Semivolatile Organic Analysis (UG/KG)																		
1,1'-Biphenyl	17000	U	11000	U	11000	U	370	U	370	U	43	J	360	U	11000	U	370	U
2-Methylnaphthalene	17000	U	11000	UJ	11000	U	370	U	370	U	150	J	360	U	11000	U	370	U
Anthracene	17000	U	11000	U	11000	U	370	U	370	U	360	U	360	U	11000	U	31	J
Benzo(a)anthracene	4000	J	11000	U	11000	U	56	J	39	J	51	J	55	J	11000	U	80	J
Benzo(a)pyrene	3500	J	11000	U	11000	U	43	J	370	U	57	J	54	J	11000	U	73	J
Benzo(b)fluoranthene	3800	J	11000	U	11000	U	50	J	33	J	55	J	49	J	11000	U	85	J
Benzo(g,h,i)perylene	17000	UJ	11000	U	11000	UJ	31	J	16	J	360	U	360	U	11000	UJ	36	J
Benzo(k)fluoranthene	3600	J	11000	U	11000	U	54	J	37	J	54	J	47	J	11000	U	81	J
bis(2-Ethylhexyl)phthalate	17000	U	11000	U	11000	U	370	U	38	J	360	U	360	U	11000	U	29	J
Chrysene	4300	J	11000	U	11000	U	71	J	52	J	72	J	67	J	11000	U	110	J
Di-n-Butylphthalate	17000	U	11000	U	11000	U	34	J	370	U	41	J	17000	D	11000	U	54	J
Fluoranthene	9100	J	11000	U	920	J	130	J	100	J	130	J	130		11000	U	210	J
Indeno(1,2,3-cd)pyrene	17000	U	11000	U	11000	U	28	J	370	U	360	U	360	U	11000	UJ	33	J
N-Nitroso-diphenylamine	17000	U	11000	U	11000	U	370	U	370	U	360	U	56	J	11000	U	370	U
Phenanthrene	3700	J	11000	U	11000	U	98	J	56	J	88	J	85	J	11000	U	160	J
Pyrene	7600	J	11000	U	1200	J	110	J	80	J	91	J	110	J	11000	U	160	J

U - Not detected; UJ - Detection limit approximate; J - Quantitation approximate;
*** - From dilution analysis; R - Rejected; NA - Not Analyzed**

TABLE 4-8a (cont.)
ANALYTICAL RESULTS - DETECTED COMPOUNDS IN CONCRETE SAMPLES, BUILDING 32 SASE
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND
PAGE 2 OF 2

Sample Number	G32-CO-01-03IN		G32-CO-02-03IN		G32-CO-03-03IN		G32-CO-04-03IN		G32-CO-05-03IN		G32-CO-06-03IN		G32-CO-07-03IN		G32-CO-08-03IN		G32-DUP1	
Date Sampled	4/18/00		4/18/00		4/18/00		4/18/00		4/18/00		4/26/00		4/27/00		4/27/00		4/18/00	
QC Identifier	None		None		None		None		Field Dup. G32-CO-05-03IN		None		None		None		Field Dup. G32-CO-05-03IN	
Matrix	Concrete Dust		Concrete Dust		Concrete Dust		Concrete Dust		Concrete Dust		Concrete Dust		Concrete Dust		Concrete Dust		Concrete Dust	
Percent Solids	90.2		94		97.8		96.4		95		96.3		93.4		93.2		96.5	
Pesticide/PCB Analysis (UG/KG)																		
4,4'-DDT	22	U	24	U	22	U	5.4		7.2		3.6	U	4.1		22	U	4.9	
Aroclor-1254	220	U	240	U	220	U	34	U	320	J	36	U	37	U	220	U	36	UJ
Heptachlor Epoxide	11	U	12	U	11	U	1.7	U	2.3	J	1.8	U	1.8	U	11	U	1.8	UJ
Gasoline Range Organic Analysis (MG/KG)																		
Gasoline Range Organics	0.354		0.28	U	0.528		0.22	U	0.27	UJ	0.21	U	0.23	U	0.25	U	0.27	U
Diesel Range Organic Analysis (MG/KG)																		
Diesel Range Organics	17900		21800		13300		44.1		14.1	J	310		71.2		2420		70.8	J
TAL Metal Analysis (MG/KG)																		
Aluminum	3070		3310		3590		8580		9280		6880		7860		3400		8250	
Antimony	7.7	J	6.4	J	11.4	J	0.52	UJ	0.53	UJ		R	2.1	UJ	3.6	UJ	0.52	UJ
Arsenic	1.6	UJ	3.3	UJ	7.6	J	3.5	UJ	3.8	J	6.3	J	2.9	J	2.5	J	3.3	UJ
Barium	225		76.0		326		181		96.4		90.8	J	282		211		202	
Cadmium	451	J	40.1	J	482	J	8.2	J	18.4	J	20.2	J	2.9	UJ	4.9	J	10.7	J
Calcium	4980		3680		13400		50000		52100		49400		69800		11300		48700	
Chromium	48.1		2720		70.1	J	16.9		15.1		15.8		20.2		16.8		19.9	
Cobalt	4.0		3.7		7.5		5.7		5.9		5.6	J	5.4	J	3.9		6.2	
Copper	840	J	699	J	275	J	38.6	J	12.4	J	1060	J	102	J	45.4	J	53.1	J
Cyanide	23.8		0.53	U	2.9		0.52	U	0.53	U	0.52	U	0.54	U	0.54	U	0.52	U
Iron	15900		15200		63500		17700		16300		21000		16700		11200		19400	
Lead	598	J	526	J	650	J	183	J	40.5	J	246	J	245	J	377	J	275	J
Magnesium	1670		1630		1630		3870		3700		2850		3500		1650		4040	
Manganese	198	J	192	J	423	J	305	J	301	J	301	J	279	J	196	J	288	J
Mercury	0.09	UJ	0.16		0.06	UJ	0.02	U	0.02	U	0.07	U	0.05	U	0.08	U	0.02	UJ
Nickel	369	J	44.4	J	87.8	J	11.2	J	12.0	J	22.9	J	12.6	J	15.3	J	12.8	J
Potassium	794		987		867	J	2470		1160		2230	J	1690	J	585		2520	
Selenium	0.84	U	0.81	U		R	1.2	J	1.6	J	0.79	UJ	0.81	UJ	0.82	UJ	1.8	J
Silver	1.9		2.1		0.51	J	4.1		0.62		0.58		0.63		0.91		1.5	
Sodium	650		878		394	UJ	1680		79.7	U	1340		426		177	U	1800	
Vanadium	40.4		54.3		50.0		11.1		12.3		12.4	J	10.1	J	38.3		10.6	
Zinc	521	J	293	J	513	J	83.7	J	810	J	687	J	339	J	366	J	115	J

U - Not detected; UJ - Detection limit approximate; J - Quantitation approximate;
*** - From dilution analysis; R - Rejected; NA - Not Analyzed**

TABLE 4-8b
ANALYTICAL RESULTS - DETECTED COMPOUNDS IN DRAIN RESIDUE SAMPLES, BUILDING 32 SASE
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND

Sample Number	G32-DR-01		G32-DR-02		G32-DR-03		G32-DR-04		G32-DR-05		G32-DR-06		G32-DR-07		G32-DR-08		G32-DR-09	
Date Sampled	4/24/00		4/24/00		4/24/00		4/24/00		4/24/00		4/24/00		4/25/00		4/25/00		4/26/00	
QC Identifier	None		Field Dup. G32-DR-02		None		None		None		None		None		None		None	
Matrix	Drain		Drain		Drain		Drain		Drain		Drain		Drain		Drain		Drain	
Percent Solids	66.5		59.5		58.6		81.9		62.2		75.9		21.1		27.9		11.1	
Volatile Organic Analysis (UG/KG)																		
2-Butanone	14	U	70		33		37	J	26	J	11	U	70	UJ	29	J	140	UJ
Acetone	97	J	290	J	170	J	110	J	170	J	38	J	210	J	73	J	210	J
Benzene	14	U	18	U	3.0	J	6.0	J	16	U	11	U	70	U	34	U	140	U
Carbon Disulfide	14	U	18	U	18	U	11	UJ	3.0	J	11	U	150		34	U	32	J
Chloroethane	14	U	6.0	J	18	U	11	UJ	4.0	J	11	U	70	U	34	U	140	U
Chloromethane	14	U	21		18	U	11	UJ	7.0	J	11	U	70	U	34	U	140	U
cis-1,2-Dichloroethene	14	U	18	U	18	U	11	UJ	16	U	11	U	11	J	28	J	140	U
Ethylbenzene	14	U	18	U	18	U	11	UJ	16	U	11	U	70	U	34	U	140	U
Isopropylbenzene	14	U	18	U	18	U	11	UJ	16	U	11	U	70	U	34	U	140	U
Methylcyclohexane	14	U	18	U	18	U	11	UJ	16	U	11	U	70	U	34	U	140	U
Methylene Chloride	3.0	J	2.0	J	18	U	11	UJ	6.0	J	2.0	J	12	J	7.0	J	150	
Tetrachloroethene	14	U	18	U	18	U	11	UJ	16	U	11	U	70	U	34	U	140	U
Toluene	14	U	18	U	2.0	J	1.0	J	16	U	11	U	70	U	34	U	140	U
Total Xylenes	14	U	18	U	18	U	11	UJ	16	U	11	U	70	U	34	U	140	U
trans-1,2-Dichloroethene	14	U	18	U	18	U	11	UJ	16	U	11	U	70	U	34	J	140	U
Trichloroethene	14	U	18	U	5.0	J	48	J	16	U	11	U	250		69		140	U
Vinyl Chloride	14	U	18	U	18	U	11	UJ	16	U	11	U	70	U	34	U	140	U
Semivolatile Organic Analysis (UG/KG)																		
1,1'-Biphenyl	5100	U	5800	U	6100	U	4100	U	820	J	4500	U	1500	UJ	1200	UJ	5200	J
2,4-Dimethylphenol	5100	U	5800	U	6100	U	4100	U	5300	U	4500	U	1500	UJ	1200	UJ	1300	J
2-Methylnaphthalene	5100	U	5800	U	1300	J	4100	U	2400	J	4500	U	1500	UJ	1200	UJ	18000	J
Acenaphthene	3100	J	5800	U	6200		750	J	9700		4500	U	1500	UJ	1200	UJ	71000	*J
Acenaphthylene	5100	U	5800	U	6100	U	4100	U	1800	J	4500	U	1500	UJ	1200	UJ	39000	J
Anthracene	6000		1000	J	10000		2200	J	57000	*	4500	U	170	J	1200	UJ	220000	*J
Benzaldehyde	5100	U	5800	U	6100	U	4100	U	5300	U	1700	J	1500	UJ	1200	UJ	5800	UJ
Benzo(a)anthracene	18000		2900	J	19000		7600		220000	*	700	J	460	J	1200	UJ	620000	*J
Benzo(a)pyrene	19000		3200	J	17000		6200		150000	*	600	J	320	J	1200	UJ	490000	*J
Benzo(b)fluoranthene	21000		4000	J	17000		6200		150000	*	590	J	270	J	1200	UJ	370000	*J

U - Not detected; UJ - Detection limit approximate; J - Quantitation approximate;
*** - From dilution analysis; R - Rejected; NA - Not Analyzed**

TABLE 4-8b (cont.)
ANALYTICAL RESULTS - DETECTED COMPOUNDS IN DRAIN RESIDUE SAMPLES, BUILDING 32 SASE
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND
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Sample Number	G32-DR-01		G32-DR-02		G32-DR-03		G32-DR-04		G32-DR-05		G32-DR-06		G32-DR-07		G32-DR-08		G32-DR-09	
Date Sampled	4/24/00		4/24/00		4/24/00		4/24/00		4/24/00		4/24/00		4/25/00		4/25/00		4/26/00	
QC Identifier	None		Field Dup. G32-DR-02		None		None		None		None		None		None		None	
Matrix	Drain		Drain		Drain		Drain		Drain		Drain		Drain		Drain		Drain	
Percent Solids	66.5		59.5		58.6		81.9		62.2		75.9		21.1		27.9		11.1	
Benzo(g,h,i)perylene	9700		720	J	5500	J	2300	J	27000		4500	U	1500	UJ	1200	UJ	170000	*J
Benzo(k)fluoranthene	16000		3300	J	16000		7000		140000	*	710	J	320	J	1200	UJ	400000	*J
bis(2-Ethylhexyl)phthalate	7900		5800	U	3900	*	520	J	5300	U	160000	*	1500	UJ	1200	UJ	51000	j
Carbazole	5200		590	J	6100		1400	J	36000		4500	U	1500	UJ	1200	UJ	61000	*J
Chrysene	20000		4100	J	20000		8300		230000	*	1100	J	480	J	1200	UJ	520000	*J
Di-n-Butylphthalate	1100	J	5800	U	6500		4100	U	5300	U	4500	U	1500	UJ	1200	UJ	5800	UJ
Dibenzo(a,h)anthracene	4600	J	5800	U	2900	J	1200	J	17000		4500	U	1500	UJ	1200	UJ	38000	J
Dibenzofuran	1400	J	5800	U	2800	J	540	J	9800		4500	U	1500	UJ	1200	UJ	38000	*J
Fluoranthene	51000	D	7600		53000	*	22000		550000	*	1700	J	1200	J	1200	UJ	1500000	*J
Fluorene	2100	J	5800	U	4600	J	680	J	12000		4500	U	1500	UJ	1200	UJ	5800	UJ
Indeno(1,2,3-cd)pyrene	10000		770	J	5100	J	2400	J	32000		4500	U	1500	UJ	1200	UJ	190000	*J
Naphthalene	1000	J	5800	U	2600	J	770	J	4100	J	4500	U	1500	UJ	1200	UJ	39000	*J
Phenanthrene	34000		6000		51000	*	12000		26000	*	810	J	780	J	1200	UJ	600000	*J
Pyrene	40000		6800		45000	*	17000		470000	*	1400	J	1000	J	1200	UJ	1200000	*J
Pesticide/PCB Analysis (UG/KG)																		
4,4'-DDD	4.9	U	5.9	U	5.7	U	8.9		5.5	U	18		17	UJ	12	UJ	32	UJ
4,4'-DDE	260	*	61	J	13		30		5.5	U	43		17	UJ	12	UJ	32	UJ
4,4'-DDT	200	*	230	*J	72		82	*	5.5	U	55		24	J	12	UJ	32	UJ
alpha-Chlordane	2.4	U	2.9	U	2.8	U	27	J	2.8	U	2.3	U	8.3	UJ	5.9	UJ	16	UJ
Aroclor-1248	1200	*	59	U	57	U	43	U	55	U	46	U	170	UJ	120	UJ	320	UJ
Aroclor-1254	49	U	1400	J	150		340		55	U	320		170	UJ	120	UJ	320	UJ
Aroclor-1260	49	U	1100	J	57	U	43	U	55	U	46	U	170	UJ	120	UJ	320	UJ
Dieldrin	28		17	J	5.7	U	4.3	U	5.5	U	8.7		17	UJ	12	UJ	32	UJ
Endosulfan II	4.9	U	5.9	U	6.0		4.3	U	5.5	U	4.6	U	17	UJ	12	UJ	32	UJ
gamma-Chlordane	2.4	U	2.9	U	2.8	U	18	J	2.8	U	2.3	U	8.3	UJ	5.9	UJ	16	UJ
Gasoline Range Organic Analysis (MG/KG)																		
Gasoline Range Organics	0.52		0.36	UJ	0.31	UJ	0.282	J	0.424		0.275		3.34	J	0.20	U	2.3	UJ

U - Not detected; UJ - Detection limit approximate; J - Quantitation approximate;
*** - From dilution analysis; R - Rejected; NA - Not Analyzed**

TABLE 4-8b (cont.)
ANALYTICAL RESULTS - DETECTED COMPOUNDS IN DRAIN RESIDUE SAMPLES, BUILDING 32 SASE
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND
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Sample Number	G32-DR-01		G32-DR-02		G32-DR-03		G32-DR-04		G32-DR-05		G32-DR-06		G32-DR-07		G32-DR-08		G32-DR-09	
Date Sampled	4/24/00		4/24/00		4/24/00		4/24/00		4/24/00		4/24/00		4/25/00		4/25/00		4/26/00	
QC Identifier	None		Field Dup. G32-DR-02		None		None		None		None		None		None		None	
Matrix	Drain		Drain		Drain		Drain		Drain		Drain		Drain		Drain		Drain	
Percent Solids	66.5		59.5		58.6		81.9		62.2		75.9		21.1		27.9		11.1	
Diesel Range Organic Analysis (MG/KG)																		
Diesel Range Organics	1490		17900	J	1350	J	690		7720		320		35.1	J	98.5	J	12900	J
TAL Metal Analysis (MG/KG)																		
Aluminum	3230	J	3140	J	1100	J	1070	J	1010	J	352	J	996	J	1170	J	1710	J
Antimony	95.8	J		R	541	J	103	J	2100		166	J	63.9	J		R		R
Arsenic	10.3	J	18.5	J	29.8	J	41.7	J	40.4	J	9.5	J	22.2	J	29.8	J	10.5	J
Barium	1250		1340		1640	J	702	J	6090		419	J	1120	J	1150	J	230	J
Beryllium	1.1		0.15	UJ	0.13	UJ	0.76	U	0.10	U	0.08	U		R	0.22	UJ		R
Cadmium	201		95.2	J	1140		4540		435	J	56900		230	J	106	J	73.6	J
Calcium	21500	J	15300	J	8400	J	10200	J	7510	J	3480	J	8470	J	5190	J	15300	J
Chromium	149		219		1480		495		600		11800		149	J	103	J	226	J
Cobalt	16.9	J	17.4	J	36.6	J	35.6	J	48.7	J	22.5	J	17.7	J	21.8	J	13.2	J
Copper	1300		2320		24700		1390	J	1050	J	9540		931	J	1680	J	2160	J
Cyanide	1.3	J	1.6		16.3		194		16.9		865			R		R		R
Iron	78600		199000		331000		334000		377000		177000		314000	J	453000	J	146000	J
Lead	4180		7590		28500		5270		24100		31600		7560	J	2410	J	2500	J
Magnesium	2340		1990		1130		1530		991		328		673	J	1010	J	1300	J
Manganese	462		939		1330		1300		1700		728		878	J	2010	J	641	J
Mercury	1.1	J	0.84	J	2.5	J	0.56	J	0.33	J	6.7	J	0.95	J	0.34	J	1.6	J
Nickel	169	J	285	J	1420	J	276	J	607	J	14100	J	175	J	142	J	980	J
Potassium	1170	J	3060	J		R	2270	J		R	4870	J		R	1020	J	645	J
Selenium	1.1	UJ	1.3	UJ	2.0	J	1.9	UJ	3.1	J	1.0	UJ	5.3	J	8.2	J		R
Silver	3.3		5.7		22.1		10.4		3.4		104		3.3	J	1.2	J	10.3	J
Sodium	560	J	5840	J	290	J	2360	J	160	UJ	7870	J	1070	J	3780	J	561	J
Thallium	1.4	UJ	1.2	UJ	1.3	UJ	1.8	UJ	2.4	UJ	16.0	J		R		R		R
Vanadium	33.9	J	15.3	J	34.5	J	57.6		38.0	J	41.3		15.5	J	13.2	J	19.3	J
Zinc	3050		62900		12100		2770		13700		2290		7420	J	11600	J	1670	J

U - Not detected; UJ - Detection limit approximate; J - Quantitation approximate;
*** - From dilution analysis; R - Rejected; NA - Not Analyzed**

TABLE 4-8b (cont.)
ANALYTICAL RESULTS - DETECTED COMPOUNDS IN DRAIN RESIDUE SAMPLES, BUILDING 32 SASE
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND
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Sample Number	G32-DR-10		G32-DR-11		G32-DUP4		G32-DR-12		G32-DR-13		G32-DR-14		G32-DUP3	
Date Sampled	4/26/00		4/26/00		4/26/00		4/24/00		4/25/00		4/25/00		4/24/00	
QC Identifier	Field Dup. G32-DR-10		None		Field Dup. G32-DR-10		None		None		None		Field Dup. G32-DR-02	
Matrix	Drain		Drain		Drain		Drain		Drain		Drain		Drain	
Percent Solids	AQ Sample		AQ Sample		AQ Sample		55.9		61.1		28.5		65.3	
Volatile Organic Analysis (UG/KG)														
2-Butanone	ND		ND		ND		21		64	J	47	UJ	79	
Acetone	ND		ND		ND		120	J	150	J	130	J	260	J
Benzene	ND		ND		ND		19	U	13	U	47	U	17	U
Carbon Disulfide	ND		ND		ND		19	U	46	J	45	J	17	U
Chloroethane	ND		ND		ND		19	U	13	U	47	U	7.0	J
Chloromethane	ND		ND		ND		19	U	13	U	47	U	25	
cis-1,2-Dichloroethene	ND		ND		ND		19	U	11	J	47	U	17	U
Ethylbenzene	ND		ND		ND		19	U	2.0	J	6.0	J	17	U
Isopropylbenzene	ND		ND		ND		19	U	4.0	J	47	U	17	U
Methylcyclohexane	ND		ND		ND		19	U	12	J	47	U	17	U
Methylene Chloride	ND		ND		ND		3.0	J	2.0	J	9.0	J	2.0	J
Tetrachloroethene	ND		ND		ND		19	U	40	J	47	U	17	U
Toluene	ND		ND		ND		19	U	7700	*	7.0	J	17	U
Total Xylenes	ND		ND		ND		19	U	14	J	29	J	17	U
trans-1,2-Dichloroethene	ND		ND		ND		19	U	13	U	47	U	17	U
Trichloroethene	ND		ND		ND		19	U	13	U	47	U	17	U
Vinyl Chloride	ND		ND		ND		19	U	5.0	J	47	U	17	U
Semivolatile Organic Analysis (UG/KG)														
1,1'-Biphenyl	1100	UJ	330	J	860	U	6100	U	2800	U	1200	UJ	2700	U
2,4-Dimethylphenol	1100	UJ	1100	U	860	U	6100	U	2800	U	1200	UJ	2700	U
2-Methylnaphthalene	1100	UJ	1200		860	U	1000	J	16000		1200	UJ	2700	U
Acenaphthene	1100	UJ	1800		860	U	4700	J	2800	U	1200	UJ	530	J
Acenaphthylene	1100	UJ	1100	U	190	J	6100	U	2800	U	1200	UJ	2700	U
Anthracene	1100	UJ	6300		180	J	11000		1600	J	240	J	1100	J
Benzaldehyde	1100	UJ	1100	U	860	U	6100	U	2800	U	1200	UJ	2700	U
Benzo(a)anthracene	1100	UJ	15000	*	1200		16000		5200		580	J	2600	J
Benzo(a)pyrene	1100	UJ	8500	*	1200		14000		6300		530	J	2600	J
Benzo(b)fluoranthene	1100	UJ	7500	*	1300		13000		7500		520	J	3500	

U - Not detected; UJ - Detection limit approximate; J - Quantitation approximate;
*** - From dilution analysis; R - Rejected; NA - Not Analyzed**

TABLE 4-8b (cont.)
ANALYTICAL RESULTS - DETECTED COMPOUNDS IN DRAIN RESIDUE SAMPLES, BUILDING 32 SASE
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND
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Sample Number	G32-DR-10		G32-DR-11		G32-DUP4		G32-DR-12		G32-DR-13		G32-DR-14		G32-DUP3	
Date Sampled	4/26/00		4/26/00		4/26/00		4/24/00		4/25/00		4/25/00		4/24/00	
QC Identifier	Field Dup. G32-DR-10		None		Field Dup. G32-DR-10		None		None		None		Field Dup. G32-DR-02	
Matrix	Drain		Drain		Drain		Drain		Drain		Drain		Drain	
Percent Solids	AQ Sample		AQ Sample		AQ Sample		55.9		61.1		28.5		65.3	
Benzo(g,h,i)perylene	1100	UJ	1900		630	J	3700	J	3000		250	J	2700	U
Benzo(k)fluoranthene	1100	UJ	9000	*	1300		13000		5100		480	J	3800	
bis(2-Ethylhexyl)phthalate	1100	UJ	1100	U	860	U	780	J	1100	J	1200	UJ	2700	U
Carbazole	1100	UJ	3200		860	U	4900	J	2800	U	1200	UJ	540	J
Chrysene	1100	UJ	15000	*	1300		15000		6700		650	J	3400	
Di-n-Butylphthalate	1100	UJ	1100	U	860	U	6100	U	300	J	1200	UJ	520	J
Dibenzo(a,h)anthracene	1100	UJ	1300		310	J	2300	J	1300	J	120	J	2700	U
Dibenzofuran	1100	UJ	2400		860	U	3400	J	2800	U	1200	UJ	360	J
Fluoranthene	120	J	43000	*	1400		46000		12000		1400	J	7700	
Fluorene	1100	UJ	1600		860	U	5500	J	1400	J	1200	UJ	530	J
Indeno(1,2,3-cd)pyrene	1100	UJ	2300		640	J	4000	J	3000		240	J	2700	U
Naphthalene	1100	UJ	3600		860	U	1200	J	2800	U	1200	UJ	2700	U
Phenanthrene	1100	UJ	35000	*	490	J	44000		13000		1000	J	5700	
Pyrene	110	J	33000	*	1100		33000		12000		1200	J	4700	
Pesticide/PCB Analysis (UG/KG)														
4,4'-DDD	11	UJ	11	U	8.7	U	5.9	U	5.3	U	12	UJ	5.4	U
4,4'-DDE	11	UJ	11	U	8.7	U	18		5.3	U	12	UJ	32	J
4,4'-DDT	11	UJ	11	U	8.7	U	34		5.3	U	24	J	55	J
alpha-Chlordane	5.7	UJ	5.3	U	4.3	U	3.0	U	2.6	U	5.9	UJ	2.7	U
Aroclor-1248	110	UJ	110	U	87	U	59	U	53	U	120	UJ	54	U
Aroclor-1254	110	UJ	110	U	87	U	270	J	2300		120	UJ	830	J
Aroclor-1260	110	UJ	110	U	87	U	59	U	53	U	260	J	500	J
Dieldrin	11	UJ	11	U	8.7	U	5.9	U	5.3	U	12	UJ	8.3	J
Endosulfan II	11	UJ	11	U	8.7	U	5.9	U	5.3	U	12	UJ	5.4	U
gamma-Chlordane	5.7	UJ	5.3	U	4.3	U	3.0	U	2.6	U	5.9	UJ	2.7	U
Gasoline Range Organic Analysis (MG/KG)														
Gasoline Range Organics	ND		ND		ND		0.522		57		0.936	J	0.477	J

U - Not detected; UJ - Detection limit approximate; J - Quantitation approximate;
*** - From dilution analysis; R - Rejected; NA - Not Analyzed**

TABLE 4-8b (cont.)
ANALYTICAL RESULTS - DETECTED COMPOUNDS IN DRAIN RESIDUE SAMPLES, BUILDING 32 SASE
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND
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Sample Number	G32-DR-10		G32-DR-11		G32-DUP4		G32-DR-12		G32-DR-13		G32-DR-14		G32-DUP3	
Date Sampled	4/26/00		4/26/00		4/26/00		4/24/00		4/25/00		4/25/00		4/24/00	
QC Identifier	Field Dup. G32-DR-10		None		Field Dup. G32-DR-10		None		None		None		Field Dup. G32-DR-02	
Matrix	Drain		Drain		Drain		Drain		Drain		Drain		Drain	
Percent Solids	AQ Sample		AQ Sample		AQ Sample		55.9		61.1		28.5		65.3	
Diesel Range Organic Analysis (MG/KG)														
Diesel Range Organics	123	J	1490		130	J	3600		25900		277	J	10600	J
TAL Metal Analysis (MG/KG)														
Aluminum	5520	J	943		3540		1770	J	2510		1180	J	5970	J
Antimony	13.7	J		R	1.2	UJ		R	26.5	J		R		R
Arsenic	24.9	J	36.0	J	3.2	J	21.1	J	11.0	J	14.3	J	23.7	J
Barium	194	J	120	J	64.5		857	J	108	J	1340	J	1130	J
Beryllium	0.67	UJ	0.18	U	0.43	U	0.11	U	0.21	U	0.32	UJ	0.19	U
Cadmium	67.1	J	39.3	J	30.2	J	46.0	J	16.6	J	73.4	J	64.2	J
Calcium	106000	J	3970	J	52100	J	19400	J	12100	J	18700	J	9090	J
Chromium	133	J	206	J	23.8	J	159		49.5	J	197	J	222	
Cobalt	50.1	J	30.3	J	20.4		18.4	J	11.4	J	21.8	J	25.6	J
Copper	904	J	601	J	299	J	973	J	436	J	322	J	2940	
Cyanide		R	1.5	UJ	1.2	UJ	0.89	U	1.0	J		R	1.6	
Iron	170000	J	605000	J	36900	J	213000		102000	J	250000	J	278000	
Lead	911	J	1300	J	249	J	4300		12700	J	2670	J	7720	
Magnesium	5520	J	3050		3430		2310		1370		31200	J	2010	
Manganese	1160	J	2100	J	582	J	1040		263	J	1360	J	1250	
Mercury	0.22	J	0.38		0.48		0.69	J	0.61		2.6	J	1.8	J
Nickel	132	J	236		44.5		167	J	76.1		228	J	528	J
Potassium	560	J		R	347		826	J	590	J	1110	J	2170	J
Selenium		R	12.2		2.0	UJ	1.4	UJ	1.4	J	3.7	J	1.8	J
Silver	2.8	J	3.4		0.86		2.4		2.6		7.6	J	2.8	
Sodium	203	UJ	794		390		737	J	367		1100	J	3790	J
Thallium		R	2.2	U	1.8	U	1.3	J	1.2	U		R	1.1	UJ
Vanadium	60.8	J	5.2	J	25.2	J	11.4	J	8.5	J	13.9	J	10.0	J
Zinc	8230	J	3610	J	4050	J	2790		1030	J	2200	J	93800	

U - Not detected; UJ - Detection limit approximate; J - Quantitation approximate;
*** - From dilution analysis; R - Rejected; NA - Not Analyzed**

TABLE 4-8c
ANALYTICAL RESULTS - DETECTED COMPOUNDS IN SURFACE SOIL SAMPLES, BUILDING 32 SASE
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND

Sample Number	G32-DUP2		G32-SS-01-06IN		G32-SS-02-06IN		G32-SS-03-06IN		G32-SS-04-06IN		G32-SS-05-06IN		G32-SS-06-06IN		G32-SS-07-06IN		G32-SS-08-06IN	
Date Sampled	4/20/00		4/20/00		4/20/00		4/20/00		4/20/00		4/20/00		4/20/00		4/20/00		4/20/00	
QC Identifier	Field Dup. G32-SS-07-06IN		None		None		None		None		None		None		Field Dup. G32-SS-07-06IN		None	
Matrix	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Percent Solids	68.9		53.1		73.4		29.8		84.6		92.1		83.5		61.7		80.5	
Volatile Organic Analysis (UG/KG)																		
2-Butanone	14	U	28	U	26	U	47	U	9.0	U	11	U	12	J	18	U	13	U
Acetone	75	J	150	J	140	J	140	J	34	J	40	J	74	J	100	J	120	J
Benzene	14	U	28	U	26	U	47	U	9.0	U	11	U	2.0	J	18	U	13	U
Chloromethane	14	U	28	U	26	U	47	U	9.0	U	11	U	5.0	J	18	U	13	U
Methyl Acetate	14	U	20	J	14	J	47	U	9.0	U	11	U	14	U	18	U	13	U
Semivolatile Organic Analysis (UG/KG)																		
1,1'-Biphenyl	65	J	680	U	460	U	1200	U	130	J	360	U	400	U	320	J	130	J
2-Methylnaphthalene	140	J	680	U	460	U	100	J	390	J	360	U	400	U	880	J	440	J
4-Methylphenol	530	U	680	U	460	U	1200	U	400	U	360	U	400	U	600	U	52	J
Acenaphthene	1400		70	J	92	J	750	J	1700		360	U	32	J	6300	*J	1400	J
Acenaphthylene	340	J	680	U	460	U	1200	U	60	J	360	U	34	J	300	J	49	J
Anthracene	3500	*J	130	J	200	J	1400		3400	*J	20	J	90	J	10000	*J	2400	
Benzaldehyde	530	U	680	U	460	U	1200	U	400	U	360	U	400	U	600	U	47	J
Benzo(a)anthracene	12000	*J	410	J	690		4100		8500	*	88	J	600		22000	*J	5300	*
Benzo(a)pyrene	9800	*J	390	J	630		3500		8100	*	85	J	860	J	19000	*J	4800	*
Benzo(b)fluoranthene	10000	*J	450	J	770		3700		6900	*	110	J	1500	J	18000	*J	4000	*
Benzo(g,h,i)perylene	6200	*J	140	J	280	J	1100	J	2900	J	73	J	450	J	14000	*J	1300	
Benzo(k)fluoranthene	9300	*J	360	J	680		3400		6400	*	78	J	1200	J	17000	*J	4500	*
bis(2-Ethylhexyl)phthalate	310	J	680	U	460	U	1200	U	400	U	41	J	400	U	280	J	52	J
Carbazole	2600		81	J	130	J	870	J	1500		360	U	79	J	5800	*J	1600	
Chrysene	14000	*	470	J	810		4400		9200	*	100	J	1000		23000	*	5200	*
Di-n-Butylphthalate	530	U	680	U	460	U	1200	U	400	U	42	J	400	U	600	U	410	U
Dibenzo(a,h)anthracene	2900	*J	88	J	130	J	720	J	1500		360	U	200	J	6600	*J	810	
Dibenzofuran	920		680	U	35	J	410	J	630		360	U	400	U	3300	J	890	
Fluoranthene	30000	*	990		1600		9400	*	20000	*	180	J	560		61000	*J	12000	*
Fluorene	1800		65	J	84	J	750	J	1200		360	U	400	U	5400	*J	1500	
Indeno(1,2,3-cd)pyrene	5900	*J	140	J	270	J	1300		2700		56	J	410	J	12000	*J	1500	
Naphthalene	190	J	680	U	35	J	220	J	1400		360	U	400	U	3500	J	990	J
Phenanthrene	20000	*	680		930		7300		15000	*	83	J	260	J	50000	*J	11000	*
Pyrene	24000	*	830		1500		8400		19000	*	160	J	1300		48000	*J	10000	*J

U - Not detected; UJ - Detection limit approximate; J - Quantitation approximate;
*** - From dilution analysis; R - Rejected; NA - Not Analyzed**

TABLE 4-8c (cont.)
ANALYTICAL RESULTS - DETECTED COMPOUNDS IN SURFACE SOIL SAMPLES, BUILDING 32 SASE
BACKGROUND SUMMARY
SITE 17, BUILDING 32
NAVAL STATION NEWPORT, NEWPORT, RHODE ISLAND
PAGE 2 OF 2

Sample Number	G32-DUP2		G32-SS-01-06IN		G32-SS-02-06IN		G32-SS-03-06IN		G32-SS-04-06IN		G32-SS-05-06IN		G32-SS-06-06IN		G32-SS-07-06IN		G32-SS-08-06IN	
Date Sampled	4/20/00		4/20/00		4/20/00		4/20/00		4/20/00		4/20/00		4/20/00		4/20/00		4/20/00	
QC Identifier	Field Dup. G32-SS-07-06IN		None		None		None		None		None		None		Field Dup. G32-SS-07-06IN		None	
Matrix	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Percent Solids	68.9		53.1		73.4		29.8		84.6		92.1		83.5		61.7		80.5	
Pesticide/PCB Analysis (UG/KG)																		
4,4'-DDT	5.3	U	6.9	U	6.2	P	12	P	17		5.5		5.4		6.0	U	6.6	
Aroclor-1254	4000	*	69	U	110		120	U	39	U	37	U	42	U	5800	*	43	U
Gasoline Range Organics (MG/KG)																		
Gasoline Range Organics	0.664		0.55	U	0.44	U	1.0	U	0.283		0.23	U	0.27	U	0.407		0.257	J
Diesel Range Organics (MG/KG)																		
Diesel Range Organics	558		123		410		490		371		364		553		734		94.2	J
TAL Metal Analysis (MG/KG)																		
Aluminum	1950		3480		6920		3840	J	11400		5820		4880		1750		6590	
Antimony	93.0	J	0.94	UJ	0.68	UJ	1.8	J	0.59	UJ	1.7	J	8.7	J	106	J	0.62	UJ
Arsenic	13.9		1.9	UJ	5.9		6.6	J	16.8		3.5	U	9.6		16.4		2.8	U
Barium	203		21.1		39.4		113	J	21.2		20.3		200		352		18.7	
Cadmium	38.1	J	2.3		9.9		511	J	1.4	J	2.6	J	8.1	J	51.8	J	1.7	
Calcium	10500		5420		642		16800	J	2440		1140		2010		12400		1300	
Chromium	79.8	J	7.4		67.3		86.8	J	21.3	J	14.1	J	48.2	J	86.7	J	12.1	
Cobalt	6.8		3.0		9.0		7.8	J	12.5		6.0		11.4		7.6		4.5	
Copper	112	J	27.8		413		146	J	36.3	J	94.0	J	287	J	121	J	26.6	
Cyanide	1.6		0.94	U	0.68	U	2.6	J	0.59	U	0.54	U	0.60	U	0.81	U	0.62	U
Iron	98200		7790		20700		17000	J	33000		25000		97600		113000		14900	
Lead	3140		35.8		225		337	J	106		292		1950		2710		112	
Magnesium	1010		1550		1890		1640	J	3800		2600		2490		767		2600	
Manganese	460		240		142		475	J	399		193		494		461		124	
Mercury	0.04	UJ	0.08	UJ	0.04	UJ	0.45	J	0.02	U	0.04	UJ	0.17		0.05	UJ	0.04	UJ
Nickel	33.3	J	9.2		23.5		64.3	J	24.6	J	13.4	J	47.8	J	44.7	J	13.1	
Potassium	305	J	485	J	429	J	551	J	385	J	655	J	773	J	236	J	928	J
Selenium		R	2.8	J	1.7	J	3.4	J	0.90	U		R		R		R	0.97	J
Silver	0.76	J	0.24	UJ	0.26	UJ	0.82	J	0.12	UJ	0.11	UJ	0.75	J	0.85	J	0.12	U
Vanadium	45.9		11.5		25.8		41.3	J	18.0		14.7		25.7		44.6		63.5	
Zinc	4430		60.2		129		2140	J	205		231		1310		4990		43.6	

U - Not detected; UJ - Detection limit approximate; J - Quantitation approximate;
*** - From dilution analysis; R - Rejected; NA - Not Analyzed**

5.0 DEMOLITION AND PCB INVESTIGATIONS

5.1 BUILDING DEMOLITION

Due to the deteriorated condition of the buildings at the site, the Navy undertook demolition and removal of the building overhead structures. Work on the demolition commenced in the spring of 2000, and continued until fall 2002. The demolition consisted of asbestos abatement, removal of building equipment and components, and demolition of buildings to the slab elevation only. The following buildings were demolished in this manner:

- Building 32 - Torpedo Overhaul Shop
- Building 33 - Steam Plant
- Building 34 – Acetylene Generator Building
- Building 35 (South) – Support for Torpedo Firing Pier
- Building 70 – Quonset Hut
- Building 52 - Riggers Storage Building
- Building 59 - Switch House/Transformer Vault
- Building 58 - Deep Well House
- Acid Storage Shed
- Buildings 53, 54, 56, 60, 61, 62 – Transformer Vaults

In addition, in 2000, the docks and piers that were in ruins at the shoreline were removed as they presented a navigation hazard. Removal of these structures involved dismantling the remaining above water structure, then cutting the pilings at grade. The following structures were removed in this manner:

- “T” Dock
- Ferry Dock
- Saltwater Intake Pier

During building demolition, concrete samples were taken from the interior floor and walls of the transformer vaults and the switch house to determine disposal options for the material. The results of this sampling indicated PCB contamination in some of the floor samples. Due to this finding, additional PCB investigations were conducted after building component removal. Details on the demolition and disposal of the buildings at Gould Island, conducted by Foster Wheeler Environmental Corporation (FWENC) are pending publication by FWENC.

5.2 PHASE 1 PCB SAMPLING (FOSTER WHEELER, 2002)

During building demolition, concrete samples taken from the interior floor and walls of the transformer vaults and the switch indicated PCB contamination in some of the floor samples. Therefore, FWENC initiated a first phase of PCB investigations to confirm the location of existing PCB contamination and determine the horizontal and vertical delineation of the PCB contamination in soils under the buildings, and in the concrete roadways and soils near those buildings. This first phase involved the concrete roadways, and transformer vaults (TRVs) 53, 54, 56, 59, 60, and 61, and the area around the Riggers Storage Building 52. An interim cleanup goal of 10 mg/kg was used to delineate action areas where excavations were conducted under Phase 2 (Section 5.3 of this report). Appendix C provides excerpts from the Foster Wheeler Draft Phase 1 Sampling Report for the Characterization of PCB Contaminated Soils and Concrete at Gould Island. Figure 4 in Appendix C shows Phase 1 grid sample stations.

PCB sampling was conducted in accordance with The Navy Installation Chemical Data Quality Manual and the Region I USEPA – New England Compendium of Quality Assurance Project Plan Guidance. The sampling and analysis effort involved screening (immunoassay) and laboratory confirmation analysis. Screening data was initially generated using immunoassay testing, with a minimum of 10% confirmed using EPA approved reference methods. Later analysis was all performed using EPA methods reference number 3550 or 3545 and 8082. A limited number of samples were taken using an extended suite of analytical methods, including analysis for VOCs, SVOCs, and TPH.

Samples were taken of debris, concrete, water, wastewater, and soil. Concrete samples were taken from the top one-inch of concrete on the surface of interest. In some locations, deep concrete was also collected, as the lowest one-inch of concrete dust in the component. Soil samples were taken below and around the transformer vault foundations using direct push instruments, at one foot intervals to a depth of two feet below the groundwater level, or two feet below the bottom of the transformer vault, whichever was deeper. At Building 54, sediment samples were collected as the sediment was within one of the grid areas.

Based on the findings of the grid sampling, additional samples were collected in some locations. This approach was based on TSCA rules and agreements with EPA and RIDEM representatives familiar with the project. Sample locations were surveyed to record location data.

Interim action goals were set at 10 mg/kg PCB in most locations, and 1 mg/kg in areas adjacent to the former Building 54 transformer vault, due to its proximity to the shoreline. Data from the Phase 1 study are summarized in Appendix C, Table C-1 (Concrete Sample Analysis) and C-2 (Soil Sample Analysis). Much of the concrete and underlying soils in the roadways analyzed for PCB content had undetectable

concentrations, or had PCBs below the action levels, with the exception of the concrete roadway at the riggers storage building (Building 52) and the roadway near Buildings 56 and 59.

Soil testing under the building foundations was also conducted if PCBs were detected in the concrete overlying those soils. In this manner, some concrete and soils at Buildings 52, 54, 56, 59, and 61 were delineated for later removal from the site.

Concrete and soils with PCBs in excess of the interim cleanup goals were removed from the area and disposed of as TSCA waste as a part of Phase 2 PCB removals (Section 5.3 of this report).

5.3 PHASE 2 PCB CONTAMINATED CONCRETE AND SOIL REMEDIATION (FOSTER WHEELER, 2002)

Phase 2 of the PCB Removal Actions involved actual removal and disposal of the contaminated concrete and soil delineated as described in Section 5.2 of this report. The removal actions have taken place to remove the soils and concrete with concentrations of PCBs in excess of the interim cleanup goals of 10 mg/kg PCB in soil and concrete, and 1 mg/kg in sediments near Building 54. This section describes the removal actions at each area in more detail.

- Concrete Roadways – The concrete roadways throughout the site were sampled as described in Section 5.2. Some sections where PCBs were not detected were removed and disposed of offsite as construction debris. Samples collected from other areas of the concrete roadways near Buildings 54, 56, 59 and 52 showed PCBs in excess of the interim cleanup goal, and these concentrations triggered additional sampling and delineation of removal areas of concrete and underlying soils.

- Building 54 – Concrete samples taken from the floor of this building found concentrations of PCBs (320 mg/kg) in excess of the interim cleanup goal, although the walls did not (2.1 mg/kg). The walls and roof were removed and used as backfill in the Building 44 UST removal area. The floor-slab was removed and disposed of off site as TSCA waste. The small basement area contained a small amount of water and oil that was removed and disposed of as TSCA waste. The foundation and soils underneath were removed to the approximate depth of the foundation. A single sample from the bottom of the excavation indicated PCBs present at concentrations above the interim cleanup goal, and thus a series of borings were performed in the former building foot print, and around the former building. These borings were used to delineate the Phase 2 removal action area.

- Building 56 – Concrete samples taken from the floor slab of this building (270 mg/kg) exceeded the PCB interim cleanup goal. The walls (0.9 mg/kg) did not exceed the criteria, so the material was removed and used as backfill in the Building 44 UST removal area. The floor slab and foundation were removed and disposed of as TSCA waste. Additional concrete samples from the north (roadway) side of Building 56 showed PCBs in excess of the interim cleanup goal also, and additional samples were taken to define the removal action area in this location.

- Building 59 - Concrete samples taken from the floor slab of this building (73 mg/kg) exceeded the PCB interim cleanup goal. The walls (2.9 mg/kg) did not exceed the criteria, so the material was removed and used as backfill in the Building 44 UST removal area. The floor slab and foundation were removed and disposed of as TSCA waste. Additional concrete samples from the north (roadway) side of Building 59 showed PCBs in excess of the interim cleanup goal also, and additional samples were taken to define the removal action area in this location.

- Building 60 - Concrete samples taken from the floor slab of this building (10,000 mg/kg) exceeded the PCB interim cleanup goal. The walls (0.2 mg/kg) did not exceed the criteria, so the material was removed and used as backfill in the Building 44 UST removal area. The floor slab and foundation were removed and disposed of as TSCA waste. Additional concrete samples from the north (roadway) side of Building 60 showed PCBs in excess of the interim cleanup goal also, and additional samples were taken to define the removal action area in this location.

- Building 61 - Concrete samples taken from the floor slab of this building (3,000 mg/kg) exceeded the PCB interim cleanup goal. The walls (0.2 mg/kg) did not exceed the criteria, so the material was removed and used as backfill in the Building 44 UST removal area. The floor slab and foundation were removed and disposed of as TSCA waste. Additional concrete samples from the north (roadway) side of Building 60 showed PCBs in excess of the interim cleanup goal also, and additional samples were taken to define the removal action area in this location.

As of the press date of this Background Summary Report, a report has not been made available that describes the excavations and confirmatory sampling at the site near the buildings listed above. However, data from confirmatory sampling after planned removals has been made available and is provided as Table C-3, Appendix C. Based on these data, it appears that excavations were continued in each area until the action level of 10 mg/kg PCB was met. Therefore it is likely that PCBs remain in the soils at concentrations that are below 10 mg/kg at these locations, and in the Building 44 UST removal action area, as described above.

6.0 SUMMARY

The following presents a brief summary of environmental media and areas of the site known or suspected to contain oil or hazardous materials.

6.1 GROUNDWATER CONTAMINATION

Based on studies performed to date, groundwater appears to contain low concentrations of petroleum, chlorinated solvents, PAHs, and metals. Low concentrations of these contaminants are currently known to exist in the area of former Building 44, and the open areas to the west. Traces of petroleum hydrocarbons may be found in the groundwater south of Building 32 as well, in the area of the former 1000 gallon UST.

Groundwater appears to have a northeastern flow direction, although measured head differences are slight, and tidal fluctuations are likely in this area.

6.2 VADOSE ZONE CONTAMINATION

Based on The Quad 3 Group study in 1997 and the TtNUS SASE study performed in 2000, it is anticipated that there are chlorinated solvents, toluene, and PAHs under the existing slab foundation for Building 32, and also to the north as far as the firing pier. This is consistent with the former use of the building, materials likely to have been used at the site, and history of operations at the site.

6.3 SOIL CONTAMINATION

Based on the PCB sampling efforts conducted by Foster Wheeler in 2001 and 2002, it is apparent that there are soils present containing PCBs at concentrations below 10 mg/kg at the former locations of Buildings 52, 53, 54, 56, 59, 60, and 61.

6.4 SEDIMENT CONTAMINATION

Based on historical records, piping configurations and sampling of sediment and mussels conducted in the 1980s, electroplating fluids were likely to have been discharged to Narragansett Bay, in the subtidal area to the east of Building 32. Additionally, it is likely that chlorinated and non-chlorinated solvents from the degreasing operations conducted in Building 32 may also have been discharged in that area. The subtidal environment at this location is highly active, exposed to the north, south and east. The discharge

pipes have rotted away, and there is very little depositional sediment present. There is an apparently healthy epibenthic ecosystem in place that is typical for Narragansett Bay.

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U.S. Naval Operating Base, PW Drawing No. 7612-83, Overhaul Shop Drainage Plan, Newport Rhode Island 8/7/42.

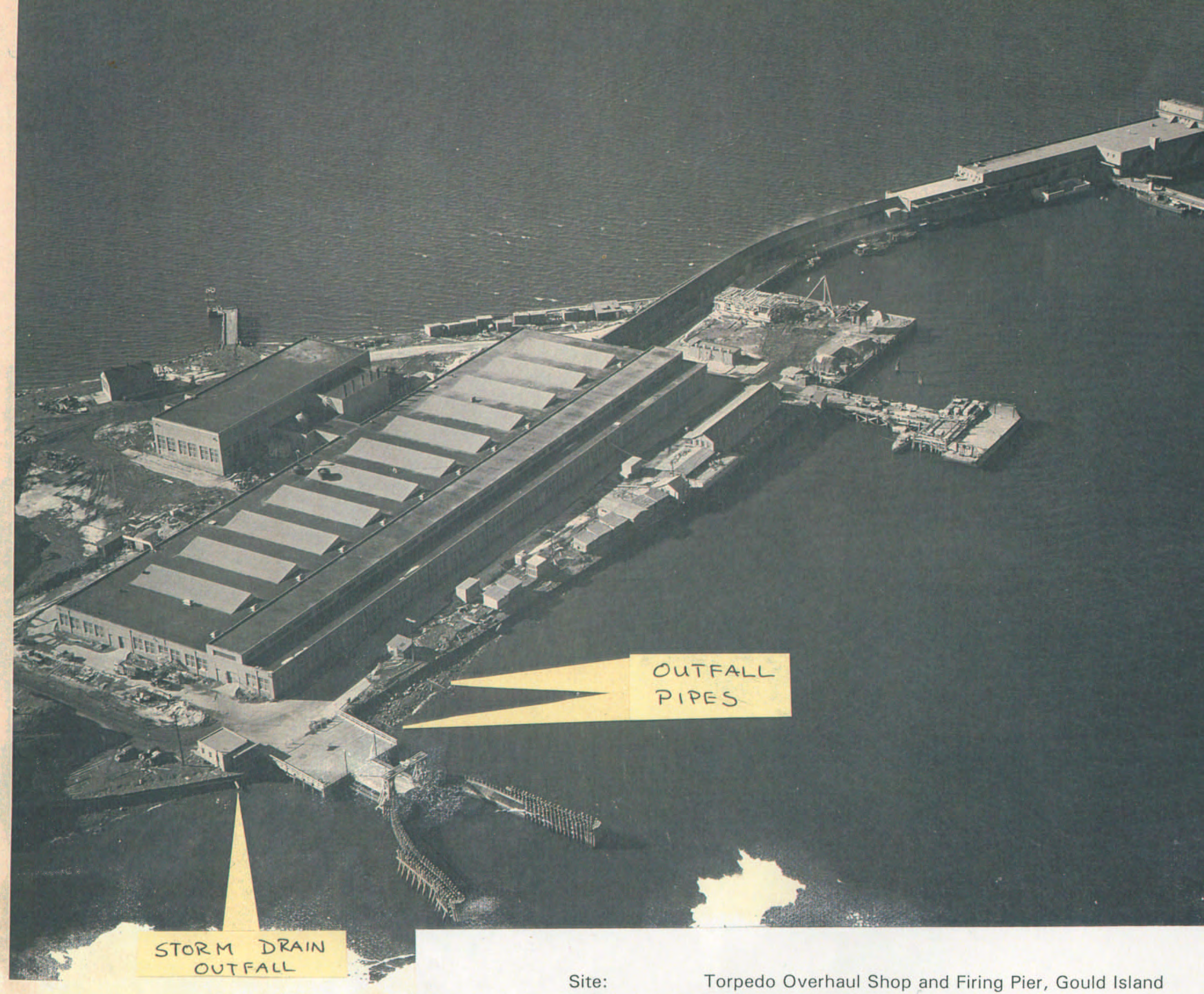
U.S. Naval Operating Base, PW Drawings No. 3876-46, 3877-46, 3878-48, 3879-46, Overhaul Shop Floor Plan Sections 1, 2, 3, and 4, Newport Rhode Island, 12/29/41.

U.S. Naval Operating Base, PW Drawings No. 7607-83, 7608-83, 7609-83, 7610-83, Overhaul Shop Plumbing Layout, Sections 1, 2, 3, and 4, Newport Rhode Island, 7/15/42.

U.S. Naval Operating Base, PW Drawing No. 4313-50, Overhaul Shop Plumbing Floor Plan, Newport Rhode Island 3/14/42.

APPENDIX A

SELECTED HISTORICAL AIR PHOTOS, GOULD ISLAND



Site: Torpedo Overhaul Shop and Firing Pier, Gould Island
Date: February 9, 1943

PHOTO AUGUST 1943 - Overview of Gould Island (looking north).

Gould Island Building 32, Interior Photographs Prior to Demolition

Overhaul Shop North End, View to the South

Overhaul Shop, View to the Southeast

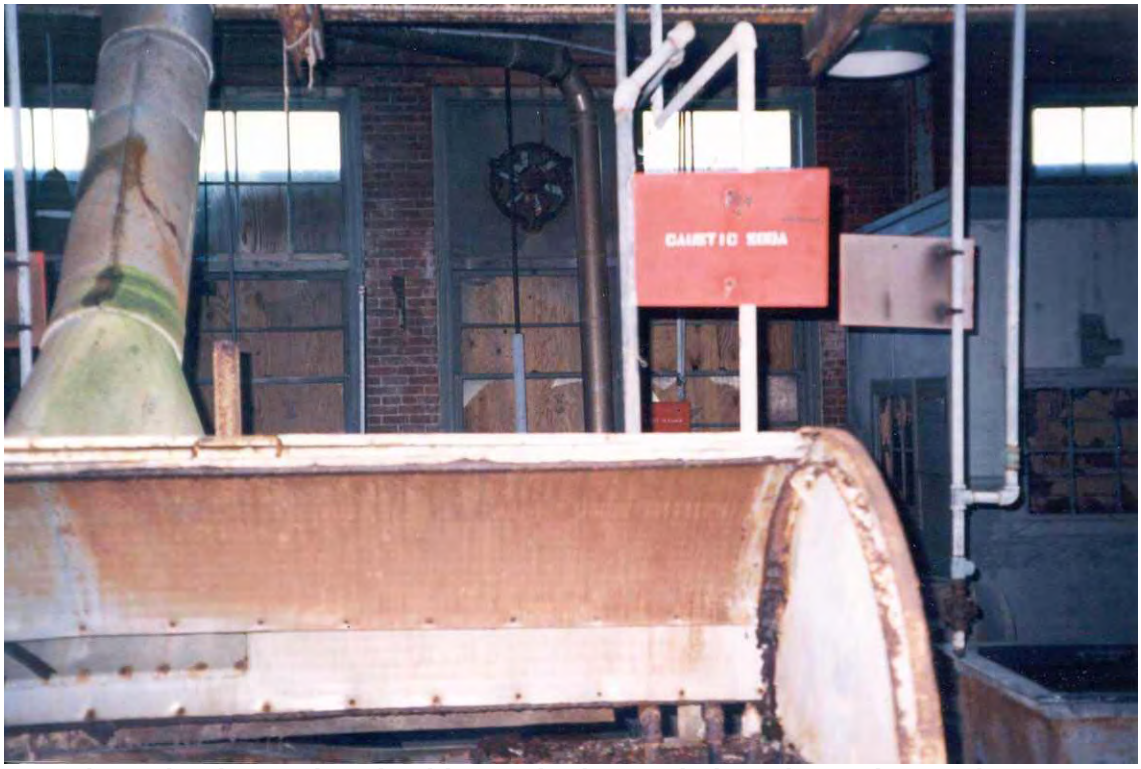
Gould Island Building 32, Interior Photographs Prior to Demolition

Electroplating Shop, East Section View to the South

Electroplating Shop West Section View to the South

Gould Island Building 32, Interior Photographs Prior to Demolition

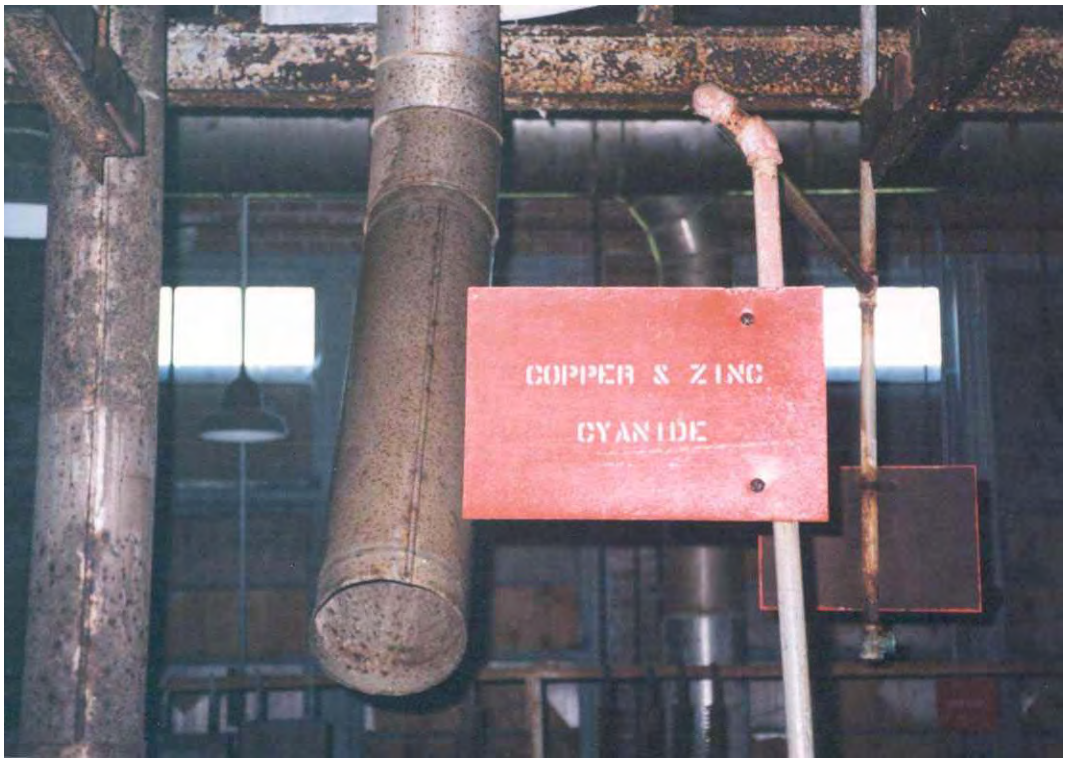
Acid Dipping Room View to the West



Caustic Soda Sign and Bath with Hood, Electroplating Shop, View to the West

Gould Island Building 32, Interior Photographs Prior to Demolition

Copper Cyanide Sign, Electroplating Shop, View to the East



Copper and Zinc Cyanide Sign, Electroplating Shop, View to the West

Gould Island Building 32, Interior Photographs Prior to Demolition

Interior of a Plating Bath, Electroplating Shop

Small Parts Washer, Electroplating Shop

Gould Island Building 32, Interior Photographs Prior to Demolition

Drainage Trench Behind Plating Baths, Electroplating Shop

Muriatic Acid Sign, Electroplating Shop, View to the West

Gould Island Building 32, Interior Photographs Prior to Demolition

Sodium Cyanide Sign, Electroplating Shop, View to the East

Caustic Soda Tank with Hood, Electroplating Shop, View to the South

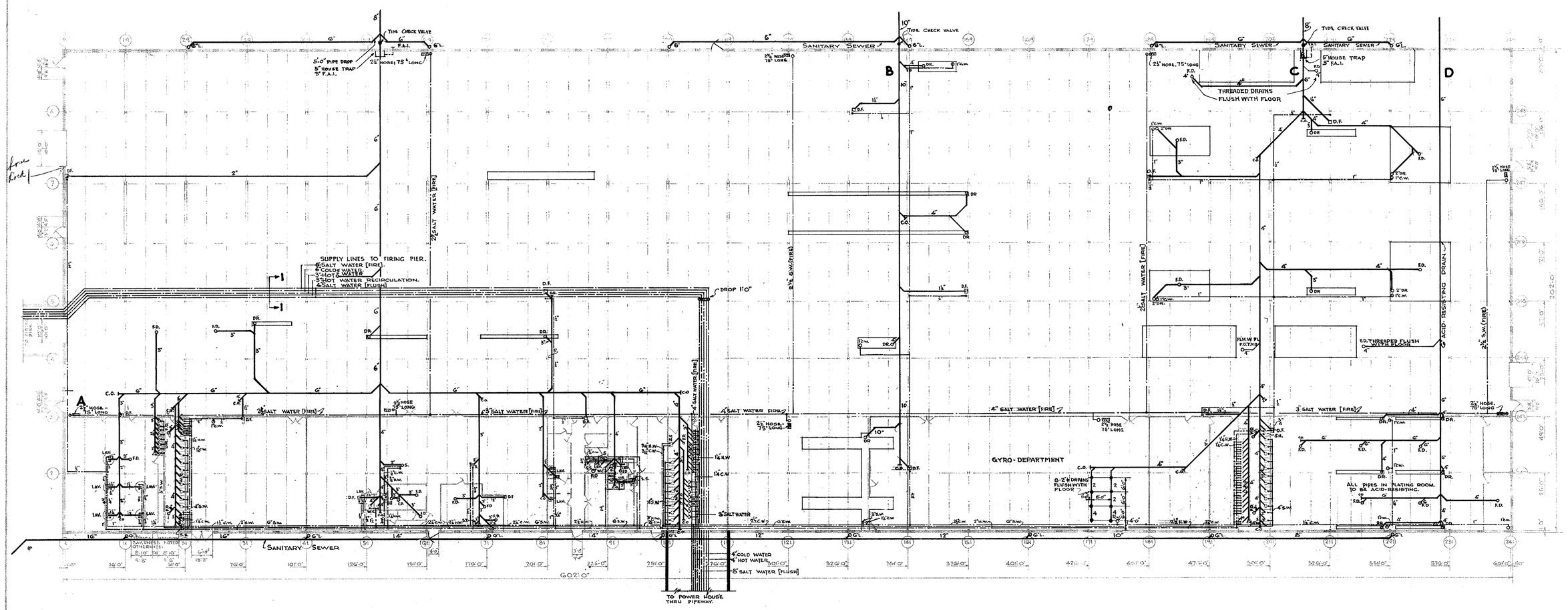
Gould Island Building 32, Interior Photographs Prior to Demolition

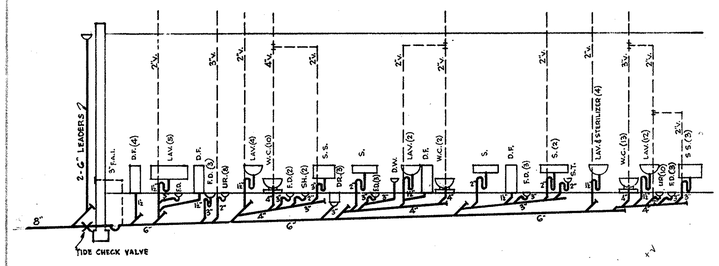
Bench Top, Electroplating Shop, View to the Northwest

Gould Island Building 32, Interior Photographs Prior to Demolition

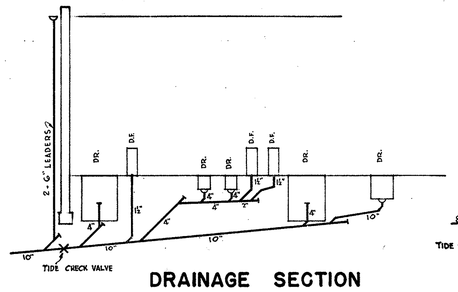
Annodex Cleaner Sign and Bath, Electroplating Shop, View to the East

Mixing Tank at SG92, North End of Building 32

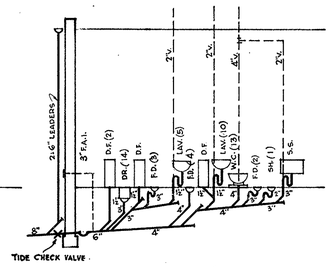




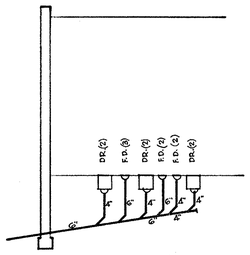
DRAINAGE SECTION
GROUP "A"



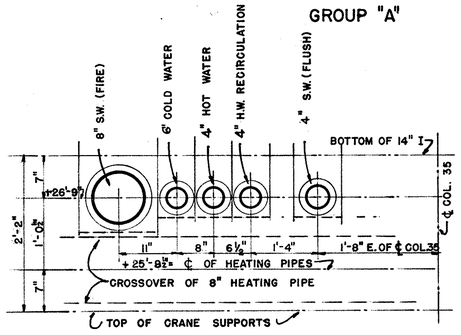
DRAINAGE SECTION
GROUP "B"



DRAINAGE SECTION
GROUP "C"



DRAINAGE SECTION
GROUP "D"



SECTION "1-1"

ABBREVIATIONS

C.W.	=	COLD WATER
H.W.	=	HOT WATER
S.W.	=	SALT WATER
C.O.	=	CLEANOUT
F.A.I.	=	FRESH AIR INTAKE
D.F.	=	DRINKING FOUNTAIN
F.D.	=	FLOOR DRAIN
DR.	=	DRAIN
LAV.	=	LAVATORY
UR.	=	URINAL
W.C.	=	WATER CLOSET
S.	=	SINK
S.S.	=	SLOP SINK
S.T.	=	STEAM TABLE
D.W.	=	DISH-WASHING MACHINE
SH.	=	SHOWER

NOTE: ALL HORIZONTAL PIPE RUNS SHOWN IN SOLID LINES ARE TO BE RUN UNDER FLOOR OR GRADE.
LOCATION OF SALT WATER (FIRE) HOSE RACKS ARE TO BE FINALLY DETERMINED BY OFFICER-IN-CHARGE.

SYMBOLS

SALT WATER
COLD WATER
HOT WATER

NOTE
SUPERCEDED BY THE FOLLOWING DRAWINGS
SECTION NO. 1 P.W. DRAWING NO. 7607-83
SECTION NO. 2 P.W. DRAWING NO. 7608-83
SECTION NO. 3 P.W. DRAWING NO. 7609-83
SECTION NO. 4 P.W. DRAWING NO. 7610-83

REVISION	DATE	BRIEF	BY
3.	5/20/42	FIXTURES ADDED & GENERAL REVISIONS	C.H.F.
2.	4/14/42	CHANGES MADE AT DYNOMETER ROOM FLOOR DRAINS ADDED	C.D.V.
1.	3/28/42	PIPES RESIZED	B.B.

REVIEWED P.W.D. A.C.R.

P.W. DRAWING NO. 4313-50

P.W. DEPARTMENT — BUREAU OF YARDS & DOCKS

APPROVED MARCH 23, 1942
PUBLIC WORKS OFFICER

Y. & D. DRAWING NO. 190913

DRAWN BY R.A.
TRACED BY R.A.
CHECKED BY J.B.
CHIEF D'F'M'N C.D.V.
IN CHARGE C.D.V.

SHEET ... OF ... ACCOMPANYING SPECIFICATION NO.

J.B.(P) CONT. NO. NO. y 4994
DRAWING NO. P-201

U. S. NAVAL OPERATING BASE, NEWPORT, R. I.
TORPEDO STATION GOULD ISLAND

OVERHAUL SHOP PLUMBING FLOOR PLAN

SUBMITTED: MARCH 14, 1942
JOHN BRACKETT, CONSULTING ENGINEER
1360 BROADWAY, NEW YORK

SCALE 1"=20'-0" AND AS NOTED

APPENDIX B

SOIL GAS SURVEY RESULTS, APRIL 2000

W. L. GORE & ASSOCIATES, INC.

Creative Technologies Worldwide

100 CHESAPEAKE BLVD., P.O. BOX 10 • ELKTON, MARYLAND 21922-0010 • PHONE: 410/392-7600
FAX: 410/506-4780

GORE-SORBER® Screening Survey
Final Report

Gould Island Building 32
Newport, RI

May 24, 2000

Gore Production Order No. 10380972

Prepared For:
Tetra Tech NUS, Inc.
55 Jonspin Road
Wilmington, MA 01887

W.L. Gore & Associates, Inc.

Written/Submitted by:
Jay W. Hodny, Ph.D., Project Manager

Reviewed/Approved by:
Ray F. Fenstermacher, P.G., Project Manager

Analytical Data Reviewed by:
Jim E. Whetzel, Chemist

I:\MAPPING\PROJECTS\10380972\000524R.DOC

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GORE-SORBER® Screening Survey
Final Report

REPORT DATE: May 24, 2000 **AUTHOR:** JWH

SITE INFORMATION

Site Reference: Gould Island Building 32, Newport, RI
Customer Purchase Order Number: 00-775
Gore Production Order Number: 10380972 **Gore Site Code:** BJM

FIELD PROCEDURES

 # Modules shipped: 76
Installation Date(s): 04/17/2000 **# Modules Installed:** 66
Field work performed by: Tetra Tech NUS, Inc.

Retrieval date(s): 05/01/2000 **Exposure Time:** 14 [days]
 # Modules Retrieved: 61 **# Trip Blanks Returned:** 2
 # Modules Lost in Field: 3 **# Unused Modules Returned:** 0

Date/Time Received by Gore: 05/03/2000 @ 01:15 PM **By:** TS
Chain of Custody Form attached: √
Chain of Custody discrepancies: None
Comments:
Two modules, #327762 and –738, were identified as trip blanks.
Nine modules, #327690-696, -767, and –768, were not returned to Gore.
Three modules, #327745, -753, and –758, were not returned to Gore and indicated as lost on the Chain of Custody.
One module, #327734, was listed as not installed.

GORE-SORBER® Screening Survey
Final Report

ANALYTICAL PROCEDURES

W.L. Gore & Associates´ Screening Module Laboratory operates under the guidelines of its Quality Assurance Manual, Operating Procedures and Methods. The quality assurance program is consistent with Good Laboratory Practices (GLP) and ISO Guide 25, "General Requirements for the Competence of Calibration and Testing Laboratories", third edition, 1990.

Instrumentation consists of state of the art gas chromatographs equipped with mass selective detectors, coupled with automated thermal desorption units. Sample preparation simply involves cutting the tip off the bottom of the sample module and transferring one or more exposed sorbent containers (sorbers, each containing 40mg of a suitable granular adsorbent) to a thermal desorption tube for analysis. Sorbers remain clean and protected from dirt, soil, and ground water by the insertion/retrieval cord, and require no further sample preparation.

Analytical Method Quality Assurance:
The analytical method employed is a modified EPA method 8260A/8270B. Before each run sequence, two instrument blanks, a sorber containing 5µg BFB (Bromofluorobenzene), and a method blank are analyzed. The BFB mass spectra must meet the criteria set forth in the method before samples can be analyzed. A method blank and a sorber containing BFB is also analyzed after every 30 samples and/or trip blanks. Standards containing the selected target compounds at three calibration levels of 5, 20, and 50µg are analyzed at the beginning of each run. The criterion for each target compound is less than 35% RSD (relative standard deviation). If this criterion is not met for any target compound, the analyst has the option of generating second- or third-order standard curves, as appropriate. A second-source reference standard, at a level of 10µg per target compound, is analyzed after every ten samples and/or trip blanks, and at the end of the run sequence. Positive identification of target compounds is determined by 1) the presence of the target ion and at least two secondary ions; 2) retention time versus reference standard; and, 3) the analyst's judgment.

NOTE: All data have been archived. Any replicate sorbers not used in the initial analysis will be discarded fifteen (15) days from the date of analysis.

Laboratory analysis: thermal desorption, gas chromatography, mass selective detection
Quality Assurance Level: 2 (ANA-4/A1)
Instrument ID: # 5 **Chemist:** JW **Data Subdirectory:** 10380972
Compounds/mixtures requested: Custom Target Compounds
Deviations from Standard Method: None
Comments: Soil vapor analytes and abbreviations are tabulated in the Data Table Key (page 6).

GORE-SORBER® Screening Survey
Final Report

DATA TABULATION

 # CONTOUR MAPS ENCLOSED: Three B-sized color contour maps
LIST OF MAPS ENCLOSED:

- Trichloroethene (TCE)
- Naphthalene
- Total Petroleum Hydrocarbons (TPH)

NOTE: All data values presented in Appendix A represent masses of compound(s) desorbed from the GORE-SORBER Screening Modules received and analyzed by W.L. Gore, as identified in the Chain of Custody (Appendix A). The measurement traceability and instrument performance are reproducible and accurate for the measurement process documented. Semi-quantitation of the compound mass is based on either a single-level (QA Level 1) or three-level (QA Level 2) standard calibration.

General Comments:

- This survey reports soil gas mass levels present in the vapor phase. Vapors are subject to a variety of attenuation factors during migration away from the source concentration to the module. Thus, mass levels reported from the module will often be less than concentrations reported in soil and groundwater matrix data. In most instances, the soil gas masses reported on the modules compare favorably with concentrations reported in the soil or groundwater (e.g., where soil gas levels are reported at greater levels relative to other sampled locations on the site, matrix data should reveal the same pattern, and vice versa). However, due to a variety of factors, a perfect comparison between matrix data and soil gas levels can rarely be achieved.
- Soil gas signals reported by this method cannot be identified to soil adsorbed, groundwater, and/or free-product contamination. The soil gas signal reported from each module can evolve from all of these sources. Differentiation between soil and groundwater contamination can only be achieved with prior knowledge of the site history (i.e., the site is known to have groundwater contamination only).
- Currently, soil gas surveys are not designed to replace soil or groundwater matrix sampling. Following a soil gas survey, matrix sampling is recommended in select areas to establish the nature of the contamination (i.e., soil, groundwater, or both), and the relationship to the soil gas levels.

GORE-SORBER® Screening Survey
Final Report

- QA/QC trip blank modules were provided to document contamination occurring that was not part of the soil gas signal of interest (i.e., impact during module shipment, installation and retrieval, and storage). The trip blanks are identically manufactured and packaged soil gas modules to those modules placed in the subsurface. However, the trip blanks remain unopened during all phases of the soil gas survey. Levels reported on the trip blanks may indicate potential impact to modules other than the contaminant source of interest.
- Unresolved peak envelopes (UPEs) are represented as a series of compound peaks clustered together around a central GC elution time in the total ion chromatogram. Typically, UPEs are indicative of complex fluid mixtures that are present in the subsurface. UPEs observed early in the chromatogram are considered to indicate the presence of more volatile fluids, while UPEs observed later in the chromatogram may indicate the presence of less volatile fluids. Multiple UPEs may indicate the presence of multiple complex fluids. Attenuation of the VOC/SVOC soil gas components may suggest the presence of a less volatile fluid, when in fact, a more volatile fluid existed but the volatile components have weathered away.

Project Specific Comments:

- The minimum (gray) contour level for individually mapped target analytes is set at the maximum QA blank level observed or the method detection limit (MDL), whichever is greater. For summed compounds, e.g., BTEX, the minimum contour level is arbitrarily set at 0.02 μg or the maximum blank level observed, whichever is greater. No MDLs exist for summed data. The maximum contour level is set at the maximum value observed, by compound(s).
- Stacked total ion chromatograms (TICs) are included in Appendix A. The six digit serial number of each module is incorporated into the TIC identification (e.g.: 123456S.D represents module #123456).
- Nominal QA blank levels were reported for some target analytes. In our experience, TPH, GRPH, and DRPH, present in the blanks at these levels, can be considered "background." Thus, target analyte levels, reported for the field-installed modules, that exceed trip and method blank levels, and the method detection limits, have a high probability of originating from on-site sources.
- Moderate to high soil gas mass levels for petroleum-related and chlorinated compounds were observed. Naphthalene and 2-methylnaphthalene levels were the most abundant.
- Well-defined naphthalene soil gas plumes were observed encompassing modules installed within the building.
- The soil gas plumes appear to extend into areas of the site that were not sampled for soil gas. If the objective of the soil gas survey was to delineate the nature and extent of the contamination, then additional soil gas sampling is recommended in those areas. Subsequent soil gas sampling events can be combined onto one set of maps providing increased resolution of the subsurface impact.

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GORE-SORBER® Screening Survey
Final Report

KEY TO DATA TABLE
Gould Island Building 32, Newport, RI

UNITS

µg	micrograms (per sorber), reported for compounds
MDL	method detection limit
bdl	below detection limit
nd	non-detect

ANALYTES

TPH	total petroleum hydrocarbons
GRPH	gasoline-range petroleum hydrocarbons
DRPH	diesel-range petroleum hydrocarbons
2MePHENOL	2-methylphenol
BTEX	benzene, toluene, ethylbenzene and total xylenes combined
BENZ	benzene
TOL	toluene
EtBENZ	ethylbenzene
mpXYL	m-, p-xylene
oXYL	o-xylene
C11, C13, & C15	undecane, tridecane, and pentadecane combined (Diesel Range Alkanes)
UNDEC	undecane
TRIDEC	tridecane
PENTADEC	pentadecane
TMBs	1,3,5-trimethylbenzene and 1,2,4-trimethylbenzene combined
135TMB	1,3,5-trimethylbenzene
124TMB	1,2,4-trimethylbenzene
ct12DCE	cis- & trans-1,2-dichloroethene combined
t12DCE	trans-1,2-dichloroethene
c12DCE	cis-1,2-dichloroethene
NAPH&2-MN	naphthalene and 2-methyl naphthalene combined
NAPH	naphthalene
2MeNAPH	2-methyl naphthalene
MTBE	methyl t-butyl ether
11DCA	1,1-dichloroethane
$CHCl_3$	chloroform
111TCA	1,1,1-trichloroethane
12DCA	1,2-dichloroethane
CCl_4	carbon tetrachloride
TCE	trichloroethene
OCT	octane
PCE	tetrachloroethene
ClBENZ	chlorobenzene
14DCB	1,4-dichlorobenzene
112TCA	1,1,2-trichloroethane
1112TetCA	1,1,1,2-tetrachloroethane
1122TetCA	1,1,2,2-tetrachloroethane
13DCB	1,3-dichlorobenzene
14DCB	1,4-dichlorobenzene
12DCB	1,2-dichlorobenzene

BLANKS

TBn	unexposed modules (trip blanks), documents ambient impact during field activities
method blank	QA/QC module, documents ambient impact during analysis

APPENDIX A:

1. CHAIN OF CUSTODY
2. DATA TABLE
3. STACKED TOTAL ION CHROMATOGRAMS
4. COLOR CONTOUR MAPS

GORE-SORBER® Screening Survey Chain of Custody

For W.L. Gore & Associates use only
Production Order # 10380972

W. L. Gore & Associates, Inc., Environmental Products Group
100 Chesapeake Boulevard • Elkton, Maryland 21921 • Tel: (410) 392-7600 • Fax (410) 506-4780

Instructions: Customer must complete ALL shaded cells

Customer Name: tetra tech nus inc	Site Name: naval education and training center
Address: 55 jonspin road	Site Address: Newport, RI
wilmington ma	Gould Island Bldg 32
usa	Project Manager: steve parker
Phone: 978-658-7899	Customer Project No.: N7574
FAX: 978-658-7870	Customer P.O. #: 00-775 Quote #: 206557

Serial # of Modules Shipped						# of Modules for Installation 70 # of Trip Blanks 6		
# 327690	-	# 327758	#	-	#	Total Modules Shipped: 76 Pieces		
# 327762	-	# 327768	#	-	#	Total Modules Received: 76 Pieces		
#	-	#	#	-	#	Total Modules Installed: 66 (- 3 lost) Pieces		
#	-	#	#	-	#	Serial # of Trip Blanks (*Client Decides*)		#
#	-	#	#	-	#	# 327762	#	#
#	-	#	#	-	#	# 327738	#	#
#	-	#	#	-	#	#	#	#
#	-	#	#	-	#	#	#	#
#	-	#	#	-	#	#	#	#
#	-	#	#	-	#	#	#	#
GORE ANALYTICAL OPTION:						#	#	#
[A 7]						#	#	#

Installation Performed By:	Installation Method(s) (*circle those that apply*):
Name (*please print*): Steve Parker / Dave Masse	Slide Hammer (Hammer Drill) Auger
Company/Affiliation: Tetra Tech NUS	Other:
Installation Start Date and Time: 4 / 17 / 00 7 : 35 (AM) PM	
Installation Complete Date and Time: 4 / 17 / 00 3 : 50 AM (PM)	
Retrieval Performed By:	Total Modules Retrieved: 63 Pieces
Name (*please print*): Steve Parker / Dave Masse	Total Modules Lost in Field: 3 Pieces
Company/Affiliation: Tetra Tech NUS	Total Unused Modules Returned: 0 Pieces
Retrieval Start Date and Time: 5 / 1 / 00 6 : 55 (AM) PM	
Retrieval Complete Date and Time: 5 / 1 / 00 9 : 30 (AM) PM	

Relinquished By [signature] Affiliation: W.L. Gore & Associates, Inc.	Date 4-17-00	Time 12:50	Received By: Affiliation:	Date	Time
Relinquished By [signature] Affiliation: T+N NUS Inc	Date 5-2-00	Time 1600	Received By: Affiliation:	Date	Time
Relinquished By Affiliation	Date	Time	Received By: [signature] Affiliation: W.L. Gore & Associates, Inc.	Date 5/3/00	Time 11:15 pm

Delivered to Gore by Fed Ex AB# 816917336180

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FORM 8R.5

GORE-SORBER® Screening Survey
Installation and Retrieval Log

Page 1 of 2

SITE NAME & LOCATION
Gould Island Building 32
Newport, RI

LINE #	MODULE #	INSTALLATION DATE/TIME	RETRIEVAL DATE/TIME	EVIDENCE OF LIQUID HYDROCARBONS (LPH) or HYDROCARBON ODOR (Check as appropriate)			MODULE IN WATER (check one)		COMMENTS
				LPH	ODOR	NONE	YES	NO	
1.	327690								
2.	327691								
3.	327692								
4.	327693								
5.	327694								
6.	327695								
7.	327696								
8.	327697	4/17/00 / 1550	5/1/00 0930			✓		✓	
9.	327698	4/17/00 / 1550	5/1/00 0930			✓		✓	
10.	327699	4/17/00 / 1545	5/1/00 0928			✓		✓	
11.	327700	4/17/00 1535	5/1/00 0926			✓		✓	
12.	327701	4/17/00 1525	5/1/00 0924			✓		✓	
13.	327702	4/17/00 1525	5/1/00 0924			✓		✓	
14.	327703	4/17/00 1515	5/1/00 0935			✓		✓	
15.	327704	4/17/00 1455	5/1/00 0920			✓		✓	
16.	327705	4/17/00 1445	5/1/00 0918			✓		✓	
17.	327706	4/17/00 1445	5/1/00 0918			✓		✓	
18.	327707	4/17/00 1440	5/1/00 0917			✓		✓	
19.	327708	4/17/00 1429	5/1/00 0915			✓		✓	
20.	327709	4/17/00 1424	5/1/00 0914			✓		✓	
21.	327710	4/17/00 1418	5/1/00 0913			✓		✓	
22.	327711	4/17/00 1411	5/1/00 0912			✓		✓	
23.	327712	4/17/00 1405	5/1/00 0911			✓		✓	
24.	327713	4/17/00 1359	5/1/00 0910			✓		✓	
25.	327714	4/17/00 1340	5/1/00 0908			✓		✓	
26.	327715	4/17/00 1330	5/1/00 0906			✓		✓	
27.	327716	4/17/00 1310	5/1/00 0905			✓		✓	
28.	327717	4/17/00 1304	5/1/00 0902			✓		✓	
29.	327718	4/17/00 1259	5/1/00 0859			✓		✓	
30.	327719	4/17/00 1250	5/1/00 0858			✓		✓	
31.	327720	4/17/00 1242	5/1/00 0856			✓		✓	
32.	327721	4/17/00 1235	5/1/00 0854			✓		✓	
33.	327722	4/17/00 1228	5/1/00 0853			✓		✓	
34.	327723	4/17/00 1224	5/1/00 0851			✓		✓	
35.	327724	4/17/00 1214	5/1/00 0850			✓		✓	
36.	327725	4/17/00 1211	5/1/00 0849			✓		✓	
37.	327726	4/17/00 1118	5/1/00 0839			✓		✓	
38.	327727	4/17/00 1115	5/1/00 0842			✓		✓	
39.	327728	4/17/00 1107	5/1/00 0845			✓		✓	
40.	327729	4/17/00 1058	5/1/00 0836			✓		✓	
41.	327730	4/17/00 1055	5/1/00 0835			✓		✓	
42.	327731	4/17/00 1051	5/1/00 0832			✓		✓	

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GORE-SORBER® Screening Survey
Installation and Retrieval Log

Page 2 of 2

SITE NAME & LOCATION
Gould Island Building 32
Newport, RI

LINE #	MODULE #	INSTALLATION DATE/TIME	RETRIEVAL DATE/TIME	EVIDENCE OF LIQUID HYDROCARBONS (LPH) or HYDROCARBON ODOR (Check as appropriate)			MODULE IN WATER (check one)		COMMENTS
				LPH	ODOR	NONE	YES	NO	
43.	327732	4/17/00 1046	5/1/00 0829			✓		✓	
44.	327733	4/17/00 1041	5/1/00 0828			✓		✓	
45.	327734	NOT INSTALLED							
46.	327735	4/17/00 1028	5/1/00 0830			✓		✓	
47.	327736	4/17/00 1020	5/1/00 0825			✓		✓	
48.	327737	4/17/00 1010	5/1/00 0823			✓		✓	
49.	327738	4/17/00 1000	5/1/00 0823			✓		✓	
50.	327739	4/17/00 0953	5/1/00 0815			✓		✓	
51.	327740	4/17/00 0953	5/1/00 0815			✓		✓	
52.	327741	4/17/00 0948	5/1/00 0809			✓		✓	
53.	327742	4/17/00 0944	5/1/00 0808			✓		✓	
54.	327743	4/17/00 0942	5/1/00 0807			✓		✓	
55.	327744	4/17/00 0935	5/1/00 0805			✓		✓	
56.	327745	4/17/00 0929	— —						
57.	327746	4/17/00 0920	5/1/00 0751			✓		✓	
58.	327747	4/17/00 0910	5/1/00 0745			✓		✓	
59.	327748	4/17/00 0859	5/1/00 0740			✓		✓	
60.	327749	4/17/00 0855	5/1/00 0738			✓		✓	
61.	327750	4/17/00 0855	5/1/00 0738			✓		✓	
62.	327751	4/17/00 0850	5/1/00 0736			✓		✓	
63.	327752	4/17/00 0845	5/1/00 0734			✓		✓	
64.	327753	4/17/00 0819	~~5/1/00~~ —						
65.	327754	4/17/00 0815	5/1/00 0723			✓		✓	
66.	327755	4/17/00 0829	5/1/00 0711			✓		✓	
67.	327756	4/17/00 0834	5/1/00 0708			✓		✓	
68.	327757	4/17/00 0810	5/1/00 0718			✓		✓	
69.	327758	4/17/00 0805	— —						
70.	327762	4/17/00 0750	5/1/00 0710			✓		✓	
71.	327763	4/17/00 0748	5/1/00 0705			✓		✓	
72.	327764	4/17/00 0745	5/1/00 0704			✓		✓	
73.	327765	4/17/00 0742	5/1/00 0703			✓		✓	
74.	327766	4/17/00 0735	5/1/00 0655			✓		✓	
75.	327767								
76.	327768								
77.									
78.									
79.									
80.									
81.									
82.									
83.									
84.									

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GORE SORBER SCREENING SURVEY ANALYTICAL RESULTS
TETRA TECH NUS, INC., WILMINGTON, MA
CUSTOM TARGET LIST (A7)
NAVAL EDUCATION AND TRAINING CENTER, NEWPORT, RI
SITE BJM - PRODUCTION ORDER #10380972

DATE ANALYZED	SAMPLE NAME	TPH, ug	GRPH, ug	DRPH, ug	BTEX, ug	BENZ, ug	TOL, ug	EtBENZ, ug	mpXYL, ug	oXYL, ug	C11, C13, &C15, ug	UNDEC, ug	TRIDEC, ug	PENTADEC, ug	TMBs, ug
	MDL=					0.05	0.03	0.03	0.04	0.02		0.03	0.04	0.01	
05/04/00	327697	4.96	0.07	4.92	0.00	nd	nd	nd	nd	nd	0.17	bdl	0.06	0.11	0.00
05/04/00	327698	3.73	0.07	3.69	0.00	nd	nd	nd	nd	nd	0.12	bdl	0.05	0.07	0.00
05/04/00	327699	24.28	1.90	23.27	0.00	nd	nd	nd	nd	nd	1.26	0.31	0.51	0.44	0.00
05/04/00	327700	19.37	15.78	10.93	41.95	nd	40.85	0.20	0.69	0.22	1.11	0.77	0.22	0.12	0.54
05/04/00	327701	28.34	9.73	23.13	0.18	nd	0.05	bdl	0.07	0.06	2.44	1.16	0.97	0.31	1.19
05/04/00	327702	42.93	13.60	35.65	0.03	nd	nd	bdl	bdl	0.03	4.35	2.35	1.51	0.49	1.39
05/04/00	327703	4.71	2.51	3.37	0.09	nd	nd	nd	0.05	0.04	0.42	0.25	0.11	0.05	0.27
05/04/00	327704	36.96	12.00	30.54	0.27	nd	0.08	bdl	0.10	0.10	6.33	3.46	2.37	0.49	2.59
05/04/00	327705	8.17	4.80	5.60	0.22	nd	0.06	0.04	0.07	0.06	0.60	0.48	0.08	0.04	0.37
05/04/00	327706	9.63	10.64	3.94	1.11	0.06	0.19	0.19	0.40	0.27	0.39	0.36	bdl	0.04	0.91
05/04/00	327707	25.49	21.04	14.24	0.33	nd	0.04	0.03	0.13	0.13	3.20	2.98	0.18	0.04	2.53
05/04/00	327708	41.98	33.30	24.16	0.46	nd	0.27	bdl	0.09	0.10	2.47	0.91	1.05	0.51	1.82
05/04/00	327709	52.29	22.71	40.14	0.43	bdl	0.11	0.06	0.15	0.12	4.33	1.95	1.50	0.89	2.87
05/04/00	327710	3.77	1.38	3.03	0.03	nd	nd	bdl	bdl	0.03	0.34	0.23	0.08	0.03	0.29
05/04/00	327711	6.92	0.62	6.58	0.00	nd	nd	nd	bdl	nd	0.85	0.12	0.56	0.17	0.12
05/04/00	327712	35.88	8.19	31.50	0.23	nd	0.10	bdl	0.07	0.05	4.01	1.47	1.86	0.68	0.76
05/04/00	327713	3.99	3.94	1.88	0.10	nd	nd	bdl	0.05	0.05	0.07	0.05	bdl	0.03	0.51
05/04/00	327714	4.19	3.22	2.47	2.29	nd	1.97	0.06	0.21	0.06	0.15	0.12	bdl	0.03	0.00
05/04/00	327715	5.67	3.87	3.60	0.16	nd	0.04	bdl	0.07	0.05	0.29	0.27	bdl	0.02	0.50
05/04/00	327716	2.28	1.55	1.45	0.00	nd	nd	nd	bdl	bdl	0.00	bdl	bdl	bdl	0.17
05/04/00	327717	2.39	0.24	2.26	0.04	nd	0.04	nd	nd	nd	0.04	bdl	bdl	0.04	0.00
05/04/00	327718	7.48	7.05	3.71	5.48	nd	5.48	nd	bdl	bdl	0.20	0.04	0.10	0.06	0.00
05/04/00	327719	3.22	1.69	2.32	0.03	nd	nd	bdl	bdl	0.03	0.14	0.12	bdl	0.02	0.29
05/04/00	327720	13.00	8.00	8.72	0.39	nd	0.13	0.06	0.11	0.08	2.26	2.15	0.07	0.04	0.86
05/04/00	327721	30.83	17.17	21.64	5.93	0.30	4.72	0.33	0.38	0.20	1.79	1.16	0.32	0.30	0.78
05/04/00	327722	14.40	0.13	14.34	0.00	nd	nd	nd	nd	nd	1.70	0.14	1.02	0.55	0.00
05/04/00	327723	5.50	0.27	5.35	0.06	nd	0.06	nd	bdl	nd	0.30	0.05	0.12	0.13	0.03
05/04/00	327724	2.63	1.39	1.89	1.29	nd	1.29	nd	bdl	bdl	0.10	0.06	bdl	0.04	0.05
05/04/00	327725	45.63	23.20	33.23	0.37	nd	0.27	bdl	0.06	0.04	13.20	12.94	0.22	0.03	3.00
05/04/00	327726	1.09	1.79	0.13	0.00	nd	nd	nd	nd	nd	0.00	nd	nd	nd	0.00
05/05/00	327727	0.63	0.77	0.22	0.00	nd	nd	nd	nd	nd	0.02	nd	nd	0.02	0.00
05/05/00	327728	0.17	0.07	0.13	0.00	nd	nd	nd	nd	nd	0.00	nd	nd	nd	0.00
05/05/00	327729	3.32	0.29	3.17	0.00	nd	nd	nd	nd	nd	0.19	0.07	0.06	0.06	0.00
05/05/00	327730	0.29	0.11	0.23	0.06	nd	0.06	nd	nd	nd	0.00	nd	nd	bdl	0.00
05/05/00	327731	3.27	0.64	2.92	0.00	nd	bdl	bdl	bdl	bdl	0.20	0.10	0.06	0.04	0.06
05/05/00	327732	0.06	0.07	0.03	0.00	nd	nd	nd	nd	nd	0.00	nd	nd	nd	0.00
05/05/00	327733	11.60	0.65	11.25	0.00	nd	nd	nd	nd	nd	0.89	0.23	0.41	0.25	0.00
05/05/00	327735	0.48	0.13	0.42	0.00	nd	nd	nd	nd	nd	0.01	nd	bdl	0.01	0.00
05/05/00	327736	0.09	0.12	0.03	0.00	nd	nd	nd	nd	nd	0.00	nd	nd	nd	0.00
05/05/00	327737	0.69	0.26	0.55	0.00	nd	nd	nd	bdl	bdl	0.03	bdl	bdl	0.03	0.00
05/05/00	327739	4.12	4.32	1.82	0.00	nd	nd	nd	nd	nd	0.03	bdl	bdl	0.03	0.00
05/05/00	327740	1.33	0.42	1.10	0.00	nd	nd	nd	nd	nd	0.01	nd	bdl	0.01	0.00
05/05/00	327741	62.82	36.44	43.32	0.00	nd	nd	nd	bdl	nd	0.59	0.25	0.18	0.15	0.05
05/05/00	327742	2354.89	2075.06	1244.91	23.41	nd	0.11	10.92	10.92	1.46	35.05	13.81	13.88	7.36	214.15

No mdl is available for summed combinations of analytes. In summed columns (eg., BTEX), the reported values should be considered ESTIMATED if any of the individual compounds were reported as bdl.

GORE SORBER SCREENING SURVEY ANALYTICAL RESULTS
TETRA TECH NUS, INC., WILMINGTON, MA
CUSTOM TARGET LIST (A7)
NAVAL EDUCATION AND TRAINING CENTER, NEWPORT, RI
SITE BJM - PRODUCTION ORDER #10380972

DATE ANALYZED	SAMPLE NAME	TPH, ug	GRPH, ug	DRPH, ug	BTEX, ug	BENZ, ug	TOL, ug	EtBENZ, ug	mpXYL, ug	oXYL, ug	C11, C13, &C15, ug	UNDEC, ug	TRIDEC, ug	PENTADEC, ug	TMBs, ug
	MDL=					0.05	0.03	0.03	0.04	0.02		0.03	0.04	0.01	
05/05/00	327743	20.43	7.07	16.65	0.00	nd	bdl	bdl	bdl	bdl	0.40	0.21	0.07	0.12	0.80
05/05/00	327744	2.74	1.41	1.99	0.00	nd	nd	nd	bdl	nd	0.06	0.04	bdl	0.02	0.19
05/05/00	327746	0.54	0.33	0.37	0.00	nd	nd	bdl	bdl	bdl	0.00	nd	nd	nd	0.08
05/05/00	327747	76.90	0.37	76.70	0.09	nd	0.09	nd	bdl	bdl	11.78	0.06	5.92	5.80	0.07
05/05/00	327748	4.45	1.07	3.88	0.07	nd	0.07	nd	bdl	nd	0.03	bdl	bdl	0.03	0.05
05/05/00	327749	0.50	0.24	0.38	0.00	nd	nd	nd	nd	nd	0.00	bdl	nd	nd	0.02
05/05/00	327750	0.36	0.14	0.29	0.00	nd	nd	nd	nd	nd	0.00	nd	nd	nd	0.00
05/05/00	327751	42.75	34.96	24.06	0.00	nd	nd	nd	nd	nd	0.32	0.16	0.10	0.06	0.02
05/05/00	327752	270.76	55.42	241.11	0.00	nd	nd	bdl	bdl	nd	4.74	0.72	0.92	3.10	0.04
05/05/00	327754	0.46	0.26	0.31	0.00	nd	nd	nd	nd	nd	0.00	nd	nd	nd	0.00
05/05/00	327755	0.37	0.12	0.31	0.00	nd	nd	nd	bdl	bdl	0.00	bdl	nd	nd	0.03
05/05/00	327756	9.23	9.17	4.33	0.00	nd	nd	nd	nd	nd	0.34	0.33	bdl	0.01	0.00
05/05/00	327757	0.24	0.11	0.19	0.00	nd	nd	nd	nd	nd	0.00	nd	nd	nd	0.00
05/05/00	327763	0.28	0.08	0.23	0.00	nd	nd	nd	nd	nd	0.00	bdl	nd	nd	0.00
05/05/00	327764	2.82	0.39	2.61	0.00	nd	nd	nd	nd	nd	0.09	0.04	bdl	0.05	0.00
05/05/00	327765	0.53	0.03	0.52	0.00	nd	nd	nd	nd	nd	0.01	nd	nd	0.01	0.00
05/05/00	327766	0.53	0.23	0.41	0.05	nd	0.05	nd	nd	nd	0.00	bdl	nd	nd	0.00
05/05/00	327738	0.62	0.37	0.43	0.00	nd	nd	nd	nd	nd	0.00	bdl	nd	nd	0.00
05/05/00	327762	0.18	0.08	0.14	0.00	nd	nd	nd	nd	nd	0.00	nd	nd	nd	0.00
05/04/00	method blank	0.02	0.00	0.02	0.00	nd	nd	nd	nd	nd	0.00	nd	nd	bdl	0.00
05/04/00	method blank	0.07	0.00	0.07	0.00	nd	nd	nd	nd	nd	0.00	nd	nd	nd	0.00
05/05/00	method blank	0.13	0.02	0.12	0.00	nd	nd	nd	nd	nd	0.00	nd	nd	nd	0.00
	Maximum	2354.89	2075.06	1244.91	41.95	0.30	40.85	10.92	10.92	1.46	35.05	13.81	13.88	7.36	214.15
	Standard Dev.	301.67	265.08	161.07	6.14	0.04	5.28	1.40	1.40	0.19	5.01	2.45	1.94	1.24	27.38
	Mean	55.24	40.37	33.64	1.40	0.01	0.92	0.20	0.23	0.05	1.76	0.82	0.57	0.38	3.89

No mdl is available for summed combinations of analytes. In summed columns (eg., BTEX), the reported values should be considered ESTIMATED if any of the individual compounds were reported as bdl.

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TETRA TECH NUS, INC., WILMINGTON, MA
CUSTOM TARGET LIST (A7)
NAVAL EDUCATION AND TRAINING CENTER, NEWPORT, RI
SITE BJM - PRODUCTION ORDER #10380972

SAMPLE NAME	124TMB, ug	135TMB, ug	ct12DCE, ug	t12DCE, ug	c12DCE, ug	NAPH&2-MN, ug	NAPH, ug	2MeNAPH, ug	MTBE, ug	11DCA, ug	111TCA, ug	12DCA, ug	TCE, ug	OCT, ug	PCE, ug
MDL=	0.02	0.03		0.03	0.02		0.02	0.02	0.36	0.06	0.04	0.03	0.03	0.10	0.04
327697	nd	nd	0.00	nd	nd	0.00	nd	bdl	nd	nd	nd	nd	0.04	nd	nd
327698	nd	nd	0.00	nd	nd	0.00	nd	bdl	nd	nd	nd	nd	bdl	nd	nd
327699	nd	nd	0.05	nd	0.05	0.03	0.03	bdl	nd	nd	nd	nd	1.03	nd	nd
327700	0.38	0.16	0.00	nd	nd	54.34	40.66	13.68	nd	nd	nd	nd	0.33	bdl	nd
327701	0.86	0.33	0.00	nd	nd	40.18	31.08	9.10	nd	nd	nd	nd	1.27	bdl	nd
327702	0.96	0.43	0.00	nd	nd	49.81	37.00	12.82	nd	nd	nd	nd	1.59	bdl	bdl
327703	0.19	0.08	0.00	nd	nd	8.48	7.11	1.37	nd	nd	nd	nd	0.44	bdl	nd
327704	1.78	0.81	0.00	nd	nd	61.08	46.53	14.55	nd	nd	nd	nd	0.39	bdl	0.13
327705	0.26	0.11	0.00	nd	nd	41.51	32.73	8.78	nd	nd	nd	nd	0.86	bdl	0.27
327706	0.60	0.32	0.00	nd	nd	20.13	17.10	3.03	nd	nd	nd	nd	1.54	0.16	0.48
327707	1.79	0.74	0.00	nd	nd	33.09	26.20	6.89	nd	nd	nd	nd	0.09	bdl	0.24
327708	1.17	0.64	0.00	nd	nd	31.29	26.36	4.92	nd	nd	nd	nd	bdl	0.16	0.06
327709	1.92	0.95	0.00	nd	nd	59.45	44.80	14.64	nd	nd	nd	nd	0.18	0.13	0.08
327710	0.22	0.08	0.00	nd	nd	34.89	28.35	6.54	nd	nd	nd	nd	bdl	nd	nd
327711	0.09	0.04	0.00	nd	nd	26.14	18.67	7.48	nd	nd	nd	nd	0.28	nd	nd
327712	0.49	0.27	0.00	nd	nd	72.07	53.97	18.09	nd	nd	nd	nd	0.15	bdl	nd
327713	0.35	0.16	0.00	nd	nd	26.96	22.62	4.34	nd	nd	nd	nd	0.08	bdl	nd
327714	bdl	nd	0.00	nd	nd	0.29	0.23	0.05	nd	nd	nd	nd	0.13	bdl	bdl
327715	0.37	0.14	0.00	nd	nd	39.45	32.62	6.83	nd	nd	nd	nd	0.67	bdl	nd
327716	0.12	0.06	0.00	nd	nd	24.55	18.61	5.95	nd	nd	nd	nd	nd	nd	nd
327717	nd	nd	0.00	nd	nd	0.03	0.03	bdl	nd	nd	nd	nd	bdl	nd	0.25
327718	nd	nd	0.00	nd	nd	0.04	0.04	bdl	nd	nd	nd	nd	nd	nd	bdl
327719	0.20	0.09	0.00	nd	nd	37.16	28.95	8.21	nd	nd	nd	nd	bdl	nd	nd
327720	0.63	0.23	0.00	nd	nd	40.25	31.56	8.69	nd	nd	0.85	nd	61.80	bdl	0.16
327721	0.51	0.27	0.00	nd	nd	67.53	48.99	18.54	nd	nd	nd	nd	0.15	0.18	0.07
327722	nd	nd	0.00	nd	nd	0.30	0.21	0.08	nd	nd	nd	nd	nd	nd	0.11
327723	0.03	bdl	0.00	nd	nd	0.27	0.21	0.06	nd	nd	nd	nd	bdl	nd	0.10
327724	0.05	bdl	0.00	nd	nd	5.03	3.92	1.11	nd	nd	nd	nd	bdl	nd	bdl
327725	2.09	0.92	0.00	nd	nd	45.55	36.48	9.07	nd	nd	nd	nd	nd	nd	nd
327726	nd	nd	0.00	nd	nd	0.10	0.10	bdl	nd	nd	0.04	nd	nd	bdl	1.05
327727	nd	nd	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	nd	nd	nd
327728	nd	nd	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	bdl	nd	nd
327729	nd	nd	0.00	nd	nd	0.00	nd	nd	nd	nd	3.41	0.14	0.07	nd	5.73
327730	nd	nd	0.00	nd	nd	0.00	nd	nd	nd	nd	0.26	nd	nd	nd	0.26
327731	0.06	bdl	0.00	nd	nd	20.53	15.79	4.74	nd	nd	nd	nd	nd	bdl	nd
327732	nd	nd	0.00	nd	nd	0.02	0.02	bdl	nd	nd	nd	nd	nd	nd	bdl
327733	bdl	nd	0.00	nd	nd	0.02	0.02	bdl	nd	nd	0.27	nd	bdl	nd	6.88
327735	nd	nd	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	nd	nd	nd
327736	nd	nd	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	0.10	nd	nd
327737	bdl	bdl	0.00	nd	nd	0.03	0.03	bdl	nd	nd	nd	nd	nd	bdl	nd
327739	nd	nd	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	nd	0.25	nd
327740	nd	nd	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	nd	nd	nd
327741	0.05	bdl	0.15	nd	0.15	0.02	0.02	bdl	nd	nd	nd	nd	0.88	nd	nd
327742	158.44	55.71	0.73	0.17	0.56	19.25	12.66	6.59	nd	nd	nd	nd	0.76	1.80	nd

No mdl is available for summed combinations of analytes. In summed columns (eg., BTEX), the reported values should be considered ESTIMATED if any of the individual compounds were reported as bdl.

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TETRA TECH NUS, INC., WILMINGTON, MA
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NAVAL EDUCATION AND TRAINING CENTER, NEWPORT, RI
SITE BJM - PRODUCTION ORDER #10380972

SAMPLE NAME	124TMB, ug	135TMB, ug	ct12DCE, ug	t12DCE, ug	c12DCE, ug	NAPH&2-MN, ug	NAPH, ug	2MeNAPH, ug	MTBE, ug	11DCA, ug	111TCA, ug	12DCA, ug	TCE, ug	OCT, ug	PCE, ug
MDL=	0.02	0.03		0.03	0.02		0.02	0.02	0.36	0.06	0.04	0.03	0.03	0.10	0.04
327743	0.61	0.19	0.00	nd	nd	0.06	0.04	0.02	nd	nd	nd	nd	0.10	nd	nd
327744	0.15	0.04	0.00	nd	nd	0.02	0.02	bdl	nd	nd	nd	nd	nd	nd	0.30
327746	0.08	bdl	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	nd	nd	nd
327747	0.07	bdl	0.00	nd	nd	0.87	0.17	0.70	nd	nd	nd	nd	nd	nd	nd
327748	0.05	bdl	0.00	nd	nd	0.05	0.03	0.02	nd	nd	nd	nd	nd	nd	nd
327749	0.02	nd	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	nd	nd	nd
327750	bdl	nd	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	nd	nd	nd
327751	0.02	bdl	0.00	nd	nd	0.09	0.09	bdl	nd	nd	nd	nd	nd	nd	nd
327752	0.04	bdl	0.49	0.06	0.42	0.52	0.44	0.08	nd	nd	nd	nd	nd	nd	nd
327754	bdl	nd	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	bdl	nd	nd
327755	0.03	bdl	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	nd	nd	nd
327756	bdl	bdl	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	nd	nd	nd
327757	nd	nd	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	0.09	nd	0.09
327763	nd	nd	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	nd	nd	bdl
327764	nd	nd	0.05	nd	0.05	0.05	0.05	bdl	nd	nd	nd	nd	bdl	nd	nd
327765	nd	nd	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	0.08	nd	nd
327766	nd	bdl	0.00	nd	nd	1.45	1.15	0.30	nd	nd	nd	nd	bdl	nd	nd
													0.03	nd	nd
327738	bdl	nd	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	nd	nd	nd
327762	nd	nd	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	nd	nd	nd
method blank	nd	nd	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	nd	nd	nd
method blank	nd	nd	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	nd	nd	nd
method blank	nd	nd	0.00	nd	nd	0.00	nd	nd	nd	nd	nd	nd	nd	nd	nd
Maximum	158.44	55.71	0.73	0.17	0.56	72.07	53.97	18.54	0.00	0.00	3.41	0.14	61.80	1.80	6.88
Standard Dev.	20.26	7.12	0.11	0.02	0.09	21.14	16.16	5.07	0.00	0.00	0.45	0.02	7.90	0.23	1.14
Mean	2.86	1.03	0.02	0.00	0.02	14.15	10.91	3.24	0.00	0.00	0.08	0.00	1.20	0.06	0.27

No mdl is available for summed combinations of analytes. In summed columns (eg., BTEX), the reported values should be considered ESTIMATED if any of the individual compounds were reported as bdl.

GORE SORBER SCREENING SURVEY ANALYTICAL RESULTS
TETRA TECH NUS, INC., WILMINGTON, MA
CUSTOM TARGET LIST (A7)
NAVAL EDUCATION AND TRAINING CENTER, NEWPORT, RI
SITE BJM - PRODUCTION ORDER #10380972

SAMPLE NAME	14DCB, ug	PHENOL, ug	2MePHENOL, ug	11DCE, ug	CHCl3, ug	CCl4, ug	112TCA, ug	ClBENZ, ug	1112TetCA, ug	1122TetCA, ug	13DCB, ug	12DCB, ug
MDL=	0.01	0.02	0.03	0.02	0.02	0.03	0.05	0.02	0.04	0.03	0.03	0.02
327697	0.01	nd	nd	nd	nd	nd	nd	nd	nd	nd	bdl	bdl
327698	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327699	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327700	bdl	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327701	nd	0.09	0.04	nd	nd	nd	nd	nd	nd	nd	nd	nd
327702	nd	0.10	0.04	nd	nd	nd	nd	nd	nd	nd	nd	nd
327703	nd	0.09	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327704	nd	bdl	bdl	nd	nd	nd	nd	nd	nd	nd	nd	nd
327705	nd	0.03	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327706	nd	0.39	0.11	nd	nd	nd	nd	nd	nd	nd	nd	nd
327707	bdl	bdl	bdl	nd	nd	nd	nd	nd	nd	bdl	nd	nd
327708	nd	bdl	nd	nd	nd	nd	nd	nd	nd	bdl	nd	nd
327709	nd	bdl	nd	nd	nd	nd	nd	nd	nd	bdl	nd	nd
327710	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327711	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327712	nd	bdl	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327713	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327714	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327715	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327716	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327717	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327718	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327719	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327720	nd	0.06	bdl	0.14	nd	nd	nd	nd	nd	nd	nd	nd
327721	nd	bdl	bdl	nd	nd	nd	nd	nd	nd	nd	nd	nd
327722	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327723	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327724	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327725	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327726	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327727	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327728	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327729	nd	nd	nd	0.29	nd	nd	nd	nd	nd	nd	nd	nd
327730	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327731	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327732	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327733	nd	nd	nd	0.04	nd	nd	nd	nd	nd	nd	nd	nd
327735	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327736	nd	nd	nd	nd	0.17	nd	nd	nd	nd	nd	nd	nd
327737	nd	0.05	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327739	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327740	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327741	nd	0.02	nd	nd	nd	nd	nd	nd	nd	0.04	nd	nd
327742	nd	0.08	0.39	nd	nd	nd	nd	nd	nd	18.16	nd	nd

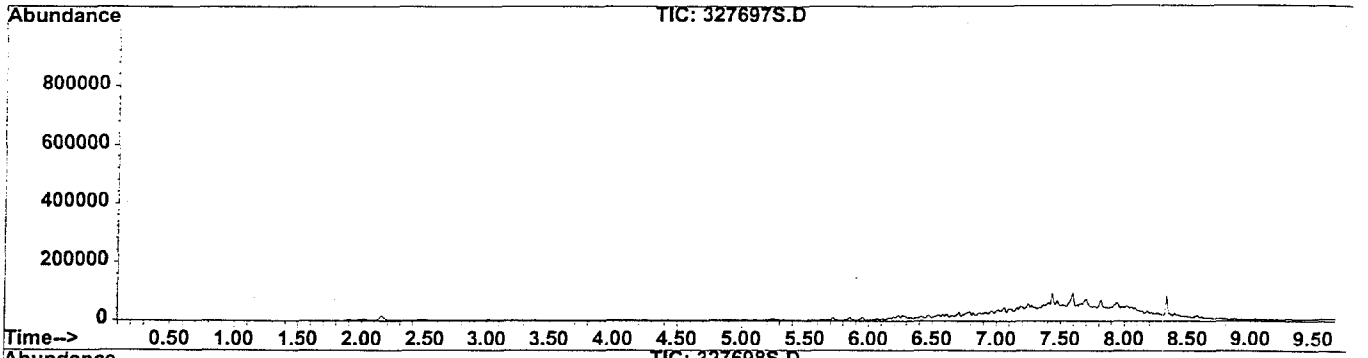
No mdl is available for summed combinations of analytes. In summed columns (eg., BTEX), the reported values should be considered ESTIMATED if any of the individual compounds were reported as bdl.

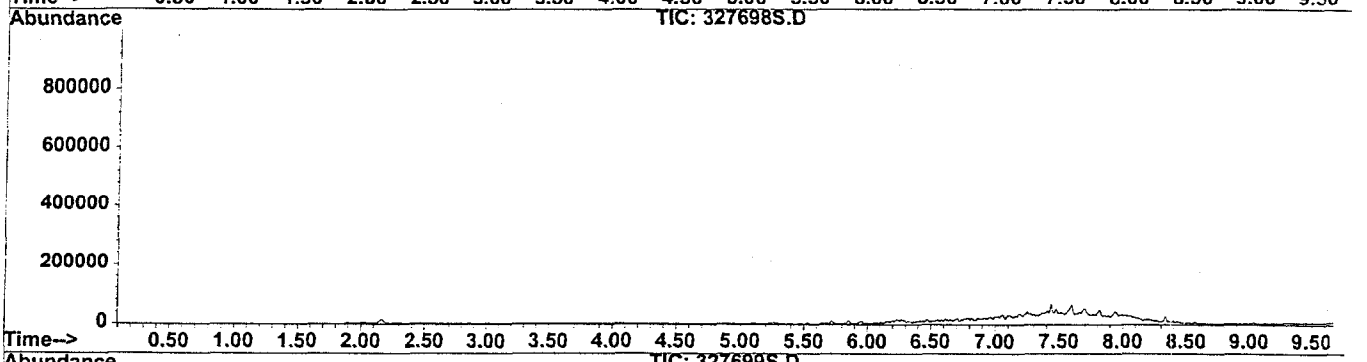
GORE SORBER SCREENING SURVEY ANALYTICAL RESULTS
TETRA TECH NUS, INC., WILMINGTON, MA
CUSTOM TARGET LIST (A7)
NAVAL EDUCATION AND TRAINING CENTER, NEWPORT, RI
SITE BJM - PRODUCTION ORDER #10380972

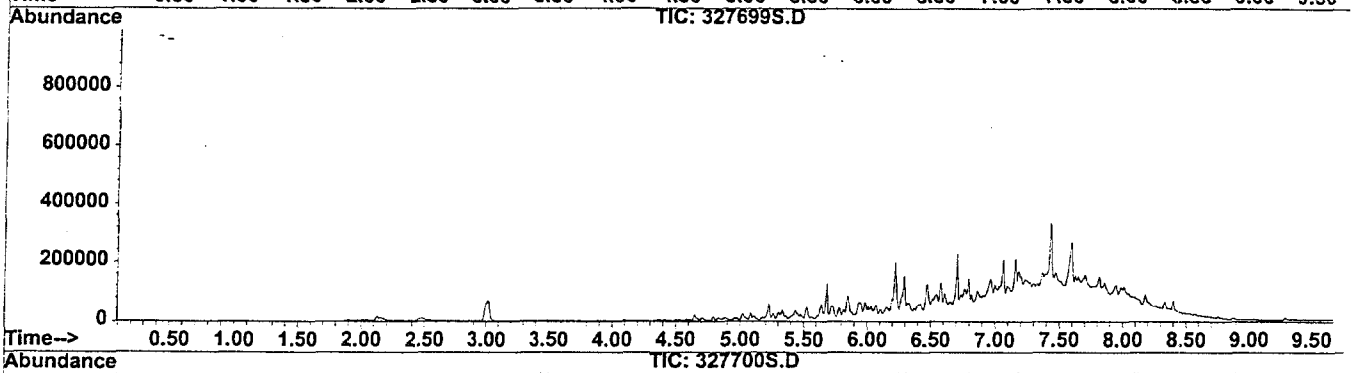
SAMPLE NAME	14DCB, ug	PHENOL, ug	2MePHENOL, ug	11DCE, ug	CHCl3, ug	CCl4, ug	112TCA, ug	ClBENZ, ug	1112TetCA, ug	1122TetCA, ug	13DCB, ug	12DCB, ug
MDL=	0.01	0.02	0.03	0.02	0.02	0.03	0.05	0.02	0.04	0.03	0.03	0.02
327743	nd	nd	nd	nd	nd	nd	nd	nd	nd	bdl	nd	nd
327744	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327746	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327747	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327748	nd	0.05	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327749	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327750	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327751	nd	bdl	nd	nd	nd	nd	nd	nd	nd	0.07	nd	nd
327752	nd	bdl	bdl	nd	nd	nd	nd	nd	nd	0.14	nd	nd
327754	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327755	bdl	bdl	nd	nd	nd	nd	nd	nd	nd	nd	bdl	nd
327756	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327757	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327763	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327764	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327765	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327766	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327738	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
327762	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
method blank	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
method blank	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
method blank	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Maximum	0.01	0.39	0.39	0.29	0.17	0.00	0.00	0.00	0.00	18.16	0.01	0.01
Standard Dev.	0.00	0.05	0.05	0.04	0.02	0.00	0.00	0.00	0.00	2.32	0.00	0.00
Mean	0.00	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00

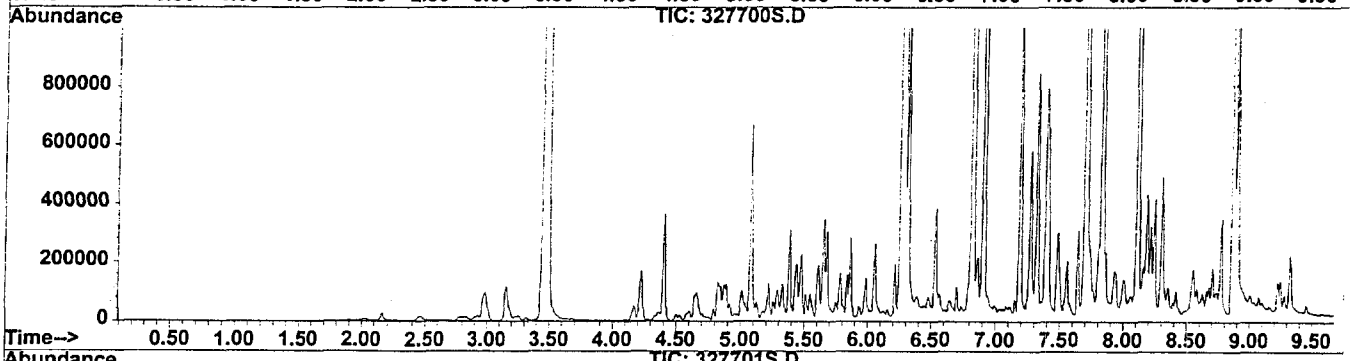
No mdl is available for summed combinations of analytes. In summed columns (eg., BTEX), the reported values should be considered ESTIMATED if any of the individual compounds were reported as bdl.

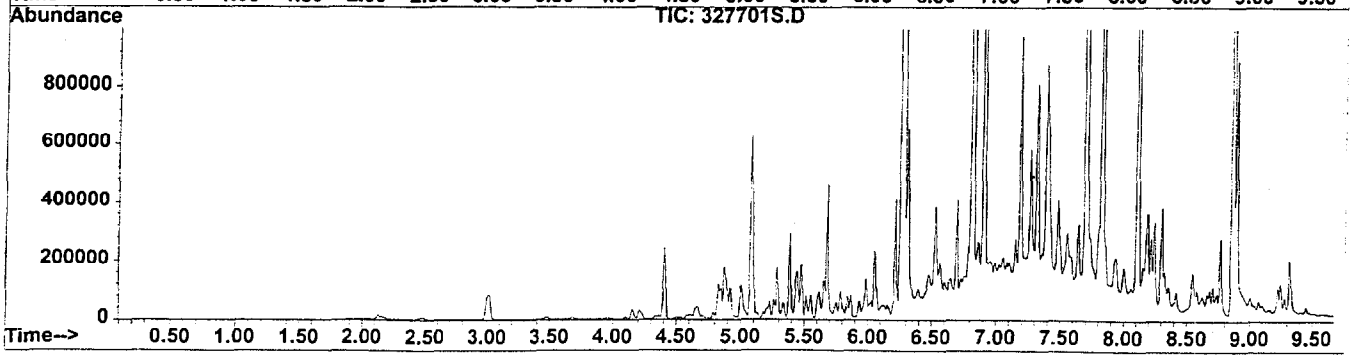
TIC - SITE BJM - PRODUCTION ORDER #10380972
In Numerical Order











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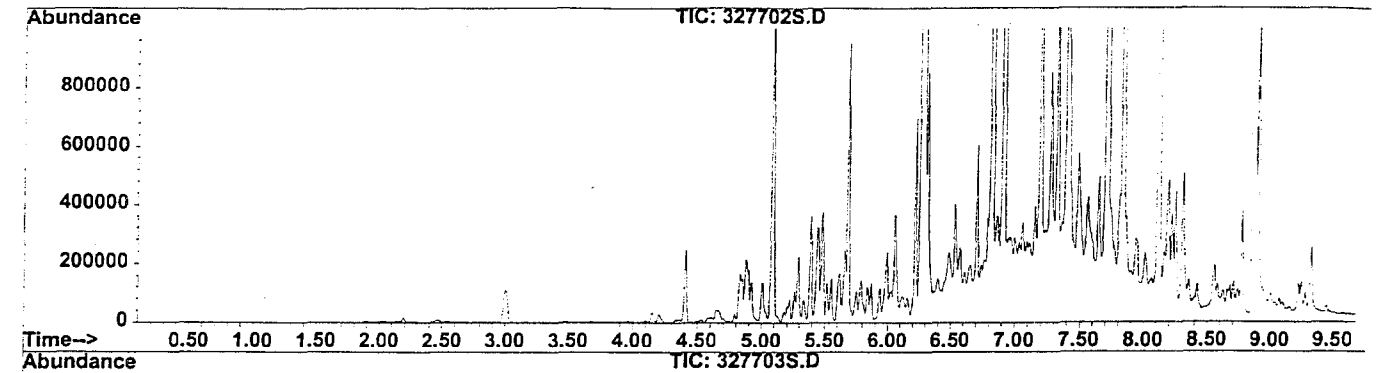

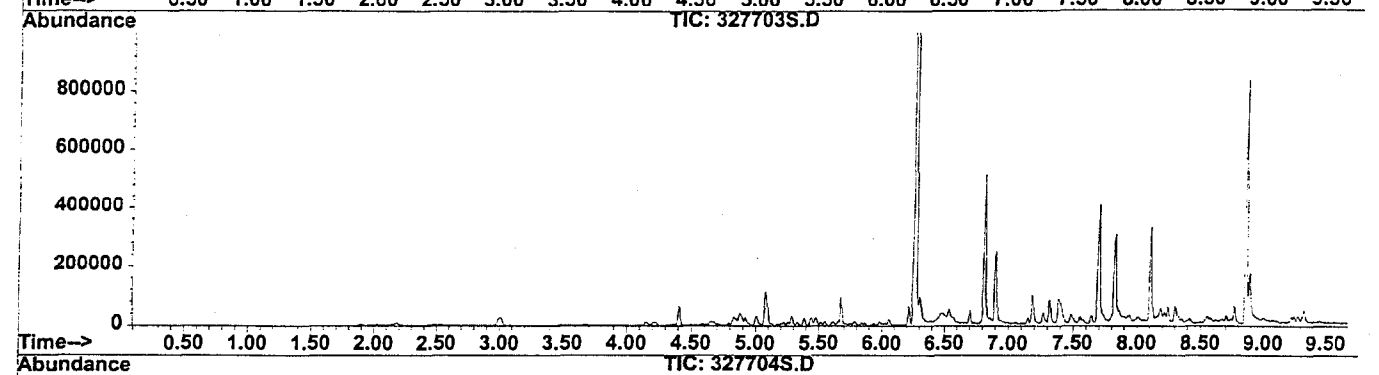

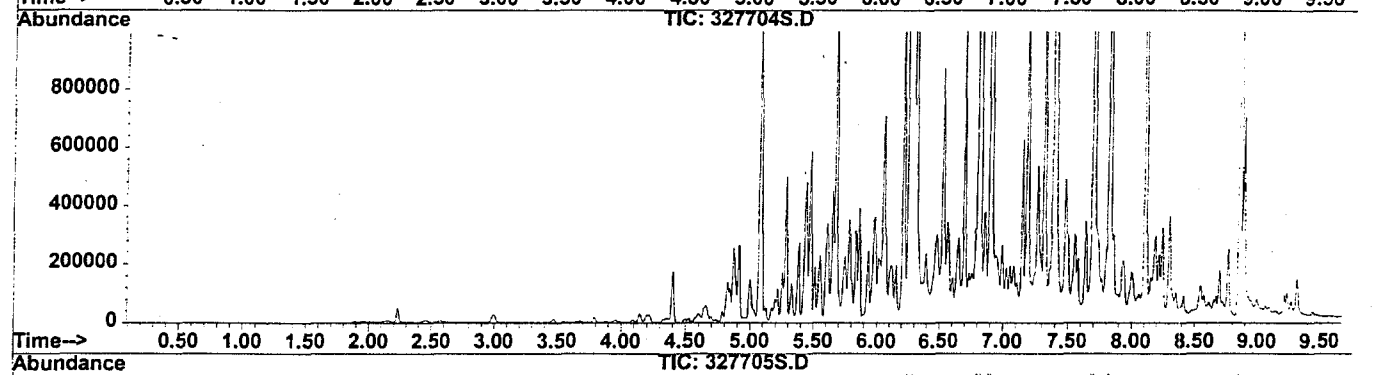

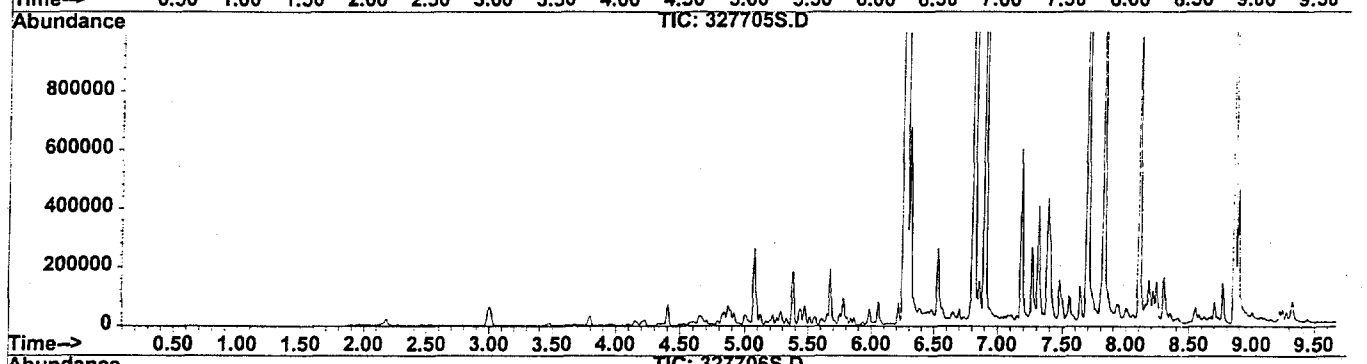

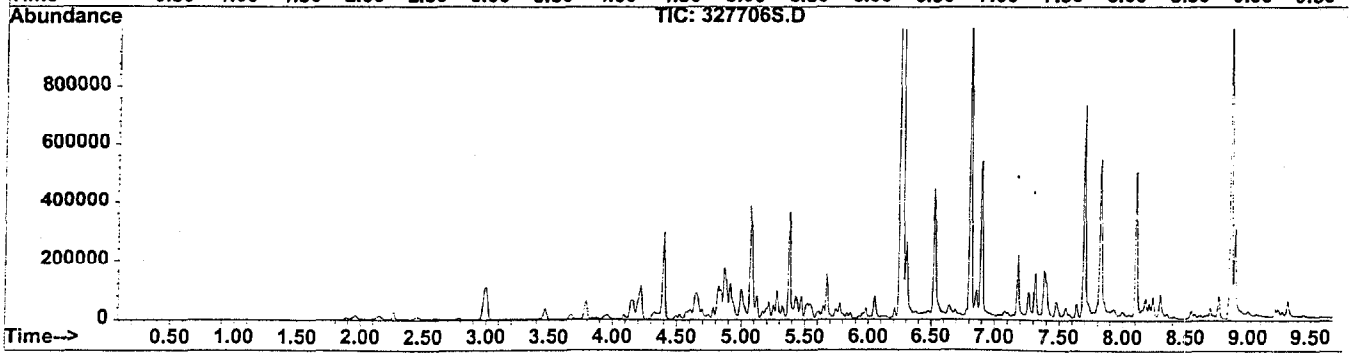

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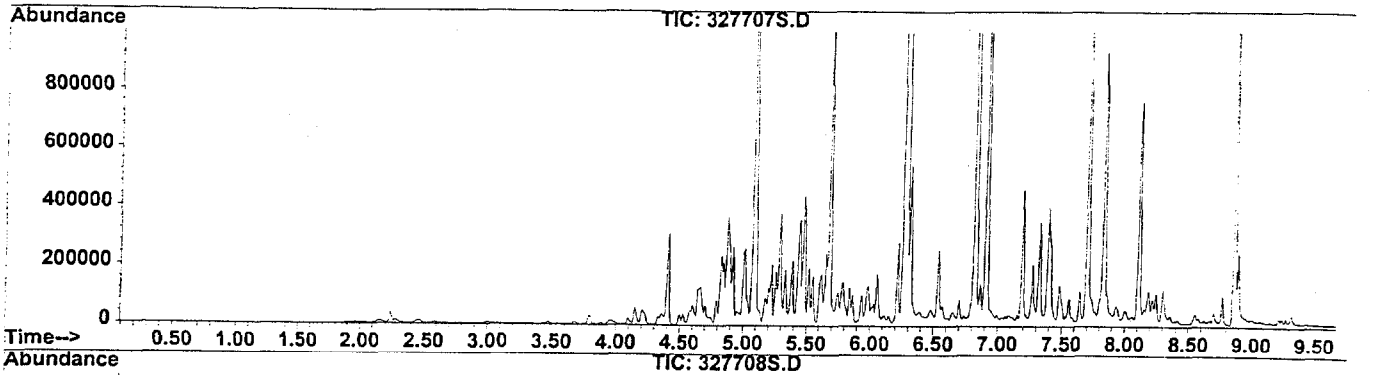

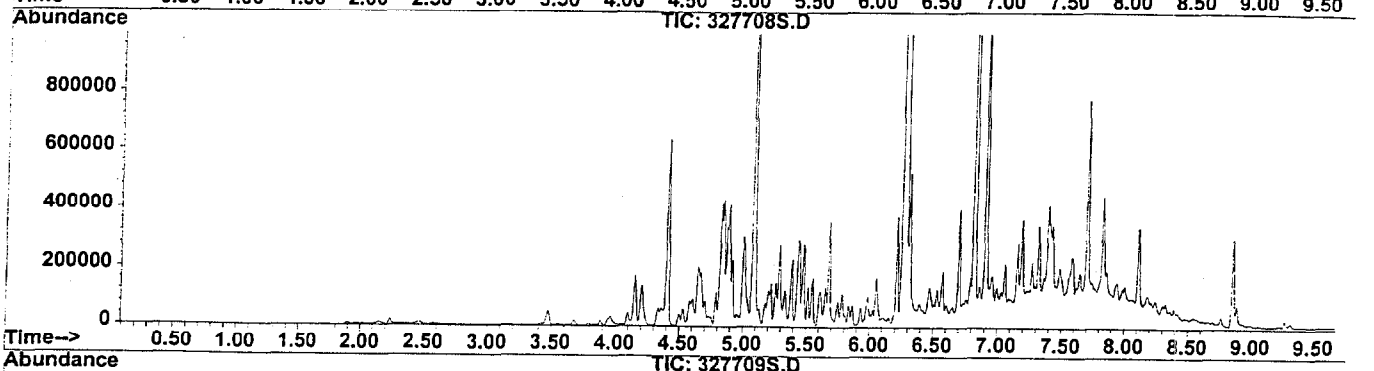

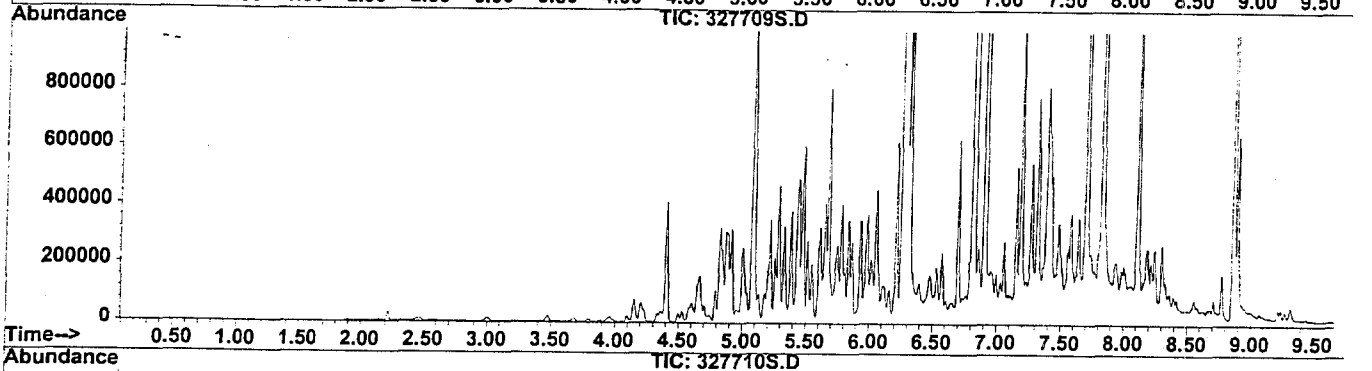

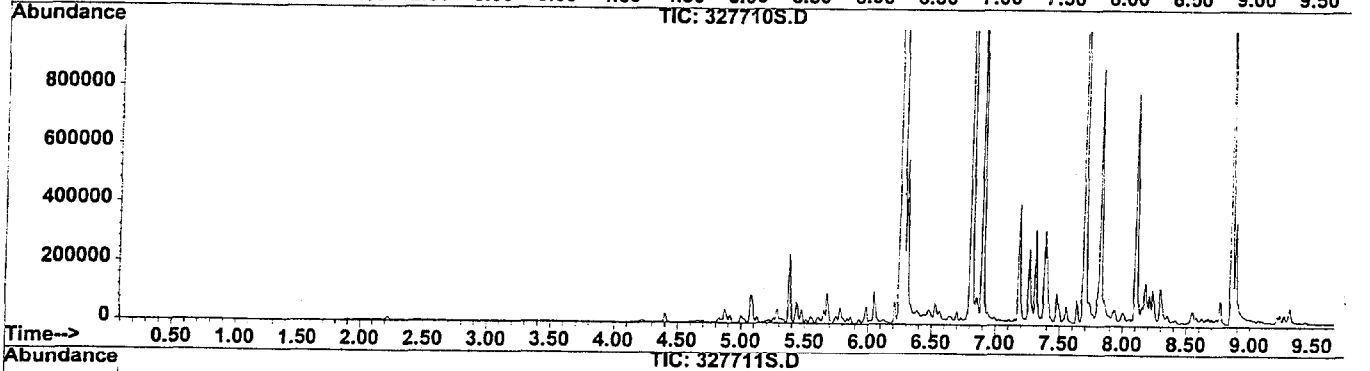

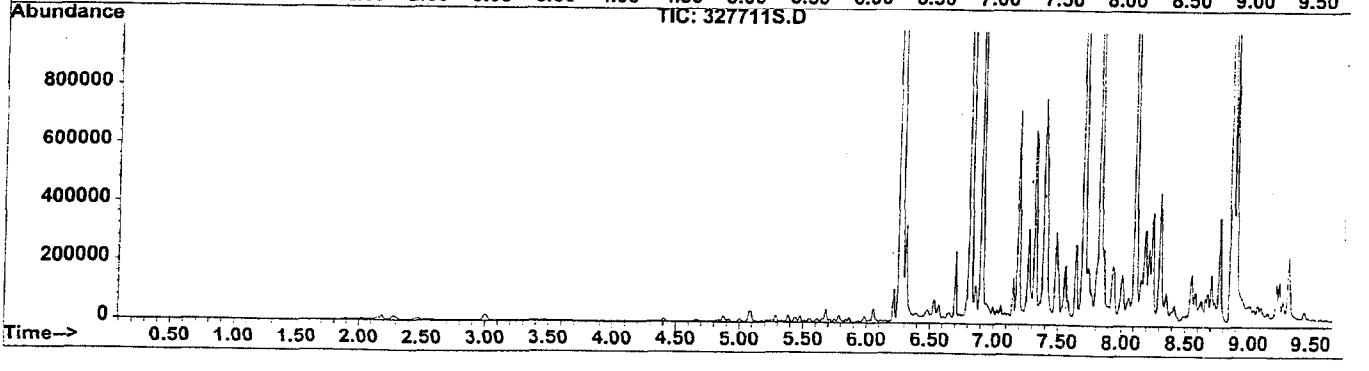

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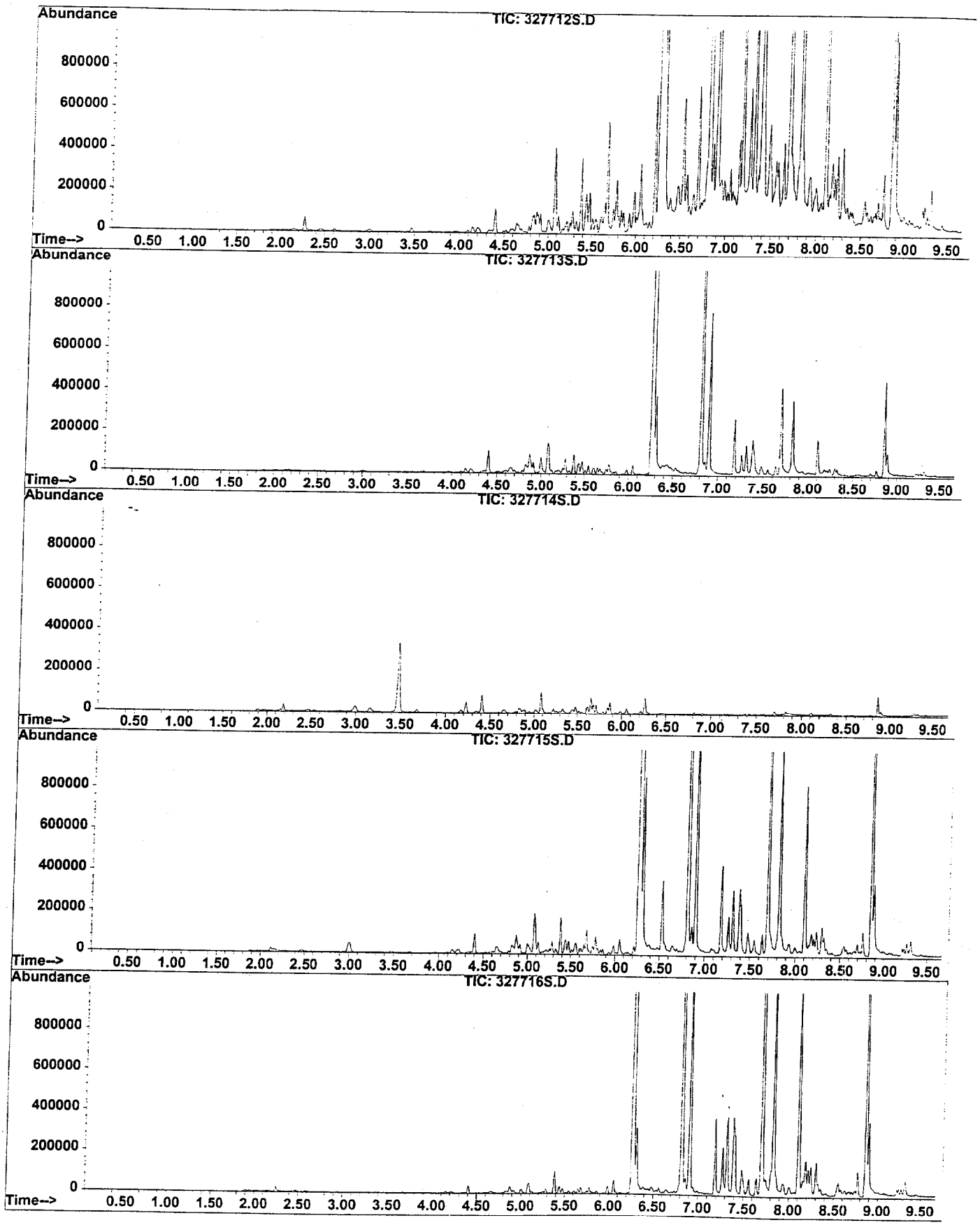

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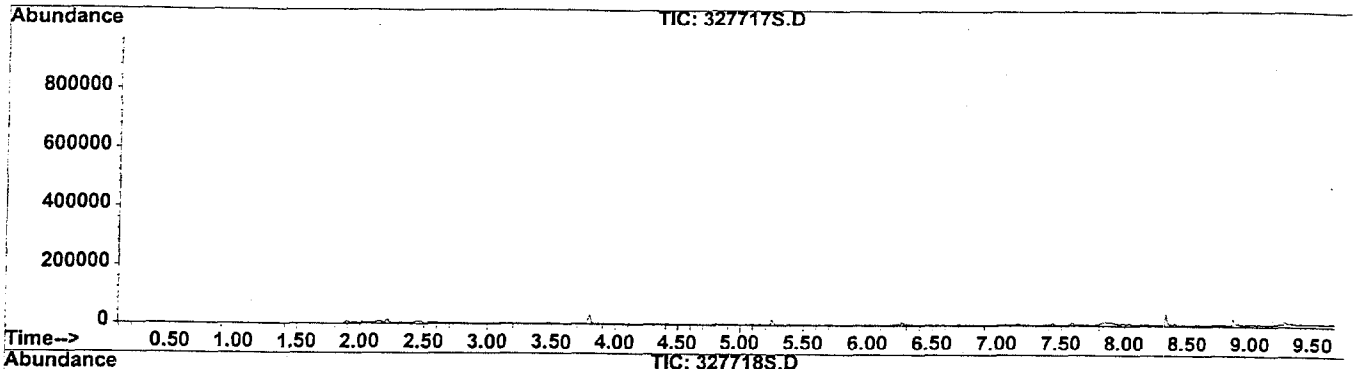

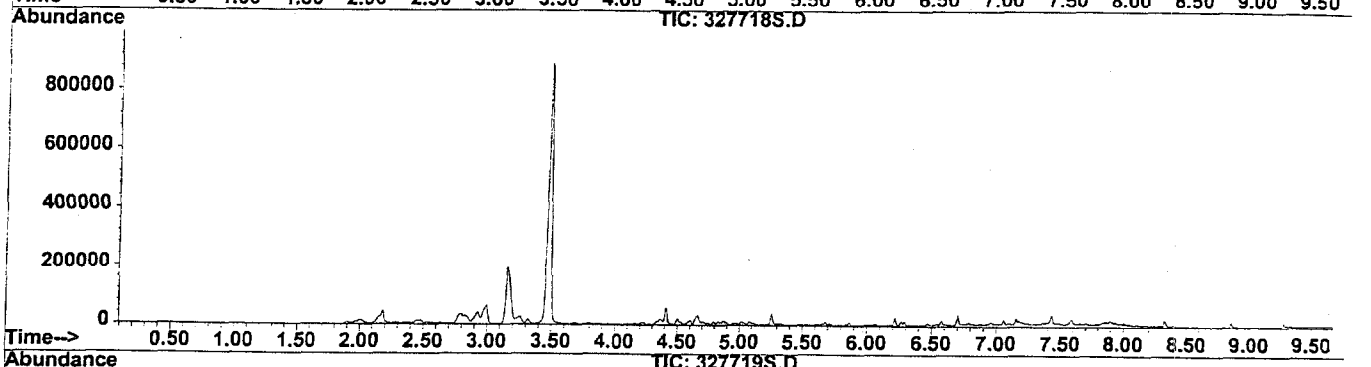

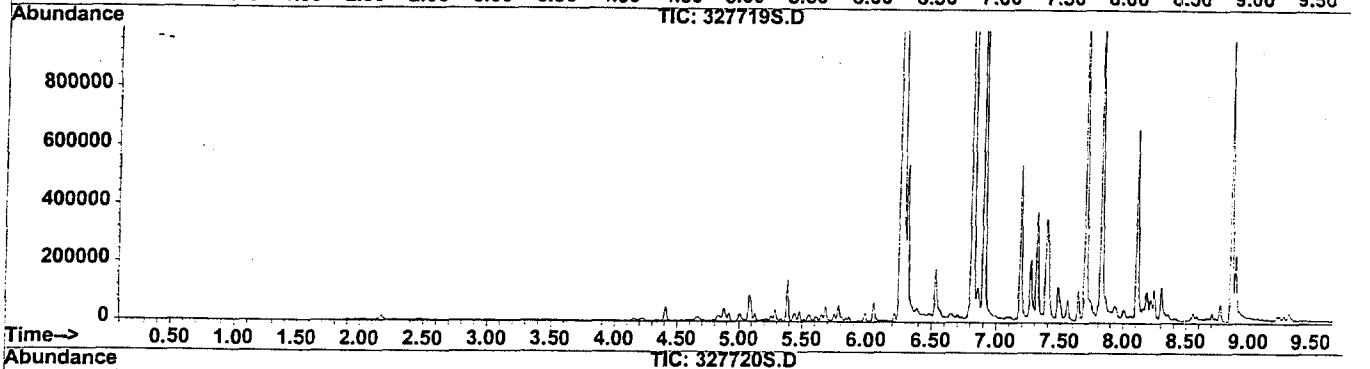

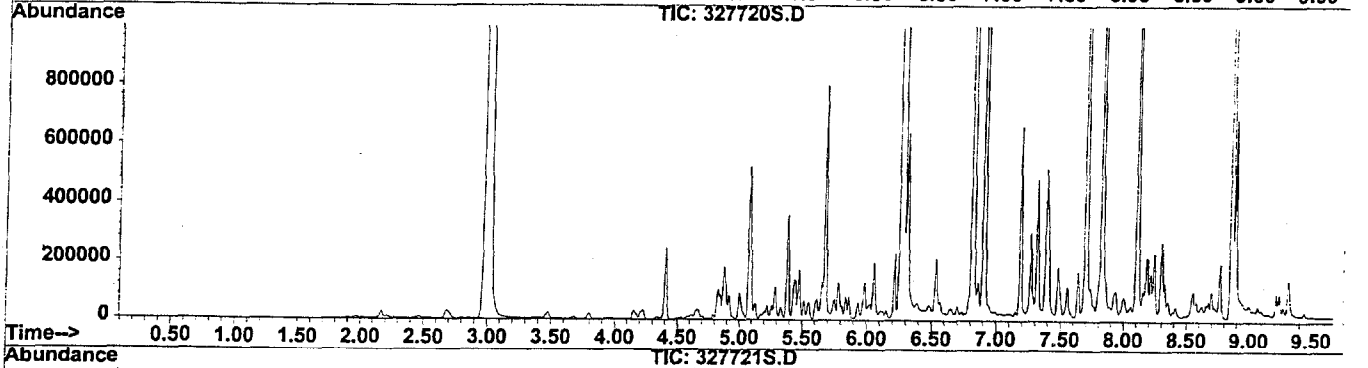

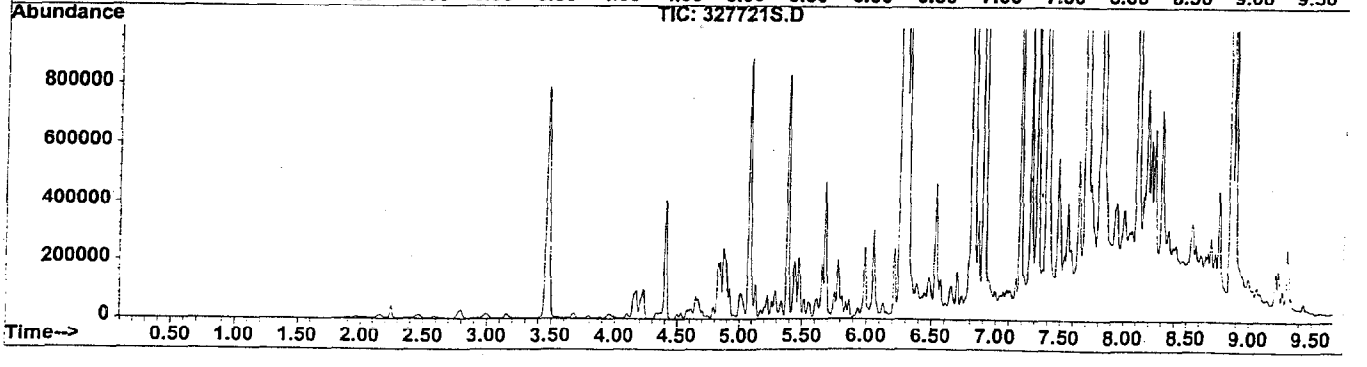

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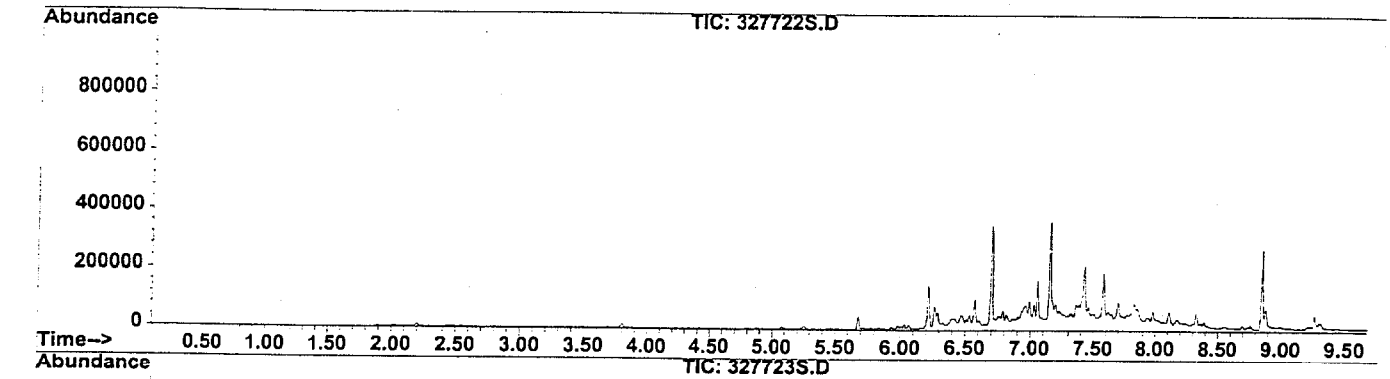

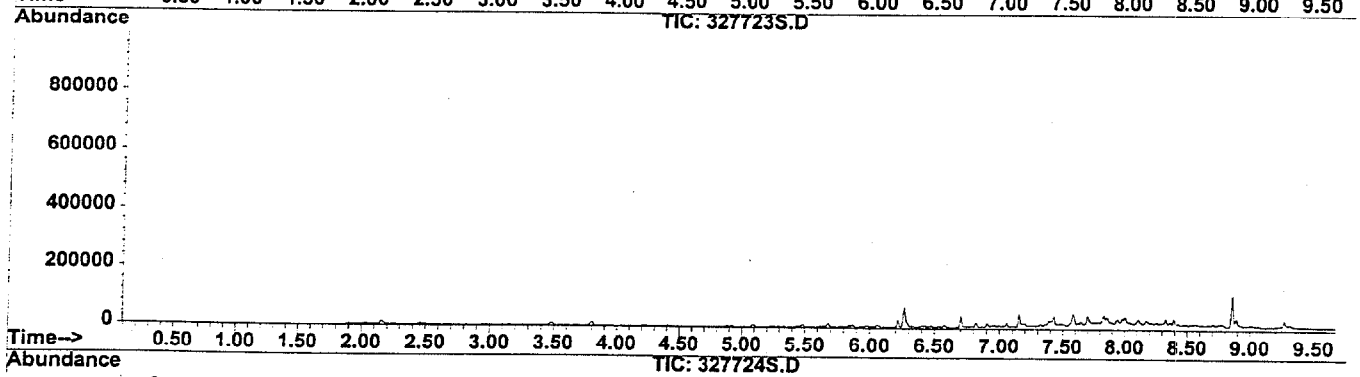

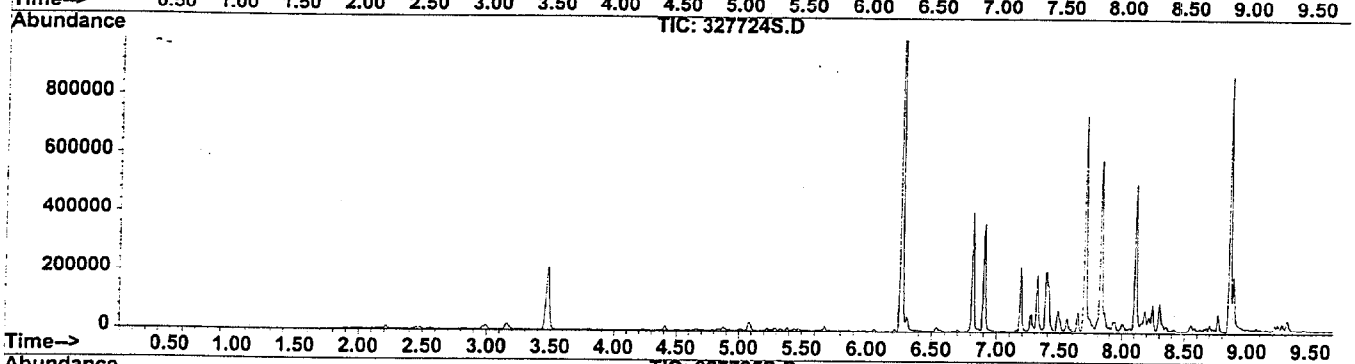

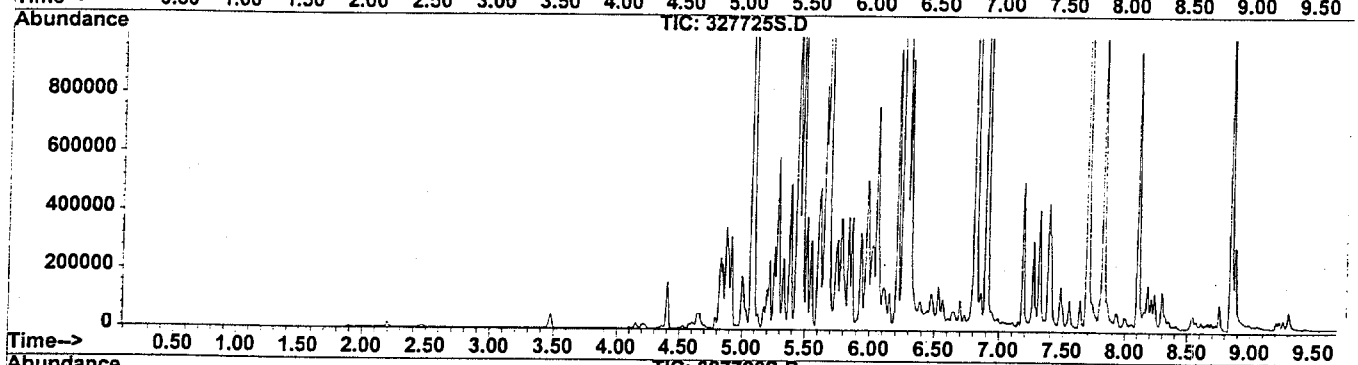

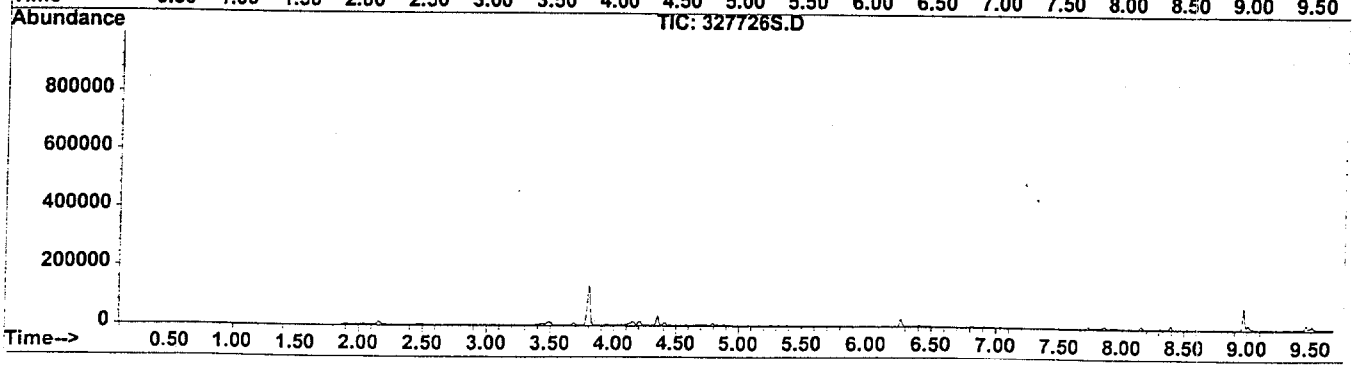

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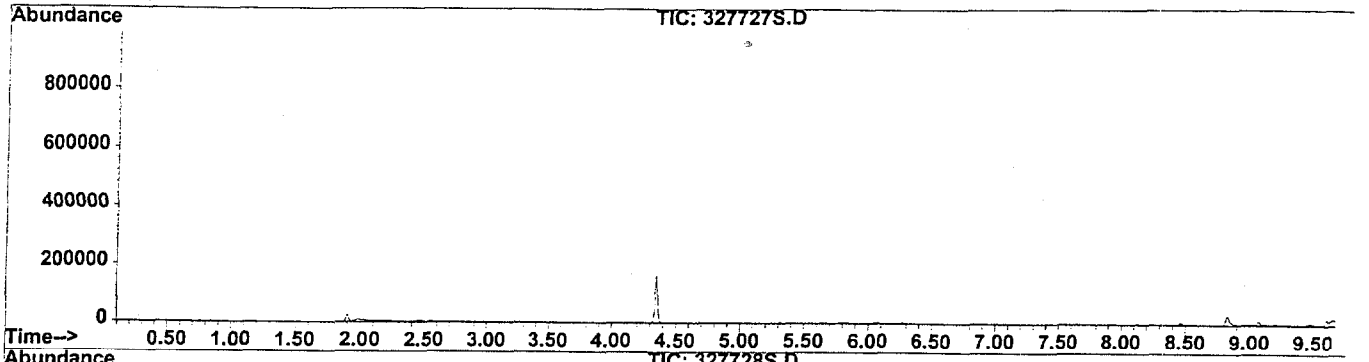
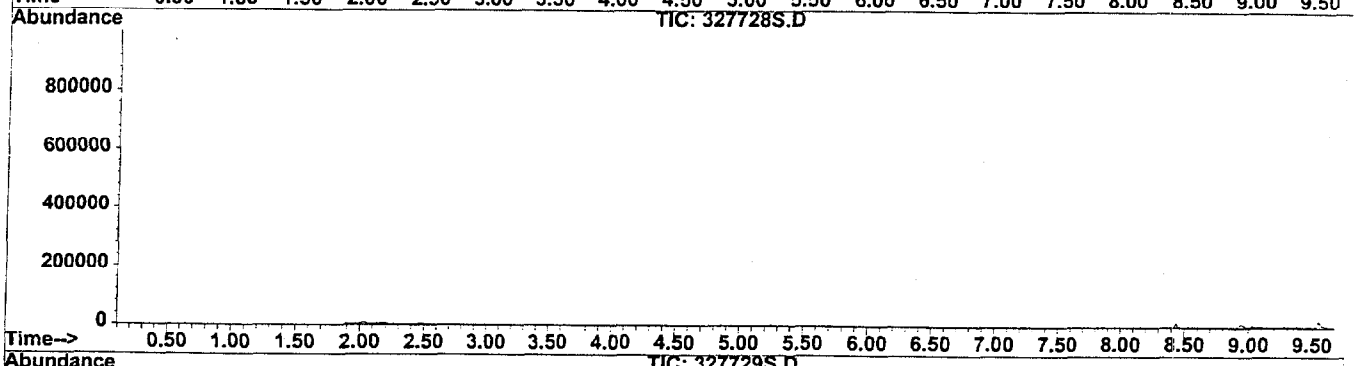
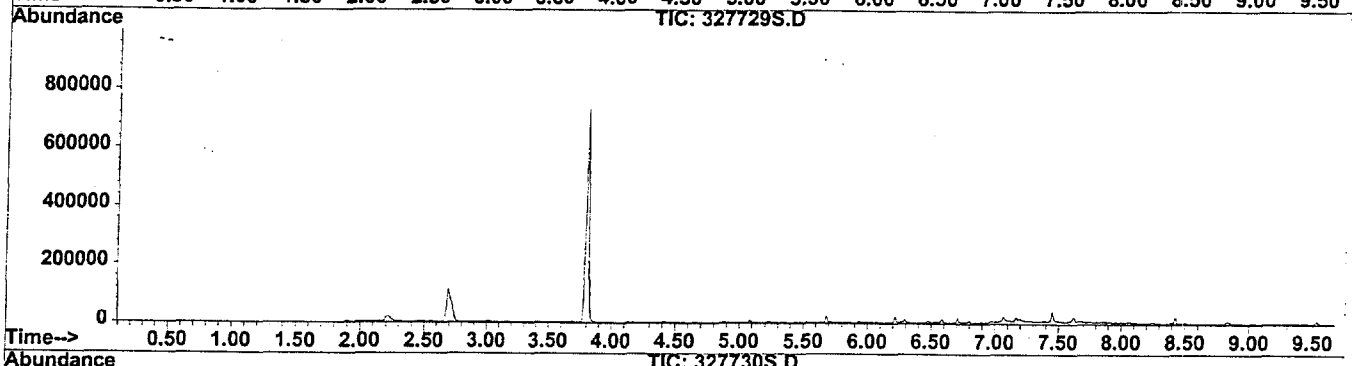
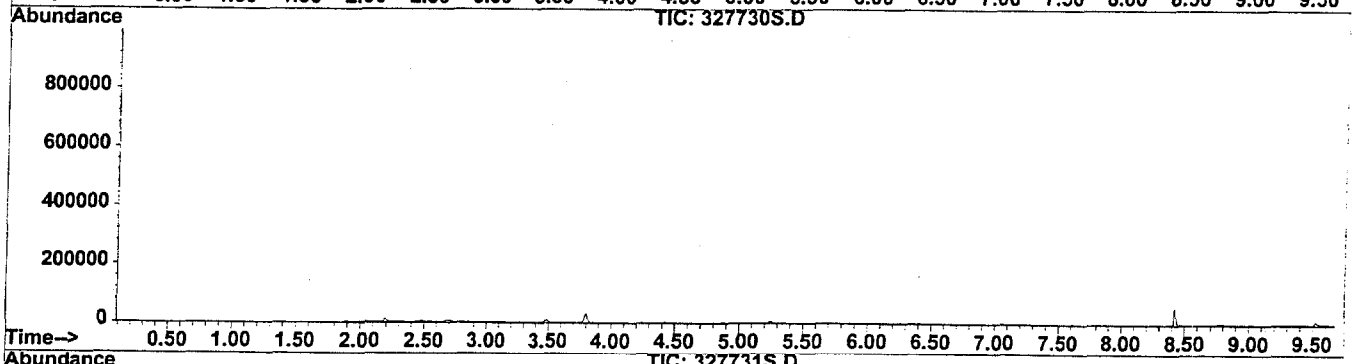
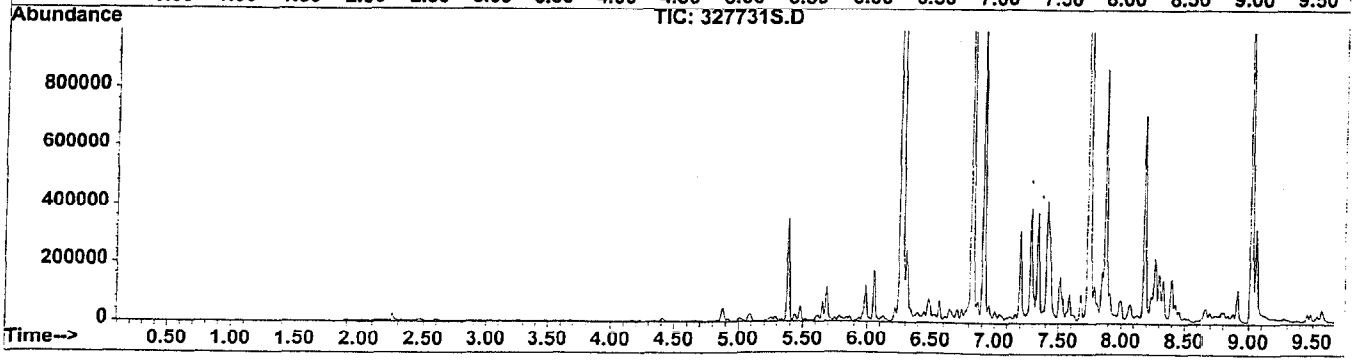


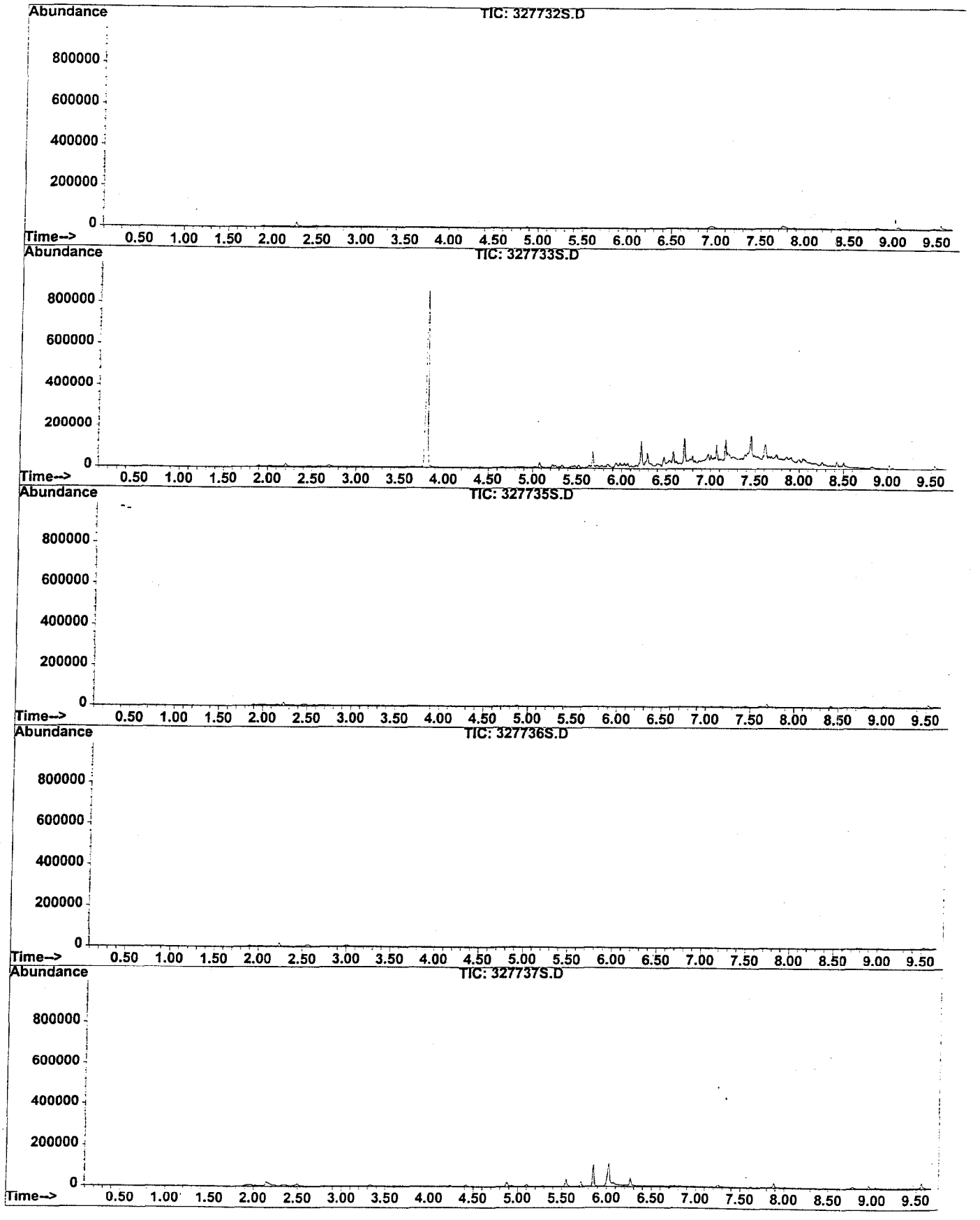








TIC - SITE BJM - PRODUCTION ORDER #10380972
In Numerical Order



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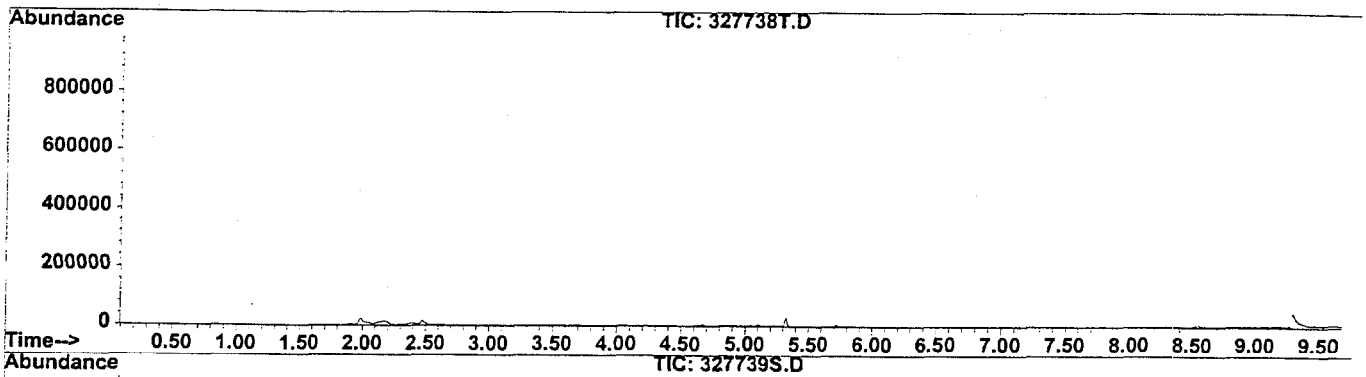

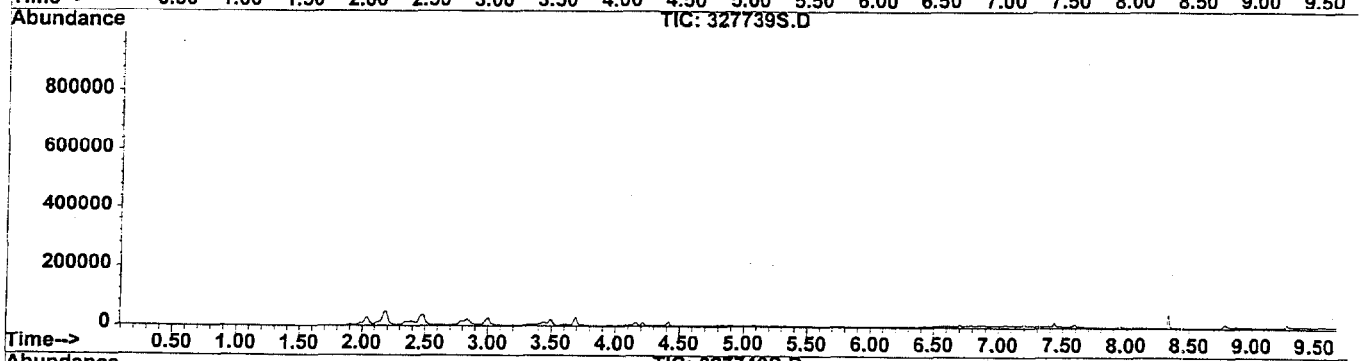

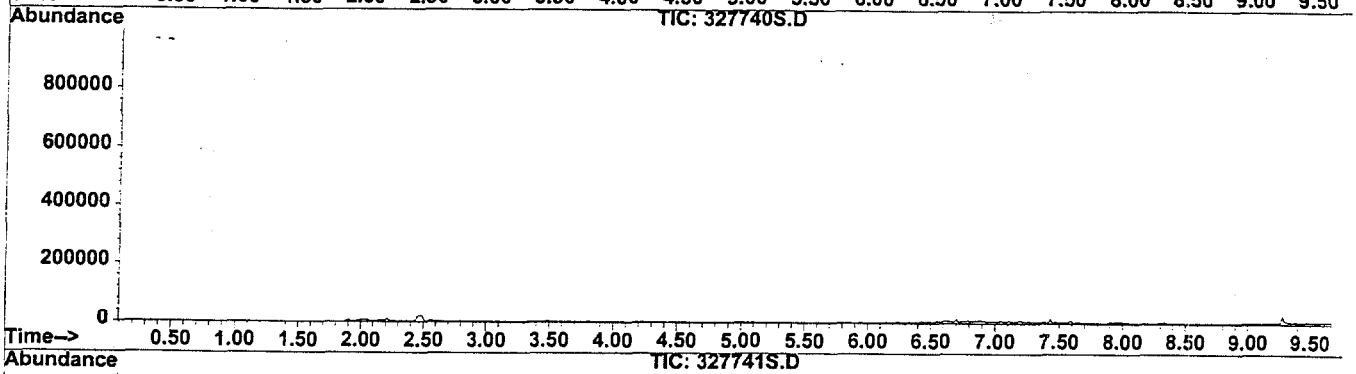

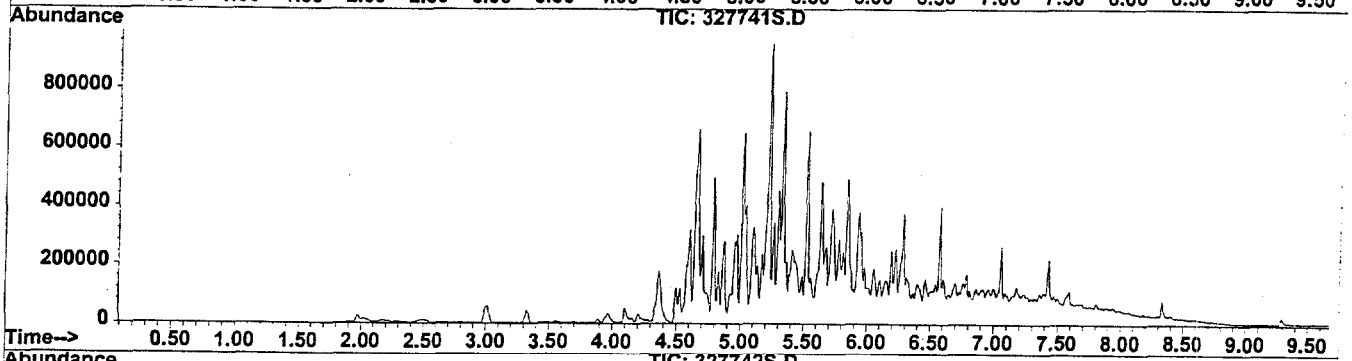

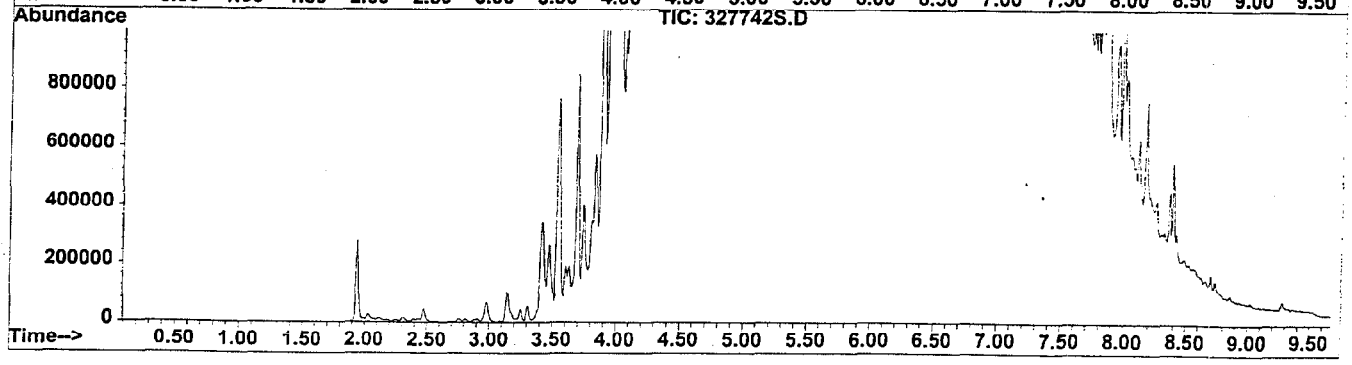

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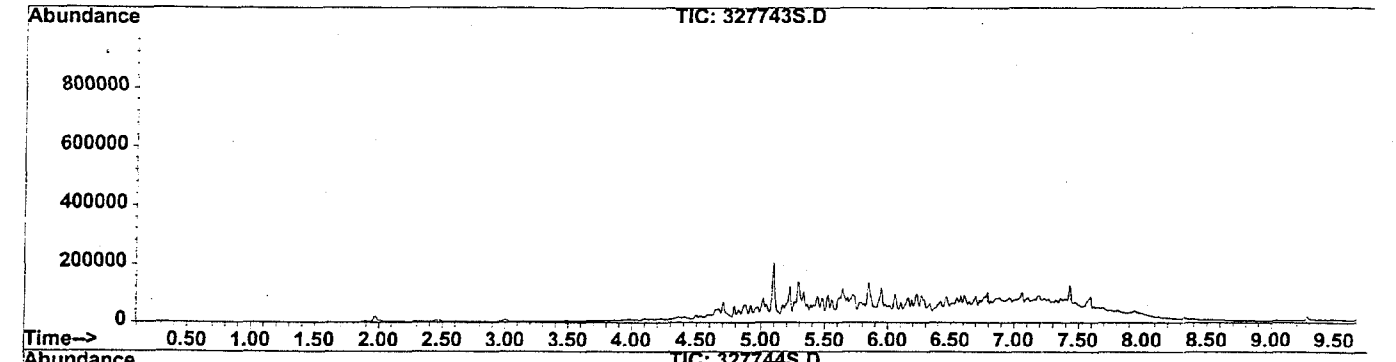
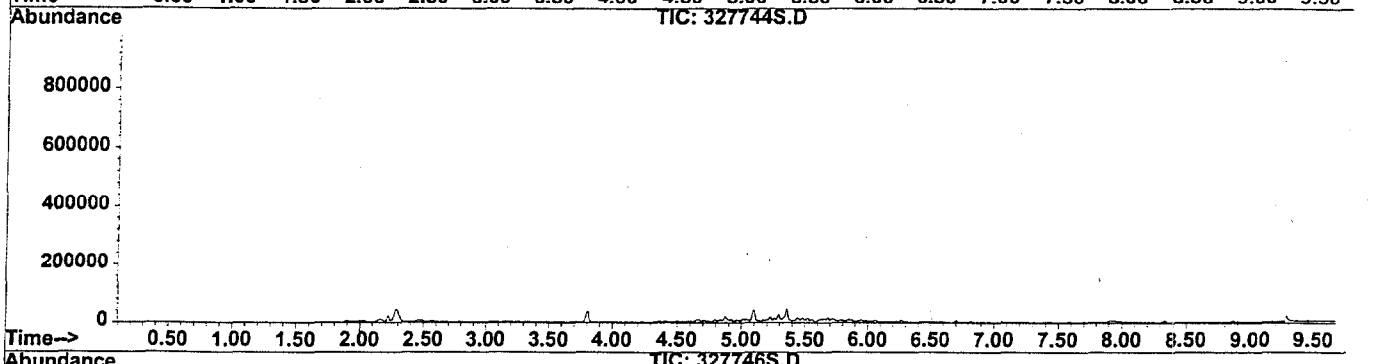
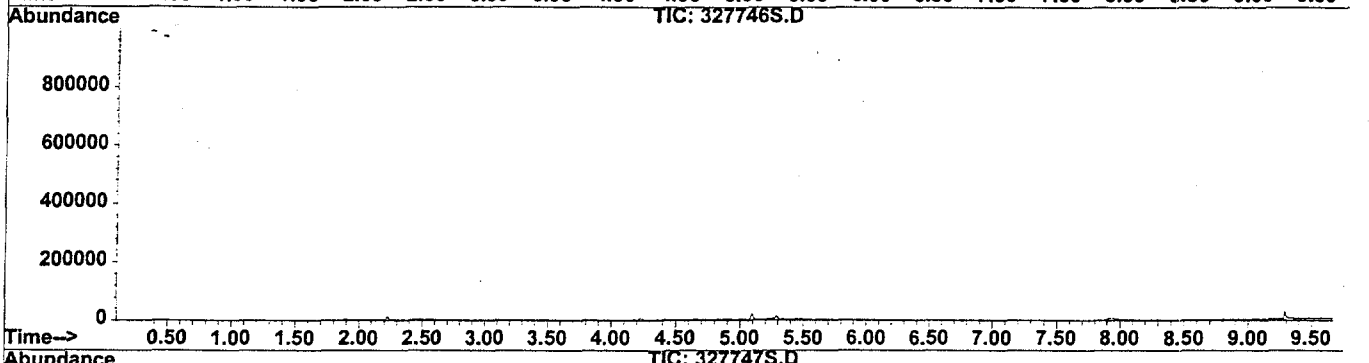
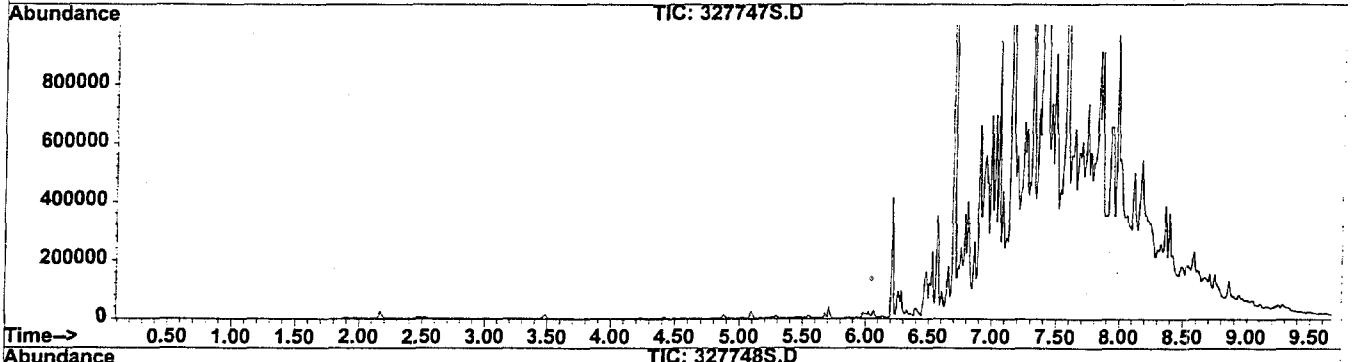
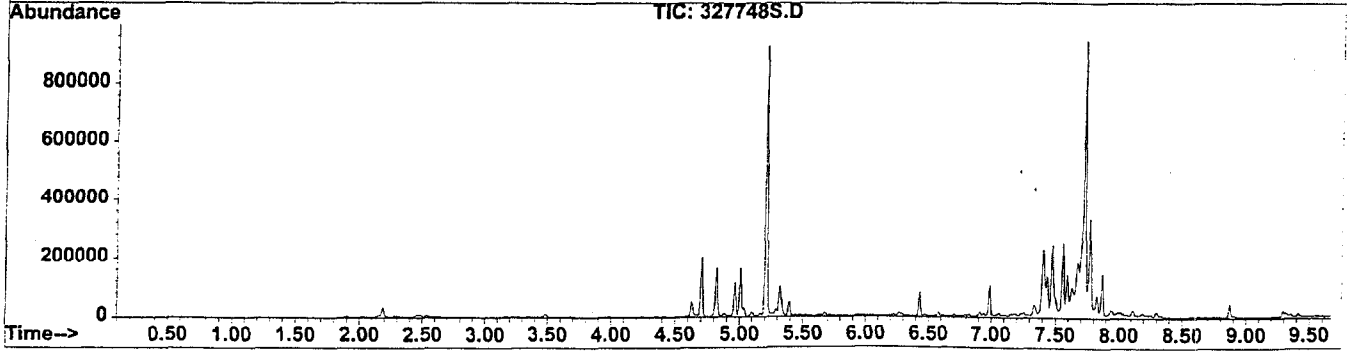
In Numerical Order











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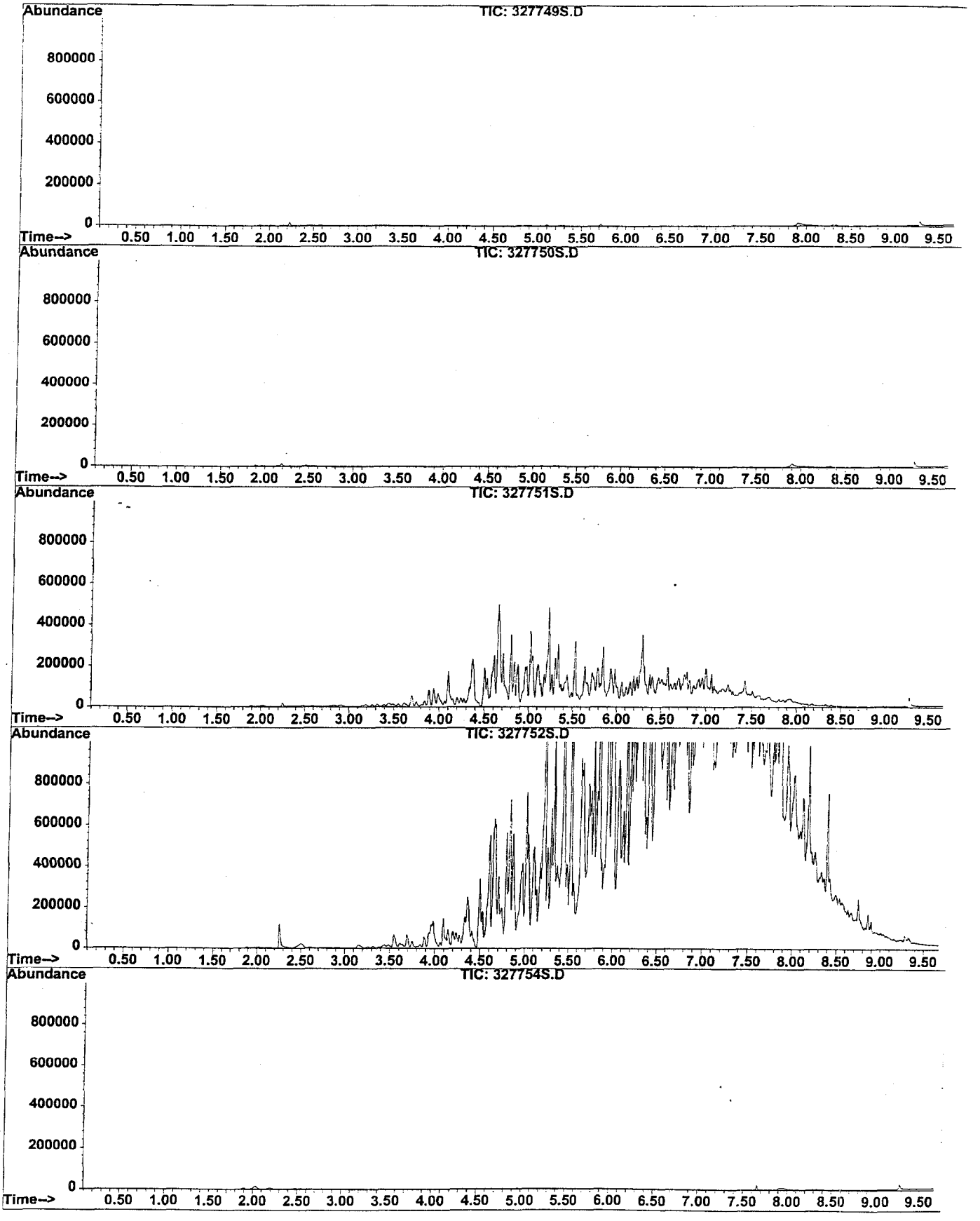
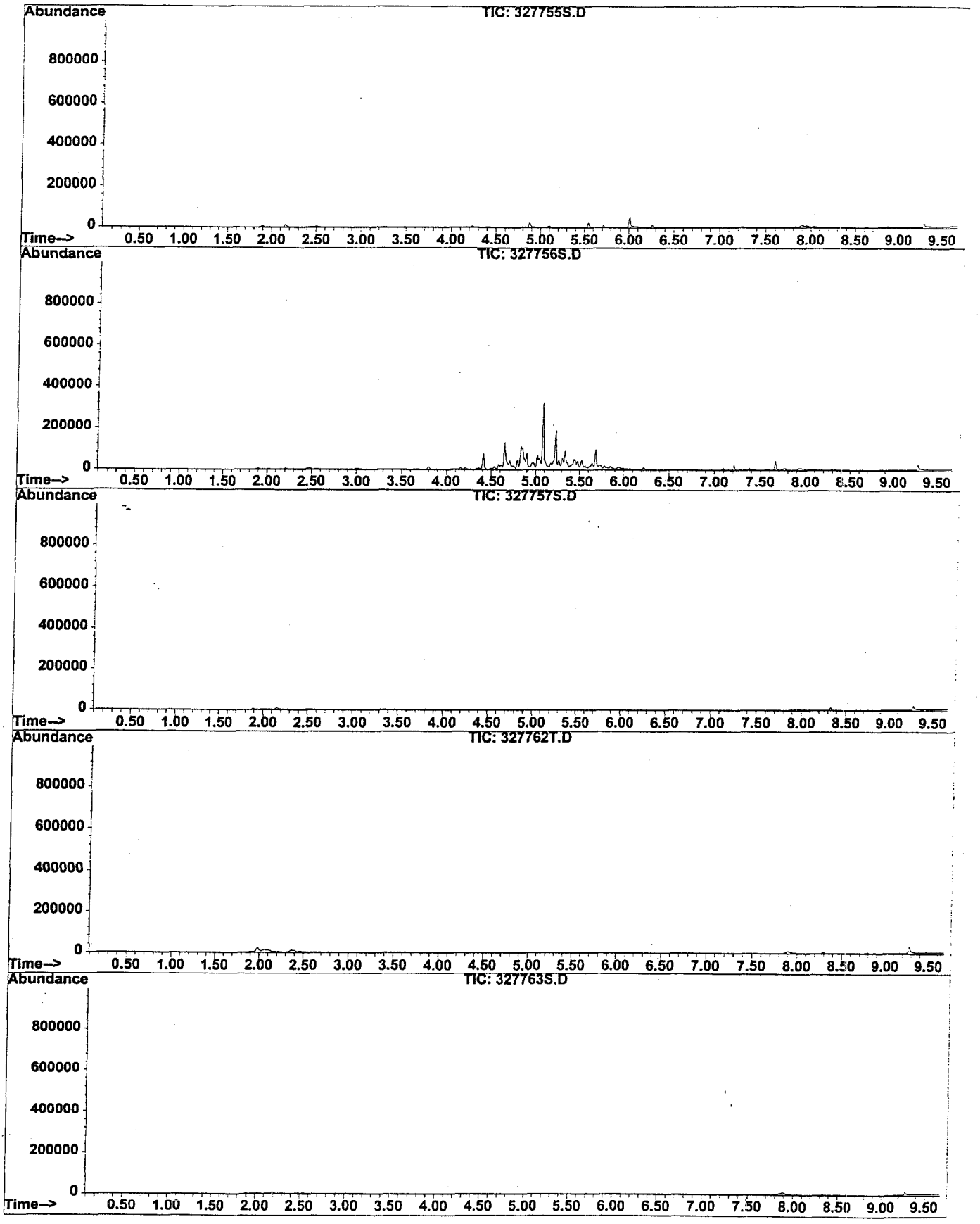
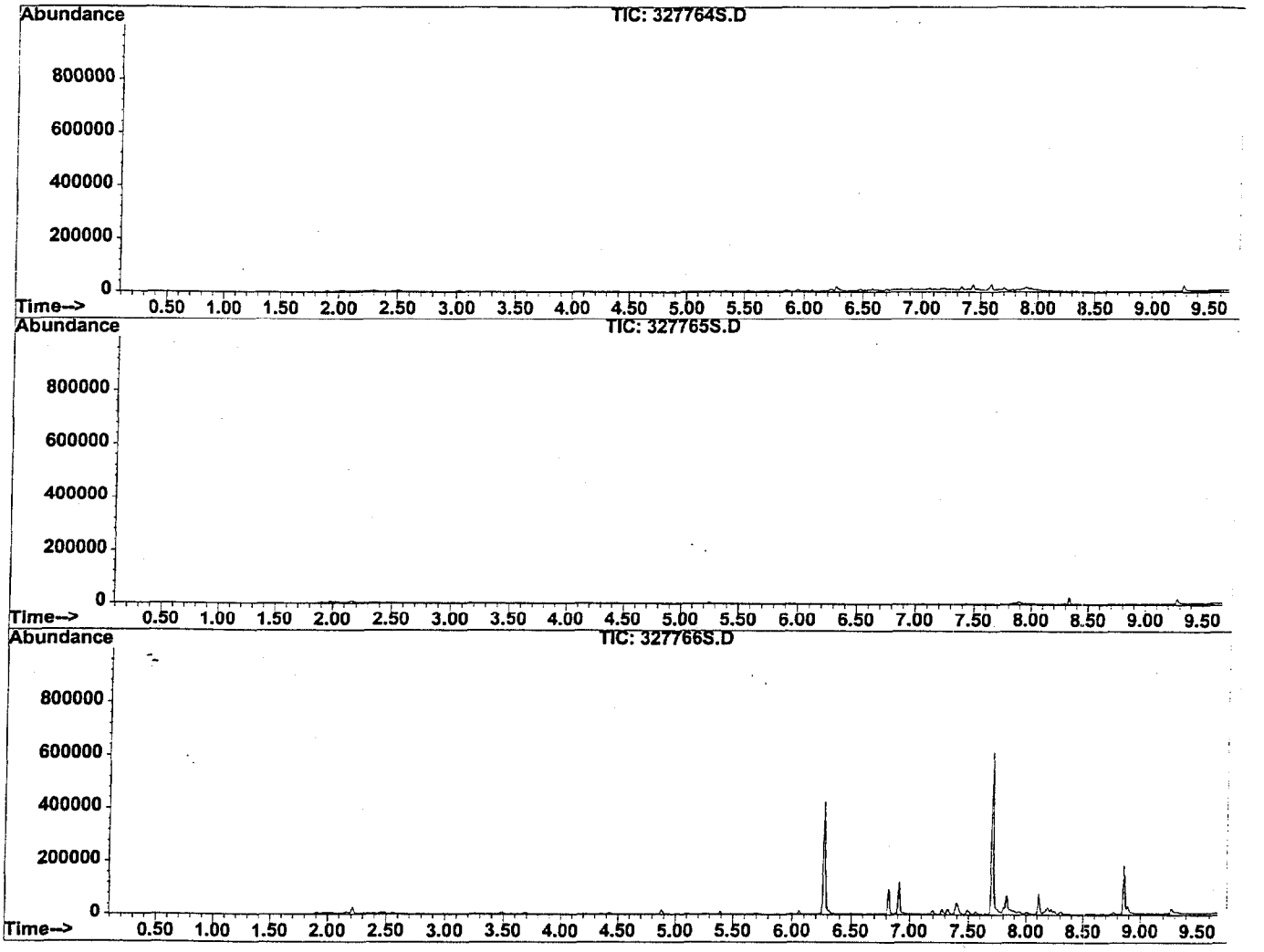
In Numerical Order



TIC - SITE BJM - PRODUCTION ORDER #10380972
In Numerical Order



TIC - SITE BJM - PRODUCTION ORDER #10380972
In Numerical Order



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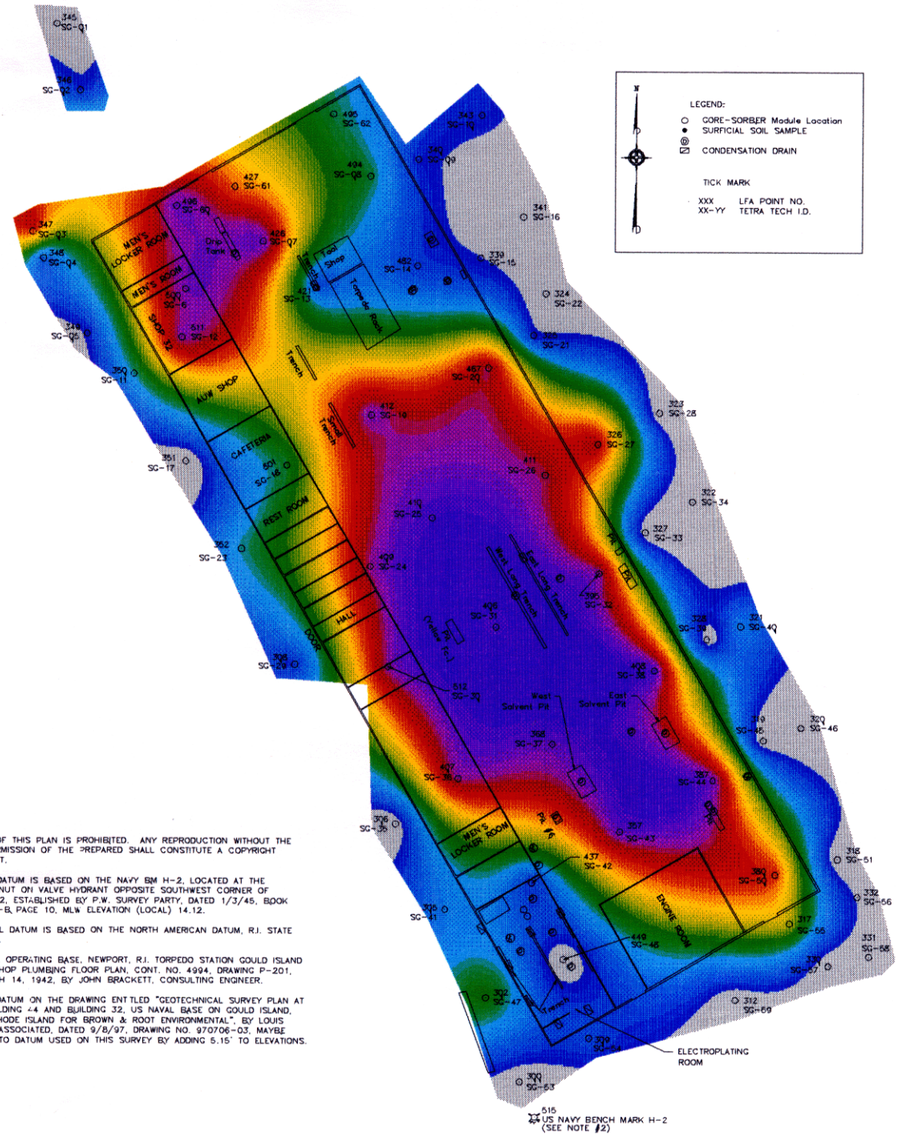

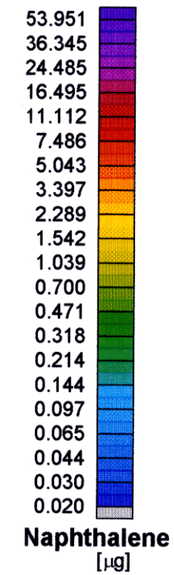

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3. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM, R.I. STATE PLANE 1983.

4. U.S. NAVAL OPERATING BASE, NEWPORT, R.I. TORPEDO STATION GOULD ISLAND OVERHAUL SHOP PLUMBING FLOOR PLAN, CONT. NO. 4994, DRAWING P-201, DATED MARCH 14, 1942, BY JOHN BRACKETT, CONSULTING ENGINEER.

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Scale 1:1200

50 0 50 100 150 200 250

foot

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(410) 392-7600

Tetra Tech NUS, Inc., Wilmington, MA
Gould Island Building 32, Newport, RI
Naphthalene

DATE DRAWN: 24 May 2000	DRAWN BY: JH	ORIG. CAD: SOILGAS.dwg	SITE CODE: BJM
REV. DATE:	REV. #:	PROJECT NUMBER: 10380972	

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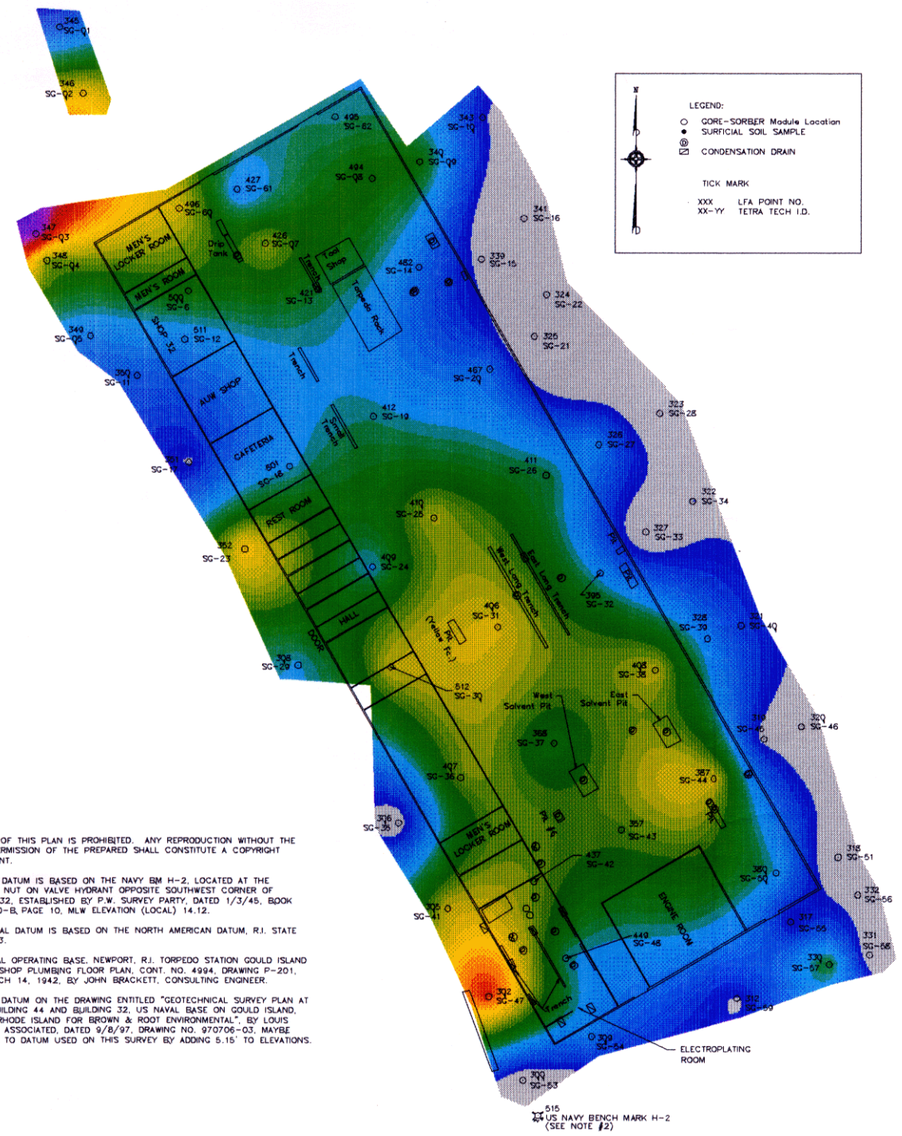

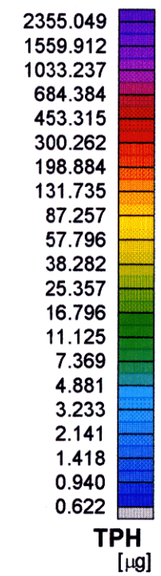

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Scale 1:1200

50 0 50 100 150 200 250

foot

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Gould Island Building 32, Newport, RI
Total Petroleum Hydrocarbons

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REV. DATE:	REV. #:	PROJECT NUMBER: 10380972	

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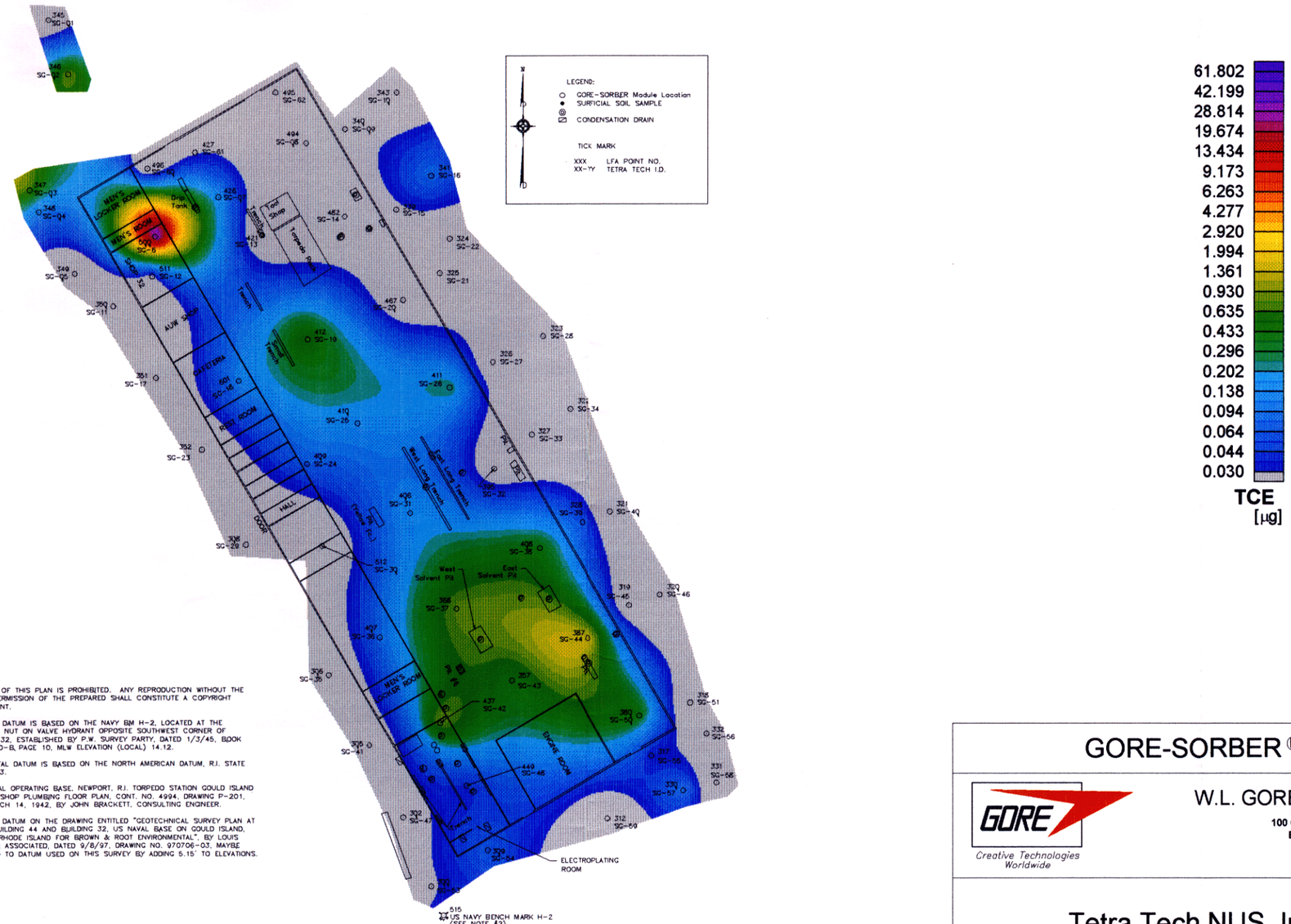

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Scale 1:1200

50 0 50 100 150 200 250

foot

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Trichloroethene

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APPENDIX C

FIGURES AND DATA FROM PCB CONCRETE AND SOIL REMEDIATION, FOSTER WHEELER ENVIRONMENTAL CORPORATION

APPENDIX C-1
DATA TABLES FROM - DRAFT PHASE 1 SAMPLING REPORT FOR THE CHARACTERIZATION OF PCB CONTAMINANTED SOILS AND CONCRETE GOULD ISLAND, APRIL 2002

TABLE C-1 Gould Island PCB Remediation Phase 1 Concrete Sample Analysis

TABLE C-2 Gould Island PCB Remediation Phase 1 Soil Sample Analysis

TABLE C-1
GOULD ISLAND PCB REMEDIATION
PHASE 1 CONCRETE SAMPLE ANALYSIS

Sample I.D	Matrix	Date Collected	PCB 3550/8082	PCB 3545/8082	Results (ppm)	Comment	
GIPI-RD-A6	Concrete	2/7/2002		X	U		
GIPI-RD-A10	Concrete	2/7/2002		X	U	Duplicate of	GIPI-RD-A10D
GIPI-RD-A10D	Concrete	2/7/2002		X	U	Duplicate of	GIPI-RD-A10
GIPI-RD-A11	Concrete	2/7/2002		X	U		
GIPI-RD-AA29	Concrete	1/28/2002	X		U		
GIPI-RD-AA30	Concrete	1/28/2002	X		U		
GIPI-RD-B1	Concrete	2/7/2002		X	U		
GIPI-RD-B2	Concrete	2/7/2002		X	U		
GIPI-RD-B3	Concrete	1/14/2002	X		U		
GIPI-RD-B4	Concrete	1/15/2002	X		0.097		
GIPI-RD-B5	Concrete	1/15/2002	X		U		
GIPI-RD-B6	Concrete	1/15/2002	X		0.018		
GIPI-RD-B7	Concrete	1/15/2002	X		0.028	Duplicate of	GIPI-RD-B7D
GIPI-RD-B7D	Concrete	1/15/2002	X		0.015	Duplicate of	GIPI-RD-B7
GIPI-RD-B8	Concrete	1/16/2002	X		U		
GIPI-RD-B9	Concrete	1/24/2002	X		U		
GIPI-RD-B10	Concrete	1/16/2002	X		U		
GIPI-RD-B11	Concrete	2/6/2002		X	U		
GIPI-RD-C1	Concrete	2/7/2002		X	U		
GIPI-RD-C2	Concrete	1/14/2002	X		U		
GIPI-RD-C3	Concrete	1/14/2002	X		U		
GIPI-RD-C4	Concrete	1/14/2002	X		U		
GIPI-RD-C5	Concrete	1/11/2002	X		U		
GIPI-RD-C6	Concrete	1/11/2002	X		U		
GIPI-RD-C10	Concrete	1/16/2002	X		U		
GIPI-RD-C11	Concrete	1/16/2002	X		U		
GIPI-RD-C42	Concrete	2/6/2002		X	U		
GIPI-RD-C43	Concrete	2/6/2002		X	U		
GIPI-RD-D1	Concrete	2/6/2002		X	U		
GIPI-RD-D2	Concrete	12/20/2001	X		0.115		
GIPI-RD-D3	Concrete	1/10/2002	X		U		
GIPI-RD-D4	Concrete	1/14/2002	X		U		
GIPI-RD-D5	Concrete	1/11/2002	X		U		
GIPI-RD-D11	Concrete	1/25/2002	X		U		
GIPI-RD-D12	Concrete	1/25/2002	X		U		
GIPI-RD-D13	Concrete	1/24/2002	X		0.028		
GIPI-RD-D14	Concrete	1/22/2002	X		U		
GIPI-RD-D15	Concrete	1/17/2002	X		U	Duplicate of	GIPI-RD-D15D
GIPI-RD-D15D	Concrete	1/17/2002	X		U	Duplicate of	GIPI-RD-D15
GIPI-RD-D16	Concrete	1/22/2002	X		U		
GIPI-RD-D17	Concrete	1/25/2002	X		U		
GIPI-RD-D20B5-TOP	Concrete	12/26/2001	X		0.018		
GIPI-RD-D20B5-BOT	Concrete	12/26/2001	X		U		
GIPI-RD-D21B3-TOP	Concrete	12/26/2001	X		U		
GIPI-RD-D21B3-BOT	Concrete	12/26/2001	X		U		
GIPI-RD-D22B10-TOP	Concrete	12/26/2001	X		U		
GIPI-RD-D22B10-BOT	Concrete	12/26/2001	X		U		
GIPI-RD-D42	Concrete	2/6/2002		X	U		
GIPI-RD-D43	Concrete	2/6/2002		X	U		
GIPI-RD-E1	Concrete	2/7/2002		X	0.165		
GIPI-RD-E2	Concrete	1/10/2002	X		0.056		
GIPI-RD-E3-TOP	Concrete	1/10/2002	X		0.083		
GIPI-RD-E3-BOT	Concrete	1/10/2002	X		U	Duplicate of	GIPI-RD-E3-BOTD
GIPI-RD-E3-BOTD	Concrete	1/10/2002	X		U	Duplicate of	GIPI-RD-E3-BOT
GIPI-RD-E4	Concrete	12/20/2001	X		0.122		
GIPI-RD-E12	Concrete	1/17/2002	X		U		
GIPI-RD-E13	Concrete	1/17/2002	X		U		
GIPI-RD-E14	Concrete	1/17/2002	X		U		
GIPI-RD-E15	Concrete	1/17/2002	X		U		
GIPI-RD-E16	Concrete	1/17/2002	X		U		
GIPI-RD-E17	Concrete	1/16/2002	X		U		

TABLE C-1
GOULD ISLAND PCB REMEDIATION
PHASE 1 CONCRETE SAMPLE ANALYSIS

Sample I.D	Matrix	Date Collected	PCB 3550/8082	PCB 3545/8082	Results (ppm)	Comment	
GIPI-RD-E18	Concrete	1/23/2002	X		U		
GIPI-RD-E19	Concrete	1/22/2002	X		U		
GIPI-RD-E20-TOP	Concrete	12/26/2001	X		U		
GIPI-RD-E20-BOT	Concrete	12/26/2001	X		U		
GIPI-RD-E21B7-TOP	Concrete	12/26/2002	X		U		
GIPI-RD-E21B7-BOT	Concrete	12/26/2001	X		U		
GIPI-RD-E21B9-TOP	Concrete	1/23/2002	X		U		
GIPI-RD-E21B9-BOT	Concrete	1/23/2002	X		U		
GIPI-RD-E22-TOP	Concrete	12/26/2001	X		U		
GIPI-RD-E22-BOT	Concrete	12/26/2001	X		U		
GIPI-RD-E23	Concrete	12/21/2001	X		U		
GIPI-RD-E24	Concrete	1/23/2002	X		U	Duplicate of	GIPI-RD-E24D
GIPI-RD-E24D	Concrete	1/23/2002	X		U	Duplicate of	GIPI-RD-E24
GIPI-RD-E25	Concrete	1/23/2002	X		U		
GIPI-RD-E26	Concrete	1/24/2002	X		U		
GIPI-RD-E27	Concrete	1/24/2002	X		U		
GIPI-RD-E28	Concrete	1/24/2002	X		U		
GIPI-RD-E29	Concrete	1/23/2002	X		U		
GIPI-RD-E30-TOP	Concrete	12/26/2001	X		U		
GIPI-RD-E30-BOT	Concrete	12/27/2001	X		U		
GIPI-RD-E31B1-TOP	Concrete	12/26/2001	X		U		
GIPI-RD-E31B1-BOT	Concrete	12/27/2001	X		0.031		
GIPI-RD-E31B13-TOP	Concrete	12/27/2001	X		0.015		
GIPI-RD-E31B13-BOT	Concrete	12/27/2001	X		0.213		
GIPI-RD-E32B3-TOP	Concrete	12/27/2001	X		U		
GIPI-RD-E32B3-BOT	Concrete	12/27/2001	X		0.029		
GIPI-RD-E32 B11-TOP	Concrete	12/27/2001	X		0.111		
GIPI-RD-E32B11-BOT	Concrete	12/27/2001	X		0.05		
GIPI-RD-E33B5-TOP	Concrete	12/28/2001	X		0.029		
GIPI-RD-E33B5-BOT	Concrete	12/28/2001	X		0.063	Duplicate of	GIPI-RD-E33B5-BOTD
GIPI-RD-E33B5-BOTD	Concrete	12/28/2001	X		0.082	Duplicate of	GIPI-RD-E33B5-BOT
GIPI-RD-E33B9-TOP	Concrete	12/27/2001	X		0.205		
GIPI-RD-E33B9-BOT	Concrete	12/27/2001	X		0.336		
GIPI-RD-F1	Concrete	2/7/2002	X		**2.3**		
GIPI-RD-F1-E	Concrete	2/20/2002	X		**1.85**		
GIPI-RD-F2	Concrete	12/20/2001	X		**291**		
GIPI-RD-F2-N	Concrete	1/24/2002	X		**14.6**		
GIPI-RD-F2-E	Concrete	1/24/2002	X		0.241		
GIPI-RD-F2-S	Concrete	1/24/2002	X		0.192		
GIPI-RD-F2-W	Concrete	1/24/2002	X		**244**		
GIPI-RD-F3	Concrete	12/20/2001	X		0.12		
GIPI-RD-F4	Concrete	12/20/2001	X		0.067		
GIPI-RD-F44	Concrete	12/19/2001	X		U		
GIPI-RD-G1	Concrete	2/7/2002		X	0.685		
GIPI-RD-G2	Concrete	1/8/2002	X		0.192		
GIPI-RD-G3	Concrete	1/9/2002	X		0.132		
GIPI-RD-G4	Concrete	1/10/2002	X		U		
GIPI-RD-G43	Concrete	2/4/2002		X	U		
GIPI-RD-H1	Concrete	2/7/2002		X	U		
GIPI-RD-H2	Concrete	1/8/2002	X		0.061		
GIPI-RD-H3	Concrete	1/9/2002	X		U		
GIPI-RD-H4	Concrete	1/9/2002	X		U		
GIPI-RD-H43	Concrete	2/4/2002		X	U		
GIPI-RD-I1	Concrete	2/7/2002		X	U		
GIPI-RD-I2	Concrete	1/8/2002	X		0.016		
GIPI-RD-I3	Concrete	1/9/2002	X		U		
GIPI-RD-I4	Concrete	1/9/2002	X		U		
GIPI-RD-I5	Concrete	1/9/2002	X		U		
GIPI-RD-I43	Concrete	2/6/2002		X	U		
GIPI-RD-J1	Concrete	2/7/2002		X	U		
GIPI-RD-J2	Concrete	1/8/2002	X		U		

TABLE C-1
GOULD ISLAND PCB REMEDIATION
PHASE 1 CONCRETE SAMPLE ANALYSIS

Sample I.D	Matrix	Date Collected	PCB 3550/8082	PCB 3545/8082	Results (ppm)	Comment	
GIPI-RD-J3	Concrete	1/8/2002	X		U		
GIPI-RD-J4	Concrete	1/8/2002	X		U		
GIPI-RD-J5	Concrete	1/8/2002	X		U		
GIPI-RD-J43	Concrete	2/6/2002		X	U		
GIPI-RD-K1	Concrete	1/4/2002	X		U		
GIPI-RD-K2	Concrete	1/4/2002	X		U		
GIPI-RD-K3	Concrete	1/4/2002	X		U		
GIPI-RD-K4	Concrete	1/4/2002	X		U		
GIPI-RD-K5	Concrete	1/4/2002	X		U		
GIPI-RD-K6	Concrete	1/4/2002	X		U		
GIPI-RD-K7	Concrete	1/15/2002	X		U		
GIPI-RD-K8	Concrete	1/15/2002	X		U		
GIPI-RD-K9	Concrete	1/15/2002	X		U		
GIPI-RD-K43	Concrete	2/6/2002		X	U		
GIPI-RD-L1	Concrete	1/17/2002	X		U		
GIPI-RD-L2	Concrete	1/17/2002	X		U		
GIPI-RD-L3	Concrete	1/16/2002	X		U		
GIPI-RD-L4	Concrete	1/16/2002	X		U		
GIPI-RD-L5	Concrete	1/16/2002	X		U		
GIPI-RD-L6	Concrete	1/16/2002	X		U		
GIPI-RD-L7	Concrete	1/16/2002	X		U		
GIPI-RD-L8	Concrete	1/16/2002	X		U		
GIPI-RD-L9	Concrete	1/16/2002	X		U		
GIPI-RD-L10	Concrete	1/15/2002	X		U		
GIPI-RD-L43	Concrete	2/6/2002		X	U		
GIPI-RD-M4	Concrete	1/23/2002	X		U		
GIPI-RD-M5	Concrete	1/23/2002	X		U		
GIPI-RD-M6	Concrete	1/17/2002	X		U		
GIPI-RD-M7	Concrete	1/17/2002	X		U		
GIPI-RD-M8	Concrete	1/17/2002	X		U		
GIPI-RD-M9	Concrete	1/17/2002	X		U		
GIPI-RD-M10	Concrete	1/22/2002	X		U		
GIPI-RD-M43	Concrete	2/6/2002		X	U		
GIPI-RD-N7	Concrete	1/23/2002	X		U		
GIPI-RD-N8	Concrete	1/22/2002	X		U		
GIPI-RD-N9	Concrete	1/22/2002	X		U		
GIPI-RD-N10	Concrete	1/22/2002	X		U		
GIPI-RD-N43	Concrete	2/6/2002		X	0.019		
GIPI-RD-O9	Concrete	1/23/2002	X		U		
GIPI-RD-O10	Concrete	1/22/2002	X		U		
GIPI-RD-O43	Concrete	2/6/2002		X	U		
GIPI-RD-P10	Concrete	1/30/2002		X	U		
GIPI-RD-P35-TOP	Concrete	1/2/2002	X		U		
GIPI-RD-P35-BOT	Concrete	1/2/2002	X		U		
GIPI-RD-P43	Concrete	2/6/2002		X	U		
GIPI-RD-Q11	Concrete	1/23/2002	X		U		
GIPI-RD-Q12	Concrete	1/24/2002	X		U		
GIPI-RD-Q13	Concrete	1/24/2002	X		U		
GIPI-RD-Q14	Concrete	1/25/2002	X		U		
GIPI-RD-Q15	Concrete	1/25/2002	X		U		
GIPI-RD-Q16-TOP	Concrete	1/2/2002	X		U		
GIPI-RD-Q16-BOT	Concrete	1/2/2002	X		U		
GIPI-RD-Q16B11-TOP	Concrete	1/3/2002	X		0.036		
GIPI-RD-Q16B11-BOT	Concrete	1/3/2002	X		0.018		
GIPI-RD-Q17-TOP	Concrete	1/3/2002	X		U		
GIPI-RD-Q17-BOT	Concrete	1/3/2002	X		U		
GIPI-RD-Q17B7-TOP	Concrete	1/3/2002	X		0.018	duplicate of	GIPI-RD-Q17B7-TOPD
GIPI-RD-Q17B7-TOPD	Concrete	1/3/2002	X		0.042	duplicate of	GIPI-RD-Q17B7-TOP
GIPI-RD-Q17B7-BOT	Concrete	1/3/2002	X		0.058		
GIPI-RD-Q17B8-TOP	Concrete	1/3/2002	X		0.07		
GIPI-RD-Q17B8-BOT	Concrete	1/3/2002	X		0.034		

TABLE C-1
GOULD ISLAND PCB REMEDIATION
PHASE 1 CONCRETE SAMPLE ANALYSIS

Sample I.D	Matrix	Date Collected	PCB 3550/8082	PCB 3545/8082	Results (ppm)	Comment	
GIPI-RD-Q17B9-TOP	Concrete	1/2/2002	X		U		
GIPI-RD-Q17B9-BOT	Concrete	1/2/2002	X		0.165		
GIPI-RD-Q18-TOP	Concrete	1/2/2002	X		U		
GIPI-RD-Q18-BOT	Concrete	1/2/2002	X		U		
GIPI-RD-Q18B2-TOP	Concrete	1/3/2002	X		0.038		
GIPI-RD-Q18B2-BOT	Concrete	1/3/2002	X		U		
GIPI-RD-Q18B3-TOP	Concrete	1/2/2002	X		U		
GIPI-RD-Q18B3-BOT	Concrete	1/2/2002	X		U		
GIPI-RD-Q18B5-TOP	Concrete	1/2/2002	X		0.045		
GIPI-RD-Q18B5-BOT	Concrete	1/3/2002	X		U		
GIPI-RD-Q19	Concrete	1/25/2002	X		U		
GIPI-RD-Q20	Concrete	1/28/2002	X		U		
GIPI-RD-Q21	Concrete	1/28/2002	X		U		
GIPI-RD-Q22	Concrete	1/25/2002	X		U	duplicate of	
GIPI-RD-Q22D	Concrete	1/25/2002	X		U	duplicate of	
GIPI-RD-Q23	Concrete	1/25/2002	X		U		
GIPI-RD-Q24	Concrete	1/25/2002	X		U		
GIPI-RD-Q25-TOP	Concrete	1/4/2002	X		U		
GIPI-RD-Q25-BOT	Concrete	1/4/2002	X		U		
GIPI-RD-Q25B14-TOP	Concrete	1/3/2002	X		0.325		
GIPI-RD-Q25B14-BOT	Concrete	1/3/2002	X		U		
GIPI-RD-Q26-TOP	Concrete	1/4/2002	X		U		
GIPI-RD-Q26-BOT	Concrete	1/4/2002	X		0.047		
GIPI-RD-Q26A-TOP	Concrete	1/3/2002	X		0.125		
GIPI-RD-Q26A-BOT	Concrete	1/3/2002	X		0.021		
GIPI-RD-Q26B-TOP	Concrete	1/3/2002	X		**1.36**	duplicate of	GIPI-RD-Q26B-TOPD
GIPI-RD-Q26B-TOPD	Concrete	1/3/2002	X		**1.66**	duplicate of	GIPI-RD-Q26B-TOP
GIPI-RD-Q26B-BOT	Concrete	1/3/2002	X		0.094		
GIPI-RD-Q26B12-TOP	Concrete	1/4/2002	X		0.04		
GIPI-RD-Q26B12-BOT	Concrete	1/4/2002	X		U		
GIPI-RD-Q27	Concrete	1/28/2002	X		U	duplicate of	GIPI-RD-Q27D
GIPI-RD-Q27D	Concrete	1/28/2002	X		U	duplicate of	GIPI-RD-Q27
GIPI-RD-Q27A-TOP	Concrete	1/3/2002	X		U		
GIPI-RD-Q27A-BOT	Concrete	1/3/2002	X		U		
GIPI-RD-Q27B7-TOP	Concrete	1/3/2002	X		U		
GIPI-RD-Q27B7-BOT	Concrete	1/3/2002	X		U		
GIPI-RD-Q28	Concrete	1/28/2002	X		U		
GIPI-RD-Q29	Concrete	1/28/2002	X		U		
GIPI-RD-Q30	Concrete	1/29/2002	X		U		
GIPI-RD-Q31	Concrete	1/29/2002	X		U		
GIPI-RD-Q32	Concrete	1/29/2002	X		U		
GIPI-RD-Q33	Concrete	1/28/2002	X		U		
GIPI-RD-Q34-TOP	Concrete	1/2/2002	X		0.085		
GIPI-RD-Q34-BOT	Concrete	1/2/2002	X		0.343		
GIPI-RD-Q35B4-TOP	Concrete	12/28/2001	X		0.017		
GIPI-RD-Q35B4-BOT	Concrete	12/28/2002	X		0.017		
GIPI-RD-Q35B6-TOP	Concrete	12/28/2001	X		0.039		
GIPI-RD-Q35B6-BOT	Concrete	1/2/2002	X		U		
GIPI-RD-Q35B8-TOP	Concrete	12/28/2001	X		0.153		
GIPI-RD-Q35B8-BOT	Concrete	12/28/2001	X		0.212		
GIPI-RD-Q35B9-TOP	Concrete	12/28/2001	X		**4.71**	duplicate of	GIPI-RD-Q35B9-TOPD
GIPI-RD-Q35B9-TOPD	Concrete	12/28/2001	X		**2.29**	duplicate of	GIPI-RD-Q35B9-TOP
GIPI-RD-Q35B9-BOT	Concrete	12/28/2001	X		0.153		
GIPI-RD-Q35B9-N-TOP	Concrete	2/11/2002		X	0.059		
GIPI-RD-Q35B9-E-TOP	Concrete	2/11/2002		X	U		
GIPI-RD-Q36-TOP	Concrete	1/2/2002	X		U		
GIPI-RD-Q36-BOT	Concrete	1/2/2002	X		U		
GIPI-RD-R11	Concrete	1/30/2002		X	U		
GIPI-RD-R12	Concrete	1/30/2002		X	U	duplicate of	GIPI-RD-R12D
GIPI-RD-R12D	Concrete	1/30/2002		X	U	duplicate of	GIPI-RD-R12
GIPI-RD-R30	Concrete	1/29/2002	X		U		

TABLE C-1
GOULD ISLAND PCB REMEDIATION
PHASE 1 CONCRETE SAMPLE ANALYSIS

Sample I.D	Matrix	Date Collected	PCB 3550/8082	PCB 3545/8082	Results (ppm)	Comment	
GIPI-RD-S13	Concrete	1/30/2002		X	U		
GIPI-RD-S17	Concrete	1/31/2002		X	U		
GIPI-RD-S18	Concrete	1/31/2002		X	U		
GIPI-RD-S30	Concrete	1/29/2002	X		U		
GIPI-RD-T14	Concrete	1/30/2002		X	U		
GIPI-RD-T18	Concrete	2/4/2002		X	U		
GIPI-RD-T30	Concrete	1/29/2002	X		U		
GIPI-RD-U14	Concrete	1/31/2002		X	U		
GIPI-RD-U15	Concrete	1/31/2002		X	U		
GIPI-RD-U16	Concrete	1/31/2002		X	U		
GIPI-RD-U17	Concrete	2/4/2002		X	U		
GIPI-RD-U18	Concrete	2/4/2002		X	U		
GIPI-RD-U30	Concrete	1/29/2002	X		U		
GIPI-RD-V16	Concrete	2/7/2002		X	U		
GIPI-RD-V17	Concrete	2/4/2002		X	U		
GIPI-RD-V18	Concrete	2/4/2002		X	U		
GIPI-RD-V30	Concrete	1/29/2002	X		U		
GIPI-RD-W17	Concrete	1/31/2002		X	U		
GIPI-RD-W18	Concrete	2/4/2002		X	U		
GIPI-RD-W24	Concrete	1/30/2002		X	U		
GIPI-RD-W30	Concrete	1/29/2002	X		U		
GIPI-RD-X17D	Concrete	1/31/2002		X	U	duplicate of	GIPI-RD-X17
GIPI-RD-X17	Concrete	1/31/2002		X	U	duplicate of	GIPI-RD-X17D
GIPI-RD-X18	Concrete	1/31/2002		X	U		
GIPI-RD-X19	Concrete	1/31/2002		X	U		
GIPI-RD-X24	Concrete	1/30/2002		X	U		
GIPI-RD-X30	Concrete	1/29/2002	X		U		
GIPI-RD-Y20	Concrete	1/31/2002		X	U		
GIPI-RD-Y21	Concrete	1/30/2002		X	U		
GIPI-RD-Y24	Concrete	1/30/2002		X	U		
GIPI-RD-Y30	Concrete	1/28/2002	X		U		
GIPI-RD-Z22	Concrete	1/30/2002		X	U		
GIPI-RD-Z23	Concrete	1/30/2002		X	U		
GIPI-RD-Z24	Concrete	1/29/2002		X	U		
GIPI-RD-Z30	Concrete	1/28/2002	X		U		

TABLE C-2
GOULD ISLAND PCB REMEDIATION
PHASE 1 SOIL SAMPLE ANALYSIS

Sample I.D.	Matrix	Date Collected	PCB 3550/8082	PCB 3545/8082	Lab Results (ppm)	Comment
VAULT 53						
GIPI-53-B1-NW	Soil	1/10/2002	X		2.45	
GIPI-53-B1-7	Soil	1/10/2002	X		2.12	
GIPI-53-B1-8	Soil	1/10/2002	X		1.24	
GIPI-53-B1-9	Soil	1/10/2002	X		**11.6**	
GIPI-53-B1-10	Soil	1/10/2002	X		0.092	2' below bottom of vault
GIPI-53-B1-11	Soil	1/16/2002		X	0.036	
GIPI-53-B2-1	Soil	1/9/2002	X		6.71	
GIPI-53-B2-2	Soil	1/9/2002	X		0.779	
GIPI-53-B2-8	Soil	1/9/2002		X	U	
GIPI-53-B2-9	Soil	1/9/2002		X	U	
GIPI-53-B2-10	Soil	1/9/2002		X	U	2' below bottom of vault
GIPI-53-B3-1	Soil	1/9/2002	X		0.018	
GIPI-53-B3-2	Soil	1/9/2002	X		U	
GIPI-53-B3-8	Soil	1/9/2002		X	U	
GIPI-53-B3-9	Soil	1/9/2002		X	U	
GIPI-53-B3-10	Soil	1/9/2002		X	U	2' below bottom of vault
GIPI-53-B4-1	Soil	1/17/2002	X		1.46	
GIPI-53-B4-2	Soil	1/17/2002	X		0.111	
GIPI-53-B4-8	Soil	1/17/2002		X	U	
GIPI-53-B4-9	Soil	1/17/2002		X	U	
GIPI-53-B4-10	Soil	1/17/2002		X	U	2' below bottom of vault
GIPI-53-B5-1	Soil	1/16/2002	X		0.018	
GIPI-53-B5-2	Soil	1/16/2002	X		U	
GIPI-53-B5-8	Soil	1/16/2002		X	U	
GIPI-53-B5-9	Soil	1/16/2002		X	U	
GIPI-53-B5-10	Soil	1/16/2002		X	U	2' below bottom of vault
GIPI-53-B6-1	Soil	1/16/2002	X		U	
GIPI-53-B6-2	Soil	1/16/2002	X		U	
GIPI-53-B6-8	Soil	1/16/2002		X	U	
GIPI-53-B6-9	Soil	1/16/2002		X	U	
GIPI-53-B6-10	Soil	1/16/2002		X	U	2' below bottom of vault
GIPI-53-B7-1	Soil	1/16/2002	X		U	
GIPI-53-B7-2	Soil	1/16/2002	X		U	
GIPI-53-B9-1	Soil	1/16/2002	X		U	
GIPI-53-B9-2	Soil	1/16/2002	X		U	
GIPI-53-B9-8	Soil	1/16/2002		X	U	
GIPI-53-B9-9	Soil	1/16/2002		X	U	
GIPI-53-B9-10	Soil	1/16/2002		X	U	2' below bottom of vault
GIPI-53-B10-1	Soil	1/16/2002	X		U	
GIPI-53-B10-2	Soil	1/16/2002	X		U	Duplicate of GIPI-53-SS-8
GIPI-53-SS-8	Soil	1/16/2002	X		U	Duplicate of GIPI-53-B10-2
GIPI-53-B10-8	Soil	1/16/2002		X	U	
GIPI-53-B10-9	Soil	1/16/2002		X	U	Duplicate of GIPI-53-SS-9
GIPI-53-SS-9	Soil	1/16/2002		X	U	Duplicate of GIPI-53-B10-9
GIPI-53-B10-10	Soil	1/16/2002		X	U	2' below bottom of vault
GIPI-53-B11-1	Soil	1/9/2002	X		0.118	
GIPI-53-B11-2	Soil	1/9/2002	X		U	
GIPI-53-B11-8	Soil	1/9/2002		X	U	
GIPI-53-B11-9	Soil	1/9/2002		X	U	
GIPI-53-B11-10	Soil	1/9/2002		X	U	2' below bottom of vault
GIPI-53-B12-1	Soil	1/15/2002	X		U	
GIPI-53-B12-2	Soil	1/15/2002	X		U	
GIPI-53-B12-8	Soil	1/15/2002		X	U	
GIPI-53-B12-9	Soil	1/15/2002		X	U	
GIPI-53-B12-10	Soil	1/15/2002		X	U	2' below bottom of vault
GIPI-53-B13-1	Soil	1/15/2002	X		U	
GIPI-53-B13-2	Soil	1/15/2002	X		U	
GIPI-53-B13-8	Soil	1/15/2002		X	U	

TABLE C-2
GOULD ISLAND PCB REMEDIATION
PHASE 1 SOIL SAMPLE ANALYSIS

Sample I.D.	Matrix	Date Collected	PCB 3550/8082	PCB 3545/8082	Lab Results (ppm)	Comment
GIPI-53-B13-9	Soil	1/15/2002		X	U	
GIPI-53-B13-10	Soil	1/15/2002		X	U	2' below bottom of vault
GIPI-53-B14-1	Soil	1/17/2002	X		0.364	
GIPI-53-B14-2	Soil	1/17/2002	X		U	
GIPI-53-B14-8	Soil	1/17/2002		X	U	
GIPI-53-B14-9	Soil	1/17/2002		X	U	
GIPI-53-B14-10	Soil	1/17/2002		X	U	2' below bottom of vault
GIPI-53-B15-1	Soil	1/15/2002	X		1.12	
GIPI-53-B15-2	Soil	1/15/2002	X		U	
GIPI-53-B15-8	Soil	1/15/2002		X	U	
GIPI-53-B15-9	Soil	1/15/2002		X	U	
GIPI-53-B15-10	Soil	1/15/2002		X	U	2' below bottom of vault
GIPI-53-B16-1	Soil	1/15/2002	X		0.505	
GIPI-53-B16-2	Soil	1/15/2002	X		U	
GIPI-53-B17-1	Soil	1/9/2002	X		0.252	
GIPI-53-B17-2	Soil	1/9/2002	X		U	
GIPI-53-B17-8	Soil	1/9/2002		X	U	
GIPI-53-B17-9	Soil	1/9/2002		X	U	
GIPI-53-B17-10	Soil	1/9/2002		X	U	2' below bottom of vault
GIPI-53-B18-1	Soil	1/17/2002	X		0.239	
GIPI-53-B18-2	Soil	1/17/2002	X		U	
GIPI-53-B18-8	Soil	1/17/2002		X	U	
GIPI-53-B18-9	Soil	1/17/2002		X	U	
GIPI-53-B18-10	Soil	1/17/2002		X	U	2' below bottom of vault
GIPI-53-B19-1	Soil	1/9/2002	X		**15.8**	
GIPI-53-B19-2	Soil	1/9/2002	X		U	
GIPI-53-B19-3	Soil	1/28/2002	X		U	
GIPI-53-B19-8	Soil	1/9/2002		X	1.19	
GIPI-53-B19-9	Soil	1/9/2002		X	0.294	
GIPI-53-B19-10	Soil	1/9/2002		X	U	2' below bottom of vault
GIPI-53-B20-1	Soil	1/15/2002	X		0.482	
GIPI-53-B20-2	Soil	1/15/2002	X		U	
GIPI-53-B21-1	Soil	1/14/2002	X		0.366	
GIPI-53-B21-2	Soil	1/14/2002	X		U	
GIPI-53-B21-8	Soil	1/14/2002		X	U	
GIPI-53-B21-9	Soil	1/14/2002		X	U	
GIPI-53-B21-10	Soil	1/14/2002		X	U	2' below bottom of vault
GIPI-53-B22-1	Soil	1/8/2002	X		3.06	
GIPI-53-B22-2	Soil	1/8/2002	X		0.029	
GIPI-53-B22-8	Soil	1/8/2002		X	U	
GIPI-53-B22-9	Soil	1/8/2002		X	U	
GIPI-53-B22-10	Soil	1/8/2002		X	U	2' below bottom of vault
GIPI-53-B23-1	Soil	1/14/2002	X		U	
GIPI-53-B23-2	Soil	1/14/2002	X		U	
GIPI-53-B23-8	Soil	1/14/2002		X	U	
GIPI-53-B23-9	Soil	1/14/2002		X	U	
GIPI-53-B23-10	Soil	1/14/2002		X	U	2' below bottom of vault
GIPI-53-B24-1	Soil	1/14/2002	X		U	
GIPI-53-B24-2	Soil	1/14/2002	X		U	
GIPI-53-B24-8	Soil	1/14/2002		X	U	
GIPI-53-B24-9	Soil	1/14/2002		X	U	
GIPI-53-B24-10	Soil	1/14/2002		X	0.034	2' below bottom of vault
GIPI-53-B25-1	Soil	1/9/2002	X		0.165	
GIPI-53-B25-2	Soil	1/9/2002	X		U	
GIPI-53-B25-8	Soil	1/9/2002		X	U	
GIPI-53-B25-9	Soil	1/9/2002		X	U	
GIPI-53-B25-10	Soil	1/9/2002		X	U	2' below bottom of vault

TABLE C-2
GOULD ISLAND PCB REMEDIATION
PHASE 1 SOIL SAMPLE ANALYSIS

Sample I.D.	Matrix	Date Collected	PCB 3550/8082	PCB 3545/8082	Lab Results (ppm)	Comment
VAULT 54						
GIPI-54-B1-SW	Soil	1/10/2002	X		**4020**	Groundwater @ 7'
GIPI-54-B1-SW-8	Soil	1/10/2002	X		**2810**	
GIPI-54-B1-SW-9	Soil	1/10/2002	X		**7660**	
GIPI-54-B1-SW-10	Soil	1/10/2002	X		**124**	2' below bottom of vault
GIPI-54-B1-SW-11	Soil	1/17/2002		X	**22.9**	
GIPI-54-B1-SW-12	Soil	1/17/2002		X	0.712	
GIPI-54-B1-SW-13	Soil	1/17/2002		X	6.28	
GIPI-54-B1-1	Soil	2/4/2002		X	U	duplicate of GIPI-54-SS-29
GIPI-54-SS-29	Soil	2/4/2002		X	U	duplicate of GIPI-54-B1-1
GIPI-54-B1-2	Soil	2/4/2002		X	U	
GIPI-54-B1-6	Soil	2/4/2002		X	U	
GIPI-54-B1-7	Soil	2/4/2002		X	U	
GIPI-54-B1-8	Soil	2/4/2002		X	U	
GIPI-54-B1-9	Soil	2/4/2002		X	U	2' below bottom of vault
GIPI-54-B1-10	Soil	2/4/2002		X	U	
GIPI-54-B1-11	Soil	2/4/2002		X	U	
GIPI-54-B1-12	Soil	2/4/2002		X	U	
GIPI-54-B2-1	Soil	2/4/2002		X	U	
GIPI-54-B2-2	Soil	2/4/2002		X	U	
GIPI-54-B2-6	Soil	2/4/2002		X	U	
GIPI-54-B2-7	Soil	2/4/2002		X	U	
GIPI-54-B2-8	Soil	2/4/2002		X	U	
GIPI-54-B2-9	Soil	2/4/2002		X	U	2' below bottom of vault
GIPI-54-B2-10	Soil	2/4/2002		X	U	
GIPI-54-B2-11	Soil	2/4/2002		X	U	
GIPI-54-B2-12	Soil	2/4/2002		X	U	
GIPI-54-B3-1	Soil	2/7/2002		X	U	
GIPI-54-B3-2	Soil	2/7/2002		X	U	
GIPI-54-B3-5	Soil	2/7/2002		X	U	
GIPI-54-B3-6	Soil	2/7/2002		X	U	
GIPI-54-B3-7	Soil	2/7/2002		X	U	
GIPI-54-B3-8	Soil	2/7/2002		X	U	
GIPI-54-B3-9	Soil	2/7/2002		X	U	2' below bottom of vault
GIPI-54-B4-1	Soil	2/7/2002		X	0.209	
GIPI-54-B4-2	Soil	2/7/2002		X	U	
GIPI-54-B4-5	Soil	2/7/2002		X	U	
GIPI-54-B4-6	Soil	2/7/2002		X	U	
GIPI-54-B4-7	Soil	2/7/2002		X	U	
GIPI-54-B4-8	Soil	2/7/2002		X	U	duplicate of GIPI-54-SS-32
GIPI-54-SS-32	Soil	2/7/2002		X	U	duplicate of GIPI-54-B4-8
GIPI-54-B4-9	Soil	2/7/2002		X	U	2' below bottom of vault
GIPI-54-B5-1	Soil	2/6/2002		X	0.045	
GIPI-54-B5-2	Soil	2/6/2002		X	U	
GIPI-54-B5-5	Soil	2/6/2002		X	U	
GIPI-54-B5-6	Soil	2/6/2002		X	U	
GIPI-54-B5-7	Soil	2/6/2002		X	U	
GIPI-54-B5-8	Soil	2/6/2002		X	U	
GIPI-54-B5-9	Soil	2/6/2002		X	U	2' below bottom of vault
GIPI-54-B6-1	Soil	2/6/2002		X	U	duplicate of GIPI-54-SS-31
GIPI-54-SS-31	Soil	2/6/2002		X	U	duplicate of GIPI-54-B6-1
GIPI-54-B6-2	Soil	2/6/2002		X	U	
GIPI-54-B6-5	Soil	2/6/2002		X	U	
GIPI-54-B6-6	Soil	2/6/2002		X	U	
GIPI-54-B6-7	Soil	2/6/2002		X	0.031	
GIPI-54-B6-8	Soil	2/6/2002		X	U	
GIPI-54-B6-9	Soil	2/6/2002		X	U	2' below bottom of vault
GIPI-54-B7-1	Soil	1/29/2002		X	0.089	
GIPI-54-B7-2	Soil	1/29/2002		X	U	

TABLE C-2
GOULD ISLAND PCB REMEDIATION
PHASE 1 SOIL SAMPLE ANALYSIS

Sample I.D.	Matrix	Date Collected	PCB 3550/8082	PCB 3545/8082	Lab Results (ppm)	Comment
GIPI-54-B7-5	Soil	1/29/2002		X	0.167	
GIPI-54-B7-6	Soil	1/29/2002		X	U	
GIPI-54-B7-7	Soil	1/29/2002		X	U	
GIPI-54-B7-8	Soil	1/29/2002		X	0.033	
GIPI-54-B7-9	Soil	1/29/2002		X	0.041	2' below bottom of vault
GIPI-54-B7-10	Soil	1/29/2002		X	U	
GIPI-54-B7-11	Soil	1/29/2002		X	U	
GIPI-54-B7-12	Soil	1/29/2002		X	U	
GIPI-54-B8-1	Soil	1/28/2002		X	U	
GIPI-54-B8-2	Soil	1/28/2002		X	U	Duplicate of GIPI-54-SS-19
GIPI-54-SS-19	Soil	1/28/2002		X	U	Duplicate of GIPI-54-B8-2
GIPI-54-B8-5	Soil	1/28/2002		X	0.232	
GIPI-54-B8-6	Soil	1/28/2002		X	U	
GIPI-54-B8-7	Soil	1/28/2002		X	0.061	
GIPI-54-B8-8	Soil	1/28/2002		X	0.02	
GIPI-54-B8-9	Soil	1/28/2002		X	U	2' below bottom of vault
GIPI-54-B8-10	Soil	1/28/2002		X	U	
GIPI-54-B8-11	Soil	1/28/2002		X	U	
GIPI-54-B8-12	Soil	1/28/2002		X	U	
GIPI-54-B9-1	Soil	1/30/2002		X	U	
GIPI-54-B9-2	Soil	1/30/2002		X	U	
GIPI-54-B9-5	Soil	1/30/2002		X	U	
GIPI-54-B9-6	Soil	1/30/2002		X	U	
GIPI-54-B9-7	Soil	1/30/2002		X	U	
GIPI-54-B9-8	Soil	1/30/2002		X	U	
GIPI-54-B9-9	Soil	1/30/2002		X	U	2' below bottom of vault
GIPI-54-B9-10	Soil	1/30/2002		X	U	
GIPI-54-B9-11	Soil	1/30/2002		X	U	
GIPI-54-B9-12	Soil	1/30/2002		X	U	
GIPI-54-B10-1	Soil	1/30/2002		X	0.028	
GIPI-54-B10-2	Soil	1/30/2002		X	U	
GIPI-54-B10-5	Soil	1/30/2002		X	U	
GIPI-54-B10-6	Soil	1/30/2002		X	U	
GIPI-54-B10-7	Soil	1/30/2002		X	U	
GIPI-54-B10-8	Soil	1/30/2002		X	U	duplicate of GIPI-54-SS-23
GIPI-54-SS-23	Soil	1/30/2002		X	U	duplicate of GIPI-54-B10-8
GIPI-54-B10-9	Soil	1/30/2002		X	U	2' below bottom of vault
GIPI-54-B10-10	Soil	1/30/2002		X	U	
GIPI-54-B10-11	Soil	1/30/2002		X	U	
GIPI-54-B10-12	Soil	1/30/2002		X	U	
GIPI-54-B11-1	Soil	1/30/2002		X	U	
GIPI-54-B11-2	Soil	1/30/2002		X	U	
GIPI-54-B11-5	Soil	1/30/2002		X	U	
GIPI-54-B11-6	Soil	1/30/2002		X	U	
GIPI-54-B11-7	Soil	1/30/2002		X	U	
GIPI-54-B11-8	Soil	1/30/2002		X	U	
GIPI-54-B11-9	Soil	1/30/2002		X	U	2' below bottom of vault
GIPI-54-B11-10	Soil	1/30/2002		X	U	
GIPI-54-B11-11	Soil	1/30/2002		X	U	
GIPI-54-B11-12	Soil	1/30/2002		X	U	
GIPI-54-B12-1	Soil	1/31/2002		X	0.081	
GIPI-54-B12-2	Soil	1/31/2002		X	U	
GIPI-54-B12-5	Soil	1/31/2002		X	0.025	
GIPI-54-B12-6	Soil	1/31/2002		X	U	
GIPI-54-B12-7	Soil	1/31/2002		X	U	
GIPI-54-B12-8	Soil	1/31/2002		X	U	
GIPI-54-B12-9	Soil	1/31/2002		X	U	2' below bottom of vault
GIPI-54-B12-10	Soil	1/31/2002		X	U	
GIPI-54-B12-11	Soil	1/31/2002		X	U	Duplicate of GIPI-54-SS-25

TABLE C-2
GOULD ISLAND PCB REMEDIATION
PHASE 1 SOIL SAMPLE ANALYSIS

Sample I.D.	Matrix	Date Collected	PCB 3550/8082	PCB 3545/8082	Lab Results (ppm)	Comment
GIPI-54-SS-25	Soil	1/31/2002		X	U	Duplicate of GIPI-54-B12-11
GIPI-54-B12-12	Soil	1/31/2002		X	U	
GIPI-54-B13-1	Soil	1/31/2002		X	U	
GIPI-54-B13-2	Soil	1/31/2002		X	U	Duplicate of GIPI-54-SS-26
GIPI-54-SS-26	Soil	1/31/2002		X	U	Duplicate of GIPI-54-B13-2
GIPI-54-B13-5	Soil	1/31/2002		X	U	
GIPI-54-B13-6	Soil	1/31/2002		X	0.161	
GIPI-54-B13-7	Soil	1/31/2002		X	U	
GIPI-54-B13-8	Soil	1/31/2002		X	U	
GIPI-54-B13-9	Soil	1/31/2002		X	U	2' below bottom of vault
GIPI-54-B13-10	Soil	1/31/2002		X	U	
GIPI-54-B13-11	Soil	1/31/2002		X	U	
GIPI-54-B13-12	Soil	1/31/2002		X	U	
GIPI-54-B14-1	Soil	1/31/2002		X	U	
GIPI-54-B14-2	Soil	1/31/2002		X	U	
GIPI-54-B14-5	Soil	1/31/2002		X	U	
GIPI-54-B14-6	Soil	1/31/2002		X	U	
GIPI-54-B14-7	Soil	1/31/2002		X	U	
GIPI-54-B14-8	Soil	1/31/2002		X	U	
GIPI-54-B14-9	Soil	1/31/2002		X	U	2' below bottom of vault
GIPI-54-B14-10	Soil	1/31/2002		X	U	
GIPI-54-B14-11	Soil	1/31/2002		X	U	
GIPI-54-B14-12	Soil	1/31/2002		X	U	
GIPI-54-B15-1	Soil	1/25/2002		X	0.172	Duplicate of GIPI-54-SS-17
GIPI-54-SS-17	Soil	1/25/2002		X	0.342	Duplicate of GIPI-54-B15-1
GIPI-54-B15-2	Soil	1/25/2002		X	U	
GIPI-54-B15-6	Soil	1/25/2002		X	U	
GIPI-54-B15-7	Soil	1/25/2002		X	0.024	
GIPI-54-B15-8	Soil	1/25/2002		X	U	Duplicate of GIPI-54-SS-18
GIPI-54-SS-18	Soil	1/25/2002		X	U	Duplicate of GIPI-54-B15-8
GIPI-54-B15-9	Soil	1/25/2002		X	U	
GIPI-54-B15-10	Soil	1/25/2002		X	U	2' below bottom of vault
GIPI-54-B15-11	Soil	1/25/2002		X	0.042	
GIPI-54-B15-12	Soil	1/25/2002		X	U	
GIPI-54-B15-13	Soil	1/25/2002		X	U	
GIPI-54-B16-1	Soil	1/22/2002		X	0.175	
GIPI-54-B16-2	Soil	1/22/2002		X	U	
GIPI-54-B16-6	Soil	1/22/2002		X	U	
GIPI-54-B16-7	Soil	1/22/2002		X	U	
GIPI-54-B16-8	Soil	1/22/2002		X	U	
GIPI-54-B16-9	Soil	1/22/2002		X	U	
GIPI-54-B16-10	Soil	1/22/2002		X	U	2' below bottom of vault
GIPI-54-B16-11	Soil	1/24/2002		X	0.216	
GIPI-54-B16-12	Soil	1/24/2002		X	0.138	
GIPI-54-B16-13	Soil	1/24/2002		X	U	
GIPI-54-B17-1	Soil	1/28/2002		X	U	
GIPI-54-B17-2	Soil	1/28/2002		X	U	
GIPI-54-B17-7	Soil	1/28/2002		X	0.207	
GIPI-54-B17-8	Soil	1/28/2002		X	U	
GIPI-54-B17-9	Soil	1/28/2002		X	U	
GIPI-54-B17-10	Soil	1/28/2002		X	U	
GIPI-54-B17-11	Soil	1/28/2002		X	U	sal, 2' below bottom of vault
GIPI-54-B18-1	Soil	1/22/2002		X	0.141	
GIPI-54-B18-2	Soil	1/22/2002		X	U	Duplicate of GIPI-54-SS-14
GIPI-54-SS-14	Soil	1/22/2002		X	U	Duplicate of GIPI-54-B18-2
GIPI-54-B18-7	Soil	1/22/2002		X	2.18	
GIPI-54-B18-8	Soil	1/22/2002		X	U	
GIPI-54-B18-9	Soil	1/22/2002		X	0.063	
GIPI-54-B18-10	Soil	1/22/2002		X	U	

TABLE C-2
GOULD ISLAND PCB REMEDIATION
PHASE 1 SOIL SAMPLE ANALYSIS

Sample I.D.	Matrix	Date Collected	PCB 3550/8082	PCB 3545/8082	Lab Results (ppm)	Comment
GIPI-54-B18-11	Soil	1/22/2002		X	U	2' below bottom of vault
GIPI-54-B18-12	Soil	1/24/2002		X	0.048	
GIPI-54-B18-13	Soil	1/24/2002		X	U	
GIPI-54-B18-14	Soil	1/24/2002		X	U	
GIPI-54-B19-1	Soil	2/4/2002		X	0.028	
GIPI-54-B19-2	Soil	2/4/2002		X	U	
GIPI-54-B19-3	Soil	2/4/2002		X	U	
GIPI-54-B19-4	Soil	2/4/2002		X	U	
GIPI-54-B19-5	Soil	2/4/2002		X	U	
GIPI-54-B19-6	Soil	2/4/2002		X	U	2' below bottom of vault
GIPI-54-B19-7	Soil	2/4/2002		X	U	
GIPI-54-B19-8	Soil	2/4/2002		X	U	
GIPI-54-B19-9	Soil	2/4/2002		X	U	
GIPI-54-B20-1	Soil	1/25/2002		X	0.037	
GIPI-54-B20-2	Soil	1/25/2002		X	0.077	
GIPI-54-B20-3	Soil	1/25/2002		X	0.876	
GIPI-54-B20-4	Soil	1/25/2002		X	U	
GIPI-54-B20-5	Soil	1/25/2002		X	1.77	
GIPI-54-B20-6	Soil	1/25/2002		X	U	2' below bottom of vault
GIPI-54-B20-7	Soil	1/25/2002		X	3.68	
GIPI-54-B20-8	Soil	1/25/2002		X	U	
GIPI-54-B20-9	Soil	1/25/2002		X	U	
GIPI-54-B21-1	Soil	2/4/2002		X	U	
GIPI-54-B21-2	Soil	2/4/2002		X	U	
GIPI-54-B21-3	Soil	2/4/2002		X	U	
GIPI-54-B21-4	Soil	2/4/2002		X	U	duplicate of GIPI-54-SS-28
GIPI-54-SS-28	Soil	2/4/2002		X	U	duplicate of GIPI-54-B21-4
GIPI-54-B21-5	Soil	2/4/2002		X	U	2' below bottom of vault
GIPI-54-B21-6	Soil	2/4/2002		X	U	
GIPI-54-B21-7	Soil	2/4/2002		X	U	
GIPI-54-B21-8	Soil	2/4/2002		X	U	
GIPI-54-B22-1	Soil	2/4/2002		X	0.086	
GIPI-54-B22-2	Soil	2/4/2002		X	U	
GIPI-54-B22-3	Soil	2/4/2002		X	0.033	2' below bottom of vault
GIPI-54-B22-4	Soil	2/4/2002		X	U	
GIPI-54-B22-5	Soil	2/4/2002		X	U	
GIPI-54-B22-6	Soil	2/4/2002		X	U	
GIPI-54-B22-7	Soil	2/4/2002		X	U	
GIPI-54-B23-1	Soil	2/4/2002		X	U	
GIPI-54-B23-2	Soil	2/4/2002		X	U	
GIPI-54-B23-3	Soil	2/4/2002		X	U	2' below bottom of vault
GIPI-54-B23-4	Soil	2/4/2002		X	U	
GIPI-54-B23-5	Soil	2/4/2002		X	U	
GIPI-54-B23-6	Soil	2/4/2002		X	U	
GIPI-54-B23-7	Soil	2/4/2002		X	U	
GIPI-54-B24-1	Soil	2/6/2002		X	1.25	
GIPI-54-B24-2	Soil	2/6/2002		X	U	
GIPI-54-B24-3	Soil	2/6/2002		X	0.112	
GIPI-54-B24-4	Soil	2/6/2002		X	U	2' below bottom of vault
GIPI-54-B25-1	Soil	1/25/2002		X	0.089	
GIPI-54-B25-2	Soil	1/25/2002		X	U	
GIPI-54-B25-3	Soil	1/25/2002		X	0.549	
GIPI-54-B25-4	Soil	1/25/2002		X	0.048	
GIPI-54-B25-5	Soil	1/25/2002		X	0.111	
GIPI-54-B25-6	Soil	1/25/2002		X	U	2' below bottom of vault
GIPI-54-B25-7	Soil	1/25/2002		X	0.4	
GIPI-54-B25-8	Soil	1/25/2002		X	U	
GIPI-54-B25-9	Soil	1/25/2002		X	U	
GIPI-54-B26-1	Soil	1/25/2002		X	4.32	

TABLE C-2
GOULD ISLAND PCB REMEDIATION
PHASE 1 SOIL SAMPLE ANALYSIS

Sample I.D.	Matrix	Date Collected	PCB 3550/8082	PCB 3545/8082	Lab Results (ppm)	Comment
GIPI-54-B26-2	Soil	1/25/2002		X	4.41	
GIPI-54-B26-3	Soil	1/25/2002		X	3.96	
GIPI-54-B26-4	Soil	1/25/2002		X	1.87	
GIPI-54-B26-5	Soil	1/25/2002		X	**12.2**	2' below bottom of vault
GIPI-54-B26-6	Soil	1/25/2002		X	0.359	
GIPI-54-B26-7	Soil	1/25/2002		X	0.023	
GIPI-54-B26-8	Soil	1/25/2002		X	0.118	Duplicate of GIPI-54-SS-16
GIPI-54-SS-16	Soil	1/25/2002		X	U	Duplicate of GIPI-54-B26-8
GIPI-54-B27-1	Soil	2/6/2002		X	0.027	
GIPI-54-B27-2	Soil	2/6/2002		X	U	
GIPI-54-B27-3	Soil	2/6/2002		X	U	
GIPI-54-B27-4	Soil	2/6/2002		X	U	2' below bottom of vault
GIPI-54-B27-5	Soil	2/6/2002		X	U	
GIPI-54-B27-6	Soil	2/6/2002		X	U	
GIPI-54-B27-7	Soil	2/6/2002		X	U	duplicate of GIPI-54-SS-30
GIPI-54-SS-30	Soil	2/6/2002		X	U	duplicate of GIPI-54-B27-7
GIPI-54-B28-1	Soil	2/6/2002		X	U	
GIPI-54-B28-2	Soil	2/6/2002		X	U	
GIPI-54-B28-3	Soil	2/6/2002		X	U	2' below bottom of vault
GIPI-54-B28-4	Soil	2/6/2002		X	U	
GIPI-54-B29-1	Soil	1/30/2002		X	1.39	
GIPI-54-B29-2	Soil	1/30/2002		X	U	
GIPI-54-B29-3	Soil	1/30/2002		X	0.261	2' below bottom of vault
GIPI-54-B29-4	Soil	1/30/2002		X	0.954	
GIPI-54-B29-5	Soil	1/30/2002		X	U	
GIPI-54-B29-6	Soil	1/30/2002		X	0.02	
GIPI-54-B29-7	Soil	1/30/2002		X	U	
GIPI-54-B30-1	Soil	2/6/2002		X	U	
GIPI-54-B30-2	Soil	2/6/2002		X	U	
GIPI-54-B30-3	Soil	2/6/2002		X	U	
GIPI-54-B30-4	Soil	2/6/2002		X	U	2' below bottom of vault
GIPI-54-B30-5	Soil	2/6/2002		X	U	
GIPI-54-B30-6	Soil	2/6/2002		X	U	
GIPI-54-B30-7	Soil	2/6/2002		X	U	
GIPI-54-B31-1	Soil	1/22/2002		X	0.128	
GIPI-54-B31-2	Soil	1/22/2002		X	0.018	
GIPI-54-B31-3	Soil	1/22/2002		X	4.82	
GIPI-54-B31-4	Soil	1/22/2002		X	0.059	
GIPI-54-B31-5	Soil	1/22/2002		X	**161**	2' below bottom of vault
GIPI-54-B31-6	Soil	1/22/2002		X	**23600**	
GIPI-54-B31-7	Soil	1/24/2002		X	**7540**	
GIPI-54-B31-8	Soil	1/24/2002		X	**163**	
GIPI-54-B31-9	Soil	1/24/2002		X	**17.7**	
GIPI-54-B31-10	Soil	1/25/2002		X	**11.7**	
GIPI-54-B31-11	Soil	1/25/2002		X	1.11	Refusal @ 10.8'
GIPI-54-B32-1	Soil	1/30/2002		X	0.336	
GIPI-54-B32-2	Soil	1/30/2002		X	U	
GIPI-54-B32-3	Soil	1/30/2002		X	U	Duplicate of GIPI-54-SS-24
GIPI-54-SS-24	Soil	1/30/2002		X	U	Duplicate of GIPI-54-B32-3
GIPI-54-B32-4	Soil	1/30/2002		X	U	2' below bottom of vault
GIPI-54-B32-5	Soil	1/30/2002		X	U	
GIPI-54-B32-6	Soil	1/30/2002		X	U	
GIPI-54-B32-7	Soil	1/30/2002		X	U	
GIPI-54-B33-1	Soil	1/31/2002		X	U	
GIPI-54-B33-2	Soil	1/31/2002		X	U	
GIPI-54-B33-3	Soil	1/31/2002		X	0.379	
GIPI-54-B33-4	Soil	1/31/2002		X	U	
GIPI-54-B33-5	Soil	1/31/2002		X	U	2' below bottom of vault
GIPI-54-B33-6	Soil	1/31/2002		X	U	

TABLE C-2
GOULD ISLAND PCB REMEDIATION
PHASE 1 SOIL SAMPLE ANALYSIS

Sample I.D.	Matrix	Date Collected	PCB 3550/8082	PCB 3545/8082	Lab Results (ppm)	Comment
GIPI-54-B33-7	Soil	1/31/2002		X	U	
GIPI-54-B33-8	Soil	1/31/2002		X	U	
GIPI-54-B34-1	Soil	1/22/2002		X	2.03	
GIPI-54-B34-2	Soil	1/22/2002		X	U	
GIPI-54-B34-3	Soil	1/22/2002		X	0.074	
GIPI-54-B34-4	Soil	1/22/2002		X	0.034	
GIPI-54-B34-5	Soil	1/22/2002		X	1.02	
GIPI-54-B34-6	Soil	1/22/2002		X	U	2' below bottom of vault
GIPI-54-B34-7	Soil	1/24/2002		X	0.291	
GIPI-54-B34-8	Soil	1/24/2002		X	0.382	
GIPI-54-B34-9	Soil	1/24/2002		X	0.275	Refusal @ 9'
GIPI-54-B35-1	Soil	1/29/2002		X	U	
GIPI-54-B35-2	Soil	1/29/2002		X	5.45	
GIPI-54-B35-3	Soil	1/29/2002		X	0.024	
GIPI-54-B35-4	Soil	1/29/2002		X	U	
GIPI-54-B35-5	Soil	1/29/2002		X	0.083	
GIPI-54-B35-6	Soil	1/29/2002		X	U	
GIPI-54-B35-7	Soil	1/29/2002		X	U	2' below bottom of vault
GIPI-54-B35-8	Soil	1/29/2002		X	U	
GIPI-54-B35-9	Soil	1/29/2002		X	U	
GIPI-54-B35-10	Soil	1/29/2002		X	U	
GIPI-54-B36-1	Soil	1/17/2002		X	1.54	
GIPI-54-B36-2	Soil	1/17/2002		X	1.01	
GIPI-54-B36-4	Soil	1/17/2002		X	0.275	
GIPI-54-B36-5	Soil	1/17/2002		X	0.071	
GIPI-54-B36-6	Soil	1/17/2002		X	0.6	
GIPI-54-B36-7	Soil	1/17/2002		X	U	
GIPI-54-B36-8	Soil	1/17/2002		X	U	2' below bottom of vault
GIPI-54-B36-9	Soil	1/24/2002		X	0.061	
GIPI-54-B36-10	Soil	1/24/2002		X	0.224	
GIPI-54-B36-11	Soil	1/24/2002		X	6.07	
GIPI-54-B37-1	Soil	1/28/2001		X	0.275	
GIPI-54-B37-2	Soil	1/28/2001		X	U	
GIPI-54-B37-5	Soil	1/28/2001		X	U	
GIPI-54-B37-6	Soil	1/28/2001		X	U	
GIPI-54-B37-7	Soil	1/28/2001		X	0.049	
GIPI-54-B37-8	Soil	1/28/2001		X	U	
GIPI-54-B37-9	Soil	1/28/2001		X	U	2' below bottom of vault
GIPI-54-B37-10	Soil	1/28/2001		X	U	
GIPI-54-B37-11	Soil	1/28/2001		X	U	
GIPI-54-B37-12	Soil	1/28/2001		X	U	
GIPI-54-B38-1	Soil	1/22/2002		X	0.14	
GIPI-54-B38-2	Soil	1/22/2002		X	0.163	
GIPI-54-B38-6	Soil	1/22/2002		X	0.078	
GIPI-54-B38-7	Soil	1/22/2002		X	0.21	
GIPI-54-B38-8	Soil	1/22/2002		X	0.249	
GIPI-54-B38-9	Soil	1/22/2002		X	U	
GIPI-54-B38-10	Soil	1/22/2002		X	U	2' below bottom of vault
GIPI-54-B38-11	Soil	1/24/2002		X	0.085	
GIPI-54-B38-12	Soil	1/24/2002		X	1.84	Duplicate of GIPI-54-SS-15
GIPI-54-SS-15	Soil	1/24/2002		X	0.439	Duplicate of GIPI-54-B38-12
GIPI-54-B38-13	Soil	1/24/2002		X	0.081	
GIPI-54-B39-1	Soil	1/28/2002		X	5.99	
GIPI-54-B39-2	Soil	1/28/2002		X	U	
GIPI-54-B39-5	Soil	1/28/2002		X	U	
GIPI-54-B39-6	Soil	1/28/2002		X	U	
GIPI-54-B39-7	Soil	1/28/2002		X	U	Duplicate of GIPI-54-SS-20
GIPI-54-SS-20	Soil	1/28/2002		X	U	Duplicate of GIPI-54-B39-7
GIPI-54-B39-8	Soil	1/28/2002		X	U	

TABLE C-2
GOULD ISLAND PCB REMEDIATION
PHASE 1 SOIL SAMPLE ANALYSIS

Sample I.D.	Matrix	Date Collected	PCB 3550/8082	PCB 3545/8082	Lab Results (ppm)	Comment
GIPI-54-B39-9	Soil	1/28/2002		X	U	2' below bottom of vault
GIPI-54-B39-10	Soil	1/28/2002		X	0.071	
GIPI-54-B39-11	Soil	1/28/2002		X	U	
GIPI-54-B39-12	Soil	1/28/2002		X	0.215	
GIPI-54-B40-1	Sediment	1/14/2002		X	3.04	Duplicate of GIPI-54-SS-5
GIPI-54-SS-5	Sediment	1/14/2002	X		0.676	Duplicate of GIPI-54-B40-1
GIPI-54-B40-2	Sediment	1/14/2002		X	2.79	Refusal @ 2'
GIPI-54-B41-1	Sediment	1/14/2002		X	0.394	
GIPI-54-B41-2	Sediment	1/14/2002		X	0.028	
GIPI-54-B41-3	Sediment	1/14/2002		X	0.104	
GIPI-54-B41-4	Sediment	1/14/2002		X	0.03	
GIPI-54-B42-1	Sediment	1/14/2002		X	1.61	
GIPI-54-B42-2	Sediment	1/14/2002		X	0.35	
GIPI-54-B42-3	Sediment	1/14/2002		X	U	
GIPI-54-B42-4	Sediment	1/14/2002		X	0.023	
GIPI-54-B45-1	Sediment	1/31/2002		X	3.45	
GIPI-54-B45-2	Sediment	1/31/2002		X	U	
GIPI-54-B45-3	Sediment	1/31/2002		X	8.88	Duplicate of GIPI-54-SS-27
GIPI-54-SS-27	Sediment	1/31/2002		X	2.31	Duplicate of GIPI-54-B45-3
GIPI-54-B45-4	Sediment	1/31/2002		X	U	
GIPI-54-B45-5	Sediment	1/31/2002		X	U	2' below bottom of vault
GIPI-54-B45-6	Sediment	1/31/2002		X	U	
GIPI-54-B45-7	Sediment	1/31/2002		X	0.021	
GIPI-54-B45-8	Sediment	1/31/2002		X	0.096	
GIPI-54-B46-1	Sediment	1/31/2002		X	U	
GIPI-54-B46-2	Sediment	1/31/2002		X	U	
GIPI-54-B46-3	Sediment	1/31/2002		X	U	
GIPI-54-B46-4	Sediment	1/31/2002		X	U	2' below bottom of vault
GIPI-54-B46-5	Sediment	1/31/2002		X	U	
GIPI-54-B46-6	Sediment	1/31/2002		X	U	
GIPI-54-B46-7	Sediment	1/31/2002		X	U	
GIPI-54-B47-1	Sediment	1/29/2002		X	U	Duplicate of GIPI-54-SS-21
GIPI-54-SS-21	Sediment	1/29/2002		X	U	Duplicate of GIPI-54-B47-1
GIPI-54-B47-2	Sediment	1/29/2002		X	U	
GIPI-54-B47-3	Sediment	1/29/2002		X	U	
GIPI-54-B47-4	Sediment	1/29/2002		X	U	2' below bottom of vault
GIPI-54-B47-5	Sediment	1/29/2002		X	U	
GIPI-54-B47-6	Sediment	1/29/2002		X	U	
GIPI-54-B47-7	Sediment	1/29/2002		X	U	
GIPI-54-B48-1	Sediment	1/29/2002		X	1.48	Duplicate of GIPI-54-SS-22
GIPI-54-SS-22	Sediment	1/29/2002		X	0.212	Duplicate of GIPI-54-B48-1
GIPI-54-B48-2	Sediment	1/29/2002		X	U	
GIPI-54-B48-3	Sediment	1/29/2002		X	U	2' below bottom of vault
GIPI-54-B48-4	Sediment	1/29/2002		X	U	
GIPI-54-B48-5	Sediment	1/29/2002		X	U	
GIPI-54-B48-6	Sediment	1/29/2002		X	U	
GIPI-54-B48-7	Sediment	1/29/2002		X	U	
GIPI-54-B49-1	Sediment	1/29/2002		X	0.139	
GIPI-54-B49-2	Sediment	1/29/2002		X	U	
GIPI-54-B49-3	Sediment	1/29/2002		X	0.072	2' below bottom of vault
GIPI-54-B49-4	Sediment	1/29/2002		X	U	
GIPI-54-B49-5	Sediment	1/29/2002		X	U	
GIPI-54-B49-6	Sediment	1/29/2002		X	U	
GIPI-54-B49-7	Sediment	1/29/2002		X	U	

TABLE C-2
GOULD ISLAND PCB REMEDIATION
PHASE 1 SOIL SAMPLE ANALYSIS

Sample I.D.	Matrix	Date Collected	PCB 3550/8082	PCB 3545/8082	Lab Results (ppm)	Comment
VAULT 56						
GIPI-56-B1-CTR.	Soil	1/10/2002	X		7	
GIPI-56-B1-7	Soil	1/10/2002	X		0.158	
GIPI-56-B1-8	Soil	1/10/2002	X		**15.6**	
GIPI-56-B1-9	Soil	2/7/2002		X	0.053	
GIPI-56-B1-10	Soil	2/7/2002		X	U	
GIPI-56-B2-6	Soil	2/7/2002		X	U	
GIPI-56-B2-7	Soil	2/7/2002		X	U	
GIPI-56-B2-8	Soil	2/7/2002		X	U	
GIPI-56-B2-9	Soil	2/7/2002		X	0.026	
GIPI-56-B3-4	Soil	2/7/2002		X	U	
GIPI-56-B3-5	Soil	2/7/2002		X	U	
GIPI-56-B3-6	Soil	2/7/2002		X	U	
GIPI-56-B3-7	Soil	2/7/2002		X	U	
GIPI-56-B3-8	Soil	2/7/2002		X	U	
GIPI-56-B4-1	Soil	2/13/2002		X	U	
GIPI-56-B4-2	Soil	2/13/2002		X	U	
GIPI-56-B4-6	Soil	2/13/2002		X	U	
GIPI-56-B4-7	Soil	2/13/2002		X	U	
GIPI-56-B4-8	Soil	2/13/2002		X	U	Refusal @ 7.78'
GIPI-56-B5-1	Soil	2/12/2002		X	U	
GIPI-56-B5-2	Soil	2/12/2002		X	U	
GIPI-56-B5-6	Soil	2/12/2002		X	U	
GIPI-56-B5-7	Soil	2/12/2002		X	U	
GIPI-56-B5-8	Soil	2/12/2002		X	U	
GIPI-56-B6-1	Soil	2/13/2002		X	U	
GIPI-56-B6-2	Soil	2/13/2002		X	U	
GIPI-56-B6-6	Soil	2/13/2002		X	U	
GIPI-56-B6-7	Soil	2/13/2002		X	U	
GIPI-56-B6-8	Soil	2/13/2002		X	U	
GIPI-56-B7-1	Soil	2/13/2002		X	U	
GIPI-56-B7-2	Soil	2/13/2002		X	U	
GIPI-56-B7-6	Soil	2/13/2002		X	U	
GIPI-56-B7-7	Soil	2/13/2002		X	U	
GIPI-56-B7-8	Soil	2/13/2002		X	U	
GIPI-56-B8-1	Soil	2/11/2002		X	U	
GIPI-56-B8-2	Soil	2/11/2002		X	U	
GIPI-56-B8-6	Soil	2/11/2002		X	U	
GIPI-56-B8-7	Soil	2/11/2002		X	U	
GIPI-56-B8-8	Soil	2/11/2002		X	U	
GIPI-56-B9-1	Soil	2/11/2002		X	1.84	
GIPI-56-B9-2	Soil	2/11/2002		X	U	
GIPI-56-B9-6	Soil	2/11/2002		X	U	
GIPI-56-B9-7	Soil	2/11/2002		X	U	
GIPI-56-B9-8	Soil	2/11/2002		X	U	
GIPI-56-B10-1	Soil	2/13/2002		X	U	Duplicate of GIPI-56-SS-40
GIPI-56-SS-40	Soil	2/13/2002		X	U	Duplicate of GIPI-56-B10-1
GIPI-56-B10-2	Soil	2/13/2002		X	U	
GIPI-56-B10-6	Soil	2/13/2002		X	U	
GIPI-56-B10-7	Soil	2/13/2002		X	U	
GIPI-56-B10-8	Soil	2/13/2002		X	U	
GIPI-56-B11-1	Soil	2/12/2002		X	0.227	
GIPI-56-B11-2	Soil	2/12/2002		X	U	
GIPI-56-B11-6	Soil	2/12/2002		X	U	
GIPI-56-B11-7	Soil	2/12/2002		X	U	
GIPI-56-B11-8	Soil	2/12/2002		X	U	Duplicate of GIPI-56-SS-36
GIPI-56-SS-36	Soil	2/12/2002		X	U	Duplicate of GIPI-56-B11-8
GIPI-56-B12-1	Soil	2/14/2002		X	0.147	
GIPI-56-B12-2	Soil	2/14/2002		X	U	

TABLE C-2
GOULD ISLAND PCB REMEDIATION
PHASE 1 SOIL SAMPLE ANALYSIS

Sample I.D.	Matrix	Date Collected	PCB 3550/8082	PCB 3545/8082	Lab Results (ppm)	Comment
GIPI-56-B12-7	Soil	2/14/2002		X	U	
GIPI-56-B12-8	Soil	2/14/2002		X	U	
GIPI-56-B12-9	Soil	2/14/2002		X	U	
GIPI-56-B13-1	Soil	2/14/2002		X	1.76	
GIPI-56-B13-2	Soil	2/14/2002		X	0.023	
GIPI-56-B13-6	Soil	2/14/2002		X	U	
GIPI-56-B13-7	Soil	2/14/2002		X	U	
GIPI-56-B13-8	Soil	2/14/2002		X	U	
GIPI-56-B14-1	Soil	2/12/2002		X	2.84	
GIPI-56-B14-2	Soil	2/12/2002		X	U	
GIPI-56-B14-9	Soil	2/12/2002		X	U	
GIPI-56-B14-10	Soil	2/12/2002		X	U	
GIPI-56-B14-11	Soil	2/12/2002		X	U	
GIPI-56-B16-1	Soil	2/8/2002		X	3.06	
GIPI-56-B16-2	Soil	2/8/2002		X	U	Duplicate of GIPI-56-SS-34
GIPI-56-SS-34	Soil	2/8/2002		X	0.062	Duplicate of GIPI-56-B16-2
GIPI-56-B16-8	Soil	2/8/2002		X	U	
GIPI-56-B16-9	Soil	2/8/2002		X	U	
GIPI-56-B16-10	Soil	2/8/2002		X	U	
GIPI-56-B17-1	Soil	2/13/2002		X	0.19	Duplicate of GIPI-56-SS-42
GIPI-56-SS-42	Soil	2/13/2002		X	0.032	Duplicate of GIPI-56-B17-1
GIPI-56-B17-2	Soil	2/13/2002		X	U	
GIPI-56-B17-10	Soil	2/13/2002		X	U	
GIPI-56-B17-11	Soil	2/13/2002		X	U	
GIPI-56-B17-12	Soil	2/13/2002		X	U	
GIPI-56-B18-1	Soil	2/12/2002		X	U	
GIPI-56-B18-2	Soil	2/12/2002		X	U	
GIPI-56-B18-10	Soil	2/12/2002		X	U	Duplicate of GIPI-56-SS-38
GIPI-56-SS-38	Soil	2/12/2002		X	U	Duplicate of GIPI-56-B18-10
GIPI-56-B18-11	Soil	2/12/2002		X	U	
GIPI-56-B18-12	Soil	2/12/2002		X	U	
GIPI-56-B19-1	Soil	2/13/2002		X	0.133	
GIPI-56-B19-2	Soil	2/13/2002		X	0.166	
GIPI-56-B19-10	Soil	2/13/2002		X	U	
GIPI-56-B19-11	Soil	2/13/2002		X	U	
GIPI-56-B19-12	Soil	2/13/2002		X	U	
GIPI-56-B20-1	Soil	2/13/2002		X	0.247	
GIPI-56-B20-2	Soil	2/13/2002		X	0.286	
GIPI-56-B20-11	Soil	2/13/2002		X	U	
GIPI-56-B20-12	Soil	2/13/2002		X	U	Duplicate of GIPI-56-SS-41
GIPI-56-SS-41	Soil	2/13/2002		X	U	Duplicate of GIPI-56-B20-12
GIPI-56-B20-13	Soil	2/13/2002		X	U	
GIPI-56-B21-1	Soil	2/12/2002		X	0.113	Duplicate of GIPI-56-SS-37
GIPI-56-SS-37	Soil	2/12/2002		X	0.08	Duplicate of GIPI-56-B21-1
GIPI-56-B21-2	Soil	2/12/2002		X	0.054	
GIPI-56-B21-9	Soil	2/12/2002		X	U	
GIPI-56-B21-10	Soil	2/12/2002		X	U	
GIPI-56-B21-11	Soil	2/12/2002		X	U	
GIPI-56-B22-1	Soil	2/8/2002		X	2.16	
GIPI-56-B22-2	Soil	2/8/2002		X	0.555	
GIPI-56-B22-8	Soil	2/8/2002		X	U	Duplicate of GIPI-56-SS-33
GIPI-56-SS-33	Soil	2/8/2002		X	U	Duplicate of GIPI-56-B22-8
GIPI-56-B22-9	Soil	2/8/2002		X	U	
GIPI-56-B22-10	Soil	2/8/2002		X	U	
GIPI-56-B23-1	Soil	2/12/2002		X	0.374	
GIPI-56-B23-2	Soil	2/12/2002		X	0.053	
GIPI-56-B23-10	Soil	2/12/2002		X	U	
GIPI-56-B23-11	Soil	2/12/2002		X	U	
GIPI-56-B23-12	Soil	2/12/2002		X	U	

TABLE C-2
GOULD ISLAND PCB REMEDIATION
PHASE 1 SOIL SAMPLE ANALYSIS

Sample I.D.	Matrix	Date Collected	PCB 3550/8082	PCB 3545/8082	Lab Results (ppm)	Comment
GIPI-56-B24-1	Soil	2/12/2002		X	0.207	
GIPI-56-B24-2	Soil	2/12/2002		X	0.227	Duplicate of GIPI-56-SS-39
GIPI-56-SS-39	Soil	2/12/2002		X	0.328	Duplicate of GIPI-56-B24-2
GIPI-56-B24-10	Soil	2/12/2002		X	U	
GIPI-56-B24-11	Soil	2/12/2002		X	U	
GIPI-56-B24-12	Soil	2/12/2002		X	U	
GIPI-56-B25-1	Soil	2/11/2002		X	0.089	
GIPI-56-B25-2	Soil	2/11/2002		X	0.051	
GIPI-56-B25-9	Soil	2/11/2002		X	U	
GIPI-56-B25-10	Soil	2/11/2002		X	U	
GIPI-56-B25-11	Soil	2/11/2002		X	U	
GIPI-56-B26-1	Soil	2/8/2002		X	7.84	
GIPI-56-B26-2	Soil	2/8/2002		X	U	
GIPI-56-B26-7	Soil	2/8/2002		X	U	
GIPI-56-B26-8	Soil	2/8/2002		X	U	
GIPI-56-B26-9	Soil	2/8/2002		X	U	
GIPI-56-B27-1	Soil	2/11/2002		X	0.079	
GIPI-56-B27-2	Soil	2/11/2002		X	U	
GIPI-56-B27-9	Soil	2/11/2002		X	U	Duplicate of GIPI-56-SS-35
GIPI-56-SS-35	Soil	2/11/2002		X	U	Duplicate of GIPI-56-B27-9
GIPI-56-B27-10	Soil	2/11/2002		X	U	
GIPI-56-B27-11	Soil	2/11/2002		X	U	
GIPI-56-B28-1	Soil	2/13/2002		X	0.26	
GIPI-56-B28-2	Soil	2/13/2002		X	U	
GIPI-56-B28-8	Soil	2/13/2002		X	U	
GIPI-56-B28-9	Soil	2/13/2002		X	U	
GIPI-56-B28-10	Soil	2/13/2002		X	U	
GIPI-56-B29-4	Soil	2/8/2002		X	U	
GIPI-56-B29-5	Soil	2/8/2002		X	U	
GIPI-56-B29-7	Soil	2/8/2002		X	U	
GIPI-56-B29-8	Soil	2/8/2002		X	U	Refusal @ 7.5'
GIPI-56-B30-1	Soil	2/11/2002		X	0.411	
GIPI-56-B30-2	Soil	2/11/2002		X	U	
GIPI-56-B30-7	Soil	2/11/2002		X	U	
GIPI-56-B30-8	Soil	2/11/2002		X	U	
GIPI-56-B30-9	Soil	2/11/2002		X	U	
VAULT 59						
GIPI-59-B1-NW	Soil	1/10/2002	X		0.093	Duplicate of GIPI-59-SS-4
GIPI-59-SS-4	Soil	1/10/2002	X		3	Duplicate of GIPI-59-B1-NW
GIPI-59-B1-8	Soil	1/10/2002	X		0.032	
GIPI-59-B1-9	Soil	1/10/2002	X		0.057	2' below bottom of vault
GIPI-59-B1-10	Soil	1/10/2002	X		0.031	
GIPI-59-B1-11	Soil	1/10/2002	X		0.02	
GIPI-59-B1-12	Soil	1/10/2002	X		0.021	
GIPI-59-B1-13	Soil	1/10/2002	X		U	
GIPI-59-B1-14	Soil	1/10/2002	X		0.075	

APPENDIX C-2
FIGURES FROM - FINAL WORK PLAN FOR PHASE 2 PCB CONTAMINATED SOILS AND CONCRETE REMEDIATION GOULD ISLAND, AUGUST 2002

FIGURE 1 Site Plan

FIGURE 2 Historical Sample Results and Locations

FIGURE 3 Existing Concrete Roadway Conditions

FIGURE 4 Concrete Roadway Sample Locations

FIGURE 5 TSCA Concrete Roadway Removals/Rapid Assay Soil Excavations

FIGURE 6 TSCA Soil beneath Grid F2

FIGURE 7 Soil Sample Results – Transformer Vault Nos. 53 and 56

FIGURE 8 Sample Results – Transformer Vault No. 54

FIGURE 9 Soil Sample Results – Transformer Vault Nos. 59 and 60

FIGURE 10 Transformer Vault No. 61/Dewaterng Detail

LEGEND:

MW-02 MONITORING WELL
CASING ELEV. – 9.63
PVC ELEV. – 9.47
GROUND ELEV. – 7.6

MW-206 MONITORING WELL
CASING ELEV. – 7.25
PVC ELEV. – 6.96
GROUND ELEV. – 7.2

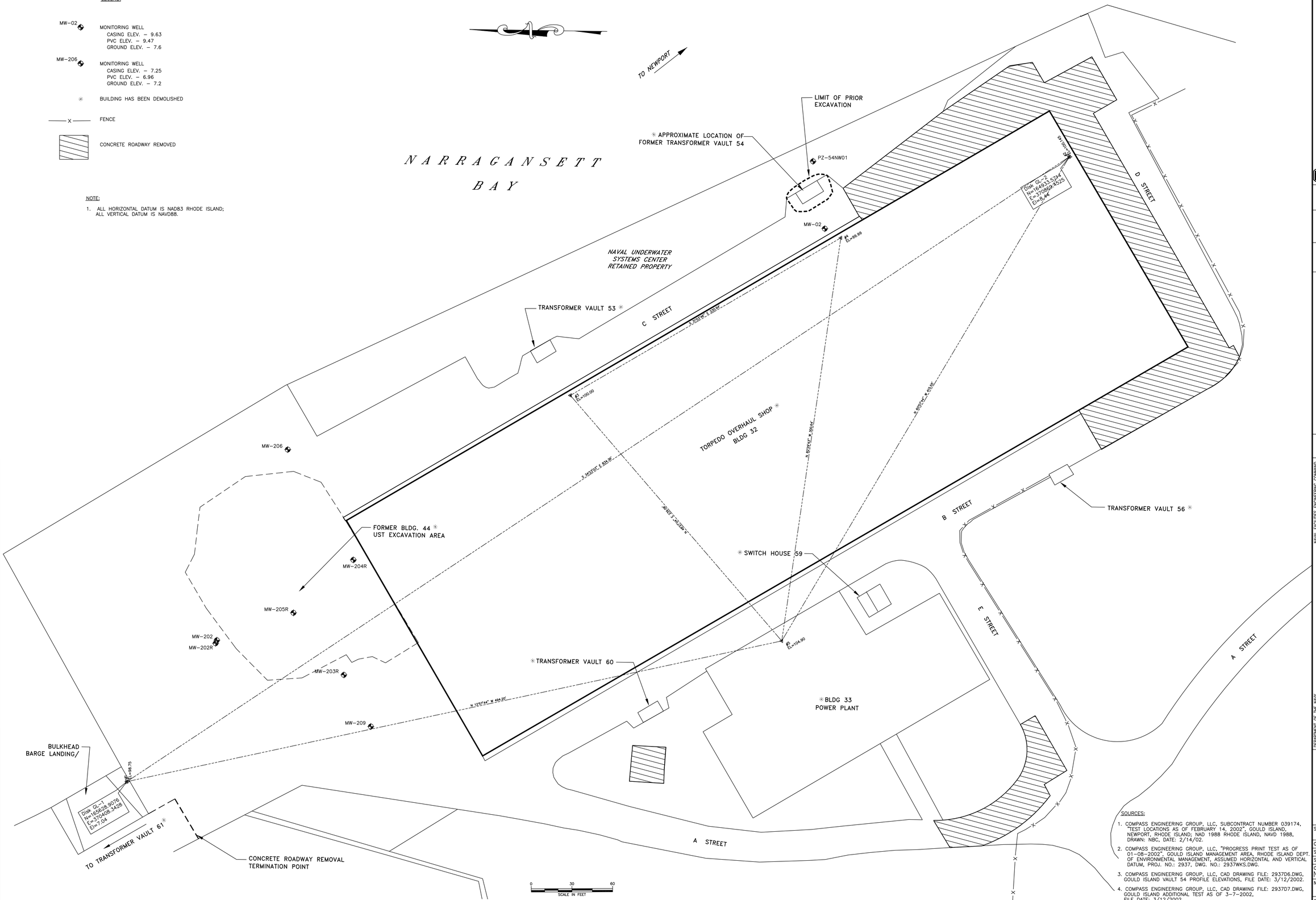
✳ BUILDING HAS BEEN DEMOLISHED

—X— FENCE

CONCRETE ROADWAY REMOVED

NOTE:

1. ALL HORIZONTAL DATUM IS NAD83 RHODE ISLAND; ALL VERTICAL DATUM IS NAVD88.



SOURCES:

1. COMPASS ENGINEERING GROUP, LLC, SUBCONTRACT NUMBER 039174, "TEST LOCATIONS AS OF FEBRUARY 14, 2002", GOULD ISLAND, NEWPORT, RHODE ISLAND; NAD 1988 RHODE ISLAND, NAVD 1988, DRAWN: NBC, DATE: 2/14/02.
2. COMPASS ENGINEERING GROUP, LLC, "PROGRESS PRINT TEST AS OF 01-08-2002", GOULD ISLAND MANAGEMENT AREA, RHODE ISLAND DEPT OF ENVIRONMENTAL MANAGEMENT, ASSUMED HORIZONTAL AND VERTICAL DATUM, PROJ. NO.: 2937, DWG. NO.: 2937WKS.DWG.
3. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D6.DWG, GOULD ISLAND VAULT 54 PROFILE ELEVATIONS, FILE DATE: 3/12/2002.
4. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D7.DWG, GOULD ISLAND ADDITIONAL TEST AS OF 3-7-2002, FILE DATE: 3/12/2002.
5. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D8.DWG, GOULD ISLAND BUILDING AND VAULTS, FILE DATE: 3/13/2002.

CAD FILE: NAVYRAC\GOULD ISLAND\PHASE II WORK PLAN REVISIONS\GOULD_WP_BASE_REV1.DWG

DATE CREATED
LATEST CHANGE

REV.	DESCRIPTION	PREP BY	DATE	APPRVD

FOSTER WHEELER ENVIRONMENTAL CORPORATION

DR: CH: CHK:
CH ENG:
SURV: (TITLE)
SUBMITTED BY: (FIRM NAME/S) (DATE)
NORTHDIV HD:
DM: HD:
PFE: DR:
OFFICER IN CHARGE
APPROVED DATE

NAVAL FACILITIES ENGINEERING COMMAND
PENNSYLVANIA

DEPARTMENT OF THE NAVY

ENGINEERING FIELD ACTIVITY – NORTHEAST

LESTER

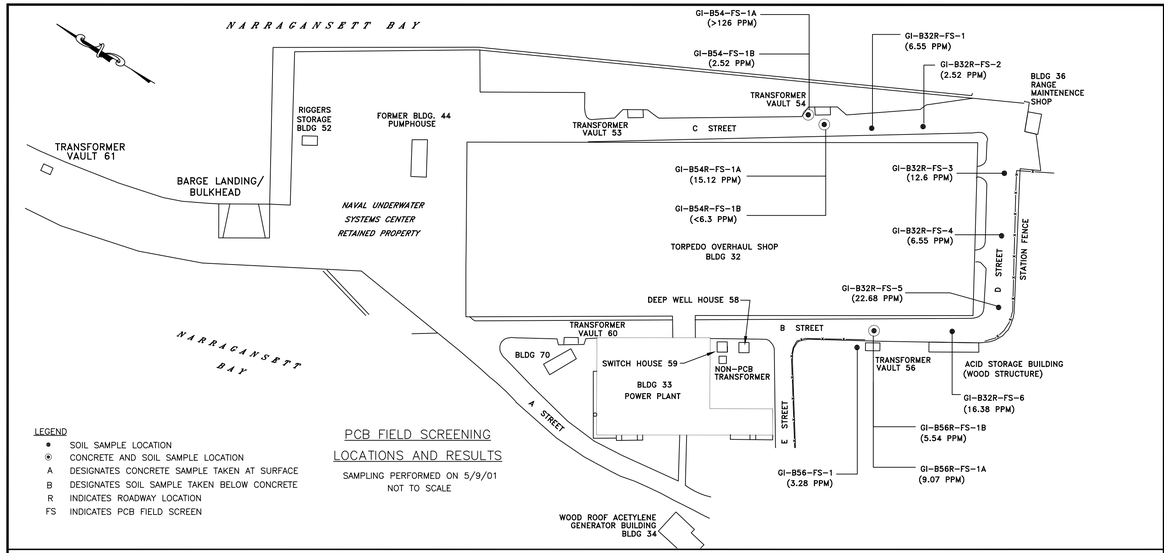
GOULD ISLAND, NEWPORT, RHODE ISLAND

SITE PLAN

ETANE FOR COMMANDER, NAVFAC
APPROVED DATE

SEAL AREA

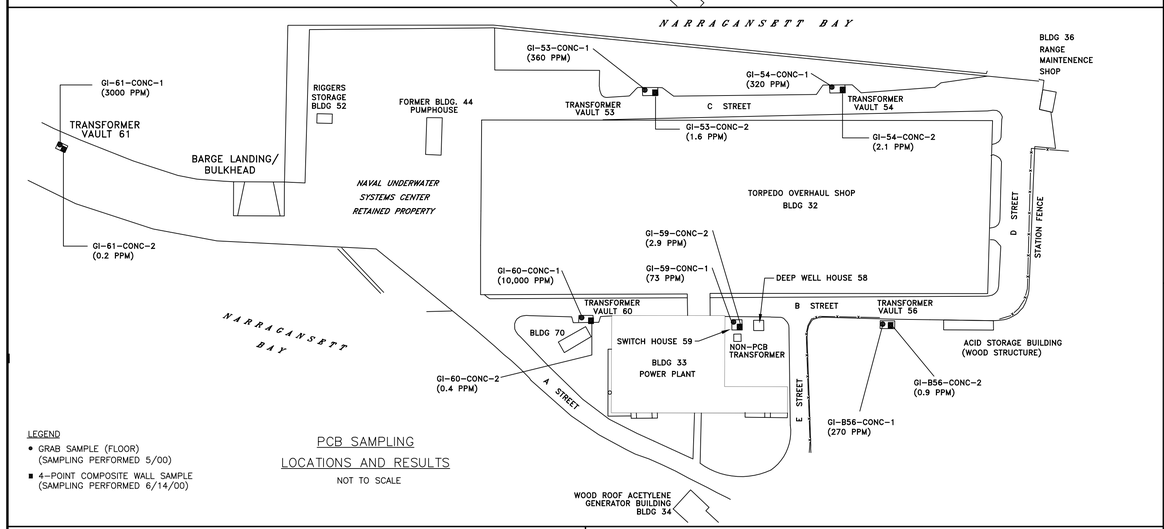
SAT TO	DATE 6/28/02
CODE I.D. NO.	80091
SCALE :	AS SHOWN
SPEC. NO.	
CONSTRN. CONTR. NO.	N62472-99-D-0032
NAVFAC DRAWING NO.	
SHEET 1	OF 10
SIZE: D	DIS. SH. NO. FIGURE 1



LEGEND
- ● SOIL SAMPLE LOCATION
- ⊙ CONCRETE AND SOIL SAMPLE LOCATION
- A DESIGNATES CONCRETE SAMPLE TAKEN AT SURFACE
- B DESIGNATES SOIL SAMPLE TAKEN BELOW CONCRETE
- R INDICATES ROADWAY LOCATION
- FS INDICATES PCB FIELD SCREEN

PCB FIELD SCREENING LOCATIONS AND RESULTS

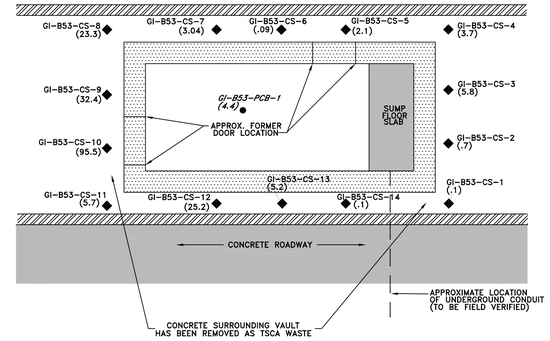
SAMPLING PERFORMED ON 5/9/01
NOT TO SCALE



LEGEND
- ● GRAB SAMPLE (FLOOR) (SAMPLING PERFORMED 5/00)
- ■ 4-POINT COMPOSITE WALL SAMPLE (SAMPLING PERFORMED 6/14/00)

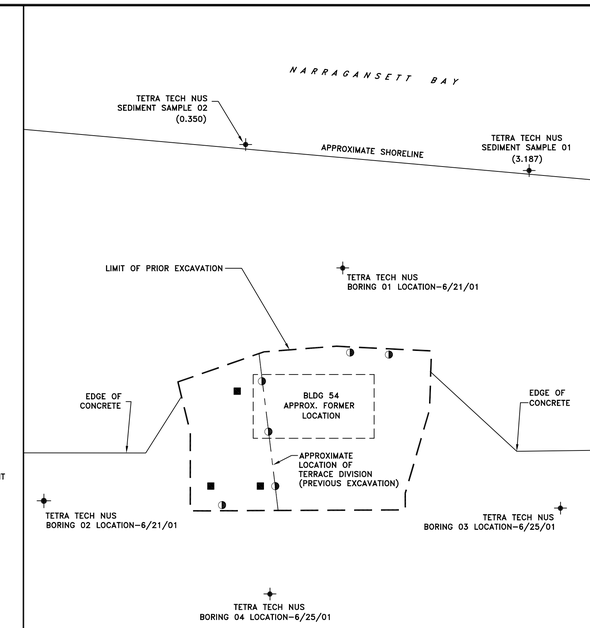
PCB SAMPLING LOCATIONS AND RESULTS

NOT TO SCALE



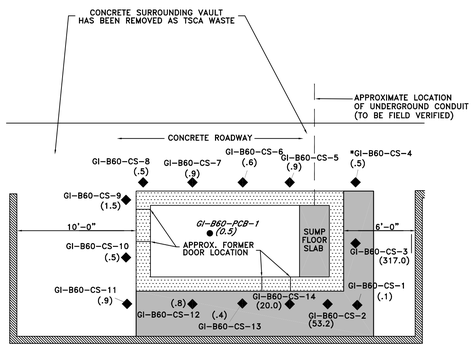
TRANSFORMER VAULT – BUILDING 53

PERIMETER SAMPLED ON 4/12/01
NOT TO SCALE



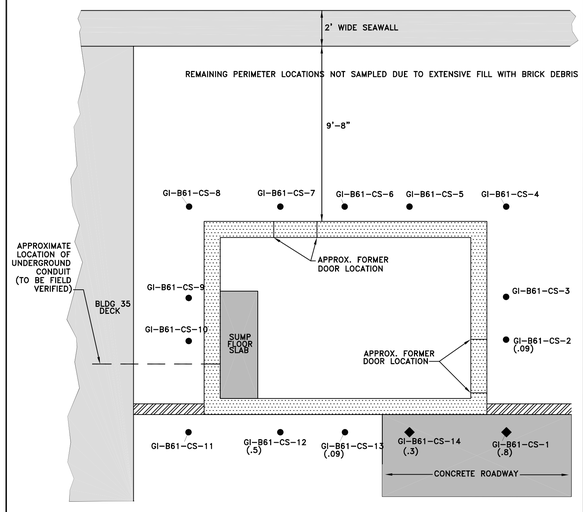
TRANSFORMER VAULT – BUILDING 54

NOT TO SCALE



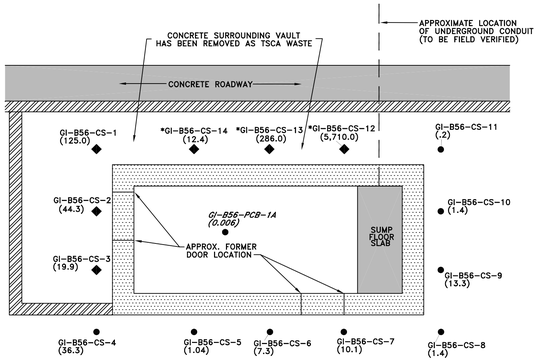
TRANSFORMER VAULT – BUILDING 60

PERIMETER SAMPLED ON 4/12/01
NOT TO SCALE



TRANSFORMER VAULT– BUILDING 61

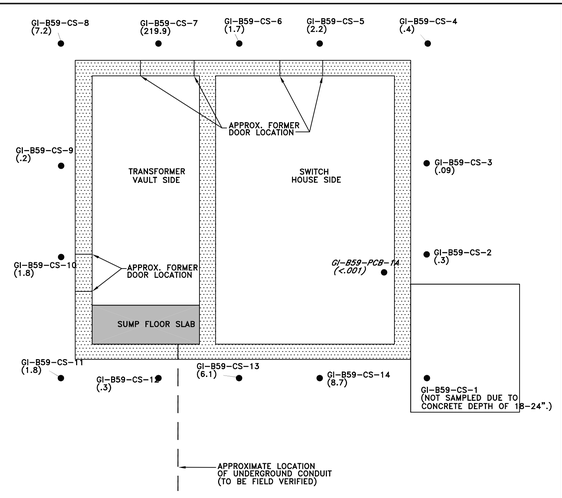
PERIMETER SAMPLED ON 4/16/01
NOT TO SCALE



TRANSFORMER VAULT – BUILDING 56 SAMPLING GRID

APPROXIMATE INTERIOR SLAB SIZE = 6' x 15'
PERIMETER SAMPLED ON 4/12/01
NOT TO SCALE

* SAMPLED ON 4/16/01



SWITCH HOUSE – BUILDING 59

PERIMETER SAMPLED ON 4/12/01
NOT TO SCALE

NOTE: SAMPLE LOCATIONS SHOWN ARE APPROXIMATE ONLY AND ARE BASED ON FIELD MEASUREMENTS.

LEGEND
- CONCRETE SLAB
- CONCRETE FOUNDATION
- 8"HIGH CONCRETE CURB
- 8 FT. HIGH CONCRETE RETAINING WALL
- ● PREVIOUS SOIL SAMPLE LOCATION (0"-6")
- ◆ PREVIOUS CONCRETE SURFACE SAMPLE (0"-1")
- ■ BOTTOM SAMPLE WITH 5/21/01 FIELD SCREEN RESULT >126 ppm
- ◑ SIDEWALL SAMPLE WITH 5/21/01 FIELD SCREEN RESULT >126 ppm
- (23.3) SOIL SAMPLE ANALYTICAL LAB PCB RESULTS IN ppm
- (95.5) WATER SAMPLE ANALYTICAL LAB PCB RESULTS IN ppm

REV.	DESCRIPTION	PREP BY	DATE	APPRVD

FOSTER WHEELER ENVIRONMENTAL CORPORATION

DRN: DR | CHK: | CH ENG: | SURV: | SUBMITTED BY: | (TITLE) | (DATE) | (FROM NUMBER) | NORTHDIV | DM: | HP: | HD: | PFE: | DR: | OFFICER IN CHARGE | APPROVED | DATE

NAVAL FACILITIES ENGINEERING COMMAND
DEPARTMENT OF THE NAVY
LESTER PENNSYLVANIA

ENGINEERING FIELD ACTIVITY – NORTHEAST

GOULD ISLAND, NEWPORT, RHODE ISLAND

HISTORICAL SAMPLE RESULTS AND LOCATIONS

SEAL AREA

EFANE FOR COMMANDER, NAVFAC | DATE | APPROVED

SAT TO	DATE 6/28/02
CODE I.D. NO.	80091
SCALE :	AS SHOWN
SPEC. NO.	
CONSTRN. CONTR. NO.	N62472-99-D-0032
NAVFAC DRAWING NO.	
SHEET 2	OF 10
SIZE: D	DIS. SH. NO. FIGURE 2

DATE CREATED
LATEST CHANGE

CAD FILE: NAVYRAC\GOULD ISLAND\PHASE II WORK PLAN REVISIONS\GOULD_WP_HISTORICAL.DWG

LEGEND:

MW-02 MONITORING WELL
CASING ELEV. – 9.63
PVC ELEV. – 9.47
GROUND ELEV. – 7.6

MW-206 MONITORING WELL
CASING ELEV. – 7.25
PVC ELEV. – 6.96
GROUND ELEV. – 7.2

✳ BUILDING HAS BEEN DEMOLISHED

—X— FENCE

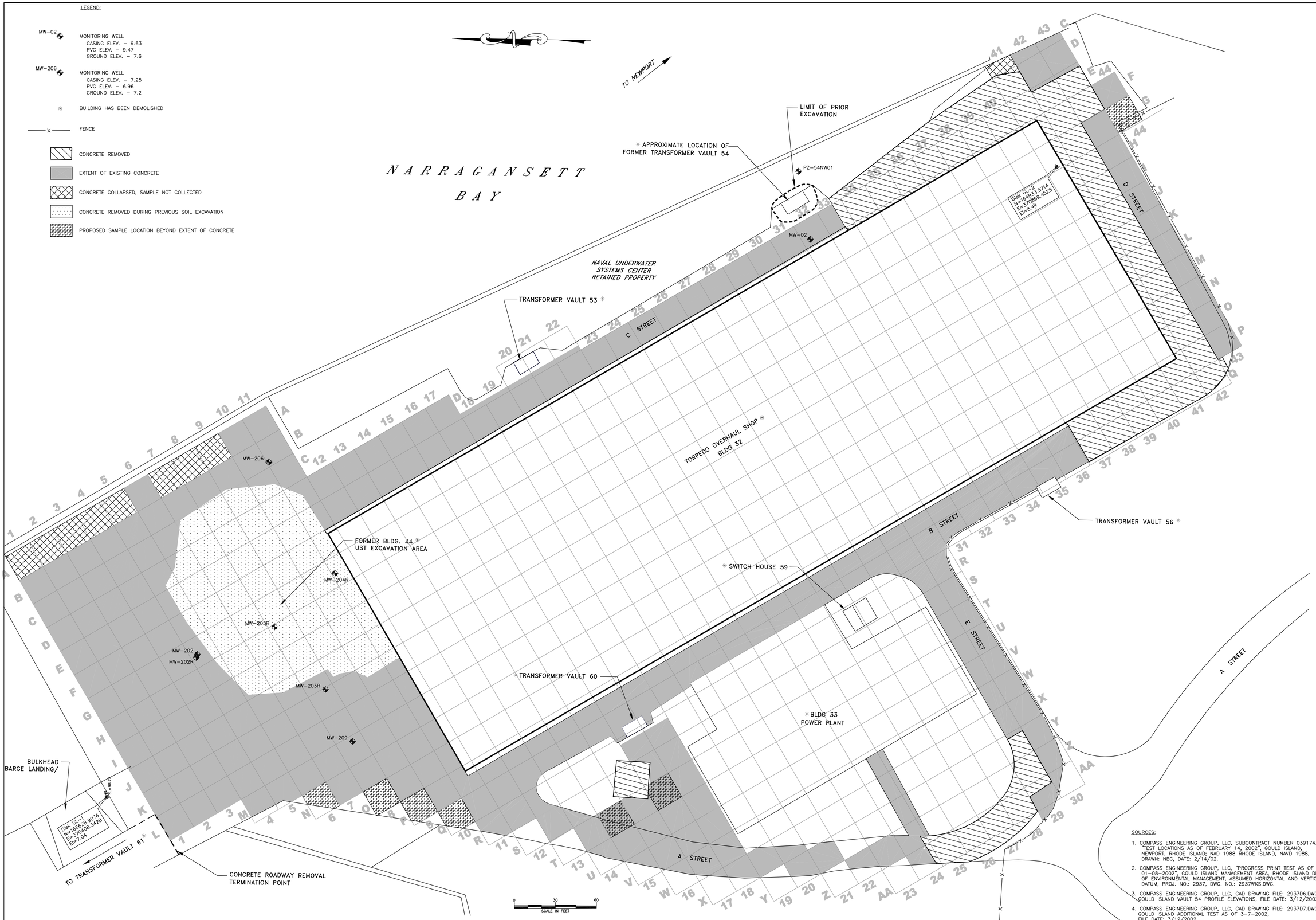
CONCRETE REMOVED

EXTENT OF EXISTING CONCRETE

CONCRETE COLLAPSED, SAMPLE NOT COLLECTED

CONCRETE REMOVED DURING PREVIOUS SOIL EXCAVATION

PROPOSED SAMPLE LOCATION BEYOND EXTENT OF CONCRETE



SOURCES:

1. COMPASS ENGINEERING GROUP, LLC, SUBCONTRACT NUMBER 039174, "TEST LOCATIONS AS OF FEBRUARY 14, 2002", GOULD ISLAND, NEWPORT, RHODE ISLAND; NAD 1988 RHODE ISLAND, NAVD 1988, DRAWN: NBC, DATE: 2/14/02.
2. COMPASS ENGINEERING GROUP, LLC, "PROGRESS PRINT TEST AS OF 01-08-2002", GOULD ISLAND MANAGEMENT AREA, RHODE ISLAND DEPT OF ENVIRONMENTAL MANAGEMENT, ASSUMED HORIZONTAL AND VERTICAL DATUM, PROJ. NO.: 2937, DWG. NO.: 2937WKS.DWG.
3. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D6.DWG, GOULD ISLAND VAULT 54 PROFILE ELEVATIONS, FILE DATE: 3/12/2002.
4. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D7.DWG, GOULD ISLAND ADDITIONAL TEST AS OF 3-7-2002, FILE DATE: 3/12/2002.
5. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D8.DWG, GOULD ISLAND BUILDING AND VAULTS, FILE DATE: 3/13/2002.

CAD FILE: NAVYRAC\GOULD ISLAND\PHASE II WORK PLAN REVISIONS\GOULD_WP_CONC_ROAD_REV1.DWG

REV.	DESCRIPTION	PREP BY	DATE	APPRVD

FOSTER WHEELER ENVIRONMENTAL CORPORATION

DSGN: DR: CHK:
SUPV: CH. ENG:
SUBMITTED BY: TITLE: (DATE)
NORTHDIV DM: HD: FPC: HD: DR:
OFFICER IN CHARGE DATE
APPROVED

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
LISTER PENNSYLVANIA

ENGINEERING FIELD ACTIVITY – NORTHEAST

GOULD ISLAND, NEWPORT, RHODE ISLAND

EXISTING CONCRETE ROADWAY CONDITIONS

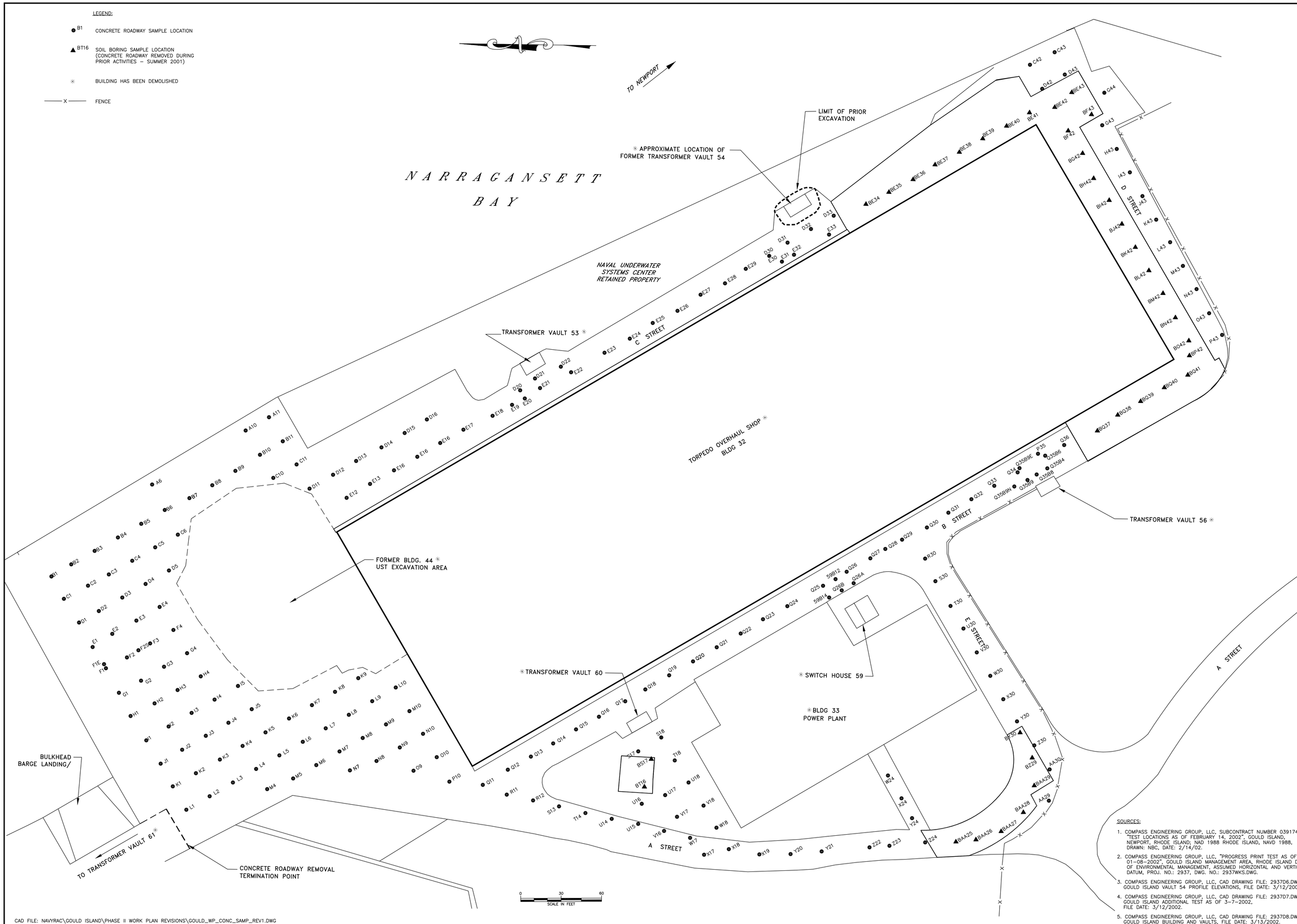
SEAL AREA

EFANE FOR COMMANDER, NAVFAC DATE APPROVED

SAT TO	DATE 6/28/02
CODE I.D. NO.	80091
SCALE :	AS SHOWN
SPEC. NO.	
CONSTRN. CONTR. NO.	N62472-99-D-0032
NAVFAC DRAWING NO.	
SHEET 3	OF 10
SIZE: D	DIS. SH. NO. FIGURE 3

LEGEND:

- ● B1 — CONCRETE ROADWAY SAMPLE LOCATION
- ▲ BT16 — SOIL BORING SAMPLE LOCATION (CONCRETE ROADWAY REMOVED DURING PRIOR ACTIVITIES – SUMMER 2001)
- ✳ — BUILDING HAS BEEN DEMOLISHED
- —X— FENCE



SOURCES:

1. COMPASS ENGINEERING GROUP, LLC, SUBCONTRACT NUMBER 039174, "TEST LOCATIONS AS OF FEBRUARY 14, 2002", GOULD ISLAND, NEWPORT, RHODE ISLAND; NAD 1988 RHODE ISLAND, NAVD 1988, DRAWN: NBC, DATE: 2/14/02.
2. COMPASS ENGINEERING GROUP, LLC, "PROGRESS PRINT TEST AS OF 01–08–2002", GOULD ISLAND MANAGEMENT AREA, RHODE ISLAND DEPT OF ENVIRONMENTAL MANAGEMENT, ASSUMED HORIZONTAL AND VERTICAL DATUM, PROJ. NO.: 2937, DWG. NO.: 2937WKS.DWG.
3. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D6.DWG, GOULD ISLAND VAULT 54 PROFILE ELEVATIONS, FILE DATE: 3/12/2002.
4. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D7.DWG, GOULD ISLAND ADDITIONAL TEST AS OF 3–7–2002, FILE DATE: 3/12/2002.
5. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D8.DWG, GOULD ISLAND BUILDING AND VAULTS, FILE DATE: 2/13/2002.

CAD FILE: NAVYRAC\GOULD ISLAND\PHASE II WORK PLAN REVISIONS\GOULD_WP_CONC_SAMP_REV1.DWG

REV.	DESCRIPTION	PREP BY	DATE	APPRVD

FOSTER WHEELER ENVIRONMENTAL CORPORATION

DSGN: DR: CH ENG: CHK:
SURV: SUBMITTED BY: (TITLE) (DATE)
(FROM MONIES) NORTHDIV DM: HD: HD: DR: FFE:
OFFICER IN CHARGE
APPROVED DATE

NAVAL FACILITIES ENGINEERING COMMAND
DEPARTMENT OF THE NAVY
LESTER PENNSYLVANIA

ENGINEERING FIELD ACTIVITY – NORTHEAST

GOULD ISLAND, NEWPORT, RHODE ISLAND

CONCRETE ROADWAY SAMPLE LOCATIONS

SEAL AREA

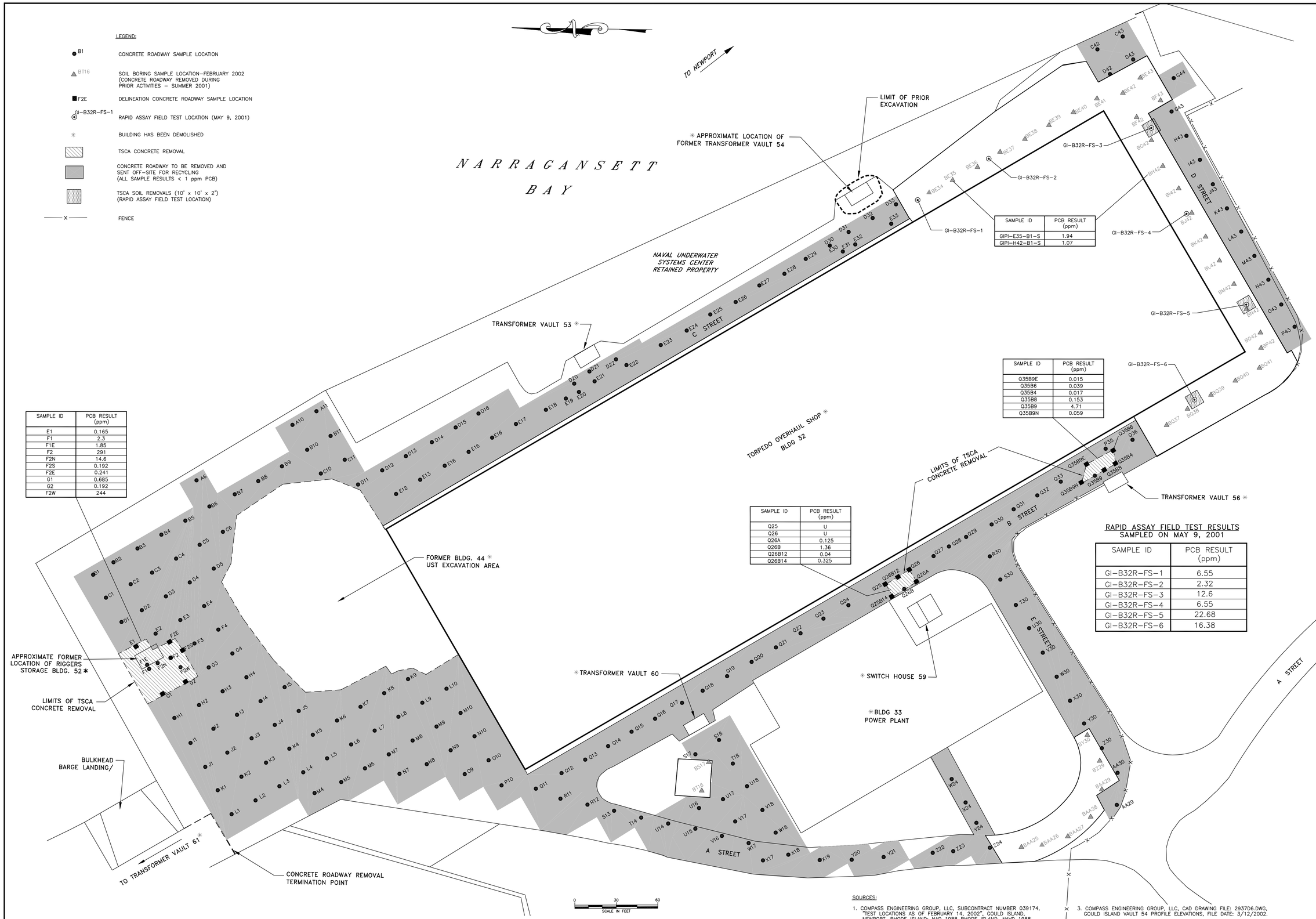
APPROVED DATE
EFANE FOR COMMANDER, NAVFAC

SAT TO	DATE 6/28/02
CODE I.D. NO.	80091
SCALE :	AS SHOWN
SPEC. NO.	
CONSTRN. CONTR. NO.	N62472-99-D-0032
NAVFAC DRAWING NO.	
SHEET 4	OF 10
SIZE: D	DIS. SH. NO. FIGURE 4

DATE CREATED
LATEST CHANGE

LEGEND:

- B1 — CONCRETE ROADWAY SAMPLE LOCATION
- BT16 — SOIL BORING SAMPLE LOCATION–FEBRUARY 2002 (CONCRETE ROADWAY REMOVED DURING PRIOR ACTIVITIES – SUMMER 2001)
- F2E — DELINEATION CONCRETE ROADWAY SAMPLE LOCATION
- GI–B32R–FS–1 — RAPID ASSAY FIELD TEST LOCATION (MAY 9, 2001)
- ✳ — BUILDING HAS BEEN DEMOLISHED
- TSCA CONCRETE REMOVAL
- CONCRETE ROADWAY TO BE REMOVED AND SENT OFF–SITE FOR RECYCLING (ALL SAMPLE RESULTS < 1 ppm PCB)
- TSCA SOIL REMOVALS (10' x 10' x 2') (RAPID ASSAY FIELD TEST LOCATION)
- X — FENCE



SAMPLE ID	PCB RESULT (ppm)
E1	0.165
F1	2.3
F1E	1.85
F2	291
F2N	14.6
F2S	0.192
F2E	0.241
G1	0.685
G2	0.192
F2W	244

SAMPLE ID	PCB RESULT (ppm)
GIPI–E35–B1–S	1.94
GIPI–H42–B1–S	1.07

SAMPLE ID	PCB RESULT (ppm)
Q35B9E	0.015
Q35B6	0.039
Q35B4	0.017
Q35B8	0.153
Q35B9	4.71
Q35B9N	0.059

SAMPLE ID	PCB RESULT (ppm)
Q25	U
Q26	U
Q26A	0.125
Q26B	1.36
Q26B12	0.04
Q26B14	0.325

RAPID ASSAY FIELD TEST RESULTS
SAMPLED ON MAY 9, 2001

SAMPLE ID	PCB RESULT (ppm)
GI–B32R–FS–1	6.55
GI–B32R–FS–2	2.32
GI–B32R–FS–3	12.6
GI–B32R–FS–4	6.55
GI–B32R–FS–5	22.68
GI–B32R–FS–6	16.38

SOURCES:

1. COMPASS ENGINEERING GROUP, LLC, SUBCONTRACT NUMBER 039174, "TEST LOCATIONS AS OF FEBRUARY 14, 2002", GOULD ISLAND, NEWPORT, RHODE ISLAND; NAD 1988 RHODE ISLAND, NAVD 1988, DRAWN: NBC, DATE: 2/14/02.
2. COMPASS ENGINEERING GROUP, LLC, "PROGRESS PRINT TEST AS OF 01–08–2002", GOULD ISLAND MANAGEMENT AREA, RHODE ISLAND DEPT. OF ENVIRONMENTAL MANAGEMENT, ASSUMED HORIZONTAL AND VERTICAL DATUM, PROJ. NO.: 2937, DWG. NO.: 2937WKS.DWG.
3. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D6.DWG, GOULD ISLAND VAULT 54 PROFILE ELEVATIONS, FILE DATE: 3/12/2002.
4. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D7.DWG, GOULD ISLAND ADDITIONAL TEST AS OF 3–7–2002, FILE DATE: 3/12/2002.
5. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D8.DWG, GOULD ISLAND BUILDING AND VAULTS, FILE DATE: 3/13/2002.

CAD FILE: NAVYRAC\GOULD ISLAND\PHASE II WORK PLAN REVISIONS\GOULD_WP_RPD_ASSAY_REV1.DWG

DATE CREATED
LATEST CHANGE

FOSTER WHEELER ENVIRONMENTAL CORPORATION

REV.	DESCRIPTION	PREP BY	DATE	APPRVD

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
LESTER PENNSYLVANIA

ENGINEERING FIELD ACTIVITY – NORTHEAST

GOULD ISLAND, NEWPORT, RHODE ISLAND

TSCA CONCRETE ROADWAY REMOVALS/RAPID ASSAY SOIL EXCAVATIONS

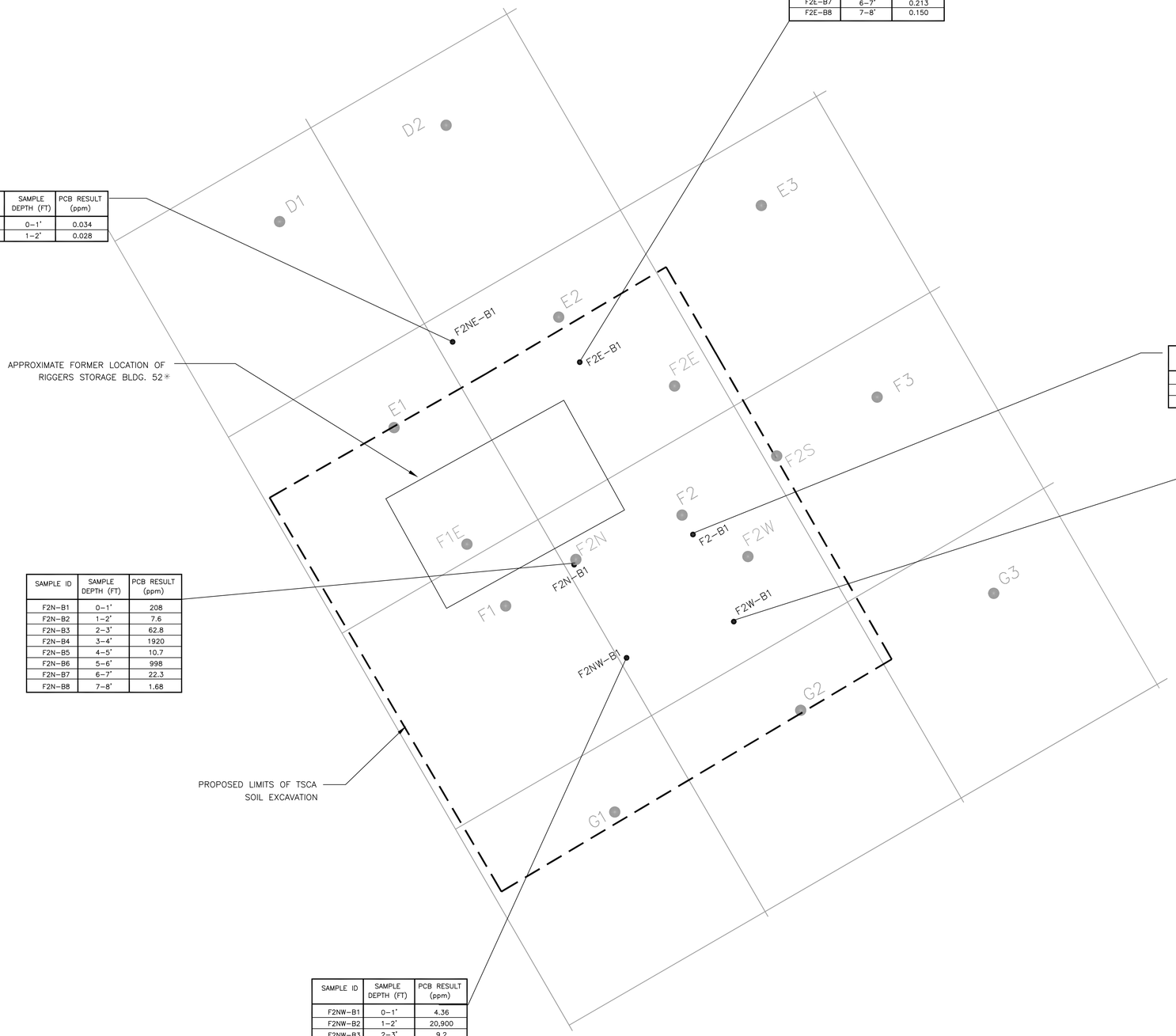
SEAL AREA

APPROVED: EFANE FOR COMMANDER, NAVFAC

SAT TO — DATE 6/28/02
CODE I.D. NO. 80091
SCALE : AS SHOWN
SPEC. NO.
CONSTRN. CONTR. NO. N62472–99–D–0032
NAVFAC DRAWING NO.
SHEET 5 OF 10
SIZE: D — DIS. SH. NO. FIGURE 5

SAMPLE ID	SAMPLE DEPTH (FT)	PCB RESULT (ppm)
F2E-B1	0-1'	0.455
F2E-B2	1-2'	30.8
F2E-B3	2-3'	0.038
F2E-B4	3-4'	1.7
F2E-B5	4-5'	0.07
F2E-B6	5-6'	0.035
F2E-B7	6-7'	0.213
F2E-B8	7-8'	0.150

SAMPLE ID	SAMPLE DEPTH (FT)	PCB RESULT (ppm)
F2NE-B1	0-1'	0.034
F2NE-B2	1-2'	0.028



SAMPLE ID	SAMPLE DEPTH (FT)	PCB RESULT (ppm)
F2-B1	0-1'	4.83
F2-B2	1-2'	0.057
F2-B3	2-3'	U

SAMPLE ID	SAMPLE DEPTH (FT)	PCB RESULT (ppm)
F2W-B1	0-1'	658
F2W-B2	1-2'	1.64
F2W-B3	2-3'	0.434

SAMPLE ID	SAMPLE DEPTH (FT)	PCB RESULT (ppm)
F2N-B1	0-1'	208
F2N-B2	1-2'	7.6
F2N-B3	2-3'	62.8
F2N-B4	3-4'	1920
F2N-B5	4-5'	10.7
F2N-B6	5-6'	998
F2N-B7	6-7'	22.3
F2N-B8	7-8'	1.68

SAMPLE ID	SAMPLE DEPTH (FT)	PCB RESULT (ppm)
F2NW-B1	0-1'	4.36
F2NW-B2	1-2'	20,900
F2NW-B3	2-3'	9.2
F2NW-B4	3-4'	0.599
F2NW-B5	4-5'	424
F2NW-B6	5-6'	8
F2NW-B7	6-7'	116
F2NW-B8	7-8'	0.463

CONCRETE ROADWAY SAMPLE RESULTS

CONCRETE SAMPLE ID	PCB RESULT (ppm)
D1	U
D2	0.115
E1	0.165
E2	0.056
E3	0.083
F1	2.3
F1E	1.85
F2	291
F2N	14.6
F2S	0.192
F2E	0.241
F2W	244
F3	0.12
G1	0.685
G2	0.192
G3	0.132

0 5 10
SCALE IN FEET

LEGEND

E1 CONCRETE SAMPLE LOCATION

SOIL BORINGS BENEATH CONCRETE ROADWAY

BUILDING HAS BEEN DEMOLISHED

CAD FILE: NAVYRAC\GOULD ISLAND\PHASE II WORK PLAN REVISIONS\GOULD_WP_F2_D.DWG

REV.	DESCRIPTION	PREP BY	DATE	APPRVD

FOSTER WHEELER ENVIRONMENTAL CORPORATION

DR: CH: CH ENG: (DATE) (TITLE) (TRIM MARGIN) SUBMITTED BY: SURV: DSGN:

HD: HD: DR: NORTHDIV DM: PPE: OFFICER IN CHARGE APPROVED DATE

NAVAL FACILITIES ENGINEERING COMMAND PENNSYLVANIA

DEPARTMENT OF THE NAVY

ENGINEERING FIELD ACTIVITY - NORTHEAST

LESTER

GOULD ISLAND, NEWPORT, RHODE ISLAND

TSCA SOIL BENEATH GRID F2

EFANE FOR COMMANDER, NAVFAC DATE APPROVED

SEAL AREA

SAT TO DATE 6/28/02

CODE I.D. NO. 80091

SCALE : AS SHOWN

SPEC. NO.

CONSTRN. CONTR. NO. N62472-99-D-0032

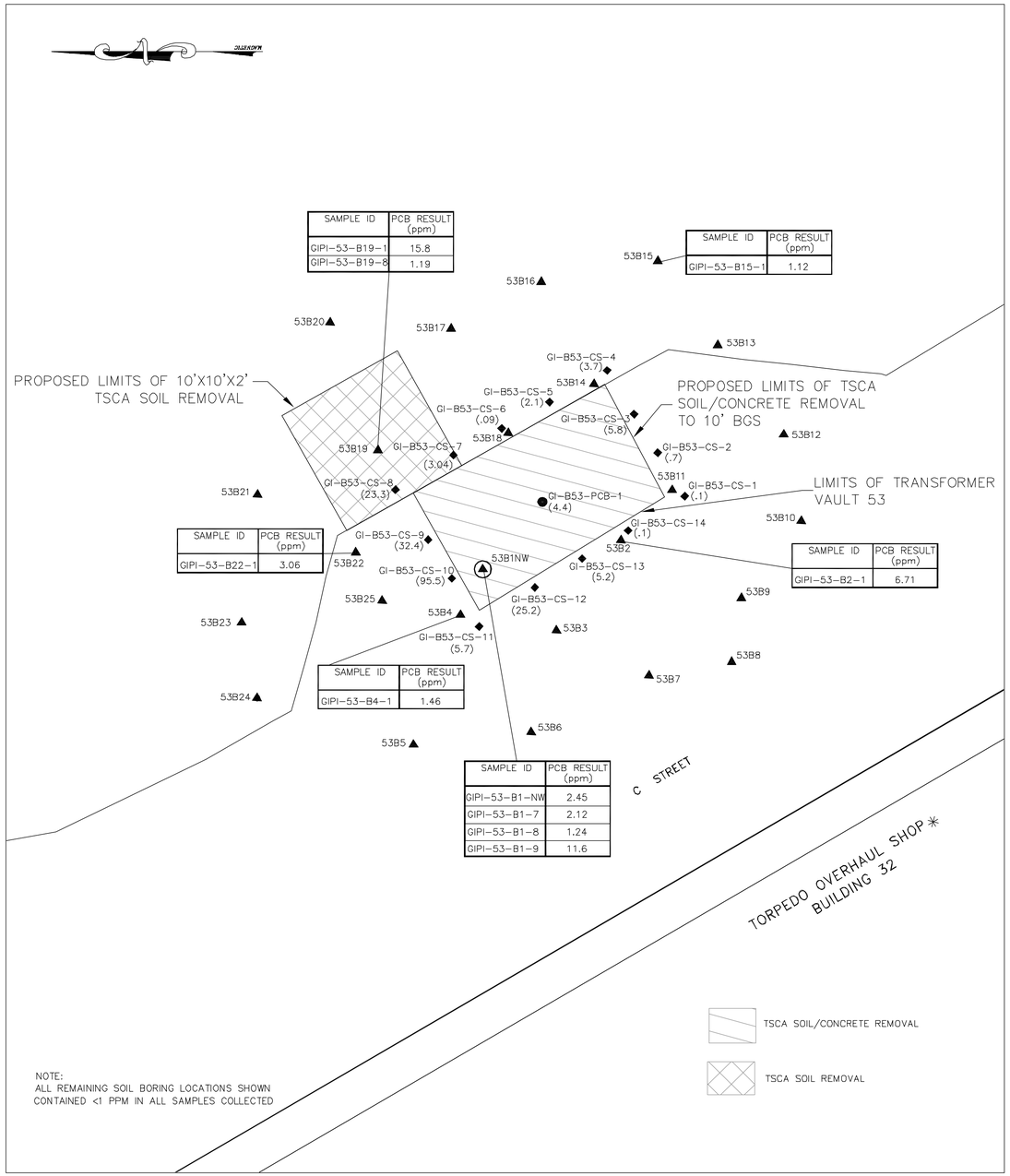
NAVFAC DRAWING NO.

SHEET 6 OF 10

SIZE: D

DIS. SH. NO. FIGURE 6

DATE CREATED
LATEST CHANGE



SAMPLE ID	PCB RESULT (ppm)
GIPI-53-B19-1	15.8
GIPI-53-B19-8	1.19

SAMPLE ID	PCB RESULT (ppm)
GIPI-53-B15-1	1.12

SAMPLE ID	PCB RESULT (ppm)
GIPI-53-B22-1	3.06

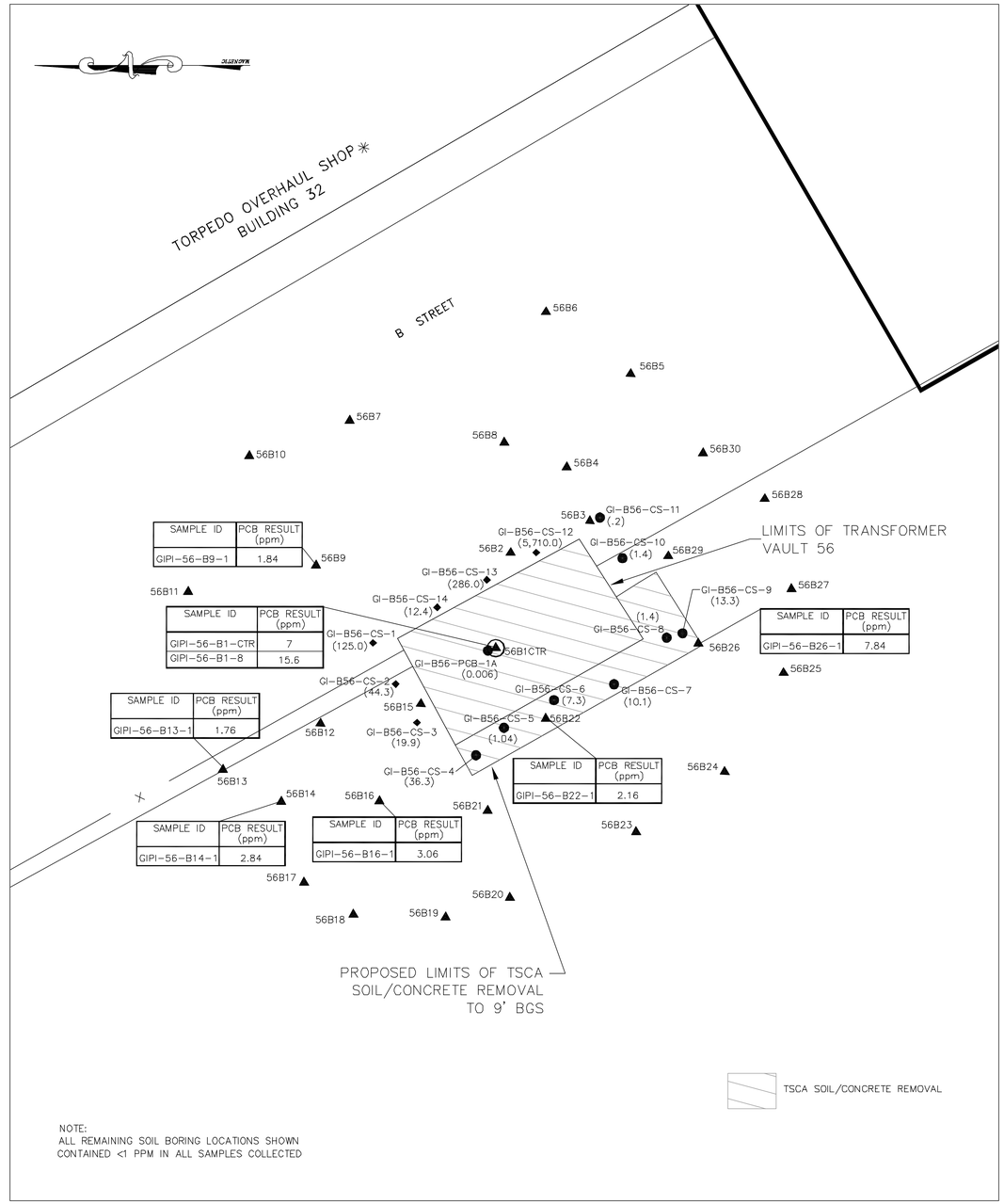
SAMPLE ID	PCB RESULT (ppm)
GIPI-53-B2-1	6.71

SAMPLE ID	PCB RESULT (ppm)
GIPI-53-B4-1	1.46

SAMPLE ID	PCB RESULT (ppm)
GIPI-53-B1-NW	2.45
GIPI-53-B1-7	2.12
GIPI-53-B1-8	1.24
GIPI-53-B1-9	11.6

TRANSFORMER VAULT 53 ✳

0 5 10
SCALE IN FEET



SAMPLE ID	PCB RESULT (ppm)
GIPI-56-B9-1	1.84

SAMPLE ID	PCB RESULT (ppm)
GIPI-56-B1-CTR	7
GIPI-56-B1-8	15.6

SAMPLE ID	PCB RESULT (ppm)
GIPI-56-B26-1	7.84

SAMPLE ID	PCB RESULT (ppm)
GIPI-56-B13-1	1.76

SAMPLE ID	PCB RESULT (ppm)
GIPI-56-B22-1	2.16

SAMPLE ID	PCB RESULT (ppm)
GIPI-56-B14-1	2.84

SAMPLE ID	PCB RESULT (ppm)
GIPI-56-B16-1	3.06

TRANSFORMER VAULT 56 ✳

0 5 10
SCALE IN FEET

LEGEND:

- ▲ SOIL BORING SAMPLE LOCATION
- ⓐ SOIL BORING SAMPLE LOCATION (ADDITIONAL ANALYSIS FOR TPH, VOCs AND SVOCs)
- ✳ BUILDING HAS BEEN DEMOLISHED
- ——X—— FENCE
- BGS BELOW GROUND SURFACE
- GI-B53-PCB-1 (4.4) ● APPROXIMATE LOCATION OF PREVIOUS SOIL SAMPLE (0"-6") WITH SAMPLE ID AND ANALYTICAL RESULT IN PARENTHESES
- GI-B53-CS-1 (.1) ◆ APPROXIMATE LOCATION OF PREVIOUS CONCRETE SURFACE SAMPLE (0"-1") WITH SAMPLE ID AND ANALYTICAL RESULT IN PARENTHESES. CONCRETE HAS BEEN DISPOSED OF AS TSCA WASTE.

SOURCES:

1. COMPASS ENGINEERING GROUP, LLC, SUBCONTRACT NUMBER 039174, "TEST LOCATIONS AS OF FEBRUARY 14, 2002", GOULD ISLAND, NEWPORT, RHODE ISLAND; NAD 1988 RHODE ISLAND, NAVD 1988, DRAWN: NBC, DATE: 2/14/02.
2. COMPASS ENGINEERING GROUP, LLC, "PROGRESS PRINT TEST AS OF 01-08-2002", GOULD ISLAND MANAGEMENT AREA, RHODE ISLAND DEPT. OF ENVIRONMENTAL MANAGEMENT, ASSUMED HORIZONTAL AND VERTICAL DATUM, PROJ. NO.: 2937, DWG. NO.: 2937WKS.DWG.
3. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D6.DWG, GOULD ISLAND VAULT 54 PROFILE ELEVATIONS, FILE DATE: 3/12/2002.
4. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D7.DWG, GOULD ISLAND ADDITIONAL TEST AS OF 3-7-2002, FILE DATE: 3/12/2002.
5. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D8.DWG, GOULD ISLAND BUILDING AND VAULTS, FILE DATE: 3/13/2002.

CAD FILE: NAVYRAC\GOULD ISLAND\PHASE II WORK PLAN REVISIONS\GOULD_WP_VAULT_53_56_REV1.DWG

FOSTER WHEELER ENVIRONMENTAL CORPORATION

REV.	DESCRIPTION	PREP BY	DATE	APPRVD
1	ADDITION OF SAMPLE RESULTS > 1 PPM PCBs			

DESIGN: DR: CH. ENG.
SUPV: DR:
SUBMITTED BY: (TITLE) (DATE)
TITRA NUMBER(S)
NORTHDIV HD:
DIV. HD:
FPC: DR:
OFFICER IN CHARGE DATE
APPROVED

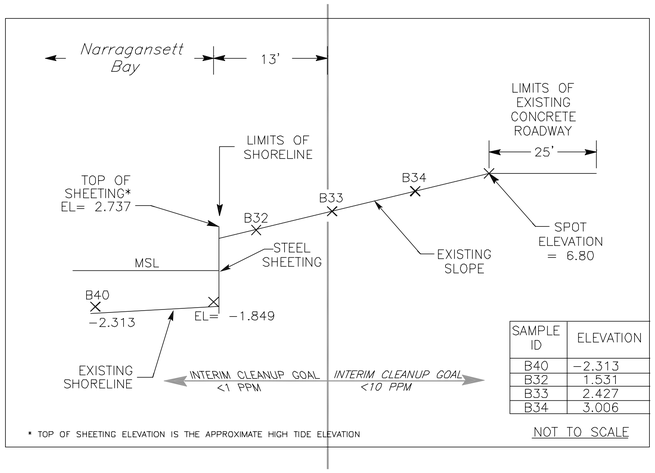
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
ENGINEERING FIELD ACTIVITY – NORTHEAST
LESTER PENNSYLVANIA

GOULD ISLAND, NEWPORT, RHODE ISLAND
SOIL SAMPLE RESULTS – TRANSFORMER VAULT NOS. 53 AND 56

EFANE FOR COMMANDER, NAVFAC
APPROVED DATE

SEAL AREA

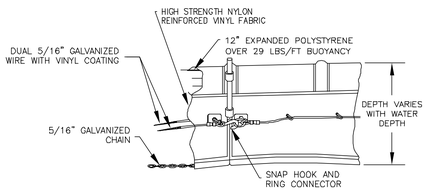
SAT TO	DATE 6/28/02
CODE I.D. NO.	80091
SCALE :	AS SHOWN
SPEC. NO.	
CONSTRN. CONTR. NO.	N62472-99-D-0032
NAVFAC DRAWING NO.	
SHEET 7	OF 10
SIZE: D	DIS. SH. NO. FIGURE 7



SAMPLE ID	ELEVATION
B40	-2.313
B32	1.531
B33	2.427
B34	3.006

NOT TO SCALE

* TOP OF SHEETING ELEVATION IS THE APPROXIMATE HIGH TIDE ELEVATION



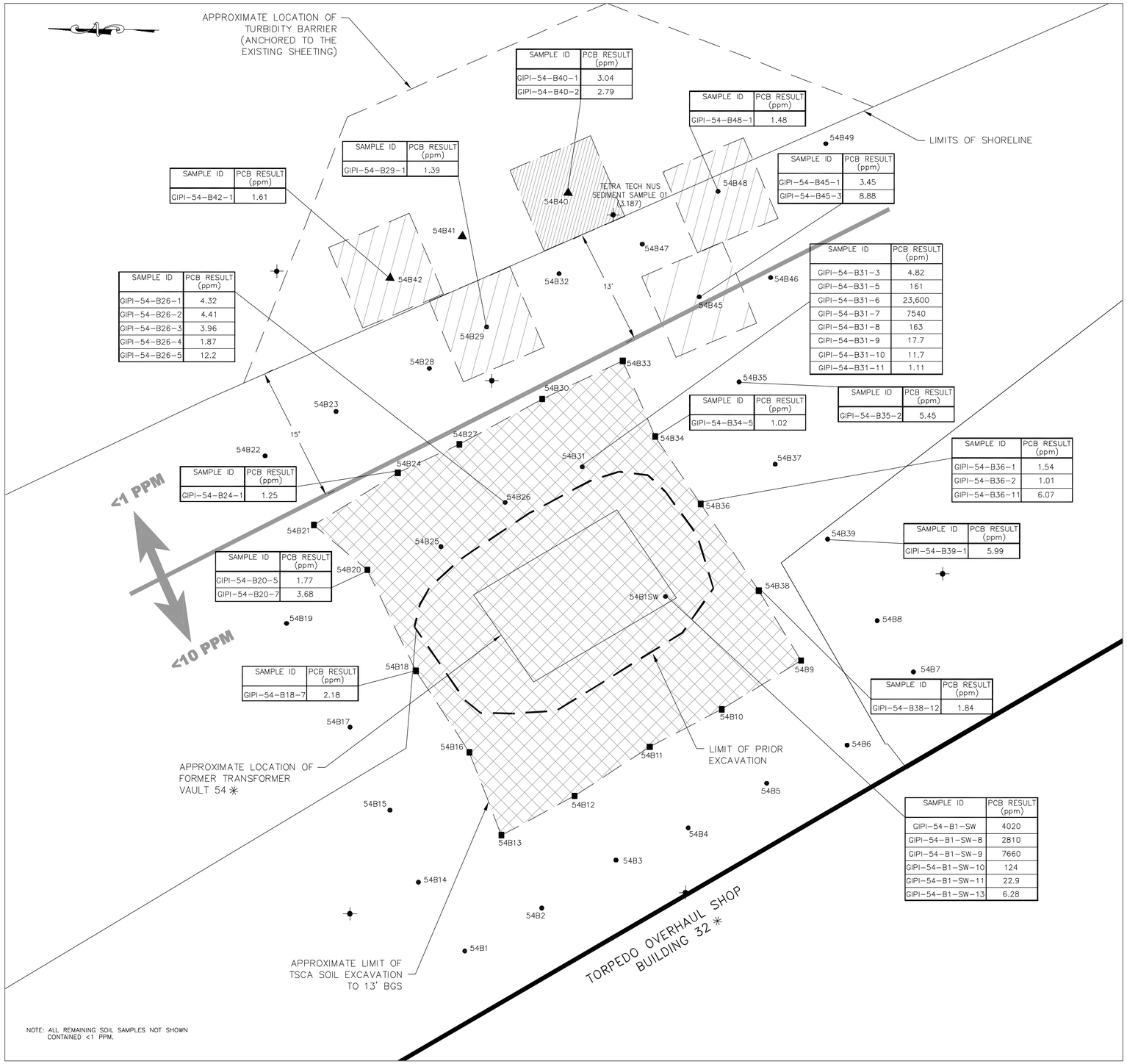
TURBIDITY BARRIER
NOT TO SCALE

NOTES:
1. SHALL BE CONSTRUCTED OF HIGH VISIBILITY MATERIAL.
2. BARRIER SHALL BE SIZED TO EXTEND TO THE WATER BODY BOTTOM.

LEGEND

- SOIL BORING LOCATION
- SEDIMENT SAMPLE LOCATION
- DELINEATION SOIL BORING – ALL SAMPLE RESULTS <10 PPM
- APPROXIMATE LOCATION OF PREVIOUS SAMPLE PERFORMED BY TETRA-TECH NUS
- TSCA SOIL EXCAVATION
- TSCA SOIL/SEDIMENT EXCAVATION TO 2' BGS
- TSCA SOIL/SEDIMENT EXCAVATION TO 3' BGS
- TSCA SOIL/SEDIMENT EXCAVATION TO 4' BGS
- BUILDING HAS BEEN DEMOLISHED
- PROPOSED LIMIT OF 10 PPM/1 PPM INTERIM CLEAN-UP GOAL
- BGS — BELOW GROUND SURFACE

SOURCES:
1. COMPASS ENGINEERING GROUP, LLC, SUBCONTRACT NUMBER 039174, "TEST LOCATIONS AS OF FEBRUARY 14, 2002", GOULD ISLAND, NEWPORT, RHODE ISLAND; NAD 1988 RHODE ISLAND, NAVD 1988, DRAWN: NBC, DATE: 2/14/02.
2. COMPASS ENGINEERING GROUP, LLC, "PROGRESS PRINT TEST AS OF 01-08-2002", GOULD ISLAND MANAGEMENT AREA, RHODE ISLAND DEPT. OF ENVIRONMENTAL MANAGEMENT, ASSUMED HORIZONTAL AND VERTICAL DATUM, PROJ. NO.: 2937, DWG. NO.: 2937WKS.DWG.
3. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D6.DWG, GOULD ISLAND VAULT 54 PROFILE ELEVATIONS, FILE DATE: 3/12/2002.
4. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D7.DWG, GOULD ISLAND ADDITIONAL TEST AS OF 3-7-2002, FILE DATE: 3/12/2002.
5. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D8.DWG, GOULD ISLAND BUILDING AND VAULTS, FILE DATE: 3/13/2002.



SAMPLE ID	PCB RESULT (ppm)
GIPI-54-B40-1	3.04
GIPI-54-B40-2	2.79

SAMPLE ID	PCB RESULT (ppm)
GIPI-54-B48-1	1.48

SAMPLE ID	PCB RESULT (ppm)
GIPI-54-B29-1	1.39

SAMPLE ID	PCB RESULT (ppm)
GIPI-54-B45-1	3.45
GIPI-54-B45-3	8.88

SAMPLE ID	PCB RESULT (ppm)
GIPI-54-B42-1	1.61

SAMPLE ID	PCB RESULT (ppm)
GIPI-54-B31-3	4.82
GIPI-54-B31-5	161
GIPI-54-B31-6	23,600
GIPI-54-B31-7	7540
GIPI-54-B31-8	163
GIPI-54-B31-9	17.7
GIPI-54-B31-10	11.7
GIPI-54-B31-11	1.11

SAMPLE ID	PCB RESULT (ppm)
GIPI-54-B26-1	4.32
GIPI-54-B26-2	4.41
GIPI-54-B26-3	3.96
GIPI-54-B26-4	1.87
GIPI-54-B26-5	12.2

SAMPLE ID	PCB RESULT (ppm)
GIPI-54-B34-5	1.02

SAMPLE ID	PCB RESULT (ppm)
GIPI-54-B35-2	5.45

SAMPLE ID	PCB RESULT (ppm)
GIPI-54-B36-1	1.54
GIPI-54-B36-2	1.01
GIPI-54-B36-11	6.07

SAMPLE ID	PCB RESULT (ppm)
GIPI-54-B24-1	1.25

SAMPLE ID	PCB RESULT (ppm)
GIPI-54-B39-1	5.99

SAMPLE ID	PCB RESULT (ppm)
GIPI-54-B20-5	1.77
GIPI-54-B20-7	3.68

SAMPLE ID	PCB RESULT (ppm)
GIPI-54-B18-7	2.18

SAMPLE ID	PCB RESULT (ppm)
GIPI-54-B38-12	1.84

SAMPLE ID	PCB RESULT (ppm)
GIPI-54-B1-SW	4020
GIPI-54-B1-SW-8	2810
GIPI-54-B1-SW-9	7660
GIPI-54-B1-SW-10	124
GIPI-54-B1-SW-11	22.9
GIPI-54-B1-SW-13	6.28

NOTE: ALL REMAINING SOIL SAMPLES NOT SHOWN CONTAINED <1 PPM.

TRANSFORMER VAULT 54 *

0 6 12
SCALE IN FEET

CAD FILE: NAVYRAC\GOULD ISLAND\PHASE II WORK PLAN_REVISIONS\GOULD_WP_VAULT_54_REV1.DWG

REV.	DESCRIPTION	PREP BY	DATE	APPRVD
1	ADDITION OF SAMPLE RESULTS > 1 PPM PCBs			

FOSTER WHEELER ENVIRONMENTAL CORPORATION

DR: CHK: CH. ENG.
TOOL: SURV. SUBMITTED BY: (TITLE) (DATE)
NORTHDIV DIV. HD: HD: DR: FPC:
OFFICER IN CHARGE DATE
APPROVED

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
LESTER PENNSYLVANIA

ENGINEERING FIELD ACTIVITY – NORTHEAST

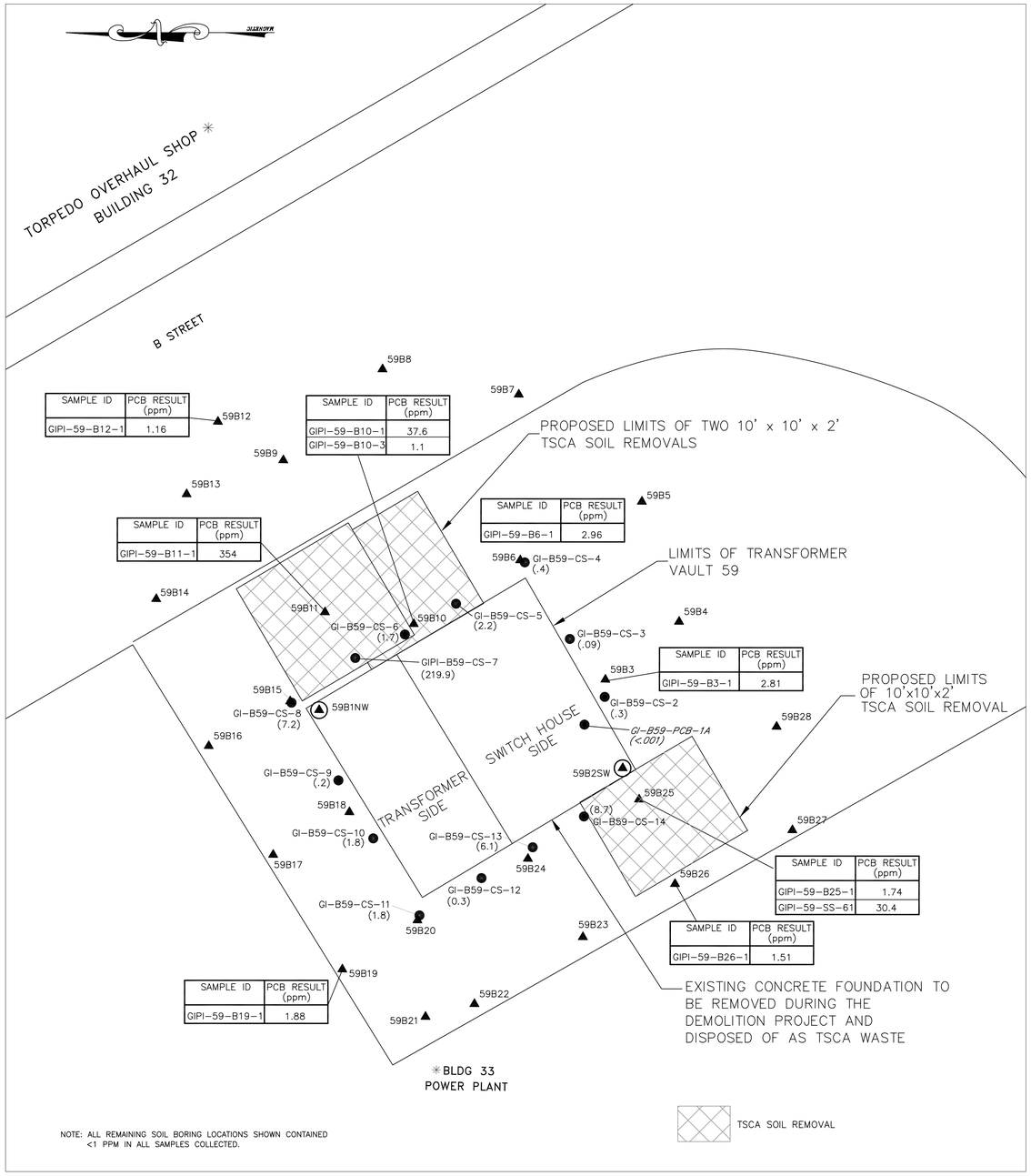
GOULD ISLAND, NEWPORT, RHODE ISLAND

SAMPLE RESULTS – TRANSFORMER VAULT NO. 54

EFANE FOR COMMANDER, NAVFAC
APPROVED DATE

SEAL AREA

SAT TO DATE 6/28/02
CODE I.D. NO. 80091
SCALE : AS SHOWN
SPEC. NO. 04-
CONSTRN. CONTR. NO. N62472-99-D-0032
NAVFAC DRAWING NO.
SHEET 8 OF 10
SIZE: D
DIS. SH. NO. FIGURE 8



SAMPLE ID	PCB RESULT (ppm)
GIPI-59-B12-1	1.16

SAMPLE ID	PCB RESULT (ppm)
GIPI-59-B10-1	37.6
GIPI-59-B10-3	1.1

SAMPLE ID	PCB RESULT (ppm)
GIPI-59-B11-1	354

SAMPLE ID	PCB RESULT (ppm)
GIPI-59-B6-1	2.96

SAMPLE ID	PCB RESULT (ppm)
GIPI-59-B3-1	2.81

SAMPLE ID	PCB RESULT (ppm)
GIPI-59-B25-1	1.74
GIPI-59-SS-61	30.4

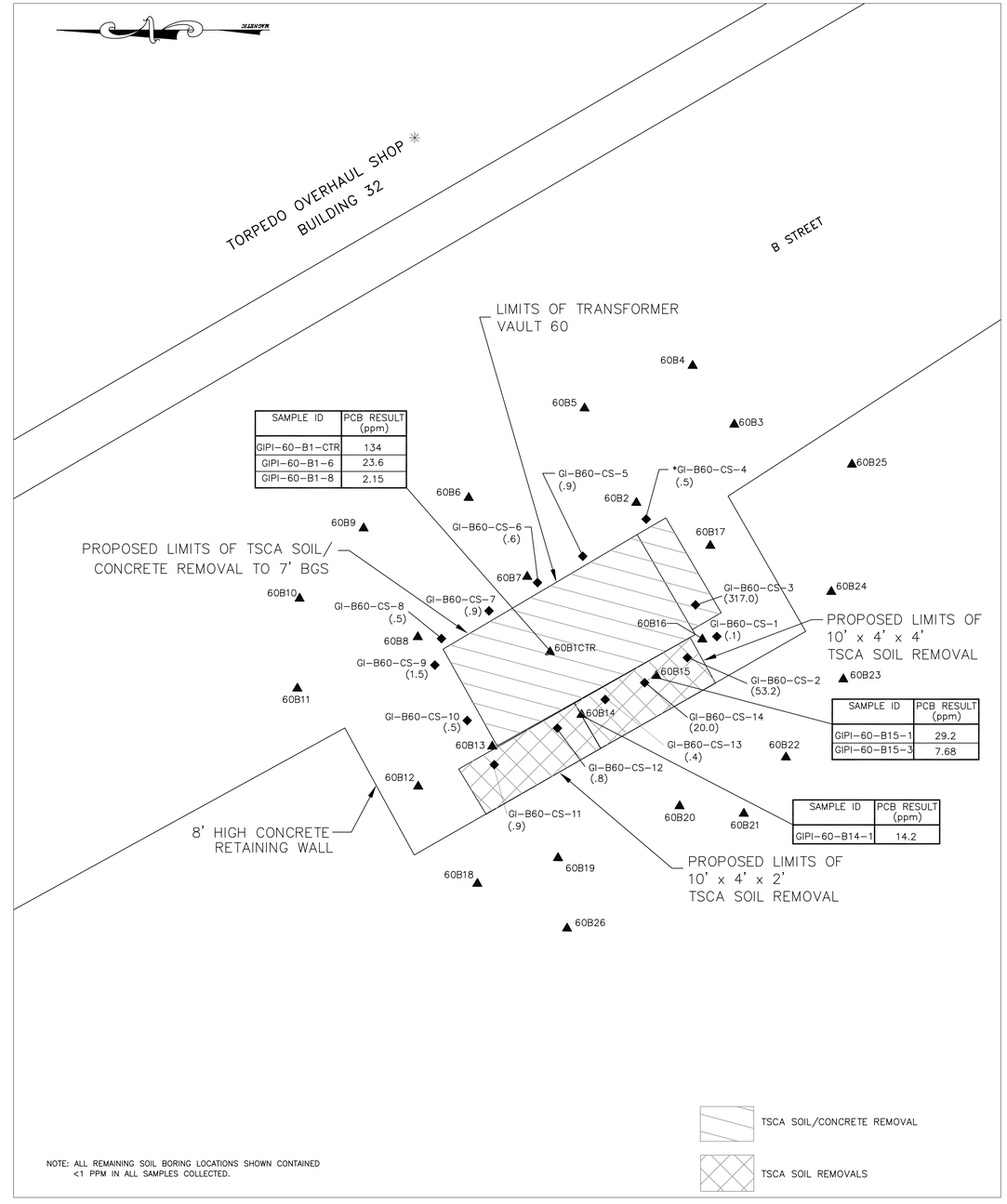
SAMPLE ID	PCB RESULT (ppm)
GIPI-59-B26-1	1.51

SAMPLE ID	PCB RESULT (ppm)
GIPI-59-B19-1	1.88

NOTE: ALL REMAINING SOIL BORING LOCATIONS SHOWN CONTAINED <1 PPM IN ALL SAMPLES COLLECTED.

SWITCH HOUSE 59 *

0 5 10
SCALE IN FEET



SAMPLE ID	PCB RESULT (ppm)
GIPI-60-B1-CTR	134
GIPI-60-B1-6	23.6
GIPI-60-B1-8	2.15

SAMPLE ID	PCB RESULT (ppm)
GIPI-60-B15-1	29.2
GIPI-60-B15-3	7.68

SAMPLE ID	PCB RESULT (ppm)
GIPI-60-B14-1	14.2

NOTE: ALL REMAINING SOIL BORING LOCATIONS SHOWN CONTAINED <1 PPM IN ALL SAMPLES COLLECTED.

TRANSFORMER VAULT 60 *

0 5 10
SCALE IN FEET

LEGEND:

- ▲ SOIL BORING SAMPLE LOCATION
- (▲) SOIL BORING SAMPLE LOCATION (ADDITIONAL ANALYSIS FOR TPH, VOCs AND SVOCs)
- * BUILDING HAS BEEN DEMOLISHED
- ● APPROXIMATE LOCATION OF PREVIOUS SOIL SAMPLE (0"–6") WITH RESULT (10.1)
- ◆ PREVIOUS CONCRETE SURFACE SAMPLE (0"–1") WITH RESULT (317.0)

SOURCES:

1. COMPASS ENGINEERING GROUP, LLC, SUBCONTRACT NUMBER 039174, "TEST LOCATIONS AS OF FEBRUARY 14, 2002", GOULD ISLAND, NEWPORT, RHODE ISLAND; NAD 1988 RHODE ISLAND, NAVD 1988, DRAWN: NBC, DATE: 2/14/02.
2. COMPASS ENGINEERING GROUP, LLC, "PROGRESS PRINT TEST AS OF 01–08–2002", GOULD ISLAND MANAGEMENT AREA, RHODE ISLAND DEPT. OF ENVIRONMENTAL MANAGEMENT, ASSUMED HORIZONTAL AND VERTICAL DATUM, PROJ. NO.: 2937, DWG. NO.: 2937WKS.DWG.
3. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D6.DWG, GOULD ISLAND VAULT 54 PROFILE ELEVATIONS, FILE DATE: 3/12/2002.
4. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D7.DWG, GOULD ISLAND ADDITIONAL TEST AS OF 3–7–2002, FILE DATE: 3/12/2002.
5. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D8.DWG, GOULD ISLAND BUILDING AND VAULTS, FILE DATE: 3/13/2002.

CAD FILE: NAVYRAC\GOULD ISLAND\PHASE II WORK PLAN_REVISIONS\GOULD_WP_VAULT_59_60_REV1.DWG

REV.	DESCRIPTION	PREP BY	DATE	APPRVD
1	ADDITION OF SAMPLE RESULTS > 1 PPM PCBs			

FOSTER WHEELER ENVIRONMENTAL CORPORATION

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
LESTER PENNSYLVANIA

ENGINEERING FIELD ACTIVITY – NORTHEAST

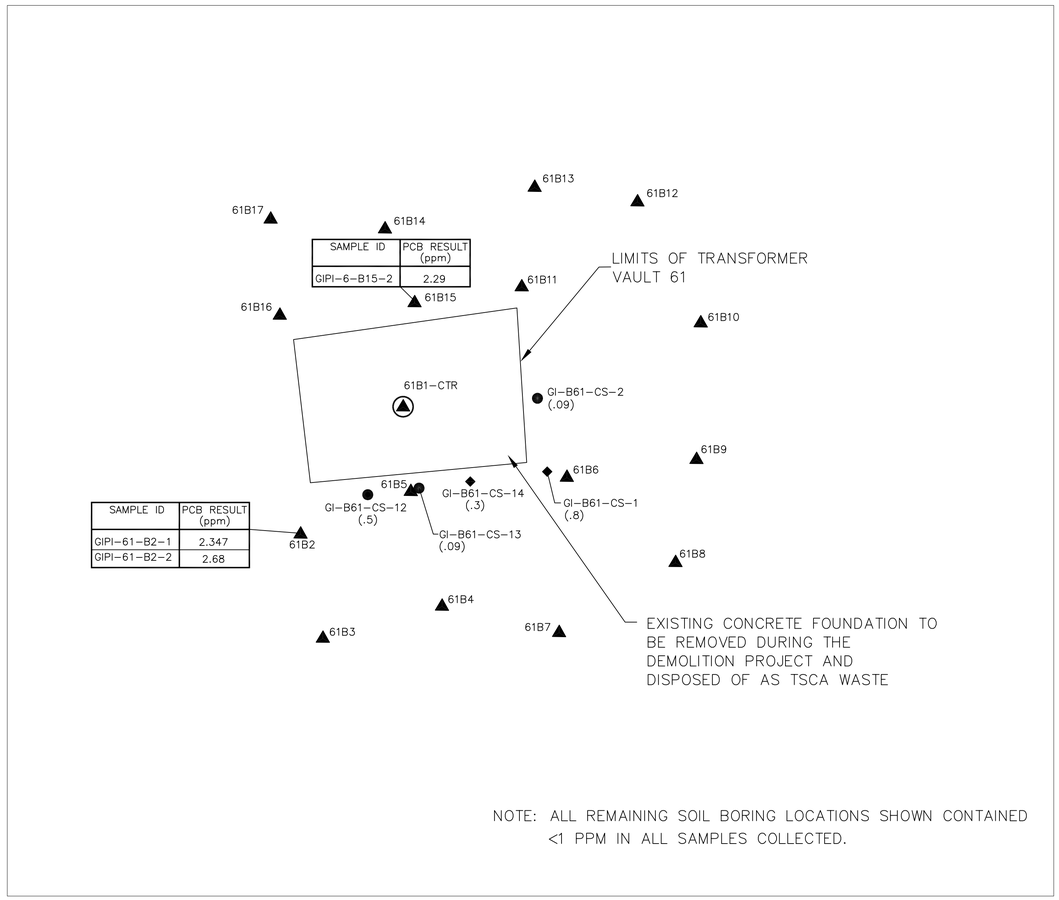
GOULD ISLAND, NEWPORT, RHODE ISLAND

SOIL SAMPLE RESULTS – TRANSFORMER VAULT NOS. 59 AND 60

EFANE FOR COMMANDER, NAVFAC

SEAL AREA

SAT TO	DATE 6/28/02
CODE I.D. NO.	80091
SCALE :	AS SHOWN
SPEC. NO.	
CONSTRN. CONTR. NO.	N62472–99–D–0032
NAVFAC DRAWING NO.	
SHEET 9	OF 10
SIZE: D	DIS. SH. NO. FIGURE 9

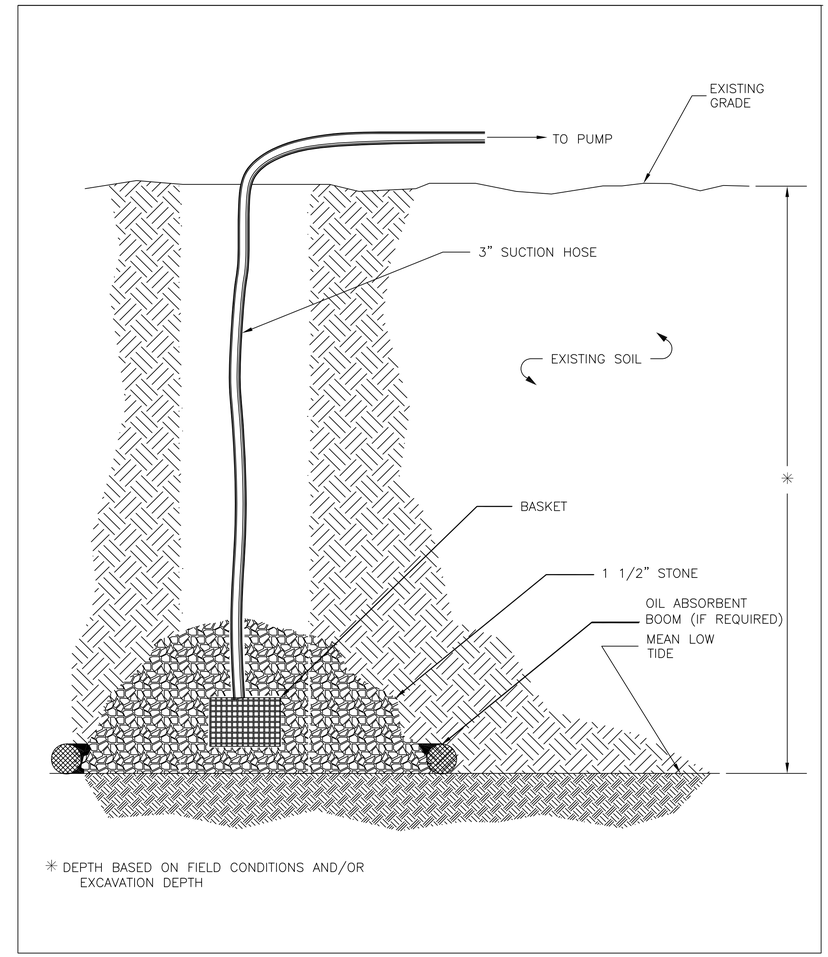


SAMPLE ID	PCB RESULT (ppm)
GIPI-6-B15-2	2.29

SAMPLE ID	PCB RESULT (ppm)
GIPI-61-B2-1	2.347
GIPI-61-B2-2	2.68

TRANSFORMER VAULT 61✳

0 5 10
SCALE IN FEET



DEWATERING DETAIL

NOT TO SCALE

LEGEND:

- ▲ SOIL BORING SAMPLE LOCATION
- ⊛ SOIL BORING SAMPLE LOCATION (ADDITIONAL ANALYSIS FOR TPH, VOCs AND SVOCs)
- ✳ BUILDING HAS BEEN DEMOLISHED
- ● APPROXIMATE LOCATION OF PREVIOUS SOIL SAMPLE (0"–6") WITH RESULT (10.1)
- ◆ PREVIOUS CONCRETE SURFACE SAMPLE (0"–1") WITH RESULT (317.0)

SOURCES:

1. COMPASS ENGINEERING GROUP, LLC, SUBCONTRACT NUMBER 039174, "TEST LOCATIONS AS OF FEBRUARY 14, 2002", GOULD ISLAND, NEWPORT, RHODE ISLAND; NAD 1988 RHODE ISLAND, NAVD 1988, DRAWN: NBC, DATE: 2/14/02.
2. COMPASS ENGINEERING GROUP, LLC, "PROGRESS PRINT TEST AS OF 01–08–2002", GOULD ISLAND MANAGEMENT AREA, RHODE ISLAND DEPT. OF ENVIRONMENTAL MANAGEMENT, ASSUMED HORIZONTAL AND VERTICAL DATUM, PROJ. NO.: 2937, DWG. NO.: 2937WKS.DWG.
3. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D6.DWG, GOULD ISLAND VAULT 54 PROFILE ELEVATIONS, FILE DATE: 3/12/2002.
4. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D7.DWG, GOULD ISLAND ADDITIONAL TEST AS OF 3–7–2002, FILE DATE: 3/12/2002.
5. COMPASS ENGINEERING GROUP, LLC, CAD DRAWING FILE: 2937D8.DWG, GOULD ISLAND BUILDING AND VAULTS, FILE DATE: 3/13/2002.

REV.	DESCRIPTION	PREP BY	DATE	APPRVD
1	ADDITION OF SAMPLE RESULTS > 1 PPM PCBs			

FOSTER WHEELER ENVIRONMENTAL CORPORATION

DR: CHK: CH ENG:
SUPV: (TITLE) (DATE)
SUBMITTED BY: (TITLE)
(FIRM NAME(S))
NORTHDIV HD:
DM: HD:
PFE: DR:
OFFICER IN CHARGE
APPROVED DATE

NAVAL FACILITIES ENGINEERING COMMAND
DEPARTMENT OF THE NAVY
ENGINEERING FIELD ACTIVITY – NORTHEAST
LESTER PENNSYLVANIA

GOULD ISLAND, NEWPORT, RHODE ISLAND
TRANSFORMER VAULT NO. 61/DEWATERING DETAIL

APPROVED DATE
ETANE FOR COMMANDER, NAVFAC

SEAL AREA

SAT TO DATE 6/28/02
CODE I.D. NO. 80091
SCALE : AS SHOWN
SPEC. NO.
CONSTRN. CONTR. NO. N62472-99-D-0032
NAVFAC DRAWING NO.
SHEET 10 OF 10
SIZE: D
DIS. SH. NO. FIGURE 10

DATE CREATED
LATEST CHANGE

CAD FILE: NAVYRAC\GOULD ISLAND\PHASE II WORK PLAN_REVISIONS\GOULD_WP_VAULT_61_REV1.DWG

APPENDIX A-2

SUPPLEMENTAL SITE INVESTIGATION
QUAD THREE GROUP, INC.
JANUARY 1997

FILE COPY ⇒ WR# 40-026-96 A

SUPPLEMENTAL SITE INVESTIGATION

Naval Education and Training Center
Building 44 - Gould Island
Newport, Rhode Island

Q3G Project No. 5782.08

Prepared For:

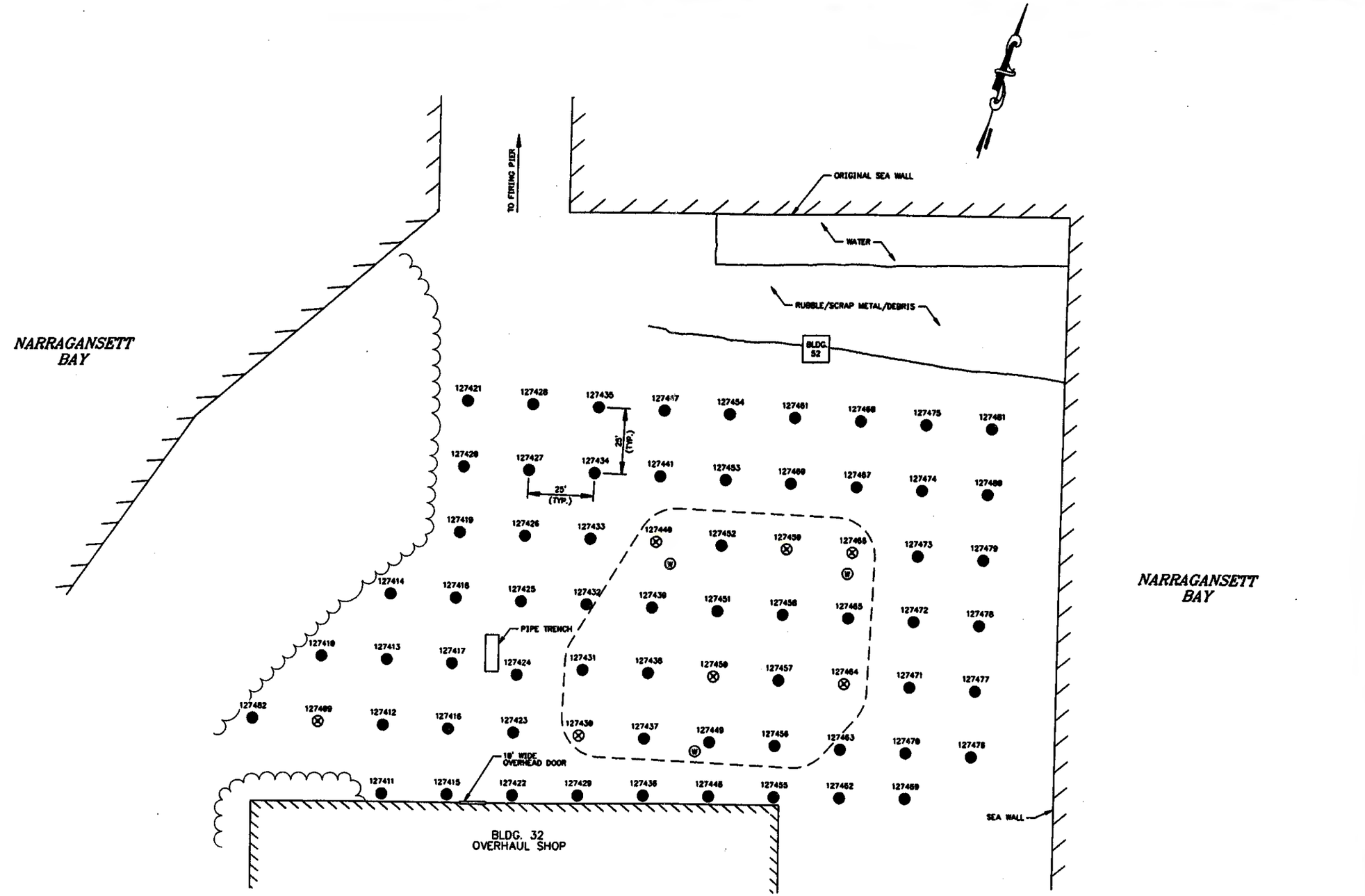
NAVAL EDUCATION TRAINING CENTER
Newport, Rhode Island

Prepared By:

QUAD THREE GROUP, INC.
37 North Washington Street
Wilkes-Barre, PA 18701
Telephone: (717)829-4200

QUAD THREE GROUP INCORPORATED

Date: January, 1997



SITE PLAN

SCALE: 1"=40'

LEGEND

- ⊗ LOCATION OF SOIL SAMPLES FOR QUANTITATIVE ANALYSIS
- ● LOCATION OF SOIL SAMPLES
- Ⓦ EXISTING MONITORING WELLS
- EXISTING TREELINE
- APPROXIMATE BOUNDARY OF EXCAVATION

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

QUAD THREE GROUP, INC. architects engineers environmental scientists 37 north washington street wilkes-barre, pa. 18701 717-829-4200

SOIL SAMPLE LOCATION PLAN

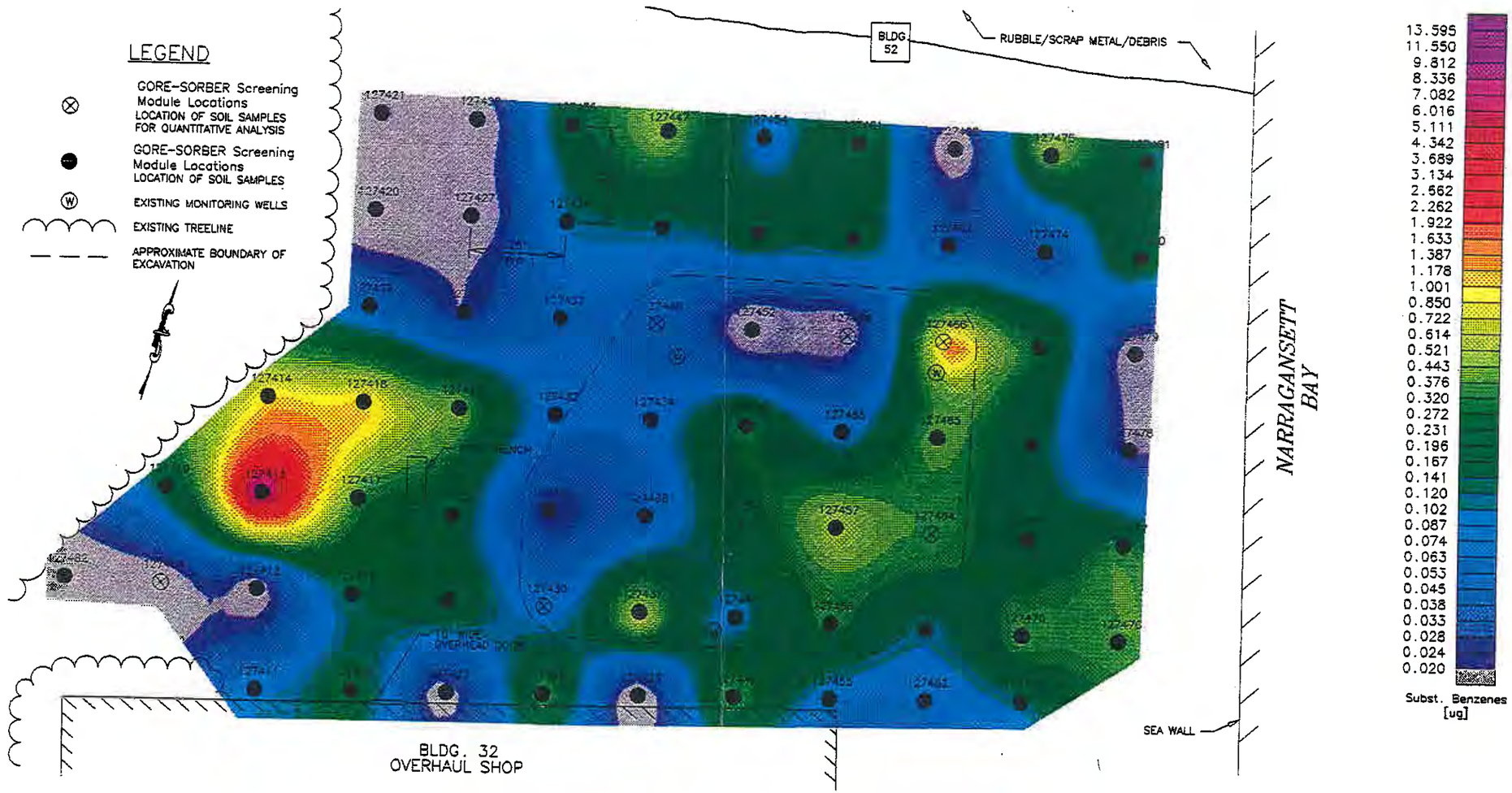
1"=40'

GORE SORBER SOIL SURVEY
BORING PLAN
BUILDING 64 (FORMER PARKHOUSE)
GOULD ISLAND, NARRAGANSETT BAY
JAMESTOWN, RHODE ISLAND

FIG. 2

SELECT SUBSTITUTED BENZENES

Building 44 (Former Pumphouse) Site, Gould Island, Jamestown, RI



Scale 1:360

25 0 25

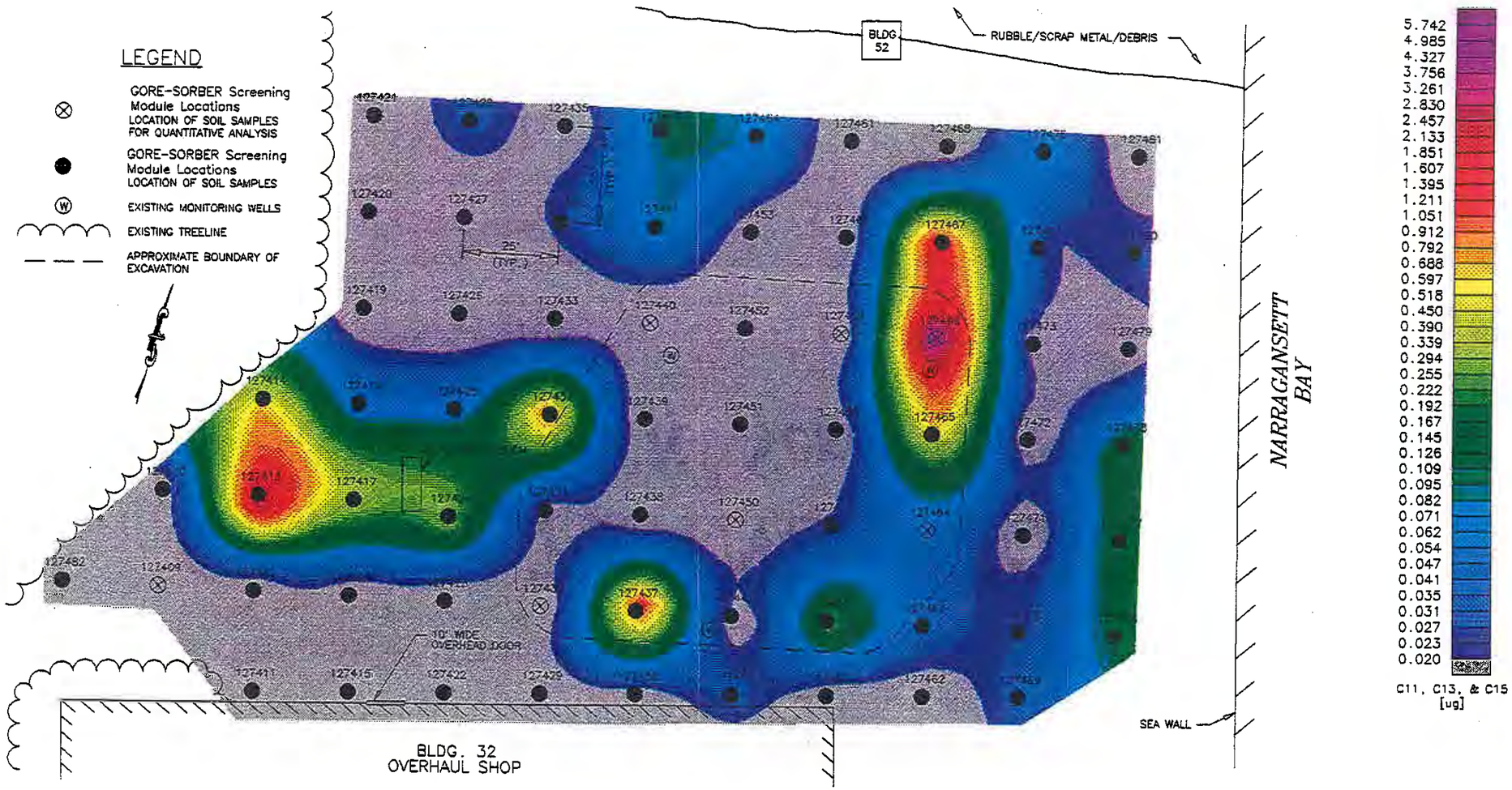
(feet)

QUAD THREE GROUP INCORPORATED

Figure 3

UNDECANE, TRIDECANE, & PENTADECANE

Building 44 (Former Pumphouse) Site, Gould Island, Jamestown, RI



Scale 1:360

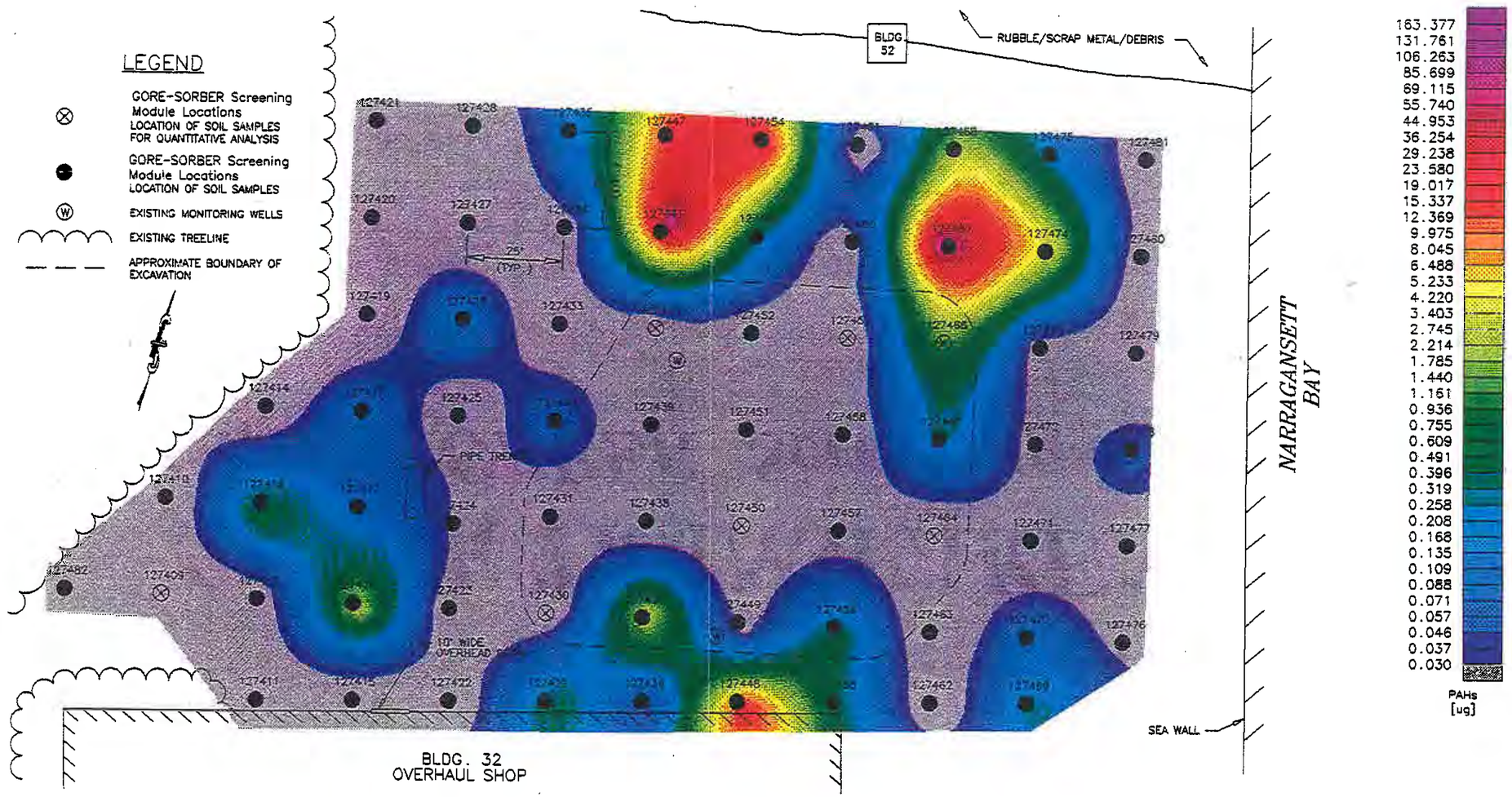
25 0 25 (feet)

QUAD THREE GROUP INCORPORATED

Figure 4

COMBINED TARGET PAHs

Building 44 (Former Pumphouse) Site, Gould Island, Jamestown, RI



Scale 1:360

25 0 25

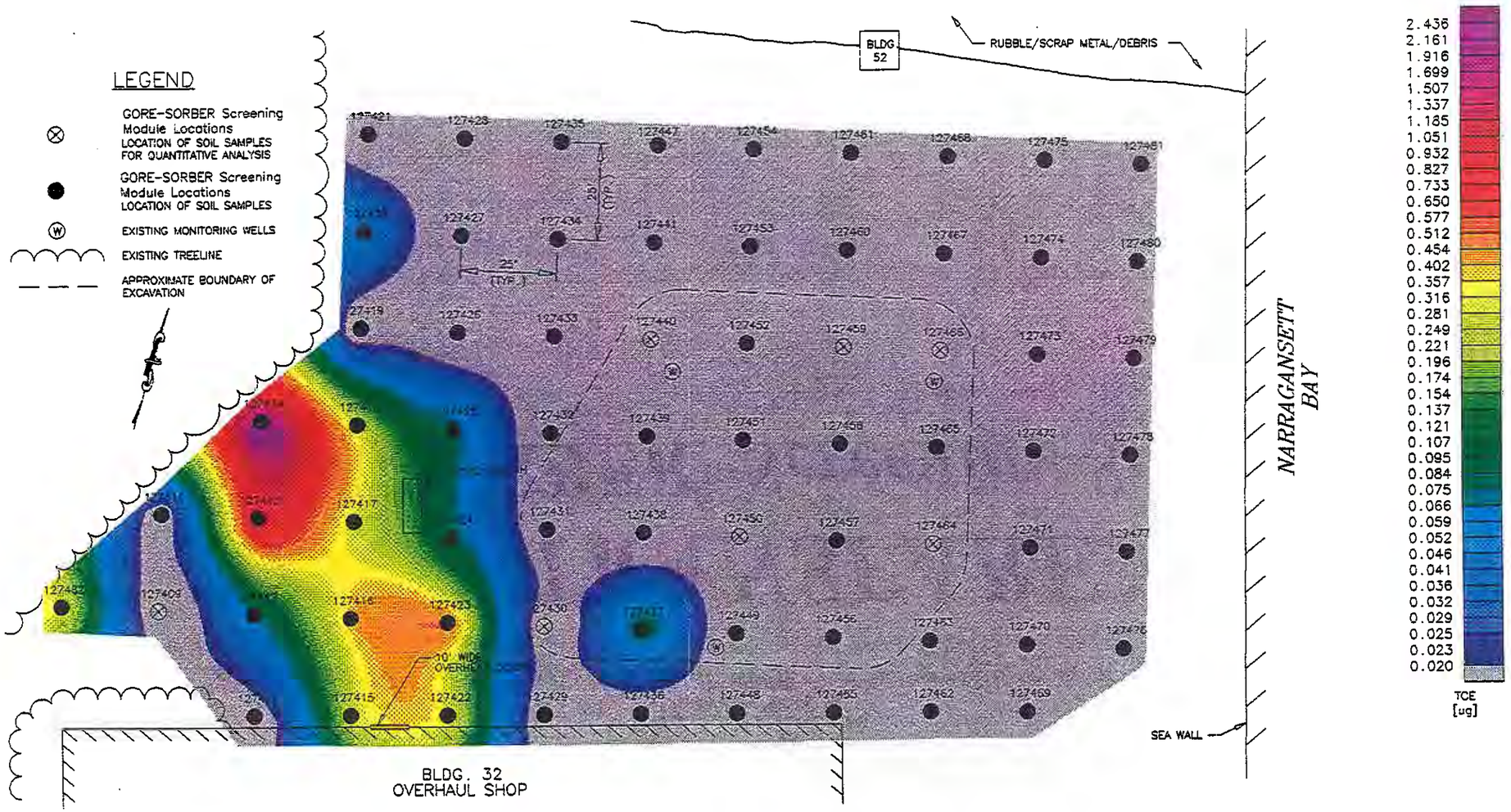
(feet)

QUAD THREE GROUP INCORPORATED

Figure 5

TRICHLOROETHENE

Building 44 (Former Pumphouse) Site, Gould Island, Jamestown, RI



Scale 1:360

25 0 25

(feet)

QUAD THREE GROUP INCORPORATED

Figure 6

APPENDIX B

EPA SEDIMENT SAMPLING REPORT, GOULD ISLAND AND OFFTA SITES, 2003

TETRA TECH NUS, INC.
55 Jonspin Road • Wilmington, MA 01887-1020
Tel 978.658.7899 • Fax 978.658.7870 • www.tetratech.com

0498

C-NAVY-01-04-1686W

January 30, 2004

Project Number N5152

Mr. Curtis Frye
Remedial Project Manager
EFA Northeast, Naval Facilities Engineering Command
10 Industrial Highway, Mail Stop 82
Lester, Pennsylvania 19113

Reference: CLEAN Contract No. N62467-94-D-0888
Contract Task Order No. 0842

Subject: EPA Report on Sediment Sampling
Gould Island and Coasters Harbor
Naval Station Newport, Newport Rhode Island

Dear Mr. Frye:

Enclosed you will find the EPA report on sediment sample collection and analysis that they conducted near Gould Island and at Coasters Harbor, proximal to Naval Station Newport Sites 17 and 09, respectively.

Data collected were compared with ERL, ERM and AET which are ecological-based reference values for marine sediment. Data provided in this report indicate presence of PCBs in excess of the ERM values at six of 22 stations at Gould Island, and PAHs in excess of ERM values at two of twelve stations at Coasters Harbor. Several metals including cyanide were detected at low concentrations near Gould Island.

This information should be taken into consideration for future sediment investigations at these sites.

Very truly yours,

Stephen S. Parker, LSP
Project Manager

SSP/rp

Attachment

c: D. Barclift, EFANE (w/encl. – 1)
T. Bober, EFANE (w/encl. – 1)
A. Cerise, NSN (w/encl. - 1)
J. Trepanowski/G. Glenn, TtNUS (w/o encl.)
File N5152-3.2 (w/o encl.)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1 New England
Office of Environmental Measurement and Evaluation
11 Technology Drive, North Chelmsford, MA 01863

Memorandum

Date: December 3, 2003

Subj: Naval Education and Training Center Superfund Site
Newport, MA

From: Lisa Thuot - EIA Field Investigations Team
Jerry Keefe - EIA Field Investigations Team

To: Kymberlee Keckler, HBT

On September 29-30, 2003, Dan Granz, Jerry Keefe, Bill Osbahr, and Lisa Thuot of the USEPA Investigations & Analysis Unit collected marine sediment samples from locations in the Naval Education and Training Center Superfund Site in Newport, RI. EIA was assisted by the USEPA Office of Research & Development's Atlantic Ecology Division (AED) from Narragansett, RI. A site reconnaissance was conducted on September 29, 2003, and maps with approximate sampling locations were provided to the sampling team.

Gould Island 0-6" sediment samples were collected with a petit ponar dredge deployed from the EIA boat, or a hydraulic sediment dredge deployed from the AED boat. Sediment cores were collected with equipment from the AED boat. Samples from Coasters' Harbor Island were collected at the island shoreline during low tide. Each sediment sample was homogenized before dispensing into containers.

Some unforeseen issues were encountered when trying to collect sediment cores. The 12-18" interval at ARD1 did not yield sediment, and the rocky bottom at GISD6 did not yield a core sample. Coring equipment could not be deployed at GISD12 due to rough water conditions and a mechanical problem with the AED boat. At location FS-1, coring equipment loss occurred. EIA can conduct additional sampling at the site in spring/summer 2004 as necessary.

Gould Island samples (GISD, ARD, FS series) were analyzed for total metals, cynanide, and polychlorinated biphenyls (PCBs) and Coasters' Harbor Island samples (FTA series) were analyzed for polycyclic aromatic hydrocarbons (PAHs) at the EPA New England Regional Laboratory in North Chelmsford, MA. Laboratory analytical reports are enclosed for review.

Other attachments include:
- Key/list of Sample ID numbers originally assigned to each sampling location.
- Field data (including sample location, date, and time, sediment depth, water depth, and descriptions).

Results were compared with ELR, ERM, and AET* values from NOAA Screening Quick Reference Tables (SQUIRTs) for marine sediment. Results that were found to exceed one or more of these SQUIRT reference values are highlighted below.

Metals:

Sample ID	Parameter	Result (mg/Kg)	Result in ppb	ELR (ppb)	ERM (ppb)	AET (ppb)
ARD1b	Cu Pb	44 51	44,000 51,000	34,000 46,700	270,000 218,000	390,000 400,000
FS2	Pb	67	67,000	46,700	218,000	400,000
GISD10	Cu	100	100,000	34,000	270,000	390,000
GISD12	Mn	280	280,000	-	-	260,000 N

N = Neanthes bioassays

PCBs:

Sample ID	Compound	Result (mg/Kg)	Result in ppb	ELR (ppb)	ERM (ppb)	AET (ppb)
ARD1a	Aroclor-1260	0.14	140	22.7	180	130 M
ARD1b	Aroclor-1260	0.45	450	22.7	180	130 M
ARD2	Aroclor-1260	0.52	520	22.7	180	130 M
ARD5	Aroclor-1260	0.23	230	22.7	180	130 M
ARD9	Aroclor-1260	0.49	490	22.7	180	130 M
FS2	Aroclor-1260	2.0	2000	22.7	180	130 M
GISD1	Aroclor-1260	0.17	170	22.7	180	130 M
GISD3	Aroclor-1260	0.18	180	22.7	180	130 M
GISD4	Aroclor-1260	0.13	130	22.7	180	130 M
GISD5	Aroclor-1260	0.11	110	22.7	180	130 M

M = Microtox

* ERL = Effects Range-Low; ERM = Effects Range-Median; AET = Apparent Effect Threshold

Cyanide*:

Sample ID	Result (mg/Kg)
ARD1a	0.21
ARD1b	0.44
ARD2	0.32
GISD6	0.18
GISD6D	0.23
GISD7	0.41

* Please note SQUIRT values for cynanide in sediment were not available for comparison purposes. All other locations not listed above were either not detected or below the laboratory reporting limit.

PAHs:

Compound	ERL (ppb)	AET (ppb)	ERM (ppb)	Sample #s above ERL (please see results)	Samples #s above AET (please see results)	Samples #s above ERM (please see results)
Acenaphthene	16	130 E	500	FTA1 - FTA9; FTA11	None	None
Acenaphthylene	44	71 E	640	FTA2; FTA4 - FTA9	FTA2; FTA5 - FTA9	None
Anthracene	85.3	280 E	1100	FTA1 - FTA11	FTA2; FTA4 - FTA7	None
Benzo(a)anthracene	261	960 E	1600	FTA1 - FTA11	FTA1 - FTA2; FTA4 - FTA8	None
Benzo(a)pyrene	430	1100 E	1600	FTA1 - FTA9; FTA11	FTA4	None
Benzo(b)fluoranthene	-	-	1800 EI	None	None	None
Benzo(g,h,i)perylene	-	-	670 M	None	None	None
Benzo(k)fluoranthene	-	-	1800 EI	None	None	None
Chrysene	384	950 E	2800	FTA1 - FTA9; FTA11	FTA2; FTA5; FTA9	None
Dibenzo(a,h)anthracene	63.4	230 OM	260	FTA1 - FTA2; FTA4; FTA6 - FTA7	None	None
Fluoranthene	600	1300E	5100	FTA1 - FTA11	FTA1 FTA2; FTA4 - FTA8	None
Fluorene	19	120 E	540	FTA1 - FTA11	FTA4	None
Ideno(1,2,3-cd)pyrene	-	-	600 M	None	None	None
Naphthalene	160	230 E	2100	None	None	None
Phenanthrene	240	660 E	1500	FTA1 - FTA11	FTA1 - FTA9; FTA11	None
Pyrene	665	2400 E	2600	FTA1 - FTA11	FTA4; FTA6; FTA7	FTA4; FTA6

E = Echinoderm larvae
O = Oyster larvae
M = Microtox
I = Infaunal community impacts

The SQUIRT source used for this data comparison is located on the following website: http://response.restoration.noaa.gov/cpr/sediment/squirt/squirt.html

Geographic Information System (GIS) maps outlining the site and sampling locations will follow this report at a later date.

If you have any questions regarding this report, please contact Lisa Thuot at 8-8366 or Jerry Keefe at 8-8376.

Naval Ed. and Training Center Superfund Site Sampling (9/29/03-9/30/03)

Sample Location	Sample Date	Sample Time	Sedmt. Depth	Water Depth	Location Description	Sample Description	Site Information, other comments
ARD-1a	09/29/03	13:35	0-6"	18'	GI - Acid Resistant Drain Area	Dark, black, silty, sandy w/ shells, etc.	Sediment core. Sampled w/ AED boat.
ARD-1b	09/29/03	13:35	6-12"	18'	GI - Acid Resistant Drain	Same as ARD-1a	Sediment core. Could not collect 12-18" interval. Sampled w/ AED boat.
ARD-2	09/29/03	13:00	0-6"	30'	GI - Acid Resistant Drain Area	Black, dark silt w/ shells, etc.	Sampled w/ AED boat.
ARD-3	09/30/03	12:30	0-6"	23'	GI - Acid Resistant Drain Area	Fine, silty material, dark brown w/ some shell debris	Sampled w/ AED boat.
ARD-4	09/30/03	12:20	0-6"	18.8'	GI - Acid Resistant Drain Area	Thick, medium to fine/silty. Some organic & shell debris.	Sampled w/ AED boat.
ARD-5	09/30/03	11:50	0-6"	36.5'	GI - Acid Resistant Drain Area	Thick, medium to fine grained, dark brown, w/ significant shell debris.	Sampled w/ AED boat.
ARD-6	09/30/03	11:40	0-6"	41.4'	GI - Acid Resistant Drain Area	Thick, med. to fine grained, dark brown, sign. shell/organic material	Sampled w/ AED boat.
ARD-7	09/30/03	11:25	0-6"	40.3'	GI - Acid Resistant Drain Area	Thick, med-sized grains w/ organic & shell debris, dark brown.	Sampled w/ AED boat.
ARD-8	09/30/03	11:15	0-6"	38'	GI - Acid Resistant Drain Area	Fine, silty, dark brown w/ significant shell debris	Sampled w/ AED boat.
ARD-9	09/30/03	12:00	0-6"	26.4'	GI - Acid Resistant Drain Area	Thick, dark brown, fine, w/ significant shell debris	Sampled w/ AED boat.
FS-1	09/30/03	14:00	0-6"	10.9'	GI - Ferry Slip	Med. To coarse sand & pebbles w/ some organic & shell debris.	Sampled w/ AED boat. Could not collect core due to equipment loss.
FS-2	09/30/03	12:00	0-6"	5.7'	GI - Ferry Slip	Med. to coarse sandy material, w/ eel grass	Sampled w/ AED boat tied to EIA boat.
FTA-1	09/30/03	16:40	0-6"	n/a	CI - Fire training area	Med. to coarse sandy material.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-2	09/30/03	16:45	0-6"	n/a	CI - Fire training area	Med. to coarse sandy material.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-3	09/30/03	16:55	0-6"	n/a	CI - Fire training area	Med. to coarse sand and silt; black/brown. Strong petroleum odor.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-4	09/30/03	17:00	0-6"	n/a	CI - Fire training area	Med. to fine sand/silt. Petroleum odor & slight sheen observed.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.

Naval Ed. and Training Center Superfund Site Sampling (9/29/03-9/30/03)

Sample Location	Sample Date	Sample Time	Sedmt. Depth	Water Depth	Location Description	Sample Description	Site Information, other comments
FTA-5	09/30/03	17:03	0-6"	n/a	CI - Fire training area	Med. to fine brown sand/silt. Slight petroleum odor.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-6	09/30/03	17:07	0-6"	n/a	CI - Fire training area	Med. to fine sand/silt. No odor.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-7	09/30/03	17:13	0-6"	n/a	CI - Fire training area	Med. to coarse sand, brown, no odor.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-8	09/30/03	17:16	0-6"	n/a	CI - Fire training area	Med. to coarse sand, brown, no odor.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-9	09/30/03	17:18	0-6"	n/a	CI - Fire training area	Med. to coarse sand, brown, no odor.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-10	09/30/03	17:33	0-6"	n/a	CI - Fire training area	Med. to coarse sand and gravel, no odor.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-11	09/30/03	17:36	0-6"	n/a	CI - Fire training area	Med. to coarse sand and gravel, no odor.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-12	09/30/03	17:42	0-6"	n/a	CI - Fire training area	Coarse gravel & sand. Pebbles & rocks (~1-3") covered sample location.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
GISD-1	09/30/03	14:29	0-4"	18.7'	GI - island perimeter	Brownish gray w/ shell material.	Sampled w/ EIA boat.
GISD-3	09/30/03	11:50	0-4"	14'	GI - island perimeter	Grayish silty sand w/ shells.	Sampled w/ EIA boat.
GISD-4	09/30/03	11:26	0-4"	17'	GI - island perimeter	Grayish silty sand, some brown color mixed in.	Sampled w/ EIA boat.
GISD-5	09/30/03	10:50	0-4"	25'	GI - island perimeter	Grayish dark silty sand w/ mussel, periwinkle, cherrystone shells (none alive).	Field duplicate taken (GISD-5D). Sampled w/ EIA boat.
GISD-6	09/30/03	10:25	0-6"	12'	GI - island south side	Fines, dark brown, silt-sized w/ some sand-sized mixed in.	Field duplicate taken (GISD-6D). Sampled w/ AED boat.
GISD-6a	09/30/03	15:00	0-6"	28.0'	GI - island south side	Fine, silty brown. Minimal to no organic or shell material.	Couldn't collect core (insufficient sed. depth). Sampled w/ AED boat.
GISD-7	09/29/03	14:37	0-6"	18'	GI - island perimeter (18" outfall pipe)	Black, grayish silty sand	Sampled w/ AED boat.

Naval Ed. and Training Center Superfund Site Sampling (9/29/03-9/30/03)

Sample Location	Sample Date	Sample Time	Sedmt. Depth	Water Depth	Location Description	Sample Description	Site Information, other comments
GISD-8	09/29/03	14:48	0-6"	6-10'	GI - island perimeter (8" outfall)	Black/gray silty sand	Sampled w/ AED boat.
GISD-10	09/29/03	15:01	0-6"	6-10'	GI - along perimeter	Gray silty sand, eel grass.	Field duplicate taken (GISD-10D). Sampled w/ AED boat.
GISD-11	09/29/03	14:00	0-6"	20'	GI - along perimeter	Black, grayish silty sand w/ some shells	Sampled w/ AED boat.
GISD-12	09/30/03	14:20	0-6"	123'	GI - deep water	Very fine silt, light brown color.	Sampled w/ AED boat.
GISD-12a	09/30/03	14:30	0-6"	119'	GI - deep water	Very fine silt, light brown color.	Field duplicate taken (GISD-12aD). Sampled w/ AED boat.

Sample IDs for Newport Naval Ed. Training Ctr. Sampling (9/29/03-9/30/03)

Sample ID	Depth (in.)	Description	Sample collected?
ARD-1a	0-6	GI sediment core - Acid Resistant Drain area	Yes
ARD-1b	6-12	GI sediment core - Acid Resistant Drain area	Yes
ARD-1c	12-18	GI sediment core - Acid Resistant Drain area	Sediment did not extend to this depth
ARD-2	0-6	GI sediment - Acid Resistant Drain area	Yes
ARD-3	0-6	GI sediment - Acid Resistant Drain area	Yes
ARD-4	0-6	GI sediment - Acid Resistant Drain area	Yes
ARD-5	0-6	GI sediment - Acid Resistant Drain area	Yes
ARD-6	0-6	GI sediment - Acid Resistant Drain area	Yes
ARD-7	0-6	GI sediment - Acid Resistant Drain area	Yes
ARD-8	0-6	GI sediment - Acid Resistant Drain area	Yes
ARD-9	0-6	GI sediment - Acid Resistant Drain area	Yes
FS-1a	0-6	GI sediment core - Ferry Slip	Could not collect sed. core due to equipment loss. See sample FS-1
FS-1b	6-12	GI sediment core - Ferry Slip	Could not collect sed. core due to equipment loss. See sample FS-1
FS-1c	12-18	GI sediment core - Ferry Slip	Could not collect sed. core due to equipment loss. See sample FS-1
FS-2	0-6	GI sediment - Ferry Slip	Yes
FTA-1	0-6	CHI sediment - Fire training area	Yes
FTA-2	0-6	CHI sediment - Fire training area	Yes
FTA-3	0-6	CHI sediment - Fire training area	Yes
FTA-4	0-6	CHI sediment - Fire training area	Yes
FTA-5	0-6	CHI sediment - Fire training area	Yes
FTA-6	0-6	CHI sediment - Fire training area	Yes
FTA-7	0-6	CHI sediment - Fire training area	Yes
FTA-8	0-6	CHI sediment - Fire training area	Yes
FTA-9	0-6	CHI sediment - Fire training area	Yes
FTA-10	0-6	CHI sediment - Fire training area	Yes
FTA-11	0-6	CHI sediment - Fire training area	Yes
FTA-12	0-6	CHI sediment - Fire training area	Yes
GISD-1	0-6	GI sediment - along island perimeter	Yes
GISD-2	0-6	GI sediment - along island perimeter	Not collected due to an oversight.
GISD-3	0-6	GI sediment - along island perimeter	Yes
GISD-4	0-6	GI sediment - along island perimeter	Yes
GISD-5	0-6	GI sediment - along island perimeter	Yes
GISD-6	0-6	GI sediment - along island perimeter	Yes
GISD-6a1	0-6	GI sediment core	No, insufficient sediment at location. See alternate sample GISD-6a
GISD-6a2	6-12	GI sediment core	No, insufficient sediment at location. See alternate sample GISD-6a
GISD-6a3	12-18	GI sediment core	No, insufficient sediment at location. See alternate sample GISD-6a
GISD-7	0-6	GI sediment - along island perimeter	Yes
GISD-8	0-6	GI sediment - along island perimeter	Yes
GISD-9	0-6	GI sediment - along island perimeter	No: Location cancelled on 9/29/03.
GISD-10	0-6	GI sediment - along island perimeter	Yes
GISD-11	0-6	GI sediment - along island perimeter	Yes
GISD-12	0-6	GI sediment - in deep water	Yes
GISD-12a	0-6	GI sediment - in deep water	Yes

Key: GI = Gould Island; CHI = Coasters Harbor Island

Sample IDs for Newport Naval Ed. Training Ctr. Sampling (9/29/03-9/30/03)

Sample ID	Depth (in.)	Description	Sample collected?
GISD-12b1	0-6	GI sediment core in deep water	Could not collect sed. core due to rough waters & boat malfunction.
GISD-12b2	6-12	GI sediment core in deep water	Could not collect sed. core due to rough waters & boat malfunction.
GISD-12b3	12-18	GI sediment core in deep water	Could not collect sed. core due to rough waters & boat malfunction.

Key: GI = Gould Island; CHI = Coasters Harbor Island

EPA
Region 1, New England

United States Environmental Protection Agency
Office of Environmental Measurement & Evaluation
11 Technology Drive
North Chelmsford, MA 01863-2431

Laboratory Report

October 23, 2003

Ms Kim Keckler - HBT
USEPA New England, Region 1
One Congress Street
Boston, MA 02114 - 2023

Project Number: 03100001
Project: Naval Ed. Training Center
Analysis: PCBs Medium Level in Soils and Sediments
Analyst: Paul Carroll 11/6/03

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, PESTSOIL2.SOP.

The analysis was performed using high resolution capillary column chromatography on a Hewlett Packard 5890 Series II gas chromatograph equipped with dual electron capture detectors. The 30 meter dual capillary column system consists of a J&W DB-5 and J&W DB-1701, both with 0.25mm ID and 0.25 micron film thickness.

The results are reported on a dry weight basis.

Date Samples Received by the Laboratory: 10/1/03

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8333.

Sincerely,

11/13/03

Dr. William J. Andrade
Advanced Analytical Chemistry Specialist

Qualifiers	RL	Reporting limit
	ND	Not Detected above Reporting limit
	NA	Not Applicable due to high sample dilutions or sample interferences
	J	Estimated value
	E	Estimated value exceeds the calibration range
	L	Estimated value is below the calibration range
	B	Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
	P	The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.
	C	The identification has been confirmed by GC/MS.
	R	No recovery was calculated since the analyte concentration is greater than four times the spike level.

US ENVIRONMENTAL PROTECTION AGENCY
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Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD2	Lab Sample ID:	AA34773
Date of Collection:	9/29/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/6/03	Percent Solids:	82%
Dry Weight Extracted:	4.64 grams	Extract Dilution:	1
Wet Weight Extracted:	5.65 grams		

ppm

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	**0.52**	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	83	36 - 131
Decachlorobiphenyl	89	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 51%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD1a	Lab Sample ID:	AA34774
Date of Collection:	9/29/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/6/03	Percent Solids:	81%
Dry Weight Extracted:	4.29 grams	Extract Dilution:	1
Wet Weight Extracted:	5.27 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	0.14	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	88	36 - 131
Decachlorobiphenyl	86	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 49%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD1b	Lab Sample ID:	AA34775
Date of Collection:	9/29/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/6/03	Percent Solids:	84%
Dry Weight Extracted:	4.38 grams	Extract Dilution:	1
Wet Weight Extracted:	5.20 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	0.45	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	91	36 - 131
Decachlorobiphenyl	86	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 42%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	GSD11	Lab Sample ID:	AA34776
Date of Collection:	9/29/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/6/03	Percent Solids:	88%
Dry Weight Extracted:	5.1 grams	Extract Dilution:	1
Wet Weight Extracted:	5.8 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	**0.07**	0.10	L
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	90	36 - 131
Decachlorobiphenyl	86	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 60%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	GSD7	Lab Sample ID:	AA34777
Date of Collection:	9/29/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/6/03	Percent Solids:	99%
Dry Weight Extracted:	5.68 grams	Extract Dilution:	1
Wet Weight Extracted:	5.71 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	87	36 - 131
Decachlorobiphenyl	89	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 81%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	GSD8	Lab Sample ID:	AA34778
Date of Collection:	9/29/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/6/03	Percent Solids:	99%
Dry Weight Extracted:	5.67 grams	Extract Dilution:	1
Wet Weight Extracted:	5.73 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	79	36 - 131
Decachlorobiphenyl	88	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 81%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	GSD10	Lab Sample ID:	AA34779
Date of Collection:	9/29/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	99%
Dry Weight Extracted:	6.00 grams	Extract Dilution:	1
Wet Weight Extracted:	6.04 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	83	36 - 131
Decachlorobiphenyl	88	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 78%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	GSD6	Lab Sample ID:	AA34780
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	100%
Dry Weight Extracted:	5.39 grams	Extract Dilution:	1
Wet Weight Extracted:	5.41 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	81	36 - 131
Decachlorobiphenyl	89	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 81%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	GSD6D	Lab Sample ID:	AA34781
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	100%
Dry Weight Extracted:	5.65 grams	Extract Dilution:	1
Wet Weight Extracted:	5.66 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	90	36 - 131
Decachlorobiphenyl	92	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 85%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD8	Lab Sample ID:	AA34782
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	91%
Dry Weight Extracted:	4.62 grams	Extract Dilution:	1
Wet Weight Extracted:	5.05 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	81	36 - 131
Decachlorobiphenyl	91	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 50%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD7	Lab Sample ID:	AA34783
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	91%
Dry Weight Extracted:	5.31 grams	Extract Dilution:	1
Wet Weight Extracted:	5.82 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	0.06	0.10	L
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	78	36 - 131
Decachlorobiphenyl	90	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 58%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD6	Lab Sample ID:	AA34784
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	98%
Dry Weight Extracted:	5.59 grams	Extract Dilution:	1
Wet Weight Extracted:	5.70 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	86	36 - 131
Decachlorobiphenyl	92	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 65%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD5	Lab Sample ID:	AA34785
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	85%
Dry Weight Extracted:	4.79 grams	Extract Dilution:	1
Wet Weight Extracted:	5.66 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	**0.23**	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	87	36 - 131
Decachlorobiphenyl	89	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 52%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD9	Lab Sample ID:	AA34786
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	90%
Dry Weight Extracted:	4.90 grams	Extract Dilution:	1
Wet Weight Extracted:	5.46 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	0.49	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	74	36 - 131
Decachlorobiphenyl	89	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 58%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD4	Lab Sample ID:	AA34787
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	88%
Dry Weight Extracted:	4.71 grams	Extract Dilution:	1
Wet Weight Extracted:	5.38 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	82	36 - 131
Decachlorobiphenyl	83	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 54%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD3	Lab Sample ID:	AA34788
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	84%
Dry Weight Extracted:	4.51 grams	Extract Dilution:	1
Wet Weight Extracted:	5.38 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	0.06	0.10	L
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	84	36 - 131
Decachlorobiphenyl	86	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 50%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	FS2	Lab Sample ID:	AA34789
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/8/03	Percent Solids:	99%
Dry Weight Extracted:	5.95 grams	Extract Dilution:	2
Wet Weight Extracted:	5.98 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.20	
11104-28-2	Aroclor-1221	ND	0.20	
11141-16-5	Aroclor-1232	ND	0.20	
53469-21-9	Aroclor-1242	ND	0.20	
12672-29-6	Aroclor-1248	ND	0.20	
11097-69-1	Aroclor-1254	ND	0.20	
11096-82-5	Aroclor-1260	2.0	0.20	
11100-14-4	Aroclor-1262	ND	0.20	
37324-23-5	Aroclor-1268	ND	0.20	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	77	36 - 131
Decachlorobiphenyl	89	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 84%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	FS1	Lab Sample ID:	AA34790
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	99%
Dry Weight Extracted:	5.58 grams	Extract Dilution:	1
Wet Weight Extracted:	5.65 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	0.09	0.10	L
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	92	36 - 131
Decachlorobiphenyl	83	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 72%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD12	Lab Sample ID:	AA34791
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	94%
Dry Weight Extracted:	5.02 grams	Extract Dilution:	1
Wet Weight Extracted:	5.34 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	81	36 - 131
Decachlorobiphenyl	91	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 58%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD12a	Lab Sample ID:	AA34792
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	98%
Dry Weight Extracted:	6.02 grams	Extract Dilution:	1
Wet Weight Extracted:	6.14 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	82	36 - 131
Decachlorobiphenyl	91	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 63%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD12aD	Lab Sample ID:	AA34793
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	98%
Dry Weight Extracted:	6.28 grams	Extract Dilution:	1
Wet Weight Extracted:	6.40 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	85	36 - 131
Decachlorobiphenyl	86	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 61%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD6a	Lab Sample ID:	AA34794
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	99%
Dry Weight Extracted:	5.99 grams	Extract Dilution:	1
Wet Weight Extracted:	6.03 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	80	36 - 131
Decachlorobiphenyl	87	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 80%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD5	Lab Sample ID:	AA34795
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	98%
Dry Weight Extracted:	5.84 grams	Extract Dilution:	1
Wet Weight Extracted:	5.96 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	0.11	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	92	36 - 131
Decachlorobiphenyl	88	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 68%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD5D	Lab Sample ID:	AA34796
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	99%
Dry Weight Extracted:	5.39 grams	Extract Dilution:	1
Wet Weight Extracted:	5.47 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	91	36 - 131
Decachlorobiphenyl	93	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 69%.

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Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD4	Lab Sample ID:	AA34797
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	100%
Dry Weight Extracted:	5.40 grams	Extract Dilution:	1
Wet Weight Extracted:	5.41 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	**0.13**	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	90	36 - 131
Decachlorobiphenyl	91	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 81%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD3	Lab Sample ID:	AA34798
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	100%
Dry Weight Extracted:	5.40 grams	Extract Dilution:	1
Wet Weight Extracted:	5.41 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	0.18	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	79	36 - 131
Decachlorobiphenyl	88	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 82%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD1	Lab Sample ID:	AA34799
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	96%
Dry Weight Extracted:	5.11 grams	Extract Dilution:	1
Wet Weight Extracted:	5.33 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	0.17	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	88	36 - 131
Decachlorobiphenyl	86	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 69%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD10D	Lab Sample ID:	AA34800
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	100%
Dry Weight Extracted:	5.34 grams	Extract Dilution:	1
Wet Weight Extracted:	5.35 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	83	36 - 131
Decachlorobiphenyl	94	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 79%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/6/03	Percent Solids:	100%
Dry Weight Extracted:	6.22 grams	Extract Dilution:	1
Wet Weight Extracted:	6.23 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	63	60 - 104
Decachlorobiphenyl	95	65 - 110

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

PCB MATRIX SPIKE (MS) / MATRIX SPIKE DUPLICATE (MSD) RECOVERY

Naval Ed. Training Center

Sample ID: AA34774

PARAMETER	SPIKE ADDED mg/Kg	SAMPLE CONCENTRATION mg/Kg	MS CONCENTRATION mg/Kg	MS % REC	QC LIMITS (% REC)
Aroclor-1260	1	0.14	.816	103	77 - 136

PARAMETER	MSD SPIKE ADDED	MSD CONCENTRATION mg/Kg	MSD % REC	RPD %	QC LIMITS RPD
Aroclor-1260	1	.771	102	1	50

Samples in Batch: AA34773 AA34774 AA34775 AA34776 AA34777 AA34778 AA34779 AA34780 AA34781 AA34782 AA34783 AA34784 AA34785 AA34786 AA34787 AA34788 AA34789 AA34790 AA34791 AA34792 AA34793 AA34794 AA34795 AA34796 AA34797 AA34798 AA34799 AA34800

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

LABORATORY DUPLICATE RESULTS

Naval Ed. Training Center

Sample ID: AA34773

PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS
Aroclor-1016	ND	ND	ND	50
Aroclor-1221	ND	ND	ND	50
Aroclor-1232	ND	ND	ND	50
Aroclor-1242	ND	ND	ND	50
Aroclor-1248	ND	ND	ND	50
Aroclor-1254	ND	ND	ND	50
Aroclor-1260	0.52	0.33	45	50
Aroclor-1262	ND	ND	ND	50
Aroclor-1268	ND	ND	ND	50

United States Environmental Protection Agency
Office of Environmental Measurement & Evaluation
11 Technology Drive
North Chelmsford, MA 01863-2431

Laboratory Report

October 29, 2003

Ms Kim Keckler - HBT
USEPA New England, Region 1
One Congress Street
Boston, MA 02114 - 2023

Project Number: 03100001
Project: Naval Ed. Training Center
Analysis: Metals in Soil Medium Level by ICP
Analysts: Janet Paquin, Mike Dowling
10/29/03 MD 10/29/03

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Samples were analyzed following the EPA Region I SOP, INGICP4.SOP.

Sample preparation was done following the EPA Region I SOP, INGMETALSPREP3.SOP.

Samples were analyzed by inductively coupled plasma - atomic emission spectrometry using pneumatic nebulization. Preparation and analysis SOP's are based on "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Edition, Revision 2, Final Update III, Methods 3050B and 6010B," respectively.

Date Samples Received by the Laboratory: 10/1/03

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions, please call me at 617-918-8333.

Sincerely,
11/21/03
Dr. William J. Andrade
Advanced Analytical Chemistry Specialist

Qualifiers:

RL	Reporting limit
ND	Not Detected above reporting limit
NA	Not Applicable
NC	Not calculated since analyte concentration is ND
J1	Estimated value due to MS recovery outside accceptance criteria
J2	Estimated value due to LFB result outside acceptance criteria
J3	Estimated value due to RPD result outside acceptance criteria
J4	Estimated value due to LCS result outside acceptance criteria
B	Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
R	No recovery was calculated since the analyte concentration is greater than four times the spike level.

Samples were prepared by ESAT contractors.

Comments:

Results are in "mg/kg dry wt." units.

Calcium results were not requested.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD2	Lab Sample ID:	AA34773
Date of Collection:	9/29/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	9200	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	25	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	32	3.0	
7440-48-4	Cobalt	6.1	3.0	
7440-50-8	Copper	29	3.0	
7439-89-6	Iron	17000	10	
7439-92-1	Lead	38	10	
7439-95-4	Magnesium	6100	10	
7439-96-5	Manganese	190	2.0	
7440-02-0	Nickel	14	6.0	
7440-09-7	Potassium	3000	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	16000	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	32	3.0	
7440-66-6	Zinc	88	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD1a	Lab Sample ID:	AA34774
Date of Collection:	9/29/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	7100	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	21	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	25	3.0	
7440-48-4	Cobalt	4.8	3.0	
7440-50-8	Copper	25	3.0	
7439-89-6	Iron	13000	10	
7439-92-1	Lead	35	10	
7439-95-4	Magnesium	5400	10	
7439-96-5	Manganese	160	2.0	
7440-02-0	Nickel	10	6.0	
7440-09-7	Potassium	2500	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	15000	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	26	3.0	
7440-66-6	Zinc	79	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD1b	Lab Sample ID:	AA34775
Date of Collection:	9/29/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	9100	24	
7440-36-0	Antimony	ND	12	
7440-38-2	Arsenic	ND	24	
7440-39-3	Barium	25	3.6	
7440-41-7	Beryllium	ND	1.2	
7440-43-9	Cadmium	ND	3.6	
7440-47-3	Chromium	38	3.6	
7440-48-4	Cobalt	6.0	3.6	
7440-50-8	Copper	44	3.6	
7439-89-6	Iron	17000	12	
7439-92-1	Lead	51	12	
7439-95-4	Magnesium	6300	12	
7439-96-5	Manganese	170	2.4	
7440-02-0	Nickel	20	7.2	
7440-09-7	Potassium	3100	480	
7782-49-2	Selenium	ND	12	
7440-22-4	Silver	ND	3.6	
7440-23-5	Sodium	18000	1200	
7440-28-0	Thallium	ND	24	
7440-62-2	Vanadium	36	3.6	
7440-66-6	Zinc	110	3.6	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	G1SD11	Lab Sample ID:	AA34776
Date of Collection:	9/29/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	7900	22	
7440-36-0	Antimony	ND	11	
7440-38-2	Arsenic	ND	22	
7440-39-3	Barium	26	3.3	
7440-41-7	Beryllium	ND	1.1	
7440-43-9	Cadmium	ND	3.3	
7440-47-3	Chromium	26	3.3	
7440-48-4	Cobalt	5.4	3.3	
7440-50-8	Copper	25	3.3	
7439-89-6	Iron	15000	11	
7439-92-1	Lead	32	11	
7439-95-4	Magnesium	4700	11	
7439-96-5	Manganese	150	2.2	
7440-02-0	Nickel	13	6.6	
7440-09-7	Potassium	2300	440	
7782-49-2	Selenium	ND	11	
7440-22-4	Silver	ND	3.3	
7440-23-5	Sodium	9200	1100	
7440-28-0	Thallium	ND	22	
7440-62-2	Vanadium	25	3.3	
7440-66-6	Zinc	71	3.3	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	G1SD7	Lab Sample ID:	AA34777
Date of Collection:	9/29/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	4400	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	14	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	13	3.0	
7440-48-4	Cobalt	3.3	3.0	
7440-50-8	Copper	11	3.0	
7439-89-6	Iron	9000	10	
7439-92-1	Lead	13	10	J3
7439-95-4	Magnesium	2400	10	
7439-96-5	Manganese	91	2.0	
7440-02-0	Nickel	7.5	6.0	
7440-09-7	Potassium	1000	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	2800	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	13	3.0	
7440-66-6	Zinc	39	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	G1SD8	Lab Sample ID:	AA34778
Date of Collection:	9/29/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	4200	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	17	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	11	3.0	
7440-48-4	Cobalt	3.5	3.0	
7440-50-8	Copper	8.7	3.0	
7439-89-6	Iron	9300	10	
7439-92-1	Lead	11	10	
7439-95-4	Magnesium	2400	10	
7439-96-5	Manganese	94	2.0	
7440-02-0	Nickel	6.9	6.0	
7440-09-7	Potassium	980	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	3500	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	13	3.0	
7440-66-6	Zinc	36	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	G1SD10	Lab Sample ID:	AA34779
Date of Collection:	9/29/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	6200	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	32	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	14	3.0	
7440-48-4	Cobalt	5.4	3.0	
7440-50-8	Copper	20	3.0	
7439-89-6	Iron	14000	10	
7439-92-1	Lead	12	10	
7439-95-4	Magnesium	3600	10	
7439-96-5	Manganese	100	2.0	
7440-02-0	Nickel	12	6.0	
7440-09-7	Potassium	2400	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	3800	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	20	3.0	
7440-66-6	Zinc	53	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	G1SD6	Lab Sample ID:	AA34780
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	5600	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	11	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	12	3.0	
7440-48-4	Cobalt	4.8	3.0	
7440-50-8	Copper	11	3.0	
7439-89-6	Iron	11000	10	
7439-92-1	Lead	12	10	
7439-95-4	Magnesium	3000	10	
7439-96-5	Manganese	110	2.0	
7440-02-0	Nickel	8.2	6.0	
7440-09-7	Potassium	930	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	3700	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	12	3.0	
7440-66-6	Zinc	38	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	G1SD6D	Lab Sample ID:	AA34781
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	6900	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	11	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	12	3.0	
7440-48-4	Cobalt	5.5	3.0	
7440-50-8	Copper	11	3.0	
7439-89-6	Iron	15000	10	
7439-92-1	Lead	ND	10	
7439-95-4	Magnesium	3400	10	
7439-96-5	Manganese	130	2.0	
7440-02-0	Nickel	9.6	6.0	
7440-09-7	Potassium	960	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	3100	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	12	3.0	
7440-66-6	Zinc	39	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD8	Lab Sample ID:	AA34782
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**9000**	24	
7440-36-0	Antimony	ND	12	
7440-38-2	Arsenic	ND	24	
7440-39-3	Barium	**26**	3.6	
7440-41-7	Beryllium	ND	1.2	
7440-43-9	Cadmium	ND	3.6	
7440-47-3	Chromium	**28**	3.6	
7440-48-4	Cobalt	**6.2**	3.6	
7440-50-8	Copper	**21**	3.6	
7439-89-6	Iron	**16000**	12	
7439-92-1	Lead	**28**	12	
7439-95-4	Magnesium	**6100**	12	
7439-96-5	Manganese	**230**	2.4	
7440-02-0	Nickel	**10**	7.2	
7440-09-7	Potassium	**2900**	480	
7782-49-2	Selenium	ND	12	
7440-22-4	Silver	ND	3.6	
7440-23-5	Sodium	**15000**	1200	
7440-28-0	Thallium	ND	24	
7440-62-2	Vanadium	**26**	3.6	
7440-66-6	Zinc	**69**	3.6	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD7	Lab Sample ID:	AA34783
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	7400	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	20	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	25	3.0	
7440-48-4	Cobalt	4.9	3.0	
7440-50-8	Copper	22	3.0	
7439-89-6	Iron	13000	10	
7439-92-1	Lead	27	10	
7439-95-4	Magnesium	5100	10	
7439-96-5	Manganese	180	2.0	
7440-02-0	Nickel	10	6.0	
7440-09-7	Potassium	2400	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	11000	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	24	3.0	
7440-66-6	Zinc	66	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD6	Lab Sample ID:	AA34784
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	7600	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	15	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	22	3.0	
7440-48-4	Cobalt	5.3	3.0	
7440-50-8	Copper	14	3.0	
7439-89-6	Iron	16000	10	
7439-92-1	Lead	23	10	
7439-95-4	Magnesium	4500	10	
7439-96-5	Manganese	170	2.0	
7440-02-0	Nickel	11	6.0	
7440-09-7	Potassium	1900	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	6600	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	22	3.0	
7440-66-6	Zinc	58	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD5	Lab Sample ID:	AA34785
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	8400	22	
7440-36-0	Antimony	ND	11	
7440-38-2	Arsenic	ND	22	
7440-39-3	Barium	24	3.3	
7440-41-7	Beryllium	ND	1.1	
7440-43-9	Cadmium	ND	3.3	
7440-47-3	Chromium	27	3.3	
7440-48-4	Cobalt	5.7	3.3	
7440-50-8	Copper	22	3.3	
7439-89-6	Iron	16000	11	
7439-92-1	Lead	32	11	
7439-95-4	Magnesium	5600	11	
7439-96-5	Manganese	210	2.2	
7440-02-0	Nickel	12	6.6	
7440-09-7	Potassium	2700	440	
7782-49-2	Selenium	ND	11	
7440-22-4	Silver	ND	3.3	
7440-23-5	Sodium	13000	1100	
7440-28-0	Thallium	ND	22	
7440-62-2	Vanadium	27	3.3	
7440-66-6	Zinc	71	3.3	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD9	Lab Sample ID:	AA34786
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	N/A
Date of Analysis:	10/22/03	Digestate Dilution:	N/A
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	6700	22	
7440-36-0	Antimony	ND	11	
7440-38-2	Arsenic	ND	22	
7440-39-3	Barium	19	3.3	
7440-41-7	Beryllium	ND	1.1	
7440-43-9	Cadmium	ND	3.3	
7440-47-3	Chromium	22	3.3	
7440-48-4	Cobalt	4.4	3.3	
7440-50-8	Copper	20	3.3	
7439-89-6	Iron	12000	11	
7439-92-1	Lead	26	11	
7439-95-4	Magnesium	4800	11	
7439-96-5	Manganese	180	2.2	
7440-02-0	Nickel	8.3	6.6	
7440-09-7	Potassium	2200	440	
7782-49-2	Selenium	ND	11	
7440-22-4	Silver	ND	3.3	
7440-23-5	Sodium	12000	1100	
7440-28-0	Thallium	ND	22	
7440-62-2	Vanadium	21	3.3	
7440-66-6	Zinc	59	3.3	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD4	Lab Sample ID:	AA34787
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	6200	24	
7440-36-0	Antimony	ND	12	
7440-38-2	Arsenic	ND	24	
7440-39-3	Barium	19	3.6	
7440-41-7	Beryllium	ND	1.2	
7440-43-9	Cadmium	ND	3.6	
7440-47-3	Chromium	23	3.6	
7440-48-4	Cobalt	4.3	3.6	
7440-50-8	Copper	25	3.6	
7439-89-6	Iron	13000	12	
7439-92-1	Lead	29	12	
7439-95-4	Magnesium	5300	12	
7439-96-5	Manganese	150	2.4	
7440-02-0	Nickel	12	7.2	
7440-09-7	Potassium	2200	480	
7782-49-2	Selenium	ND	12	
7440-22-4	Silver	ND	3.6	
7440-23-5	Sodium	16000	1200	
7440-28-0	Thallium	ND	24	
7440-62-2	Vanadium	23	3.6	
7440-66-6	Zinc	71	3.6	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD3	Lab Sample ID:	AA34788
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	6600	22	
7440-36-0	Antimony	ND	11	
7440-38-2	Arsenic	ND	22	
7440-39-3	Barium	20	3.3	
7440-41-7	Beryllium	ND	1.1	
7440-43-9	Cadmium	ND	3.3	
7440-47-3	Chromium	22	3.3	
7440-48-4	Cobalt	4.4	3.3	
7440-50-8	Copper	20	3.3	
7439-89-6	Iron	12000	11	
7439-92-1	Lead	26	11	
7439-95-4	Magnesium	5000	11	
7439-96-5	Manganese	170	2.2	
7440-02-0	Nickel	11	6.6	
7440-09-7	Potassium	2300	440	
7782-49-2	Selenium	ND	11	
7440-22-4	Silver	ND	3.3	
7440-23-5	Sodium	14000	1100	
7440-28-0	Thallium	ND	22	
7440-62-2	Vanadium	22	3.3	
7440-66-6	Zinc	62	3.3	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	FS2	Lab Sample ID:	AA34789
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	6700	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	17	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	18	3.0	
7440-48-4	Cobalt	5.3	3.0	
7440-50-8	Copper	17	3.0	
7439-89-6	Iron	21000	10	
7439-92-1	Lead	67	10	
7439-95-4	Magnesium	4300	10	
7439-96-5	Manganese	250	2.0	
7440-02-0	Nickel	10	6.0	
7440-09-7	Potassium	1200	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	5600	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	18	3.0	
7440-66-6	Zinc	45	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	FS1	Lab Sample ID:	AA34790
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	3700	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	17	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	16	3.0	
7440-48-4	Cobalt	3.5	3.0	
7440-50-8	Copper	20	3.0	
7439-89-6	Iron	20000	10	
7439-92-1	Lead	21	10	
7439-95-4	Magnesium	4700	10	
7439-96-5	Manganese	160	2.0	
7440-02-0	Nickel	7.8	6.0	
7440-09-7	Potassium	1000	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	8800	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	14	3.0	
7440-66-6	Zinc	42	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD12	Lab Sample ID:	AA34791
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**8800**	20	
7440-36-0	Antimony	ND	10	J1
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**20**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**26**	3.0	
7440-48-4	Cobalt	**6.8**	3.0	
7440-50-8	Copper	**16**	3.0	
7439-89-6	Iron	**21000**	10	
7439-92-1	Lead	**26**	10	
7439-95-4	Magnesium	**5200**	10	
7439-96-5	Manganese	**280**	2.0	
7440-02-0	Nickel	**14**	6.0	
7440-09-7	Potassium	**2600**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**8200**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**25**	3.0	
7440-66-6	Zinc	**72**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD12a	Lab Sample ID:	AA34792
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	7300	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	18	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	22	3.0	
7440-48-4	Cobalt	6.0	3.0	
7440-50-8	Copper	14	3.0	
7439-89-6	Iron	19000	10	
7439-92-1	Lead	21	10	
7439-95-4	Magnesium	4600	10	
7439-96-5	Manganese	230	2.0	
7440-02-0	Nickel	12	6.0	
7440-09-7	Potassium	2400	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	7100	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	22	3.0	
7440-66-6	Zinc	63	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD12aD	Lab Sample ID:	AA34793
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/8/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	7000	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	18	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	21	3.0	
7440-48-4	Cobalt	5.7	3.0	
7440-50-8	Copper	12	3.0	
7439-89-6	Iron	18000	10	
7439-92-1	Lead	21	10	
7439-95-4	Magnesium	4200	10	
7439-96-5	Manganese	220	2.0	
7440-02-0	Nickel	11	6.0	
7440-09-7	Potassium	2300	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	5800	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	21	3.0	
7440-66-6	Zinc	58	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD6a	Lab Sample ID:	AA34794
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/8/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	6500	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	11	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	15	3.0	
7440-48-4	Cobalt	4.6	3.0	
7440-50-8	Copper	8.3	3.0	
7439-89-6	Iron	14000	10	
7439-92-1	Lead	14	10	
7439-95-4	Magnesium	3600	10	
7439-96-5	Manganese	140	2.0	
7440-02-0	Nickel	9.0	6.0	
7440-09-7	Potassium	1200	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	3600	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	16	3.0	
7440-66-6	Zinc	47	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD5	Lab Sample ID:	AA34795
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/8/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	7300	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	17	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	20	3.0	
7440-48-4	Cobalt	4.6	3.0	
7440-50-8	Copper	15	3.0	
7439-89-6	Iron	14000	10	
7439-92-1	Lead	22	10	
7439-95-4	Magnesium	4500	10	
7439-96-5	Manganese	160	2.0	
7440-02-0	Nickel	10	6.0	
7440-09-7	Potassium	1600	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	7800	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	19	3.0	
7440-66-6	Zinc	67	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD5D	Lab Sample ID:	AA34796
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/8/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	7400	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	19	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	26	3.0	
7440-48-4	Cobalt	5.2	3.0	
7440-50-8	Copper	18	3.0	
7439-89-6	Iron	15000	10	
7439-92-1	Lead	26	10	
7439-95-4	Magnesium	4600	10	
7439-96-5	Manganese	180	2.0	
7440-02-0	Nickel	13	6.0	
7440-09-7	Potassium	1900	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	7500	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	22	3.0	
7440-66-6	Zinc	70	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD4	Lab Sample ID:	AA34797
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/8/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	6800	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	20	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	17	3.0	
7440-48-4	Cobalt	4.6	3.0	
7440-50-8	Copper	14	3.0	
7439-89-6	Iron	14000	10	
7439-92-1	Lead	22	10	
7439-95-4	Magnesium	4000	10	
7439-96-5	Manganese	130	2.0	
7440-02-0	Nickel	6.1	6.0	
7440-09-7	Potassium	1500	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	4500	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	17	3.0	
7440-66-6	Zinc	69	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD3	Lab Sample ID:	AA34798
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/8/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	4100	20	
7440-36-0	Antimony	ND	10	J1
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	11	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	10	3.0	
7440-48-4	Cobalt	3.3	3.0	
7440-50-8	Copper	9.5	3.0	
7439-89-6	Iron	8700	10	
7439-92-1	Lead	15	10	
7439-95-4	Magnesium	2300	10	
7439-96-5	Manganese	88	2.0	
7440-02-0	Nickel	ND	6.0	
7440-09-7	Potassium	880	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	3000	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	11	3.0	
7440-66-6	Zinc	34	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD1	Lab Sample ID:	AA34799
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/8/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	6800	22	
7440-36-0	Antimony	ND	11	
7440-38-2	Arsenic	ND	22	
7440-39-3	Barium	18	3.3	
7440-41-7	Beryllium	ND	1.1	
7440-43-9	Cadmium	ND	3.3	
7440-47-3	Chromium	21	3.3	
7440-48-4	Cobalt	4.7	3.3	
7440-50-8	Copper	19	3.3	
7439-89-6	Iron	13000	11	
7439-92-1	Lead	25	11	
7439-95-4	Magnesium	4700	11	
7439-96-5	Manganese	180	2.2	
7440-02-0	Nickel	8.5	6.6	
7440-09-7	Potassium	2000	440	
7782-49-2	Selenium	ND	11	
7440-22-4	Silver	ND	3.3	
7440-23-5	Sodium	11000	1100	
7440-28-0	Thallium	ND	22	
7440-62-2	Vanadium	21	3.3	
7440-66-6	Zinc	69	3.3	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Laboratory Reagent Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	Water
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	50 mL	pH:	N/A

CAS Number	Parameter	Concentration ug/L	RL ug/L	Qualifier
7429-90-5	Aluminum	ND	200	
7440-36-0	Antimony	ND	100	
7440-38-2	Arsenic	ND	200	
7440-39-3	Barium	ND	30	
7440-41-7	Beryllium	ND	10	
7440-43-9	Cadmium	ND	30	
7440-47-3	Chromium	ND	30	
7440-48-4	Cobalt	ND	30	
7440-50-8	Copper	ND	30	
7439-89-6	Iron	ND	100	
7439-92-1	Lead	ND	100	
7439-95-4	Magnesium	ND	100	
7439-96-5	Manganese	ND	20	
7440-02-0	Nickel	ND	60	
7440-09-7	Potassium	ND	4000	
7782-49-2	Selenium	ND	100	
7440-22-4	Silver	ND	30	
7440-23-5	Sodium	ND	10000	
7440-28-0	Thallium	ND	200	
7440-62-2	Vanadium	ND	30	
7440-66-6	Zinc	ND	30	

Comments: **Laboratory Reagent Blank Sample #1**

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD10D	Lab Sample ID:	AA34800
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/8/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	5300	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	14	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	11	3.0	
7440-48-4	Cobalt	3.8	3.0	
7440-50-8	Copper	100	3.0	
7439-89-6	Iron	11000	10	
7439-92-1	Lead	12	10	
7439-95-4	Magnesium	3600	10	
7439-96-5	Manganese	120	2.0	
7440-02-0	Nickel	8.0	6.0	
7440-09-7	Potassium	1200	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	4800	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	15	3.0	
7440-66-6	Zinc	64	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Laboratory Reagent Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	Water
Date of Digestion:	10/8/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	50 mL	pH:	N/A

CAS Number	Parameter	Concentration ug/L	RL ug/L	Qualifier
7429-90-5	Aluminum	ND	200	
7440-36-0	Antimony	ND	100	
7440-38-2	Arsenic	ND	200	
7440-39-3	Barium	ND	30	
7440-41-7	Beryllium	ND	10	
7440-43-9	Cadmium	ND	30	
7440-47-3	Chromium	ND	30	
7440-48-4	Cobalt	ND	30	
7440-50-8	Copper	ND	30	
7439-89-6	Iron	ND	100	
7439-92-1	Lead	ND	100	
7439-95-4	Magnesium	ND	100	
7439-96-5	Manganese	ND	20	
7440-02-0	Nickel	ND	60	
7440-09-7	Potassium	ND	4000	
7782-49-2	Selenium	ND	100	
7440-22-4	Silver	ND	30	
7440-23-5	Sodium	ND	10000	
7440-28-0	Thallium	ND	200	
7440-62-2	Vanadium	ND	30	
7440-66-6	Zinc	ND	30	

Comments: **Laboratory Reagent Blank Sample #2**

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

METALS MATRIX SPIKE (MS) RESULTS

Sample ID: AA34791

PARAMETER	SPIKE ADDED mg/Kg	SAMPLE CONCENTRATION mg/Kg	MS CONCENTRATION mg/Kg	MS % REC	QC LIMITS (% REC)
Antimony	100	ND	32	32	75 - 125
Arsenic	100	ND	98	98	75 - 125
Barium	100	20	116	96	75 - 125
Beryllium	40	ND	39	98	75 - 125
Cadmium	50	ND	44	88	75 - 125
Chromium	100	26	117	91	75 - 125
Cobalt	100	6.8	98	91	75 - 125
Copper	100	16	108	92	75 - 125
Lead	100	26	112	86	75 - 125
Manganese	100	280	368	88	75 - 125
Nickel	100	14	105	91	75 - 125
Selenium	100	ND	95	95	75 - 125
Silver	20	ND	19	95	75 - 125
Thallium	100	ND	77	77	75 - 125
Vanadium	100	25	118	93	75 - 125
Zinc	100	72	158	86	75 - 125

Comments: **No spike is required for Al, Fe, K, Mg and Na**

Naval Ed. Training Center
PN:03100001

Matrix Spike Results

Sample GISD3
(AA34798)

Parameter	Accuracy Recovery
Antimony	64
Arsenic	94
Barium	104
Beryllium	100
Cadmium	94
Chromium	101
Cobalt	98
Copper	98
Lead	91
Manganese	114
Nickel	103
Selenium	94
Silver	95
Thallium	84
Vanadium	101
Zinc	96

Acceptance Limits: 75-125% ✓

No spike is required for Al, Fe, K, Mg, and Na

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Laboratory Duplicate Results

Sample ID: AA34777

PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS
Aluminum	4400	4400	0	35
Antimony	ND	ND	NC	35
Arsenic	ND	ND	NC	35
Barium	14	14	0	35
Beryllium	ND	ND	NC	35
Cadmium	ND	ND	NC	35
Chromium	13	13	0	35
Cobalt	3.3	3.5	6	35
Copper	11	12	9	35
Iron	9000	9700	8	35
Lead	13	19	38	35
Magnesium	2400	2400	0	35
Manganese	91	94	3	35
Nickel	7.5	8.1	8	35
Potassium	1000	1000	0	35
Selenium	ND	ND	NC	35
Silver	ND	ND	NC	35
Sodium	2800	2900	4	35
Thallium	ND	ND	NC	35
Vanadium	13	14	7	35
Zinc	39	42	7	35

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Laboratory Duplicate Results

Sample ID: AA34795

PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS
Aluminum	7300	7000	4	35
Antimony	ND	ND	NC	35
Arsenic	ND	ND	NC	35
Barium	17	14	19	35
Beryllium	ND	ND	NC	35
Cadmium	ND	ND	NC	35
Chromium	20	18	11	35
Cobalt	4.6	4.8	4	35
Copper	15	15	0	35
Iron	14000	15000	7	35
Lead	22	27	20	35
Magnesium	4500	4200	7	35
Manganese	160	160	0	35
Nickel	10	10	0	35
Potassium	1600	1500	7	35
Selenium	ND	ND	NC	35
Silver	ND	ND	NC	35
Sodium	7800	7000	11	35
Thallium	ND	ND	NC	35
Vanadium	19	19	0	35
Zinc	67	60	11	35

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
Aluminum	1000	1000	100	85 - 115
Antimony	1000	960	96	85 - 115
Arsenic	1000	980	98	85 - 115
Barium	1000	1000	100	85 - 115
Beryllium	400	400	100	85 - 115
Cadmium	500	460	92	85 - 115
Chromium	1000	990	99	85 - 115
Cobalt	1000	990	99	85 - 115
Copper	1000	990	99	85 - 115
Iron	1000	1000	100	85 - 115
Lead	1000	940	94	85 - 115
Magnesium	10000	9900	99	85 - 115
Manganese	1000	990	99	85 - 115
Nickel	1000	980	98	85 - 115
Potassium	50000	50000	100	85 - 115
Selenium	1000	980	98	85 - 115
Silver	200	190	95	85 - 115
Sodium	50000	53000	106	85 - 115
Thallium	1000	960	96	85 - 115
Vanadium	1000	1000	100	85 - 115
Zinc	1000	950	95	85 - 115

Comments: **Laboratory Fortified Blank Sample #1**

Samples in Batch: AA34773 AA34774 AA34775 AA34776 AA34777 AA34778 AA34779 AA34780 AA34781 AA34782 AA34783 AA34784 AA34785 AA34786 AA34787 AA34788 AA34789 AA34790 AA34791 AA34792 AA34793 AA34794 AA34795 AA34796 AA34797 AA34798 AA34799 AA34800

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
Aluminum	1000	1100	110	85 - 115
Antimony	1000	960	96	85 - 115
Arsenic	1000	980	98	85 - 115
Barium	1000	1000	100	85 - 115
Beryllium	400	410	102	85 - 115
Cadmium	500	470	94	85 - 115
Chromium	1000	1000	100	85 - 115
Cobalt	1000	1000	100	85 - 115
Copper	1000	1000	100	85 - 115
Iron	1000	1000	100	85 - 115
Lead	1000	950	95	85 - 115
Magnesium	10000	10000	100	85 - 115
Manganese	1000	1000	100	85 - 115
Nickel	1000	1000	100	85 - 115
Potassium	50000	50000	100	85 - 115
Selenium	1000	980	98	85 - 115
Silver	200	190	95	85 - 115
Sodium	50000	53000	106	85 - 115
Thallium	1000	950	95	85 - 115
Vanadium	1000	1000	100	85 - 115
Zinc	1000	950	95	85 - 115

Comments: **Laboratory Fortified Blank Sample #2**

Samples in Batch: AA34773 AA34774 AA34775 AA34776 AA34777 AA34778 AA34779 AA34780 AA34781 AA34782 AA34783 AA34784 AA34785 AA34786 AA34787 AA34788 AA34789 AA34790 AA34791 AA34792 AA34793 AA34794 AA34795 AA34796 AA34797 AA34798 AA34799 AA34800

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Solid Laboratory Control Sample (LCS) Results

PARAMETER	LCS RESULTS mg/Kg	CONTROL LIMITS mg/Kg
Aluminum	8520	5470 - 13200
Antimony	21.6	0 - 79.2
Arsenic	124	98.2 - 166
Barium	794	602 - 961
Beryllium	95.0	70.6 - 110
Cadmium	52.4	39.7 - 63.3
Chromium	141	113 - 170
Cobalt	50.2	39.3 - 59.3
Copper	157	124 - 179
Iron	12800	8760 - 20100
Lead	46.3	39.6 - 66.2
Magnesium	2970	2390 - 3800
Manganese	442	362 - 573
Nickel	54.9	43.4 - 67.6
Potassium	3430	2640 - 4140
Selenium	66.5	43.1 - 78.6
Silver	134	64.5 - 185
Sodium	825	581 - 1140
Thallium	97.1	61.9 - 154
Vanadium	31.9	19.1 - 58.2
Zinc	578	429 - 746

Comments: **Laboratory Control Sample #1**

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Solid Laboratory Control Sample (LCS) Results

PARAMETER	LCS RESULTS mg/Kg	CONTROL LIMITS mg/Kg
Aluminum	8590	5470 - 13200
Antimony	20.2	0 - 79.2
Arsenic	121	98.2 - 166
Barium	780	602 - 961
Beryllium	91.8	70.6 - 110
Cadmium	48.3	39.7 - 63.3
Chromium	135	113 - 170
Cobalt	49.5	39.3 - 59.3
Copper	148	124 - 179
Iron	13800	8760 - 20100
Lead	50.2	39.6 - 66.2
Magnesium	2990	2390 - 3800
Manganese	445	362 - 573
Nickel	53.4	43.4 - 67.6
Potassium	3430	2640 - 4140
Selenium	64.5	43.1 - 78.6
Silver	127	64.5 - 185
Sodium	808	581 - 1140
Thallium	99.0	61.9 - 154
Vanadium	35.3	19.1 - 58.2
Zinc	554	429 - 746

Comments: **Laboratory Control Sample #2**

Region 1, New England

United States Environmental Protection Agency
Office of Environmental Measurement & Evaluation
11 Technology Drive
North Chelmsford, MA 01863-2431

Laboratory Results

October 15, 2003

Ms Kim Keckler - HBT
USEPA New England, Region 1
One Congress Street
Boston, MA 02114 - 2023

Project Number: 03100001
Project: Naval Ed. Training Center
Analysis: Total Cyanide in Soil
Analyst: Inna Germansderfer IG 10/15/03

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England SOP for sample Log-In.

Sample preparation and analysis was done following the EPA Region I SOP, INGCN4.SOP.

The sample preparation and analysis SOP is based on Method 335.2 CLP-M, Method for Total Cyanide Analysis by Midi Distillation, "USEPA Contract Laboratory Program, Statement of Work for Inorganic Analysis, Multi-Media Multi-Concentration, ILMO, EPA/540/R95/121".

Date Samples Received by the Laboratory: 10/01/2003

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

Dr. William J. Andrade, Advanced Analytical Chemistry Specialist
617-918-8333

Signature: W J Andrade

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Total Cyanide in Soil

Date of Collection: 09/29/2003
Matrix: Sediment

Sample Number	Lab ID	Analysis Date	Concentration mg/Kg	RL mg/Kg	Qualifier
ARD1a	AA34774	10/08/2003	0.21	0.17	
Comment:					
ARD1b	AA34775	10/08/2003	0.44	0.24	
Comment:					
ARD2	AA34773	10/08/2003	0.32	0.19	
Comment:					
ARD3	AA34788	10/08/2003	ND	0.21	
Comment:					
ARD4	AA34787	10/08/2003	ND	0.19	
Comment:					
ARD5	AA34785	10/08/2003	ND	0.15	
Comment:					

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Total Cyanide in Soil

Date of Collection: 09/30/2003

Matrix: Sediment

Sample Number	Lab ID	Analysis Date	Concentration mg/Kg	RL mg/Kg	Qualifier
ARD6	AA34784	10/08/2003	ND	0.15	
Comment:					
ARD7	AA34783	10/08/2003	ND	0.18	
Comment:					
ARD8	AA34782	10/08/2003	ND	0.16	
Comment:					
ARD9	AA34786	10/08/2003	ND	0.09	
Comment:					
FS1	AA34790	10/08/2003	ND	0.18	
Comment:					
FS2	AA34789	10/08/2003	ND	0.15	
Comment:					

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Total Cyanide in Soil

Date of Collection: 09/30/2003

Matrix: Sediment

Sample Number	Lab ID	Analysis Date	Concentration mg/Kg	RL mg/Kg	Qualifier
GISD1	AA34799	10/08/2003	ND	0.17	
Comment:					
GISD10D	AA34800	10/08/2003	ND	0.10	
Comment:					
GISD12	AA34791	10/08/2003	ND	0.18	
Comment:					
GISD12a	AA34792	10/08/2003	ND	0.15	
Comment:					
GISD12aD	AA34793	10/08/2003	ND	0.10	
Comment:					
GISD3	AA34798	10/08/2003	ND	0.12	
Comment:					

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Total Cyanide in Soil

Date of Collection: 09/30/2003

Matrix: Sediment

Sample Number	Lab ID	Analysis Date	Concentration mg/Kg	RL mg/Kg	Qualifier
GISD4	AA34797	10/08/2003	ND	0.13	
Comment:					
GISD5	AA34795	10/08/2003	ND	0.18	
Comment:					
GISD5D	AA34796	10/08/2003	ND	0.17	
Comment:					
GISD6a	AA34794	10/08/2003	ND	0.17	
Comment:					
GSD10	AA34779	10/08/2003	0.09	0.12	J
Comment: J- estimated value, below reporting limit					
GSD11	AA34776	10/08/2003	ND	0.23	
Comment:					

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Total Cyanide in Soil

Date of Collection: 09/30/2003

Matrix: Sediment

Sample Number	Lab ID	Analysis Date	Concentration mg/Kg	RL mg/Kg	Qualifier
GSD6	AA34780	10/08/2003	**0.18**	0.08	
Comment:					
GSD6D	AA34781	10/08/2003	**0.23**	0.09	
Comment:					
GSD7	AA34777	10/08/2003	**0.41**	0.11	
Comment:					
GSD8	AA34778	10/08/2003	ND	0.09	
Comment:					
N/A	Blank	10/08/2003	ND	0.25	
Comment:					
N/A	Blank	10/08/2003	ND	0.20	
Comment:					

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

MATRIX SPIKE (MS) RESULTS

Naval Ed. Training Center

SAMPLE ID	PARAMETER	SPIKE ADDED mg/Kg	SAMPLE CONCENTRATION mg/Kg	MS CONCENTRATION mg/Kg	MS % REC	QC LIMITS (% REC)
AA34776	Total Cyanide in Soil	4.65	ND	3.99	85.8	75 - 125
AA34790	Total Cyanide in Soil	0.67	ND	0.83	124	75 - 125

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Low/High Laboratory Fortified Blank (LFB) Results

Naval Ed. Training Center

High Level

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
Total Cyanide in Soil	400	422	106	90 - 110

Comments:

Low Level

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
Total Cyanide in Soil	40	38.9	97.2	85 - 115

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Solid Laboratory Control Sample (LCS) Results

Naval Ed. Training Center

Sample ID: AA34776

PARAMETER	LCS RESULTS mg/Kg	CONTROL LIMITS mg/Kg
Total Cyanide in Soil	5.5	4.1 - 7.1

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

MATRIX SPIKE (MS) RESULTS

Naval Ed. Training Center

SAMPLE ID	PARAMETER	SPIKE ADDED mg/Kg	SAMPLE CONCENTRATION mg/Kg	MS CONCENTRATION mg/Kg	MS % REC	QC LIMITS (% REC)
AA34776	Total Cyanide in Soil	4.65	ND	3.99	85.8	75 - 125
AA34790	Total Cyanide in Soil	0.67	ND	0.83	124	75 - 125

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Laboratory Duplicate Results

Naval Ed. Training Center

SAMPLE ID	PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS (%RPD)
AA34776	Total Cyanide in Soil	ND	ND		20
AA34790	Total Cyanide in Soil	ND	ND		20

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Laboratory Duplicate Results

Naval Ed. Training Center

SAMPLE ID	PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS (%RPD)
AA34776	Total Cyanide in Soil	ND	ND		20
AA34790	Total Cyanide in Soil	ND	ND		20

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Low/High Laboratory Fortified Blank (LFB) Results

Naval Ed. Training Center

High Level

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
Total Cyanide in Soil	400	422	106	90 - 110

Comments:

Low Level

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
Total Cyanide in Soil	40	38.9	97.2	85 - 115

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Solid Laboratory Control Sample (LCS) Results

Naval Ed. Training Center

Sample ID: AA34776

PARAMETER	LCS RESULTS mg/Kg	CONTROL LIMITS mg/Kg
Total Cyanide in Soil	5.5	4.1 - 7.1

Comments:

Region 1, New England

United States Environmental Protection Agency
Office of Environmental Measurement & Evaluation
11 Technology Drive
North Chelmsford, MA 01863-2431

Laboratory Report

November 04, 2003

Ms Kim Keckler - HBT
USEPA New England, Region 1
One Congress Street
Boston, MA 02114 - 2023

Project Number: 03100001
Project: Naval Ed. Training Center
Analysis: PAHs in Soil
Analyst: Dan Boudreau DB 11/4/03

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIA-PAHSOLL4.SOP.

Samples Were Analyzed by GC/MSD Doing Selected Ion Monitoring (SIM). The Extraction and Analysis SOPs are Based on SW-846 Methods 3545A, 8270, and USEPA CLP SOW OLM04.2.

Analytical Support for This Project was Provided by ESAT Contractors at the Region 1 Laboratory.

Date Samples Received by the Laboratory: 10/1/03

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8333.

Sincerely,

W J Andrade 11/07/03

Dr. William J. Andrade
Advanced Analytical Chemistry Specialist

Qualifiers: RL = Reporting limit
ND = Not Detected above reporting limit
NA = Not Applicable
NC = Not calculated since analyte concentration is ND
J1 = Estimated value due to MS recovery outside acceptance criteria
J2 = Estimated value due to LFB result outside acceptance criteria
J3 = Estimated value due to RPD result outside acceptance criteria
J4 = Estimated value due to LCS result outside acceptance criteria
B = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
R = No recovery was calculated since the analyte concentration is greater than four times the spike level.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA1	Lab Sample ID:	AA34801
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/24/03	Percent Solids:	83%
Dry Weight Extracted:	26.341 grams	Extract Dilution:	5
Wet Weight Extracted:	31.822 grams	pH:	6.7

CAS Number	Compound	Concentration ug/Kg (ppb)	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	52	9.5	
208-96-8	Acenaphthylene	23	9.5	
120-12-7	Anthracene	190	9.5	
56-55-3	Benzo(a)anthracene	1000	9.5	J
50-32-8	Benzo(a)pyrene	710	9.5	J
205-99-2	Benzo(b)fluoranthene	850	9.5	J
191-24-2	Benzo(g,h,i)perylene	260	9.5	J
207-08-9	Benzo(k)fluoranthene	460	9.5	J
218-01-9	Chrysene	860	9.5	J
53-70-3	Dibenzo(a,h)anthracene	75	9.5	J
206-44-0	Fluoranthene	1400	9.5	
86-73-7	Fluorene	57	9.5	
193-39-5	Indeno(1,2,3-cd)pyrene	240	9.5	J
91-20-3	Naphthalene	23	9.5	
85-01-8	Phenanthrene	770	9.5	
129-00-0	Pyrene	2000	9.5	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	73	30 - 115
Terphenyl	84	18 - 137

Comments: This sample was run on 10/22/03 at a 2x dilution. The CCV for this sequence had several compounds out of spec and the last two internal standards had low recovery. The samples were diluted 5x and re-analyzed on 10/24/03. The last two internal recoveries were still low. The results of the 5x analysis are reported and all compounds referenced to the last two internal standards are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA2	Lab Sample ID:	AA34802
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/24/03	Percent Solids:	81%
Dry Weight Extracted:	26.452 grams	Extract Dilution:	5
Wet Weight Extracted:	32.457 grams	pH:	7.8

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	38	9.5	J
208-96-8	Acenaphthylene	100	9.5	J
120-12-7	Anthracene	300	9.5	J
56-55-3	Benzo(a)anthracene	1300	9.5	J
50-32-8	Benzo(a)pyrene	990	9.5	J
205-99-2	Benzo(b)fluoranthene	1200	9.5	J
191-24-2	Benzo(g,h,i)perylene	290	9.5	J
207-08-9	Benzo(k)fluoranthene	600	9.5	J
218-01-9	Chrysene	1100	9.5	J
53-70-3	Dibenzo(a,h)anthracene	90	9.5	J
206-44-0	Fluoranthene	2000	9.5	J
86-73-7	Fluorene	97	9.5	J
193-39-5	Indeno(1,2,3-cd)pyrene	320	9.5	J
91-20-3	Naphthalene	60	9.5	J
85-01-8	Phenanthrene	1400	9.5	J
129-00-0	Pyrene	2200	9.5	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	63	30 - 115
Terphenyl	70	18 - 137

Comments: This sample was run on 10/22/03 at a 5x dilution. The CCV for this sequence had several compounds out of spec and the last two internal standards had low recovery. The samples were diluted 2x and re-analyzed on 10/24/03. All of the internal recoveries were low. The results of the 5x analysis are reported and all compounds are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA3	Lab Sample ID:	AA34803
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/22/03	Percent Solids:	80%
Dry Weight Extracted:	26.654 grams	Extract Dilution:	5
Wet Weight Extracted:	33.521 grams	pH:	7.7

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	67	9.4	
208-96-8	Acenaphthylene	15	9.4	
120-12-7	Anthracene	160	9.4	
56-55-3	Benzo(a)anthracene	750	9.4	J
50-32-8	Benzo(a)pyrene	590	9.4	J
205-99-2	Benzo(b)fluoranthene	1100	9.4	J
191-24-2	Benzo(g,h,i)perylene	180	9.4	J
207-08-9	Benzo(k)fluoranthene	460	9.4	J
218-01-9	Chrysene	680	9.4	J
53-70-3	Dibenzo(a,h)anthracene	43	9.4	J
206-44-0	Fluoranthene	1200	9.4	
86-73-7	Fluorene	53	9.4	
193-39-5	Indeno(1,2,3-cd)pyrene	160	9.4	J
91-20-3	Naphthalene	29	9.4	
85-01-8	Phenanthrene	850	9.4	
129-00-0	Pyrene	2100	9.4	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	75	30 - 115
Terphenyl	124	18 - 137

Comments: This sample was run on 10/22/03 at a 5x dilution. The last two internal standards had low recovery. The samples were re-analyzed on 10/24/03. The last two internal recoveries were still low. The results of the original analysis are reported and all compounds referenced to the last two internal standards are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA4	Lab Sample ID:	AA34804
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	79%
Dry Weight Extracted:	24.661 grams	Extract Dilution:	2
Wet Weight Extracted:	31.339 grams	pH:	7.8

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	110	4.1	
208-96-8	Acenaphthylene	80	4.1	
120-12-7	Anthracene	420	4.1	
56-55-3	Benzo(a)anthracene	1200	4.1	
50-32-8	Benzo(a)pyrene	1300	4.1	J
205-99-2	Benzo(b)fluoranthene	1700	10.1	J
191-24-2	Benzo(g,h,i)perylene	290	4.1	J
207-08-9	Benzo(k)fluoranthene	930	4.1	J
218-01-9	Chrysene	900	4.1	
53-70-3	Dibenzo(a,h)anthracene	69	4.1	J
206-44-0	Fluoranthene	2400	10.1	
86-73-7	Fluorene	190	4.1	
193-39-5	Indeno(1,2,3-cd)pyrene	290	4.1	J
91-20-3	Naphthalene	130	4.1	
85-01-8	Phenanthrene	1500	4.1	
129-00-0	Pyrene	2800	10.1	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	66	30 - 115
Terphenyl	91	18 - 137

Comments: This sample was run on 10/21/03 at a 2x dilution. The last internal standard had low recovery. Results for fluoranthene, pyrene and benzo(b)fluoranthene exceeded the calibration range. The samples were re-analyzed on 10/25/03 with a 5x dilution. The last two internal recoveries were still low. The results of the original analysis are reported for compounds but the three that exceeded the curve and all compounds referenced to the last two internal standards are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA2D	Lab Sample ID:	AA34805
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	79%
Dry Weight Extracted:	26.611 grams	Extract Dilution:	5
Wet Weight Extracted:	33.772 grams	pH:	7.7

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	54	9.4	
208-96-8	Acenaphthylene	16	9.4	
120-12-7	Anthracene	120	9.4	
56-55-3	Benzo(a)anthracene	500	9.4	J
50-32-8	Benzo(a)pyrene	440	9.4	J
205-99-2	Benzo(b)fluoranthene	730	9.4	J
191-24-2	Benzo(g,h,i)perylene	140	9.4	J
207-08-9	Benzo(k)fluoranthene	300	9.4	J
218-01-9	Chrysene	450	9.4	J
53-70-3	Dibenzo(a,h)anthracene	29	9.4	J
206-44-0	Fluoranthene	860	9.4	
86-73-7	Fluorene	47	9.4	
193-39-5	Indeno(1,2,3-cd)pyrene	110	9.4	J
91-20-3	Naphthalene	29	9.4	
85-01-8	Phenanthrene	580	9.4	
129-00-0	Pyrene	1400	9.4	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	79	30 - 115
Terphenyl	124	18 - 137

Comments: This sample was run on 10/21/03 at a 5x dilution. The last two internal standards had low recovery. The samples were re-analyzed on 10/25/03 with a 5x dilution. The last two internal recoveries were still low. The results of the original analysis are reported and all compounds referenced to the last two internal standards are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA5	Lab Sample ID:	AA34806
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	78%
Dry Weight Extracted:	25.137 grams	Extract Dilution:	2
Wet Weight Extracted:	32.325 grams	pH:	7.8

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	54	4.0	
208-96-8	Acenaphthylene	82	4.0	
120-12-7	Anthracene	310	4.0	
56-55-3	Benzo(a)anthracene	1100	4.0	
50-32-8	Benzo(a)pyrene	1000	4.0	J
205-99-2	Benzo(b)fluoranthene	1400	4.0	J
191-24-2	Benzo(g,h,i)perylene	210	4.0	J
207-08-9	Benzo(k)fluoranthene	750	4.0	J
218-01-9	Chrysene	970	4.0	
53-70-3	Dibenzo(a,h)anthracene	53	4.0	J
206-44-0	Fluoranthene	2100	9.9	J
86-73-7	Fluorene	110	4.0	
193-39-5	Indeno(1,2,3-cd)pyrene	230	4.0	J
91-20-3	Naphthalene	68	4.0	
85-01-8	Phenanthrene	1300	4.0	
129-00-0	Pyrene	2400	9.9	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	67	30 - 115
Terphenyl	85	18 - 137

Comments: This sample was run on 10/21/03 at a 2x dilution. The last internal standard had low recovery. Results for fluoranthene and pyrene exceeded the calibration range. The samples were re-analyzed on 10/25/03 with a 5x dilution. The last two internal recoveries were still low. The results of the original analysis are reported for compounds but the two that exceeded the curve and all compounds referenced to the internal standard are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA6	Lab Sample ID:	AA34807
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	81%
Dry Weight Extracted:	26.041 grams	Extract Dilution:	2
Wet Weight Extracted:	32.337 grams	pH:	7.7

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	28	3.8	
208-96-8	Acenaphthylene	120	3.8	
120-12-7	Anthracene	320	3.8	
56-55-3	Benzo(a)anthracene	1300	3.8	
50-32-8	Benzo(a)pyrene	1100	3.8	J
205-99-2	Benzo(b)fluoranthene	1500	3.8	J
191-24-2	Benzo(g,h,i)perylene	220	3.8	J
207-08-9	Benzo(k)fluoranthene	900	3.8	J
218-01-9	Chrysene	890	3.8	
53-70-3	Dibenzo(a,h)anthracene	71	3.8	J
206-44-0	Fluoranthene	2300	9.6	J
86-73-7	Fluorene	110	3.8	
193-39-5	Indeno(1,2,3-cd)pyrene	240	3.8	J
91-20-3	Naphthalene	74	3.8	
85-01-8	Phenanthrene	1200	3.8	
129-00-0	Pyrene	2700	9.6	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	61	30 - 115
Terphenyl	83	18 - 137

Comments: This sample was run on 10/21/03 at a 2x dilution. The last internal standard had low recovery. Results for fluoranthene and pyrene exceeded the calibration range. The samples were re-analyzed on 10/25/03 with a 5x dilution. The last two internal recoveries were still low. The results of the original analysis are reported for all compounds but the two that exceeded the curve and all compounds referenced to the last internal standard are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA7	Lab Sample ID:	AA34808
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	80%
Dry Weight Extracted:	24.949 grams	Extract Dilution:	2
Wet Weight Extracted:	31.279 grams	pH:	8.0

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	48	4.0	
208-96-8	Acenaphthylene	92	4.0	
120-12-7	Anthracene	330	4.0	
56-55-3	Benzo(a)anthracene	1300	4.0	J
50-32-8	Benzo(a)pyrene	1100	4.0	J
205-99-2	Benzo(b)fluoranthene	1400	4.0	J
191-24-2	Benzo(g,h,i)perylene	240	4.0	J
207-08-9	Benzo(k)fluoranthene	840	4.0	J
218-01-9	Chrysene	890	4.0	J
53-70-3	Dibenzo(a,h)anthracene	75	4.0	J
206-44-0	Fluoranthene	2300	10.0	J
86-73-7	Fluorene	120	4.0	
193-39-5	Indeno(1,2,3-cd)pyrene	250	4.0	J
91-20-3	Naphthalene	73	4.0	
85-01-8	Phenanthrene	1300	4.0	
129-00-0	Pyrene	2600	10.0	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	63	30 - 115
Terphenyl	86	18 - 137

Comments: This sample was run on 10/21/03 at a 2x dilution. The last internal standard had low recovery. Results for fluoranthene and pyrene exceeded the calibration range. The samples were re-analyzed on 10/25/03 with a 5x dilution. The last two internal recoveries were still low. The results of the original analysis are reported for compounds but the two that exceeded the curve and all compounds referenced to the last internal standard are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA8	Lab Sample ID:	AA34809
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	79%
Dry Weight Extracted:	25.917 grams	Extract Dilution:	2
Wet Weight Extracted:	32.765 grams	pH:	7.9

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	45	3.9	
208-96-8	Acenaphthylene	84	3.9	
120-12-7	Anthracene	280	3.9	
56-55-3	Benzo(a)anthracene	1200	3.9	
50-32-8	Benzo(a)pyrene	920	3.9	J
205-99-2	Benzo(b)fluoranthene	1200	3.9	J
191-24-2	Benzo(g,h,i)perylene	190	3.9	J
207-08-9	Benzo(k)fluoranthene	720	3.9	J
218-01-9	Chrysene	780	3.9	
53-70-3	Dibenzo(a,h)anthracene	49	3.9	J
206-44-0	Fluoranthene	1500	3.9	
86-73-7	Fluorene	94	3.9	
193-39-5	Indeno(1,2,3-cd)pyrene	210	3.9	J
91-20-3	Naphthalene	66	3.9	
85-01-8	Phenanthrene	1100	3.9	
129-00-0	Pyrene	2300	9.6	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	59	30 - 115
Terphenyl	76	18 - 137

Comments: This sample was run on 10/21/03 at a 2x dilution. The last internal standard had low recovery. Result for pyrene exceeded the calibration range. The samples were re-analyzed on 10/25/03 with a 5x dilution. The last two internal recoveries were still low. The results of the original analysis are reported for all compounds but pyrene and all compounds referenced to the last internal standard are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA9	Lab Sample ID:	AA34810
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	81%
Dry Weight Extracted:	25.150 grams	Extract Dilution:	2
Wet Weight Extracted:	31.014 grams	pH:	7.9

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	22	4.0	
208-96-8	Acenaphthylene	100	4.0	
120-12-7	Anthracene	270	4.0	
56-55-3	Benzo(a)anthracene	800	4.0	
50-32-8	Benzo(a)pyrene	710	4.0	J
205-99-2	Benzo(b)fluoranthene	960	4.0	J
191-24-2	Benzo(g,h,i)perylene	140	4.0	J
207-08-9	Benzo(k)fluoranthene	530	4.0	J
218-01-9	Chrysene	690	4.0	
53-70-3	Dibenzo(a,h)anthracene	46	4.0	J
206-44-0	Fluoranthene	1300	4.0	
86-73-7	Fluorene	87	4.0	
193-39-5	Indeno(1,2,3-cd)pyrene	160	4.0	J
91-20-3	Naphthalene	54	4.0	
85-01-8	Phenanthrene	1100	4.0	
129-00-0	Pyrene	1500	4.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	66	30 - 115
Terphenyl	80	18 - 137

Comments: This sample was run on 10/21/03 at a 2x dilution. The last internal standard had low recovery. The samples were re-analyzed on 10/25/03 with a 2x dilution. The last two internal recoveries were low. The results of the original analysis are reported for all compounds and all compounds referenced to the last internal standard are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA10	Lab Sample ID:	AA34811
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	82%
Dry Weight Extracted:	25.848 grams	Extract Dilution:	2
Wet Weight Extracted:	31.534 grams	pH:	8.023

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	12	3.9	
208-96-8	Acenaphthylene	48	3.9	
120-12-7	Anthracene	130	3.9	
56-55-3	Benzo(a)anthracene	360	3.9	
50-32-8	Benzo(a)pyrene	270	3.9	J
205-99-2	Benzo(b)fluoranthene	380	3.9	J
191-24-2	Benzo(g,h,i)perylene	62	3.9	J
207-08-9	Benzo(k)fluoranthene	180	3.9	J
218-01-9	Chrysene	320	3.9	
53-70-3	Dibenzo(a,h)anthracene	16	3.9	J
206-44-0	Fluoranthene	660	3.9	
86-73-7	Fluorene	52	3.9	
193-39-5	Indeno(1,2,3-cd)pyrene	68	3.9	J
91-20-3	Naphthalene	22	3.9	
85-01-8	Phenanthrene	560	3.9	
129-00-0	Pyrene	730	3.9	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	58	30 - 115
Terphenyl	76	18 - 137

Comments: This sample was run on 10/21/03 at a 2x dilution. The last internal standard had low recovery. The samples were re-analyzed on 10/25/03 with a 2x dilution. The last two internal recoveries were low. The results of the original analysis are reported for all compounds and all compounds referenced to the last internal standard are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA11	Lab Sample ID:	AA34812
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	81%
Dry Weight Extracted:	25.906 grams	Extract Dilution:	5
Wet Weight Extracted:	31.828 grams	pH:	7.6

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	20	9.7	
208-96-8	Acenaphthylene	42	9.7	
120-12-7	Anthracene	120	9.7	
56-55-3	Benzo(a)anthracene	510	9.7	
50-32-8	Benzo(a)pyrene	530	9.7	
205-99-2	Benzo(b)fluoranthene	700	9.7	
191-24-2	Benzo(g,h,i)perylene	130	9.7	
207-08-9	Benzo(k)fluoranthene	350	9.7	
218-01-9	Chrysene	500	9.7	
53-70-3	Dibenzo(a,h)anthracene	31	9.7	
206-44-0	Fluoranthene	1200	9.7	
86-73-7	Fluorene	46	9.7	
193-39-5	Indeno(1,2,3-cd)pyrene	140	9.7	
91-20-3	Naphthalene	31	9.7	
85-01-8	Phenanthrene	750	9.7	
129-00-0	Pyrene	1100	9.7	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	61	30 - 115
Terphenyl	65	18 - 137

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Polynuclear Aromatic Hydrocarbons (PAHs)

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	100%
Dry Weight Extracted:	30.000 grams	Extract Dilution:	1
Wet Weight Extracted:	30.000 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	ND	1.7	
208-96-8	Acenaphthylene	ND	1.7	
120-12-7	Anthracene	ND	1.7	
56-55-3	Benzo(a)anthracene	ND	1.7	
50-32-8	Benzo(a)pyrene	ND	1.7	
205-99-2	Benzo(b)fluoranthene	ND	1.7	
191-24-2	Benzo(g,h,i)perylene	ND	1.7	
207-08-9	Benzo(k)fluoranthene	ND	1.7	
218-01-9	Chrysene	ND	1.7	
53-70-3	Dibenzo(a,h)anthracene	ND	1.7	
206-44-0	Fluoranthene	ND	1.7	
86-73-7	Fluorene	ND	1.7	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.7	
91-20-3	Naphthalene	ND	1.7	
85-01-8	Phenanthrene	ND	1.7	
129-00-0	Pyrene	ND	1.7	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	57	30 - 115
Terphenyl	56	18 - 137

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA12	Lab Sample ID:	AA34813
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	82%
Dry Weight Extracted:	27.038 grams	Extract Dilution:	2
Wet Weight Extracted:	32.800 grams	pH:	8.0

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	5.18	3.7	
208-96-8	Acenaphthylene	7.03	3.7	
120-12-7	Anthracene	25	3.7	
56-55-3	Benzo(a)anthracene	130	3.7	
50-32-8	Benzo(a)pyrene	100	3.7	
205-99-2	Benzo(b)fluoranthene	140	3.7	
191-24-2	Benzo(g,h,i)perylene	27	3.7	
207-08-9	Benzo(k)fluoranthene	70	3.7	
218-01-9	Chrysene	130	3.7	
53-70-3	Dibenzo(a,h)anthracene	7.31	3.7	
206-44-0	Fluoranthene	240	3.7	
86-73-7	Fluorene	8.93	3.7	
193-39-5	Indeno(1,2,3-cd)pyrene	28	3.7	
91-20-3	Naphthalene	6.72	3.7	
85-01-8	Phenanthrene	140	3.7	
129-00-0	Pyrene	290	3.7	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	60	30 - 115
Terphenyl	75	18 - 137

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

PAH MATRIX SPIKE (MS) / MATRIX SPIKE DUPLICATE (MSD) RECOVERY

Naval Ed. Training Center

Sample ID: AA34813

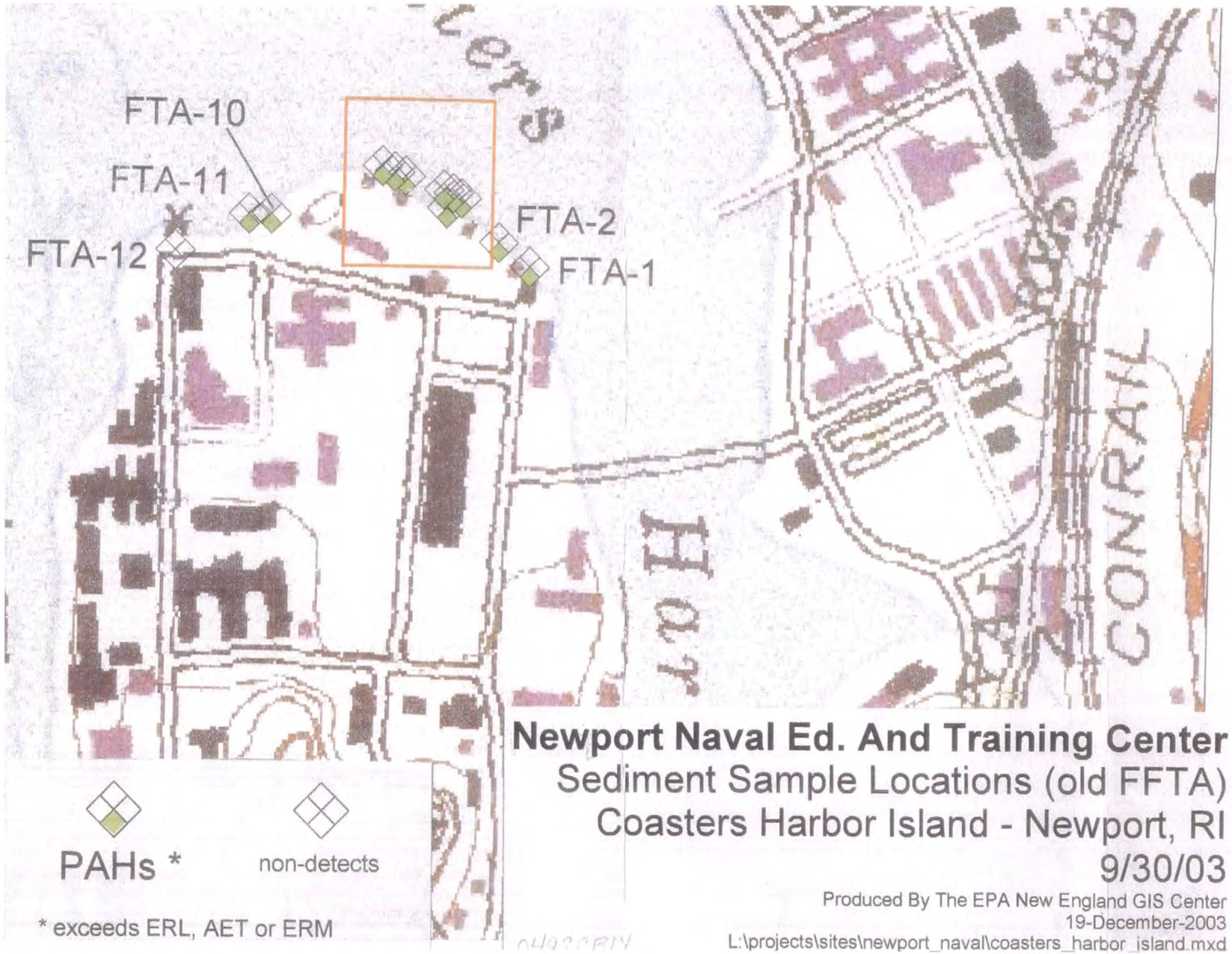
PARAMETER	SPIKE ADDED ug/Kg	SAMPLE CONCENTRATION ug/Kg	MS CONCENTRATION ug/Kg	MS % REC	QC LIMITS (% REC)
Acenaphthene	140	5.18	100	68	70 - 130
Acenaphthylene	140	7.03	96	62	70 - 130
Anthracene	140	25	130	71	70 - 130
Benzo(a)anthracene	140	130	250	84	70 - 130
Benzo(a)pyrene	140	100	250	105	70 - 130
Benzo(b)fluoranthene	140	140	300	110	70 - 130
Benzo(g,h,i)perylene	140	27	73	32	70 - 130
Benzo(k)fluoranthene	140	70	190	86	70 - 130
Chrysene	140	130	260	89	70 - 130
Dibenzo(a,h)anthracene	140	7.31	55	33	70 - 130
Fluoranthene	140	240	360	87	70 - 130
Fluorene	140	8.93	110	70	70 - 130
Indeno(1,2,3-cd)pyrene	140	28	80	36	70 - 130
Naphthalene	140	6.72	95	61	70 - 130
Phenanthrene	140	140	280	94	70 - 130
Pyrene	140	290	480	127	70 - 130

Comments:

PARAMETER	MSD SPIKE ADDED	MSD CONCENTRATION ug/Kg	MSD % REC	RPD %	QC LIMITS RPD
Acenaphthene	140	89	59	15	30
Acenaphthylene	140	90	58	6.16	30
Anthracene	140	130	76	7.24	30
Benzo(a)anthracene	140	230	69	20	30
Benzo(a)pyrene	140	220	85	21	30
Benzo(b)fluoranthene	140	260	83	28	30
Benzo(g,h,i)perylene	140	90	44	32	30
Benzo(k)fluoranthene	140	180	76	13	30
Chrysene	140	220	57	44	30
Dibenzo(a,h)anthracene	140	68	43	24	30
Fluoranthene	140	420	130	41	30
Fluorene	140	110	67	3.51	30
Indeno(1,2,3-cd)pyrene	140	100	52	36	30
Naphthalene	140	82	53	15	30
Phenanthrene	140	300	110	19	30
Pyrene	140	390	68	61	30

Comments:

Samples in Batch: AA34801 AA34802 AA34803 AA34804 AA34805 AA34806 AA34807 AA34808 AA34809 AA34810 AA34811 AA34812 AA34813



Newport Naval Ed. And Training Center
Sediment Sample Locations (old FFTA)
Coasters Harbor Island - Newport, RI
9/30/03

Produced By The EPA New England GIS Center
19-December-2003
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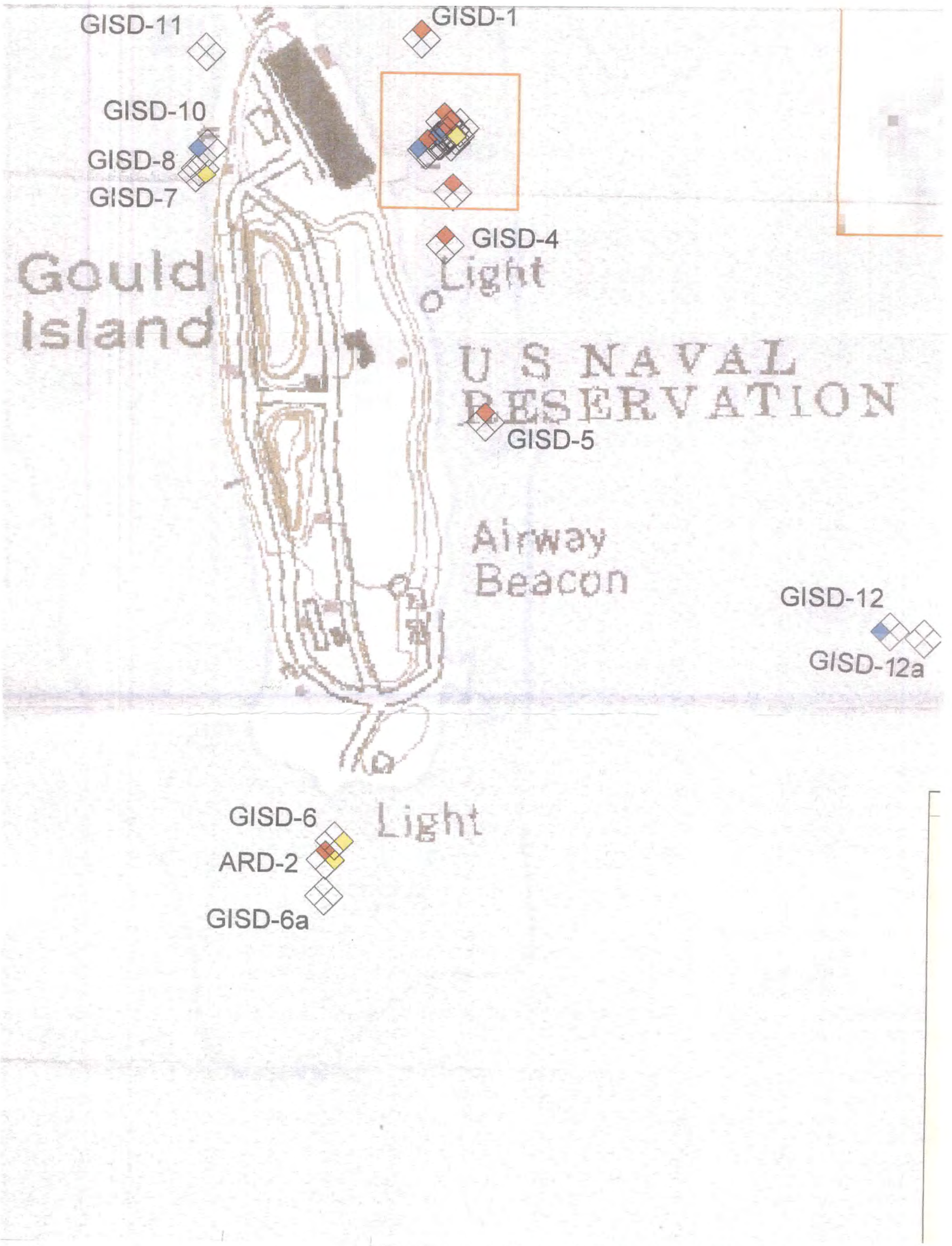

PCBs *

Metals * Cyanide **

* exceeds ERL, AET or ERM

** detected

Newport Naval Ed. And Training Center

Sediment Sample Locations

Gould Island - Newport, RI

9/29/03 - 9/30/03

Produced By The EPA New England GIS Center

17-December-2003

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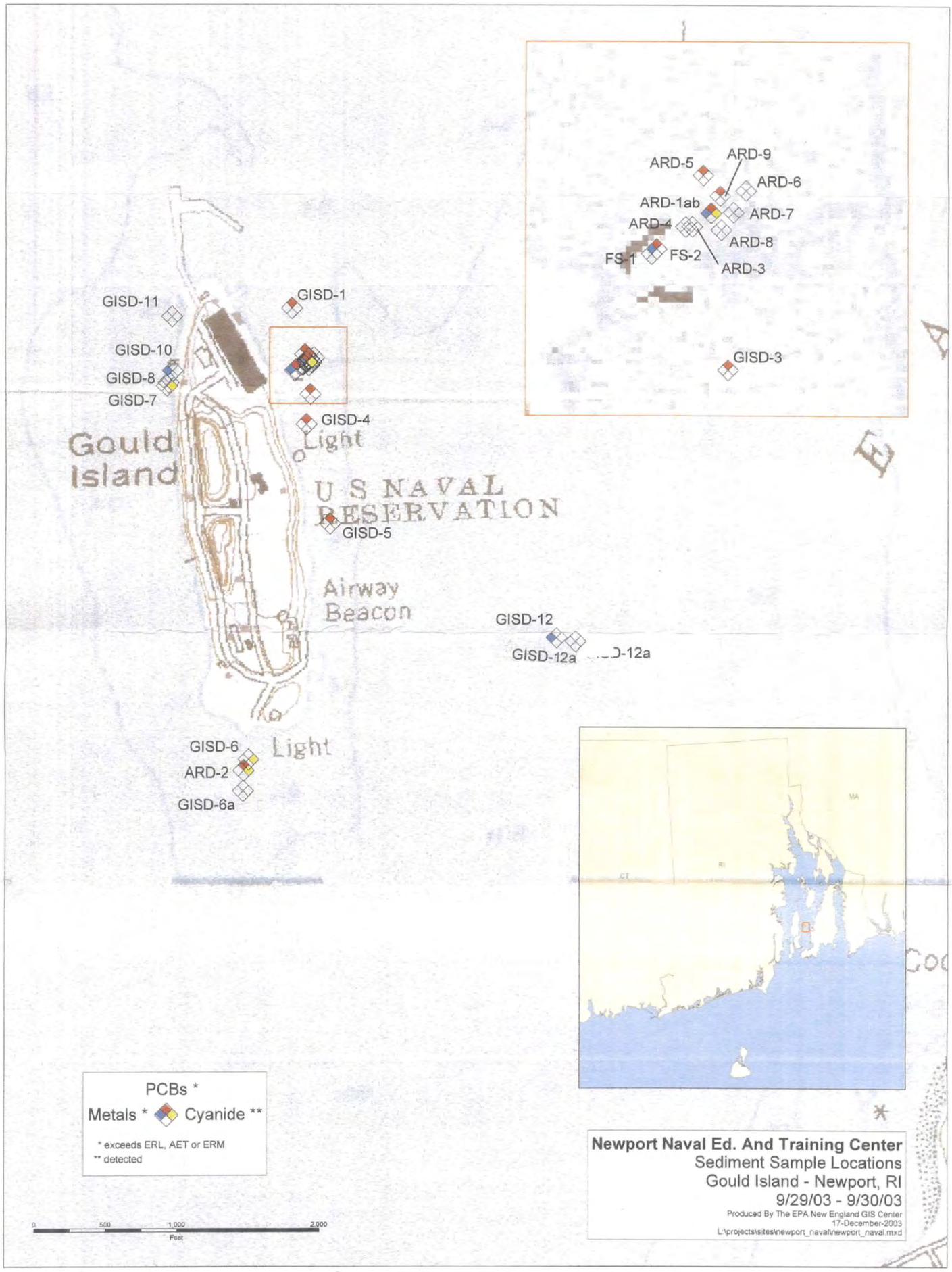
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ARD-9
ARD-6
ARD-1ab
ARD-7
ARD-4
ARD-8
FS-1
FS-2
ARD-3
GISD-3
GISD-11
GISD-1
GISD-10
GISD-8
GISD-7
GISD-4
Light
Gould Island
U S NAVAL RESERVATION
GISD-5
Airway Beacon
GISD-12
GISD-12a
GISD-6
Light
ARD-2
GISD-6a
PCBs *
Metals *
Cyanide **
* exceeds ERL, AET or ERM
** detected
0
500
1,000
2,000
Feet
Newport Naval Ed. And Training Center
Sediment Sample Locations
Gould Island - Newport, RI
9/29/03 - 9/30/03
Produced By The EPA New England GIS Center
17-December-2003
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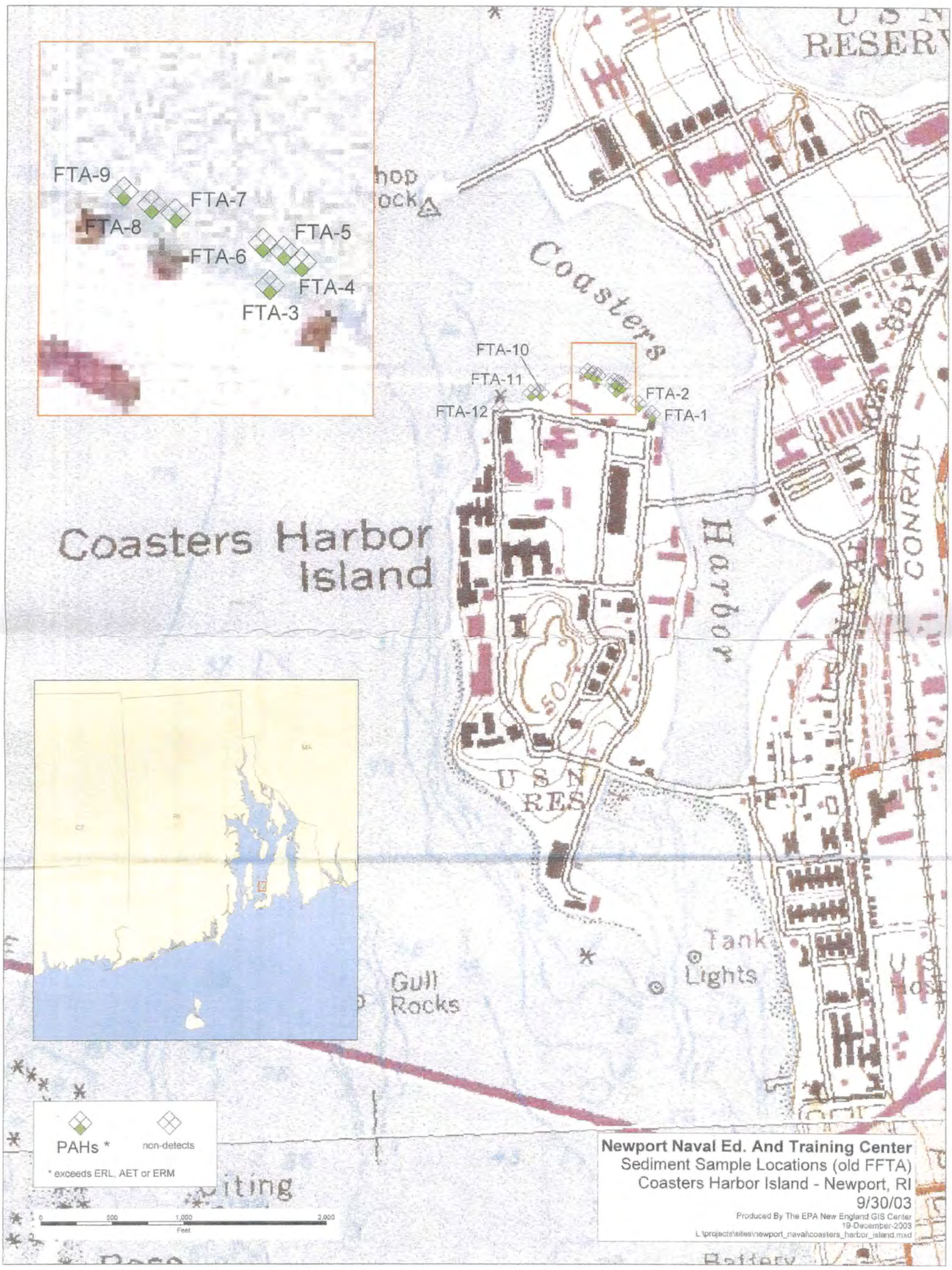
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FTA-7
FTA-8
FTA-5
FTA-6
FTA-4
FTA-3
FTA-10
FTA-11
FTA-12
FTA-2
FTA-1
Coasters Harbor Island
Coasters
Harbor
CONRAIL
U S N
RES
Tank
Lights
Gull
Rocks
PAHs *
non-detects
* exceeds ERL, AET or ERM
0
500
1,000
2,000
Feet
Newport Naval Ed. And Training Center
Sediment Sample Locations (old FFTA)
Coasters Harbor Island - Newport, RI
9/30/03
Produced By The EPA New England GIS Center
19-December-2003
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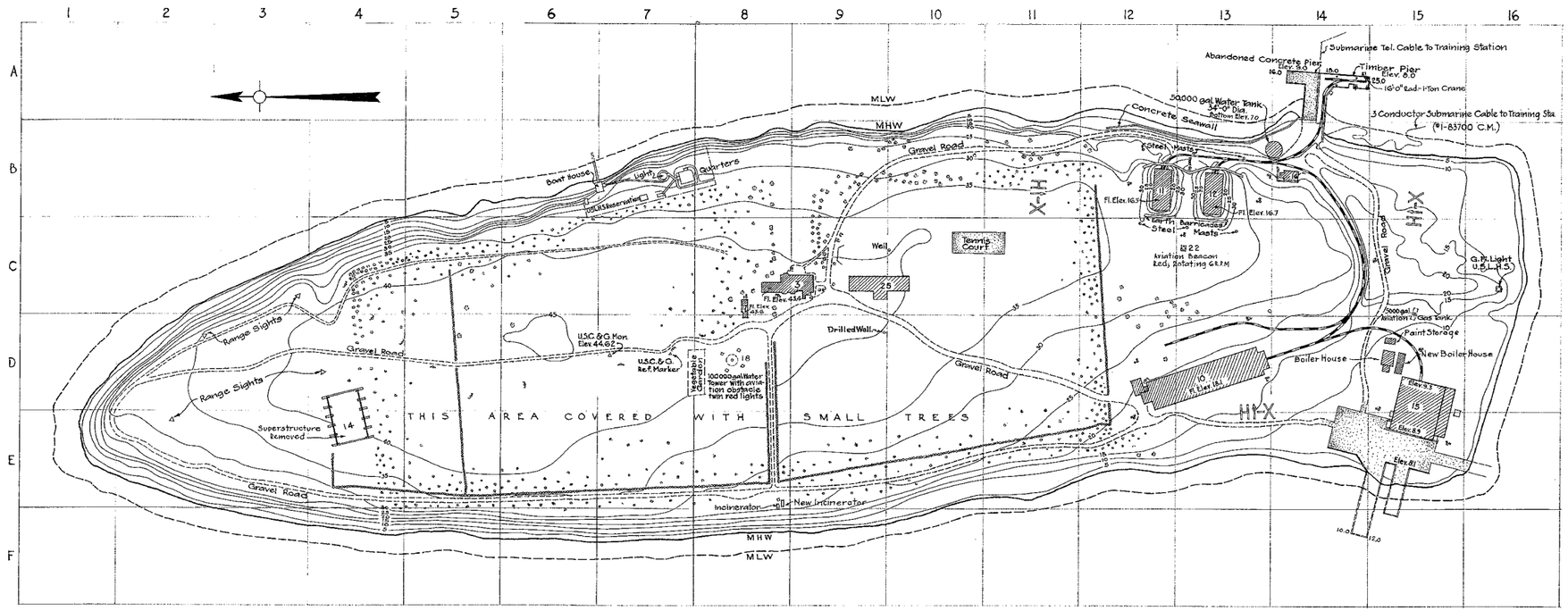
APPENDIX C

HISTORIC PHOTOS, MAPS, AND DRAWINGS OF GOULD ISLAND AND BUILDING 32



DEPT	NO	LOC	DESIGNATION	LEGEND
	18	D-8	Water Tower	
	22	C-13	Aviation Beacon	
Mil.	3	C-9	Marine Barracks	Railroad
"	17	C-8	Coal Shed	Hydrant
S	10	D-13	Torpedo Storehouse	Power Pole
"	11	E-12	Warhead "	Electric Light
"	12	E-13	" "	
Ma.	16	E-14	Waiting Room	
A	14	E-4	Hangar Foundation	
"	15	D-15	Seaplane Hangar	
Mil.	25	C-9	Bks. for Enlisted Personnel	

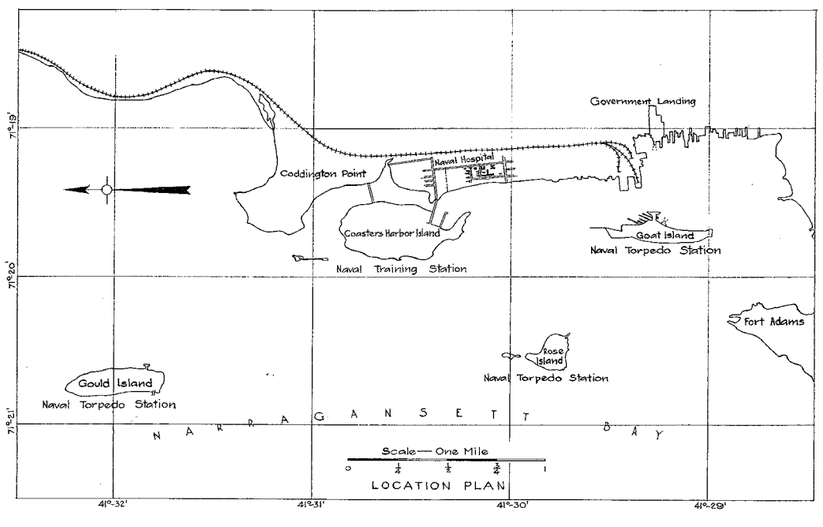
Mil.=Military; Ma.=Maintenance
S.=Supply; A.=Aviation

ELEVATIONS

Mean High Water	+3.7
Mean Low Water	0.0

AREAS

Total Area To M.L.W.	51.85 Acres
Area to M.H.W. exclusive of U.S.L.H.S. Reservation	45.85 "
Area of U.S.L.H.S. Reservation	0.62 "



OFFICIAL USE ONLY

MAP OF

GOULD ISLAND
U. S. NAVAL TORPEDO STATION
NEWPORT, R.I.

SHOWING CONDITIONS ON

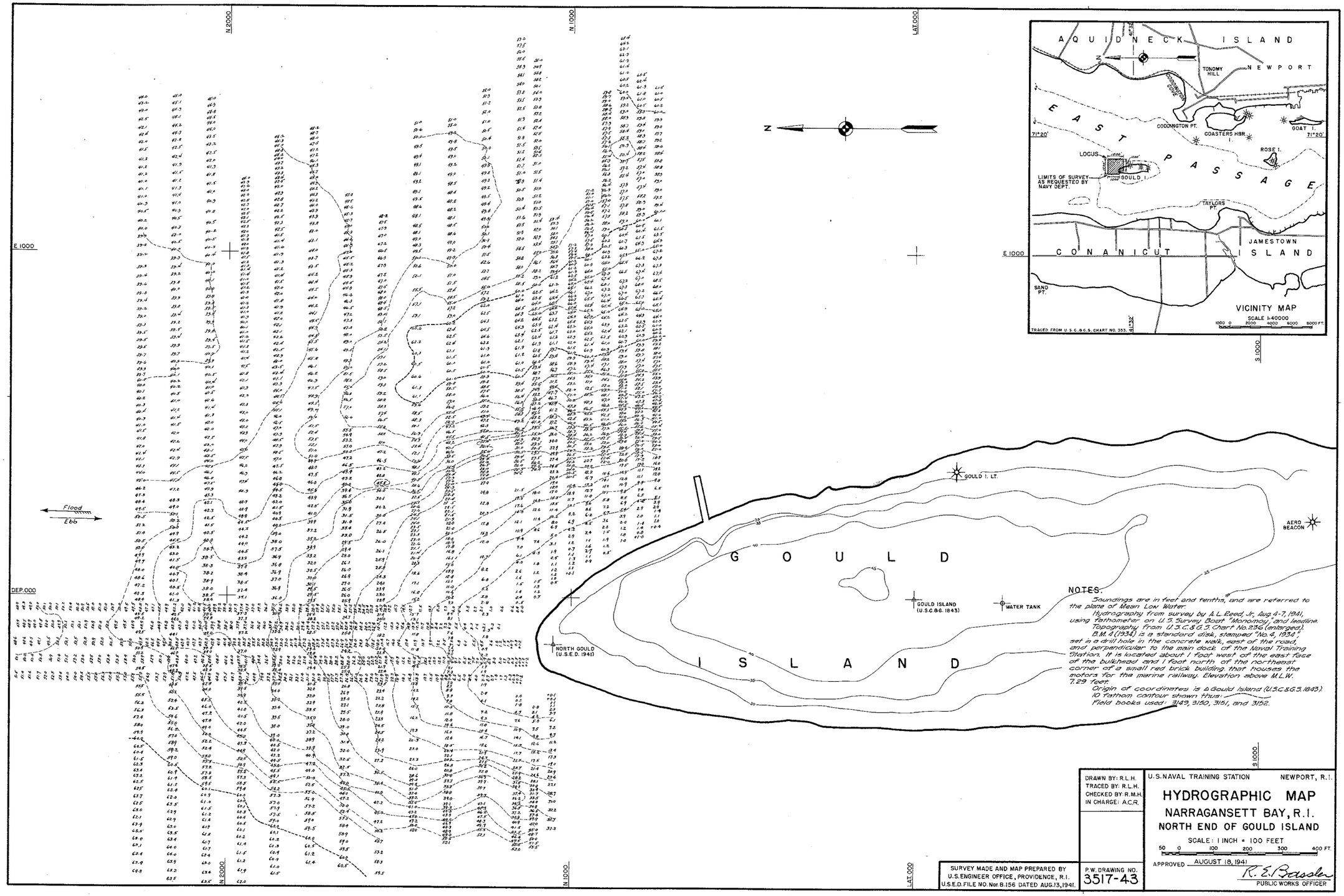
JUNE 30, 1940.

SCALE OF FEET.
0 100 200 300 400

R. D. Miller
COMMANDER, (C.E.C.) U.S. NAVY
PUBLIC WORKS OFFICER

Corrected April 1, 1943

P.W.D. Nº 2780-37



NOTES.

Soundings are in feet and tenths, and are referred to the plane of Mean Low Water.

Hydrography from survey by A.L. Reed, Jr, Aug. 4-7, 1941, using fathometer on U.S. Survey Boat "Monomoy", and leadline.

Topography from U.S.C.&G.S. Chart No. 236 (enlarged).

B.M. 2 (1934) is a standard disk, stamped "No. 4, 1934", set in a drill hole in the concrete walk, east of the road, and perpendicular to the main dock of the Naval Training Station. It is located about 1 foot west of the east face of the bulkhead and 1 foot north of the northeast corner of a small red brick building that houses the motors for the marine railway. Elevation above M.L.W. 7.29 feet.

Origin of coordinates is Gould Island (U.S.C.&G.S. 1843).

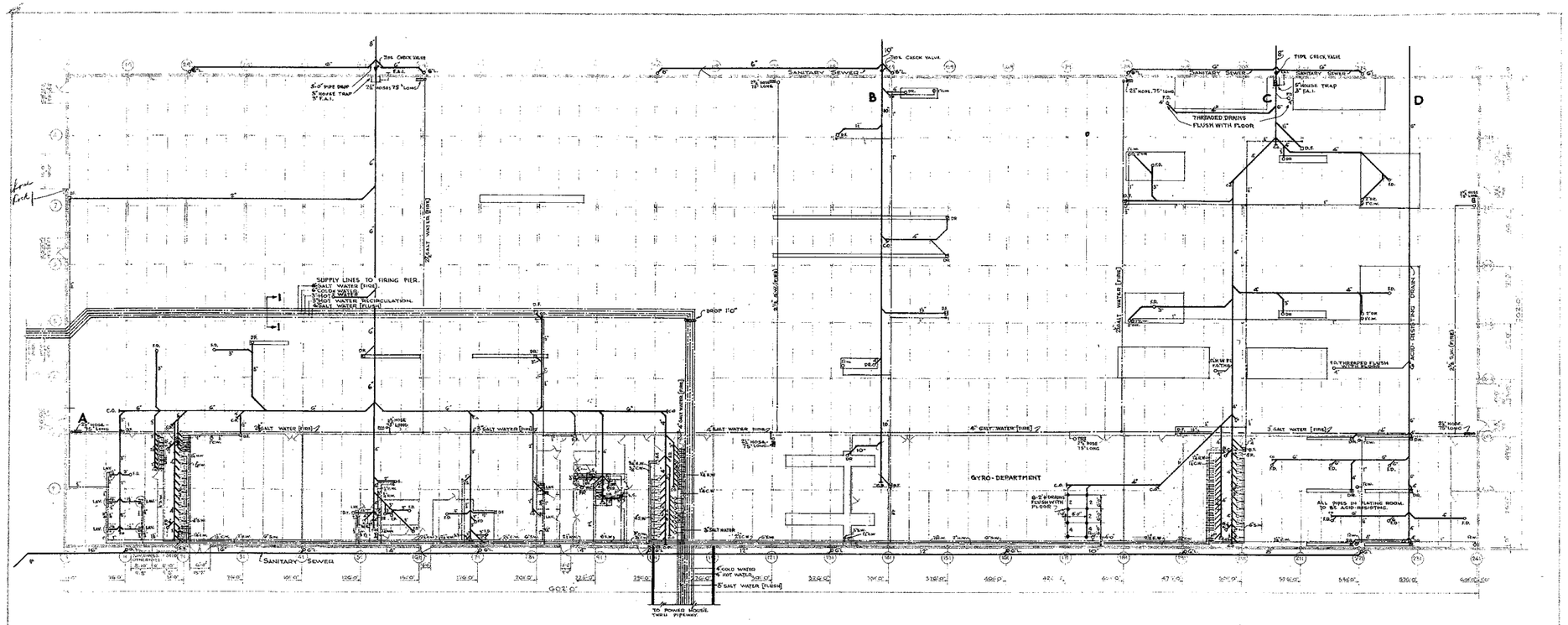
10 fathom contour shown thus:

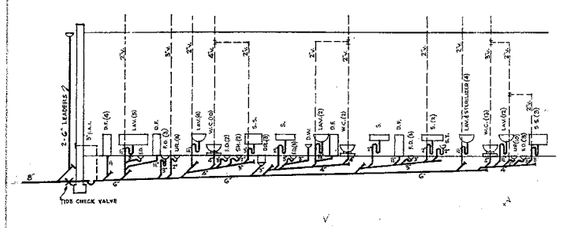
Field books used: 3149, 3150, 3151, and 3152.

DRAWN BY: R.L.H.	U.S. NAVAL TRAINING STATION NEWPORT, R.I.
TRACED BY: R.L.H.	**HYDROGRAPHIC MAP**
CHECKED BY: R.M.H.	**NARRAGANSETT BAY, R.I.**
IN CHARGE: A.C.R.	**NORTH END OF GOULD ISLAND**
	SCALE: 1 INCH = 100 FEET
	50 0 100 200 300 400 FT.
	APPROVED AUGUST 18, 1941
	R. E. Bassler
	PUBLIC WORKS OFFICER

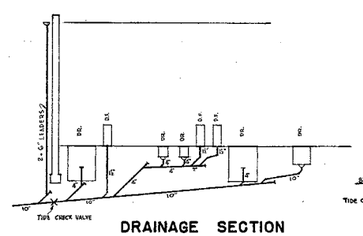
SURVEY MADE AND MAP PREPARED BY U.S. ENGINEER OFFICE, PROVIDENCE, R.I. U.S.E.D. FILE NO. Nor. B.156 DATED AUG. 13, 1941.

P.W. DRAWING NO. 3517-43

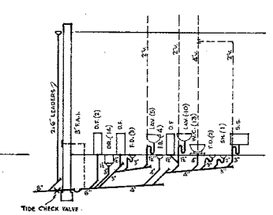




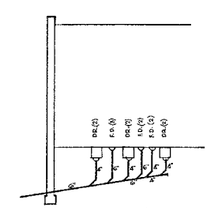
DRAINAGE SECTION
GROUP "A"



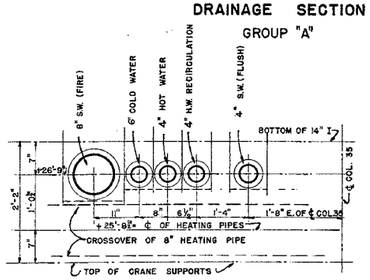
DRAINAGE SECTION
GROUP "B"



DRAINAGE SECTION
GROUP "C"



DRAINAGE SECTION
GROUP "D"



SECTION "1-1"

NOTE
SUPERCEDED BY THE FOLLOWING DRAWINGS
SECTION NO. 1 P.W. DRAWING NO. 7607-83
SECTION NO. 2 P.W. DRAWING NO. 7608-83
SECTION NO. 3 P.W. DRAWING NO. 7609-83
SECTION NO. 4 P.W. DRAWING NO. 7610-83

ABBREVIATIONS

C.W.	=	COLD WATER
H.W.	=	HOT WATER
S.W.	=	SALT WATER
C.O.	=	CLEANOUT
F.A.I.	=	FRESH AIR INTAKE
D.F.	=	DRINKING FOUNTAIN
F.D.	=	FLOOR DRAIN
D.R.	=	DRAIN
L.AV.	=	LAVATORY
U.R.	=	URINAL
W.C.	=	WATER CLOSET
S.	=	SINK
S.S.	=	SLOP SINK
S.T.	=	STEAM TABLE
D.W.	=	DISH-WASHING MACHINE
SH.	=	SHOWER

NOTE: ALL HORIZONTAL PIPE RUNS SHOWN IN SOLID LINES ARE TO BE RUN UNDER FLOOR OR GRADE.
LOCATION OF SALT WATER (FIRE) HOSE RACKS ARE TO BE FINALLY DETERMINED BY OFFICER-IN-CHARGE.

SYMBOLS

SALT WATER
COLD WATER
HOT WATER

REVISION	DATE	DESCRIPTION	BY
3.	5/20/42	FIXTURES ADDED & GENERAL REVISIONS	C.M.F.
2.	4/14/42	CHANGES MADE AT DYNOMETER ROOM FLOOR DRAINS ADDED	C.D.V.
1.	3/25/42	PIPES RESIZED	B.A.

REVIEWED P.W.D. A.S.R.

P.W. DRAWING NO. 4313-50

P.W. DEPARTMENT — BUREAU OF YARDS & DOCKS

APPROVED MARCH 23, 1942 — PUBLIC WORKS OFFICER

Y. & D. DRAWING NO. 190913

DRAWN BY R.A.
TRACED BY R.A.
CHECKED BY J.B.
CHIEF DF'MN C.D.V.
IN CHARGE C.D.V.

U. S. NAVAL OPERATING BASE, NEWPORT, R. I.
TORPEDO STATION GOULD ISLAND

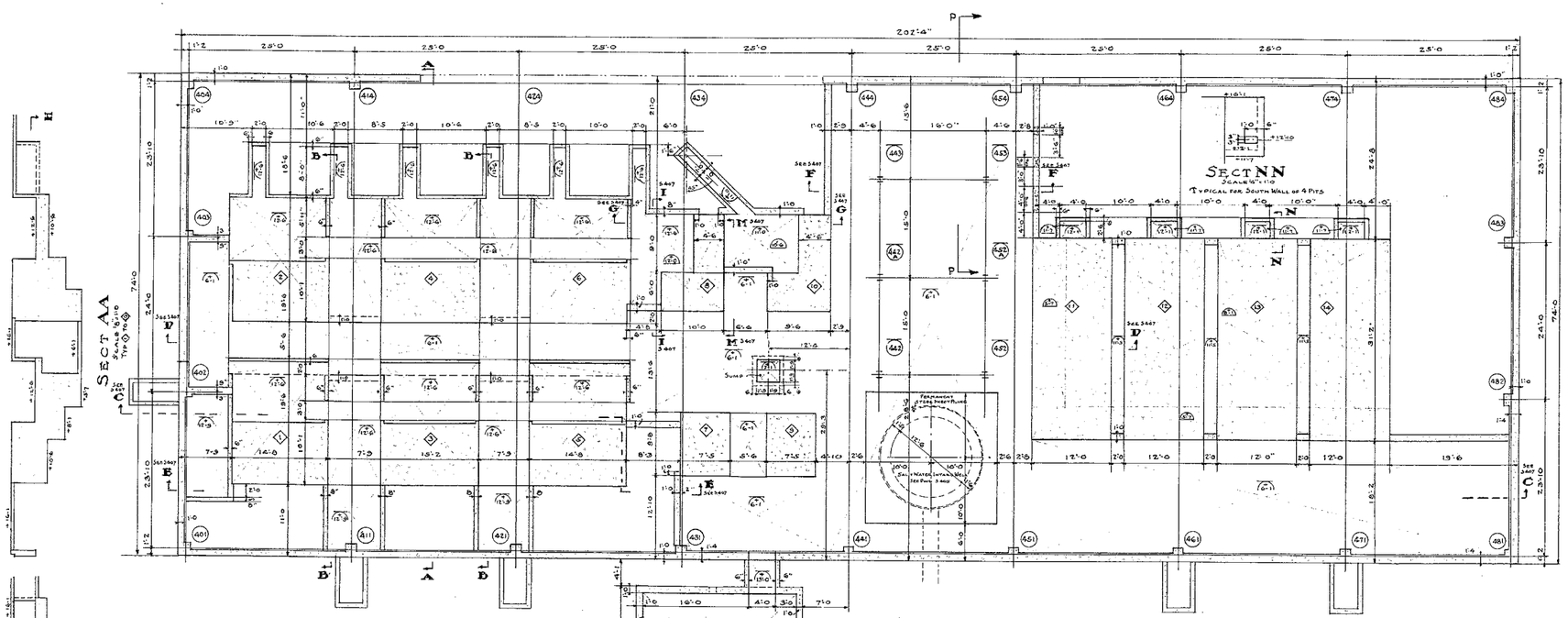
OVERHAUL SHOP PLUMBING FLOOR PLAN

SHEET OF ACCOM. DRAWING SPECIFICATION NO.

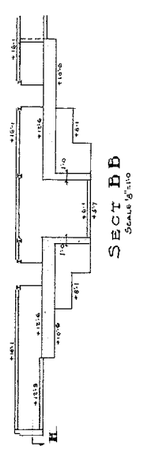
J.B.(P) CONT. NO. NO. y 6994
DRAWING NO. P-201

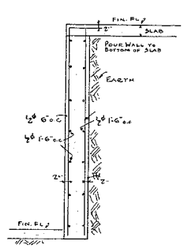
SUBMITTED MARCH 14, 1942 John Brackett
JOHN BRACKETT, CONSULTING ENGINEER
1962 BROADWAY, NEW YORK

SCALE 1"=20'-0" AND AS NOTED

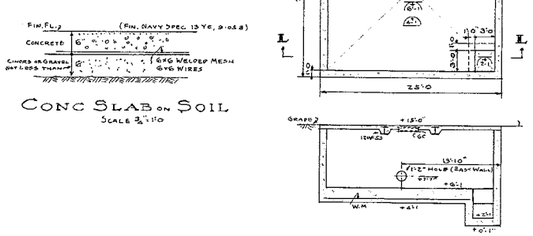


BASEMENT CONCRETE WALLS & FL SLABS
SCALE 1/8" = 1'-0"
SECTIONAL VIEW TAKEN ON HH (JUST ABOVE ELEV + 12'-6 SEE SECT AA)



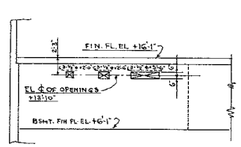


TYP. FOR ALL 12" WALLS
SCALE 3/8" = 1'-0"
FOR HEIGHTS SEE SECTS AA TO GG



CONC SLAB on SOIL
SCALE 3/8" = 1'-0"

SECT LL
SCALE 1/8" = 1'-0"



ELEV. P-P
SCALE 1/8" = 1'-0"

GENERAL NOTES

1. SECTIONS CC TO K-KON PNG 3407
2. ◇ BETWEEN CROSSED POT & DASH LINES: MACHIND EQUIPMENT FOOTINGS. DETAIL ON 3408 409 408
3. 12" FL ELEV = +16'-1 DATUM: MEAN LOW WATER
4. CONCRETE = STONE CONC 2000 LBS
5. BARS - DEFORMED - INTERMEDIATE GRADE
6. ⌒ = ELEV. TOP OF CONC.
7. ⌓ = " BOT " "
8. FOOTINGS & SLABS TO REST ON VIRGIN SOIL
9. W.M. = 6"x6" WELDED MESH 6"x6" WIRES (1-1/4" DIA)
10. WALLS - 12" CONC. WALLS ARE REINFCD SEE TYP SECT

REVISION	BY	DATE	BRIEF DESCRIPTION	APPROVED BY
C				
B				
A	CDV	6-8-42	OPENINGS ADDED BASMT WALL - ELEV. P-P ADDED	

ENGINEER'S DESIGN DEPT.
DRAWN R. GUTMAN
TRACED D.G.
CHECKED S.P.
PROJECT MGR. 5/15/42 DATE

PUBLIC WORKS DEPT.
RECEIVED 6-11-42
REVIEWED BY:
D'RFTS. ENGINEER SR. ENG'R
11/2/42 R.C.R. A.C.R.
6/13/42 6-12-42
D.O. 6-12-42
H. S. Brown 6-13-42
RESIDENT OFFICER DATE

JOHN BRACKETT, CONSULTING ENGINEER
1860 BROADWAY, NEW YORK

ENGINEERS CONTRACT NOV. 4994 DRAWING NO. S 406

U. S. NAVAL OPERATING BASE NEWPORT R. I.

TORPEDO STATION, GOULD ISLAND

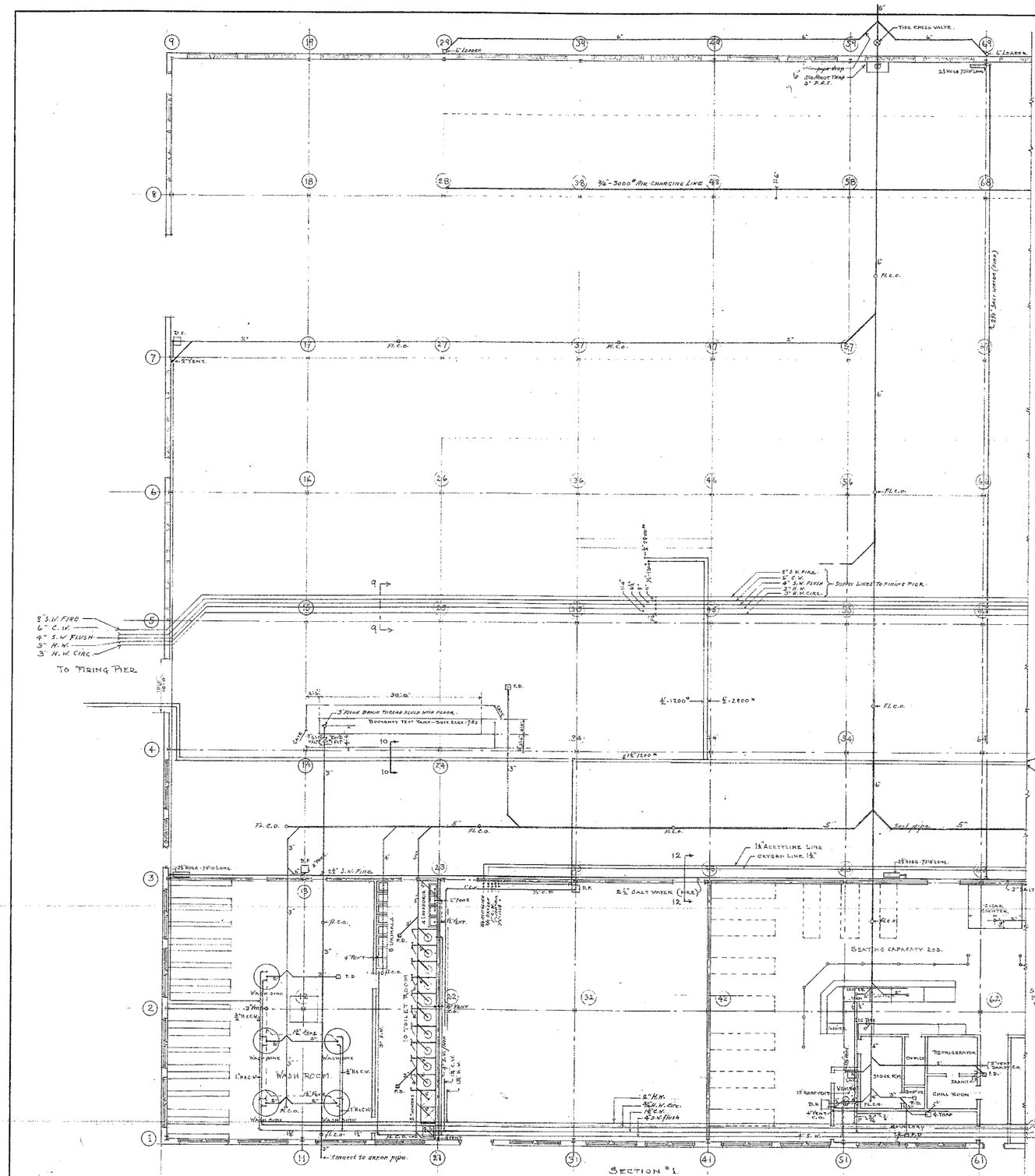
POWER HOUSE
BASEMENT CONCRETE

APPROVED JUNE 25, 1942 Y. & D. DRAWING NO.
OFFICER IN CHARGE OF CONSTRUCTION

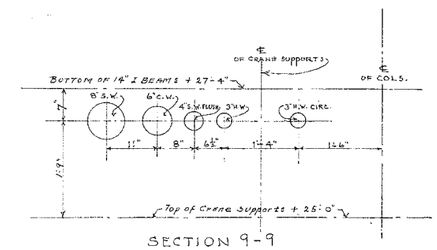
SATISFACTORY TO

SCALE: AS NOTED.

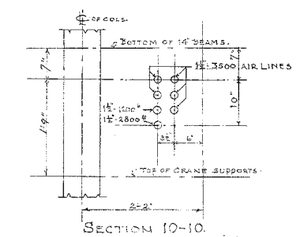
P. W. DRAWING NO.
4909-56



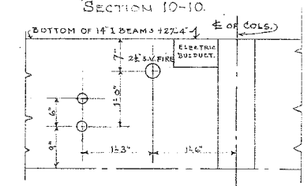
SECTION 1.



SECTION 9-9



SECTION 10-10.



SECTION 12-12.

NOTE
THIS DRAWING SUPERCEDES P.W. DRAWING No. 4313-50
ALSO SEE THE FOLLOWING DRAWINGS
SECTION 2 No. 7608-83
SECTION 3 No. 7609-83
SECTION 4 No. 7610-83

NOTE 1
SEE SECTION #2 FOR CONTINUATION OF CAFETERIA

REVISION	BY	DATE	BRIEF DESCRIPTION	APPROVED BY
D				
C				
B				
A				

ENGINEER'S DESIGN DEPT.		
DRAWN	E.A.G.	
TRACED	E.A.G.	
CHECKED		
PROJECT MGR.		DATE
PUBLIC WORKS DEPT.		
RECEIVED		
REVIEWED BY:		
D'RFTS.	ENGINEER	SR. ENG'R
D.O.		
		7-15-42
RESIDENT OFFICER		DATE

SATISFACTORY TO

SCALE: 1/8" = 1'-0"

P. W. DRAWING NO. 7607-83

P. T. COX CONSTRUCTION COMPANY
AND
SPEARIN, PRESTON AND BURROWS, INC.
ENGINEERS CONTRACT NOY. 5587 DRAWING NO. C.S.-A201 P

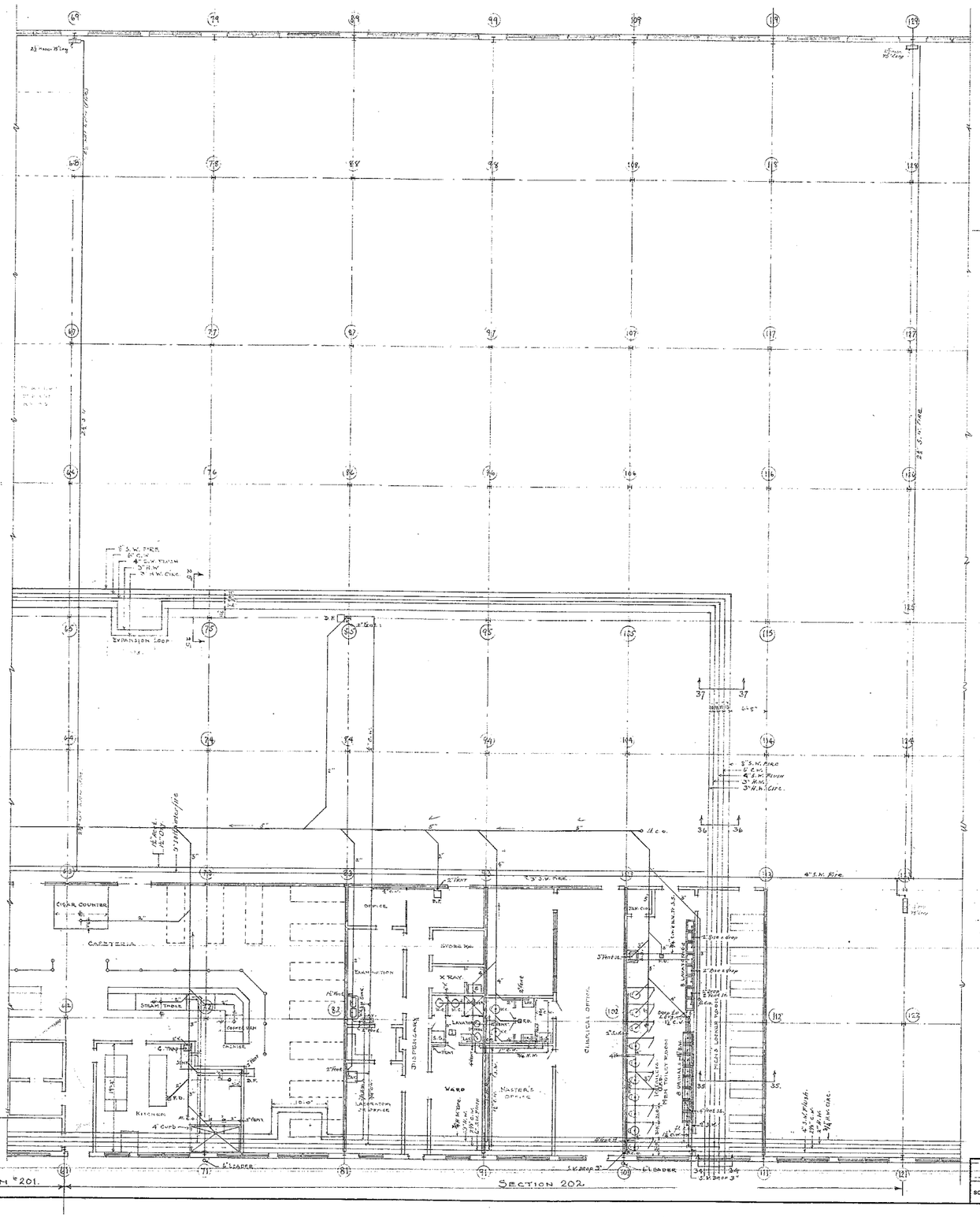
U. S. NAVAL OPERATING BASE NEWPORT R. I.

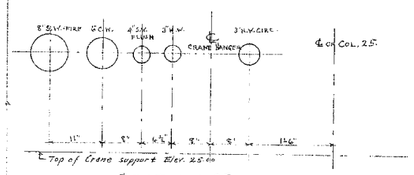
TORPEDO STATION GOULD ISLAND

OVERHAUL SHOP
FLOOR PLAN
PLUMBING LAYOUT
SECTION No. 1

APPROVED, ... V. & D. DRAWING NO.

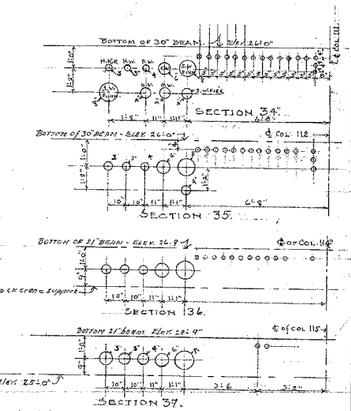
OFFICER IN CHARGE OF CONSTRUCTION





SECTION 25.

NOTE
THIS DRAWING SUPERCEDES P.W. DRAWING No. 4313-50
ALSO SEE THE FOLLOWING DRAWINGS
SECTION 1 No. 7607-83
SECTION 3 No. 7609-83
SECTION 4 No. 7610-83



REVISION	BY	DATE	BRIEF DESCRIPTION	APPROVED BY
C				
B				
A	1	7-15-42	DISPENSARY LAVATORY.	1-14-43

ENGINEER'S DESIGN DEPT.
DRAWN E.A.G.
TRACED E.A.G.
CHECKED C.J.S.

PROJECT MGR. DATE

PUBLIC WORKS DEPT.
RECEIVED
REVIEWED BY:
D'RFTS. ENGINEER SR. ENG'R
D.O.
RESIDENT OFFICER DATE 6-25-42

SATISFACTORY TO

SCALE: 1/8" = 1'-0"

P. W. DRAWING NO. 7608-83

P. T. COX CONSTRUCTION COMPANY
AND
SPEARIN, PRESTON AND BURROWS, INC.
ENGINEERS CONTRACT NOY. 5167 DRAWING NO. CS-R202-P

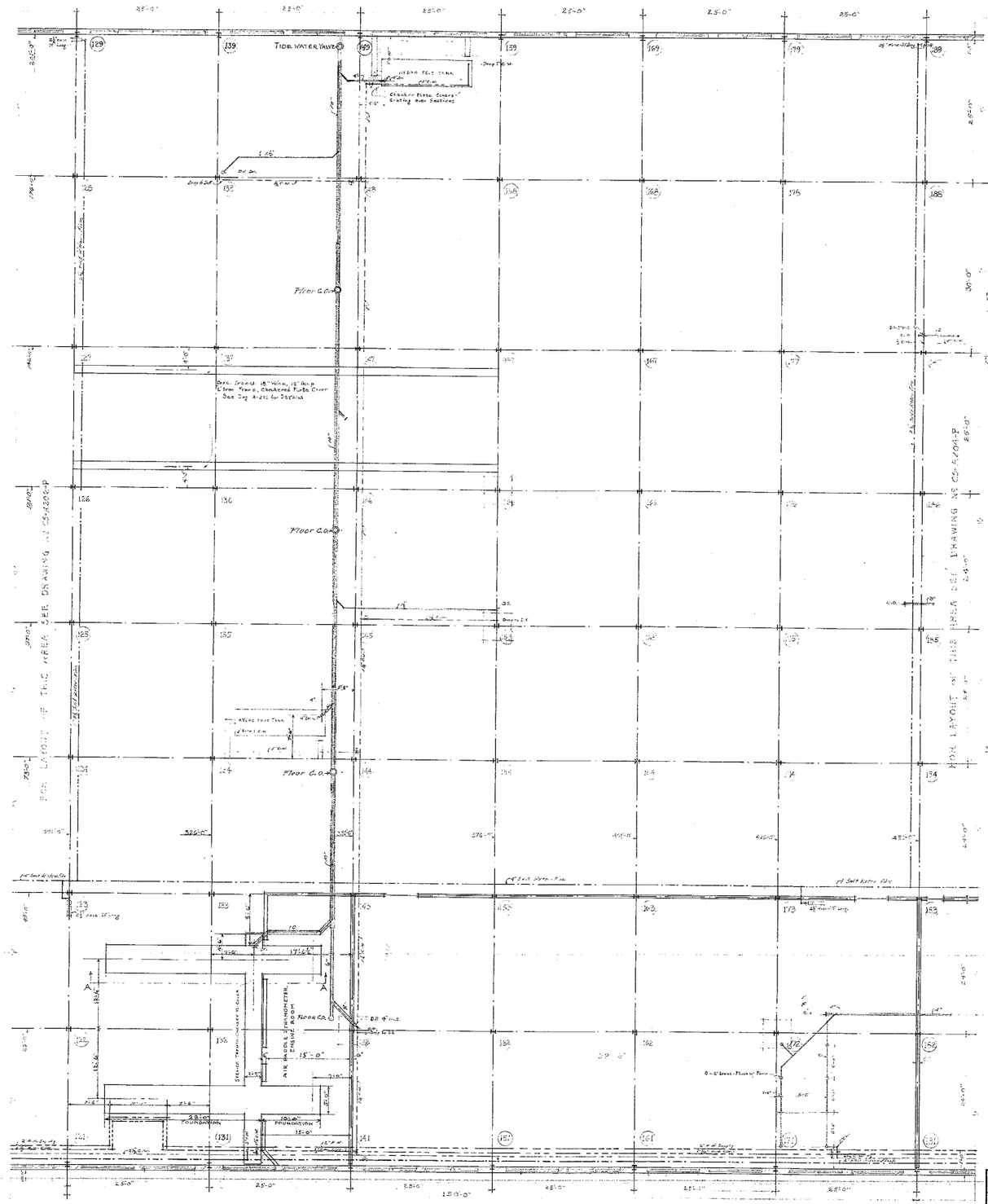
U. S. NAVAL OPERATING BASE NEWPORT R. I.

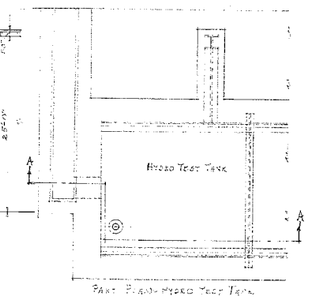
TORPEDO STATION GOULD ISLAND

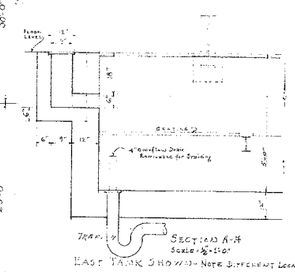
OVERHAUL SHOP FLOOR PLAN PLUMBING LAYOUT SECTION No 2.

APPROVED Y.&D. DRAWING NO.

OFFICER IN CHARGE OF CONSTRUCTION

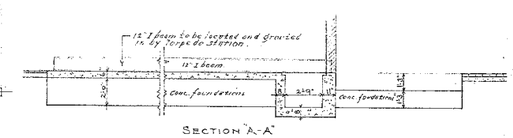






EAST TANK SHOWN - NOTE DIFFERENT LOCATION OF DRAIN IN WEST TANK

NOTE
THIS DRAWING SUPERCEDES P.W. DRAWING No 4313-50
ALSO SEE THE FOLLOWING DRAWINGS
SECTION 1 No. 7607-83
SECTION 2 No. 7608-83
SECTION 4 No. 7610-83



NOTE: All piping above floor to be Exposed.

4 PLAN SECTIONS			
CS-A201-P	CS-A202-P	CS-A203-P	CS-A204-P

REVISION	BY	DATE	BRIEF DESCRIPTION	APPROVED	BY
D					
C					
B					
A					

ENGINEER'S DESIGN DEPT.
DRAWN: J. Ferro 6/6/42
TRACED
CHECKED

PROJECT MGR. DATE

PUBLIC WORKS DEPT.
RECEIVED
REVIEWED BY: 6/16/42
D'RFTS. ENGINEER SR. ENG'R.
C.R.V. J.H.M.
D.O.
RESIDENT OFFICER DATE 6-16

P. T. COX CONSTRUCTION COMPANY
AND
SPEARIN, PRESTON AND BURROWS, INC.
ENGINEERS CONTRACT NOY. 5187 DRAWING NO. CS-A203-P

U. S. NAVAL OPERATING BASE NEWPORT R.I.
TORPEDO STATION GOULD ISLAND

OVERHAUL SHOP
SECTION No 3
"PLUMBING LAYOUT PLAN"

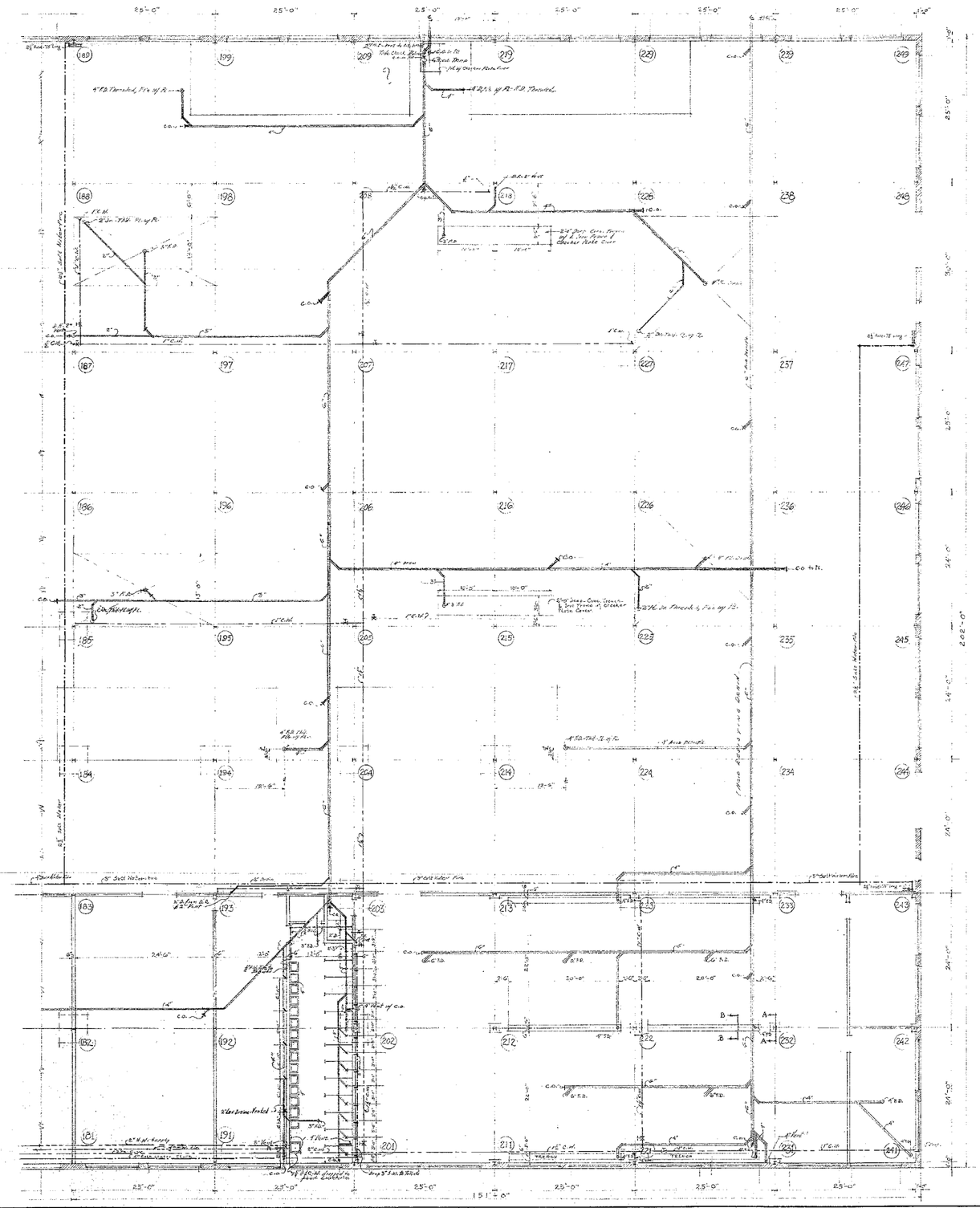
SATISFACTORY TO

SCALE: 1/8" = 1'-0" PLAN
DETAILS AS NOTED

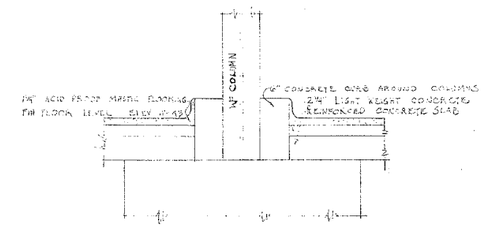
P. W. DRAWING NO.
7609-83

APPROVED
Y. & D. DRAWING NO.
X
OFFICER IN CHARGE OF CONSTRUCTION

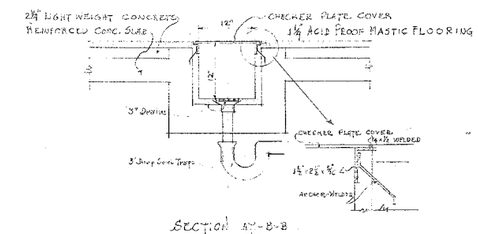
FOR LAYOUT OF THIS ARCH SEE DRAWING NO. CS-A205-P



NOTE
THIS DRAWING SUPERCEDES P.W. DRAWING No. 4313-50
ALSO SEE THE FOLLOWING DRAWINGS
SECTION 1 No. 7607-83
SECTION 2 No. 7608-83
SECTION 3 No. 7609-83



SECTION AT A-A
SCALE: 1"=1'-0"



SECTION AT B-B
Scale: 1"=1'-0"

LEGEND:
C.I. DRAINS
ACID RESISTING DRAIN
SALT WATER LINES
COLD WATER LINES
HOT WATER LINES

NOTE: All piping Above Floor to be Exposed.

PLAN SECTIONS
CS-A201-P CS-A202-P CS-A203-P CS-A204-P

REVISION	BY	DATE	BRIEF DESCRIPTION	APPROVED BY
C				
B				
A				

ENGINEER'S DESIGN DEPT.		
DRAWN	C. Quiros	
TRACED		
CHECKED		
PROJECT MGR.		DATE
PUBLIC WORKS DEPT.		
RECEIVED		6/3/42
REVIEWED BY:		
DRFTS.	ENGINEER	SR. ENG'R
	J.L.M.	ACG
	6/5/42	6/5-42
D.O.	RCZ	6-3-42
RESIDENT OFFICER		DATE
		6-1-42

SATISFACTORY TO

SCALE: 1/8" = 1'-0" PLAN
DETAILS AS NOTED

P. W. DRAWING NO.
7610-83

P. T. COX CONSTRUCTION COMPANY
AND
SPEARIN, PRESTON AND BURROWS, INC.
ENGINEERS CONTRACT NO.Y. 5157 DRAWING NO. CS-A204-P

U. S. NAVAL OPERATING BASE NEWPORT R. I.

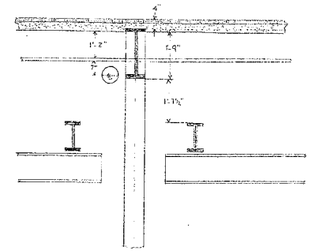
TORPEDO STATION GOULD ISLAND

OVERHAUL SHOP
SECTION No 4

PLUMBING LAYOUT PLAN

APPROVED: WILLIAM S. IDAZ, Y. & D. DRAWING NO.

C. Halloran Jr.
OFFICER IN CHARGE OF CONSTRUCTION

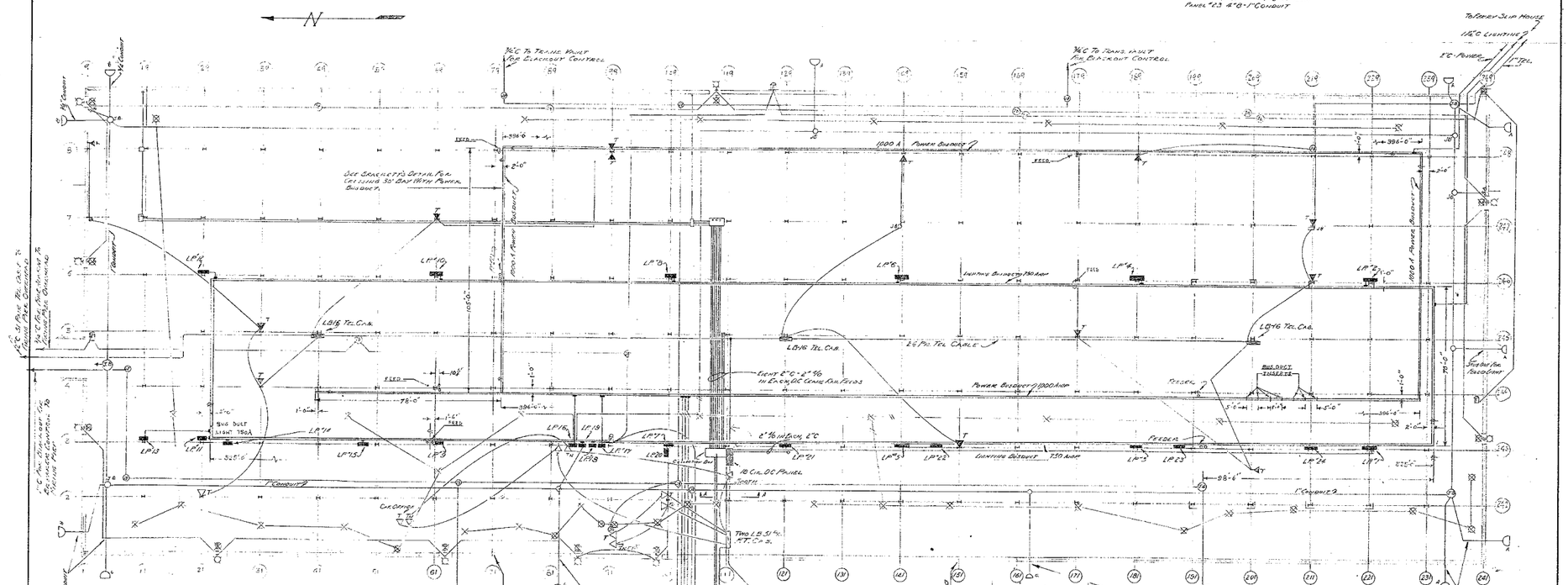


SYMBOLS

- S SINGLE POLE SW. BOX 48" ABOVE F.F.
- DUPLEX RECEPTACLE 18" ABOVE F.F.
- FAN PULLEY OUTLET 18" ABOVE F.F.
- TELEPHONE OUTLET 18" ABOVE F.F.
- LOUD SPEAKER OUTLET 18" ABOVE F.F.
- GAS BURNER BOX WALL MOUNTED 5' ABOVE F.F.
- SINGLE STROKE GONG 8' ABOVE F.F.
- LIGHTING BOX
- EX. BOX HEATER
- YARD LIGHT

NOTE:
ALL POWER & LIGHTING BUSDUCT FEEDER SLIPS CONSIST OF 2-4" CONDUIT. EACH CONDUIT WILL HAVE 4" 500 MCM

FEED CAPACITY FOR PANELS 1-12 INC.
SHALL BE 4"2-1" CONDUIT
PANELS 13 & 14 - 4"3-1" CONDUIT
PANEL 15 4"4-1" CONDUIT
PANELS 16, 17, 18, & 20 4"3-1" CONDUIT
PANELS 21, 22, & 23 - 4"6, 1" CONDUIT
PANEL 23 4"3-1" CONDUIT



REVISION	BY	DATE	BRIEF DESCRIPTION	APPROVED BY
F	WCD	9/9/42	L.P. Numbers revised	J.W.B.
E	L.L.B.	8-21-42	Lgt. Pan. #18 Location Changed	J.W.B.
D	W.S.C.	5-5-42	Section A A added	
C	W.S.C.	2-27-42	Light Panels & Exposed Conduit Added	J.W.B.
B	W.S.C.	2/17/42	Added Switching for Outside Panel Lights	J.W.B.
A	W.S.C.	2/12/42	Changed Outlet Co. 101 & Added Lt. Co. 101 & 111	J.W.B.

ENGINEERS DESIGN DEPT.

DRAWN	J.W.B.
TRACED	
CHECKED	L.L.B.

PROJECT MGR. | DATE

PUBLIC WORKS DEPT.

RECEIVED 9/10/42

REVIEWED BY:

DRFTS.	ENGINEER	SR. ENG'R
8/31/42	L.L.L.	A.C.R.
9/11/42	9-12-42	5-12-42

D.O.

RESIDENT OFFICER | DATE

P. T. COX CONSTRUCTION COMPANY
AND
SPEARIN, PRESTON AND BURROWS, INC.
ENGINEERS CONTRACT NO'T. 5107 DRAWING NO. C.S.E. 108

U. S. NAVAL OPERATING BASE NEWPORT R. I.

TORPEDO STATION GOULD ISLAND

OVERHAUL SHOP

FIRE ALARM—TELEPHONE

EXIT LIGHTS—BLUE LIGHTS

EXPOSED CONDUIT

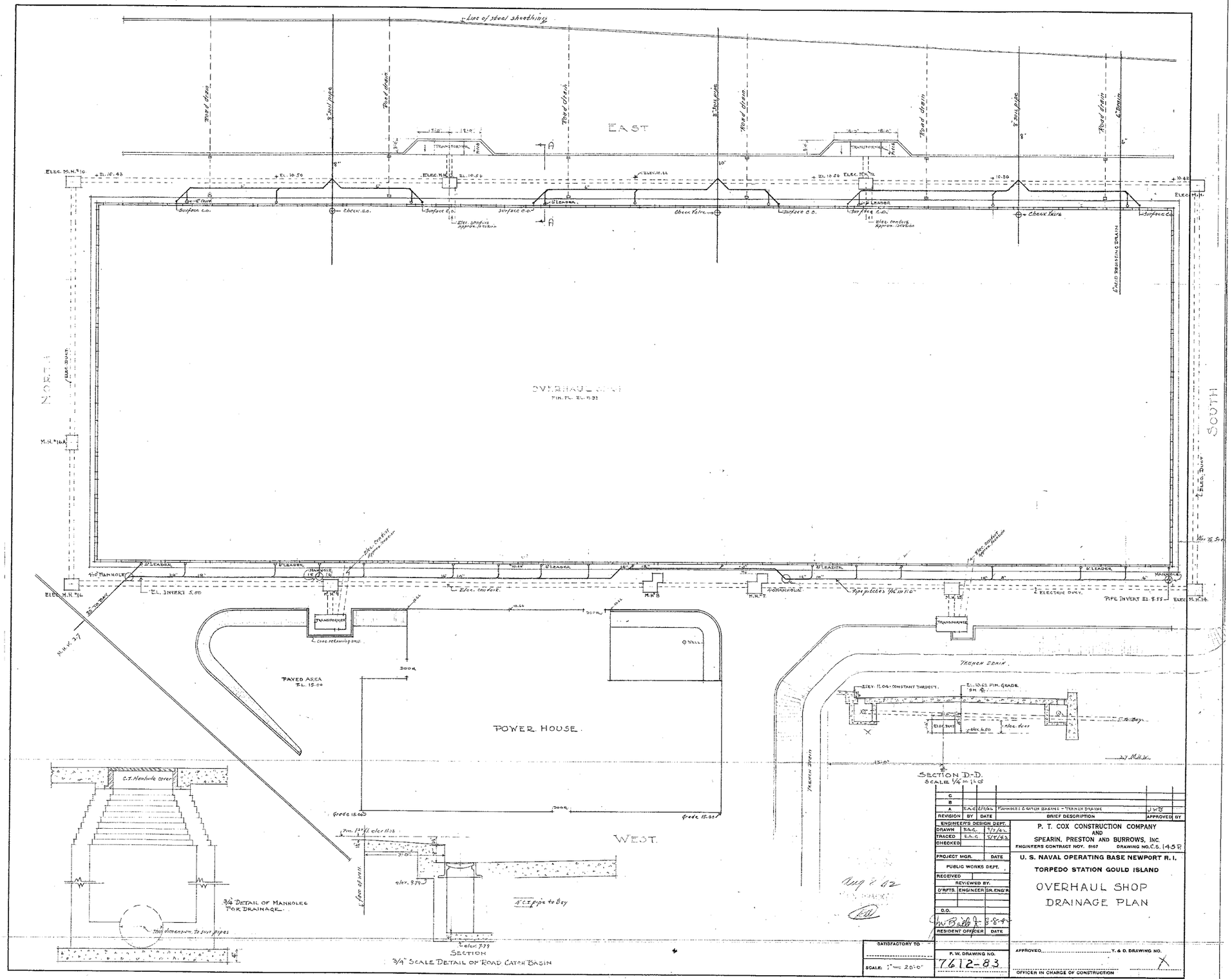
SATISFACTORY TO

SCALE:

P. W. DRAWING NO. 7611-83

APPROVED..... Y. & D. DRAWING NO. X

OFFICER IN CHARGE OF CONSTRUCTION



REVISION	BY	DATE	BRIEF DESCRIPTION	APPROVED BY
C				
B				
A	E.A.C.	8/7/42	MANHOLES & CATCH BASINS - TRENCH DRAINS	J.W.B.

ENGINEER'S DESIGN DEPT.		
DRAWN	E.A.C.	7/7/42
TRACED	E.A.C.	5/4/43
CHECKED		
PROJECT MGR.		DATE
PUBLIC WORKS DEPT.		
RECEIVED		
REVIEWED BY:		
O'RPTS.	ENGINEER	SR. ENG'R
D.O.		
RESIDENT OFFICER		DATE

P. T. COX CONSTRUCTION COMPANY
AND
SPEARIN, PRESTON AND BURROWS, INC.
ENGINEERS CONTRACT NOY. 5107 DRAWING NO. C.S. 143 R

U. S. NAVAL OPERATING BASE NEWPORT R. I.

TORPEDO STATION GOULD ISLAND

OVERHAUL SHOP
DRAINAGE PLAN

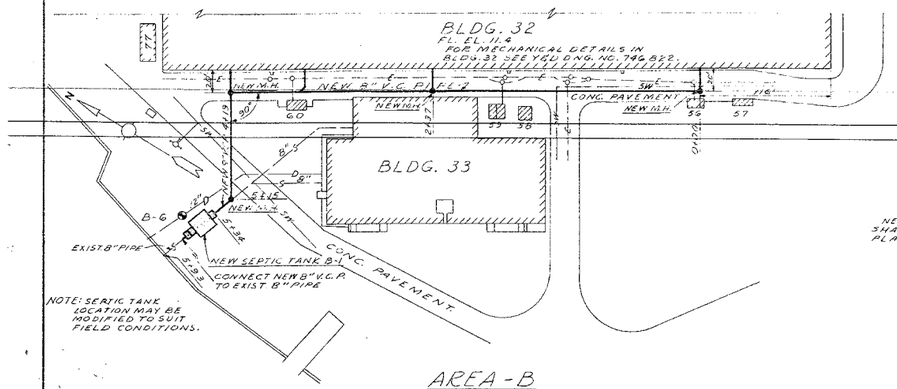
SATISFACTORY TO

SCALE: 1" = 20'-0"

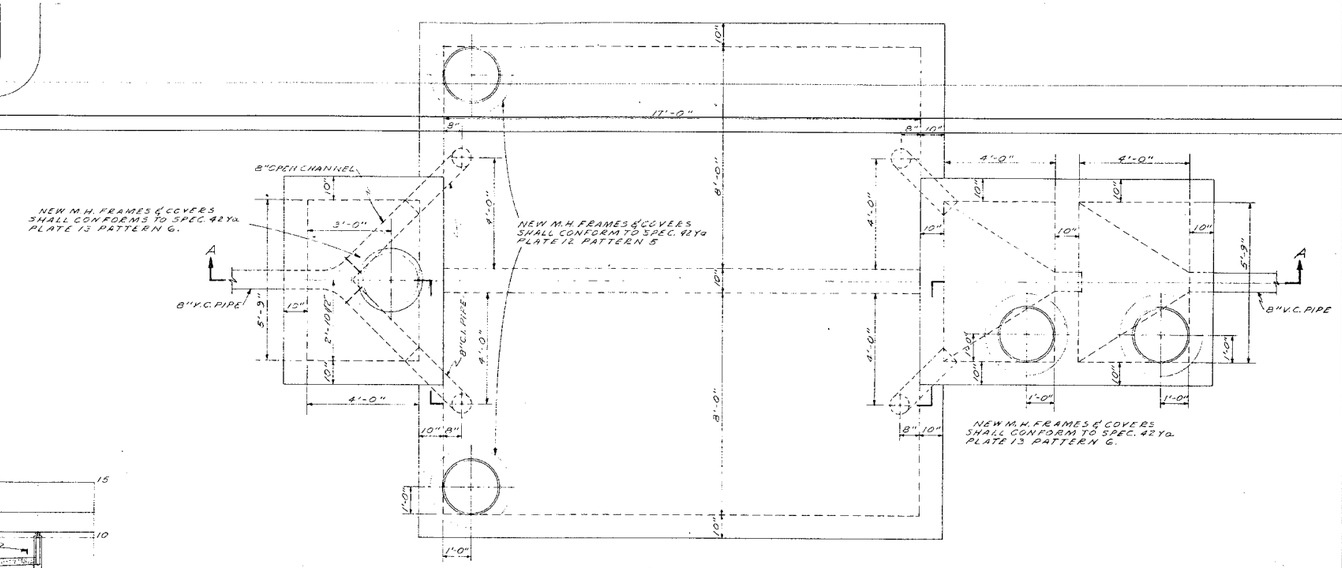
P. W. DRAWING NO. 7612-83

APPROVED..... Y. & D. DRAWING NO. X

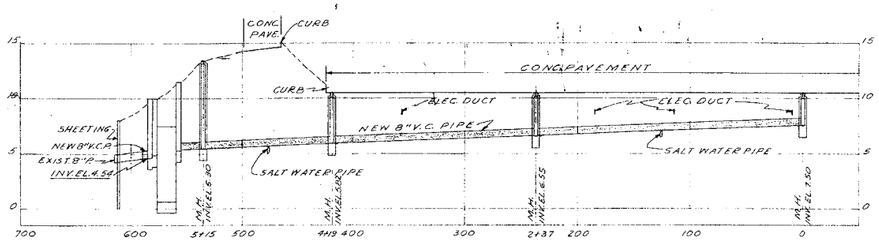
OFFICER IN CHARGE OF CONSTRUCTION



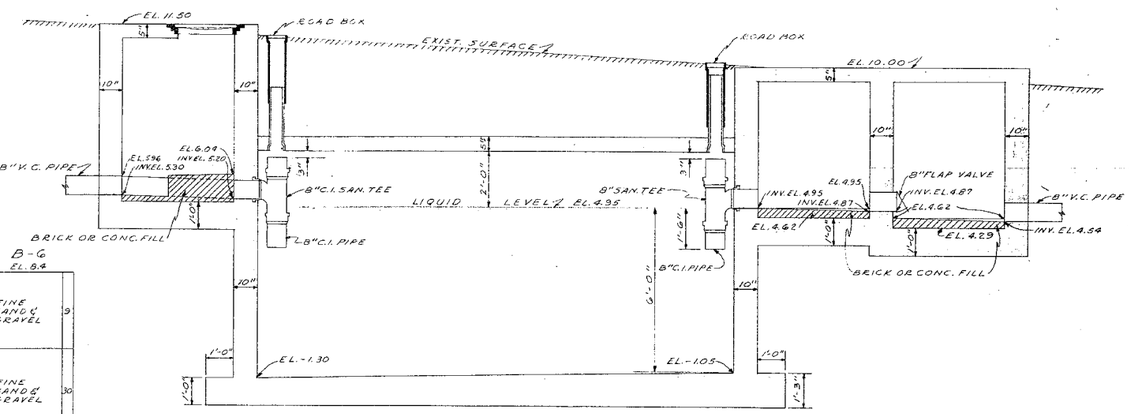
AREA-B
LOCATION PLAN
SCALE 1" = 50'



PLAN-SEPTIC TANK B-1
SCALE 1/2" = 1'-0"

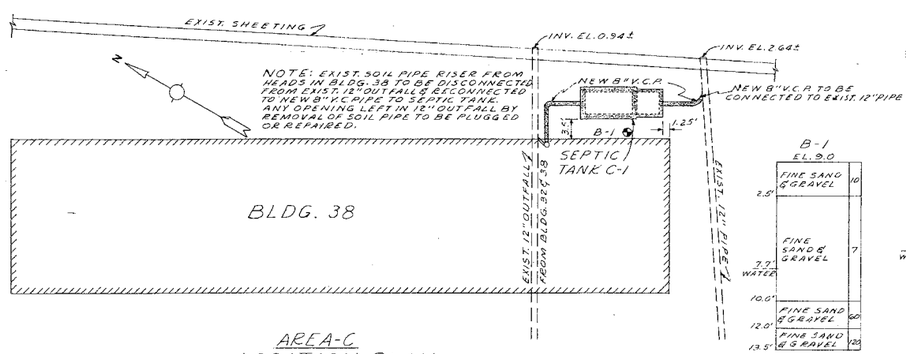


PROFIL 8" SEWER
SCALES HOR. 1" = 50'
VERT. 1" = 5'

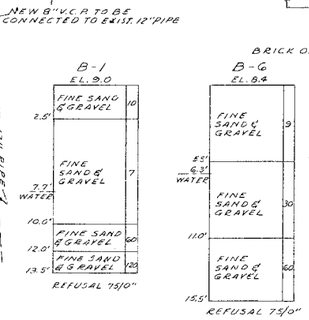


SECTION A-A
SCALE 1/2" = 1'-0"

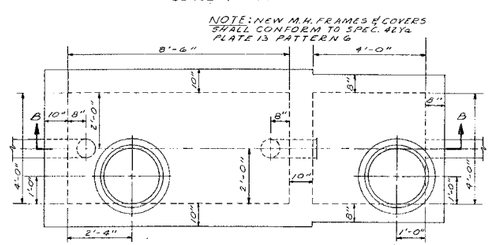
FOR KEY PLAN SEE Y&D DWG. NO. 746804.
FOR STRUCTURAL DETAILS SEE Y&D DWG. NO. 746812 & 746813.



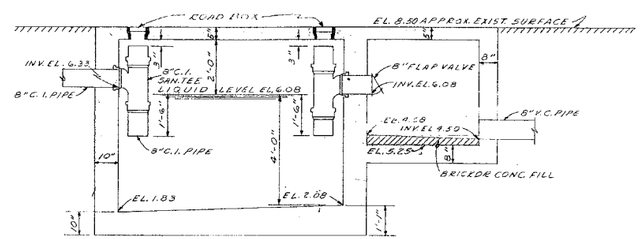
AREA-C
LOCATION PLAN
SCALE 1" = 10'



NOTE: FIGURES IN THE RIGHT HAND COLUMN INDICATE NO. BLOWS TO DRIVE 2" SPLIT SAMPLER 12" WITH 140 LB. WEIGHT FALLING 30 INCHES.



PLAN-SEPTIC TANK C-1
SCALE 1/2" = 1'-0"



SECTION B-B
SCALE 1/2" = 1'-0"

GRAPHIC SCALES

1/2" = 1'-0" 0 12" 2' 4' 6' 8' 10'
1" = 10' 0 10' 50'
1" = 5' 0 1' 10' 20'
1" = 50' 0 10' 100' 200'

SYMBOL	DESCRIPTION	DATE	APPROVAL
	REVISIONS		

DPWO DRAWING No. NCN-66 C-6

DEPARTMENT OF THE NAVY BUREAU OF YARDS AND DOCKS
DISTRICT PUBLIC WORKS OFFICE
FIRST NAVAL DISTRICT, BOSTON, MASS.

DRAWN BY: ROLAK
TRACED BY:
CHECKED BY: E.S.J. NG
SUBMITTED: [illegible]
BRANCH MANAGER
APPROVED: S.L. DIXON
DIRECTOR OF DESIGN
SATISFACTORY TO:
DATE

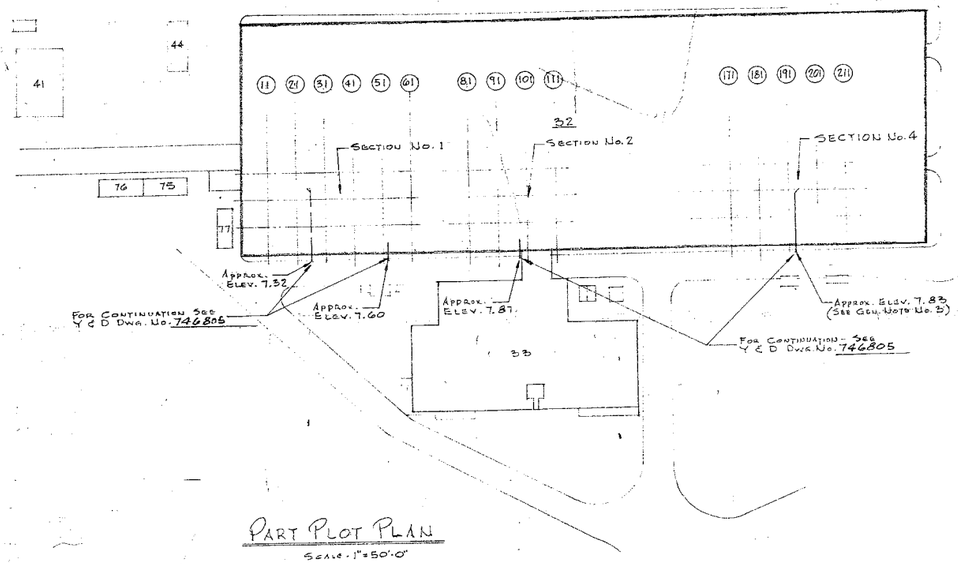
U.S. NAVAL BASE, NEWPORT, RHODE ISLAND
SEWAGE DISPOSAL FACILITIES
3RD INCREMENT
N.U.O.S. GOULD ISLAND
SANITARY SEWER
SEPTIC TANKS B-1 AND C-1
PROFILE, PLANS, SECTIONS & DETAILS

APPROVED: [illegible] DATE 15 FEB. 57
DPWO FOR CHIEF OF BUREAU

SCALE: — — — | SPEC. No. 6175/56
SHEET No. 6 OF 23 | By 6112
Y & D DRAWING No. 746805

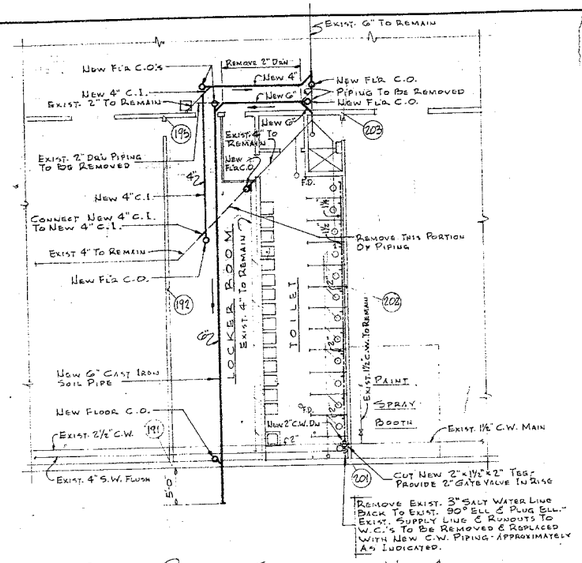
P.W. DWG. NO. 12963-136

INC-DPWO-8



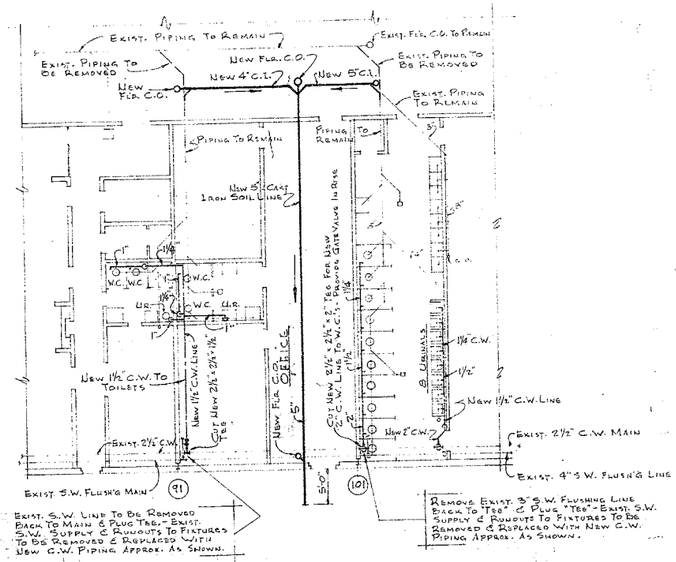
PART PLOT PLAN

SCALE: 1" = 50'-0"



PART PLAN - SECTION No. 4

SCALE: 1/8" = 1'-0"



PART PLAN - SECTION No. 2

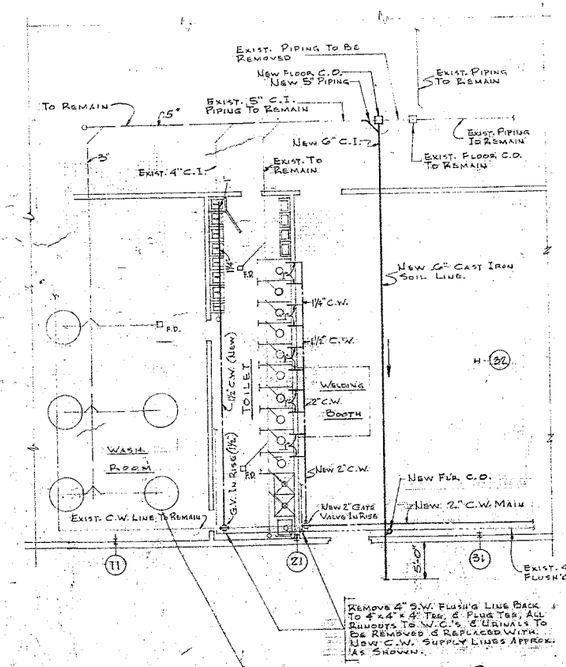
SCALE: 1/8" = 1'-0"

LEGEND

1. (100) Figures Shown Thus Indicate Column Line Designations In Accordance With Basic Plans And Conditions At The Site.
2. ——— Arrows Shown Thus Indicates Direction Of Flow.
3. ——— Cold Water Line - New.

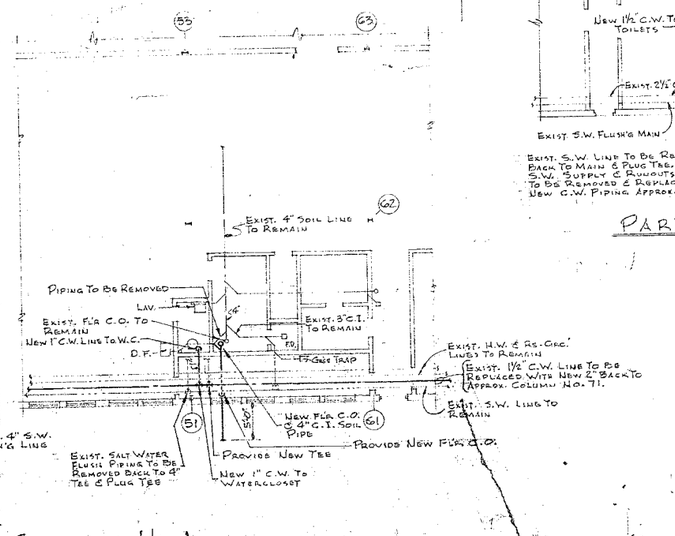
GENERAL NOTES:

1. Piping Is Shown Diagrammatically Only - Exact Location Of New & Existing Piping To Be Determined In The Field.
2. New & Existing Soil Piping Is Located Below 1st Flr. Concrete Slab.
3. Elevations Of New Soil Lines Are & Elevations, And Are Approximate - Exact Elevations To Be Determined In The Field - For Continuation See Y & D Dwg. No.



PART PLAN - SECTION No. 1

SCALE: 1/8" = 1'-0"



GRAPHIC SCALES

1" = 50' : 50 0 50 100 150

1/8" = 1'-0" : 0 1 2 3 4 5 10 15 20 25 30

SYMBOL	DESCRIPTION	DATE	APPROVAL
	REVISIONS		

DPWO DRAWING No. NBW-66 M-3

DEPARTMENT OF THE NAVY BUREAU OF YARDS AND DOCKS
DISTRICT PUBLIC WORKS OFFICE
FIRST NAVAL DISTRICT, BOSTON, MASS.

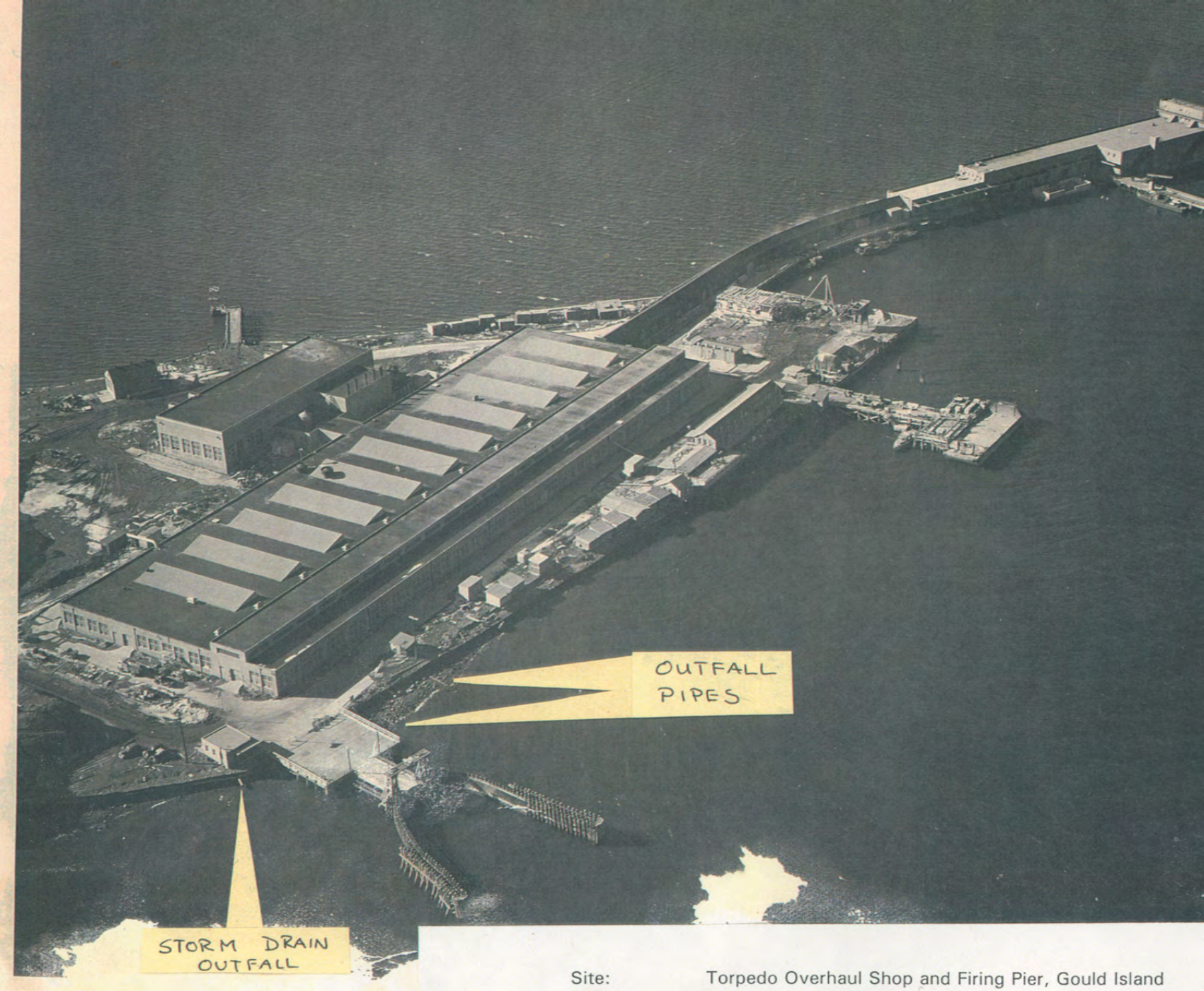
DRAWN BY: Doherty
CHECKED: Hennessy
STRC. CHECK
ELEC. CHECK
FIRE PROT.
SUBMITTED: Quirk
BRANCH MANAGER
APPROVED: Sedgwick
DIRECTOR OF DESIGN
SATISFACTORY TO:
DATE

U.S. NAVAL BASE, NEWPORT, RHODE ISLAND
SEWAGE DISPOSAL FACILITIES
3RD. INCREMENT
N.U.O.S.-GOULD ISLAND
PLUMBING ALTERATIONS
BUILDING No. 32

APPROVED: [signature] DATE 15 FEB 52
DPWO FOR CHIEF OF BUREAU

SCALE: As Shown SPEC. No. 6715/56
SHEET No. 22 OF 23 NBY-9113
Y & D DRAWING No. 746822

P.W.DWG.NO.12980-136



Site: Torpedo Overhaul Shop and Firing Pier, Gould Island
Date: February 9, 1943

PHOTO AUGUST 1943 - Overview of Gould Island (looking north).

APPENDIX D

FIELD LOGS

APPENDIX D1

BORING LOGS

BORING LOG FOR: MW-300B
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragin / Stone
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-300B
START DATE: 6/1/05
COMPLETION DATE: 6/17/05
MON. WELL NO.: MW-300B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG/ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD - [FID, (PPM)]
	5					Brown-Black	0-0.5 - Silty sand w/ some gravel, Brown		FILL	
	7	95%	0 - 2					SM		0.0
	11						0.5-2 - Silty fine grained sand w/ some gravel			
2	10		0907					I		
	3									
	3	5%	2 - 4			Black	Silty sand w/ trace clay and some gravel	SM		0.0
	5									
4	7		0920					I		
	18									
	7		4-6			Black	0.0-0.5 - med to coarse grained sand w/ some gravel	SP		
	6	40%	1015							0.0
6	8						0.5-2.0 - Silty, fine grained sand w/ some gravel	SM		
	10									
	13		6-8			Black	medium to coarse grained sand w/ some gravel	SP		
	10	60%	1031							0.0
8	9									
	11							I		
	15		8-10			Black	8-9 - medium to coarse gravel	GP		
	22	55%	1125	9.0						0.0
10	24				Dense		9-10 - dense, silty, fine grained sand some gravel/Cobbles	SM	TILL 9.0'	
	26									
	49		10-12		Dense	Black	Silty sand w/ some large gravel	SM		
	52	65%	1250							0.0
12	56							I		
	34									
	64		12-14		Dense	Black	very dense silty sand w/ some gravel	SM		
	100/5	75%	1318							0.0
14								I		
	95									
	69		14-16		Dense	Black	Silt w/ fine to med. sand and some small gravel	SM		
	83	90%	1334							0.0
16	100/5							I		

TYPE OF DRILLING RIG: Gus Pech GP1900XHR (Air Rotary)
METHOD OF ADVANCING BORING: Dragin Wash
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB 300B

Tetra Tech Form 0018

BORING LOG FOR: MW-300B
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragon / Steve
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:

ELEVATION FROM:

BORING NO.: SB-300B
START DATE: 6/1/05
COMPLETION DATE: 6/17/05
MON. WELL NO.: MW-300B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
16	75									
	84	75%	16-18			Black	Med to Coarse sand w/ some silt & fine sand	SM		0.0
	100/5		1353							
18	—									
	45									
	64		18-20			Black	fine grained sandy silt w/ some rounded gravel	SM		
	100/4	60%	1412							0.0
20	—									
	34									
	43		20-22			Black	fine grained silty sand w/ some gravel and some chunks of Phylite	SM		
	58	50%	1430							0.0
22	57									
	36									
	46		22-24			Black	fine grained sandy silt w/ some small gravel	SM		
	47	50%	1508							0.0
24	57									
	44									
	68		24-26			Black	Silt w/ some fine sand, trace clay, some small gravel to med gravel, small pieces of Phylite.	SM		
	94	60%	1530							0.0
26	100/1									
	100/6				Very Dense	Black	Silty, fine grained sand w/ some gravel	SM		
	—	10%	26-28'							0.0
	—		0918							
28	—									
	54									
	94		28-30'			Black	Top Half - dense silty sand w/ some gravel	SM		
	100/4	45%	1300				Bottom Half - Phylite, weathered, fragile	—		0.0
30	—									
	50									
	105		30-32		Very Dense	Black	Silty fine grained sand with scattered small to large gravel	SM		
	69	50%	1351							0.0
32	100						some weathered Phylite also present			

TYPE OF DRILLING RIG: Gus Pech GPM00XHR (Air Rotary)
METHOD OF ADVANCING BORING: Dame 5 inch
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18" drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB300B

Tetra Form 0013

BORING LOG FOR: MW-300B
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): DRAGON / Steve
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:

ELEVATION FROM:

BORING NO.: SB-300B
START DATE: 6/1/05
COMPLETION DATE: 6/17/05
MON. WELL NO.: MW-300B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
32	35	50%	32-34		Dense	Black	Silty fine grained sand w/ some gravel and Phylite	Sm		0.0
	127		1450							
	119									
34	80									
	55	50%	34-36			Black	Silty fine grained sand w/ some gravel	Sm		0.0
	69		1525							
	61									
36	53									
	35	30%	36-38			Black	~~Silty fine grained sand~~ Clayey silt w/ abundant weathered Phylite	ML	Weathered Bedrock (Phylite)	0.0
	58		0847							
	100/3									
38	—									
	18	45%	38-40			Black	Clayey silt w/ abundant weathered Phylite	ML		0.0
	20		0932							
	94									
40	100/1									
	92	40%	40-42			Black	Clayey Silt w/ abundant weathered Phylite	ML		0.0
	81/16		1017							
	—									
42	—									
	36	40%	42-44			Black	Clayey Silt w/ abundant weathered Phylite	ML		0.0
	72		1120							
	100									
44	100/2									
	100/6	40%	44-46			Black	Clayey silt w/ abundant weathered ~~Phylite~~ Phylite	ML		0.0
	100/3		1210							
	—									
46	—									
	94	35%	46-48			Black	Weathered Phylite			0.0
	100/3		1330							
	—									
48	—									

TYPE OF DRILLING RIG: GOS Tech GP1900XHR (Air Rotary)
METHOD OF ADVANCING BORING: Drive and wash
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18" drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB 300B

Tetra Form 0018

BORING LOG FOR: MW-300B
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): DRAGINI Steve
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB 300B
START DATE: 6/1/05
COMPLETION DATE: 6/17/05
MON. WELL NO.: MW-300B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6" or RQD	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG/ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
48	26									
	100/1	30%	48-50			Black	Weathered Phylite			
	—		1420							0.0
50	—									
	34									
	100/3	20%	50-52			Black	weathered phylite			
	—		1530							0.0
52	—									
	26									
	100/3	25%	52-54			Black	Weathered Phylite			
	—		0930							
54	—									
55				MW-300B 7/7/05	1:30	DK GRAY	WEATHERED PHYLLITE	VBR		NO FID/PID rdgs > bkgd in BZ
56	18%				2:22			BR		
57		30/44"	C-1		3:20				56.7' Fracture with alteration/ staining/color	
58					4:35				57.3 STAINING	
59					3:25		PHYLLITE/SLATE	VBR	~54.7' STAINED SURFACE, CLAY COVERED	
60	0%				2:54					
61		46/51	C-2		4:07	BLACK		BR	LOST ~ 30 GAL. during C-2 60.8' STAINING	
62					3:45					
63					3:57			VBR	63' QTZ [redacted] STAINING 63.8' FE-STAINING	
64					4:28			BR	64.5' FE-STAIN	

TYPE OF DRILLING RIG: Gus Pech GP 1900XHR (AIR Rotary)
METHOD OF ADVANCING BORING: Drive and Wash
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18" Drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB 300B

Tetra Form 0018

BORING LOG FOR: Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Whalen
DRILLED BY (Company/Driller): Dragin / M. Wilkey
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB 300B
START DATE: 6/1/05
COMPLETION: DATE: 6/17/05
MON. WELL NO.: MW 300B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6" or RQD	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
65	~~30%~~	60/60	C-3		4:29	DK GRAY to BLACK	PHYLLITE / SLATE (TRACE PYRITE)	BR	LOST ~ 30 GAL CORING C-3	NO PID readings above bkgd.
66					4:23				NO ALTERATION on SURFACES below 64.5'	in BZ
67					4:21				No Alteration on rock surfaces	
68					3:11					
69		60/60	C-4		2:05				Did not lose water during C-4	
70	~~10%~~				3:02				No Alteration on rock surfaces	
71					3:18				71.5' FE-STAINING	
72					3:09			VBR	NO Alteration on surfaces	
73		48/48	C-5		2:18					
74	~~14%~~				3:03			BR		
75					2:33					
76					3:07					
77					3:20					
78					4:05					
79	~~37%~~	60/60	C-6		5:06				LOST ~ 15 GAL coring C-6	
80					5:16					

6/16
6/17

TYPE OF DRILLING RIG:
METHOD OF ADVANCING BORING:
METHOD OF SOIL SAMPLING:
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB 300B

PAGE: 4a OF

Ttnus Form 0018

BORING LOG FOR: Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Whalen
DRILLED BY (Company/Driller): Drayin/M. Wilkey
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB 300B
START DATE: 6/1/05
COMPLETION: DATE: 6/17/05
MON. WELL NO.: MW 300B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
81					4:52	DK GRAY to BLACK	PHYLLITE / SLATE	BR		NO PID readings above bkgd. in BZ.
82					5:10				Slight STAINING at 82'	
83	69%	36/36	C-7		5:03				Lost ~10 gal. Coring C-7	
84					4:51				84' Slight STAINING	
				EOB						

TYPE OF DRILLING RIG: CME ATV w.g.
METHOD OF ADVANCING BORING: Drive and wash
METHOD OF SOIL SAMPLING: split spoon 300 lb. hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 300B

Ttnus Form 0018

BORING LOG FOR: Bldg. 32, Gould Island
PROJECT NO.: ODET
LOGGED BY: D. Whalen
DRILLED BY (Company/Driller): Pragin / M. Wilkey
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 301B
START DATE: 7/13/05
COMPLETION: DATE: 7/14/05
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
1	5	13/24	0752 S-1 G32-583018-0002			DK. BROWN	SILTY SAND, SOME GRAVEL some organic matter (F-M GRAVEL)	SM	MOIST NO ODOR	
2	8 9									0
3	5	18/24	0808 S-2				SILTY SAND		MOIST NO ODOR	
4	7 11 13					LT. BRN	SILT, SOME SAND, TR CLAY SILTY SAND, some GRAVEL, TR CLAY	ML		0
5	7 13	21/24	0824 S-3			DK BRN DK GRAY-BRN	SANDY SILT TR. CLAY SOME GRAVEL (Fine to Coarse GRAVEL)	ML	MOIST, NO ODOR	
6	17 27									0
7	27	20/24	0840 S-4						MOIST, NO ODOR	
8	17 19 23					BRN	SAND, some SILT (FINE SAND) some Gravel (F to C Gravel)	SM		0
9	16 23	20/24	0849 S-5						MOIST, NO ODOR	
10	25 22									0
11	20 15	24/24	0904 S-6 G32-583018-1012			DK BRN	SILTY SAND, TR CLAY, SOME GRAVEL (F-C GRAVEL)		MOIST NO ODOR	
12	16 29					DK GRAY and BRN	SILT, TR CLAY and Fine sand Finely layered	ML		63
13	20 46	19/20	0917 S-7			DK GRAY	SANDY SILT, SOME GRAVEL	ML	MOIST NO ODOR	
14	76 100/4					RUSTY BRN DK GRAY	weathered rock fragment SILT and PHYLLITE FRAGMENTS			0
15	14 20	22/24	0933 S-8			DK BRN GRAY	SANDY SILT, SOME GRAVEL		MOIST NO ODOR	
16	32 70									0

TYPE OF DRILLING RIG: CME 1050 (ATV)
METHOD OF ADVANCING BORING: 6 1/4" ID HSA to 34'
METHOD OF SOIL SAMPLING:
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 301B

Tmus Form 0018

BORING LOG FOR: Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Whalen
DRILLED BY (Company/Driller): Dragin / M. Wilkey
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 301B
START DATE: 7/13/05
COMPLETION: DATE: 7/14/05
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
17	10 / 29	22/24	1013 S-9			DARK GRAY	SILTY SAND, SOME GRAVEL (Fine to Coarse Gravel) tr. clay	SM	MOIST, NO ODOR	
18	42 / 68					↓	SANDY SILT, SOME GRAVEL			0
19	23 / 44	22/24	1029 S-10 G32-583018-1820			DK GRAY and BRN	SILTY SAND to SANDY SILT SOME GRAVEL and PHYLLITE FRAGMENTS (Fine to coarse GRAVEL)	SM	MOIST, NO ODOR 18.4'-F-m sand, sod silt, rounded QTZ pebbles	
20	59 / 71									2.3
21	7 / 17	23/24	1042 S-11			↓		↓	MOIST NO ODOR	
22	19 / 24					DARK GRAY	SILT, tr. clay with thin fine sand layers (orange)	ML		0
23	9 / 15	20/24	1112 S-12				SILT, SOME SAND to some clay with intervening sandy layers (silty sand)		WET NO ODOR	
24	17 / 35						SOME GRAVEL (Fine to coarse) (some rounded QTZ GRAVEL)	↓		0
25	18 / 28	24/24	1126 S-13				SILTY SAND tr. CLAY and GRAVEL (F-C GRAVEL) (some rounded QTZ)	SM	WET NO ODOR	
26	22 / 64							↓		0
27	53 / 62	21/24	1317 S-14				SILTY SAND (F-C sand) SANDY SILT some GRAVEL	ML/SM	WET NO ODOR	
28	84 / 100/5						SILTY SAND (F-M SAND) some GRAVEL	SM		0
29	19 / 53	19/24	1332 S-15				SILTY SAND AND GRAVEL (F-M SAND, F-C GRAVEL) (some rounded QTZ)	SM	WET NO ODOR	
30	44 / 75									0
31	24 / 25	20/24	1348 S-16				SILTY SAND/SANDY SILT SOME GRAVEL (F-M SAND, F-C GRAVEL)		WET NO ODOR	
32	30 / 36					↓	PHYLLITE FRAGMENTS	↓		0

TYPE OF DRILLING RIG: CME 1050
METHOD OF ADVANCING BORING: 6 1/4" ID HSA to 34'
METHOD OF SOIL SAMPLING: split spoons / 300 lb. Hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 301B

Ttnus Form 0018

BORING LOG FOR: Site 17 Bldg. 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Whalen
DRILLED BY (Company/Driller): Dragin / M. Wilkey
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 301B
START DATE: 7/13/05
COMPLETION: DATE: 7/14/05
MON. WELL NO.:
CHECKED BY: 7/14/05

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
33	80 100/1	7/7	1410 S-17			DARK GRAY	PHYLLITE FRAGMENTS		WET, NO ODOR	0
34										
35	100/4	4/4	1442 S-18				PHYLLITE		WET, NO ODOR	0
36										
37										
38					2:10	GRAY	PHYLLITE/SANDSTONE (coarser grained, Foliation not well defined)		Lost no water, C-1	NO PID rdgs > Bkgd. in BZ
39		53/60	C-1		1:38					
40	48%				2:47					
41					2:58					
42					2:54					
43					2:37				Lost ~12 Gal C-2 47.1' Fe-stain 42.9, 42.5' - Frac, Fe Stain 43.6 slight Fe stain 45' Horiz Frac., Fe stain	
44					3:05					
45	67	60/60	C-2		2:50				45.7' Low ∠ Frac, Fe Stain 46' 45° Frac, Fe-stain 46.4, 46.7 Horiz. Fracs Fe-staining	
46					3:00					
47					2:53				Lost ~10 Gal C-3 47' Fe-stain, horiz. break	
48					2:38		High ∠ QTZ vein 47'		47.1, 47.3, 47.5, 47.6, 47.7' Fe-staining	

7/13
7/14

TYPE OF DRILLING RIG: CME 1050
METHOD OF ADVANCING BORING: 6 1/4" HSA to 34'
METHOD OF SOIL SAMPLING: split spoon / 300 lb. Hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 301B

Tnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Whalen
DRILLED BY (Company/Driller): Drasin / M. Wilkey
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 301B
START DATE: 7/13/05
COMPLETION: DATE: 7/14/05
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
49		60/60	C-3		2:57	GRAY	PHYLLITE (like sandstone - Foliation not well defined)		48.6 Low ∡ Frac. slight Fe stain	NO PID vdgs > Bkgd in BZ
50	50%				3:01				49.3' Horiz Frac. slight Fe-stain	
51					1:50				50' Low ∡ Frac, slight Fe stain	
52					2:52				50.5 Low ∡ Frac. slight Fe stain clay in seam	
53					1:55				51.3 slight Fe stain Lost no water C-4	
54					2:13				52.5 Low ∡ Frac 53.2 high ∡ Frac Fe-stain	
55	32%	60/60	C-4		2:15				54.1 Fe stain	
56					2:52				55.6-57 high ∡ Frac, heavy Fe-stain	
57					3:01				Lost 10 Gal, C-5	
58					2:53				57'-57.4 Fe stains	
59		60/60	C-5		2:31		58.8 high ∡ QTZ vein		58.8 high ∡ Frac heavy Fe-stain	
60	60%				4:01					
61					4:32					
62					3:34				61.5' 45° Frac, Fe-stained	
63					3:20				Lost ~25 gal, C-6	
64					3:22				62, 62.3, 62.8' Fe stains	

TYPE OF DRILLING RIG: CME 1050
METHOD OF ADVANCING BORING: 6 1/4" HSA to 34'; Telescope 4" temp. steel casing to 37'
METHOD OF SOIL SAMPLING: split spoon, 300 lb. hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 301B

Ttnus Form 0018

BORING LOG FOR:
PROJECT NO.: 0065
LOGGED BY:
DRILLED BY (Company/Driller):
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:

ELEVATION FROM:

BORING NO.: 301B
START DATE: 7/13/05
COMPLETION: DATE:
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
65	52%	60/60	C-6		3:02	GRAY	PHYLLITE (like sandstone - Foliation not well defined)		64.4' 45° Frac. Fe stain, clay in seam	NO PID rdgs. above Bkgd. in BZ
66					2:50	↓	↓			
67					2:55	↓	↓		66.6, 66.8 Fe stains	
				EOB						

TYPE OF DRILLING RIG: CME 1050
METHOD OF ADVANCING BORING: 6 1/4" HSA to 34'
METHOD OF SOIL SAMPLING: split spoon / 300 lb. Hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.: 301B

Tetra Tech NUS, Inc.

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Whalen
DRILLED BY (Company/Driller): Dragin / B. Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 302B
START DATE: 7-5-05
COMPLETION: DATE: 7-8-05
MON. WELL NO.: MW 302B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
1	4 7	13/24	0955 S-1 GSZ-SB302B-0002			BRN	SANDY SILT TOPSOIL some PLANT ROOTS	SM	DAMP NO ODOR	
2	14 17					GRAY	GRAVEL and SILTY SAND FINE to COARSE GRAVEL	GM		0
3							<NO SAMPLES COLLECTED>			
4							↓			
5							↓			
6	64 39	17/24	1039			GRAY	CONCRETE FRAGMENTS		DRY	
7	32 71		S-2 GSZ-SB302B-0507			DARK GRAY	SILTY SAND	SM	MOIST	12
8							<NO SAMPLES COLLECTED>			
9							↓			
10							↓			
11	14 22	14/24	1054 S-3			DARK GRAY	SILTY SAND some GRAVEL to SANDY SILT Thin COARSE SAND LAYER	SM	WET NO ODOR	
12	21 23					↓	SILTY CLAY SILT RUST-STAINED	ML		0
13							<NO SAMPLES COLLECTED>			
14							↓			
15		11/12	1109 S-4				↓		WET TILL NO ODOR	
16	67 100/6					DARK GRAY	SILTY SAND AND GRAVEL (Fine Sand, Fine to Coarse Gravel)	SM		0

TYPE OF DRILLING RIG: CME 1050 (ATV)
METHOD OF ADVANCING BORING: 4 1/4" HSA to 35'
METHOD OF SOIL SAMPLING: 2.5" split spoon / 300 lb. Hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 302B

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg. 32, Govid Island
PROJECT NO.: 0065
LOGGED BY: D. Whalen
DRILLED BY (Company/Driller): Dragin / B. Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 302B
START DATE: 7/5/05
COMPLETION: DATE: 7/8/05
MON. WELL NO.: MW 302B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
17							<NO SAMPLES COLLECTED>			
18										
19										
20										
21	64	3"/8"	1129			DARK GRAY	GRAVEL and SANDY SILT, SOME CLAY (FINE to COARSE GRAVEL)	GM	WET	
22	10/2		S-5						~~NO~~ ODOR Slight	122
23							<NO SAMPLES COLLECTED>			
24										
25			1154							
26	55 66	24/	S-6			DARK GRAY	SILTY SAND and GRAVEL (FINE to MED. SAND, FINE to COARSE GRAVEL)	SM	WET	0.6
27	24 68	/24	GS2-SB3028-2527						NO ODOR	
28							<NO SAMPLES COLLECTED>			
29										
30										
31	32 67	15/24	1300			DARK GRAY	SILTY SAND and GRAVEL SAND and GRAVEL, SOME SILT (Fine to coarse SAND, Fine to Coarse Gravel)	SM	WET	
32	100/5		S-7						NO ODOR	0

TYPE OF DRILLING RIG: CME 1050
METHOD OF ADVANCING BORING: 4 1/4" Hollow Stem Auger to 35'
METHOD OF SOIL SAMPLING: Split Spoon / 300 lb. Hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 302B

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32 Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Whulen
DRILLED BY (Company/Driller): Dragin, B. Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 302B
START DATE: 7/5/05
COMPLETION: DATE: 7/8/05
MON. WELL NO.: MW 302B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
33							<NO SAMPLES COLLECTED>			
34							↓			
35							↓			
36	62 78	11"/17"	1325 S-8			DARK GRAY	PHYLLITE, V. WEATHERED		MOIST NO ODOR	
37	100/5								CRUMBLES EASILY	0
38							<NO SAMPLES COLLECTED>			
39							↓			
40							↓			
41	30 100/5	11"/11"	0820 S-9			DARK GRAY	SILT and WEATHERED PHYLLITE FRAGMENTS		WET, NO ODOR	0
42										
43							<NO SAMPLES COLLECTED>			
44							↓			
45							↓			
46	16 27	16"/20"	0858 S-10			DARK GRAY	SILT and WEATHERED PHYLLITE FRAGMENTS		MOIST, NO ODOR	0
47	59 100/4									
48										

TYPE OF DRILLING RIG: CME 1050
METHOD OF ADVANCING BORING: 4 1/4" HSA to 35'
METHOD OF SOIL SAMPLING: SPLIT SPOON / 300 lb. Hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 302B

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg. 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D Whalen
DRILLED BY (Company/Driller): Dragin / M. Wilkey
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 302B
START DATE: 7/5/05
COMPLETION: DATE: 7/8/05
MON. WELL NO.: MW 302B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6" or RQD	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG/ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
49										
50										
51	100/4"		0935			DARK GRAY	WEATHERED PHYLLITE			
52			S-11				<NO SAMPLES COLLECTED>			0
53										
54										
7/8 55					1:01	GRAY	PHYLLITE	BR	Slight Fe-stain at 55', 55.8', 56.3'	NO PID Readings above Bkgd. in BZ
56					1:45					
57	38%	60"/60"	C-1		1:31					
58					1:56	BLACK		VBR	More shale-like, softer 57'-59' 58-58.4' Fe-stain	
59					2:13			BR		
60					1:15	GRAY			59.4' Fe-stain, high ∡ Fracture	
61	17%	41"/48"	C-2		1:14				60.4' Fe-stain	
62					1:20	BLACK			61.3'-63' V. SOFT 62' Fe-stain	
63					1:16			VBR		
64					2:09			BR	63', 63.6' Fe-stains	

TYPE OF DRILLING RIG: CME 1050 (ATV)
METHOD OF ADVANCING BORING: 4 1/4" HSA 0' to 35'
METHOD OF SOIL SAMPLING: Split spoon / 300 lb. Hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 302B

Tinus Form 0018

BORING LOG FOR: Site 17, Bldg. 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Whalen
DRILLED BY (Company/Driller): Dragin / M. Wilkey
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 302B
START DATE: 7/5/05
COMPLETION: DATE: 7/8/05
MON. WELL NO.: MW 302B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6" or RQD	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
65		60/60	C-3		2:40	DARK GRAY	PHYLLITE	BR		NO PID rdgs. above Bkgd in BZ
66	18%				2:20					
67					2:45			VBR	66.2-68 soft	
68					1:49			BR		
69					3:09					
70					2:03					
71	32%	60/60	C-4		1:48				70.5 slight ~~some~~ Fe stain	
72					2:01				No Alteration/staining on Break surface 70.6-74'	
73					2:28					
74					2:17					
75		60/60	C-5		2:25				74.5 high ∡ frac some Fe staining	
76	7%				2:03				75'-80' no Alteration on Break surface	
77					2:23					
78					2:16					
79					2:27					
80					2:27				80.3 high ∡ fracture Slight Fe staining	

TYPE OF DRILLING RIG: CME 1050 (ATV)
METHOD OF ADVANCING BORING: 4 1/4" HSA 0' to 35'
METHOD OF SOIL SAMPLING: split spoon / 300 lb. Hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 302B

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg. 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: R. Whalen
DRILLED BY (Company/Driller):
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:

ELEVATION FROM:

BORING NO.: 302B
START DATE: 7/5/05
COMPLETION: DATE: 7/8/05
MON. WELL NO.: MW 302B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6" or RQD	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
81	13%	60/60	C-6			DARK GRAY	PHYLLITE	BR		
82								VBR		
83										
84	0%	12/12	C-7						84' slight Fe Staining	
				EOB						

TYPE OF DRILLING RIG: CME 1050 (ATV)
METHOD OF ADVANCING BORING: 4 1/4" HSA 0' to 35'
METHOD OF SOIL SAMPLING: 2.5" split spoon / 300 lb. Hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 302B

Ttnus Form 0018

BORING LOG FOR: Bldg 32, Govld Island
PROJECT NO.: 0065
LOGGED BY: D. whalen
DRILLED BY (Company/Driller): Dragin / M. Wilkey
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 303B
START DATE: 7/11/05
COMPLETION: DATE: 7/12/05
MON. WELL NO.: MW303B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
1	4 6	14/24	1044 S-1 G32-SB303B-0002			BROWN	SILTY SAND, SOME GRAVEL (Fine to med. sand, Fine to coarse gravel Micaceous)	SM	MOIST, NO ODOR	
2	8 11									0
3	12 22	6/24	1105 S-2						MOIST, NO ODOR	
4	29 24									0
5	13 17	18/24	1120 S-3			DK. GRAY and BROWN	SANDY SILT / SILTY SAND and Gravel / Rock Fragments (Fine to Coarse Gravel)		MOIST, NO, ODOR	
6	11 12									0
7	3 5	13/24	1133 S-4			DK GRAY	SILTY SAND and ROCK FRAGMENTS		WET	
8	4 5					DK GRAY	SAND, SOME SILT (Med to coarse Sand, Fine Gravel) SILT, Some sand	SM ML	RUST STAINED	0
9	7 9	17/24	1140 S-5				SILT, some sand, some GRAVEL (FINE SAND, FINE to COARSE GRAVEL)	ML	MOIST NO ODOR	
10	29 31						SILTY SAND, some GRAVEL (F-M SAND) PHYLLITE FRAGMENTS	SM		0
11	10 22	18/24	1240 S-6 G32-SB303B-0102						MOIST NO ODOR	
12	26 20									0
13	20 21	17/24	1300 S-7				PHYLLITE FRAGMENTS, V. weathered, and Stiff		MOIST NO ODOR	
14	48 99									0
15	3 100/5	11/11	1310 S-8				SANDY SILT and PHYLLITE PHYLLITE, weathered		V. SOFT MOIST, NO ODOR	0
16										

TYPE OF DRILLING RIG: CME 1050 (ATV)
METHOD OF ADVANCING BORING: 6 1/4" ID HSA to 14'; 4" temporary steel casing to 19'
METHOD OF SOIL SAMPLING: split spoon, 300 lb. Hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 303B

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Whalen
DRILLED BY (Company/Driller):
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 303B
START DATE: 7/11/05
COMPLETION: DATE: 7/13/05
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
17							<NO SAMPLES COLLECTED>			NO PID/FID Rdgs. > Bkgd. in the BZ
18										
19										
20					1:43	DARK GRAY	PHYLLITE Horiz. Foliation		Lost ~ 15 gal covering C-1	
21		60/60	C-1		1:44		Tr. Pyrite throughout		Fe stains at: 19.3', 19.9, 20.2, 20.5, 21.5, 21.8, 22.1, 23.7	
22	0%				1:57					
23					2:12				20.2' high ∡ Frac.	
24					2:15					
25		48/48	C-2		2:24				Lost ~ 20 Gal, C-2 Frac. 24.4, Fe stain	
26	0%				2:18				Fe-stain 25.7, 26'	
27					2:31				26.3 - 26.8 broken up high ∡ Frac, some Fe staining	
28					2:20				27.3 low ∡ Frac, Fe stain 27.8 - 45° Frac, Fe stain	
29					2:07		Horiz. Foliation		Lost ~10 Gal., C-3 high ∡ Frac., Fe stain, 29'	
30					2:06					
31	0%	60/60	C-3		2:02				30.6' Fe-stain 31' Fe stain	
32					2:06					

TYPE OF DRILLING RIG: CME 1050 (ATV)
METHOD OF ADVANCING BORING: 6 1/4" ID HSA to 14'; 4" Temp. steel casing to 19'
METHOD OF SOIL SAMPLING: split spoon 300 lb Hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 303B

Tinus Form 0018

BORING LOG FOR: Site 17, Bldg. 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Whalen
DRILLED BY (Company/Driller): Dragin / M. Wilkey
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 303B
START DATE: 7/11/05
COMPLETION: DATE: 7/12/05
MON. WELL NO.: MW 303B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
33					2:20	DARK GRAY	PHYLLITE		Lost ~20 Gal. C-4	NO PID/FID Readings > Blood in BZ
34					2:24				33.8' Fe stain	
35		60/60	C-4		2:25				34.6 Fe stain, QTZ	
36	0%				2:29				35.4 Fe staining	
37					3:06				36.2 high % frac, Fe-stain	
38					3:05					
39			C-5		4:19				Lost ~20 Gal. C-5 Bit was Jamming	
40					3:10					
41	0%	46/60			2:25					
42					2:29					
43					2:31					
44					1:26				V. soft 43'-48'	
45		47/60	C-6		0:56					
46	0%				1:30					
47					2:13				46' some Fe-staining	
48					4:20					

TYPE OF DRILLING RIG: CME 1050
METHOD OF ADVANCING BORING: 6 1/4" HSA to 14'; 4" Temp. Steel casing to 19
METHOD OF SOIL SAMPLING: Split spoons / 300 lb Hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 303B

Tnus Form 0018

BORING LOG FOR: Site 17, Bldg. 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Whalen
DRILLED BY (Company/Driller): Dragin / M. Wilkey
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 303B
START DATE: 7/11/05
COMPLETION: DATE: 7/12/05
MON. WELL NO.: MW 303B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
49	020	12/12			7:18	DARK GRAY	PHYLLITE Harden at 48' High % Foliation		No alteration/stains on any break surface	NO PID rdgs. > Bkgd. in BZ
				EOB						

TYPE OF DRILLING RIG: CME 1050
METHOD OF ADVANCING BORING: 6 1/4" HSA to 14'; 4" Temporary steel casing 0' to 19'
METHOD OF SOIL SAMPLING: split spoons / 300 lb. Hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 303B

Ttnus Form 0018

BORING LOG FOR: Site 17, Building 32, Good Islands
PROJECT NO.: [illegible]
LOGGED BY: Rosalie Bne) J. Hart C. Hickey
DRILLED BY (Company/Driller): Dragon ...
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB - 304B
START DATE: 6/1/05
COMPLETION: DATE: 6/9/05
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
	1 / 4 / 8 / 10	13/24	S-1 0913		LOOSE	DK BRN BLK	SANDY SILT to SILTY SAND SOME GRAVEL	SM	MOIST NO ODOR FILL?	
2										0
	3 / 7 / 5 / 5	4/24	S-2 0935				SILTY SAND (FINE GRAINED) TRACE GRAVEL POORLY GRADED		MOIST NO ODOR FILL?	
4										0
	2 / 4 / 7 / 8	7/24	S-3 1056			BLACK - DK GRAY	SILTY SAND (FINE GRAINED) SOME FINE GRAVEL and SHALE FRAGMENTS		NO ODOR	
6										0
	2 / 2 / 35 / 58	14/24	S-4 1042				SANDY SILT to SILTY SAND SOME GRAVEL		WET FUEL ODOR 7'-8'	
8							LARGE ROCK FRAGMENT at 7.5'			176
	2 / 10 / 23 / 29	17/24	S-5 1125				FINE GRAVEL SOME SAND and SILT	SM		
10					DENSE	~~DENSE~~	SANDY SILT → COARSE SOME FINE GRAVEL (QUARTZ and SHALE FRAGMENTS)	SM	FILL NO ODOR	0
	2 / 5 / 35 / 48	7/24	S-6 1139						MOIST NO ODOR	
12										0
	49 / 100/.4'	8/24	S-7 1250 ~~S-7~~ 1300			DK BRN GRAY	SANDY SILT to SILTY SAND SOME FINE GRAVEL (2 GRAINING COLLIC.) TUC		FILL NO ODOR WET REFUSAL 13'2" S-8 Brown Spoon Blue Spoon	
14										0
							EOB @ 13' 2"			

TYPE OF DRILLING RIG: ~~HSA~~ CME ~~ATV~~ rig
METHOD OF ADVANCING BORING: Drive and wash
METHOD OF SOIL SAMPLING: 2.5" split spoons / 300 lb. hammer
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS: [illegible] boring after [illegible] 13'-14' hard to [illegible] Note

Tetra Tech NUS, Inc.

BORING NO.: SB 304B

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg. 32, Gould Island
PROJECT NO.:
LOGGED BY: D. Whelan
DRILLED BY (Company/Driller): Dragin
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-304B
START DATE: 6/1/05
COMPLETION: DATE:
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
							OPEN 5" STEEL CASING			
2							to 12', CLEAN OUT WITH			
							ROLLER BIT			
							NO SAMPLES COLLECTED			
4							[SEE PAGE 1]			
							↓			
6										
8										
10										
12							↓			
	12	18/24	S-1 0820 (6/2)		DENSE	DKGRAY	SANDY SILT TO SILTY SAND SOME GRAVEL	SM	WET NO ODOR	
14	47 52 50				↓	↓	POORLY GRADED FINE TO MEDIUM SAND FINE TO COARSE GRAVEL		TILL	0
	10	20/24	S-2 0859				SILT, SOME CLAY thin clay/silt lens	ML	WET	
16	47 22				↓	↓	SILTY SAND SOME GRAVEL	SM	NO ODOR	0

TYPE OF DRILLING RIG:
METHOD OF ADVANCING BORING:
METHOD OF SOIL SAMPLING:
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

BORING NO.:

Tetra Tech NUS, Inc.

Ttnus Form 0018

BORING LOG FOR: Site 17 Bldg 32 Gold Island

PROJECT NO.: 00065

LOGGED BY: D. Whalen

DRILLED BY (Company/Driller): Dragin

GRD. SURFACE ELEVATION:

TRANSCRIBED BY:

ELEVATION FROM:

BORING NO.: SB 304B

START DATE: 6/1/05

COMPLETION: DATE:

MON. WELL NO.:

CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
	32 50	19/24	5-3 0920		DENSE	DK GRAY	SILTY SAND AND GRAVEL Fine to medium sand, FINE to coarse GRAVEL	SMY GM	WET NO ODOR	
18	37 90									0
	14 24	12/24	5-4 0934				SILTY SAND TR. FINE GRAVEL (FINE TO MEDIUM SAND)	SM	WET NO ODOR	
20	35 39									0
	27 35	18/24	5-5 0948		MEDIUM				WET NO ODOR	
22	25 50									0
	22 23	15/24	5-6 1004		MEDIUM		SILTY SAND SOME GRAVEL (FINE ~~TO MED~~ SAND, FINE TO COARSE GRAVEL)		WET NO ODOR	
24	38									0
	32 35	20/24	5-7 1032		DENSE		SILTY SAND AND GRAVEL (Fine to Coarse Gravel)	SMY GM	WET NO ODOR	
26	42 37						SILTY SAND SOME GRAVEL	SM	Drill 4" PVC to 26'	0
	17 33	18/24	5-8 1140				SILTY SAND ~~&~~ SANDY SILT (FINE SAND)	SM	WET NO ODOR	
28	55 40									0
	35 60	15/24	5-9 1309				SANDY SILT/ SOME GRAVEL SILTY SAND	SM	WET NO ODOR	100
30	47 60						PYROLITE FRAGMENT			0
31	50 67	15/17	5-10 1350				SILTY SAND ~~and~~ AND ROCK FRAGMENT SANDY SILT (FINE SAND)		WET NO ODOR	
32	100/5									0

TYPE OF DRILLING RIG:

METHOD OF ADVANCING BORING:

METHOD OF SOIL SAMPLING:

METHOD OF ROCK CORING:

GROUNDWATER LEVELS:

OTHER OBSERVATIONS: OPEN HOLE 19'-26', THEN INSTALL 4" casing to 26', 28'

BORING NO.:

Tetra Tech NUS, Inc.

PAGE: 3 OF 9

Ttnus Form 0018

BORING LOG FOR: SFC 17 Bldg 32 Gould Island
PROJECT NO.: 01065
LOGGED BY: D. whalen
DRILLED BY (Company/Driller): Dragin
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 304B
START DATE: 6/1/05
COMPLETION: DATE:
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [~~PID~~, (PPM)]
34	25 / 75 / 60 / 100/4	18/24	S-11 1354		DENSE	DK GRY	SANDY SILT TO SILTY SAND SOME GRAVEL	SM	WET NO ODOR	~~PID~~
					V. DENSE		(FINE TO COARSE GRAVEL) FINE TO MEDIUM SAND)			0
36	27 / 34 / 52 / 71	19/24	S-12 1426				~~SILTY~~ (PHYLLITE FRAGMENTS)		WET NO ODOR	
					V. DENSE					0
38	20 / 35 / 40 / 57	12/24	S-13 1445						WET NO ODOR	
										0
40	22 / 27 / 37 / 55	16/24	S-14 1510		DENSE				WET NO ODOR	
										0
42	55 / 65 / 75 / 100/5	19/24	S-15 613 0821		V. DENSE		SILT AND PHYLLITE/SHALE FRAGMENTS SOME SAND	ML	WET NO ODOR	
							SILTY SAND SOME CLAY (SHALE FRAGMENTS)	SM		0
44	70 / 75 / 100/5	14/24	S-16 0849						WET NO ODOR	
					V. DENSE		SILT SOME SAND, SOME GRAVEL		TILL	0
46	40 / 60 / 80 / 90	16/24	S-17 0952				(FINE SAND, FINE TO ~~MED~~ COARSE GRAVEL) (SHALE, QUARTZ) (Fine Sand)		WET NO ODOR	
					V. DENSE				TILL	0
48	32 / 28 / 100/5	~~27~~/~~27~~	S-18 1001						WET	
					V. DENSE				TILL NO ODOR	0

TYPE OF DRILLING RIG: CME ATV
METHOD OF ADVANCING BORING: Roller bit/Drive and wash
METHOD OF SOIL SAMPLING: 2.5" OD split spoons / 300 lb. hammer
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 304B

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: CCCC5
LOGGED BY: D. whalen
DRILLED BY (Company/Driller): Dragin
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB304B
START DATE: 6/16/5
COMPLETION: DATE:
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
	40	24/24	S-19			DARK GRAY	SANDY SILT, SOME GRAVEL		WET	
	57		1038				FINE to COARSE SAND	SM		
	70						FINE to COARSE GRAVEL		NO ODOR	
50	100				V. DENSE					0
	47	15/24	S-20						WET	
	18		1056						NO ODOR	
	51									
52	77				V. DENSE		SILT	ML		0
	45	15/24	S-21				SANDY SILT SOME GRAVEL	SM	WET	
	90		1127				FINE TO COARSE GRAVEL		NO ODOR	
54	90				V. DENSE		FINE to MED. SAND			0
	43	16/24	S-22				SILTY SAND TO SANDY SILT	SM	WET	
	38		1221				SOME GRAVEL		NO odor	
56	68				V. DENSE		(Fine to coarse sand			
	100/5						Fine to mid Gravel)			0
	40	17/24	S-23					SM	WET	
	65		1250						NO odor	
58	100				V. DENSE					0
	100/2									
	75	10/10	S-24				SANDY SILT	SM	NO odor	
	100/4		1312				SOME GRAVEL		TILL very hard, compacted	
60							(Fine to COARSE GRAVEL)			0
	45	15/24	S-25					SM		
	67		1448							
62	70									0
	80									
		12/24	S-26				Silty sand/	SM	WET	
			1524				sandy SILT		Hammer breaks	
64										0

TYPE OF DRILLING RIG: CME ATV
METHOD OF ADVANCING BORING: Drive and wash
METHOD OF SOIL SAMPLING: 2.5" ϕ split spoons / 300 lb. hammer
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS: 4" casing at 60'

Tetra Tech NUS, Inc.

BORING NO.: SB304B

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg. 32, Gould Island
PROJECT NO.: 00065
LOGGED BY: D. Whalen, J Trant
DRILLED BY (Company/Driller): Dragin
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 304B
START DATE: 6/1/05
COMPLETION: DATE:
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [~~FID~~, (PPM)]
	45 55 60 100/3	17/24	S-27 1104 (6/6)		V. DENSE	DARK GRAY	SILT, SOME GRAVEL (FINE TO COARSE GRAVEL)	ML/GM	MOIST No odor very compacted	PID
66										0
	50 100/4	9/10	S-28 1125				SILT and GRAVEL, SOME SAND (SHALE, GRANITE, QUARTZ		MOIST NO ODOR	
68										0
	45 60 75 75	20/24	S-29 1152				GRAVEL some sand,	GM	wet NO ODOR	
70							SANDY SILT, SOME GRAVEL (FINE TO COARSE GRAVEL	SM	MOIST/WET	0
	34 89 100/4	13/24	S-30 1314						wet no odor	
72							sandy silt, some gravel (fine to coarse gravel)	SM		0
	105 89 100/4	10/24	S-31 1341						wet no odor	
74							sandy silt, some gravel (F, ~~NE TO coarse~~) some phyllite	SM		0
	38 40 50 52	16/24	S-32 1411				Sandy silt, some gravel (fine to coarse gravel)	SM	wet no odor	
76										0
	90 100/4	14/24	S-33 1432						wet no odor	
78							silty sand, some gravel (fine to coarse gravel)	MS		0
		17/24	S-34 0740 (6/8)				SILT, SOME SAND, SOME GRAVEL (MEDIUM phyllite sand quartz)		moist no odor very compacted	
80							SANDY SILT SOME GRAVEL			0

TYPE OF DRILLING RIG: CME ATV
METHOD OF ADVANCING BORING: Drive and Wash
METHOD OF SOIL SAMPLING: 2.5" Split Spoons / 300 lb. Hammer
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.:

Tt Form 0018

BORING LOG FOR: Site 17 Bldg 32 Gould Island
PROJECT NO.: 00065
LOGGED BY: D. Walden
DRILLED BY (Company/Driller): Drissler / M.W
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB 304B
START DATE: 6/1/05
COMPLETION: DATE: 6/9/05
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6" OR RQD	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
	24	14/24	S-35 0818		V. DENSE	DK GRAY	SANDY SILT SOME GRAVEL		MOIST NO ODOR	PID
82	55 / 36 / 10/0		GQ2 SB304B-S-32							6.3
	13 / 22	12/24	S-36 0847		DENSE				NO FIT	
84	32 / 40						SILT (V. weathered PHYLLITE), TR clay		NO ODOR ROCK FABRIC VISIBLE	0
85	42 / 100/5	11/11	S-37 0912		V DENSE				MOIST, NO ODOR	0
86										
	62 / 71	11/15	S-38 0937		V. DENSE		(V. SOFT, weathered PHYLLITE)		moist, NO ODOR	
88	100/5						(rock Fabric)		SOME RUST STAINING	0
	35 / 90	19/24	S-39 1327				V. WEATHERED PHYLLITE (trace pyrite)		Broke rod while [illegible]	
90	100/3								moist no odor	0
91					1:40	DK GRAY	PHYLLITE (TRACE pyrite) (Foliation highly variable)	BR	soft at 91.5'	PID: 0 ppm BZ for entire boring
92					1:14			VBR	RUST STAINING 92'	
93	79	60/60	C-1		1:06			BR	92.5' SOFT at 93.5'	
94					1:05			VBR		
95					1:35			BR		
96					1.29				SOFT/BROKEN 95-97' RUST STAIN 96'	

TYPE OF DRILLING RIG: CME ATV rig
METHOD OF ADVANCING BORING: Drill and wash 4" I.D. casing
METHOD OF SOIL SAMPLING: 2.5" split spoons, 300 lb Hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS: 4' [illegible] at 90'
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 304B

Ttnus Form 0018

23

BORING LOG FOR: Site 17, Bldg. 32, Governors Island
PROJECT NO.:
LOGGED BY:
DRILLED BY (Company/Driller):
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB 304B
START DATE: 6/1/05
COMPLETION: DATE: 6/9/05
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
97					1:20	TK GRAY	PHYLLITE/SANDSTONE (Hardly, NOT FISSILE)	BR	97' RUST STAINS	
98	63%	20/60	C-2		1:08				98.2' RE-STAIN	
99					1:20					
100					1:37				100.5' some rust	
101					1:32	GRAY				
102					1:36					
103	50%	30/60	C-3		1:34				103' Fractured	
104					1:44			VBR	103.5 Buckle of some rust	
105					1:53			BR	104.5' Fractured 105' rust stains	
106					1:18			VBR/BR		
107		41/60	C-4		1:07				RUST STAINING on surfaces throughout interval	
108	0%				1:37					
109					1:14					
110					2:20					
111					1:26				110-111.5 RUST STAINS	
112					1:36			BR		

TYPE OF DRILLING RIG: CME ATV
METHOD OF ADVANCING BORING: Drive and wash 4" ID casing
METHOD OF SOIL SAMPLING: 2.5" split spoons / 300 lb. hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 304B

Ttnus Form 0018

BORING LOG FOR: Bldg 32, Gould Island
PROJECT NO.: 00065
LOGGED BY: D. Whalen
DRILLED BY (Company/Driller): Dragin / Mike W.
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 304B
START DATE: 6/1/05
COMPLETION: DATE: 6/9/05
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
113	15% RQD	52/60	C-5		1:42	GRAY	~~PHYLLITE~~ PHYLLITE / META SANDSTONE / META SILTSTONE	BR	113.5 RUST STAIN	
114					1:24				114' QUARTZ, SOME RUST STAINING	
115					2:07				115 RUST STAIN	
116					2:[illegible]					
117	33%	60/60	C-6		2:23				116.5 RUST STAINING	
118					2:00				117 ~~[illegible]~~ RUST STAINING 118' WEATHERED	
119					2:12					
120					2:45					

TYPE OF DRILLING RIG: CME ATV
METHOD OF ADVANCING BORING: Drive and Wash; 4" ID casing
METHOD OF SOIL SAMPLING: 2.5" split spoons / 300 lb Hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 304B

Ttnus Form 0018

BORING LOG FOR: ~~SB-305B~~ Site 17, Building 32, Governors Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Drogin / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-305B
START DATE: 6/8/05
COMPLETION: DATE: 6/23/05
MON. WELL NO.: MW-305B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
1	/	/		Concrete gravel	/	/	0-1 → Concrete and gravel	—		—
3	10 13 9 11	6/24	(1-3) S001 1508	FILL		Black	Silty sand w/ some gravel	SM		0.0
5	9 11 19 27	19/24	(3-5) S002 ✱ 1512			Black	Silty sand w/ abundant gravel small wet sand layer from 4.1 to 4.3' BGS	SM		0.0
7	13 15 17 22	17/24	(5-7) S003 1535			Black	5-5.6 → Silty sand w/ some gravel Remainder → rock from fill material	SM		0.0
9	46 72 100/1 —	13/24	(7-9) S004 1545			Black	Silty sand w/ abundant gravel	SM		0.0
11	13 13 27 41	15/24	(9-11) S005 ⊛ 0755			Black	Silty sand w/ some gravel	SM		4.7
13	35 40 55 75	22/24	(11-13) S006 0855	TILL	Dense	Black	Silty sand w/ some rounded gravel, dense, damp	SM	Spoon was wet	0.0
15	17 38 41 62	20/24	(13-15) S007 1020		Dense	Black	Silty sand w/ some rounded gravel, dense, damp	SM		0.0

TYPE OF DRILLING RIG: Gus Pech GP1900XHR (Air Rotary)
METHOD OF ADVANCING BORING: HSA / Air Rotary / Drive & Wash
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS: ⊛ Sent for Lab Analysis

Tetra Tech NUS, Inc.

BORING NO.: SB-305B

Ttnus Form 0018

BORING LOG FOR: SB305B
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragon / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-305B
START DATE: 6/8/05
COMPLETION: DATE: 6/23/05
MON. WELL NO.: MW-305B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
17	11 13 37 72	15/24	(15-17) S008 1037		Dense	Black	Silty Sand w/ some rounded gravel / Phylite, Dense, damp	SM 1		0.0
19	7 11 17 59	14/24	(17-19) S009 1105		Dense	Black	Silty Sand w/some rounded gravel, dense, damp, some chunks of Phylite	SM 1		0.0
21	12 15 28 52	12/24	(19-21) S010 1125		Dense	Black	Silty Sand w/ some rounded gravel, dense, damp	SM 1		0.0
23	18 48 49 72	12/24	(21-23) S011 1145		Very Dense	Black	Silty Sand w/ some gravel, very dense, dry	SM 1		0.0
25	6 9 17 38	11/24	(23-25) S012 1255		Dense	Black	Silty Sand w/ some gravel dense, moist	SM 1		0.0
27	10 27 31 52	14/24	(25-27) S013 1310		Dense	Black	Silty Sand w/ some gravel, dense, dry	SM 1		0.0
29	32 100/3 — —	12/24	(27-29) S014 1340	[redacted]	Very Dense	Black	Silty Sand w/ layers of phylite	SM 1	very hard layer from 27.8'-29'	0.0
31	36 100/2 — —	6/24	(29-31) S015 0855		Very Dense	Black	Silty Sand w/ chunks of phylite	SM 1		1.6

TYPE OF DRILLING RIG: Gus Pech GP190XHR (Air Rotary)
METHOD OF ADVANCING BORING: HSA, Air Rotary
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-305B

Ttnus Form 0018

BORING LOG FOR:
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): DRAGIN / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-305B
START DATE: 6/8/05
COMPLETION: DATE: 6/23/05
MON. WELL NO.: MW-305B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
33	100/5	6/24	(31-33) S016 0925		Very Dense	Black	Silty sand w/ large chunks of phylite	SM /		0.6
35	72 100/5	9/24	(33-35) S017 1057		Very Dense	Black	Silty sand w/ chunks of phylite	SM /		0.0
36	/	—	—		/	/	Hard Rock layer from 34-35.5	/	—	—
38	39 100/5	5/24	(36+38) S018 1140		Very Dense	Black	Silty sand w/ some small rounded gravel	SM /		2.5
40	100/6	4/24	(38-40) S019 1250		Very Dense	Black	Silty sand w/ some small rounded gravel	SM /		0.0
41	/	—	—		/	/	Hard rock layer from 38.5-40.5	/	—	—
43	73 100/1	5/24	(41-43) S020 1330		Very Dense	Black	Silty sand w/ some small rounded gravel	SM /		0.0
45	47 100/3	6/24	(43-45) 2021 1410		Very Dense	Black	Silty sand w/ some small rounded gravel	SM /		0.0

TYPE OF DRILLING RIG: Gus Pech GP1900XHR (Air Rotary)
METHOD OF ADVANCING BORING: HSA / Air Rotary / Drive & Wash
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18-inch drop.
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB305B

Ttnus Form 0018

BORING LOG FOR: SB 305B
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): DRAG-IN/Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-305B
START DATE: 6/8/05
COMPLETION: DATE: 6/23/05
MON. WELL NO.: MW-305B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
46	/	/	/		/	/	Hard rock layer from ~44.0-46.0	/	—	—
48	100/5	0/24	(46-48) S022 1456		/	/	no recovery	/	—	—
50	100/5	4/24	(48-50) S023 0838		Very Dense	Black	Silty sand w/ large chunks of gravel	SM 1		0.0
52	100/4	4/24	(50-52) S024 0920		Very Dense	Black	Silty Sand w/ some gravel	SM 1		0.0
54	100/5	0/24	(52-54) S025 1004		/	/	No Recovery	/	—	—
56	100/6	5/24	(54-56) S026 1035		Very Dense	Black	Silty Sand w/ some small rounded gravel	SM 1		0.0
58	100/6	6/24	(56-58) S027 1115			Black	Silt w/ fine grained sand abundant weathered Phylite.			1.5
60							More to 5' intervals — SEE NEXT PAGE			

TYPE OF DRILLING RIG: GUS Pech GP 1900XHR (AIR ROTARY)
METHOD OF ADVANCING BORING: HSA / Air Rotary
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB 305B

Ttnus Form 0018

BORING LOG FOR: SB305B
PROJECT NO.: C065
LOGGED BY: D Hickey
DRILLED BY (Company/Driller): DRAGON/Brett Siwiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-305B
START DATE: 6/10/05
COMPLETION: DATE: 6/23/05
MON. WELL NO.: MW-305B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6" / RQD	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
	56 100/3	2/24	(61-63) SO28 1050		Dense	Black	Weathered Phyllite - Top of Bedrock at 61.5' BGS			—
63	—									
6/22 64					—	—	NO SAMPLES COLLECTED			
65					—	—				
66		60/60	C-1		2:18	BLACK	PHYLLITE	BR VER	LOST NO water coming C-1. STAINING ON MOST SURFACES 65'-67.5'	No visual/ass > FKSQ. in B.Z.
67	18%				2:18	↓		↓		
68					1:54	DK. GRAY		BR	FE STAINING 68'-69'	
69					1.42					
70					1:37		LOW ∡ Foliation		FE STAIN: 69.5-70' 70.5 71, 71.5 72.6 STAIN + clay	
71					1:24			↓		
72		60/60	C-2		1:33	↓		VBR	NO WATER LOST C-2 ~~FE STAIN~~	
73	15%				1:38	BLACK		BR		
74					1:37					
75					1:52	↓		↓		
76					1:42	DK GRAY to BLACK		VBR	75' QTZ VEIN, FE-STAIN	
77					2:06	↓		BR	Frequent STAINS 75-79'	

TYPE OF DRILLING RIG: Gus Pech GP 900 XHR (Air Rotary)
METHOD OF ADVANCING BORING: HSA/Air Rotary
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS: Roller bit to 65'

Tetra Tech NUS, Inc.

BORING NO.: SB305B

Ttnus Form 0018

BORING LOG FOR: Naval Gould Island
PROJECT NO.: 02065
LOGGED BY: P. Whalen
DRILLED BY (Company/Driller): Dragin / M. Wilke
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 305B
START DATE: 6/8/05
COMPLETION: DATE: 6/23/05
MON. WELL NO.: MW-305B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
78	0%	29/48	C-3		2:50	DARK GRAY/ BLACK	PHYLLITE TRACE PYRITE	VBR	NO WATER LOST C-3 78.8 FE-STAINING	NO Fading > Background
79					6:41				78.8 FE-STAINING Big Joints	B.Z
80	0%	24/24	C-4		2:06			VBR	NO WATER LOST C-4 79.3' FE-STAIN	
81					2:03					
82		39/48	C-5		1:57	BLACK/ DK GRAY	High ∡ Foliation			
83	40%				2:22			BR	FE-stain 82.2'	
84					2:15					
85					2:40					
86					3:01				86' FE STAINING 87' " " 88.2 " " 89 " "	
87					2:44		High ∡ Foliation			
88	15%	60/60	C-6		2:55				LOST ~15 GAL C-6	
89					3:20			VBR		
90					6:14			BR		
91					2:50					
92	40%	60/60	C-7		2:31				LOST ~15 GAL C-7	
93					2:27		High ∡ Foliation			

TYPE OF DRILLING RIG: CME
METHOD OF ADVANCING BORING: Drive and Wash
METHOD OF SOIL SAMPLING:
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 305B

Ttnus Form 0018

BORING LOG FOR: Gould Island
PROJECT NO.: 2005
LOGGED BY: R. Whalen
DRILLED BY (Company/Driller): Dragin / M. Wilkey
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 305B
START DATE: 6/8/05
COMPLETION: DATE: 6/23/05
MON. WELL NO.: 305B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
94					3.26	DK GRAY	PHYLLITE		73.5' Hign & Fr	NO [illegible] > 5K [illegible]
95					4.43	↓	↓			BZ
				EOB						

TYPE OF DRILLING RIG: CME ATV
METHOD OF ADVANCING BORING: Drive and wash
METHOD OF SOIL SAMPLING: Split spoon 300 lb. Hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 305B

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragin / Greg Donahue
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-306B
START DATE: 6/23/05
COMPLETION: DATE: 6/30/05
MON. WELL NO.: MW-306B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
0	11 20 30 31	18/24	(0-2) S001 1340	Fill/ Const. Debris		Red, Gray	Brick material w/ some rock (gravel)	—		—
2										
4										
6										
8				6.5 / 9.0	Concrete		layer w/ rebar			
10										
12	34 15 100/5	17/24	(10-12) S002 1400	Fill		Brown -Red	Brick material, silty sand, gravel, wet, wood	SM		2.4
14										
16										

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb Hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-306B

Tnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0005
LOGGED BY: D. Hicks
DRILLED BY (Company/Driller): Dragin / Greg Donahue
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-306B
START DATE: 6/23/05
COMPLETION: DATE: 6/30/05
MON. WELL NO.: MW-306B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
18										
20										
22	20 60/6 —	6/24	(20-22) S003 0902	TILL	dense	Black	Silty Sand w/ some small gravel, dry (TILL)	SM 1	~6" of heave inside augers.	0.0
24										
26										
28										
30										
32	47 99 100/5	14/24	(30-32) S004 0936	TILL	Dense	Black	Silty sand w/ some small gravel, dry			0.0

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-306B

Tinus Form 0018

BORING LOG FOR: Site M, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hicks
DRILLED BY (Company/Driller): Dragin / Greg Donahue
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-306B
START DATE: 6/23/05
COMPLETION: DATE: 6/30/05
MON. WELL NO.: MW-306B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
34										
36										
38										
40										
42	3 8 23 98	3/24	(40-42) S005 1045	TILL	dense	Black	Silty sand w/ some small gravel, dry	SW		0.0
44										
46										
48										

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-306B

Tinus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragin / Greg Donahue
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-306B
START DATE: 6/23/05
COMPLETION: DATE: 6/30/05
MON. WELL NO.: MW-306B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
50										
52	91 82 83 100/4	22/24	(50-52) S006 1144	TILL	Dense	Black	~~Silty~~ fine-med sand, some silt, small gravel, moist	SW 1		0.0
54										
56										
58										
60										
62	27 91 114/6 —	10/24	(60-62) S007 1321	Rock		Gray-Brown Black	Silt w some sand weathered phylite - phylite (Bedrock. EOB			0.0

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-306B

Ttnus Form 0018

BORING LOG FOR: Gould Island
PROJECT NO.: 0065
LOGGED BY: D. whalen
DRILLED BY (Company/Driller): Dragin / M. wilkey
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 306B
START DATE: 6/23/05
COMPLETION: DATE: 6/30/05
MON. WELL NO.: 306B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6" or RQD	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
6/29 65					2:17	DARK GRAY	PHYLLITE/META SANDSTONE	VBR	frequent FE-stain 65'-66.5	No Rdgs. > Bkgd in BZ
66					2:18	↓	↓	↓		↓
67	0%	36/60	C-1		2:23	↓	SILT AND PHYLLITE FRAGMENTS	↓	Very soft 66.5'	↓
68	↓	↓	↓		3:07	↓	↓	↓	↓	↓
69	↓				3:28	↓	↓	↓		↓
70	↓				0:42	↓	PHYLLITE	↓	SLIGHT FE-STAINING @ 69'	↓
71	0%	24/48	C-2		1:50	↓	↓	↓	↓	↓
72	↓	↓	↓		3:42	↓	↓	↓	↓	↓
73	↓				4:24	↓	↓	↓	Drill bit clogging up due to softness of rock	↓
74	↓				2:19	↓	↓	↓	↓	↓
75	↓	31/60	C-3		3:10	↓	↓	↓	↓	↓
76	0%	↓	↓		3:11	↓	↓	↓	↓	↓
77	↓				2:55	↓	↓	↓	↓	↓
78	↓				2:50	↓	↓	↓	↓	↓
79	↓	18/36	C-4		2:02	↓	↓	↓	↓	↓
80	0%	↓	↓		3:29	↓	↓	↓	↓	↓

TYPE OF DRILLING RIG: CME
METHOD OF ADVANCING BORING: Drive and wash
METHOD OF SOIL SAMPLING: split spoon 300 lb. hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 306B

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg. 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Whalen
DRILLED BY (Company/Driller): Dragin / M. Wilkey
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: 306B
START DATE: 6/23/05
COMPLETION: DATE: 6/30/05
MON. WELL NO.: MW306B
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6" or RQD	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
81					4:44	DARK GRAY	PHYLLITE	VBR		No readings > Bkgd. in BZ
82	0%	18/24	C-5		3:00					
83					3:10					
84					2:38	BLACK and RED-BROWN	V. WEATHERED PHYLLITE / CLAYEY SILT			
85		51/60	C-6		2:37	DK GRAY	PHYLLITE			
86	22%				1:49	GREEN-GRAY	PHYLLITE (COARSER GRAINED, HARDER)	BR		
87					2:56				No Alteration / WEATHERING on ANY BREAK SURFACES	
88					4:29					
89					1:47					
90					2:03					
91	95%	60/60	C-7		2:09					
92					1:54					
93					2:13					
94	94%		C-8		2:26					
				EOB						

TYPE OF DRILLING RIG: CME
METHOD OF ADVANCING BORING: Drive and wash
METHOD OF SOIL SAMPLING: SPLIT SPOON / 300 lb. Hammer
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: 306B

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragin / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-309
START DATE: 7/12/05
COMPLETION: DATE: 7/12/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
	8	17/24	(0-2) S001 ⊗	Fill	Loose	Brown	Sandy Silty, grass, gravel dry	SM	Lab QC collected here	0.0
2	7 8 9		0737			Black	Silty Sand, some gravel, dry	1		
	7	4/24	(2-4) S002		Loose	Black	Silty Sand, some gravel, dry. (Large Rock in J end of spoon)	SM	dry	0.0
4	14 8 6		0755					1		
	10	3/24	(4-6) S003			Black	Silty Sand, gravel, dry (Large rock in end of J spoon)	SM	dry	0.0
6	5 6 4		0758					1		
	2	12/24	(6-8) S004			Black	TOP 4 inches = Sandy Silt w some small gravel, moist	SM	moist	0.0
8	4 12 14		0808				Bottom 8 inches = med-coarse sandy gravel, Capped w/ phylite chunks	GP	wet	
	10	16/24	(8-10) S005			Black	Top 10 inches = Sandy Silty w/ some gravel, wet	SM	wet	0.0
10	16 36 32		0815		dense		Bottom 6 inches = Silty Sand, some gravel, dry	1	dry	
	22	12/24	(10-12) S006			Black	Sandy Silt, gravel, wet	SM	wet	0.0
12	26 17 15		0826					1		
	12	14/24	(12-14) S007			Black	Silty Sand, gravel, wet	SM	wet	0.0
14	20 50 100/5		0833		dense		Silty Sand, gravel, dry, dense	1	dry	
	8	15/24	(14-16) S008			Black	Silty Sand, gravel, moist	SM	moist	0.0
16	34 42 48		0843					1		

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop.
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS: ⊗ for lab analysis

Tetra Tech NUS, Inc.

BORING NO.: SB-309

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Drogin / Bhett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-309
START DATE: 7/12/05
COMPLETION: DATE: 7/12/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
16										
	13 34	16/24	(16-18) S009	FILL		Black	Silty Sand w/ some gravel, wet	SM		0.0
18	47 60		0904					1	wet	
	31 33	13/24	(18-20) S010			Black	Sandy Silt, some sm. gravel, wet	SM		0.0
20	26 36		0914					1	wet	
	13 21	13/24	(20-22) S011			Black	Silty Sand to Sandy Silt, wet	SM		0.0
22	26 42		0922					1	wet	
	16 29	13/24	(22-24) S012			Black	Silty Sand w/ some gravel, wet	SM		0.0
24	27 25		0933					1	wet	
	16 21	16/24	(24-26) S013			Black	Silty Sand w/ some large gravel, wet	SM		0.0
26	26 36		0940					1	wet	
	30 100/5	8/24	(26-28) S014			Black	Silty Sand, some small gravel, moist	SM		0.0
28	— —		0955					1	moist	
	51 100/2	8/24	(28-30) S015		dense	Black	Silty Sand, some gravel, dry	SM		0.0
30	— —		1007					1	dry	
	21 25	14/24	(30-32) S016			Black	Silty Sand, some gravel, wet			0.0
32	100/5		1055						wet	

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop.
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-309

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragin / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-309
START DATE: 7/12/05
COMPLETION: DATE: 7/12/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
32										
	6 21	16/18	(32-34) S017 1106	FILL		Black	Silty Sand, some gravel, wet	SM	wet	0.0
34	28 32							1		
	15 31	19/24	(34-36) S018 1117			Black	Silty Sand, fine to med gr., some gravel, wet	SM	wet	0.0
36	36 48							1		
	25 46	13/24	(36-38) S019 1130		dense	Black	Silty Sand, some gravel, moist, hard	SM	moist	0.0
38	100/5 —							1		
	26 51	16/24	(38-40) S020 1141			Black	Top 12 inches = fine to med sand, some silt, gravel, wet	SM	wet	0.0
40	58 62			TILL	dense		Bottom 4 inches = Silty Sand, dry, dense.	1	dry	
	14 52	10/24	(40-42) S021 1155		dense	Black	Sandy Silt, some small gravel, dry, dense.	SM	dry	0.0
42	100/6 —							1		
	38 100/5 —	9/24	(42-44) S022 1321		dense	Black	Silty Sand, some gravel, dry, dense	SM	dry	0.0
44	—							1		
	20 55	18/24	(44-46) S023 1333		dense	Black	Silty Sand, gravel, dry, dense	SM	dry	0.0
46	70 100/4						— EOB —	1		

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS: Sample sent to Lab.

Tetra Tech NUS, Inc.

BORING NO.: SB-309

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragin / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-310
START DATE: 7/12/05
COMPLETION: DATE: 7/13/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
0	4 13 15 21	19/24	(0-2) S001 ✗ 1523		Loose	Brown	Silt w/some sand, organics (grass/roots) gravel, dry	SM	dry	0.0
2						Black	Silty Sand, gravel, dry	1		
5										
7	12 21 36 26	18/24	(5-7) S002 1535		Loose	Black	Silty Sand, some gravel, dry	SM	dry	0.0
7/12								1		
7/13 10										
12	6 15 19 26	15/24	(10-12) S003 0738			Black	Silty Sand to Sand, fine to med grained, ~~damp~~ dry	SM		0.4
15								1		
17	6 29 46 80	18/24	(15-17) S004 0751			Black	Silty Sand w/some gravel, dry	SM		4.2
								1		

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS: ✗ Sample for lab analysis.

Tetra Tech NUS, Inc.

BORING NO.: SB-310

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragon / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-310
START DATE: 7/12/05
COMPLETION: DATE: 7/13/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET) 20	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
	15 26	17/24	(20-22) S005			Black	Silty Sand, some gravel, damp	SM		4.1
22	41 55		0808					1		
25										
	12 36	15/24	(25-27) S006			Black	fine to med. grained Sand w/ some silt, gravel, damp	SM		0.2
27	65 59		0823					1		
30										
	26 49	13/24	(30-32) S007			Black	Silty Sand, some gravel, wet	SM		0.0
32	100/6 —		0842					1		
35										
	35 48	15/24	(35-37) S008			Black	Silty Sand, some gravel, wet	SM		0.0
37	60 65		0856					1		

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-310

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0265
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragon / Brett Swiatek
GRD. SURFACE ELEVATION:
TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-310
START DATE: 7/12/05
COMPLETION: DATE: 7/13/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
40										
	20	14/24	(40-42) S009			Black	Top 9" = Silty Sand, gravel, wet	SM		0.0
42	45 100/4 —		0954 ø		dense	Black	Bottom 5" = Sandy Silt, gravel dry	1		
45										
	39	12/24	(45-47) S010		dense	Black	Silty Sand, gravel, moist	SM		0.0
47	64 100/6 —		1014					1		
50										
	50	13/24	(50-52) S011		dense	Black	Silty Sand, gravel, moist	SM		
52	69 100/2 —		1032					1		
55										
	100/6 —	0/24	(55-57) S012		—	—	No Recovery	—		—
57	—		1059							

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch Drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS: ø Sample for lab analysis.

Tetra Tech NUS, Inc.

BORING NO.: SB-310

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 00665
LOGGED BY: D. Nickey
DRILLED BY (Company/Driller): Dragin/Brett Swiatek
GRD. SURFACE ELEVATION:
TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-310
START DATE: 7/12/05
COMPLETION: DATE: 7/13/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
60	40	4/24	(60-62) S013 1126		dense	Black	Silty Sand, some gravel, moist	SM		0.0
62	100/5							1		
65										
67	60 100/3	8/24	(65-67) S014 1148		dense	Black	Silty Sand, some gravel, damp	SM		0.0
70								1		
72	30 43 100/3	5/24	(70-72) S015 1302		dense	Black	Silty Sand, some gravel, dry	SM		0.2
75				74.5 Rock				1		
77	100/5	5/24	(75-77) S016 1337		—	Gray	Weathered Phyllite — EOB —	—		—

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-310

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 6045
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragon / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-311
START DATE: 6/29/05
COMPLETION: DATE: 6/29/05
MON. WELL NO.: N/A
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
1	/	/	—	1.0	/	/	Concrete / gravel	/	—	—
3	13 17 42 59	18/24	(1-3) S001 * 1048	FILL ↓		Black	Silty Sand w/ some gravel, dry	SM 1		0.0
5	19 29 32 54	13/24	(3-5) S002 1057			Black	Silty Sand w/ some gravel, moist	SM 1		0.0
7	19 29 56 67	18/24	(5-7) S003 1104			Black	Silty Sand w/ some gravel, some phylite, moist	SM 1		0.0
9	8 17 54 65	17/24	(7-9) S004 1116			Black	Silty Sand w/ some gravel, some phylite, moist	SM 1		0.0
11	19 52 48 47	19/24	(9-11) S005 1127			Black	Silty sand w/ some gravel, some phylite, brick, moist	SM 1		0.0
13	10 18 32 41	18/24	(11-13) S006 1139			Black	Silty sand w/ some gravel, rust staining, moist	SM 1		0.0
15	18 26 26 46	20/24	(13-15) S007 1242		Soft	Black	Silty Sand w/ some gravel, wet	SM 1		0.0

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS: * samples to send to Lab.

BORING NO.: SB-311

Tetra Tech NUS, Inc.

PAGE: 1 OF 1

Tinus Form 0018

BORING LOG FOR: Site 17 Bldg 32, Gould Island
PROJECT NO.: 0045
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragin/Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-311
START DATE: 6/29/05
COMPLETION: DATE: 6/29/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET) 15	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
	4	16/24	(15-17) S008	FILL	Soft	Black	Silt w/ fine sand and sm. gravel, moist	SM		0.0
17	10 18 52		1251					1		
	48 100/0	10/24	(17-19) S009	TILL	dense	Black	Silty Sand w/ some gravel, dry	SM		0.0
19	— —		1302					1		
	47 100/0	8/24	(19-21) S010	EOB	dense	Black	Silty Sand w/ some gravel, dry EOB	SM		0.0
21	— —		1314					1		

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-311

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 9065
LOGGED BY: David Hickey
DRILLED BY (Company/Driller): Dragon / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-312
START DATE: 6/29/05
COMPLETION: DATE: 6/30/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
1	/	/	—		/	/	Concrete / gravel	/	—	—
3	7 11 13 41	16/24	(1-3) S001 ⊗ 1436	FILL		Black	Silty Sand w/ some sm-med gravel, dry	SM 1		0.0
6										
8	56 18 32 47	14/24	(6-8) S002 1456			Black	Silty Sand w/ some gravel, dry	SM 1		0.0
11										
13	12 31 34 37	17/24	(11-13) S003 1512			Black	Silty Sand w/ some gravel, wet	SM 1		0.0
16										
18	52 100/4 —		(16-18) S004 1526	TILL		Black	Silty Sand w/ some gravel, moist. TILL	SM 1		0.0

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS: ⊗ Sample sent to Lab.

Tetra Tech NUS, Inc.

BORING NO.: SB-312 PAGE: 1 OF 3

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: David Hickey
DRILLED BY (Company/Driller): Dragon / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-312
START DATE: 6/29/05
COMPLETION: DATE: 6/30/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
21										
23	61 100/6	12/24	(21-23) S005 1303		dense	Black	Silty Sand w/ some gravel and phylite, moist. TILL	SM		0.0
26										
28	28 61 69 72	17/24	(26-28) S006 1321		dense	Black TILL	Silty Sand w/ some gravel, moist small sand layer in middle of spoon (4" thk)	SM		0.0
31										
33	26 32 28 25	4/24	(31-33) S007 1341			Black	Silty sand w/ some gravel, moist TILL	SM		0.0
36										
38	26 29 62 69	18/24	(36-38) S008 1402			Black	Sand w/ some silt and some gravel, wet	SM		0.0

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-312

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hicks
DRILLED BY (Company/Driller): Dragon / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-312
START DATE: 6/29/05
COMPLETION DATE: 6/30/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG/ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD – [FID, (PPM)]
41										
	64		(41-43) S009							
	100/4			EOB			Bedrock EOB		—	—
43	—		1424							

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-312

Tnus Form 0018

BORING LOG FOR: Site 17, Building 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: J. Traut
DRILLED BY (Company/Driller): Dragin, Steve Sanford
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-313
START DATE: 7/5/05
COMPLETION: DATE: 7/5/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
	6 8	13/24	(00-02) S001 0804 *	Fill		brown	organic material			
2	100/3					yellow gray	sand with some sm to med gravel & tar, dry rock layer at ~1.5'	S		0.0
	25 82	19/24	(02-04) S002 0820			black	sand with some silt, some sm to med rounded gravel moist rock layer at ~3'	Sm		0.0
4	100/4									
	12 35	13/24	(04-06) S003 0837			black	silty sand with abundant sm to lg gravel some rust staining 5½-6 feet moist	Sm		0.0
6	67 68									
	12 24	16/24	(6-8) S004 0853			black	silty sand with some sm to med gravel, moist	Sm		0.0
8	23 23									
	52 74	18/24	(8-10) S005 0907			black	silty sand with some sm to med gravel, wet	Sm		0.0
10	94 92			Till	Dense					
	31 32	16/24	(10-12) S006 0926 *			black	silty sand with a ~~little~~ small amount of gravel, wet	SM		0.0
12	55 87									
	39 61	17/24	(12-14) S007 0944		V. Dense	black	silty sand with abundant sm-large gravel, wet			0.0
14	64 87									
				EOB			End of Boring			

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-313

PAGE: 1 OF

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragon / Brett Swiatek
GRD. SURFACE ELEVATION:
TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-314
START DATE: 7/8/05
COMPLETION: DATE: 7/8/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
2	/	/	—		/	/	Concrete / gravel	/	—	—
4	8 14 24 29	12/24	(2-4) S001 ⊗ 0839	Fill	Loose	Black	Silty Sand w/ abundant gravel, dry, FILL	Sm 1		0.0
7										
9	11 34 56 59	15/24	(7-9) S002 0854			Black	Silty Sand w/ abundant gravel, iron staining, moist, FILL	Sm 1		0.0
12										
14	15 24 36 52	16/24	(12-14) S003 0911			Black	Silty Sand w/ some gravel, moist, FILL	Sm 1		0.0
17										
19	20 31 42 39	13/24	(17-19) S004 ⊗ 0931			Black	Silt w/ fine sand, some gravel, wet, FILL	Sm 1	wet	0.0

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS: ⊗ for Lab analysis.

Tetra Tech NUS, Inc.

BORING NO.: SB-314

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Nickey
DRILLED BY (Company/Driller): Dragin / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-314
START DATE: 7/8/05
COMPLETION: DATE: 7/8/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
22										
	21	12/24	(22-24) S005			Black	Silty Sand w/ some gravel, wet, FILL	SM		0.0
24	56 100/6 —		0951					1		
27										
	12	16/24	(27-29) S006	TILL	dense	Black	Silty Sand w/ some gravel, dry, TILL	SM		0.0
29	64 100/6 —		1009					1		
32										
	35	22/24	(32-34) S007		dense	Black	Silty Sand w/ some gravel, dry, TILL	SM		0.0
34	51 67 100/6		1025					1		
37										
	11	14/24	(37-39) S008		dense	Black	Silty Sand w/ some gravel, dry, TILL	SM		
39	17 56 100/4		1046					1		

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch drop.
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-314

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Draigin / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-314
START DATE: 7/8/05
COMPLETION: DATE: 7/8/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
42	36	9/24	(42-44) S009			Black	Silty Sand w/ some gravel, dry, Till	SM		0.0
44	100/6		1112					1		
47										
	56	15/24	(47-49) S010		EOB	Black	Sand w/ some silt on top of weathered phyllite	SM		—
49	38 34 29		1134			Gray		1		

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch Drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-314

Ttnus Form 0018

BORING LOG FOR: Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. whalen
DRILLED BY (Company/Driller): Dragin
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-315
START DATE: 6-15-05
COMPLETION: DATE: 6-15-05
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
	– –		S-1 1146			GRAY	CONCRETE			
2	5 13	2/12					GRAVEL		DRY	0
3	21 26	4/12	S-2 1153			DK GRAY	SILTY SAND SOME GRAVEL SOME RUST STAINING (FINE to COARSE GRAVEL)	SM	MOIST NO ODOR	
4	35 51	12/12	S-3 1208 G32-SB315-0204				SILT to SANDY SILT SOME GRAVEL			0
	20 54	19/24	S-4 1258				SILT TO SANDY SILT AND GRAVEL Fine to COARSE GRAVEL		MOIST NO ODOR	
6	44 100						SANDY SILT TO SILTY SAND AND GRAVEL			0
	22 50	22/24	S-4 1319				TR. BROWN SAND		MOIST/WET NO ODOR	
8	35 45									0
	15 25	21/24	S-5 1330 G32-SB315-0810						WET NO ODOR	
10	35 50				DENSE	~~DENSE~~	SILT TR clay SOME GRAVEL		MOIST	0
	5 100/5	11/11	S-6 1342						WET NO ODOR	
12							SANDY SILT SOME GRAVEL TR. CLAY			0
	17 25	20/24	S-7 1400	TILL						
14	57 60								slight stratification bottom 8"	0
	17 36		S-8 1424						WET	
16	100/5						SILT		MOIST	0

TYPE OF DRILLING RIG: CME
METHOD OF ADVANCING BORING: 4 1/4" I.D. HSA
METHOD OF SOIL SAMPLING: 2 1/2 split spoons / 300 lb. hammer
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB315

PAGE: 1 OF 2

Tnus Form 0018

BORING LOG FOR: Bldg. 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Whalen
DRILLED BY (Company/Driller): Dragin / M. Wilkey
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB 315
START DATE: 6-15-05
COMPLETION: DATE: 6-15-05
MON. WELL NO.: —
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
	12	22/24	S-9			DK GRAY	SILT, TR. SAND SOME GRAVEL	SM	NO ODOR	
18	40 85 75		1444		V. DENSE		SILTY SAND, SOME GRAVEL		WET	0
	16	20/24	S-10						WET	
20	30 44 81		1458						NO ODOR	0
	30	21/24	S-11				SILTY SAND / SANDY SILT (FINE SAND) SOME GRAVEL		WET	
22	50 85 73		1511		V. DENSE		(FINE TO COARSE GRAVEL)		NO ODOR	0
							—		Auger to 25'	
24							—			
25							—			
	10	18/24	S-12			DARK GRAY	~~SANDY~~ SILT, SOME CLAY		WET	
27	15 22 28		1524				SILT AND PHYLLITE FRAGMENTS (FINELY LAYERED)		MOIST NO ODOR	0
28										
	40	12/12	S-13				WEATHERED PHYLLITE		MOIST NO ODOR	0
30	100		1541	EOB						

TYPE OF DRILLING RIG: CME ATV
METHOD OF ADVANCING BORING: 4 1/4" ID HSA
METHOD OF SOIL SAMPLING: 2.5" Split spoons / 300 lb hammer
METHOD OF ROCK CORING: —
GROUNDWATER LEVELS:
OTHER OBSERVATIONS: Auger to 28'

BORING NO.: SB 315

Tetra Tech NUS, Inc.

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragin/
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-316
START DATE: 6/22/05
COMPLETION: DATE: 6/22/05
MON. WELL NO.: N/A
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
2	/	/	—	Conc/ gravel	/	/	Concrete and gravel	/		—
4	6 10 — —	10/12	(2-3) S001 1136	FILL		Black	Silty sand w/ abundant sm.-med rounded gravel dry	SM —	were only able to drive spoon 1-ft	0.0
6	14 14 21 26	19/24	(4-6) S002 1146			Black	Silty sand w/ abundant rounded gravel, some brick, trace clay, moist	SM 1		0.0
8	4 12 21 27	14/24	(6-8) S003 1156			Black	Silty Sand w/ abundant rounded gravel, moist	SM 1		0.0
10	5 12 17 24	15/24	(8-10) S004 1203			Black	Silty sand w/ abundant rounded gravel, moist	SM 1		0.0
12	6 13 21 30	16/24	(10-12) S005 1210	TILL	Dense	Black	Silty sand w/ abundant rounded gravel, moist; Silty sand w/ some gravel, dry	SM 1		0.0
14	5 6 10 14	16/24	(12-14) S006 1218			Black gray	Silty sand w/ abundant gravel, dry; Bottom 0.35' is silt w/ some fine sand, phylite	SM		0.0
16	10 16 26 37	13/24	(14-16) S007 1228	Rock		gray	silt w/ some fine sand to weathered phylite		End of Boring	0.0

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-316 PAGE: 1 OF 1

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hicks
DRILLED BY (Company/Driller): Dragin / Greg Donahue
GRD. SURFACE ELEVATION:
TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-317
START DATE: 6/22/05
COMPLETION: DATE: 6/22/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
0	10 34	6/24	(0-2) S001 1335	FILL	Loose	Black to Brown	Silty sand w/ some rounded gravel, some organic matter.	SM 1		0.0
2	26 14									
5	15 13	4/24	(5-7) (S002) 1345	5.5' / 7.0'		BROWN	Silty Sand w/ abundant gravel, wet, Solvent odor	SM 1	Concrete from 5.5-7.0' BGS	118.5
7	100/2									
				↳	- This	may	represent the floor of the			
10					old	Solvent	tank -			
12	10 33 43 50	11/24	(10-12) S003) 1428	TILL		Gray	Silty Sand Trace gravel wet	SM 1		0.0
15										
17	15 38 37 42	12/24	(15-17) S004 1446			Black / DRK Gray	Silty Sand w/ some gravel / Silty w/ some fine sand, weathered Phyllite	SM / SM		0.0

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-317 PAGE: 1 OF 2

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hicks
DRILLED BY (Company/Driller): Dragin R Greg Donahue
GRD. SURFACE ELEVATION:
TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-317
START DATE: 6/22/05
COMPLETION: DATE: 6/22/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET) 20	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
	26		(20722)							
	20	6/	5005			Gray	weathered Phyllite			—
	29								End of	
22	68	24	1504						Boring	

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-317

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragon / Greg Donahue
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-318
START DATE: 6/21/05
COMPLETION: DATE: 6/21/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
0	13	11/24	(0-2) S001 ☒		~~Gray~~	Gray	Silt sand w/ small rounded gravel	SM		0.0
	30		1401				Brick material	–		
	20									
2	25									
5										
	14	10/24	(5-7) S002			Gray to Brown	small to med gravel w/ silt & sand, brick fragments, wet	GW		7.2
	27		1414							
7	100/4									
			~~(10-12)~~ DH							
10										
	10		(10-12) S003 ☒			Black	Silty sand w/ some gravel, wet	SM		0.0
	10		1444							
12	35									
	70									
				Rock					End of Boring	

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-318

PAGE: 1 OF 1

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragin / Greg Donahue
GRD. SURFACE ELEVATION:
TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-319
START DATE: 6/22/05
COMPLETION: DATE: 6/22/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
	/	/		Conc / gravel	/	/	Concrete / gravel	/		—
2										
	10 11	0/24	(2-4) S001 0813	FILL		—	No Recovery due to gravel in spoon	/		—
4	5 4									
	6 5	12/24	(4-6) S002 0824			Black	Silt sand w/ some sm. to med. gravel, moist	sm		0.0
6	39 45			TILL	Dense			1		
	22 43	15/24	(6-8) S003 0840		Dense	Black	Silty Sand w/ some small gravel, dry	sm		—
8	38 50							1		
	10 100/6	2/24	(8-10) S004 0852	Rock			Bedrock (Phylite)	—		—
10	—								End of Boring	

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-319

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hicks
DRILLED BY (Company/Driller): Dragin & Greg Donahue
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-320
START DATE: 6/21/05
COMPLETION: DATE: 6/21/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
2	/	/	—		/	/	Concrete / gravel	/		—
4	12 13 17 15	0/24	(2-4) S001 1215		Very Soft	—	No recovery	—		—
6	3 5 4 9	4/24	(4-6) S002 1223		Very Soft	Black	silt sand w/ some small to med gravel, moist	SM 1		0.0
8	35 24 30 40	13/24	(6-8) S003 1238			Black	silt sand w/ abundant small to med gravel, wet	SM 1		0.0
10	42 43 54 49	17/24	(8-10) S004 1250	Rock		Black	silt sand w/ some small gravel, moist	SM 1	End of Boring	0.0

TYPE OF DRILLING RIG: GME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-320

PAGE: 1 OF 1

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Isle.
PROJECT NO.: 0065
LOGGED BY: D. Nickey
DRILLED BY (Company/Driller): Drayin / Greg Donahue
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-321
START DATE: 6/23/05
COMPLETION: DATE: 6/23/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
2	/	/	—	Conc/ gravel	/	/	Concrete & gravel	/		—
				2.0						
4	14 27 39 33	18/24	(2-4) S001 (1) 0837	Fill		Black	Silty sand w/ some rounded sm-med gravel, moist	Sm		0.0
								1		
6	18 31 45 39	16/24	(4-6) S002 0852			Black	Silty sand w/ some rounded sm-med gravel, moist	Sm		0.0
								1		
8	8 42 30 28	14/24	(6-8) S003 0905		Dense	Black	Silty sand w/ some rounded sm-med gravel, dry	Sm		0.0
						1	Bottom 3 inches was a fine-med sand w/ TR silt, wet	1		
10	14 37 46 42	13/24	(8-10) S004 0915			Dark gray	Silt w/ some fine sand, weathered phylite, dry	ML		0.0
				10.0				1		
12	11 10 100/2 —	10/24	(10-12) S005 (2) 0927	Till	Dense	Black	Silty Sand w/ some rounded gravel, dry	Sm		0.0
				12.0				1		
14	100/6 — — —	3/24	(12-14) S006 0940	Rock			Bedrock		End of Boring	—
							EOB			

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch Drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS: (1) - sent for laboratory analysis.

Tetra Tech NUS, Inc.

BORING NO.: SB-321

PAGE: 1 OF 1

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Isle.
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragon
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-322
START DATE: 6/20/05
COMPLETION: DATE: 6/20/05
MON. WELL NO.: N/A
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
2	/	/	—	Conc / gravel	/	/	Concrete and gravel	/		—
4	36 39 87 73	12/24	(2-4) S001 1330			Black	Silty sand w/ some gravel, slt. moist	SM 1		0.0
6	41 48 36 25	17/24	(4-6) S002 1342			Black	Silty sand w/ some gravel, small layer (0.15) of iron oxidated phylite, orangish brown in color.	SM 1		9.6
8	6 17 21 15	15/24	(6-8) S003 1357			Black	0.5 inches of silty sand w/ gravel 0.3 inches of silty w/ some sand. 0.6 inches of fine sand, wet	SM 1		0.6
10	5 8 17 24	11/24	(8-10) S004 1410			Black to Grey	0.7" of gray silt (weathered phylite) dry 0.25" of Black silt w/ fine sand, wet	ML SM		0.0
12	8 73 120/5 —	12/24	(10-12) S005 1436			Gray to Brown	heavily weathered Phylite		End of Boring	

TYPE OF DRILLING RIG: CME 75
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-322

PAGE: 1 OF 1

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hicks
DRILLED BY (Company/Driller): Dragon D Greg
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-323
START DATE: 6/21/05
COMPLETION: DATE: 6/21/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
2	/	/	—	Concl/ gravel 2.0	/	/	Concrete/gravel	/		—
4	39 24 50 55	18/24	(2-4) S001 ~~Ø~~ 0811			Black	Silty sand w/ some small to med rounded gravel, upper portion of spoon is wet.	SM 1		0.0
6	10 19 27 38	15/24	(4-6) S002 0822			Black	Silty sand w/ some rounded gravel, some phylite, dry	SM 1		0.0
8	11 21 25 29	16/24	(6-8) S003 0836			Black	Silty sand w/ some gravel, large chunk of phylite, top 4" wet	SM 1		6.1
10	17 27 31 41	15/24	(8-10) S004 0847			Black	Silty sand w/ trace gravel, some phylite, wet	SM 1		0.0
12	12 35 45 50	15/24	(10-12) S005 ~~Ø~~ 0858	11.5		Black	Silty sand w/ some gravel, wet	SM		1.9
						Gray	Silt w/ trace fine sand, (weathered phylite) dry	ML		
14	14 53 100/5 —	10/24	(12-14) S006 0913	13.0 ROCK		Gray	Silt w/ trace fine sand (weathered phylite)	ML		0.0
									End of Boring	

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-323

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0665
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): DRAgin
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-324
START DATE: 6/20/05
COMPLETION: DATE: 6/20/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
2	/	/	—	Conc/ gravel	/	/	Concrete and gravel	/		—
4	29 51 82 100/5	11/24	(2-4) S001 0930	Fill		Black	silty sand w/ some small to med. gravel, moist	SM 1		0.0
6	31 79 32 47	20/24	(4-6) S002 0957			Black	Silty sand w/ some small to med gravel, damp	SM 1		1.0
8	19 25 55 24	17/24	(6-8) S003 1020			Black	Silty sand w/ some gravel & weathered Phyllite, wet	SM 1		3.6
10	39 112 100/3 —	13/24	(8-10) S004 1037	Rock		Black	8-8.5 silty sand w/ gravel, wet. Bedrock at ~8.5' BGS.	SM	End of Boring	0.0

TYPE OF DRILLING RIG: GME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-324

PAGE: 1 OF

Ttnus Form 0018

BORING LOG FOR: Site 17, Building 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragon / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-325
START DATE: 6/17/05
COMPLETION: DATE: 6/17/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
	/	/	/	Conc / gravel	/	/	0-1' → Concrete & gravel	/		—
1				1.0'						
	6 9	5/24	(1-3) S001	Fill		Black	Silty sand w/ abundant gravel - insufficient	SM		2.6
3	13 17		0740				recovery to sample	1		
	6 16	19/24	(3-5) S002	4.0'	dense	Black	Silty Sand w/ small to med gravel, dry	SM		0.0
5	26 35		0803	Till				1		
	12 24	20/24	(5-7) S003		dense	Black	5-6' fine to med grained sand lay w/ gravel, wet	SM	Some silt	0.5
7	72 52		0822				6-7 - silty sand w/ some gravel, dry dense	SM		
	9 16	16/24	(7-9) S004	8.2'			Silty sand w/ some gravel, dense, wet	SM		0.0
9	44 68		0843	Rock			8.2 - 9.0 - weathered Phylite w/ scattered Pyrite			
	42 100/3	7/24	(9-11) S005			Grey/ Black	weathered Phylite w/			—
11	—		0858				scattered pyrite		End of Boring	

TYPE OF DRILLING RIG: Gus Pech GP1900XHR (AIR Rotary)
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-325

PAGE: 1 OF 1

Ttnus Form 0018

BORING LOG FOR: Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. whelan
DRILLED BY (Company/Driller): Dragon / M. Wilke
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB326
START DATE: 6-15-05
COMPLETION: DATE: 6-15-05
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
1		0/12	S-1 0851			GRAY	CONCRETE <NO RECOVERY>			
2	2 3						VOID			
	3 3	4/24	S-2 0856			DK GRAY	GRAVEL and SANDY SILT		MOIST NO ODOR	
4	3 4									0
	5 10	14/24	S-3 0902 G32-SB326-0406				SILTY SAND	SM	WET NO ODOR	
6	22 30						SANDY SILT, ~~SOME~~ GRAVEL SOME PHYLLITE FRAGMENTS			0
	5 10	20/24	S-4 0926 G32-SB326-0608				SILT tr. CLAY to SANDY SILT		WET NO ODOR	
8	16 100/5						PHYLLITE			0
	17 90	13/17	S-5 0939						MOIST NO ODOR DRY	
10	100/5									0
	100/3	3/3	S-6 1002	EOB			SOME RUST STAINING		WET	

TYPE OF DRILLING RIG: CME ATV
METHOD OF ADVANCING BORING: 4 1/4" ID HSA
METHOD OF SOIL SAMPLING: 2.5" split spoon / 300 lb hammer
METHOD OF ROCK CORING: NA
GROUNDWATER LEVELS:
OTHER OBSERVATIONS: 110 lb hammer 0'-7', 300 lb hammer below

BORING NO.: SB326

Tetra Tech NUS, Inc.

PAGE: 1 OF 1

Ttnus Form 0018

BORING LOG FOR: Site 17, Building 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): DRAGIN / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB 327
START DATE: 6/16/05
COMPLETION: DATE: 6/16/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
1	/	/		Concrete/ gravel	/	/	Concrete and gravel from 0-1' BGS	—		—
3	9 5 7 20	11/24	(1-3) S001 0925			Black	Silty sand w/ some rounded gravel, dry	SM 1		0.0
5	6 13 25 24	11/24	(3-5) S002 0945			Black	Silty sand w/ some rounded gravel, dry	SM 1		0.0
7	7 8 18 24	19/24	(5-7) S003 0957			Black	Silty sand w/ some gravel, some phylite, dry	SM 1		3.2
9	4 14 28 42	18/24	(7-9) S004 1010			Black	Silty sand w/ some gravel, dry; 7.55-8.15 → fine to med sand w/ some silt, wet	SM		
11	17 100/5	4/24	(9-11) S005 1025	Rock	9.5'		Phylite (Bedrock)		End of Boring	

TYPE OF DRILLING RIG: Gus Pech GP 1900 XHR
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-327

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hughes
DRILLED BY (Company/Driller): Dragin / Grey
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-328
START DATE: 6/21/05
COMPLETION: DATE: 6/21/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
2	/	/	—	Conc/ gravel	/	/	Concrete/gravel	/		—
4	36 26 17 23	0/24	(2-4) S001 1032		—	—	insufficient recovery to collect sample	— —		—
6	3 3 2 3	9/24	(4-6) S002 1041		Soft	Black	Silty sand w/ some small to med gravel, wet	SM 1		
8	13 25 12 10	3/24	(6-8) S003 1055			Black	Mostly small to med gravel w/ small amt of silty sand, wet, insufficient recovery to collect sample.	GM 1		—
10	11 21 48 100/5	11/24	(8-10) S004 1111	Rock	dense	Black	Silt w/ some fine grained sand, dry	SM —	End of Boring	

TYPE OF DRILLING RIG: GME95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-328

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragon / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-331
START DATE: 6/24/05
COMPLETION: DATE: 6/27/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
2	/	/	—		/	/	Concrete/gravel	/		—
4	11 34 39 47	19/24	(2-4) S001 ⊗ 1538			Black	Sandy Silt w/ some gravel, some rust staining	Sm 1		0.0
7										
9	27 23 100/5	13/24	(7-9) S002 1048		dense	Black	Silty sand w/ small to med gravel, dry	Sm 1		0.0
12										
14	24 37 43 36	20/24	(12-14) S003 1105			Black	Silty sand w/ small to med rounded gravel some rust staining, moist.	Sm 1		0.0
17										
19	12 26 80 85	22/24	(17-19) S004 1120		dense	Black	Silty sand w/ some gravel, moist.	Sm 1		0.0

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS: ⊗ Samples for lab analysis.

Tetra Tech NUS, Inc.

BORING NO.: SB-331 PAGE: 1 OF 3

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 52, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragon / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-331
START DATE: 6/24/05
COMPLETION: DATE: 6/29/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
22										
24	54 100/6 — —	11/24	(22-24) S005 1149		dense	Black	Silty Sand w/some gravel, dry, (TILL)	SM 1		0.0
27										
29	13 65 100/5 —	12/24	(27-29) S006 1206		dense	Black	Silty Sand w/some gravel dry. (TILL)	SM 1		0.0
32										
34	16 50 66 100/5	14/24	(32-34) S007 1315		dense	Black	Sandy Silt w/some small gravel, moist (TILL)	SM 1		0.0
37										
39	13 51 100/5 —	15/24	(37-39) S008 1335		dense	Black	Silty sand w/some gravel moist, (TILL)	SM 1		0.0

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-331

Ttnus Form 0018

BORING LOG FOR: Site 11 Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragon/Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-331
START DATE: 6/24/05
COMPLETION: DATE: 6/29/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
42										
44	13 100/4 — —	7/24	(42-44) S009 1359		dense	Black	Silty Sand w/ some gravel, some weathered phylite, dry (TILL)	SM 1		0.0
47										
49	25 51 70 80	14/24	(47-49) S010 1425		dense	Black	Silty Sand w/ some gravel moist (TILL)	SM 1		0.0
52										
54	21 28 32 36	20/24	(52-54) S011 1455			Black	fine sand w/ some silt some small gravel, wet	SM 1		0.0
57								—		—
59	100/2 — — —	2/24	(57-59) S012 0810	EOB	—	—	Phylite - Bedrock EOB	—		—

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-331

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragin / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-332
START DATE: 7/14/05
COMPLETION: DATE: 7/14/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
0	4	18/24	(0-2) S001 ⊗			Brown	Silty Sand, gravel, grass, wet	SM		0.1
	4					↓				
	7					Black		1		
2	8		1409							
	11	21/24	(2-4) S002			Black	fine grained sand w/ some silt, wet	SM		0.1
	14									
	16							1		
4	15		1414							
	12	18/24	(4-6) S003		dense	Dark Gray	Silt w/ some fine sand, dry	SM		0.1
	22									
	35							1		
6	33		1423 ⊗							
	12	16/24	(6-8) S004		dense	mottled Brown/	Silt w/ fine sand, weathered rock	SM		0.0
	40									
	42			Rock		Black/ gray		1		
8	57		1436							
	14	5/24	(8-10) S005			Tan	Weathered Phylite			—
	17									
	22						— EOB —			
10	28		1450							

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS: ⊗ Samples for Lab analysis

BORING NO.: SB-332

Tetra Tech NUS, Inc.

PAGE: 1 OF 1

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hughes
DRILLED BY (Company/Driller): Dragin / Greg Donahue
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-333
START DATE: 6/23/05
COMPLETION: DATE: 6/23/05
MON. WELL NO.: N/A
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
0	6 6 7 8	10/24	(0-2) S001 1013	FILL		Brown	Silty Sand w/ some gravel, organic matter, dry			0.0
2	4 6 8 9	0/24	(2-4) S002 1024			—	No recovery - spoon was wet.	—		—
4	2 3 2 50/1	10/24	(4-6) S003 1037 ✗	Conc.		Brown	Silt/sand/gravel, wood, wet, slight solvent odor			231.9
6	10 23 22 18	12/24	(6-8) (S004) 1059	FILL		Black	Silty Sand w/ some gravel, phylite, wet, very slight solvent odor	Sm 1		0.0
8	6 21 100/6 —	11/24	(8-10) S005 1108			Black	Silty Sand w/ some gravel, wet, very slight solvent odor.	Sm 1		0.0
10	24 30 100/5 —	8/24	(10-12) S006 1118	TILL		Black	Silty sand w/ some rounded gravel, dry, some weathered phylite	Sm 1		0.0
12	5 17 22 31	11/24	(12-14) S007 1134 ✗			Drk Gray	Silt w/ fine sand, scattered phylite, dry	Sm 1		0.0
14	8 27 100/5	3/24	(14-16) S008 1144	Rock		—	Bedrock	—	End of Boring	—
16										

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA (4 1/4")
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-333

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0665
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragin / Greg Donahue
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-334
START DATE: 6/22/05
COMPLETION: DATE: 6/22/05
MON. WELL NO.: N/A
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
0	14 11 13 22	13/24	(0-2) S001 0929	FILL		Gray	Silty Sand w/ some small to med gravel, dry	SM	Spoon punched thru a thin sheet of steel	0.0
2						Reddish Brown	Brick material, particles salvaged from during spoon			
	— 20 30 40	11/24	(2.5-4) S002 0953	Rock Layer FILL		Gray	fine grained sand w/ some silt and sm. gravel, non staining, moist	SM 1	Hard rock layer from 1.8-2.5' BGS.	0.0
4										
	7 18 23 28	15/24	(4-6) S003 1011			Black	Silty sand w/ abundant sm. to med gravel, wet	SM 1		
6										
	17 25 36 42	20/24	(6-8) S004 1021			Black	fine grained sand w/ some silt, some gravel, wet	SM		
8				TILL	Dense	Black	silty sand w/ some gravel, dry	1		
	/	18/24	(8-10) S005 1039				Silty sand w/ some sm. to med. gravel, dry	SM 1		
10										
	7 12 33 100/5	10/24	(10-12) S006 1048		dense	Black	Silty Sand w/ some gravel	SM		
12				Rock					End of Boring	

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-334

PAGE: 1 OF 1

Ttnus Form 0018

BORING LOG FOR: Site 17, Building 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: J. Trant
DRILLED BY (Company/Driller): DRAGIN/Steve Sanford
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-335
START DATE: 7/5/05
COMPLETION: DATE: 7/5/05
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
	12 98	14/24	S001 (00-02) 1032 *	Fill			Rock layer			0.0
2	57 58					black	Silty sand with a few large gravel, some rust staining, dry	SM		
									metal machine part found while drilling (brought up)	~~0.0~~
	30 34	18/24	(5-7) S002 1055			black	Silty sand with large pieces of gravel & phylite moist	SM		0.0
7	36 33									
	18 26	21/24	(10-12) S003 * 1112	Till	Dense	black	Silty sand with some sm to med gravel, moist	SM		0.0
12	48 53									
	24 36	20/24	(15-17) S004 1131			black	Silty sand, abundant sm to med gravel, some phylite, wet	SM		0.0

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-335

Ttnus Form 0018

BORING LOG FOR: Site 17, Building 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: J. Traut
DRILLED BY (Company/Driller): Dragin / S. Sanford
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-335
START DATE: 7/5/05
COMPLETION: DATE: 7/5/05
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
17	52 23				Dense	~~BTJJ~~ 7-5-05	~~SITTGJJ~~ 7-5-05			
22	59 36 43 47	15/24	(20-22) S005 1148			black	silty sand abundant sm to med gravel, wet	SM		0.0
27	11 36 42 47	13/24	(25-27) S006 1249			black	silty sand w/ abundant med gravel, wet			0.0
32	51 86 100/2	11/24	(30-32) S007 1346		~~gt~~	gray	Sandy silt weathered phyllite iron staining throughout	MS		

TYPE OF DRILLING RIG: CME-95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-335

Ttnus Form 0018

BORING LOG FOR: Site 17, Building 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: J. Traut
DRILLED BY (Company/Driller): Dragin / S. Sanford
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-335
START DATE: 7/5/05
COMPLETION: DATE: 7/5/05
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
	15		(35-37) 5008			gray	sandy silt to weathered phyllite			
	30									
37	100/4		1412						End of Boring	
				EOB						

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split spoon, 300 lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

Tetra Tech NUS, Inc.

BORING NO.: SB-335

Ttnus Form 0018

BORING LOG FOR: Bldg. 32 Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Whalen
DRILLED BY (Company/Driller): Dragin / M. Wilkey
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB336
START DATE: 7/6/05
COMPLETION: DATE: 7/6/05
MON. WELL NO.:
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
1	5	6/24	1023 S-1			BLACK to GRAY	SAND and GRAVEL, SOME SILT (CHARRED MATERIAL at surface, copper pieces Fine to coarse Gravel)	GM	DRY CHARRED MATERIAL HAS TAR ODOR	8.6
2	6 / 4									
3	8 / 30	9/24	1045 S-2				GRAVEL some SAND, TR. SILT (Fine to COARSE GRAVEL)		WET NO ODOR	0
4	100/3									
5	8 / 100/4	5/10	1059 S-3						WET slight TAR odor	2.0
6										
7	3 / 15	17/24	1118 S-4 G32-SB336-0608			DARK GRAY	SILTY SAND	SM	WET	13.3
8	20 / 20									
9	8 / 50	18/24	1140 S-5	FILL			SILTY SAND SOME GRAVEL (FINE TO MEDIUM GRAVEL, FINE to MED. SAND)		WET NO ODOR	10.3
10	55 / 100/6									
11	45 / 80	23/24	1203 S-6				SANDY SILT SOME GRAVEL (FINE TO MEDIUM GRAVEL)	SM/ML	WET/MOIST NO ODOR	0
12	97 / 100/4									
13	28 / 33	23/24	1324 S-7				SILTY SAND to SANDY SILT	SM	WET NO ODOR	0
14	70 / 100/5									
				EOB						

TYPE OF DRILLING RIG: CME
METHOD OF ADVANCING BORING: 4 1/4" HSA
METHOD OF SOIL SAMPLING: SPLIT SPOON / 300 lb. HAMMER
METHOD OF ROCK CORING: HQ
GROUNDWATER LEVELS:
OTHER OBSERVATIONS: Sample G32-SB336-0002 collected by hand following completion of boring

BORING NO.: 336

Tetra Tech NUS, Inc.

PAGE: 1 OF 1

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragun / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-337
START DATE: 7/14/05
COMPLETION: DATE: 7/14/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
0	3 5	16/24	(0-2) S001 ☒ 1115			Black	Silty Sand, abund. gravel, wet	Sm		2.5
2	5 7							1		
	17 21	14/24	(2-4) S002 1126			Black	Silty Sand, some gravel, wet	Sm		0.3
4	22 25							1		
	14 13	12/24	(4-6) S003 1133			Black	Silty Sand, some gravel, wet	Sm		0.4
6	21 26							1		
	21 18	11/24	(6-8) S004 1144			Black	Silty Sand, gravel, wet	Sm		0.3
8	22 25							1		
	23 40	13/24	(8-10) S005 1152		Stiff	Black	Silty Sand, gravel, wet	Sm		0.1
10	29 31							1		
	12 22	11/24	(10-12) S006 1254 ☒		dense	Black	Silty Sand, gravel, wet	Sm		0.0
12	20 18							1		
	10 17	6/24	(12-14) S007 1304		—	Gray	weathered Phylite to Rock — EOB —	—		—
14	25 85			Rock						

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS: ☒ Samples for lab analysis.

Tetra Tech NUS, Inc.

BORING NO.: SB-337

PAGE: 1 OF 1

Ttnus Form 0018

BORING LOG FOR: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
LOGGED BY: D. Hickey
DRILLED BY (Company/Driller): Dragin / Brett Swiatek
GRD. SURFACE ELEVATION:

TRANSCRIBED BY:
ELEVATION FROM:

BORING NO.: SB-338
START DATE: 7/14/05
COMPLETION: DATE: 7/14/05
MON. WELL NO.: NA
CHECKED BY:

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
0	4 5 6 7	16/24	(0-2) S001 ✱ 0910			Black	Silty Sand, gravel, moist	SM		9.1
2	17 15 14 14	19/24	(2-4) S002 0922			Black	Silty Sand, abundant gravel, wet	SM		0.0
4	13 23 32 34	15/24	(4-6) S003 0932			Black	Silty Sand w/ some gravel, phyllite, wet	SM		0.3
6	23 25 33 40	12/24	(6-8) S004 0944			Black	fine grained sand w/ some silt, gravel, damp	SM		0.2
8	12 22 22 26	16/24	(8-10) S005 0954		med. dense	Black	fine grained sand w/ some silt, gravel, damp	SM		0.0
10	6 12 15 11	13/24	(10-12) S006 ✱ 1001			Black	Silty Sand w/ abundant gravel, quartz, wet	SM		0.0
12	3 12 18 22	12/24	(12-14) S007 1013			Black	Silty Sand, gravel, wet	SM		0.0
14	6 25 49 100/3	13/24	(14-16) S008 1035	Rock		Gray	weathered bedrock (phyllite) — rock Rock — EOB —	—		—
16										

TYPE OF DRILLING RIG: CME 95
METHOD OF ADVANCING BORING: HSA
METHOD OF SOIL SAMPLING: Split Spoon, 300lb hammer, 18 inch drop
METHOD OF ROCK CORING:
GROUNDWATER LEVELS:
OTHER OBSERVATIONS: ✱ Samples for Lab analysis.

Tetra Tech NUS, Inc.

BORING NO.: SB-338

PAGE: 1 OF 1

Ttnus Form 0018

BORING LOG FOR: Gould Island Bldg. 54
PROJECT NO.: N7538-2300
LOGGED BY: M. Healey
DRILLED BY (Company/Driller): Guild / D. Holley
GRD. SURFACE ELEVATION:

TRANSCRIBED BY: MES
ELEVATION FROM:

BORING NO.: B04 for MW303S
START DATE: 06/21/01
COMPLETION: DATE: 06/22/01
MON. WELL NO.: MW02
CHECKED BY: CDR

DEPTH (FEET)	BLOWS PER 6"	SAMP REC. / SAMP LENG.	SAMPLING TIME & SAMPLE NO. (QA/QC STATUS)	DEPTH MAT'L CHG./ WELL PROF'L	SOIL DENSITY/ CONSIS. or ROCK HARD.	CLR	MATERIAL CLASSIFICATION	USCS or ROCK BRKN	REMARKS (moisture condition; odors; geological classification; rock weathering; etc.)	FIELD SCREENING DATA METHOD = [FID, (PPM)]
	7	14							BORING STARTED	
	13		1425				SAND/SILT; fine to coarse same with some	SM	BELOW CONCRETE	BKg
	9		GIB54-B0402				silt and fine gravel		FIRST SAMPLE @ 1.0'	
3	5	24	GIB54-B04 S-1				(stone in split barrel)			
	6	2								
	7		1435	FILL						
	9									
5	23	24	S-2							
	25	10							WATER ~ 6' BGS	
	29		1450				SIMILAR TO S-1 EXCEPT INCLUDES A SAND LENS	SM		
	13		GIB54-B0407							
7	17	24	S-3							
	65	4								
	29*		1505							
	27*	18								
9			S-4							
	63	20						SM / GM		
	50/3		1525				SILTY GRAVELLY SAND; fine sand with some			
	18*			TILL			silt and occasional silt layer ¼-1/2 in. thick			
11	50*	24	S-5				Fine sub-rounded to angular gravel			
				Boulders						
13										
	69	12	1605				SIMILAR TO S-5 EXCEPT SHALE IN NOSE OF SAMPLER			
	50*	12	GIB54-B0414 S-6							
				EOB @						
15				14'						

TYPE OF DRILLING RIG:
METHOD OF ADVANCING BORING: DRIVE AND WASH, 4 IN. CASING
METHOD OF SOIL SAMPLING: 2 IN. SPLIT BARREL
METHOD OF ROCK CORING: N/A
GROUNDWATER LEVELS:
OTHER OBSERVATIONS:

NOTES:
* DENOTE, 300 LB. HAMMER

BORING NO.: B-04

Tetra Tech NUS, Inc.

APPENDIX D2

WELL CONSTRUCTION LOGS

OVERBURDEN MONITORING WELL CONSTRUCTION LOG — TETRA TECH NUS, INC.

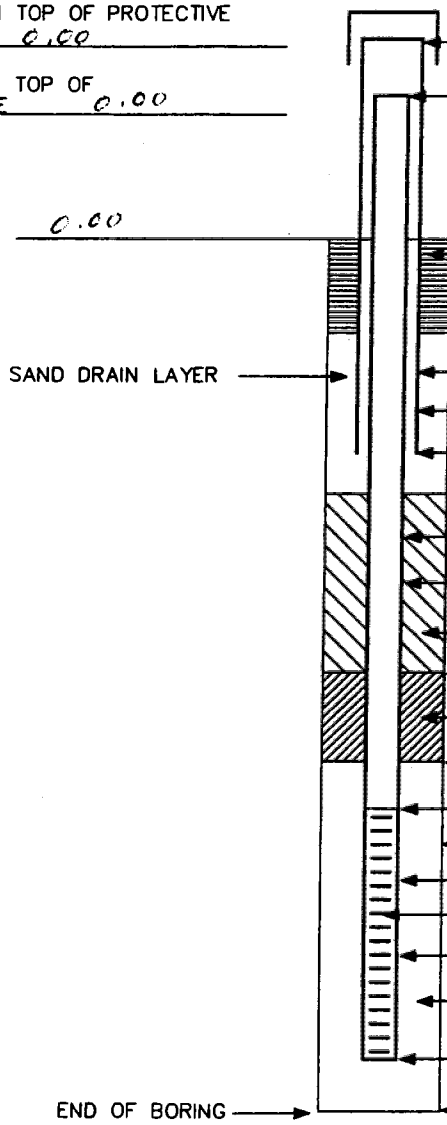
PROJECT NAME: Gould Island Site 17 Bldg 32
PROJECT NO: 0065
PROJECT LOCATION: ~~Bldg 32~~, NAVSTA Newport, RI
WELL NO: MW-3005
CLIENT: US Navy
BORING NO: 3005
CONTRACTOR: Dragon
DRILLER: B. Swintek
BORING LOCATION:
LOGGED BY: D. Hickey
DATE: 6/8/05
CHECKED BY:
DATE:

PAGE: 1 OF 1

ELEVATION TOP OF PROTECTIVE CASING: 0.00

ELEVATION TOP OF RISER PIPE: 0.00

GROUND ELEVATION: 0.00



LENGTH OF PROTECTIVE CASING ABOVE GROUND SURFACE (Ft.)	~3.0'
LENGTH OF RISER PIPE ABOVE GROUND SURFACE (Ft.)	~2.5'
TYPE OF SURFACE SEAL	Concrete
DIA. SURFACE SEAL BGS (In.)	
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	1.0
I.D. OF PROTECTIVE CASING (In.)	
TYPE OF PROTECTIVE CASING	Steel
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	
RISER PIPE (In.) I.D.: 2" O.D.:	
TYPE OF RISER PIPE	Sch. 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	
DEPTH TOP OF SEAL (Ft.)	1.0
TYPE OF SEAL	Bentonite
DEPTH BOTTOM OF SEAL (Ft.)	3.0
DEPTH TOP OF PERVIOUS SECTION (Ft.)	4.0
DIAMETER OF BOREHOLE (In.)	12"-5', 7"-TD
TYPE OF PERVIOUS SECTION	Sch 40 PVC
TYPE OF OPENINGS	Slot
PERVIOUS SECTION (In.) I.D.: 2" O.D.:	
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	14.0
DEPTH BOTTOM OF FILTER PACK (Ft.)	14.6

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation, Elev. Top of Riser Pipe & Elev. Top of Protective Casing Indicates that Surveyed Ground Elevation Not Available.

BEDROCK MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS, INC.

PROJECT NAME: Site 17, Bldg. 32 Gould Island

PROJECT NO: 0065

PROJECT LOCATION: NAVSTA NEWPORT, RI

WELL NO: MW 300B

CLIENT: Navy

BORING NO: 300B

CONTRACTOR: Drugin

DRILLER: Mike Wilkey

BORING LOCATION:

LOGGED BY: D. Whalen

DATE: 6-21-05

CHECKED BY:

DATE:

PAGE: 1 OF 1

ELEVATION TOP OF PROTECTIVE CASING

ELEVATION TOP OF RISER PIPE

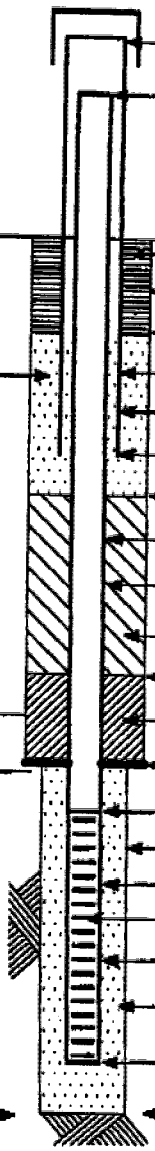
GROUND ELEVATION

SAND DRAIN LAYER

DEPTH TO BEDROCK (Ft.)

DEPTH TO RING (Ft.) NA

END OF BORING @ 84 Ft.



LENGTH OF PROTECTIVE CASING ABOVE GROUND SURFACE (Ft.)	
LENGTH OF RISER PIPE ABOVE GROUND SURFACE (Ft.)	
TYPE OF SURFACE SEAL	Concrete
DIA. SURFACE SEAL BGS (In.)	8
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	2
I.D. OF PROTECTIVE CASING (In.)	4.25
TYPE OF PROTECTIVE CASING	STEEL
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	3
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	4
RISER PIPE (In.) I.D.: 2 O.D.: 2.3	
TYPE OF RISER PIPE	schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Cement/bentonite Grout
DEPTH TOP OF SEAL (Ft.)	46.7
TYPE OF SEAL	Bentonite Chips
DEPTH BOTTOM OF SEAL (Ft.)	49.7
DEPTH TOP OF PERVIOUS SECTION (Ft.)	53
DIAMETER OF BOREHOLE (In.)	3.75"
TYPE OF PERVIOUS SECTION	schedule 40 PVC
TYPE OF OPENINGS	0.020
PERVIOUS SECTION (In.) I.D.: 2 O.D.: 2.4	
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	No. 1 Silica Sand
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	83
DEPTH BOTTOM OF FILTER PACK (Ft.)	84

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation, Elev. Top of Riser Pipe & Elev. Top of Protective Casing Indicates that Surveyed Ground Elevation Not Available.

OVERBURDEN MONITORING WELL CONSTRUCTION LOG

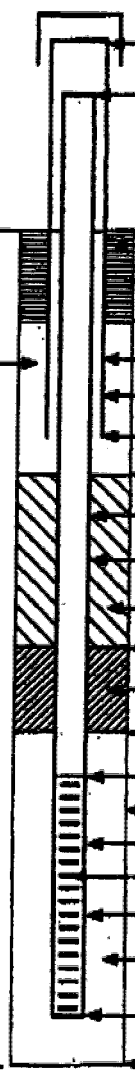
TETRA TECH NUS, INC.

PROJECT NAME: Bldg. 32, Gould Island
PROJECT NO: 0065
PROJECT LOCATION: NAVSTA Newport, RI
WELL NO: MW 301S
CLIENT: NAVY
BORING NO: 301S
CONTRACTOR: Dragin
DRILLER: M. Wilkey
BORING LOCATION:
LOGGED BY: D. Whalen
DATE: 7/15/05
CHECKED BY:
DATE:

ELEVATION TOP OF PROTECTIVE CASING

ELEVATION TOP OF RISER PIPE

GROUND ELEVATION



LENGTH OF PROTECTIVE CASING ABOVE GROUND SURFACE (Ft.)	
LENGTH OF RISER PIPE ABOVE GROUND SURFACE (Ft.)	
TYPE OF SURFACE SEAL	Concrete
DIA. SURFACE SEAL BGS (In.)	8
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	2
I.D. OF PROTECTIVE CASING (In.)	4.25
TYPE OF PROTECTIVE CASING	Steel
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	25
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	4
RISER PIPE (In.) I.D.: 2	O.D.: 2.4
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Cement/bentonite Grout
DEPTH TOP OF SEAL (Ft.)	14.4
TYPE OF SEAL	Bentonite chips
DEPTH BOTTOM OF SEAL (Ft.)	17.0
DEPTH TOP OF PERVIOUS SECTION (Ft.)	19.5
DIAMETER OF BOREHOLE (In.)	4"
TYPE OF PERVIOUS SECTION	Schedule 40 PVC
TYPE OF OPENINGS	0.010"
PERVIOUS SECTION (In.) I.D.: 2	O.D.: 2.4
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	No. 1
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	29.5
DEPTH BOTTOM OF FILTER PACK (Ft.)	30.5

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation, Elev. Top of Riser Pipe & Elev. Top of Protective Casing indicates that Surveyed Ground Elevation Not Available.

BEDROCK MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS, INC.

PROJECT NAME: Bldg 32 Gold Island

PROJECT NO: 0065

PROJECT LOCATION: NAVSTA NEWPORT, RI

WELL NO: MW 301B

CLIENT: Navy

BORING NO: 301B

CONTRACTOR: Dragin

DRILLER: M. Wilkey

BORING LOCATION:

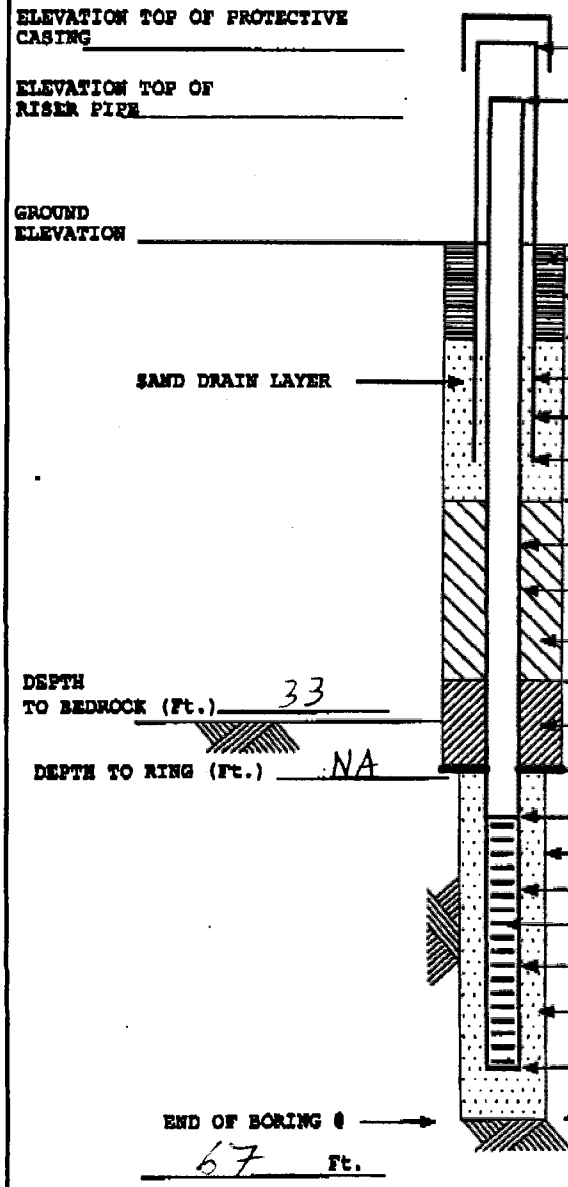
LOGGED BY: D. Whalen

DATE: 7/14/05

CHECKED BY:

DATE:

PAGE: 1 OF 1



ELEVATION TOP OF PROTECTIVE CASING

ELEVATION TOP OF RISER PIPE

GROUND ELEVATION

DEPTH TO BEDROCK (Ft.) 33

DEPTH TO RING (Ft.) NA

LENGTH OF PROTECTIVE CASING ABOVE GROUND SURFACE (Ft.)

LENGTH OF RISER PIPE ABOVE GROUND SURFACE (Ft.)

TYPE OF SURFACE SEAL: Concrete

DIA. SURFACE SEAL BGS (In.): 8

DEPTH TO BOTTOM OF SURFACE SEAL (Ft.): 2

I.D. OF PROTECTIVE CASING (In.): 4.25

TYPE OF PROTECTIVE CASING: STEEL

DEPTH BOTTOM OF PROTECTIVE CASING (Ft.): ~~25~~ 3

DEPTH BOTTOM OF DRAIN LAYER (Ft.): 4

RISER PIPE (In.) I.D.: 2 O.D.: 2.4

TYPE OF RISER PIPE: schedule 40 PVC

TYPE OF BACKFILL AROUND RISER PIPE: cement/bentonite grout

DEPTH TOP OF SEAL (Ft.): 30.5

TYPE OF SEAL: Bentonite pellets

DEPTH BOTTOM OF SEAL (Ft.): 34

DEPTH TOP OF PERVIOUS SECTION (Ft.): 37

DIAMETER OF BOREHOLE (In.): 3.75

TYPE OF PERVIOUS SECTION: schedule 40 PVC

TYPE OF OPENINGS: 0.020"

PERVIOUS SECTION (In.) I.D.: 2 O.D.: 2.4

TYPE OF FILTER PACK AROUND PERVIOUS SECTION: No. 1 sand

DEPTH BOTTOM OF PERVIOUS SECTION (Ft.): 67

DEPTH BOTTOM OF FILTER PACK (Ft.): 67

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation, Elev. Top of Riser Pipe & Elev. Top of Protective Casing Indicates that Surveyed Ground Elevation Not Available.

OVERBURDEN MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS, INC.

PROJECT NAME:	Site 17, Bldg. 32 Gould Island	PROJECT NO:	C065
PROJECT LOCATION:	NAVSTA Newport, RI	WELL NO:	MW 302S
CLIENT:	Navy	BORING NO:	302S
CONTRACTOR:	Dragin	DRILLER:	M. Wilkey
LOGGED BY:	D. Whalen	DATE:	7/18/05
CHECKED BY:		DATE:	

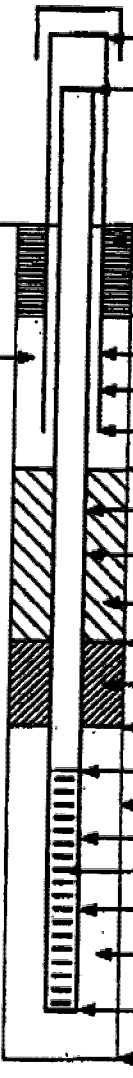
BORING LOCATION:

PAGE: 1 OF 1

ELEVATION TOP OF PROTECTIVE CASING

ELEVATION TOP OF RISER PIPE

GROUND ELEVATION



SAND DRAIN LAYER

END OF BORING

LENGTH OF PROTECTIVE CASING ABOVE GROUND SURFACE (Ft.)	
LENGTH OF RISER PIPE ABOVE GROUND SURFACE (Ft.)	
TYPE OF SURFACE SEAL	CONCRETE
DIA. SURFACE SEAL BGS (In.)	8
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	2
I.D. OF PROTECTIVE CASING (In.)	4.25
TYPE OF PROTECTIVE CASING	steel
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	2.5
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	4
RISER PIPE (In.) I.D.: 2	O.D.: 2.4
TYPE OF RISER PIPE	schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	cement/bentonite grout
DEPTH TOP OF SEAL (Ft.)	9.5
TYPE OF SEAL	Bentonite chips
DEPTH BOTTOM OF SEAL (Ft.)	12
DEPTH TOP OF PERVIOUS SECTION (Ft.)	14
DIAMETER OF BOREHOLE (In.)	
TYPE OF PERVIOUS SECTION	schedule 40 PVC
TYPE OF OPENINGS	0.010"
PERVIOUS SECTION (In.) I.D.: 2	O.D.: 2.4
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	No. 1 Sand
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	24
DEPTH BOTTOM OF FILTER PACK (Ft.)	24.5

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation, Elev. Top of Riser Pipe & Elev. Top of Protective Casing indicates that Surveyed Ground Elevation Not Available.

BEDROCK MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS, INC.

PROJECT NAME: Site 17, Bldg. 32, Gould Island
PROJECT NO: 0065
PROJECT LOCATION: NAVSTA Newport, RI
WELL NO: MW 302B
CLIENT: Navy
BORING NO: 302B
CONTRACTOR: Dragin
DRILLER: M. Wilkey
BORING LOCATION:
LOGGED BY: D. Whalen
DATE: 7/11/05
CHECKED BY:
DATE:

PAGE: 1 OF 1

ELEVATION TOP OF PROTECTIVE CASING

ELEVATION TOP OF RISER PIPE

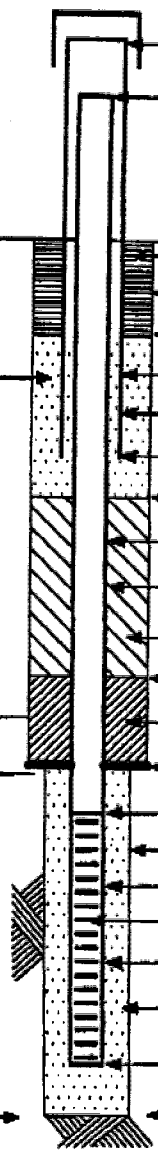
GROUND ELEVATION

SAND DRAIN LAYER

DEPTH TO BEDROCK (Ft.) 50

DEPTH TO RING (Ft.)

END OF BORING @ 84 Ft.



LENGTH OF PROTECTIVE CASING ABOVE GROUND SURFACE (Ft.)

LENGTH OF RISER PIPE ABOVE GROUND SURFACE (Ft.)

TYPE OF SURFACE SEAL: Concrete

DIA. SURFACE SEAL BGS (In.): 8

DEPTH TO BOTTOM OF SURFACE SEAL (Ft.): 2

I.D. OF PROTECTIVE CASING (In.): 4.25

TYPE OF PROTECTIVE CASING: Steel

DEPTH BOTTOM OF PROTECTIVE CASING (Ft.): 2.5

DEPTH BOTTOM OF DRAIN LAYER (Ft.): 4

RISER PIPE (In.) I.D.: 2 O.D.: 2.4

TYPE OF RISER PIPE: Schedule 40 PVC

TYPE OF BACKFILL AROUND RISER PIPE: Cement/bentonite Grout

DEPTH TOP OF SEAL (Ft.): 49

TYPE OF SEAL: Bentonite Pellets

DEPTH BOTTOM OF SEAL (Ft.): 51

DEPTH TOP OF PERVIOUS SECTION (Ft.): 54

DIAMETER OF BOREHOLE (In.): 3.75

TYPE OF PERVIOUS SECTION: Schedule 40 PVC

TYPE OF OPENINGS: 0.020"

PERVIOUS SECTION (In.) I.D.: 2 O.D.: 2.4

TYPE OF FILTER PACK AROUND PERVIOUS SECTION: No. 1 Sand

DEPTH BOTTOM OF PERVIOUS SECTION (Ft.): 84

DEPTH BOTTOM OF FILTER PACK (Ft.): 84

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation, Elev. Top of Riser Pipe & Elev. Top of Protective Casing Indicates that Surveyed Ground Elevation Not Available.

BEDROCK MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS, INC.

PROJECT NAME: Site 17 Bldg. 32 Gould Island

PROJECT NO: 0065

PROJECT LOCATION: NAVSTA NEWPORT, RI

WELL NO: MW 303B

CLIENT: NAVY

BORING NO: 303B

CONTRACTOR: Dragin

DRILLER: M. Wilkey

BORING LOCATION:

LOGGED BY: D. Whalen

DATE: 7/12/05

CHECKED BY:

DATE:

PAGE: 1 OF 1

ELEVATION TOP OF PROTECTIVE CASING

ELEVATION TOP OF RISER PIPE

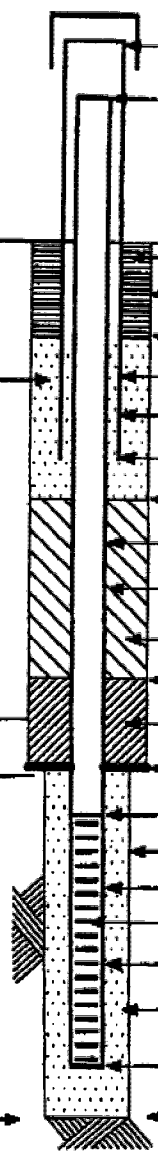
GROUND ELEVATION

SAND DRAIN LAYER

DEPTH TO BEDROCK (Ft.) 13

DEPTH TO RING (Ft.) NA

END OF BORING @ 49 Ft.



LENGTH OF PROTECTIVE CASING ABOVE GROUND SURFACE (Ft.)

LENGTH OF RISER PIPE ABOVE GROUND SURFACE (Ft.)

TYPE OF SURFACE SEAL: CONCRETE

DIA. SURFACE SEAL BGS (In.): 8

DEPTH TO BOTTOM OF SURFACE SEAL (Ft.): 2

I.D. OF PROTECTIVE CASING (In.): 4.25

TYPE OF PROTECTIVE CASING: STEEL

DEPTH BOTTOM OF PROTECTIVE CASING (Ft.): 3

DEPTH BOTTOM OF DRAIN LAYER (Ft.): 4

RISER PIPE (In.) I.D.: 2 O.D.: 2.4

TYPE OF RISER PIPE: Sch. 40 PVC

TYPE OF BACKFILL AROUND RISER PIPE: Cement/bentonite grout

DEPTH TOP OF SEAL (Ft.): 11.5

TYPE OF SEAL: Bentonite pellets

DEPTH BOTTOM OF SEAL (Ft.): 14'

DEPTH TOP OF PERVIOUS SECTION (Ft.): 19

DIAMETER OF BOREHOLE (In.): 3.75

TYPE OF PERVIOUS SECTION: sch. 40 PVC

TYPE OF OPENINGS: 0.020"

PERVIOUS SECTION (In.) I.D.: 2 O.D.:

TYPE OF FILTER PACK AROUND PERVIOUS SECTION: No. 1 sand

DEPTH BOTTOM OF PERVIOUS SECTION (Ft.): 49

DEPTH BOTTOM OF FILTER PACK (Ft.): 49

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation, Elev. Top of Riser Pipe & Elev. Top of Protective Casing Indicates that Surveyed Ground Elevation Not Available.

OVERBURDEN MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS, INC.

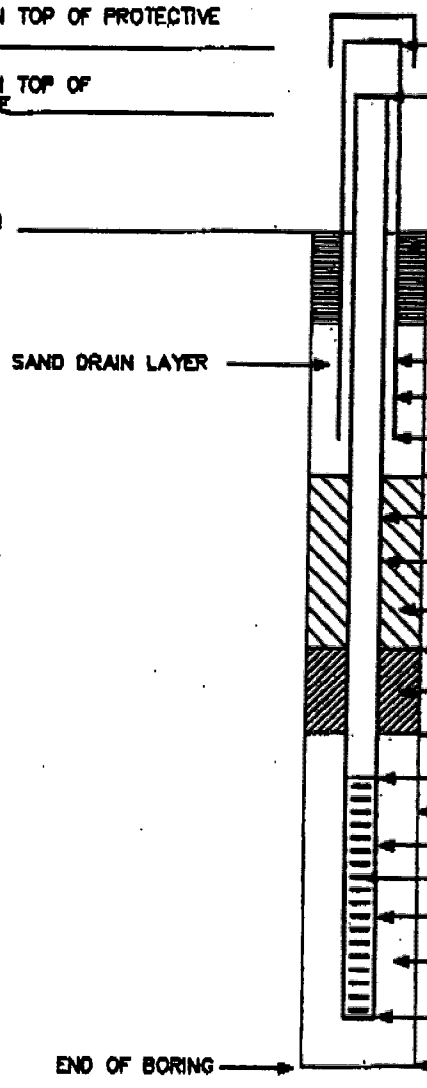
PROJECT NAME:	Bldg. 32 Gould Island	PROJECT NO:	0065
PROJECT LOCATION:	~~NASS~~ NAVSTA Newport, RI	WELL NO:	304S
CLIENT:	Navy	BORING NO:	MW 304S
CONTRACTOR:	Dragon	BORING LOCATION:	
DRILLER:	M. Wilkey		
LOGGED BY:	D. Whalen	DATE:	7/18/05
CHECKED BY:		DATE:	

PAGE: 1 OF 1

ELEVATION TOP OF PROTECTIVE CASING _____

ELEVATION TOP OF RISER PIPE _____

GROUND ELEVATION _____



LENGTH OF PROTECTIVE CASING ABOVE GROUND SURFACE (Ft.)	
LENGTH OF RISER PIPE ABOVE GROUND SURFACE (Ft.)	
TYPE OF SURFACE SEAL	CONCRETE
DIA. SURFACE SEAL BGS (In.)	8
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	1
I.D. OF PROTECTIVE CASING (In.)	4.25
TYPE OF PROTECTIVE CASING	STEEL
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	2
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	NA
RISER PIPE (In.) I.D.: 2 O.D.:	2.4
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Cement/bentonite grout
DEPTH TOP OF SEAL (Ft.)	1
TYPE OF SEAL	Bentonite chips
DEPTH BOTTOM OF SEAL (Ft.)	3
DEPTH TOP OF PERVIOUS SECTION (Ft.)	4
DIAMETER OF BOREHOLE (In.)	8
TYPE OF PERVIOUS SECTION	Schedule 40 PVC
TYPE OF OPENINGS	0.010"
PERVIOUS SECTION (In.) I.D.: 2 O.D.:	-
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	No. 1 sand
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	14'
DEPTH BOTTOM OF FILTER PACK (Ft.)	15'

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation, Elev. Top of Riser Pipe & Elev. Top of Protective Casing indicates that Surveyed Ground Elevation Not Available.

BEDROCK MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS, INC.

PROJECT NAME: Bldg 32 Gould Island

PROJECT NO: 0065

PROJECT LOCATION: Naval Station Newport, Newport, RI

WELL NO: MW 304B

CLIENT: NAVY

BORING NO: 304B

CONTRACTOR: Dragin

DRILLER:

BORING LOCATION:

LOGGED BY: R. whalen

DATE: 6/14/05

CHECKED BY:

DATE:

PAGE: 1 OF 1

ELEVATION TOP OF PROTECTIVE CASING

ELEVATION TOP OF RISER PIPE

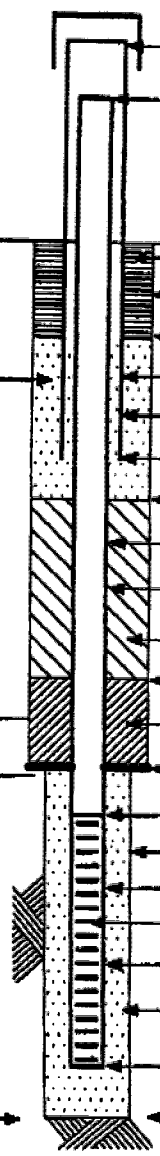
GROUND ELEVATION

SAND DRAIN LAYER

DEPTH TO BEDROCK (Ft.)

DEPTH TO RING (Ft.)

END OF BORING @ 120 Ft.



LENGTH OF PROTECTIVE CASING ABOVE GROUND SURFACE (Ft.)	
LENGTH OF RISER PIPE ABOVE GROUND SURFACE (Ft.)	
TYPE OF SURFACE SEAL	Concrete
DIA. SURFACE SEAL BGS (In.)	8
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	2
I.D. OF PROTECTIVE CASING (In.)	4.25
TYPE OF PROTECTIVE CASING	Steel
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	2.5'
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	—
RISER PIPE (In.) I.D.: 2	O.D.: 2.4
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	Cement/Bentonite Grout
DEPTH TOP OF SEAL (Ft.)	84.8
TYPE OF SEAL	Bentonite Pellets
DEPTH BOTTOM OF SEAL (Ft.)	86.9
DEPTH TOP OF PERVIOUS SECTION (Ft.)	89
DIAMETER OF BOREHOLE (In.)	4
TYPE OF PERVIOUS SECTION	Schedule 40 PVC
TYPE OF OPENINGS	0.02"
PERVIOUS SECTION (In.) I.D.: 2	O.D.:
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	No. 1 Silica Sand
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	119
DEPTH BOTTOM OF FILTER PACK (Ft.)	120

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation, Elev. Top of Riser Pipe & Elev. Top of Protective Casing Indicates that Surveyed Ground Elevation Not Available.

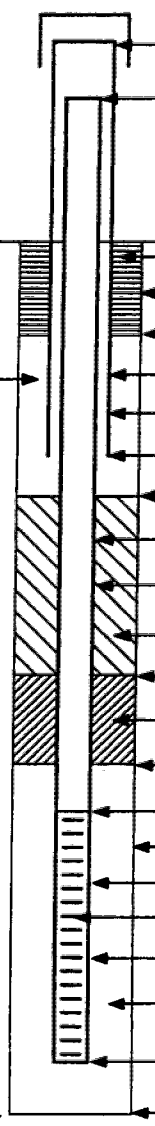
OVERBURDEN MONITORING WELL CONSTRUCTION LOG — TETRA TECH NUS, INC.

PROJECT NAME: Site 17, Bldg 32, Gould Island
PROJECT NO: 5065
PROJECT LOCATION: NAVSTA Newport, RI
WELL NO: MW-3055
CLIENT: Navy
BORING NO: 3055
CONTRACTOR: Dragin
DRILLER: Brett Swiatek
BORING LOCATION:
LOGGED BY: D. Hickey
DATE: 7/1/05
CHECKED BY:
DATE:

ELEVATION TOP OF PROTECTIVE CASING: 0.00

ELEVATION TOP OF RISER PIPE: 0.00

GROUND ELEVATION: 0.00



LENGTH OF PROTECTIVE CASING ABOVE GROUND SURFACE (Ft.)	~3.0'
LENGTH OF RISER PIPE ABOVE GROUND SURFACE (Ft.)	~2.5'
TYPE OF SURFACE SEAL	Concrete
DIA. SURFACE SEAL BGS (In.)	
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	
I.D. OF PROTECTIVE CASING (In.)	
TYPE OF PROTECTIVE CASING	Steel
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	
RISER PIPE (In.) I.D.: 2 O.D.:	
TYPE OF RISER PIPE	Sch 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	
DEPTH TOP OF SEAL (Ft.)	1
TYPE OF SEAL	Bentonite
DEPTH BOTTOM OF SEAL (Ft.)	3
DEPTH TOP OF PERVIOUS SECTION (Ft.)	4
DIAMETER OF BOREHOLE (In.)	3 1/4
TYPE OF PERVIOUS SECTION	Sch 40 PVC
TYPE OF OPENINGS	Slot
PERVIOUS SECTION (In.) I.D.: 2 O.D.:	-
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	14
DEPTH BOTTOM OF FILTER PACK (Ft.)	14.3

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation, Elev. Top of Riser Pipe & Elev. Top of Protective Casing Indicates that Surveyed Ground Elevation Not Available.

BEDROCK MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS, INC.

PROJECT NAME: Site 17, Bldg 32, Gould Island

PROJECT NO: 0065

PROJECT LOCATION: NAVSTA Newport, RI

WELL NO: MW 305B

CLIENT: Navy

BORING NO: 305B

CONTRACTOR: Dragin

DRILLER: M. Wilkly

BORING LOCATION:

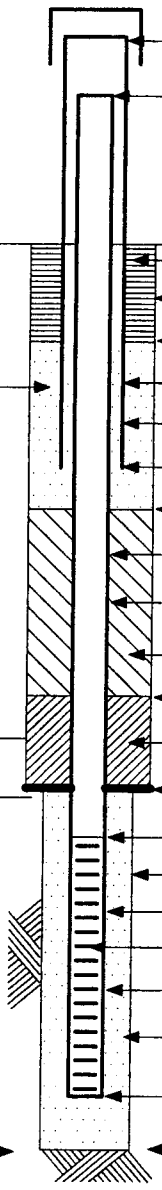
LOGGED BY: D. Whalen

DATE: 6/27/05

CHECKED BY:

DATE:

PAGE: 1 OF 1



ELEVATION TOP OF PROTECTIVE CASING

ELEVATION TOP OF RISER PIPE

GROUND ELEVATION

SAND DRAIN LAYER

DEPTH TO BEDROCK (Ft.)

DEPTH TO RING (Ft.) NA

END OF BORING @ 95' Ft.

LENGTH OF PROTECTIVE CASING ABOVE GROUND SURFACE (Ft.)

LENGTH OF RISER PIPE ABOVE GROUND SURFACE (Ft.)

TYPE OF SURFACE SEAL: Concrete

DIA. SURFACE SEAL BGS (In.): 8

DEPTH TO BOTTOM OF SURFACE SEAL (Ft.): 2

I.D. OF PROTECTIVE CASING (In.): 4.25

TYPE OF PROTECTIVE CASING: Steel

DEPTH BOTTOM OF PROTECTIVE CASING (Ft.): 2.5

DEPTH BOTTOM OF DRAIN LAYER (Ft.): 4

RISER PIPE (In.) I.D.: 2 O.D.: 2.4

TYPE OF RISER PIPE: Schedule 40 PVC

TYPE OF BACKFILL AROUND RISER PIPE: Cement/Bentonite Grout

DEPTH TOP OF SEAL (Ft.): 60.5

TYPE OF SEAL: Bentonite Pellets

DEPTH BOTTOM OF SEAL (Ft.): 63

DEPTH TOP OF PERVIOUS SECTION (Ft.): 65

DIAMETER OF BOREHOLE (In.): 3.75

TYPE OF PERVIOUS SECTION: Schedule 40 PVC

TYPE OF OPENINGS: 0.020"

PERVIOUS SECTION (In.) I.D.: 2 O.D.: 2.4

TYPE OF FILTER PACK AROUND PERVIOUS SECTION: No. 1 Sand

DEPTH BOTTOM OF PERVIOUS SECTION (Ft.): 95

DEPTH BOTTOM OF FILTER PACK (Ft.): 95

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation, Elev. Top of Riser Pipe & Elev. Top of Protective Casing Indicates that Surveyed Ground Elevation Not Available.

BEDROCK MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS, INC.

PROJECT NAME: Site 17, Bldg. 32, Gould Island

PROJECT NO: 0065

PROJECT LOCATION: NAVSTA Newport, RI

WELL NO: MW 306B

CLIENT: Navy

BORING NO: 306B

CONTRACTOR: Dragin

DRILLER: M. Wilkey

BORING LOCATION:

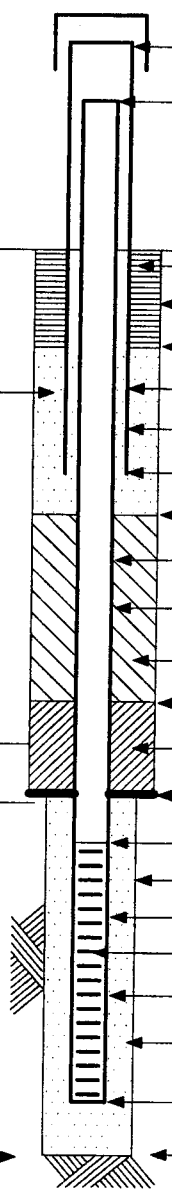
LOGGED BY: D. Whalen

DATE: 6/30/05

CHECKED BY:

DATE:

PAGE: 1 OF 1



ELEVATION TOP OF PROTECTIVE CASING

ELEVATION TOP OF RISER PIPE

GROUND ELEVATION

SAND DRAIN LAYER

DEPTH TO BEDROCK (Ft.)

DEPTH TO RING (Ft.) NA

END OF BORING @ 94 Ft.

LENGTH OF PROTECTIVE CASING ABOVE GROUND SURFACE (Ft.)

LENGTH OF RISER PIPE ABOVE GROUND SURFACE (Ft.)

TYPE OF SURFACE SEAL: Concrete

DIA. SURFACE SEAL BGS (In.): 8

DEPTH TO BOTTOM OF SURFACE SEAL (Ft.): 2

I.D. OF PROTECTIVE CASING (In.): 4.25

TYPE OF PROTECTIVE CASING: steel

DEPTH BOTTOM OF PROTECTIVE CASING (Ft.): 2.5

DEPTH BOTTOM OF DRAIN LAYER (Ft.): 4

RISER PIPE (In.) I.D.: 2 O.D.: 2.4

TYPE OF RISER PIPE: schedule 40 PVC

TYPE OF BACKFILL AROUND RISER PIPE: Cement/bentonite Grout

DEPTH TOP OF SEAL (Ft.): 60'

TYPE OF SEAL: Bentonite Pellets

DEPTH BOTTOM OF SEAL (Ft.): 62

DEPTH TOP OF PERVIOUS SECTION (Ft.): 64

DIAMETER OF BOREHOLE (In.): 3.75

TYPE OF PERVIOUS SECTION: SCHEDULE 40 PVC

TYPE OF OPENINGS: 0.020"

PERVIOUS SECTION (In.) I.D.: 2 O.D.: 2.4

TYPE OF FILTER PACK AROUND PERVIOUS SECTION: No. 1 sand

DEPTH BOTTOM OF PERVIOUS SECTION (Ft.): 94

DEPTH BOTTOM OF FILTER PACK (Ft.): 94

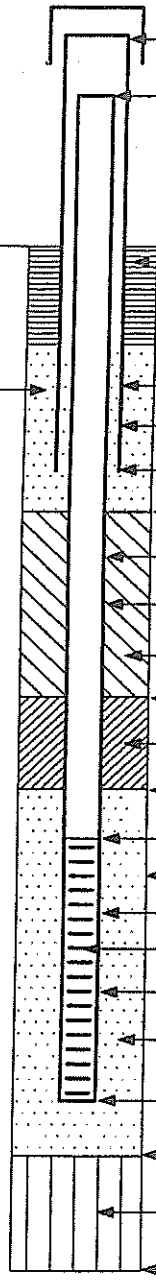
GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation, Elev. Top of Riser Pipe & Elev. Top of Protective Casing Indicates that Surveyed Ground Elevation Not Available.

OVERBURDEN MONITORING WELL CONSTRUCTION LOG — TETRA TECH NUS, INC.

PROJECT NAME: Fmr. Bldg. 44 UST Site Corrective Action GW Monitoring
PROJECT NO: N0288-1072 (CTO 143)
PROJECT LOCATION: Naval Station Newport, Rhode Island
WELL NO: MW001R Renamed MW306S 7-1-06
CLIENT: Engineering Field Activity Northeast, Naval Facilities Engineering Command
BORING NO: SB001R
CONTRACTOR: Guild Drilling Co., E. Providence, RI
DRILLER: Paul Brescia
BORING LOCATION: Source Area
LOGGED BY: M Healey
DATE: 12/19/00
CHECKED BY: J. Lambert JL
DATE: 8/20/03 (revised log)
PAGE: 1 OF 1

ELEVATION TOP OF PROTECTIVE CASING: 15.1
ELEVATION TOP OF RISER PIPE: 14.90
GROUND ELEVATION: 11.7



LENGTH OF PROTECTIVE CASING ABOVE GROUND SURFACE (Ft.)	3.4
LENGTH OF RISER PIPE ABOVE GROUND SURFACE (Ft.)	3.2
TYPE OF SURFACE SEAL	cement
DIA. SURFACE SEAL BGS (In.)	18
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	1.5
I.D. OF PROTECTIVE CASING (In.)	4
TYPE OF PROTECTIVE CASING	5.5 ft standpipe
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	2.1
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	2.5
RISER PIPE (In.) I.D.: 2	O.D.: 2 3/8
TYPE OF RISER PIPE	PVC
TYPE OF BACKFILL AROUND RISER PIPE	----
DEPTH TOP OF SEAL (Ft.)	2.5
TYPE OF SEAL	Bentonite
DEPTH BOTTOM OF SEAL (Ft.)	3.0
DEPTH TOP OF PERVIOUS SECTION (Ft.)	4.0
DIAMETER OF BOREHOLE (In.)	4.0
TYPE OF PERVIOUS SECTION	PVC
TYPE OF OPENINGS	0.010
PERVIOUS SECTION (In.) I.D.: 2	O.D.: 2 3/8
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	20-30 Sand
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	9.0
DEPTH BOTTOM OF FILTER PACK (Ft.)	10.0
TYPE OF BACKFILL BELOW FILTER PACK	N/A
END OF BORING (Ft.)	10.0

Notes:
Replacement for MW001
Repaired June 2001
Surveyed 8/29/01
Log revised to show modification from flush-mount cover to stick-up protective casing on 8/19/03
Elevation of riser pipe calculated from field measurement

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation, Elev. Top of Riser Pipe & Elev. Top of Protective Casing Indicates that Surveyed Ground Elevation Not Available.

TtNUS Form 0059

OVERBURDEN MONITORING WELL CONSTRUCTION LOG

TETRA TECH NUS, INC.

PROJECT NAME: Gould Island Building 54

PROJECT NO: 7538-2300

PROJECT LOCATION: Gould Island

WELL NO: MW02 Renamed MW3035 7/1/05

CLIENT: Naval Facilities Engineering Command

BORING NO: B04

BORING LOCATION: AT BLDG 32/54 Gould I.

CONTRACTOR: Guild

DRILLER: D. Holley

LOGGED BY: M. Healey

DATE: 06/22/01

CHECKED BY:

DATE:

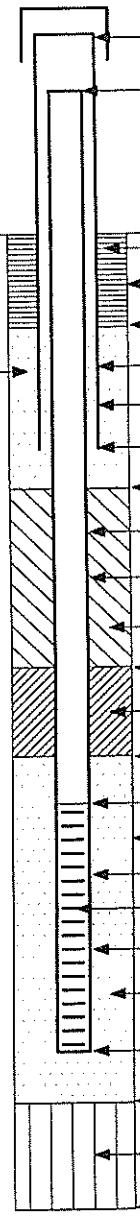
PAGE: 1 OF 1

ELEVATION TOP OF PROTECTIVE CASING

ELEVATION TOP OF RISER PIPE

GROUND ELEVATION

SAND DRAIN LAYER



LENGTH OF PROTECTIVE CASING ABOVE GROUND SURFACE (Ft.)	2.07
LENGTH OF RISER PIPE ABOVE GROUND SURFACE (Ft.)	1.92
TYPE OF SURFACE SEAL	Cement
DIA. SURFACE SEAL BGS (In.)	8 - inch
DEPTH TO BOTTOM OF SURFACE SEAL (Ft.)	1
I.D. OF PROTECTIVE CASING (In.)	3 - inch
TYPE OF PROTECTIVE CASING	Steel
DEPTH BOTTOM OF PROTECTIVE CASING (Ft.)	1.93
DEPTH BOTTOM OF DRAIN LAYER (Ft.)	3.0
RISER PIPE (In.) I.D. 2	O.D.: 2 3/8
TYPE OF RISER PIPE	Schedule 40 PVC
TYPE OF BACKFILL AROUND RISER PIPE	N/A
DEPTH TOP OF SEAL (Ft.)	N/A
TYPE OF SEAL	N/A
DEPTH BOTTOM OF SEAL (Ft.)	N/A
DEPTH TOP OF PERVIOUS SECTION (Ft.)	3
DIAMETER OF BOREHOLE (In.)	4
TYPE OF PERVIOUS SECTION	Schedule 40 PVC
TYPE OF OPENINGS	
PERVIOUS SECTION (In.) I.D.: 2	O.D.: 2 3/8
TYPE OF FILTER PACK AROUND PERVIOUS SECTION	Sand
DEPTH BOTTOM OF PERVIOUS SECTION (Ft.)	13
DEPTH BOTTOM OF FILTER PACK (Ft.)	14
TYPE OF BACKFILL BELOW FILTER PACK	NA
END OF BORING (Ft.)	14

GENERAL NOTE:

1. Entry of 0.00 for Ground Elevation, Elev. Top of Riser Pipe & Elev. Top of Protective Casing Indicates that Surveyed Ground Elevation Not Available.

APPENDIX D3

WELL DEVELOPMENT, PURGE AND GROUNDWATER SAMPLE LOG SHEETS, PACKER TESTING

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: MW300S

PROJECT: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
PERSONNEL: C. Sanchez

DATE: 7-11-5
WEATHER: ~75°F, partly cloudy

Well Screen Depth: 4 / 14 ft. bgs
H&S Monitoring Instrument Reading 0.0

Pump Type/Material: whale pump
Pump Intake Depth: 4 to 14' bgs

Total Purge Volume ~~~50~~ 50 (gal)
Data Recorded By: CSG

Time	Water Level ft below top PVC	Volume ~~pt~~ gal	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
1005	9.49		600	15.4	6.17	0.75		32	
1035	10.5			15.7	6.10	1.0		850	
1050	11.3			15.9	6.05	1.1		500	
1125	9.90			16.2	5.91	1.3		550	
1145	10.62			16.3	6.15	1.2		210	
1200	11.02			16.5	6.38	1.3		130	
1245	11.21			15.9	7.18	1.4		90	
1305	11.53			16.0	7.10	1.3		80	
1320	11.73			16.3	7.01	1.3		25	
1325	11.80			15.7	6.95	1.3		23	
1330	11.91			15.5	6.91	1.3		20	
1335	11.93			15.7	6.93	1.3		5.1	
1340	11.96			15.8	6.92	1.3		4.9	
1345	11.98	~50gal	~50gal	15.7	6.93	1.3		4.5	
	well	developed							

Tt NUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: MW300B

PROJECT: Site 17, Bldg 32, Gould Island

PROJECT NO.: 0065

PERSONNEL: C. Sorchy

DATE: 7-18-5 (CS 7-11-5)

WEATHER: ~75°F, partly cloudy

Well Screen Depth: 53 / 83 ft. bgs

H&S Monitoring Instrument Reading: 0.0

Pump Type/Material: whale pump

Pump Intake Depth: 53~83' bgs

Total Purge Volume = 50 (gal)

Data Recorded By: CSL

Time	Water Level ft below top PVC	Volume ~~mL~~ gal	Flow Rate (CS) ~~mL~~/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
0930	begin	development							
0935	10.75		1.5						
0940	11.25			14.66	6.00	0.486		600	
0950	12.65			15.3	6.23	0.45		600	
1000	12.20			15.7	6.2	0.46		750	
1015	12.00			15.5	6.2	0.43		250	
1030	11.70			15.5	6.2	0.43		320	
1045	11.75			15.9	6.2	0.48		750	
1125	11.80			16.42	6.3	0.52		450	
1140	12.01	whale pump not working - need to pull & inspect pump							
	c	replaced w/ new whale pump							
1400	6.58			15.7	6.7	0.53		230	
1415	8.65			18.0	6.7	0.47		700	
1430	9.01			15.5	6.7	0.48		550	
1440	9.30			15.7	6.6	0.50		230	
1450	9.65			15.7	6.7	0.51		190	
1500	9.95			15.5	6.7	0.48		160	
1520	10.25		1.5	15.6	6.7	0.50		100	
	Leave site for the day will continue on 7-18-5								

Tt NUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: MW300B

PROJECT: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
PERSONNEL: C. Sanchez

DATE: 7-12-5
WEATHER: ~75° partly cloudy

Well Screen Depth: 53 / 83 ft. bgs
H&S Monitoring Instrument Reading 0.0

Pump Type/Material: whale pump
Pump Intake Depth: 53-83' bgs

Total Purge Volume = 50 (gal)
Data Recorded By: CSLp

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
	continue	well	development		from	7-11-5			
0730	6.51		L/min	15.4	6.2	0.53		8.6	
0740	6.92			15.4	6.1	0.52		7.5	
0745	7.34			15.5	6.1	0.52		5.1	
0750	7.72			15.5	6.0	0.51		4.7	
0755	8.11			15.6	5.9	0.51		4.5	
0800	8.45			15.5	6.0	0.51		4.6	
0805	8.47			surge well					
0815	8.45			15.6	6.0	0.51		65	
0820	8.45			15.5	6.1	0.50		33	
0825	8.45			15.6	6.0	0.49		20	
0830	8.45			15.6	5.9	0.49		10	
0835	8.45			15.5	5.9	0.49		7.7	
0840	8.45			15.5	5.8	0.49		5.1	
0845	8.45			15.5	5.9	0.49		4.7	
0850	8.45			15.4	5.9	0.50		3.8	
0855	8.45	50	L/min	15.6	5.8	0.50		2.4	
0900	well Developed								

Tt NUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: MW-3015

PROJECT: Site 17, Bldg 32, Gravelly Island

PROJECT NO.: 0065

PERSONNEL: D. Hickey

DATE: 7/18/05

WEATHER: ~75°F, Overcast

Well Screen Depth: 19.5 / 29.5 ft. bgs

H&S Monitoring Instrument Reading 0.0

Pump Type/Material: Whale pump

Pump Intake Depth: ~29.0' BGS

Total Purge Volume = ~25 (gal)

Data Recorded By: D.H.

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
0840	18.10	0	500	13.99	6.77	0.285	8.11	187	Surged
0855	21.81	7,500	500	14.09	6.22	0.245	7.05	110	
0910	21.92	15,000	500	14.06	6.26	0.242	6.69	27.9	
0925	22.00	22,500	500	14.06	6.25	0.239	7.12	18.8	
0940	21.15	30,000	500	14.62	6.17	0.236	6.72	767	Re Surged
0955	21.80	37,500	500	14.66	6.19	0.229	7.06	321	
1010	21.86	45,000	500	15.06	6.31	0.241	6.74	156	
1025	21.89	52,500	500	14.96	6.25	0.232	7.00	77.7	
1040	21.90	60,000	500	14.71	6.18	0.228	7.06	217	Re Surged
1055	21.94	67,500	500	14.66	6.26	0.241	7.15	21.8	
1110	21.96	75,000	500	14.49	[illegible]	0.231	9.95	2.90	6.28 (pH)
1125	21.97	82,500	500	14.62	6.29	0.229	9.14	1.59	

US Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: MW-301B

PROJECT: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
PERSONNEL: Hickey

DATE: 7/18/05
WEATHER: 75°F, overcast

Well Screen Depth: 37 / 67 ft. bgs
H&S Monitoring Instrument Reading 0.0

Pump Type/Material: Whale Pump
Pump Intake Depth: 36.5' BGS

Total Purge Volume = ~20 (gal)
Data Recorded By: O.H.

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
1230	21.72	0	325	15.47	6.99	0.292	3.62	21.9	Surged
1245	26.65	4,875	325	17.00	6.66	0.282	5.18	8.30	
1300	28.03	9,750	325	19.07	6.62	0.269	6.73	5.81	Resurged
1315	28.18	14,625	325	19.24	6.37	0.280	4.16	3.37	
1330	28.25	19,500	325	18.87	6.30	0.260	10.54	3.11	Resurged
1345	28.27	24,375	325	19.09	6.15	0.255	10.36	4.80	
1400	28.29	29,250	325	19.31	6.11	0.281	6.88	6.03	
1415	27.97	34,125	325	18.92	6.01	0.248	9.88	8.64	Resurged
1430	28.28	37,125	200	19.38	5.92	0.246	9.99	6.60	
1445	28.34	40,125	200	19.81	5.96	0.270	3.97	5.87	
1500	28.37	43,125	200	19.82	6.09	0.344	2.99	6.03	
1515	28.38	46,125	200	19.72	6.02	0.271	6.26	4.92	
1530	28.38	49,125	200	19.26	6.18	0.281	5.28	4.29	

NUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: MW-302S

PROJECT: Site 17, Bldg 32, Gould Island
PROJECT NO.: 0065
PERSONNEL: D. Hickey

DATE: 7/19/02
WEATHER: ~70°F, Overcast, Foggy

* reading exceeded instrument limits

Well Screen Depth: 14 / 24 ft. bgs
H&S Monitoring Instrument Reading 0.0

Pump Type/Material: Whale
Pump Intake Depth: 23.5' BGS

Total Purge Volume = 60 (gal)
Data Recorded By: D.H.

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
0840	4.99	0	800	15.78	8.37	0.297	10.06	956	Surged
0855	16.70	12,000	800	17.09	7.94	0.312	7.82	*	
0910	19.82	24,000	800	15.92	7.48	0.401	5.22	*	
0925	20.84	36,000	800	16.01	6.73	0.388	6.35	*	
0940	21.20	48,000	800	15.93	6.53	0.393	7.03	358	
0955	22.85	60,000	800	16.52	6.68	0.407	5.83	992	
1010	23.31	72,000	800	16.23	6.56	0.404	5.98	624	
1025	24.24	84,000	800	16.11	6.50	0.425	9.47	682	
1040	24.93	96,000	800	16.41	6.51	0.414	7.88	806	
1055	25.27	108,000	800	16.32	6.54	0.415	9.19	706	
1110	25.58	120,000	800	16.66	6.56	0.419	9.27	662	
1125	25.74	132,000	800	16.92	6.43	0.433	9.61	720	
	Stop pumping to allow well to recover, Surge well when pumping resumed								
1200	20.50	144,000	800	16.17	6.54	0.419	6.81	116	
1215	22.83	156,000	800	16.13	6.50	0.487	9.14	136	
~~1230~~ DH	Had to ~~stop~~ Stop pumping to empty drum, Surged well when pump resumed. DTW = 17.27								
1250	19.40	168,000	800	16.52	6.76	0.439	8.98	302	
1305	21.15	180,000	800	16.48	6.66	0.531	8.14	341	
1325	22.33	192,000	800	16.31	6.35	0.463	8.72	68.3	

NUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: MW-302S

PROJECT: Site 17, Bldg 32, Gould Island

PROJECT NO.: 0065 J

PERSONNEL: D. Hickey

DATE: 7/19/02

WEATHER: 70°F, overcast

Well Screen Depth: 14 / 24 ft. bgs

H&S Monitoring Instrument Reading 0.0

Pump Type/Material:

Pump Intake Depth: 23.5' BOS

Total Purge Volume = 60 (gal)

Data Recorded By: D.H.

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
1340	23.14	204,000	800	16.73	6.55	0.442	8.60	35.3	
1355	23.56	216,000	800	16.59	6.50	0.438	9.33	85.7	
1410	23.83	228,000	800	16.53	6.32	0.421	9.14	9.68	
1425	24.10	240,000	800	16.96	6.42	0.434	8.13	11.6	
1440	24.20	252,000	800	16.84	6.55	0.426	7.95	5.0	

Tt NUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: MW302B

ROJECT: gould island
ROJECT NO.: 8005
ERSONNEL: C. Sanchez

DATE: 7-13-5
WEATHER: 70°F, cloudy

/ell Screen Depth: 54 / 84 ft. bgs
&S Monitoring Instrument Reading 0.0

Pump Type/Material: Whale Pump
Pump Intake Depth: ~~54-84~~ (CS) ~70' bgs

Total Purge Volume = 45 (gal)
Data Recorded By: CDS

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
0755	5.37							~~80~~ (CS)	
0815	Start	development							
0818	7.60		900	14.4	8.7	0.32	5.0	80	hill, cloudy
0830	9.18		900	14.4	8.5	0.30	4.7	120	Surge well
0835								999+	dark grey
0900	9.60		900	13.7	8.8	0.25	4.6	999+	"
0910	9.60		900	13.6	8.6	0.24	4.8	180	cloudy
0930	9.65		900	13.7	8.7	0.24	4.7	22	clear
0945	9.65		900	13.5	8.5	0.23	4.5	23	↓
1000	9.65		900	13.5	8.4	0.24	4.5	25	
1025	9.65		900	13.6	8.5	0.24	4.3	23	
1045	9.65		900	13.5	8.5	0.24	4.2	14	
1050	9.65		900	13.5	8.5	0.24	4.1	10	
1055	9.65		900	13.4	8.4	0.24	4.0	11	
1100	9.65		900	13.5	8.4	0.24	4.0	7	
1105	9.65		900	13.5	8.5	0.24	4.0	5	
1110	9.65		900	13.4	8.5	0.24	4.1	4	
	Well	Developed							

US Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: MW30B

ROJECT: Site 17, Building 32, Gould Island
ROJECT NO.: 00165
ERSONNEL: C Sanchez

DATE: 7-13-15
WEATHER: 70°F cloudy

/ell Screen Depth: 19 / 49 ft. bgs
&S Monitoring Instrument Reading 0.0

Pump Type/Material: Whale Pump
Pump Intake Depth: ~35'

Total Purge Volume = 50 (gal)
Data Recorded By: CJS

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
130	6.70		1000	17.4	7.4	0.23	6.3	999+	Dark grey
135	8.45		1000	17.2	7.3	0.22	4.5	850	
		Surge well		~~15.7~~ 15.5					
1220	8.90		1000	15.6	7.2	0.22	4.4	120	cloudy
1300	8.85		1000	15.6	7.2	0.22	4.4	40	clear
1330	8.85		1000	15.7	7.2	0.22	4.4	20	
1400	8.85		1000	15.7	7.2	0.22	4.4	10	
1405	8.85		1000	15.7	7.2	0.22	4.3	7.1	
1410	8.85		1000	15.7	7.3	0.21	4.4	8.3	
1415	8.85		1000	15.8	7.2	0.21	4.4	6.1	
1420	8.85		1000	15.7	7.2	0.21	4.3	4.7	
	Well	Developed							

JS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: MW-304S

PROJECT: Site 17, Bldg 32, Gerald Island

PROJECT NO.: 00605

PERSONNEL: D. Hickey

DATE: 7/20/05

WEATHER: Sunny, 80°F

* reading exceeded instrument limits

Well Screen Depth: 4 / 14 ft. bgs

H&S Monitoring Instrument Reading 0.0

Pump Type/Material: Peristaltic / Teflon Tubing

Pump Intake Depth: ~10' bgs

Total Purge Volume = ~35 (gal)

Data Recorded By: D.H.

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
0825	8.54	0	800	17.69	6.56	9.0	5.91	337	Surged
0845	15.83	800 mL	800	17.73	6.82	3.27	1.98	*	
Well has effectively pumped dry, will allow to recharge and resume pumping									
0925	16.15	1600	800	17.32	6.90	3.78	3.12	*	
1020	15.55		**	18.54	7.11	5.21	5.95	708	
1050	15.20		**	19.10	7.13	4.46	9.88	234	
1200	15.50		**	19.36	6.97	4.95	7.70	306	Resurged
1300	15.82		**	18.85	7.14 SH	5.56	6.18	782	6.92 (pH)
1330	14.54		**	19.93	6.80	5.66	7.52	275	
1345	15.62		**	20.64	6.73	5.46	5.30	75.2	
1410	15.22		**	20.51	6.86	6.07	5.91	20.8	
1430	15.45		**	20.72	6.91	5.67	8.32	13.2	

** Pump rate (flow) variable due to well yield

t NUS Form 0013

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: MW304B

ROJECT: gould island

ROJECT NO.: 0065

ERSONNEL: C. Sanchez / J. Trout

DATE: 7-14-5

WEATHER: 70°F Humid

/ell Screen Depth: 89 / 119 ft. bgs

&S Monitoring Instrument Reading 0.0

Pump Type/Material: Whale pump

Pump Intake Depth: ~95

Total Purge Volume = 50 (gal)

Data Recorded By: CJS

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
1000	~~4.85~~ 4.65		600	~~17.88~~	~~6.58~~	~~0.275~~	~~2.42~~	~~999+~~	dark grey
1010	4.85		600	17.88	6.58	0.275	2.42	999+	
1020	4.85		600	17.71	7.16	0.229	4.06	1000	brown green
1030	4.85		600	18.01	7.56	0.225	3.84	190	brown grey/cloudy
1040	4.84		600	18.51	7.61	0.208	6.74	130	light grey/cloudy
1050	4.80		600	18.32	7.63	0.217	5.39	145	cloudy/clear
1110	4.80		600	18.38	7.76	0.214	5.10	71	clear
1130	4.80		600	18.60	7.81	0.212	5.90	50	clear
1145	4.80		600	18.41	7.83	0.210	6.07	52	clear
		- surge well							
1155	4.70		600	18.35	7.85	0.209	4.85	658	brown/cloudy
1245	4.70		600	18.72	7.92	0.211	3.50	36.9	clear
1300	4.70		600	18.40	7.82	0.214	3.50	38.3	clear
1315	4.70		600	18.41	7.85	0.215	3.47	39	
1330	4.70		600	18.42	7.83	0.210	3.49	34	clear
1400	4.70		600	18.40	7.84	0.211	3.49	33	cleared out turbidity vial
1420	4.70		600	18.40	7.84	0.210	3.50	10	
1425	4.70		600	18.40	7.85	0.211	3.50	7	
1430	4.70		600	18.41	7.85	0.210	3.49	4	

JS Form 0013

well developed

TETRA TECH NUS, INC.

WELL DEVELOPMENT DATA SHEET

Well No.: MW306B

ROJECT: gould island
ROJECT NO.: 0065
ERSONNEL: C. Sanchez

DATE: 7-12-5
WEATHER: 85°F, sunny

/ell Screen Depth: 64 / 94 ft. bgs
&S Monitoring Instrument Reading 0.0
Vol: ~7.5' bgs

Pump Type/Material: Whale Pump
Pump Intake Depth: ~80'

Total Purge Volume = 40 (gal)
Data Recorded By: CJS

Time	Water Level ft below top PVC	Volume mL	Flow Rate mL/min	Temp °C	pH	Sp Cond mS/cm	DO mg/L	Turbidity NTU	Comments
0915	12.15		900	16.5	8.2	0.365	6.9	400	cloudy
0920	15.25		900	14.9	8.3	0.98	5.0	120	
0930	20.13		900	15.0	7.7	1.1	4.9	100	
0940	27.15		900	15.1	7.5	1.1	4.8	60	
0950	27.70		600 ~~900~~	15.0	7.1	1.2	4.7	45	
1005	27.89		600 ~~900~~	15.1	7.2	1.1	4.6	29	
1020	27.90		600 ~~900~~	14.9	7.3	1.2	4.3	20	
1035	27.90		600	15.0	7.2	1.1	4.4	15	
1040	Surge	well						~~850~~	
1050								850	
1110	27.91		600	15.1	7.3	1.2	4.5	90	
1120	27.89		600	15.2	7.3	1.1	4.3	60	
1130	27.89		600	15.3	7.2	1.0	4.2	40	
1135	27.88		600	15.4	7.3	1.1	4.2	17	
1140	27.88		600	15.3	7.1	1.0	4.0	13	
1145	27.88		600	15.4	7.1	1.1	4.1	7.1	
1150	27.88		600	15.3	7.0	1.2	4.0	5.0	
1155	27.88		600	15.4	7.1	1.0	4.0	3.7	
1200	Well	Developed							

JS Form 0013

Tetra Tech NUS, Inc.

PACKER TEST REPORT

PROJECT: Bldg. 32, Gould Island
BORING NO.: 3005 CASING DEPTH: 54
TEST INTERVAL: 57-67'
6/17/05

PROJECT NO.: 0065 TEST NO.: 1
CONTRACTOR: Dragin
BY: Whalen CHECKED:

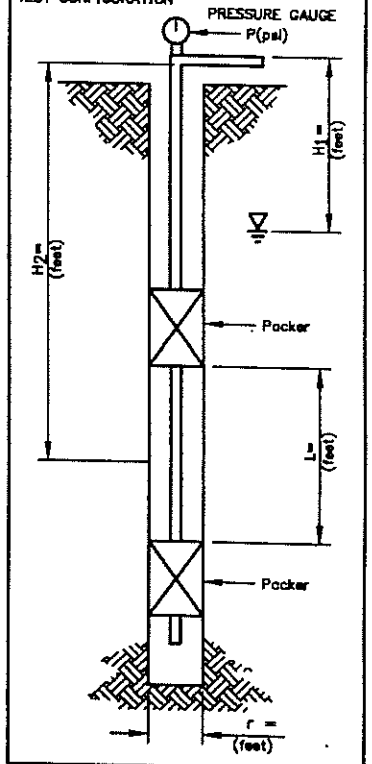
PAGE 1 OF 3
STATIC WATER LEVEL: 32'
PACKER PRESSURE: 175 psi

Flow Test					Calculated Results							
Pressure, p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft^3)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H_1 * (ft)	Hp(Ft)= 2.31(psi)	H_2 * (ft)	H = Hp + (H_1 or H_2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67x10^{-7} K(ft/yr)
5	0	248.06	—	—	—	9.2	11.6	—	20.80	4500	—	—
	0.5	248.08	0.02	.15	.30			—			64.90	6.28×10^{-5}
	1.0	248.09	0.01	.075	.15			—			32.45	3.14×10^{-5}
	1.5	248.10	0.01	.075	.15			—			32.45	3.14×10^{-5}
	2.0	248.11	0.01	.075	.15			—			32.45	3.14×10^{-5}
	2.5	248.11	0	0	0			—				
	3.0	248.11	0	0	0			—				
	3.5	248.11	0	0	0			—				
	4.0	248.11	0	0	0			—				
	4.5	248.11	0	0	0			—				
	5.0	248.11	0	0	0			—				
5	5.5	—		Holding test				—				
5	6.0	—						—				
5	6.5	—						—				
5	7.0	—						—				
5	7.5	—						—				
5	8.0	—						—				
5	8.5	—						—				
5	9.0	—						—				
4.5	9.5	—				9.2	10.4	—	19.60			
4.5	10.0	—						—				

CP = (1/(2πL))LN(L/r) (70,315.5)
7.48 Gallons = 1Ft^3
1psi = 2.31ft head
Remarks: 5.82 Pressure gauge is 6' above ground surface

* H_1 is used when the test length is below the water table.
H_2 is used when the test length is above the water table.

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,600	9,300	8,800	8,200
8	8,800	8,500	8,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,600
20	3,200	3,100	3,000	2,800

Tetra Tech NUS, Inc.

PACKER TEST REPORT

PROJECT: Bldg. 32 Gould Island
BORING NO.: 3008 CASING DEPTH: 54
TEST INTERVAL: 57-67
6-17-05

PROJECT NO.: 0065 TEST NO.: 2
CONTRACTOR: Dragin
BY: Whalen CHECKED:

PAGE 2 OF 3
STATIC WATER LEVEL: 32'
PACKER PRESSURE: 175 PSI

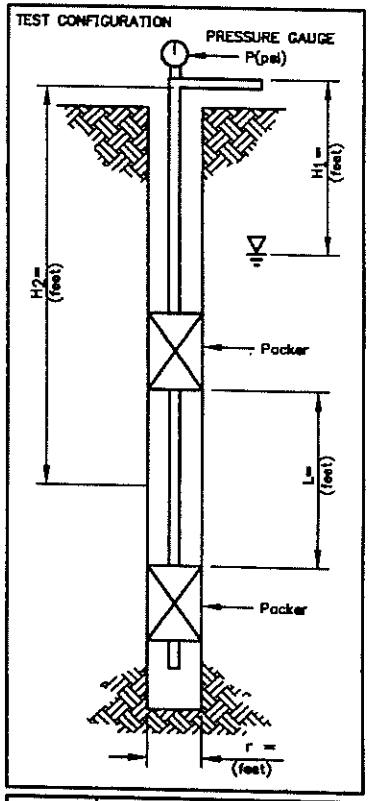
Flow Test					Calculated Results							
Pressure p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft^3)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H_1 * (ft)	Hp(Ft)= 2.31(psi)	H_2 * (ft)	H = Hp + (H_1 or H_2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67x10^-7 K(ft/yr)
10	0	248.19	—	—						4500		
	0.5	248.20	0.01	.07	0.15	9.2	23.1	—	32.3		20.90	2.02×10^{-5}
	1	248.20	0	0	0							
	1.5	248.20	0	0	0							
	2	248.20	0	0	0							
	2.5	248.20	0	0	0							
	3	248.20	0	0	0							
	3.5	248.20	0	0	0							
	4	248.20	0	0	0							
	4.5	248.20	0	0	0							
	5	248.20	0	0	0							
10	5.5	—	HOLDING TEST									
10	6.0	—										
10	6.5	—										
10	7.0	—										
10	7.5	—										
10	8.0	—										
10	8.5	—										
10	9.0	—										
9.5	9.5	—										
9.0	10.0	—										

CP = (1/(2πL))LN(L/r) (70,315.5)
7.48 Gallons = 1Ft^3
1psi = 2.31ft head

* H_1 is used when the test length is below the water table.
H_2 is used when the test length is above the water table.

Remarks:

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,800	8,200
8	8,800	8,500	8,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,500
20	3,200	3,100	3,000	2,800

Tetra Tech NUS, Inc.

PACKER TEST REPORT

PROJECT: Bldg 32 Gould Island
BORING NO.: 300B CASING DEPTH:
TEST INTERVAL: 57-67
6-17-05

PROJECT NO.: 0065 TEST NO.: 3
CONTRACTOR: Pragin
BY: D. Whalen CHECKED:

PAGE 3 OF 3
STATIC WATER LEVEL: 32'
PACKER PRESSURE:

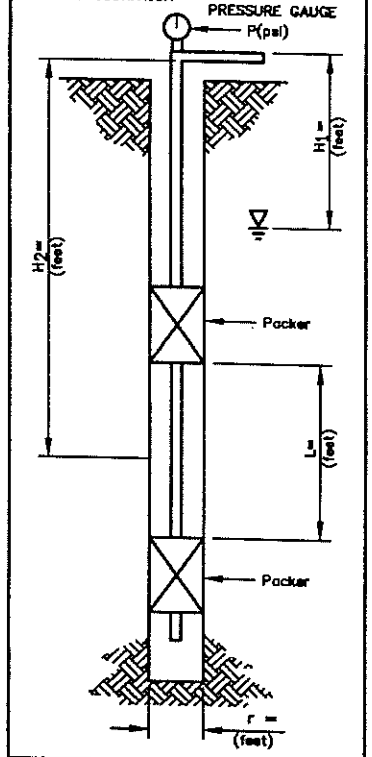
Flow Test					Calculated Results							
Pressure, p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft³)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H1 * (ft)	Hp(Ft)= 2.31(psi)	H2 * (ft)	H = Hp + (H1 or H2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67x10⁻⁷ K(ft/yr)
20	0	248.24	—	—	—					4500		
	0.5	248.24	0	0	0							
	1.0	248.24	0	0	0							
	1.5	248.24	0	0	0							
	2.0	248.24	0	0	0							
	2.5	248.24	0	0	0							
	3.0	248.24	0	0	0							
	3.5	248.24	0	0	0							
	4.0	248.24	0	0	0							
	4.5	248.24	0	0	0							
20	5.0	248.24	0	0	0							
20	5.5			Holding Test								
19.5	6.0			w/ visqueen inside 4" casing								
19	6.5											
18	7.0											
17	7.5											
16	8.0											
15.5	8.5											
15	9.0											
15	9.5											
14.5	10											

CP = (1/(2πL))LN(L/r) (70,315.5)
7.48 Gallons = 1Ft³
1psi = 2.31ft head

* H1 is used when the test length is below the water table.
H2 is used when the test length is above the water table.

Remarks:

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size			
	Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,800	8,200
8	8,000	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,600
20	3,200	3,100	3,000	2,800

Tetra Tech NUS, Inc.

PACKER TEST REPORT

PROJECT: Fl.6.32 Gould Island
BORING NO.: 36CB CASING DEPTH:
TEST INTERVAL: 54-63
6/20

PROJECT NO.: 0065 TEST NO.: 2
CONTRACTOR:
BY: Whalen CHECKED:

PAGE 1 OF 2
STATIC WATER LEVEL: 4.37 ft
PACKER PRESSURE: 165

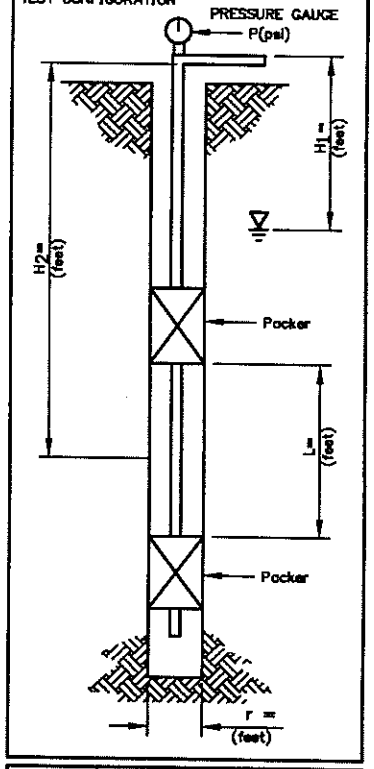
Flow Test					Calculated Results							
Pressure, p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft^3)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H_1 * (ft)	Hp(Ft)= 2.31(psi)	H_2 * (ft)	H = Hp + (H_1 or H_2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67x10^{-7} K(ft/yr)
5	0	248.78	—	—	—							
	0.5	248.78	0	0	0							
	1.0	248.78	0	0	0							
	1.5	248.78	0	0	0							
	2.0	248.78	0	0	0							
	2.5	248.78	0	0	0							
	3.0	248.78	0	0	0							
	3.5	248.78	0	0	0							
	4.0	248.78	0	0	0							
	4.5	248.78	0	0	0							
5	5.0			Holding fast								
5	5.5											
5	6.0											
5	6.5											
5	7.0											
5	7.5											
5	8.0											
5	8.5											
5	9.0											
5	9.5											
5	10.0											

CP = (1/(2πL))LN(L/r) (70,315.5)
7.48 Gallons = 1ft^3
1psi = 2.31 ft head

* H_1 is used when the test length is below the water table.
H_2 is used when the test length is above the water table.

Remarks:

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size			
	Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,800	8,200
8	6,800	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,500
20	3,200	3,100	3,000	2,800

9 inch casing H_2O level 2
10 mins
3.6

PACKER TEST REPORT

Tetra Tech NUS, Inc.

PROJECT: Bldg. 32 Gould Island
BORING NO.: 300B CASING DEPTH:
TEST INTERVAL: 54 - 63
6/30

PROJECT NO.: 0065 TEST NO.: 2
CONTRACTOR: Dragin
BY: Uhalen CHECKED:

PAGE 2 OF 2
STATIC WATER LEVEL: 4.37
PACKER PRESSURE:

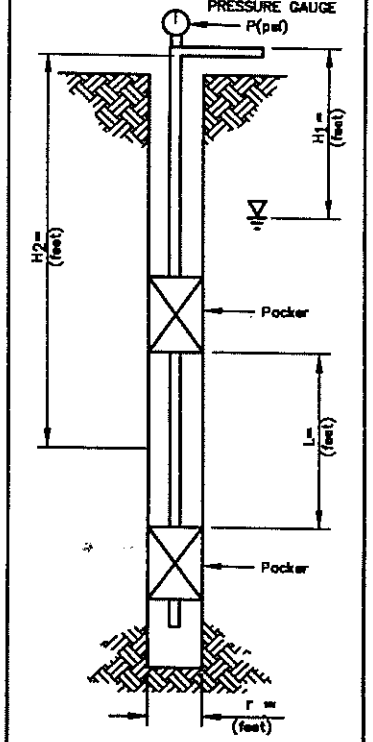
Flow Test					Calculated Results							
Pressure p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft^3)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H_1 * (ft)	Hp(Ft)= 2.31(psi)	H_2 * (ft)	H = Hp + (H_1 or H_2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67x10^-7 K(ft/yr)
20	0	248.92	—	—	—							
	0.5	249.01	<0.09	0.67	1.35	9.2	46.2	—	55.4	4500	109.66	1.06×10^{-4}
	1	249.04	.03	0.224	0.45	9.2	46.2	—	55.4	4500	36.55	3.53×10^{-5}
	1.5	249.04	0	0	0							
	2.0	249.04	0	0	0							
	2.5	249.04	0	0	0							
	3.0	249.04	0	0	0							
	3.5	249.04	0	0	0							
	4.0	249.04	0	0	0							
	4.5	249.04	0	0	0							
20	5.0	249.04	0	0	0							
20	5.5		Holding	Test								
18	6.0											
17	6.5											
17	7.0											
16	7.5		4.37									
16	8.0											
15	8.5											
15	9.0		4.37									
14	9.5											
14	10.0											

CP = (1/(2πL))LN(L/r) (78,315.5)
7.48 Gallons = 1Ft^3
1psi = 2.31 ft head

* H_1 is used when the test length is below the water table.
H_2 is used when the test length is above the water table.

Remarks: Pressure gauge is 6' above ground

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size			
	Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,000	23,300
2	19,400	18,100	16,800	15,500
5	9,500	9,300	8,500	8,200
8	6,500	6,500	6,100	5,600
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,600
20	3,200	3,100	3,000	2,800

Tetra Tech NUS, Inc.

PACKER TEST REPORT

PROJECT: Bldg 32 Gould Island
BORING NO.: 300B CASING DEPTH:
TEST INTERVAL: 67-77
6/20

PROJECT NO.: 0065 TEST NO.:
CONTRACTOR: Dragin
BY: Whalen CHECKED:

PAGE 1 OF 2
STATIC WATER LEVEL: 3.5' BOS
PACKER PRESSURE: 105 psi

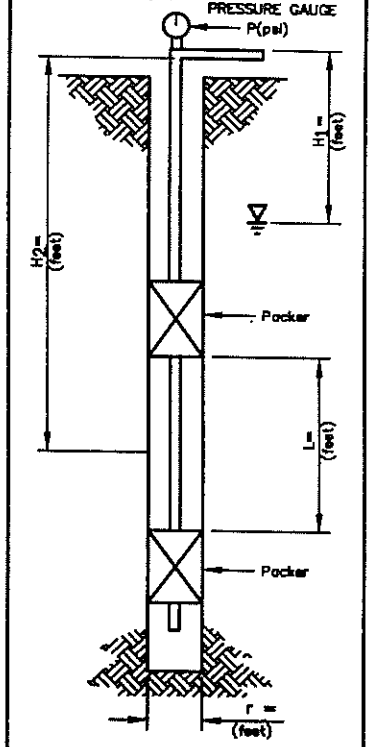
Flow Test					Calculated Results							
Pressure, p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft³)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H_1 * (ft)	Hp(Ft)= 2.31(psi)	H_2 * (ft)	H = Hp + (H_1 or H_2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67x10⁻⁷ K(ft/yr)
5	0	248.40	—							4500		
	0.5	248.40	0									
	1.0	248.40	0									
	1.5	248.40	0									
	2.0	248.40	0									
	2.5	248.40	0									
	3.0	248.40	0									
	3.5	248.40	0									
	4.0	248.40	0									
	4.5	248.40	0									
	5.0	248.40	0									
5	5.5			Holding test								
5	6.0											
5	6.5											
5	7.0											
5	7.5											
5	8.0											
5	8.5											
5	9.0											
5	9.5											
5	10.0											

CP = (1/(2πL))LN(L/r) (70,315.5)
7.48 Gallons = 1Ft³
1psi = 2.31ft head

* H_1 is used when the test length is below the water table.
H_2 is used when the test length is above the water table.

Remarks:

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size			
	Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,500	23,300
2	19,400	18,100	16,500	15,500
5	9,500	9,300	8,800	8,200
8	6,800	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,600
20	3,200	3,100	3,000	2,800

Tetra Tech NUS, Inc.

PACKER TEST REPORT

PROJECT: Bldg 32, Gould Island
BORING NO.: 3COB CASING DEPTH: 54
TEST INTERVAL: 67-77
6/20/05

PROJECT NO.: 0065 TEST NO.:
CONTRACTOR: Dragin
BY: D. Whalen CHECKED:

PAGE 2 OF 2
STATIC WATER LEVEL: 35'
PACKER PRESSURE:

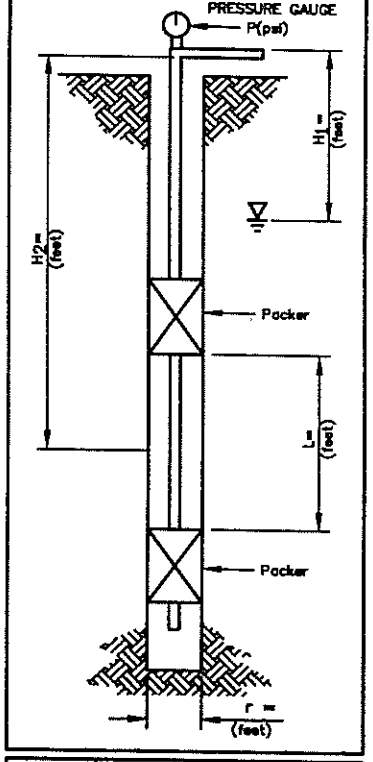
Flow Test					Calculated Results							
Pressure, p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft^3)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H_1 * (ft)	Hp(Ft)= 2.31(psi)	H_2 * (ft)	H = Hp + (H_1 or H_2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67x10^-7 K(ft/yr)
20	0	248.52	—	—	—					4500		
	0.5	248.53	0.01	.075	.15	9.2	46.2	—	55.4	4500	14.6	1.41x10^-5
	1	248.53	0	0	0							
	1.5	248.53	0	0	0							
	2.0	248.53	0	0	0							
	2.5	248.53	0	0	0							
	3.0	248.53	0	0	0							
	3.5	248.53	0	0	0							
	4.0	248.53	0	0	0							
	4.5	248.53	0	0	0							
20	5.0	248.53	0	0	0							
19	5.5		Holding	TEST								
19	6.0											
18	6.5											
18	7.0											
17	7.5		6.55									
16	8.0											
16	8.5											
15	9.0		6.49									
15	9.5											
14	10.0		6.46									

CP = (1/(2πL))LN(L/r) (78,315.5)
7.48 Gallons = 1Ft^3
1psi = 2.31ft head

* H_1 is used when the test length is below the water table.
H_2 is used when the test length is above the water table.

Remarks:

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,800	8,200
8	6,800	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,500
20	3,200	3,100	3,000	2,800

Tetra Tech NUS, Inc.

PACKER TEST REPORT

PROJECT: Bldg. 32 Gould Island
BORING NO.: 300B CASING DEPTH: 54'
TEST INTERVAL: 77-84'
6/20/05

PROJECT NO.: 0065 TEST NO.:
CONTRACTOR: Dragin
BY: D. whalen CHECKED:

PAGE 1 OF 3
STATIC WATER LEVEL: 35'
PACKER PRESSURE: 160

Flow Test					Calculated Results							
Pressure p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft^3)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H_1 * (ft)	$H_p(Ft)$= 2.31(psi)	H_2 * (ft)	H = Hp + (H_1 or H_2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67×10^{-7} K(ft/yr)
6	0	249.30	—	—	—					6066		
	0.5	249.30	0	0	0							
	1.0	249.30	0	0	0							
	1.5	249.30	0	0	0							
	2.0	249.30	0	0	0							
	2.5	249.30	0	0	0							
	3.0	249.30	0	0	0							
	3.5	249.30	0	0	0							
	4.0	249.30	0	0	0							
	4.5	249.30	0	0	0							
6	5.0	249.30	0	0	0							
6	5.5	Holding Test										
6	6.0											
6	6.5											
6	7.0											
6	7.5											
6	8.0											
6	8.5											
6	9.0											
6	9.5											
6	10.0											

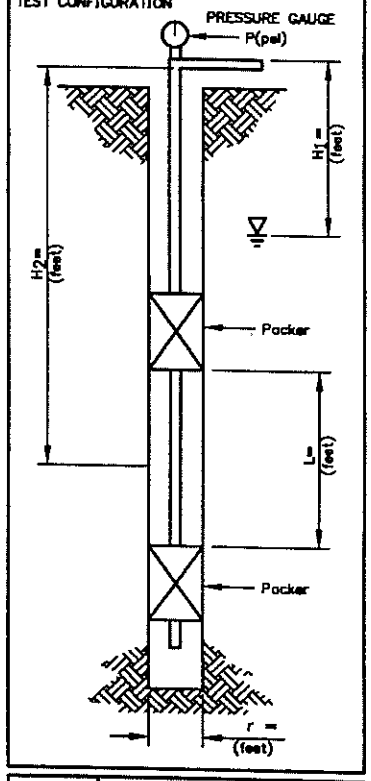
CP = (1/(2πL))LN(L/r) (70,315.5)
7.48 Gallons = $1Ft^3$
1psi = 2.31ft head

* H_1 is used when the test length is below the water table.
H_2 is used when the test length is above the water table.

Remarks:

1036 WL= 7.55

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,500	8,200
8	6,800	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,600
20	3,200	3,100	3,000	2,800

Tetra Tech NUS, Inc.

PACKER TEST REPORT

PROJECT: Bldg. 72 Gould Island
BORING NO.: 300B CASING DEPTH: 54
TEST INTERVAL: 77-84
6/20/05

PROJECT NO.: 0065 TEST NO.:
CONTRACTOR: Dragin
BY: D. Whalen CHECKED:

PAGE 2 OF 3
STATIC WATER LEVEL: 3.5'
PACKER PRESSURE: 160

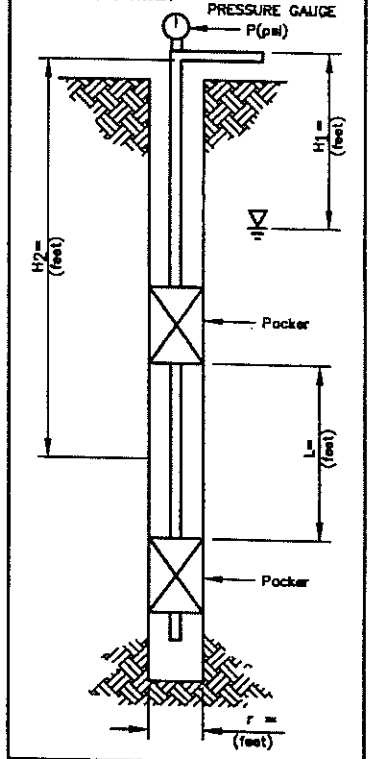
Flow Test					Calculated Results							
Pressure, p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft^3)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H_1 * (ft)	Hp(Ft)= 2.31(psi)	H_2 * (ft)	H = Hp + (H_1 or H_2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67x10−7 K(ft/yr)
10	0	249.34	—	—	—					6066		
	0.5	249.34	0	0	0							
	1.0	249.34	0	0	0							
	1.5	249.34	0	0	0							
	2.0	249.34	0	0	0							
	2.5	249.34	0	0	0							
	3.0	249.34	0	0	0							
	3.5	249.34	0	0	0							
	4.0	249.34	0	0	0							
	4.5	249.34	0	0	0							
10	5.0	249.34	0	0	0							
10	5.5			Holding flat								
10	6.0		wi =	7.43								
10	6.5			7.43								
10	7.0			7.43								
10	7.5			7.42								
10	8.0			7.42								
10	8.5			7.42								
10	9.0			7.41								
10	9.5			7.41								
10	10.0			7.40								

CP = (1/(2πL))LN(L/r) (70,315.5)
7.48 Gallons = 1Ft^3
1psi = 2.31 ft head

* H_1 is used when the test length is below the water table.
H_2 is used when the test length is above the water table.

Remarks:

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size			
	Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,800	8,200
8	6,800	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,600
20	3,200	3,100	3,000	2,800

PACKER TEST REPORT

Tetra Tech NUS, Inc.

PROJECT: Bldg. 32 Gould Island
BORING NO.: 3008 CASING DEPTH: 541
TEST INTERVAL: 77-84
6/26/05

PROJECT NO.: 0065 TEST NO.: _____
CONTRACTOR: Dragin
BY: uhalen CHECKED: _____

PAGE 3 OF 3
STATIC WATER LEVEL: 35'
PACKER PRESSURE: 175

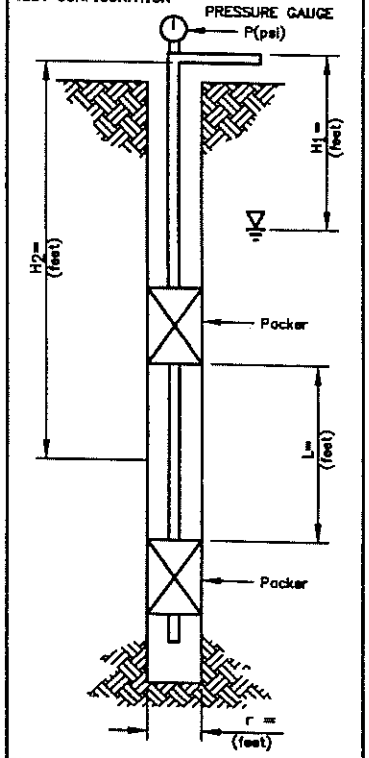
Flow Test					Calculated Results							
Pressure, p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft^3)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H_1 * (ft)	Hp(Ft)= 2.31(psi)	H_2 * (ft)	H = Hp + (H_1 or H_2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67x10^{-7} K(ft/yr)
20	0	249.44	—	—						6066		
	0.5	249.45	0.01	.075	.15	9.2	46.2	—	55.4	6066	19.7	1.9x10^{-5}
	1.0	249.45	0	0	0							
	1.5	249.45	0	0	0							
	2.0	249.45	0	0	0							
	2.5	249.45	0	0	0							
	3.0	249.46	0.01	.075	.15	9.2	46.2	—	55.4	6066	19.7	1.9x10^{-5}
	3.5	249.46	0	0	0							
	4.0	249.46	0	0	0							
	4.5	249.46	0	0	0							
	5.0	249.46	0	0	0							
20	3.5		7.32	HOLDING TEST								
20	6.0											
20	6.5											
20	7.0											
20	7.5											
20	8.0		7.32									
20	8.5											
20	9.0											
19	9.5		7.31									
19	10.0		7.31									

CP = (1/(2πL))LN(L/r) (78,315.5)
7.48 Gallons = 1Ft^3
1psi = 2.31ft head

* H_1 is used when the test length is below the water table.
H_2 is used when the test length is above the water table.

Remarks: _____

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,800	8,200
8	6,800	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,600
20	3,200	3,100	3,000	2,800

PACKER TEST REPORT

Tetra Tech NUS, Inc.

PROJECT: Bldg. 32 Gould Island
BORING NO.: 305B CASING DEPTH: 64'
TEST INTERVAL: 64 - 74'
6/24/05

PROJECT NO.: 0065 TEST NO.: 1
CONTRACTOR: Dragin
BY: D. Whalen CHECKED:

PAGE 1 OF 3
STATIC WATER LEVEL: 74
PACKER PRESSURE:

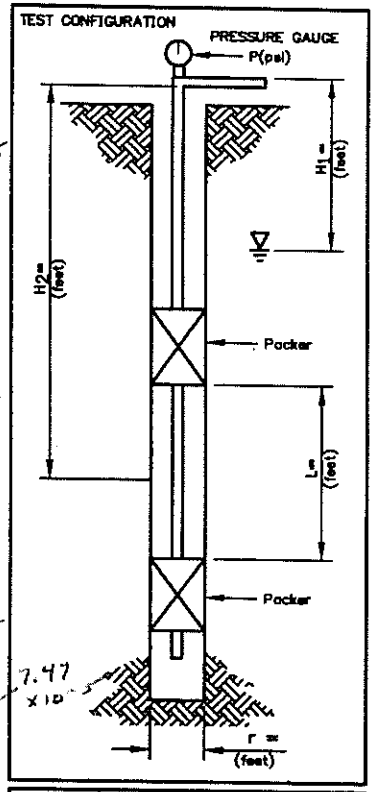
Flow Test					Calculated Results								
Pressure p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft³)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H1 * (ft)	Hp(Ft)= 2.31(psi)	H2 * (ft)	H = Hp + (H1 or H2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.87x10⁻⁷ K(ft/yr)
20	0	249.91	—	—	—	8.7	46.2	—	54.9	4500	~~36.85~~	—
	0.5	.94	0.03	0.224	0.45			—			36.89	3.57×10^{-5}
	1.0	.96	0.02	0.15	0.30			—			24.59	2.38×10^{-5}
	1.5	.98	0.02	0.15	0.30			—			24.59	2.38×10^{-5}
	2.0	250.00	0.02	0.15	0.30			—			24.59	2.38×10^{-5}
	2.5	250.00	0	0	0			—			—	—
	3.0	.01	0.01	0.075	0.15			—			12.30	1.19×10^{-5}
	3.5	.01	0	0	0			—			—	—
	4.0	.02	0.01	0.075	0.15			—			12.30	1.19×10^{-5}
	4.5	.03	0.01	0.075	0.15			—			12.30	1.19×10^{-5}
	5.0	.03	0	0	0			—			—	—
	5.5	.04	0.01	0.075	0.15			—			12.30	1.19×10^{-5}
	6.0	.04	0	0	0			—			—	—
	6.5	.05	0.01	0.075	0.15			—			12.30	1.19×10^{-5}
	7.0	.06	0.01	0.075	0.15			—			12.30	1.19×10^{-5}
	7.5	.07	0.01	0.075	0.15		46.2	—	54.9		12.30	1.19×10^{-5}
30	8.0	.16	0.09	0.67	1.34		69.3	—	78.0		77.30	~~1.99×10^{-4}~~ 7.47×10^{-5}
30	8.5	.18	0.02	0.15	0.30			—			17.30	1.67×10^{-5}
30	9.0	.35	0.07	0.52	1.04			—			60.02	5.8×10^{-5}
35	9.5	.34	0.04	0.30	0.6			—			34.62	3.35×10^{-5}
30	10.0	.30	0.01	0.075	0.15	8.7	69.3	—	78.0		8.65	8.37×10^{-6}

CP = (1/(2πL))LN(L/r) (70,315.5)
7.48 Gallons = 1Ft³
1psi = 2.31 ft head

* H1 is used when the test length is below the water table.
H2 is used when the test length is above the water table.

Remarks: Pressure gauge is 5.3' above ground surface

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,500	23,300
2	19,400	18,100	16,600	15,500
5	9,800	9,300	8,500	8,200
8	6,800	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,500
20	3,200	3,100	3,000	2,800

Tetra Tech NUS, Inc.

PACKER TEST REPORT

PROJECT: Gould Island
BORING NO.: 3058 CASING DEPTH: 64
TEST INTERVAL: 64-74
6/24

PROJECT NO.: 0065 TEST NO.: 1
CONTRACTOR: Dragin
BY: CHECKED:

PAGE 2 OF 3
STATIC WATER LEVEL: 3.4
PACKER PRESSURE:

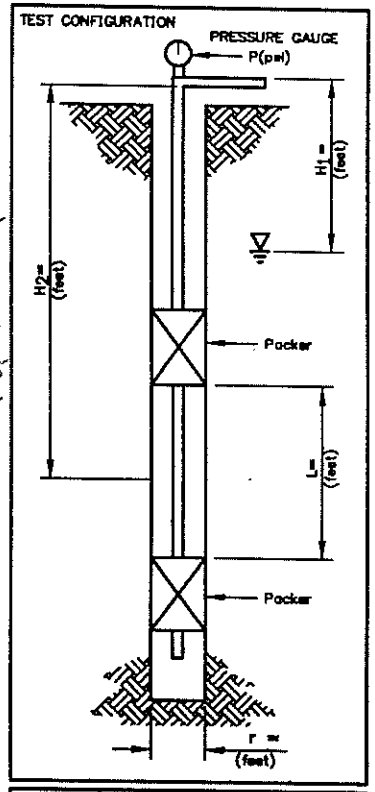
Flow Test					Calculated Results							
Pressure, p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft^3)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H_1 * (ft)	Hp(Ft)= 2.31(psi)	H_2 * (ft)	H = Hp + (H_1 or H_2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67x10-7 K(ft/yr)
30	10.5	250.31	0.01	0.075	0.15	8.7	69.3	—	78.0	4500	8.65	8.36×10^{-6}
30	11	.32	0.01	0.075	0.15			—			8.65	8.36×10^{-6}
30	11.5	.33	0.01	0.075	0.15			—			8.65	8.36×10^{-6}
30	12	.36	0.03	0.224	0.45			—			26.0	2.51×10^{-5}
34?	12.5	.37	0.01	0.075	0.15			—			8.65	8.36×10^{-6}
30	13.0	.38	0.01	0.075	0.15			—			8.65	8.36×10^{-6}
30	13.5	.41	0.03	0.224	0.45			—			26.0	2.51×10^{-5}
30	14.0	.43	0.02	0.15	0.30			—			17.3	1.67×10^{-5}
30	14.5	.46	0.03	0.224	0.45			—			26.0	2.51×10^{-5}
30	15.0	.46	0	—	—			—			—	—
30	15.5	.47	0.01	0.075	0.15			—			8.65	8.36×10^{-6}
30	16.0	.48	0.01	0.075	0.15			—			8.65	8.36×10^{-6}
30	16.5	.49	0.01	0.075	0.15			—			8.65	8.36×10^{-6}
30	17.0	.51	0.02	0.15	0.30			—			17.3	1.67×10^{-5}
30	17.5	.53	0.02	0.15	0.30			—			17.3	1.67×10^{-5}
30	18.0	.56	0.03	0.224	0.45	8.7	69.3	—	78.0		26.0	2.51×10^{-5}
40	17.5											
40	19.0				inc.	packer	pressure	125→150	psi			
40	19.5											
40	20											
40	20.0											

CP = (1/(2πL))LN(L/r) (78,315.5)
7.48 Gallons = 1Ft^3
1psi = 2.31ft head

* H_1 is used when the test length is below the water table.
H_2 is used when the test length is above the water table.

Remarks:

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size			
	Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,500	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,800	8,200
8	6,800	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,600
20	3,200	3,100	3,000	2,800

Tetra Tech NUS, Inc.

PACKER TEST REPORT

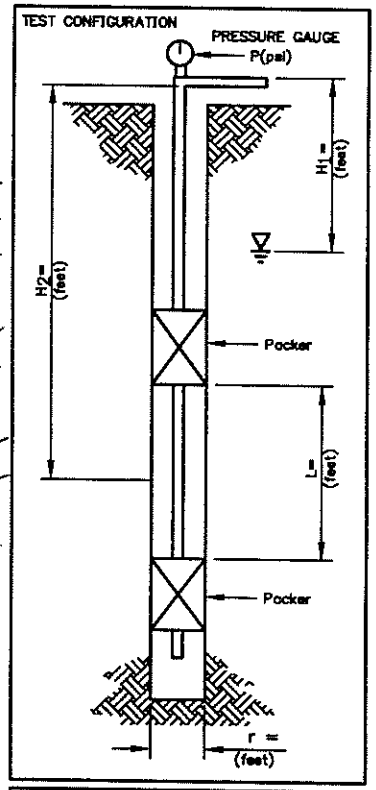
PROJECT: _____
BORING NO.: 305 B CASING DEPTH: 64
TEST INTERVAL: 64-74
6/24/05

PROJECT NO.: 0065 TEST NO.: 1
CONTRACTOR: Dragi
BY: _____ CHECKED: _____

PAGE 3 OF 3
STATIC WATER LEVEL: 34
PACKER PRESSURE: 160

Flow Test					Calculated Results							
Pressure, p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft^3)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H_1 * (ft)	Hp(Ft)= 2.31(psi)	H_2 * (ft)	H = Hp + (H_1 or H_2)	Cp	K(ft/yr) = Cp•Q/H	K(cm/sec)= 9.67×10^{-7} K(ft/yr)
40	23	351.11	0.80	5.98		8.7	92.4	—	101.1	4500		
40	23.5	1.15	0.04	0.30	0.60			—	101.1		26.71	2.58×10^{-5}
40	24	1.18	0.03	0.224	0.45			—			20.03	1.94×10^{-5}
40	24.5	1.20	0.02	0.15	0.30			—			13.35	1.29×10^{-5}
40	25	1.24	0.04	0.30	0.60			—			26.71	2.58×10^{-5}
40	25.5	1.27	0.03	0.224	0.45			—			20.03	1.94×10^{-5}
40	26	1.30	0.03	0.224	0.45			—			20.03	1.94×10^{-5}
40	26.5	1.33	0.03	0.224	0.45			—			20.03	1.94×10^{-5}
40	27.0	1.36	0.03	0.224	0.45			—			20.03	1.94×10^{-5}
40	27.5	1.39	0.03	0.224	0.45			—			20.03	1.94×10^{-5}
40	28.0	1.42	0.03	0.224	0.45			—			20.03	1.94×10^{-5}
40	28.5	1.45	0.03	0.224	0.45			—			20.03	1.94×10^{-5}
40	29.0	1.48	0.03	0.224	0.45	8.7	92.4	—	101.1		20.03	1.94×10^{-5}

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size			
	Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,800	8,200
8	8,500	8,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,500
20	3,200	3,100	3,000	2,800

CP = (1/(2π L))LN(L/r) (70,315.5)
7.48 Gallons = 1Ft^3
1psi = 2.31ft head

* H_1 is used when the test length is below the water table.
H_2 is used when the test length is above the water table.

Remarks:

Pressure gauge 5.5' above ground

Tetra Tech NUS, Inc.

PACKER TEST REPORT

PROJECT: Bldg 32 Gould Island
BORING NO.: 305B CASING DEPTH:
TEST INTERVAL: 72-82
6/24/05

PROJECT NO.: 0065 TEST NO.: 2
CONTRACTOR: Dragin
BY: D. Whalen CHECKED:

PAGE 1 OF 4
STATIC WATER LEVEL: 3.4
PACKER PRESSURE: 1

Flow Test					Calculated Results							
Pressure, p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft³)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H1 * (ft)	Hp(Ft)= 2.31(psi)	H2 * (ft)	H = Hp + (H1 or H2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67x10⁻⁷ K(ft/yr)
20	0	251.83	0	0	0	8.7	46.2	—	54.9	4500	—	—
	0.5	251.85	0.02	0.15	0.30						24.59	2.38×10^{-5}
	1.0	251.87	0.02	0.15	0.30						24.59	2.38×10^{-5}
	1.5	251.89	0.02	0.15	0.30						24.59	2.38×10^{-5}
	2.0	251.92	0.03	0.224	0.45						36.89	3.57×10^{-5}
	2.5	251.94	0.02	0.15	0.30						24.59	2.38×10^{-5}
	3.0	251.95	0.01	0.075	0.15						12.30	1.19×10^{-5}
	3.5	251.96	0.01	0.075	0.15						12.30	1.19×10^{-5}
	4.0	251.97	0.01	0.075	0.15						12.30	1.19×10^{-5}
	4.5	251.98	0.01	0.075	0.15						12.30	1.19×10^{-5}
	5.0	252.00	0.02	0.15	0.30						24.59	2.38×10^{-5}
	5.5	252.02	0.02	0.15	0.30						24.59	2.38×10^{-5}
	6.0	252.04	0.02	0.15	0.30						24.59	2.38×10^{-5}
	6.5	252.07	0.03	0.224	0.45						36.89	3.57×10^{-5}
	7.0	252.09	0.02	0.15	0.30						24.59	2.38×10^{-5}
	7.5	252.11	0.02	0.15	0.30						24.59	2.38×10^{-5}
	8.0	252.12	0.01	0.075	0.15						12.30	1.19×10^{-5}
	8.5	252.14	0.02	0.15	0.30						24.59	2.38×10^{-5}
	9.0	252.15	0.01	0.075	0.15						12.30	1.19×10^{-5}
	9.0	252.17	0.02	0.15	0.30						24.59	2.38×10^{-5}
	9.5	252.18	0.01	0.075	0.15	8.7	46.2	—	54.9		12.30	1.19×10^{-5}

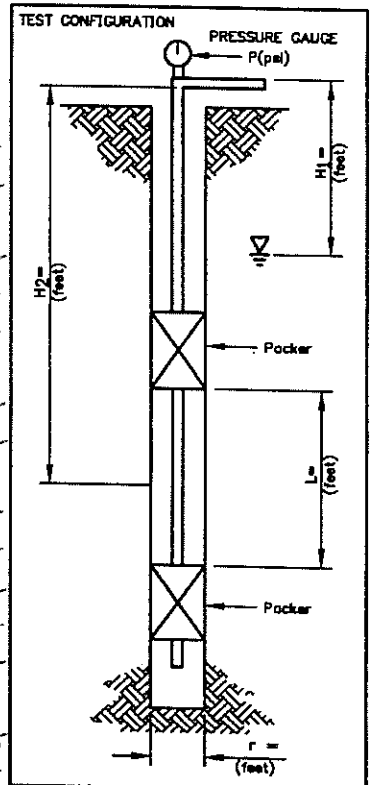
CP = (1/(2πL))LN(L/r) (70,315.5)
7.48 Gallons = 1Ft³
1psi = 2.31ft head

* H1 is used when the test length is below the water table.
H2 is used when the test length is above the water table.

Remarks:

4.29
1083 4.97

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,500	9,300	8,600	8,200
8	6,800	6,500	6,100	5,600
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,600
20	3,200	3,100	3,000	2,500

PACKER TEST REPORT

Tetra Tech NUS, Inc.

PROJECT: Bldg 32 Gould Island
BORING NO.: 305B CASING DEPTH:
TEST INTERVAL: 72-82
6/24

PROJECT NO.: 0065 TEST NO.: 2
CONTRACTOR:
BY: CHECKED:

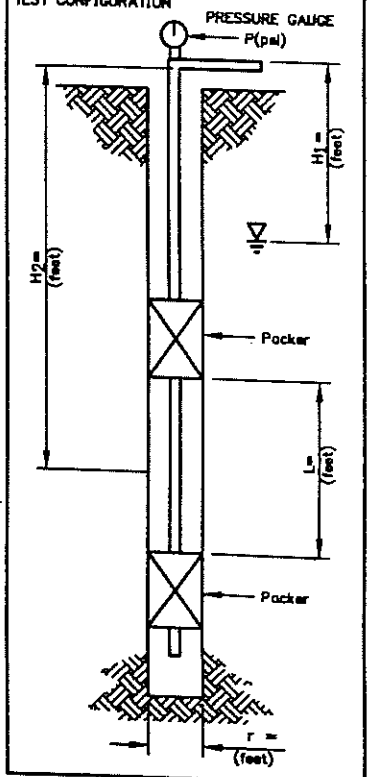
PAGE 2 OF 4
STATIC WATER LEVEL: 34
PACKER PRESSURE:

Flow Test					Calculated Results							
Pressure p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft³)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H1 * (ft)	Hp(Ft)= 2.31(psi)	H2 * (ft)	H = Hp + (H1 or H2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67x10⁻⁷ K(ft/yr)
30	11.5	252.29	0.11	0.82	1.64	8.7	69.3	—	78.0	4500	94.6	9.15×10^{-5}
	12.0	2.32	0.03	0.224	0.45						25.96	2.51×10^{-5}
	12.5	2.34	0.02	0.15	0.30						17.30	1.67×10^{-5}
	13.0	2.37	0.03	0.224	0.45						25.96	2.51×10^{-5}
	13.5	2.39	0.02	0.15	0.30						17.30	1.67×10^{-5}
	14.0	2.41	0.02	0.15	0.30						17.30	1.67×10^{-5}
	14.5	2.43	0.02	0.15	0.30						17.30	1.67×10^{-5}
	15.0	2.45	0.02	0.15	0.30						17.30	1.67×10^{-5}
	15.5	2.47	0.02	0.15	0.30						17.30	1.67×10^{-5}
	16.0	2.50	0.03	0.224	0.45						25.96	2.51×10^{-5}
	16.5	2.52	0.02	0.15	0.30						17.30	1.67×10^{-5}
	17.0	2.54	0.02	0.15	0.30						17.30	1.67×10^{-5}
	17.5	2.56	0.02	0.15	0.30						17.30	1.67×10^{-5}
	18.0	2.58	0.02	0.15	0.30						17.30	1.67×10^{-5}
1:01	18.5	2.60	0.02	0.15	0.30		69.3		78.0		17.30	1.67×10^{-5}
40	19	—	—	—	—		92.4		101.1		—	—
40	19.5	252.71	0.11	0.82	1.64					72.30	~~94.6~~	6.99×10^{-5}
40	20.0	252.73	0.02	0.15	0.30						13.35	1.29×10^{-5}
40	20.5	252.75	0.02	0.15	0.30						13.35	1.29×10^{-5}
40	21.0	252.77	0.02	0.15	0.30						13.35	1.29×10^{-5}
40	21.5	252.81	0.04	0.30	0.60	8.7	92.4	—	101.1		26.71	2.58×10^{-5}

CP = (1/(2πL))LN(L/r) (70,315.5)
7.48 Gallons = 1Ft³
1psi = 2.31ft head
Remarks:

* H1 is used when the test length is below the water table.
H2 is used when the test length is above the water table.

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,800	8,200
8	8,800	8,500	8,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,600
20	3,200	3,100	3,000	2,800

110.4.47

PACKER TEST REPORT

Tetra Tech NUS, Inc.

PROJECT: Bldg 32, Gould Island
BORING NO.: 305B CASING DEPTH:
TEST INTERVAL: 72-82
6/24

PROJECT NO.: 0065 TEST NO.: 2
CONTRACTOR: Drasin
BY: CHECKED:

PAGE 3 OF 4
STATIC WATER LEVEL: 34
PACKER PRESSURE:

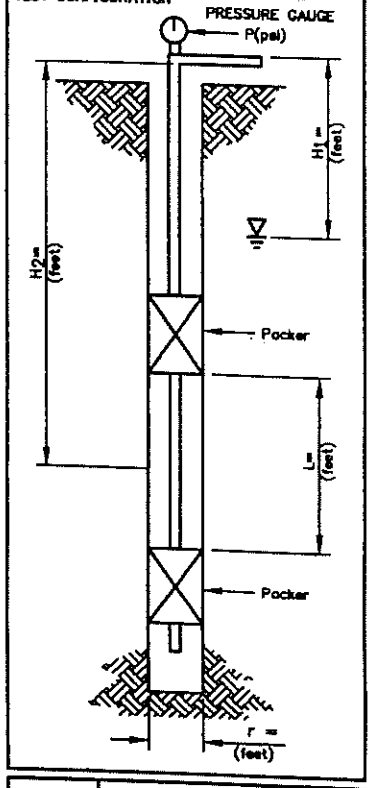
Flow Test					Calculated Results							
Pressure, p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft³)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H1 * (ft)	Hp(Ft)= 2.31(psi)	H2 * (ft)	H = Hp + (H1 or H2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67x10⁻⁷ K(ft/yr)
40	22	252.84	0.03	0.224	0.45	8.7	92.4	—	101.1	4500	20.02	1.94×10^{-5}
40	22.5	252.87	0.03	0.224	0.45						20.02	1.94×10^{-5}
40	23.0	252.90	0.03	0.224	0.45						20.02	1.94×10^{-5}
40	23.5	252.93	0.03	0.224	0.45						20.02	1.94×10^{-5}
40	24.0	252.96	0.03	0.224	0.45						20.02	1.94×10^{-5}
	24.5	252.99	0.03	0.224	0.45						20.02	1.94×10^{-5}
	25.0	253.02	0.03	0.224	0.45						20.02	1.94×10^{-5}
	25.5	253.06	0.04	0.30	0.60						26.71	2.58×10^{-5}
	26.0	253.09	0.03	0.224	0.45						20.02	1.94×10^{-5}
	26.5	253.12	0.03	0.224	0.45						20.02	1.94×10^{-5}
	27	253.15	0.03	0.224	0.45		92.4	—	101.1		20.02	1.94×10^{-5}
30	29	3.22	0.07	0.52	1.04		69.3	—	78.0		60.0	5.80×10^{-5}
30	29.5	3.24	0.02	0.15	0.30						17.30	1.67×10^{-5}
	30	3.25	0.01	0.075	0.15						8.65	8.36×10^{-6}
	30.5	3.27	0.02	0.15	0.30						17.30	1.67×10^{-5}
	31	3.29	0.02	0.15	0.30						17.30	1.67×10^{-5}
	31.5	3.31	0.02	0.15	0.30						17.30	1.67×10^{-5}
	32.0	3.33	0.02	0.15	0.30						17.30	1.67×10^{-5}
	32.5	3.35	0.02	0.15	0.30						17.30	1.67×10^{-5}
	33	3.37	0.02	0.15	0.30						17.30	1.67×10^{-5}
	33.5	3.39	0.02	0.15	0.30	8.7	69.3	—	78.0		17.30	1.67×10^{-5}

CP = (1/(2πL))LN(L/r) (78,315.8)
7.48 Gallons = 1Ft³
1psi = 2.31ft head

* H1 is used when the test length is below the water table.
H2 is used when the test length is above the water table.

Remarks:

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size			
	Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,800	8,200
8	6,500	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,500
20	3,200	3,100	3,000	2,800

PACKER TEST REPORT

Tetra Tech NUS, Inc.

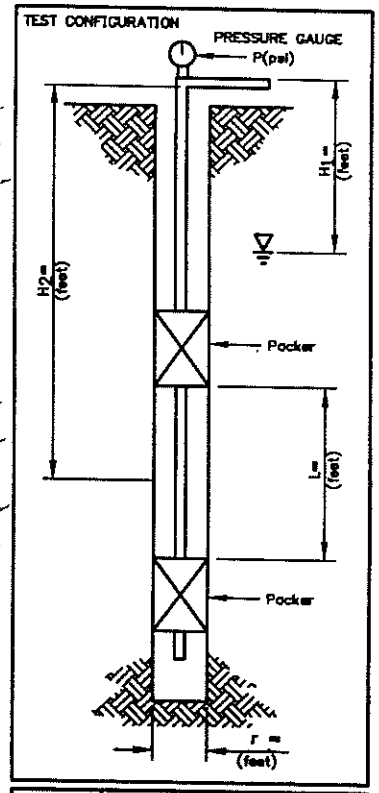
PROJECT: Bldg. 32 Gold Island
BORING NO.: 305B CASING DEPTH:
TEST INTERVAL: 72-82
6/24/05

PROJECT NO.: 0065 TEST NO.: 2
CONTRACTOR: Dragin
BY: D. Whalen CHECKED:

PAGE 4 OF 4
STATIC WATER LEVEL: 3.4
PACKER PRESSURE:

Flow Test					Calculated Results							
Pressure, p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft^3)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H_1 * (ft)	Hp(Ft)= 2.31(psi)	H_2 * (ft)	H = Hp + (H_1 or H_2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67x10^{-7} K(ft/yr)
30	34	3.41	0.02	0.15	0.30	8.7	69.3	—	78.0	4500	17.30	1.67×10^{-5}
30	34.5	3.43	0.02	0.15	0.30		69.3	—	78.0		17.30	1.67×10^{-5}
20	35	3.44	0.01	0.075	0.15		46.2		54.9		12.30	1.19×10^{-5}
20	35.5	3.44	0	0	—						—	—
	36	3.45	0.01	0.075	0.15						12.30	1.19×10^{-5}
	36.5	3.45	0	0	—						—	—
	37.0	3.46	0.01	0.075	0.15						12.30	1.19×10^{-5}
	37.5	3.47	0.01	0.075	0.15						12.30	1.19×10^{-5}
	38.0	3.49	0.02	0.15	0.30						24.59	2.38×10^{-5}
	38.5	3.51	0.02	0.15	0.30						24.59	2.38×10^{-5}
	39.0	3.52	0.01	0.075	0.15						12.30	1.19×10^{-5}
	39.5	3.54	0.02	0.15	0.30						24.59	2.38×10^{-5}
	40.0	3.55	0.01	0.075	0.15						12.30	1.19×10^{-5}
	40.5	3.56	0.01	0.075	0.15						12.30	1.19×10^{-5}
	41.0	3.58	0.02	0.15	0.30	8.7	46.2	—	54.9		24.59	2.38×10^{-5}

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,800	8,200
5	6,800	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,500
20	3,200	3,100	3,000	2,800

CP = (1/(2πL))LN(L/r) (78,315.5)
7.48 Gallons = 1Ft^3
1psi = 2.31 ft head

* H_1 is used when the test length is below the water table.
H_2 is used when the test length is above the water table.

Remarks:

Tetra Tech NUS, Inc.

PACKER TEST REPORT

PROJECT: Gould Island
BORING NO.: 305B CASING DEPTH: 64'
TEST INTERVAL: 84-95'

PROJECT NO.: C065 TEST NO.: 3
CONTRACTOR: Dragin
BY: D. Whalen CHECKED:

PAGE 1 OF 4
STATIC WATER LEVEL: 34
PACKER PRESSURE:

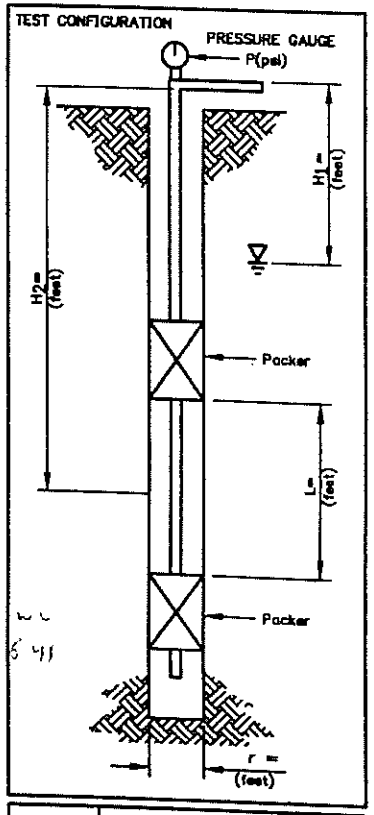
Flow Test					Calculated Results							
Pressure p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft^3)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H_1 * (ft)	Hp(Ft)= 2.31(psi)	H_2 * (ft)	H = Hp + (H_1 or H_2)	Cp	K(ft/yr) = Cp•Q/H	K(cm/sec)= 9.67x10^{-7} K(ft/yr)
10	0	253.84	0	0	0	8.7	—	—	—	4320	—	—
10	0.5	253.84	0	—	—		—		—		—	—
20	1	253.91	0	—	—		—		—		—	—
21	1.5	253.91	0.07	0.52	1.04		49.51		57.21		78.53	7.59×10^{-5}
20	2.0	253.97	0.06	0.45	0.90		46.2		54.90		70.82	6.85×10^{-5}
20	2.5	254.02	0.05	0.37	0.74		46.2		54.90		58.23	5.63×10^{-5}
21	3.0	254.07	0.05	0.37	0.74		48.51		57.21		55.88	5.4×10^{-5}
21	3.5	254.12	0.05	0.37	0.74		48.51		57.21		55.88	5.4×10^{-5}
20	4.0	254.17	0.05	0.37	0.74		46.2		54.90		58.23	5.63×10^{-5}
20	4.5	254.20	0.03	0.224	0.48		46.2		54.90		37.77	3.65×10^{-5}
20	5.0	254.26	0.06	0.45	0.90		46.2		54.90		70.82	6.82×10^{-5}
20	5.5	254.30	0.04	0.299	0.60		46.2		54.90		47.21	4.57×10^{-5}
20	6.0	254.34	0.04	0.299	0.60		46.2		54.90		47.21	4.57×10^{-5}
20	6.5	254.39	0.05	0.37	0.74		46.2		54.90		58.23	5.63×10^{-5}
20	7.0	254.44	0.05	0.37	0.74		46.2		54.90		58.23	5.63×10^{-5}
20	7.5	254.48	0.04	0.299	0.60		46.2		54.90		47.21	4.57×10^{-5}
20	8.0	254.52	0.04	0.299	0.60		46.2		54.90		47.21	4.57×10^{-5}
20	8.5	254.66	0.08	0.60	1.20		46.2		54.90		94.43	9.13×10^{-5}
30	9.0	254.66	0.06	0.45	0.90		69.3		78.0		49.85	4.82×10^{-5}
30	9.5	254.72	0.06	0.45	0.90		69.3		78.0		49.85	4.82×10^{-5}
30	10	254.78	0.06	0.45	0.90	8.7	69.3		78.0		49.85	4.82×10^{-5}

CP = (1/(2πL))LN(L/r) (70,315.5)
7.48 Gallons = 1ft^3
1psi = 2.31 ft head

* H_1 is used when the test length is below the water table.
H_2 is used when the test length is above the water table.

Remarks:

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,500	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,800	8,200
8	8,000	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,500
20	3,200	3,100	3,000	2,800

Tetra Tech NUS, Inc.

PACKER TEST REPORT

PROJECT: Bldg 32 Gould Island
BORING NO.: 305B CASING DEPTH: 64'
TEST INTERVAL: 84-95'
6/24

PROJECT NO.: _____ TEST NO.: 3
CONTRACTOR: _____
BY: _____ CHECKED: _____

PAGE 2 OF 4
STATIC WATER LEVEL: 3.1
PACKER PRESSURE: _____

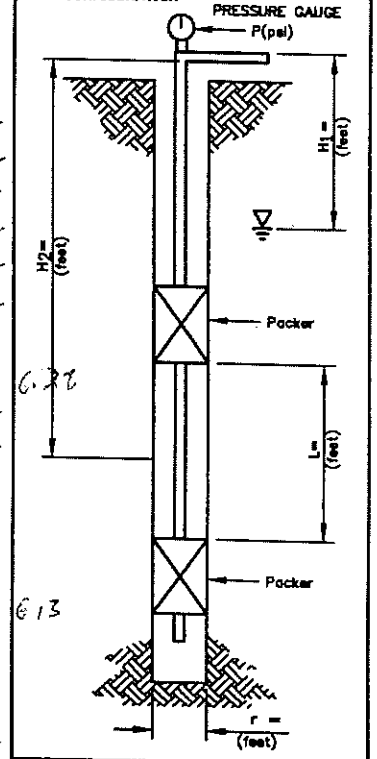
Flow Test					Calculated Results							
Pressure, p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft³)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H1 * (ft)	Hp(Ft)= 2.31(psi)	H2 * (ft)	H = Hp + (H1 or H2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.87x10⁻⁷ K(ft/yr)
30	10.5	254.84	0.06	0.45	0.9	8.7	69.3	—	78.0	4320	49.85	4.32×10^{-5}
30	11	254.89	0.05	0.37	0.74						40.98	3.96×10^{-5}
30	11.5	254.94	0.05	0.37	0.74						40.98	3.96×10^{-5}
30	12	255.00	0.06	0.45	0.9						49.85	4.32×10^{-5}
30	12.5	255.05	0.05	0.37	0.74						40.98	3.96×10^{-5}
30	13	255.12	0.07	0.52	1.04						57.6	5.57×10^{-5}
30	13.5	255.17	0.05	0.37	0.74						40.98	3.96×10^{-5}
30	14.0	255.22	0.05	0.37	0.74						40.98	3.96×10^{-5}
30	14.5	255.27	0.05	0.37	0.74						40.98	3.96×10^{-5}
30	15.0	255.32	0.05	0.37	0.74						40.98	3.96×10^{-5}
30	15.5	255.38	0.06	0.45	0.9						49.85	4.32×10^{-5}
30	16	255.43	0.05	0.37	0.74						40.98	3.96×10^{-5}
30	16.5	255.48	0.05	0.37	0.74		69.3		78.0		40.98	3.96×10^{-5}
40	17.0	255.56	0.08	0.60	1.2		92.4		101.1		51.28	4.96×10^{-5}
40	17.5	255.63	0.07	0.52	1.04						44.44	4.3×10^{-5}
40	18.0	255.69	0.06	0.45	0.9						38.46	3.72×10^{-5}
40	18.5	255.76	0.07	0.52	1.04						44.44	4.3×10^{-5}
40	19	255.82	0.06	0.45	0.9						38.46	3.72×10^{-5}
40	19.5	255.88	0.06	0.45	0.9						38.46	3.72×10^{-5}
40	20	255.95	0.07	0.52	1.04						44.44	4.3×10^{-5}
40	20.5	256.01	0.06	0.45	0.9	8.7	92.4	—	101.1		38.46	3.72×10^{-5}

CP = (1/(2πL))LN(L/r) (70,315.5)
7.48 Gallons = 1Ft³
1psi = 2.31ft head

* H1 is used when the test length is below the water table.
H2 is used when the test length is above the water table.

Remarks: _____

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,800	8,200
8	6,800	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,600
20	3,200	3,100	3,000	2,800

Tetra Tech NUS, Inc.

PACKER TEST REPORT

PROJECT: Gould Island
BORING NO.: 305B CASING DEPTH: 64'
TEST INTERVAL: 84-95'
6/24

PROJECT NO.: 0065 TEST NO.: 3
CONTRACTOR: Drugin
BY: D. Whalen CHECKED:

PAGE 3 OF 4
STATIC WATER LEVEL: 34
PACKER PRESSURE:

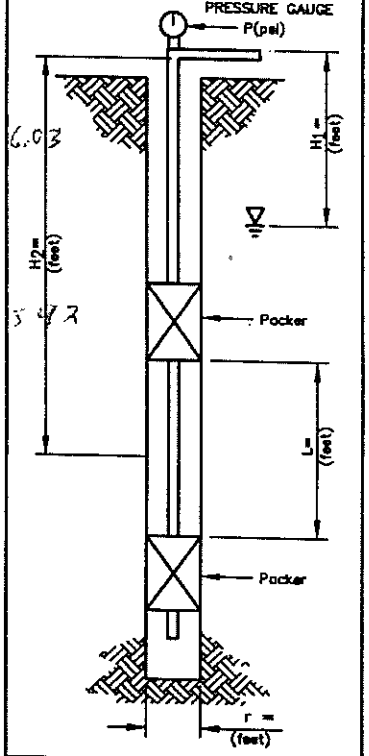
Flow Test					Calculated Results							
Pressure, p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft^3)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H_1 * (ft)	Hp(Ft)= 2.31(psi)	H_2 * (ft)	H = Hp + (H_1 or H_2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67x10^-7 K(ft/yr)
40	21	256.09	0.03	0.60	1.2	8.7	92.4	—	101.1	4320	51.28	4.96×10^{-5}
40	21.5	256.15	0.06	0.45	0.9						38.46	3.72×10^{-5}
40	22	256.20	0.05	0.37	0.74						31.62	3.06×10^{-5}
40	22.5	256.26	0.06	0.45	0.9						38.46	3.72×10^{-5}
40	23.0	256.31	0.05	0.37	0.74						31.62	3.06×10^{-5}
40	23.5	256.37	0.06	0.45	0.9						38.46	3.72×10^{-5}
40	24.0	256.43	0.06	0.45	0.9		92.4		101.1		38.46	3.72×10^{-5}
30	24.5	256.48	0.05	0.37	0.74		69.3		78.0		40.98	3.96×10^{-5}
30	25	56.52	0.04	0.30	0.6						33.23	3.2×10^{-5}
30	25.5	56.57	0.05	0.37	0.74						40.98	3.96×10^{-5}
30	26	56.58	0.01	0.075	0.15						8.31	8.04×10^{-6}
30	26.5	56.62	0.04	0.30	0.6						33.23	3.2×10^{-5}
30	27	56.67	0.05	0.37	0.74						40.98	3.96×10^{-5}
30	27.5	56.71	0.04	0.30	0.6						33.23	3.2×10^{-5}
30	28	56.75	0.04	0.30	0.6						33.23	3.2×10^{-5}
30	28.5	56.80	0.05	0.37	0.74						40.98	3.96×10^{-5}
30	29.0	56.85	0.05	0.37	0.74						40.98	3.96×10^{-5}
30	29.5	56.89	0.04	0.30	0.6						33.23	3.2×10^{-5}
30	30.0	56.94	0.05	0.37	0.74						40.98	3.96×10^{-5}
30	30.5	56.99	0.05	0.37	0.74		69.3		78.0		40.98	3.96×10^{-5}
20	31	57.02	0.03	0.30	0.6	8.7	46.2		54.9		47.21	4.57×10^{-5}

CP = (1/(2πL))LN(L/r) (70,315.5)
7.48 Gallons = 1Ft^3
1psi = 2.31ft head

* H_1 is used when the test length is below the water table.
H_2 is used when the test length is above the water table.

Remarks:

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,800	8,200
8	6,800	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,600
20	3,200	3,100	3,000	2,800

Tetra Tech NUS, Inc.

PACKER TEST REPORT

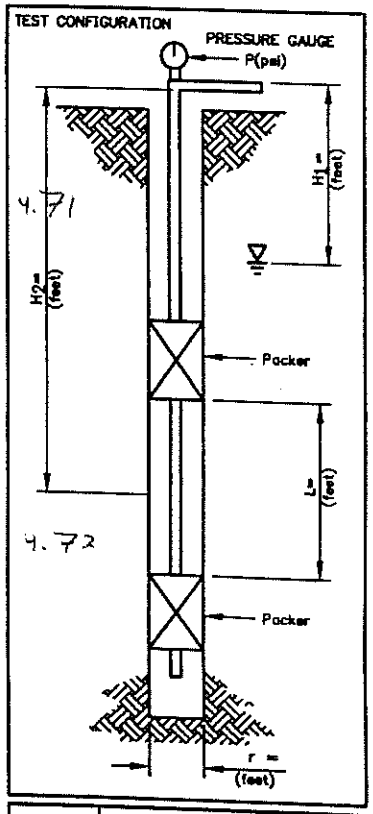
PROJECT:
BORING NO.: 305B CASING DEPTH: 64
TEST INTERVAL: 84 - 95
6/24/05

PROJECT NO.: 0065 TEST NO.: 3
CONTRACTOR: Duggin
BY: CHECKED:

PAGE 4 OF 4
STATIC WATER LEVEL: 34
PACKER PRESSURE:

Flow Test					Calculated Results							
Pressure p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft³)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H1 * (ft)	Hp(Ft)= 2.31(psi)	H2 * (ft)	H = Hp + (H1 or H2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67x10⁻⁷ K(ft/yr)
20	31.5	257.05	0.03	0.224	0.45	8.7	46.2	—	54.9	4320	35.41	3.42x10⁻⁵
20	32	257.08	0.03	0.224	0.45						35.41	3.42x10⁻⁵
20	32.5	257.11	0.03	0.224	0.45						35.41	3.42x10⁻⁵
20	33	257.14	0.03	0.224	0.45						35.41	3.42x10⁻⁵
20	33.5	257.17	0.03	0.224	0.45						35.41	3.42x10⁻⁵
20	34	257.19	0.02	0.15	0.30						23.61	2.28x10⁻⁵
20	34.5	257.22	0.03	0.224	0.45						35.41	3.42x10⁻⁵
20	35	257.24	0.02	0.15	0.30						23.61	2.28x10⁻⁵
20	35.5	257.27	0.03	0.224	0.45						35.41	3.42x10⁻⁵
20	36	257.29	0.02	0.15	0.30						23.61	2.28x10⁻⁵
20	36.5	257.33	0.04	0.30	0.60						47.21	4.57x10⁻⁵
20	37	257.37	0.04	0.30	0.60						47.21	4.57x10⁻⁵
20	37.5	257.40	0.03	0.224	0.45						35.41	3.42x10⁻⁵
20	38	257.43	0.03	0.224	0.45						35.41	3.42x10⁻⁵
20	38.5	257.46	0.03	0.224	0.45						35.41	3.42x10⁻⁵
20	39	257.49	0.03	0.224	0.45	8.7	46.2	—	54.9	4320	35.41	3.42x10⁻⁵

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,800	8,200
8	6,800	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,600
20	3,200	3,100	3,000	2,800

CP = (1/(2πL))LN(L/r) (78,315.5)
7.48 Gallons = 1Ft³
1psi = 2.31 ft head

* H1 is used when the test length is below the water table.
H2 is used when the test length is above the water table.

Remarks:

Tetra Tech NUS, Inc.

PACKER TEST REPORT

PROJECT: Bldg 32, Gould Island
BORING NO.: 304B CASING DEPTH: 90'
TEST INTERVAL: 103'-113'
6/13/05

PROJECT NO.: 0065 TEST NO.: 1
CONTRACTOR: Dragin
BY: D. Whalen CHECKED:

PAGE 1 OF 2
STATIC WATER LEVEL: 6.95
PACKER PRESSURE: 175

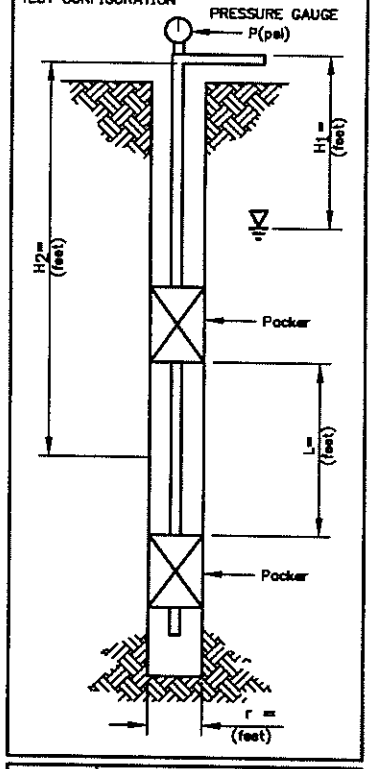
Flow Test					Calculated Results							
Pressure, p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft^3)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H_1 * (ft)	Hp(Ft)= 2.31(psi)	H_2 * (ft)	H = Hp + (H_1 or H_2)	Cp	K(ft/yr) = Cp=Q/H	K(cm/sec)= 9.67x10^{-7} K(ft/yr)
28	0	44.57	—	—	—	12.95	53.13	—	66.08	4500	8 —	
	.25	44.62	.05	.374	0.75			—			51.1	4.9×10^{-5}
	.5	44.64	.02	.150	0.30			—			20.4	2.0×10^{-5}
	1	44.66	.02	.150	0.30			—			20.4	2.0×10^{-5}
	1.5	44.69	.03	.224	0.45			—			30.6	3.0×10^{-5}
	2.0	44.70	.01	.075	0.15			—			10.2	4.9×10^{-5}
	2.5	44.72	.02	.150	0.30			—			20.4	2.0×10^{-5}
	3.0	44.74	.02	.150	0.30			—			20.4	2.0×10^{-5}
	3.5	44.76	.02	.150	0.30			—			20.4	2.0×10^{-5}
	4.0	44.78	.02	.150	0.30			—			20.4	2.0×10^{-5}
	4.5	44.80	.02	.150	0.30			—			20.4	2.0×10^{-5}
	5.0	44.82	.02	.150	0.30			—			20.4	2.0×10^{-5}
	5.5	44.85	.03	.224	0.45			—			30.6	3×10^{-5}
	6.0	44.87	.02	.150	0.30			—			20.4	2.0×10^{-5}
	6.5	44.89	.02	.150	0.30			—			20.4	2.0×10^{-5}
	7.0	44.91	.02	.150	0.30			—			20.4	2.0×10^{-5}
40	7.5	44.95	—	—		12.95	92.4	—	105.4	4500	—	—
	8.0	45.00	.05	.374	.748			—	105.4		32.0	3.1×10^{-5}
	8.5	45.03	.03	.224	0.45			—	105.4		19.2	1.9×10^{-5}
	9.0	45.07	.04	.30	0.60			—	105.4		25.6	2.5×10^{-5}
	10.0	45.18	.06	.449	0.898			—	105.4		38.6	3.7×10^{-5}

CP = (1/(2πL))LN(L/r) (78,315.5)
7.48 Gallons = 1Ft^3
1psi = 2.31ft head

* H_1 is used when the test length is below the water table.
H_2 is used when the test length is above the water table.

Remarks: Pressure gauge is 6' above ground surface

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size			
	Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,800	8,200
8	6,800	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,600
20	3,200	3,100	3,000	2,800

PACKER TEST REPORT

Tetra Tech NUS, Inc.

PROJECT: Bldg 32 Gould Island
BORING NO.: 3D4B CASING DEPTH: 90'
TEST INTERVAL: 103'-113'
6/13/05

PROJECT NO.: 0065 TEST NO.: 1
CONTRACTOR: Dragin
BY: D. Whalen CHECKED:

PAGE 2 OF 2
STATIC WATER LEVEL: 7'
PACKER PRESSURE: 175 psi

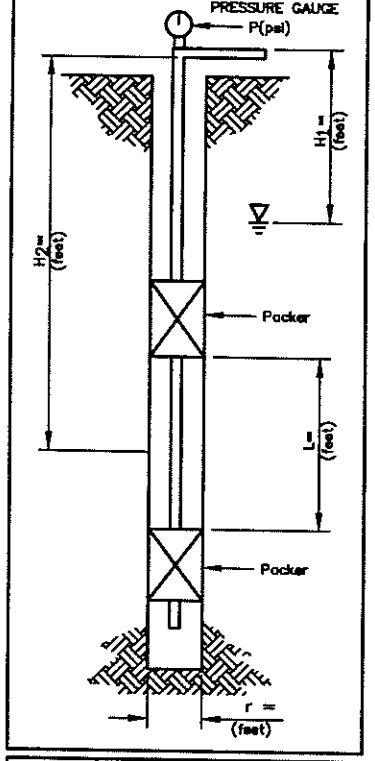
Flow Test					Calculated Results							
Pressure, p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft^3)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H_1 * (ft)	Hp(Ft)= 2.31(psi)	H_2 * (ft)	H = Hp + (H_1 or H_2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67x10-7 K(ft/yr)
40	10.5	245.16	.03	.224	.448	13	92.4	—	105.4	4500	19.1	1.84×10^{-5}
	11.0	245.19	.03	.224	.448			—			19.1	1.84×10^{-5}
	11.5	245.22	.03	.224	.448			—			19.1	1.84×10^{-5}
	12.0	245.26	.04	.299	.6			—			25.6	2.47×10^{-5}
	12.5	245.29	.03	.224	.448			—			19.1	1.84×10^{-5}
	13.0	245.32	.03	.224	.448			—			19.1	1.84×10^{-5}
	13.5	245.35	.03	.224	.448			—			19.1	1.84×10^{-5}
	14.0	245.38	.03	.224	.448			—			19.1	1.84×10^{-5}
60	14.5	245.43	~~.05~~	—			138.6	—	151.6	4500	—	—
	15.0	245.48	.05	.374	.748			—			22.2	2.15×10^{-5}
	15.5	245.54	.06	.449	.898			—			26.6	2.57×10^{-5}
	16.0	245.60	.06	.449	.898			—			26.6	2.57×10^{-5}
	16.5	245.66	.06	.449	.898			—			26.6	2.57×10^{-5}
	17.0	245.71	.05	.374	.748			—			22.2	2.15×10^{-5}
	17.5	245.76	.05	.374	.748			—			22.2	2.15×10^{-5}
	18.0	245.81	.05	.374	.748			—			22.2	2.15×10^{-5}
	18.5	245.87	.06	.374	.748			—			22.2	2.15×10^{-5}
	19.0	245.91	.04	.299	.6			—			17.8	1.72×10^{-5}
	19.5	245.97	.06	.449	.898			—			26.6	2.57×10^{-5}
	20.0	246.03	.06	.449	.898			—			26.6	2.57×10^{-5}
	20.5	246.08	.05	.374	.748			—			22.2	2.15×10^{-5}
	21.0	6.13	.05	.374	.748							

CP = $(1/(2\pi L))LN(L/r)$ (70,315.5)
7.48 Gallons = $1Ft^3$
1psi = 2.31ft head

* H_1 is used when the test length is below the water table.
H_2 is used when the test length is above the water table.

Remarks:

TEST CONFIGURATION



Length of Test Section in feet, L	Cp — Drilling Bit Size: Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,800	8,200
8	6,800	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,500
20	3,200	3,100	3,000	2,800

PACKER TEST REPORT

Tetra Tech NUS, Inc.

PROJECT: Bldg 32 Gould Island
BORING NO.: 304B CASING DEPTH: 90'
TEST INTERVAL: 113'-120

PROJECT NO.: 0065 TEST NO.:
CONTRACTOR: Dragin
BY: CHECKED:

PAGE 1 OF 3
STATIC WATER LEVEL: 6.95
PACKER PRESSURE: 75 psi

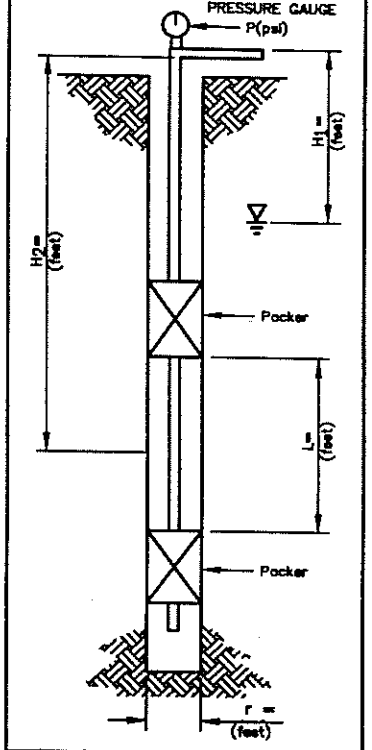
Flow Test					Calculated Results							
Pressure, p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft³)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H1 * (ft)	Hp(Ft)= 2.31(psi)	H2 * (ft)	H = Hp + (H1 or H2)	Cp	K(ft/yr) = Cp=Q/H	K(cm/sec)= 9.67x10⁻⁷ K(ft/yr)
5	0	247.26	—	—						6066		
	:30	247.26	0	0	0							
	1:00	247.26	0	0	0							
	1:30	247.26	0	0	0							
	2:00	247.26	0	0	0							
	2:30	247.26	0	0	0							
	3:00	247.26	0	0	0							
	3:30	247.26	0	0	0							
	4:00	247.26	0	0	0							
	4:30	247.26	0	0	0							
	5:00	247.26	0	0	0							
5	5:30	5 psi		holding test								
	6:00	5 psi										
	6:30	4.8										
	7:00	4.8										
	7:30	4.8										
	8:00	4.8										
	8:30	4.8										
	9:00	4.8										
	9:30	4.7										
	10:00	4.6										

CP = (1/(2πL))LN(L/r) (70,315.5)
7.48 Gallons = 1Ft³
1psi = 2.31 ft head

* H1 is used when the test length is below the water table.
H2 is used when the test length is above the water table.

Remarks:

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,500	8,200
8	6,800	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,600
20	3,200	3,100	3,000	2,800

PACKER TEST REPORT

Tetra Tech NUS, Inc.

PROJECT: Bldg 32 Gould Island
BORING NO.: 304B CASING DEPTH:
TEST INTERVAL: 113'-120'

PROJECT NO.: 0065 TEST NO.:
CONTRACTOR: Dugan
BY: D. Whalen CHECKED:

PAGE 2 OF 3
STATIC WATER LEVEL: 6.95
PACKER PRESSURE: 175 psi

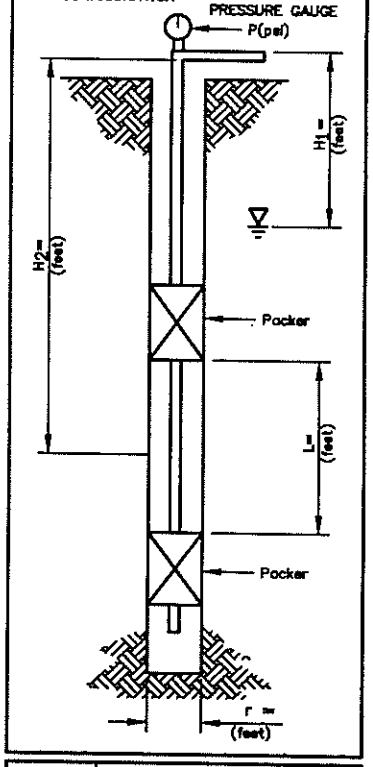
Flow Test					Calculated Results							
Pressure, p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft^3)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H_1 * (ft)	Hp(Ft)= 2.31(psi)	H_2 * (ft)	H = Hp + (H_1 or H_2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67x10-7 K(ft/yr)
10	0	247.26	—	—	—					6066		
	:30	247.26	0	0	0							
	1:00	247.26	0	0	0							
	1:30	247.26	0	0	0							
	2:00	247.26	0	0	0							
	2:30	247.26	0	0	0							
	3:00	247.26	0	0	0							
	3:30	247.26	0	0	0							
	4:00	247.26	0	0	0							
	4:30	247.26	0	0	0							
	5:00	247.26	0	0	0							
	5:30	10 psi		HOLDING TEST								
	6:00	7.5										
	6:30	8										
	7:00	7.5										
	7:30	7										
	8:00	6.5										
	8:30	6.0										
	9:00	6.0										
	9:30	~~6.0~~ 5.5										
	10:00	5.0										

CP = (1/(2πL))LN(L/r) (70,315.5)
7.48 Gallons = 1ft^3
1psi = 2.31ft head

* H_1 is used when the test length is below the water table.
H_2 is used when the test length is above the water table.

Remarks:

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,800	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,800	8,200
8	6,800	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,600
20	3,200	3,100	3,000	2,800

Tetra Tech NUS, Inc.

PACKER TEST REPORT

PROJECT: Bldg 32 Gould Island
BORING NO.: 3045 CASING DEPTH: 90
TEST INTERVAL: 113-120

PROJECT NO.: 0065 TEST NO.:
CONTRACTOR: Dragin
BY: D. Whalen CHECKED:

PAGE 3 OF 3
STATIC WATER LEVEL: 6.95
PACKER PRESSURE: 175 psi

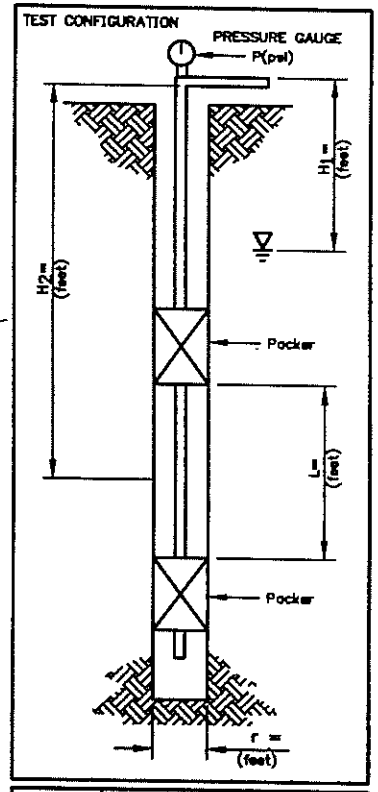
Flow Test					Calculated Results							
Pressure, p (psi)	Elapsed Time (min)	Flow Reading	ΔFlow ΔQ (ft^3)	ΔFlow ΔQ (gal)	Flow Rate Q (gal/min)	H_1 * (ft)	Hp(Ft)= 2.31(psi)	H_2 * (ft)	H = Hp + (H_1 or H_2)	Cp	K(ft/yr) = Cp*Q/H	K(cm/sec)= 9.67x10^{-7} K(ft/yr)
20	0	247.26	—	—								
	15	247.37	.04							6066		
	30	247.40	.03	0.224	0.45	12.95	46.2	—	59.15	6066	46.15	4.46x10^{-5}
	1:00	247.46	.06	0.45	0.90						92.30	8.93x10^{-5}
	1:30	247.51	.05	0.374	0.75						76.91	7.44x10^{-5}
	2:00	247.51	0	—	—						—	—
	2:30	247.52	.01	0.075	0.15	12.95	46.2	—	59.15	6066	15.38	1.49x10^{-5}
	3:00	247.52	0	0	0							
	3:30	247.52	0	0	0							
	4:00	247.52	0	0	0							
	4:30	247.52	0	0	0							
	5:00	247.52	0	0	0							
	5:30	20 psi		Holding	Test							
	6:00	17 psi										
	6:30	15 psi										
	7:00	13 psi										
	7:30	12 psi										
	8:00	10.5 psi										
	8:30	10										
	9:00	9										
	9:30	8										
	10	7.5 psi										

CP = (1/(2πL))LN(L/r) (78,315.5)
7.48 Gallons = 1Ft^3
1psi = 2.31ft head

* H_1 is used when the test length is below the water table.
H_2 is used when the test length is above the water table.

Remarks:

TEST CONFIGURATION



Length of Test Section in feet, L	Cp Drilling Bit Size Ex (1.5")	Ax (1.875")	Bx (2.37")	Nx (3")
1	31,000	28,500	25,000	23,300
2	19,400	18,100	16,800	15,500
5	9,800	9,300	8,800	8,200
8	6,800	6,500	6,100	5,800
10	5,700	5,400	5,200	4,900
15	4,100	3,900	3,700	3,500
20	3,200	3,100	3,000	2,800

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-MW3005

Tetra Tech NUS Job No./PMS 0065
QC: DUP-GW-01 (If applicable)

Sample Method: Low flow
Depth Sampled: 13 Feet TPVC Screened Interval Depth 4-14 feet TPVC
Sample Date & Time: 7/20/05 1100 hours 1135/Dup
Sampler(s): Johanna Traut
Data Recorded By: Johanna Traut Signature: Johanna Traut
Notes:
MP: TPVC
pre. pump

H&S Survey Meter 0.0 PPM Field Instrument Group A/B/C/D
Pre-pump insertion WL 9.1 ft TPVC Post - pump insertion WL ____ ft

Analysis	Bottle Lot#	Analysis	Bottle Lot #	Analysis	Bottle Lot #
SVOC/PAH		VOC		Metals	
Pest/PCB		GRO		CN	
TPH		TOC		Sulfides	
				Alkalinity	

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
0836	9.87		240		15.99	1662	6.32	-0.8	0.71	11	
0848	9.87		300		15.78	1596	6.27	29.9	0.56	14	
0853	9.95		↓		15.68	1607	6.29	32	0.47	14	
0858	10		↓		15.84	1650	6.33	27.5	0.38	11	
0903	10		↓		15.84	1672	6.34	23.9	0.35	7.1	
0910	10.1		↓		15.46	1745	6.37	22	0.31	6.6	
0915	10.25		↓		15.48	1771	6.38	23.2	0.28	8.0	
0920	10.2		240		15.72	1777	6.40	28.2	0.28	6.3	
0925	10.18		↓		15.63	1786	6.40	17.2	0.28	7.7	
0930	10.2		↓		15.56	1795	6.40	18.6	0.29	9	
0935	10.18		↓		15.89	1809	6.40	19.4	0.30	9.7	
0940	10.18		↓		15.81	1820	6.40	20.9	0.32	12	
0945	10.25		280		15.49	1837	6.41	22.7	0.36	9.1	
0950	10.45		↓		15.53	1859	6.40	32.6	0.45	6.4	
0955	10.65		↓		15.76	1818	6.40	24.4	0.40	15	
1005	10.85		280		16.72	1817	6.37	24.3	0.43	20	

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siamens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-MW3008

Tetra Tech NUS Job No./PMS 0063
QC: GW-DUP-01 (If applicable)

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
1015	10.3		220		16.53	1819	6.37	30.8	0.96	18	
1025	10.2				16.94	1825	6.39	39.5	1.48	9.6	
1030	10.2				17.27	1836	6.34	39.8	1.55	6.2	
1035	10.1				17.35	1842	6.34	43.1	1.63	4.5	
1038	10.1				17.42	1839	6.34	42.1	1.66	4.7	
1042	10.1			≈ 7 gals	17.40	1835	6.32	43.6	1.68	4.6	
			parameters stable, collect sample								

1. Pump dial setting (for exemple: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: gould island
Sample ID: G32 - MW300B

Tetra Tech NUS Job No./PMS 0065
QC: NA (If applicable)

Sample Method: low flow / bladder pump
Depth Sampled: ~63 Feet Screened Interval Depth 53-83 feet
Sample Date & Time: 7/~~19~~ 25/5 1060 hours NA /Dup
Sampler(s): C. Sanchez
Data Recorded By: C. Sanchez Signature: C. SLA
Notes: MP = TPVC

H&S Survey Meter 0.0 PPM
Pre-pump insertion WL _____ ft
Field Instrument Group A/B/C/D
Post - pump insertion WL _____ ft

Analysis	Bottle Lot#	Analysis	Bottle Lot #	Analysis	Bottle Lot #
SVOC/PAH		GRO		Metals	
Pest/PCB		VOC		CN	
TPH		TOC		Alkalinity	
				Sulfides	

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
1015	6.29		200		15.4	500	6.3	134.6	2.9	130	
1020	7.04		350		15.4	498	6.3	71	2.6	101	
1025	7.68		15 ~~200~~ 350		15.4	496	6.3	13.3	1.1	90	
1030	7.71		350		15.4	495	6.3	1.0	0.7	81	
1035	7.73		350		15.3	494	6.3	-13	0.5	73	
1040	7.73		350		15.3	493	6.3	-21	0.41	70	
1050	7.97		350		15.5	490	6.2	-24	0.40	54	
1055	7.91		350		15.7	490	6.2	-26	0.40	40	
1100	7.91		350		15.7	490	6.3	-26	0.40	45	
1105	7.96		350		15.5	487	6.3	-30	0.39	29	
	Δ nitrogen tanks										
1115	6.30		175		17.3	509	6.3	-26	0.4	23	
1120	6.34		175		17.5	499	6.3	-28	0.4	19	
1125	6.38		175		17.6	493	6.3	-28	0.4	20	
1140	7.45		175		17.7	490	6.3	-33	0.4	23	
1200	7.51		175		17.7	490	6.3	-33	0.4	19	

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: Site 17, Building 432, Gould Island
Sample ID: MW300B
Date: 6-25

Tetra Tech NUS Job No./PMS 0065
QC: NA (If applicable)

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
0905	7.10		250		15.2	955	6.5	-172	0.3	13	
0920	7.20		250		15.1	953	6.5	-174	0.3	7.4	
0925	7.05		100		16.9	959	6.5	-172	0.3	3.2	
0930	6.85		100		17.1	960	6.5	-171	0.3	2.3	
0935	6.55		100		17.4	965	6.5	-172	0.3	1.7	
0940	6.35		100	≈ 6 gals	17.5	962	6.5	-172	0.3	1.0	
0945			parameters stable / start sampling								

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: Site 77, Bldg 32, Gould Island
Sample ID: MW-301S

Tetra Tech NUS Job No./PMS 0065
QC: NA (If applicable)

Sample Method: Peri Pump 'Low Flow
Depth Sampled: 28 Feet Screened Interval Depth 18.5 - 28.5 feet
Sample Date & Time: 7/21/05 1104 hours NA /Dup
Sampler(s): Dave Hickey
Data Recorded By: Johanna Traut Signature: Johanna Traut
Notes:
MP = TOC

H&S Survey Meter 0.0 PPM
Pre-pump insertion WL 19.4 ft
Field Instrument Group A/B/C/D
Post - pump insertion WL 19.4 ft

Analysis	Bottle Lot#	Analysis	Bottle Lot #	Analysis	Bottle Lot #
SVOC/PAH		VOC		Metals	
Pest/PCB		GRO		CN	
TPH		TOC		Sulfides	
				Alkalinity	

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
0922	20.22	NA	220	0	15.15	344	6.14	63	7.79	45	
0932	20.47	NA	220	2.2	14.20	330	6.25	62.6	7.60	45	
0942	20.63	NA	220	4.4	14.28	328	6.28	66.2	7.62	35	
0952	20.52	NA	200	6.4	14.51	334	6.31	84.1	7.33	22	
1002	20.54	NA	200	8.4	14.27	338	6.27	83.5	7.35	16	
1012	20.55	NA	200	10.4	14.36	335	6.26	76.8	7.28	12	
1022	20.69	NA	200	12.4	13.95	337	6.33	80.5	7.42	10	
1032	20.68	NA	200	14.4	14.47	338	6.28	59.0	7.27	8.9	
1042	20.69	NA	200	16.4	14.48	335	6.29	59.2	7.11	5.9	
1052	20.69	NA	200	18.4	14.50	339	6.29	54.7	7.11	4.6	
1057	20.69	NA	200	19.4	14.39	338	6.28	56.7	7.15	4.6	
1102	20.70	NA	200	20.4	14.52	339	6.31	52.9	7.21	4.0	
1104	parameters stable / collect sample										

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: Site 17, Building 32, Gould Island
Sample ID: MW-301B

Tetra Tech NUS Job No./PMS 0065
QC: NA (If applicable)

Sample Method: Portable Bladder Pump / Low flow
Depth Sampled: 52 Feet Screened Interval Depth 37-67 feet
Sample Date & Time: 7/21/05 1450 hours NA /Dup
Sampler(s): Dave Hickey
Data Recorded By: Joanna Traut Signature: Johanna Traut
Notes:
MP = TPVC

H&S Survey Meter 0.0 PPM Field Instrument Group A/B/C/D
Pre-pump insertion WL 22.3 ft TPVC Post - pump insertion WL ____ ft

Analysis	Bottle Lot#	Analysis	Bottle Lot #	Analysis	Bottle Lot #
SVOC/PAH		VOC		Metals	
Pest/PCB		GRO		CN	
TPH		DOC		Sulfides	
				Alkalinity	

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
0920	24.45	4 cycles/min	210 ml/min		14.09	250	6.35	-368.9	1.79	298	
0930	25.25	30 PSI			13.59	251	6.26	-401.6	1.12	223	
0940	26.3				13.56	252	6.27	-406.8	0.93	222	
0955	26.6		175		13.74	256	6.28	-405.0	0.76	191	
1005	26.65				13.56	255	6.27	-403	0.69	127	
1015	27				13.48	255	6.26	-405.1	0.64	104.6	
1025	26.96				13.70	255	6.23	-400.7	0.59	78.5	
1035	27.02				13.71	254	6.22	-395.3	0.55	61.1	
1045	27.1				13.50	252	6.19	-392.1	0.51	67	
055	27.25				13.50	253	6.17	-394.2	0.97	60.8	
1105	26.5		125		15.36	254	6.20	-393.9	0.95	41.8	
1115	26.52				13.97	253	6.12	-396.1	0.44	45.5	
1125	26.53				13.93	252	6.09	-399.4	0.41	37.7	
1135	26.52				14.07	250	6.07	-403.4	0.39	26.6	
1145	26.53				13.94	249	6.02	-410.7	0.38	19.4	
1155	26.56				13.80	249	5.99	-410.9	0.38	18.2	

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: ~~[illegible]~~ Gould Island
Sample ID: MW 301B

Tetra Tech NUS Job No./PMS 0065
QC: NA (If applicable)

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
15	26.74				13.71	247	5.96	-415.1	0.37	16.8	
1310	24.42		160		14.59	245	5.85	-392.7	0.40	11.9	
1320	24.90		‖		14.09	245	5.80	-401.6	0.35	11.6	
1330	25.40		‖		14.01	245	5.80	-406.8	0.33	11.4	
1350	26.07		‖		13.81	245	5.82	-406.8	0.33	9.74	
1410	26.60		‖		13.71	243	5.77	-406.9	0.30	7.92	
1430	26.08		140		15.83	243	5.77	-413	0.32	5.93	
1445	25.24			≈5 gals	16.08	243	5.78	-405.7	0.32	4.95	

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: Gould Island Building 32 (CTO 35)
Sample ID: G32-MW302S

Tetra Tech NUS Job No./PMS 00085
QC: Duplicate GW-DUP-02 (If applicable)

Sample Method: Peri Pump / Low flow
Depth Sampled: ~23 Feet Screened Interval Depth 14-24 feet
Sample Date & Time: 07 / 26 / 2005 1045 hours 11:00 /Dup
Sampler(s): Daniel Hartigan
Data Recorded By: D. Hartigan Signature: D. Hartigan
Notes:
MP = TOC

H&S Survey Meter 0.0 PPM Field Instrument Group A/B/C/D
Pre-pump insertion WL — ft Post - pump insertion WL 12.10 ft

Analysis	Bottle Lot#	Analysis	Bottle Lot #	Analysis	Bottle Lot #
SVOC/PAH		VOC		Metals	
Pest/PCB		GRO		CN	
TPH		TOC		Sulfides	
				Alkalinity	

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged Gallons ~~liters~~	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
0910	6.4	↓	400		16.48	477	5.91	110.2	6.22	>999	Dark Grey
0915	8.3	↓	175		16.44	471	5.67	131.4	5.85	216	
0920	8.9	↓	175		16.70	468	5.54	145.8	5.25	153	
0930	10.2	↓	175		16.33	464	5.40	157.3	4.55	78.4	
0935	10.65	↓	150		16.88	463	5.42	158.6	4.44	13.6	
0945	11.15		140		16.86	450	5.48	160.1	4.06	7.36	
0955	11.35		140		17.19	440	5.54	137.1	3.77	8.78	
1005	11.50		140		17.33	430	5.60	114.5	3.54	6.37	
1015	11.60		140		17.30	426	5.56	110.4	3.44	4.34	
1020	11.65		140		17.14	425	5.64	109.3	3.25	4.71	
1025	11.70		140		17.14	424	5.64	109.2	3.26	4.53	
1030	11.75		140		17.13	421	5.66	102.0	3.18	4.78	
1035	11.75		140		17.13	421	5.66	101.9	3.19	4.35	
1040	11.75		140	4 Gallons	17.14	419	5.65	98.3	3.17	3.98	
1045											SAMPLE

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: ~~G32-GW3028-01~~ Gould Island CTO 35
Sample ID: G32-GW 3023-01

Tetra Tech NUS Job No./PMS 0005 (CTO 35)
QC: NONE TAKEN (If applicable)

Sample Method: Portable ~~peristaltic pump~~ (CS) 7-25-5 bladder pump / Low flow
Depth Sampled: 70 Feet Screened Interval Depth 54-84 feet
Sample Date & Time: 07/25/05 1435 hours NA /Dup
Sampler(s): Daniel Hartigan
Data Recorded By: D. Hartigan Signature: D. Hartigan
Notes:

MP = TOC

H&S Survey Meter 0.0 PPM Field Instrument Group A/B/C/D
Pre-pump insertion WL ~~54~~ ft Post - pump insertion WL ____ ft

Analysis	Bottle Lot#	Analysis	Bottle Lot #	Analysis	Bottle Lot #
SVOC/PAH		VOC		Metals	
PEST/PCB		GRO		CN	
TPH		TOC		Sulfides	
				Alkalinity	

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
0930	5.9	40 psi	180	0	18.97	242	9.69	291.2	~~58.3~~ 5.33	>999	
0945	6.0		175		17.86	222	9.84	254.1	1.73	720	
0950	6.0		175		18.68	215	9.80	239.4	1.30	550	
1000	6.0		160		17.10	200	9.70	226.0	0.70	401	
1010	6.0		160		18.82	188	9.53	214.0	0.61	370	
1020	6.0		125		19.07	183	9.16	213.3	0.60	262	
1030	5.9		125		19.00	174	8.94	201.9	0.58	239	
1040	5.9		125		16.93	166	8.80	-4.9	0.77	191	
1050	5.9		180		16.50	182	8.21	-77.6	0.31	149	
1100	5.9		175		16.28	174	7.65	-25.1	0.40	109	
1110	5.8		175		16.59	170	7.56	-16.4	0.35	94	Changed NO. Tanks
1120	5.9		200		16.18	168	7.69	-17.8	0.58	89	
1130	5.9		200		15.86	158	7.39	1.9	0.34	92.5	
1140	5.9		200		15.90	149	7.34	4.6	0.56	76.6	
1150	5.9		200		16.14	172	7.25	12.5	0.33	57.1	
1200	5.9		200		15.96	157	7.17	22.6	0.54	46.9	

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: Gould Island building 32
Sample ID: G32 - MW 302B 01

Tetra Tech NUS Job No./PMS 0065
QC: NA (If applicable)

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged Gallon ~~liters~~	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
1210	5.9		200		15.73	175	7.11	28.2	0.52	43.0	[illegible]
1240	5.9		200		17.47	230	7.02	37.4	0.36	31.0	
1250	5.9		180		19.00	218	7.04	32.8	0.30	25.3	
1300	6.0		180		16.98	210	6.98	43.3	0.33	26.1	Low NO
1310	5.9		60		17.49	200	7.01	37.1	0.26	23.4	
1320	5.9		100		19.56	199	7.01	35.4	0.35	21.7	Near NO. [illegible]
1330	5.9		110		18.02	192	6.98	41.1	0.34	20.0	
1340	5.85		110		17.98	191	6.99	39.9	0.31	17.4	
1345	5.9		110		17.02	189	6.98	39.1	0.29	15.9	
1350	5.9		110		17.00	187	6.98	38.7	0.24	14.6	
1355	5.9		150		16.89	179	6.97	38.6	0.25	12.7	
1400	5.9		150		16.77	177	6.96	38.9	0.26	9.1	
1405	5.9		150		16.83	179	6.96	39.1	0.28	10.3	
1410	5.9	=	150		16.91	180	6.96	39.2	0.26	9.6	
1415	5.9		150		16.93	180	6.95	40.0	0.27	9.1	
1420	5.9		150		16.80	179	6.94	40.3	0.26	10.9	
1425	5.9		150	9 Gallons	16.87	177	6.93	40.4	0.25	11.3	
1430	5.9		150		16.85	176	6.92	40.2	0.25	12.8	
1435		pressure	stable	/	collect	sample					

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: Site 17 Building 32, Gould Island
Sample ID: MW303S (Well Previously Installed -No label)

Tetra Tech NUS Job No./PMS 0065
QC: Lab QC (If applicable)

Sample Method: Peri Pump / Low Flow
Depth Sampled: 14.76 Feet ~~TPVC~~ Screened Interval Depth _____ feet
Sample Date & Time: 7/25/05 1245 hours ~~N~~ NA/Dup
Sampler(s): J. Traut
Data Recorded By: J. Traut Signature: Johanna Traut
Notes:
MPE TPVC

H&S Survey Meter 0.0 PPM Field Instrument Group A/B/C/D
Pre-pump insertion WL 10.15 ft TPVC Post - pump insertion WL 10.3 ft TPVC

Analysis	Bottle Lot#	Analysis	Bottle Lot #	Analysis	Bottle Lot #
SVOC/PAH		VOC		Metals	
Pest/PCB		GRO		CN	
TPH		TOC		Sulfides	
				Alkalinity	

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
0954	10.87		250		18.36	1288	5.55	16.3	2.28	520	
1000	11.5		↓		18.39	1321	5.52	18.5	2.71	65	
1015	11.69		225		18.65	1416	5.52	15.4	2.56	45	
1025	11.34		180		19.17	1392	5.51	12.0	2.51	20	
1030	11.17				19.30	1380	5.46	9.9	2.36	12	
1035	11.15				19.32	1268	5.49	11.3	2.15	12	
1040	11.11				19.02	1263	5.48	17.0	1.71	11	
1045	11.1				18.97	1284	5.48	22.1	1.90	7.2	
1055	11.03				18.69	1308	5.47	25.2	1.97	4.1	
1100	11.03				18.61	1320	5.48	25.9	1.99	3.2	
1105	11.19		↓		18.57	1329	5.48	28.2	2.07	3.9	

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: Site 17, Bldg. 32 ~~[illegible]~~ Gould Island
Sample ID: 303B

Tetra Tech NUS Job No./PMS 0065
QC: NA (If applicable)

Sample Method: Bladder Pump / Low Flow
Depth Sampled: 34 Feet Screened Interval Depth 19-49 feet
Sample Date & Time: 7/19/05 1235 hours NA /Dup
Sampler(s): D. Whalen
Data Recorded By: Donald Whalen Signature: Donald Whalen
Notes:
MP = TPVC

H&S Survey Meter 0.0 PPM Field Instrument Group A/B/C/D
Pre-pump insertion WL _____ ft Post - pump insertion WL 8.35 ft

Analysis	Bottle Lot#	Analysis	Bottle Lot #	Analysis	Bottle Lot #
SVOC/PAH		VOC		Metals	
Pest/PCB		GRO		CN	
TPH		TOC		Sulfides	
				Alkalinity	

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
1005		4 cycle/min 40%		0							
1010			300	1.5	12.73	581	6.74	-350	1.69	84	lt. BRN
1015	9.10		300	3.0	15.67	582	6.77	-402	0.55	75	"
1020	9.12		300	4.5	15.86	555	6.78	-418	0.47	55	"
1025	9.14		250	6	15.86	563	6.76	-423	0.62	65	"
1030	9.11		250	7.25	16.94	550	6.74	-423	0.41	60	"
1035	9.07		250	8.5	17.46	544	6.71	-423	0.42	52	"
1040	9.09		250	9.75	17.42	554	6.67	-413	0.52	45	"
1045	9.10		250	11	17.52	555	6.66	-420	0.53	37	"
1050	9.11		250	12.25	17.20	548	6.63	-418	0.61	26	"
1055	9.12		250	13.50	17.54	552	6.62	-419	0.45	27	"
1100	9.14		240	14.75	17.60	554	6.62	-421	0.43	26	"
1105	9.14		240	16	17.67	556	6.58	-420	0.46	20	cloudy
1110	9.15		240	17.2	17.64	555	6.60	-419	0.50	19	"
1115	9.15		240	18.4	17.67	554	6.60	-422	0.44	18	"
1120	9.15		240	19.6		554	6.59	-421	0.42	18	"

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: Site 17, Bldg 32, Gould Island
Sample ID: 303B

Tetra Tech NUS Job No./PMS 0065
QC: _____ (If applicable)

Clock Time 24hr	Water Depth below MP ft	Pump Diel 1	Purge Rete ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
1125	9.13	4 cycle/min	200	20.8	19.20	553	6.59	-426	0.41	16	cloudy
1130	9.13		200	22	18.97	554	6.58	-421	0.40	16	"
1135	9.14		200	23	19.09	551	6.59	-416	0.39	13	"
1140	9.15		200	24	18.93	553	6.59	-416	0.39	13	"
1145	9.17		200	25	18.89	555	6.58	-417	0.39	13	"
1150	9.16		200	26	18.64	554	6.57	-424	0.37	12	"
1155	9.18		200	27	19.21	553	6.57	-427	0.34	11	clear
1200	9.19		200	28	19.13	554	6.58	-429	0.32	11	clear
1205	9.21		200	29	18.97	553	6.57	-429	0.31	9.3	clear
1210	9.22		200	30	19.08	555	6.57	-428	0.31	7.0	
1215	9.21		200	31	19.00	557	6.57	-428	0.30	7.5	
1220	9.21		200	32	19.05	556	6.57	-431	0.29	6.3	
1225	9.21		200	33	19.23	558	6.57	-430	0.31	5.6	
1230	9.21		200	34	19.28	558	6.57	-431	0.30	4.9	
1235	parameters stable collect sample										

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: Gould Island Site 17, Building 32
Sample ID: B32 - MW304S

Tetra Tech NUS Job No./PMS 0065
QC: ~~None~~ (CS) LAB QC (If applicable)

Sample Method: Low Flow w/ peri. pump
Depth Sampled: _____ Feet Screened Interval Depth _____ feet
Sample Date & Time: 7 / 27 / 5 1025 hours _____ /Dup
Sampler(s): _____
Data Recorded By: C. Sanchez Signature: [signature]
Notes:
MP = TPVC
T_0 = 9.85

H&S Survey Meter 0.0 PPM Field Instrument Group A/B/C/D
Pre-pump insertion WL _____ ft Post - pump insertion WL _____ ft

Analysis	Bottle Lot#	Analysis	Bottle Lot #	Analysis	Bottle Lot #

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
0840	9.85		250		17.7	36580	7.1	-7.1	4.1	7.6	
0845	11.21		175		18.1	36750	6.7	-7.9	3.9	43.4	
0850	11.70(8)		100		17.9	38542	6.6	24	3.9	45.7	
0855	12.05		100		18.7	38200	6.7	26	3.5	179	
0900	12.45		100		17.6	39459	6.3	24	3.1	424	
0905	13.03		100		17.6	39441	6.3	21	2.8	399	
0910	13.35		100		17.6	39515	6.3	20	2.7	298	
0915	13.70		100		17.6	39705	6.3	17	2.7	175	
0920	13.90		100		17.5	39800	6.3	20	2.6	87	
0925	13.80		100		17.7	39810	6.3	22	2.6	50	
0930	13.53		100		17.7	39800	6.3	24	2.7	30	
0935	14.01		100		17.3	39684	6.3	21	2.8	25	
0940	14.11		100		17.1	39414	6.2	17	2.9	20	
0945	14.45		100		17.0	39171	6.2	17	2.8	18	
0955	14.67		100		17.1	39372	6.2	17	2.8	12	
1005	15.00		100		17.5	39271	6.2	21	2.7	10	

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

(8) pump on lowest setting - can not control drawdown

P. 1 of 2

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: Site 17, Building 32, Gravel Island
Sample ID: B32 - MW3045

Tetra Tech NUS Job No./PMS 0865
QC: NONE (If applicable)

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
1010	15.10		100		17.5	39371	6.2	19	2.8	7.1	
1015	15.17		100		17.3	39388	6.1	21	2.8	5.2	
1020	15.25		100	~5 gals	17.1	39212	6.1	21	2.8	4.5	
1025		Parameters		Stable /	Collect	Sample					

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: Site 17, Building 32, Gould Island
Sample ID: B32 - MW30HB

Tetra Tech NUS Job No./PMS 0065
QC: NONE (If applicable)

Sample Method: Low flow w/ bladder pump
Depth Sampled: _____ Feet Screened Interval Depth _____ feet
Sample Date & Time: 7 / 27 / 5 1230 hours _____ /Dup
Sampler(s): C. Sanchez
Data Recorded By: C. Sanchez Signature: [signature]
Notes:
MP = TOPVC

H&S Survey Meter 0.0 PPM
Pre-pump insertion WL _____ ft
Field Instrument Group A/B/C/D
Post - pump insertion WL _____ ft

Analysis	Bottle Lot#	Analysis	Bottle Lot #	Analysis	Bottle Lot #

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
0820	5.25		100		17.5	34001	7.4	-10	4.3	800	
0920	5.30		100		17.8	27771	6.9	-20	4.2	90	
0930	5.30		100		19.5	25011	6.5	-30	4.7	65	
1030	5.30		100		19.5	22930	6.4	-40	5.7	42	
1100	5.20		100		21.7	425	7.4	-209	4.7	50	
1130	4.66		100		21.9	229	7.4	-196	4.7	46	
1140	4.65		100		21.7	230	7.5	-200	4.7	40	
1145	4.65		100		21.7	231	7.5	-216	4.7	30	
1150	4.64		100		21.5	236	7.5	-210	4.6	27	
1155	4.64		100		21.6	230	7.6	-211	4.7	20	
1200	4.64		100		21.7	225	7.6	-209	4.6	15	
1205	4.62		100		21.8	230	7.5	-216	4.5	7.0	
1210	4.65		100		21.8	229	7.6	-211	4.6	4.1	
1215	4.60		100		21.7	236	7.5	-216	4.7	3.7	
1220	4.61		100	24 gals	21.7	230	7.6	-209	4.7	3.5	
1230	4 hrs time limit per EPA SOP - Start sampling										

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: Gould Island
Sample ID: BS2-MW3055

Tetra Tech NUS Job No./PMS: N0065
QC: DUP Collected GS2-GW-DUP03 (If applicable)

Sample Method: Low Flow / peri. pump
Depth Sampled: ____ Feet Screened Interval Depth ____ feet
Sample Date & Time: 7/26/5 1100 hours 1115 /Dup
Sampler(s): Craig Sanchez
Data Recorded By: Craig Sanchez Signature: CSSL
Notes:

V_0 = 9.00

H&S Survey Meter 0.0 PPM
Pre-pump insertion WL ____ ft
Field Instrument Group A/B/C/D
Post - pump insertion WL ____ ft

Analysis	Bottle Lot#	Analysis	Bottle Lot #	Analysis	Bottle Lot #
SVOC/PAH		VOC		Metals	
Pest/PCB		GRO		CN	
TPH		TOC		Sulfides	
				Alkalinity	

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
0930	9.20		100		22.2	985	7.7	-255	1.6	999+	
0940	9.20		100		21.5	964	7.6	-255	1.6	500	
0950	9.20		100		21.6	972	7.6	-256	1.5	237	
1000	9.20		100		21.7	1020	7.7	-254	1.6	25	
1005	9.20		100		21.8	1021	7.7	-253	1.7	21	
1010	9.20		100		21.9	1019	7.6	-252	1.9	18	
1015	9.20		100		22.0	1022	7.7	-251	2.0	15	
1020	9.20		100		21.9	1025	7.6	-250	2.1	13	
1030	9.20		100		21.9	1024	7.6	-249	2.0	10	
1040	9.20		100		21.9	1045	7.6	-248	2.1	6.7	
1045	9.20		100		21.6	1047	7.6	-248	2.1	4.6	
1050	9.20		100		21.7	1045	7.6	-248	2.0	4.1	
1055	9.20		100		21.6	1045	7.6	-247	2.0	3.7	
1100		parameters		stable /	start	sampling					

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: Site 17, Building 32, Governors Island
Sample ID: B32 - 305B

Tetra Tech NUS Job No./PMS CC65
QC: NA (If applicable)

Sample Method: Portable Bladder Pump / Low Flow
Depth Sampled: ~80 Feet Screened Interval Depth 65 - 95 feet
Sample Date & Time: 7/19/05 1345 hours NA /Dup
Sampler(s): Johanna Traut
Data Recorded By: J. Traut Signature: Johanna Traut
Notes: MP = TOC

H&S Survey Meter 0.0 PPM Field Instrument Group (A)/B/C/D
Pre-pump insertion WL ~~8.37 ft TOC~~ 6.75 TOC Post - pump insertion WL _____ ft

Analysis	Bottle Lot#	Analysis	Bottle Lot #	Analysis	Bottle Lot #
SVOC/PAH		VOC		Metals	
PEST/PCB		TOC		CN	
TPH		GRO		Sulfides	
				Alkalinity	

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
~~1355~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~		~~19.32~~	~~[illegible]~~	~~[illegible]~~	~~-233~~	~~[illegible]~~	~~[illegible]~~	
7/18											
1350		4 [illegible]	75 [illegible]		20.87	224	6.63	132.1	1.07	450	
1410		[illegible]			19.76	225	6.62	126.2	0.92	450	
1411	6.91	[illegible]			19.76	221	6.63	124.6	0.91	460	
1420	6.91				19.90	218	6.63	122.9	0.89	500	
1425	6.95				20.03	~~[illegible]~~ 215	6.64	120.7	0.86	500	
1430	6.96				20.07	213	6.64	119.6	0.84	500	
1440	6.96				21.23	237	6.68	115.3	1.04	450	
1445	6.96				21.26	234	6.68	111.1	0.93	400	
1450	6.96	[illegible]			21.25	232	6.68	109.9	1.28	380	
1455	6.96				21.21	229	6.68	109.2	0.95	370	
1500	6.91				21.23	226	6.68	108.1	0.94	360	
1505	6.91				20.87	224	6.68	107	1.06	340	
1510	6.91				21.16	220	6.69	104.5	0.73	310	
1520	6.91				20.11	215	6.68	104.5	0.76	290	

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

P. 1 of 2

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: Site 17, Building 32, Gould Island
Sample ID: 2058

Tetra Tech NUS Job No./PMS 0065
QC: _____ (If applicable)

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
1530	6.91	4 cycles/min	75		19.78	211	6.68	103	0.68	260	
7/19 –		50 PST									
0920	6.71		50		21.05	392	6.53	-68.5	0.69	95	
0940	6.91		↓		19.02	383	6.52	-68.1	0.51	65	
0950	6.93				18.84	377	6.52	-67.1	0.88	38	
0955	6.95				19.43	365	6.55	-69.7	0.89	39	
1005	6.86				20.49	368	6.56	-69.3	0.76	28	
1010	6.89		↓		21.61	368	6.57	-71.7	2.87	25	
1020	7.01		60		19.90	366	6.55	-70.6	1.02	27	
1025	7.02				19.76	362	6.54	-69.8	0.68	22	
1030	7.15				19.83	360	6.55	-70.5	1.29	21	
1035	7.03				19.56	357	6.54	-72.6	2.46	18	
1040	7.15				19.56	354	6.54	-74	6.55	20	
1050	7.15				18.90	246	6.53	-74.7	6.53	34	
1100	7.2				19.16	344	6.54	-75.4	0.57	26	
1110	7.2				19.65	340	6.54	-76.5	0.65	16	
1120	7.2				19.74	335	6.54	-75.6	0.51	13	
1130	7.2				19.83	330	6.54	-74.8	0.62	12	
1140	7.2				19.87	324	6.53	-72.4	0.65	11	
1150	7.3				19.87	323	6.53	-35.7	0.73	9.5	
1200	7.35				19.81	318	6.53	-12.5	1.71	9.7	
1225	7.45				19.62	309	6.53	-71.5	1.92	5	
~~1228~~	~~7.35~~	—	—	—	~~19.82~~	~~301~~	~~6.54~~	~~-74.9~~	~~1.37~~	JT ran out of N gas	
1327	7.25				19.92	272	6.52	-80.6	0.88	4.7	
1330	7.35				19.86	272	6.52	-80.2	0.90	4.8	
1335	7.35			6 gal	19.80	270	6.52	-78.4	0.87	4.2	
					10%	3%	3%	± 10mV	10%	± 5 NTU	

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

1345 parameters stable, collect sample

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: Site 17, Building 32, Gould Island
Sample ID: 632-MW306S (Previously installed Labeled 100 R)

Tetra Tech NUS Job No./PMS 0065
QC: NA (If applicable)

Sample Method: Peri Pump / LowFlow
Depth Sampled: ~13.5 Feet TOC Screened Interval Depth _____ feet
Sample Date & Time: 7/27/05 1345 hours _____ /Dup
Sampler(s): Johanna Traut
Data Recorded By: J Traut Signature: Johanna Traut
Notes:
MP = TOC

H&S Survey Meter 0.0 PPM
Pre-pump insertion WL NA ft
Field Instrument Group A/B/C/D (Turbidity)
Post - pump insertion WL 8.4 ft TOPVC

Analysis	Bottle Lot#	Analysis	Bottle Lot #	Analysis	Bottle Lot #
SVOC/PAH		VOC		Metals	
Pest/PCB		GRO		Cyanide	
TPH		TOC		Sulfides	
				Alkalinity	

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
1300	8.4		325		15.81	22608	9.62	-288.6	3.58	35.8	
1305	8.4		330		15.48	22749	9.68	-281.8	3.29	10.79	
1310	8.43		330		15.98	2254	9.70	-278.4	3.15	7.97	
1315	8.41		330		15.60	22923	9.67	-271.5	2.99	5.53	
1320	8.42		330		15.58	23085	9.62	-268.5	2.91	3.97	
1325	8.41		330		15.62	23119	9.66	-268.7	2.89	2.05	
1330	8.41		330		15.57	23165	9.66	-267.2	2.75	1.33	
1335	8.41		330		15.52	23152	9.68	-268.1	2.69	1.09	
1340	8.41		330		15.53	23159	9.68	-265.3	2.65	0.97	
1345	—	—	Parameters Stable		—	Begin Sampling	—				

1. Pump dial setting (for example: hartz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: Goold Island (CTO 35)
Sample ID: 932-MW306B-01

Tetra Tech NUS Job No./PMS 00065
QC: N/A (If applicable)

Sample Method: Portable Bladder Pump/low flow
Depth Sampled: ~81 Feet Screened Interval Depth 64-94 feet
Sample Date & Time: 07/27/05 1300 hours ____/Dup
Sampler(s): Daniel Hartigan
Data Recorded By: D. Hartigan Signature: D. Hartigan
Notes:
MY = TPVC

H&S Survey Meter 0.0 PPM Field Instrument Group A/B/C/D Turbidity
Pre-pump insertion WL ____ ft Post - pump insertion WL ____ ft

Analysis	Bottle Lot#	Analysis	Bottle Lot #	Analysis	Bottle Lot #
SVOC/PAH		VOC		Metals	
Pest/PCB		GRO		CN	
TPH		DRO		Sulfides	
				Alkalinity	

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
0830	8.45'		100		24.46	0	~~24.46~~ 9.64	180.4	8.10	219	
0835	9.45		100		18.67	829	8.01	-25.7	4.04	131	
0845	9.85		100		18.37	982	7.35	-7.5	3.30	857	
0855	11.15		100		16.80	994	7.24	-50.1	1.24	426	
0905	11.35		125		17.76	981	7.30	-68.0	0.90	366	
0915	11.45		100		17.77	951	7.30	-74.3	1.03	316	
0925	11.35		60		19.06	958	7.30	-75.6	1.22	202	
0935	11.10		75		19.92	966	7.29	-75.5	1.30	185	
0945	11.00		80		19.65	943	7.29	-80.1	1.47	168	
0955	11.00		110		18.91	889	7.29	-8	1.78	110	
1005	11.30		110		18.07	871	7.29	-86.9	2.10	91.7	
1015	11.30		110		18.63	854	7.29	-87.1	1.12	85.0	
~~1030~~	~~4.57~~				~~23.00~~	~~963~~	~~7.25~~	~~-89.8~~	~~1.49~~	~~ran out of gas~~	
1050	9.73		90		23.90	948	7.14	-56.3	1.43	68.1	
1100	10.51		240		16.81	938	7.25	-86.9	0.89	87.8	
1110	11.55		175		17.59	898	7.29	-94.8	0.39	58.6	

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

P. 1 of 2

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - "LOW FLOW" GROUNDWATER

Site Name: Site 17, Building 32, Govid Island
Sample ID: G32-MW306B

Tetra Tech NUS Job No./PMS 0065
QC: NA (If applicable)

Clock Time 24hr	Water Depth below MP ft	Pump Dial 1	Purge Rate ml/min	Cum. Volume Purged liters	Temp °C	Spec. Cond. 2 uS/cm	pH	ORP/Eh3 mv	DO mg/L	Turbidity NTU	Comments
1120	12.09		200		17.34	893	7.29	-97.1	0.47	44.5	
1130	11.78		100		19.57	857	7.28	-96.0	0.46	25.8	
1140	11.8		130		18.92	890	7.28	-97.5	0.54	22.1	
1155	11.9		100		18.25	839	7.28	-98	0.43	23.3	Changed NO_2 TANK
1235	10.2		100		22.18	833	7.25	-91.5	0.64	14.5	
1240	10.2		75		22.50	821	7.21	-79.7	0.50	13.7	
1245	10.2		100		22.10	806	7.21	-81.8	0.67	11.1	
1250	10.2		100		22.07	812	7.21	-82.8	0.65	10.9	
1255	10.2		100		22.06	816	7.21	-88.0	0.65	10.7	
1300		parameters	stable	/	collect	sample				COLLECT	SAMPLE

1. Pump dial setting (for example: hertz, cycle/min, etc.)
2. Siemens per cm (same as umhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Tt NUS Form 0009

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17 Building 32, Gould Island
Sample ID: G32-AOTP02-07006

Tetra Tech NUS Charge No. CD65
QC Information: NA (if applicable)

Sample Method/Device: Grab
Depth Sampled: 06 feet Total Depth NA feet (SW Only)
Sample Date & Time: 4/2/05 1030 hours
Sampler(s): Craig Sanchez
Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- X Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify):

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches 2T	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

0 2T

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
Metals				
CN				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: SITE 17 Building 32 Gould Island
Sample ID: G32-A0TP02-0006

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method/Device: Grab
Depth Sampled: 0.6 feet Total Depth NA feet (SW Only)
Sample Date & Time: 12/2/05 1030 hours
Sampler(s): Craig Sanchez
Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- X Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify):

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
TPH				
Pest/PCB				
SVOC/PAH				
VOC				
GRO				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: SWMU 17 Building 32, Grand Island
Sample ID: G32-AQTP05

Tetra Tech NUS Charge No. 0005
QC Information: _____ (if applicable)

Sample Method/Device: Grab
Depth Sampled: ~~0.5 feet~~ NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 7/21/05 0820 hours
Sampler(s): Craig Sanchez, Dan Hartigan
Recorded By: Johanna Dias
Signature

TYPE OF SAMPLE: (Check all that apply)

- X Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify):

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC/PAH				
Pest/PCB				
TPH				
VOC				
GRO				
Metals				
CN				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17 Building 32, Gould Island
Sample ID: 632-AOTP06

Tetra Tech NUS Charge No. C0165
QC Information: NA (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 7/21/05 1030 hours
Sampler(s): Craig Sanchez
Dan Hartnagan

Recorded By: J Hannah Shaw
Signature

TYPE OF SAMPLE: (Check all that apply)

- X Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify):

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC/PAH				
PEST/PCB				
TPH				
VOC				
TRPH				
METALS				
CN				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: S-417 Building 32 Gould Island
Sample ID: G32-MOTP08

Tetra Tech NUS Charge No. 0065
QC Information: N/A (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 7/22/05 0930 hours
Sampler(s): Craig Sanchez
Dan Hartigan
Recorded By: [signature]
Signature

TYPE OF SAMPLE: (Check all that apply)

- X Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify):

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC/PAH				
Pest/PCB				
TPH				
VOC				
GRO				
Metals				
CN				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17 Building 32 Gum Island
Sample ID: G33-AOT-17-02

Tetra Tech NUS Charge No. C065
QC Information: NA (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 7/24/05 1130 hours
Sampler(s): Craig Sanchez
Dan Hartigan
Recorded By: Shannon Grant
Signature

TYPE OF SAMPLE: (Check all that apply)

- X Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify):

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC/PAH				
Pest/PCB				
TPH				
VOC				
GRO				
Metals				
CN				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17 Building 32, Grand Island
Sample ID: [illegible]

Tetra Tech NUS Charge No. 0045
QC Information: NA (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 7/21/05 1330 hours
Sampler(s): Craig Sanchez
Dan Hartigan
Recorded By: Jhenne Ivan
Signature

TYPE OF SAMPLE: (Check all that apply)

- X Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify):

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC/PAH				
Pest/PCB				
TPH				
VOC				
PCB				
Metals				
CN				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17 Building 32, Gravel Island
Sample ID: G32-AQTP12

Tetra Tech NUS Charge No. 6065
QC Information: N/A (if applicable)

Sample Method/Device: Grab
Depth Sampled: N/A feet Total Depth N/A feet (SW Only)
Sample Date & Time: 7/12/05 1335 hours
Sampler(s): Craig Sanchez
Dan Harrington
Recorded By: Shanna Franz
Signature

TYPE OF SAMPLE: (Check all that apply)

- X Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify):

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC/PAH				
Pest/PCB				
TPH				
VOC				
COD				
Metals/CN				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17 Building 32, Gould Island
Sample ID: G32 - ARTP/31

Tetra Tech NUS Charge No. 6005
QC Information: NA (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 7/21/05 1340 hours
Sampler(s): Craig Sanchez
Dan Hartnagan
Recorded By: Shanna Stark
Signature

TYPE OF SAMPLE: (Check all that apply)

- X Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify):

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: ___ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ___ ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC/PAH				
Pest/PCB				
TPH				
VOC				
SPD				
Metals				
CN				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: 632-AOMH02

Tetra Tech NUS Charge No. 6005
QC Information: NA (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/14/05 1007 hours
Sampler(s): Jeanna Trout
Craig Sanchez

Recorded By: Jeanna Trout
Signature

TYPE OF SAMPLE: (Check all that apply)

- ____ Groundwater
- ____ Surface Water
- ____ Residential Supply
- X Grab
- ____ Composite
- ____ Trip Blank*
- ____ Rinsate Blank*
- ____ Field Duplicate Collected
- X Other (Specify): AO manhole sample

* include sample source & lot No.

WELL PURGE DATA:

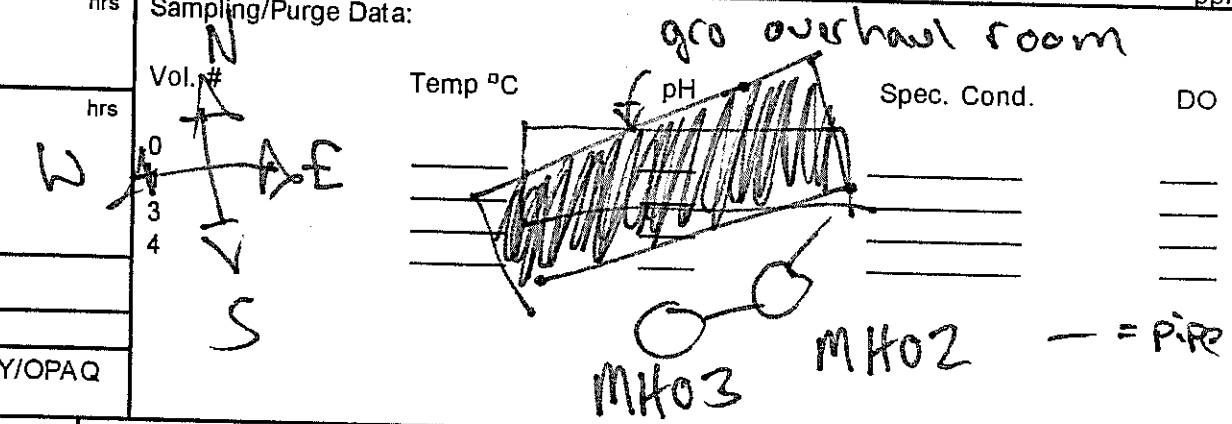
Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
3				
4				



ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC				See log book for sample locations. electrical assembly noted in MH03. Oily sheen noted in MH03. MH02 shallow manhole.
PAH				
Pest/PCB				
TPH				
Metals				
CN				
VOC				
GRO				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-AQMH03

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/19/05 1015 hours
Sampler(s): Johanna Traut, Craig Sanchez
Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- X Other (Specify): AQ manhole sample

*Include sample source & lot No.

WELL PURGE DATA:

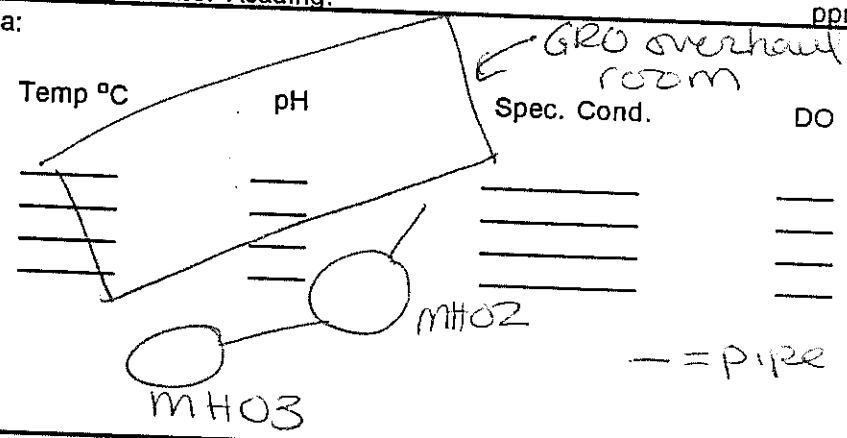
Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: ___ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				



ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC				See logbook for sample locations
PAH				electrical assembly noted in MH03
Pest/PCB				Oily sheen noted in MH03 MH02
TPH				shallow manhole
Metals				
CN				
VOC				
GRO				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-AQM101

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/2/05 1300 hours
Sampler(s): Craig Sanchez
Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- X Other (Specify): waste

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				potential free product
GRO				gathered from top of water
				sitting in manhole
				MH01 is near Mens Laundry

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: ~~GJT~~ Site 17, Building 32, Gorrill Island
Sample ID: ~~GJT~~ AQ-IDW01

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 7/28/05 0850 hours
Sampler(s): Craig Sanchez
Paul Harrison
Recorded By: [signature]
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- X Other (Specify): IDW from rolloff

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC/PAH				IDW sample was collected from the rolloff using a Peristaltic pump directly into appropriate sample containers
Pest/PCB				
TPH				
VOC				
GRO				
TOC				
Metals				
CN				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-FHW-01

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/2/05 0830 hours
Sampler(s): Craig Sanchez
Johanna Traut
Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- ___ Grab
- ___ Composite
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- X Other (Specify): Fire hydrant water

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				Collected from potable water source

TtNUS Form 0004

APPENDIX D4

TEST PIT LOGS, SOIL SAMPLE COLLECTION FORMS, LOG BOOK SKETCHES OF UNDERGROUND UTILITIES

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32 Gould Island
Sample ID: G32-SOTP01-01-0007

Tetra Tech NUS Charge No. 0005
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 07 feet bgs
Sample Date & Time: 6/2/05 1400 hours Dup NA hours
Sampler(s): Craig Sanchez
Johanna Traut

Data Recorded By: Johanna Traut
Signature

PID/OVA Monitor Reading: (7.0) PID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty Sand (fine to med) w/ gravel, brick, & debris noted & removed)

SAMPLE DATA/REMARKS: VOC sample was collected using a ~~proted~~ JT 6/6/05 precleaned syringe directly from the spitspoon and transfered into appropriate sample vials. The remaining soil was transfered into a decontaminated SS. bowl, homogenized and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
PCB/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

~~See workplan for a figure of the boring locations~~

CS ~~Boring~~ location gps (yes) or no (circle one)

6-2 Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

Page ___ of ___

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32 Gould Island
Sample ID: G32-SOTP02-0001

Tetra Tech NUS Charge No. 0065
QC Information: N/A (if applicable)

Sample Method: Grab
Depth Sampled: 0.0 feet bgs
Sample Date & Time: 6/9/05 0900 hours Dup N/A hours
Sampler(s): Craig Sanchez
Johanna Trant

Data Recorded By: Johanna Trant
Signature

PID/OVA Monitor Reading: 0.0 ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty Sand fine to med w/ gravel, brick, glass, concrete noted & removed

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining soil was transfered into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
Metals/CN	
SVOC	
PAH	
DRO	
Pest/PCB	
VOC	
GRO	

NOTES/SKETCH:

See ~~work~~ plan ~~for a~~ figure of the boring locations

Boring location gps (yes) or no (circle one)

Surveyed

CS 6.2

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: SI017 Building 32, Gold Island
Sample ID: G32-SBTP02-02-0007

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 07 feet bgs
Sample Date & Time: 6/2/05 1400 hours Dup NA hours
Sampler(s): Craig Sanchez
Johanna Traut

Data Recorded By: Johanna Traut
Signature

PID/OVA Monitor Reading: 4.1 (PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty Sand fine to med w/ gravel, brick & concrete noted & removed

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the splitspoon and transfered into appropriate sample vials. The remaining soil was transfered into a decontaminated S.S. bowl, homogenized and transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
PESTICIDES/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

~~See work plan~~ for a figure of the boring locations

Boring locations gps (yes) or no (circle one)

Surveyed

CS 6-2

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32 Gould Island
Sample ID: 632-SOTP03-01-0007

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: ~~0.0-1~~ 07 feet bgs
Sample Date & Time: 10/2/05 1400 hours Dup NA hours
Sampler(s): Craig Sanchez
Johanna Trout

Data Recorded By: Johanna Trout
Signature

PID/OVA Monitor Reading: (.34) PID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty Sand fine to med w/ gravel brick & concrete noted throughout.

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining soil was transfered into a decontaminated S.S. bowl, homogenized and transfered into appropriate containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
TPO	
PEST/PCB	
VOC	
ARO	

NOTES/SKETCH:

~~See work plan for a figure of the boring locations~~

Boring location GPS Yes or no (circle one)
Surveyed

CS 6-2

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTP01-01

Tetra Tech NUS Charge No. 0065
QC Information: N A (if applicable)

Sample Method: Grab
Depth Sampled: 00 - 02 feet BGS
Sample Date & Time: 7/22/05 0850 hours Dup NA hours
Sampler(s): Craig Sanchez
Dan Hartigan

Data Recorded By: Johanna Grant
Signature

PID/OVA Monitor Reading: 0.0 ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty Sand fine to med w/ gravel, brick, & concrete noted & removed.

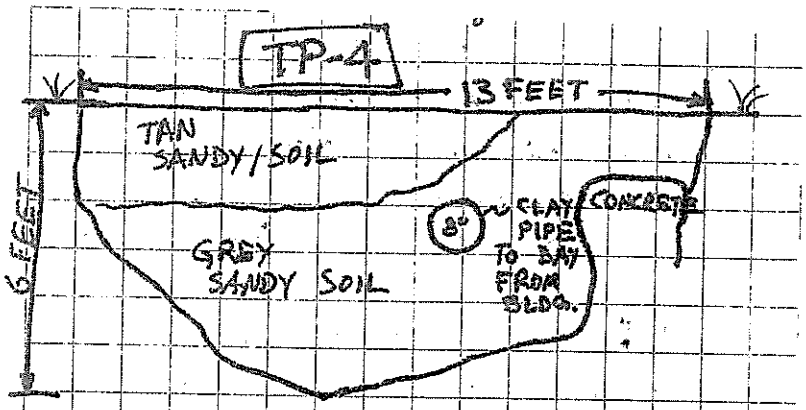
SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the ~~spit spoon~~ ground and transfered into appropriate sample vials. The remaining sample was transferred into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers. JT

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
DRO	
Pest/PCB	
VOC	
GRO	
Metals	
CN	

NOTES/SKETCH:

location surveyed

Tt NUS Form 0005A



TP-4 located right next to the EASERN. SIDE OF THE CONCRETE FOUNDATION OF BUILDING 32.

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: 32-SOTP05-01-0000

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: ~~00~~ ~ 10 feet BGS
Sample Date & Time: 7/21/05 0830 hours Dup N/A hours
Sampler(s): Craig Sanchez, Dan Hartigan

Data Recorded By: Shannon Liao
Signature

PID/OVA Monitor Reading: 0.0 ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty Sand

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the split spoon ground and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC MAH	
TRO	
Pest	
PCB	
VOC	
GRO	
Metals	
CN	

NOTES/SKETCH:

See Dan Hartigans field log book for more information/location

TP location g/s (Yes) or no (circle one)
Surveyed

Also, see attachment for sketch

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTP05-02-07000

Tetra Tech NUS Charge No. 00065
QC Information: N/A (if applicable)

Sample Method: Grab
Depth Sampled: ~~10~~ ~10 feet BGS
Sample Date & Time: 7/21/05 0900 hours Dup NA hours
Sampler(s): Craig Sanchez
Dan Hartigan

Data Recorded By: Shanne Dias
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty sand

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the split spoon ground and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
Pest/PCB	
DRO	
VOC	
GRO	
Metals	
CN	

NOTES/SKETCH:

~~See attachment for TP05-01~~ CS

TP location surveyed

See attached sketch

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTP05-03-0002

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 0.0-0.2 feet BGS
Sample Date & Time: 7/21/05 0905 hours Dup NA hours
Sampler(s): Craig Sanchez, Dan Hartigan

Data Recorded By: Johanna Grant
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty Sand

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the ground and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
Pest/PCB	
DRO	
VOC	
GRO	
Metals (N)	

NOTES/SKETCH:

Location surveyed

See attached sketch

Tt NUS Form 0005A

TETRA TECH NUS, INC.

Page ___ of ___

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTP05-MH

Tetra Tech NUS Charge No. 0065
QC Information: G32-SO-DUP10 (if applicable)

Sample Method: Grab
Depth Sampled: 7 feet bgs
Sample Date & Time: 7/26/05 1350 hours Dup 1355 hours
Sampler(s): Craig Sanchez
Dan Hartigan

Data Recorded By: _____
Signature

PID/OVA Monitor Reading: 0.0 ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty sand

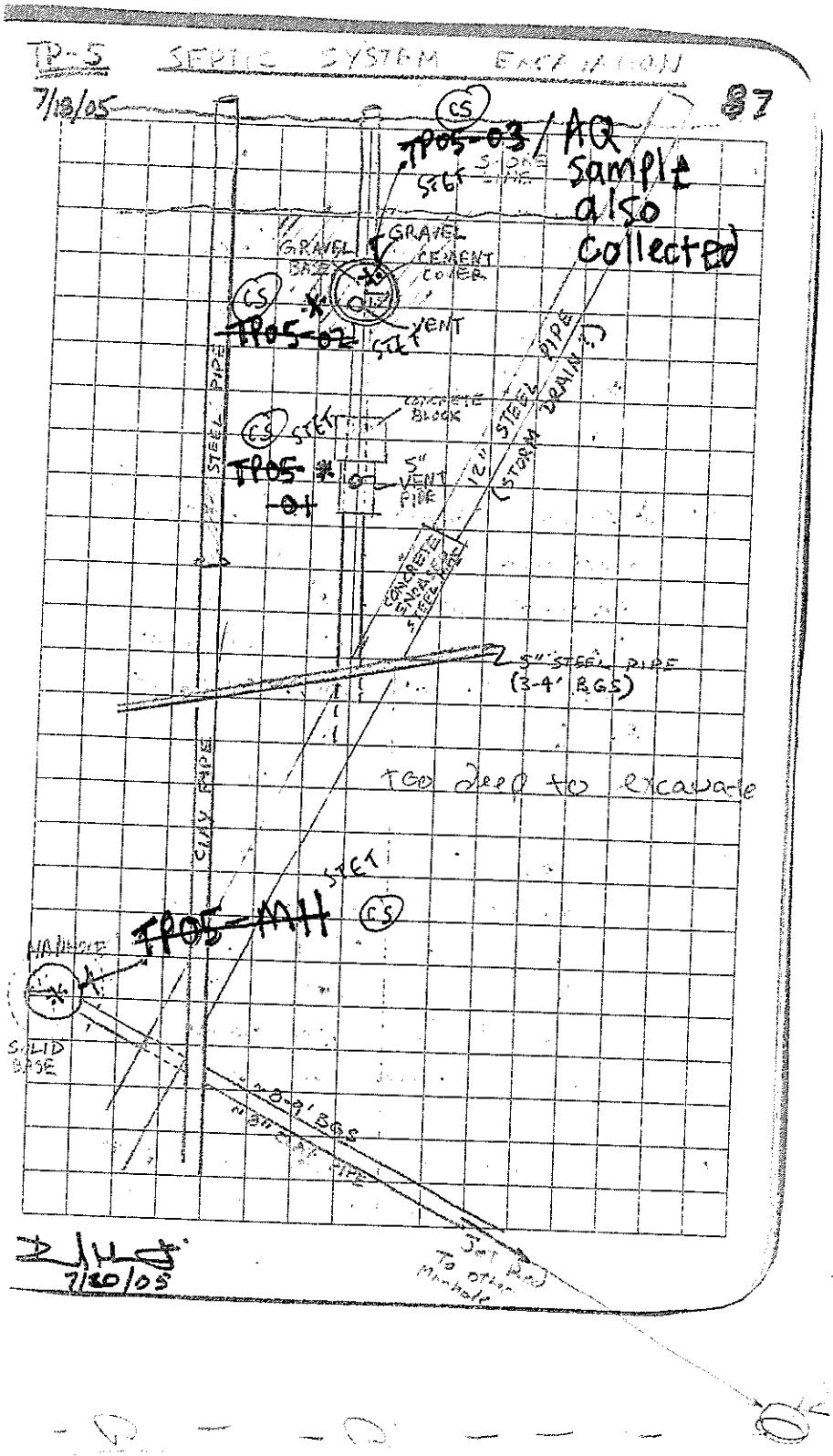
SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated SS bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
DRO	
Pest/PCB	
VOC	
GRO	
Metals	
CN	

NOTES/SKETCH: soil from bottom of manhole located in test pit 5
See Dan Hartigans log book for location of TP
See attached stetch
location surveyed

Tt NUS Form 0005A

TP05 Sketch



Preferred connection
Confirmed connection

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTP06-01-0002

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 00-02 feet BGS
Sample Date & Time: 7/21/05 1640 hours Dup NA hours
Sampler(s): ~~Johanna T. Ot~~
Craig Sanchez
Dan Hartigan

Data Recorded By: Johanna Ott
Signature

PID/OVA Monitor Reading: ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty Sand

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the ~~split spoon~~ ground and transfered into appropriate sample vials. The remaining sample was transferred into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
DRO	
Pest/PCB	
VOC	
GRO	
Metals	
CN	

NOTES/SKETCH:

location surveyed

See attached sketch

Tt NUS Form 0005A

TP 06 Sketch

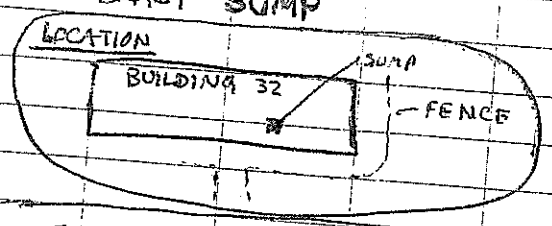
7/20/05

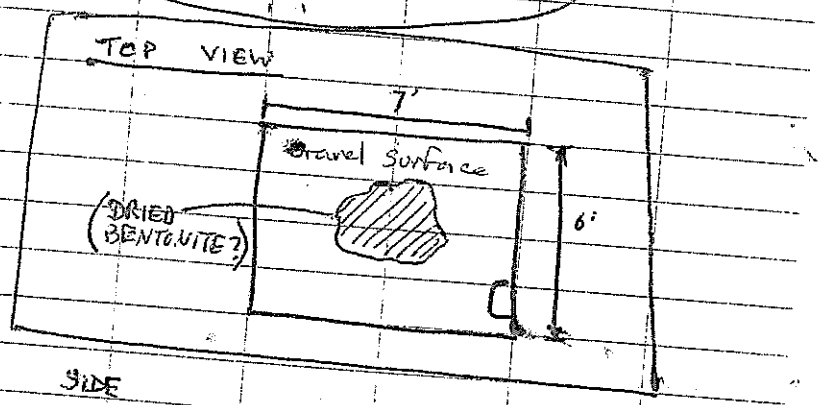
Gould Island
CTO 35

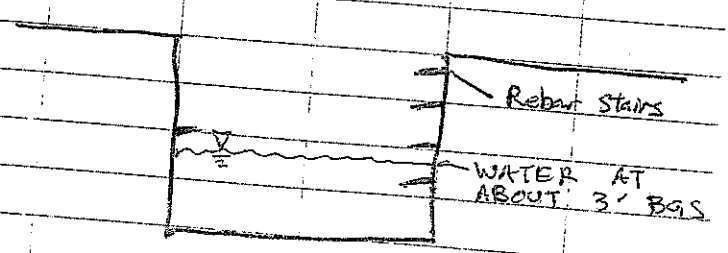
100

TP-6

SAND BLAST SUMP







TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTP07

Tetra Tech NUS Charge No. 00065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 00-02 feet BGS
Sample Date & Time: 7/22/05 0900 hours Dup NA hours
Sampler(s): Craig Sanchez
Dan Hartigan

Data Recorded By: Johanna Grant
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty Sand

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transferred into appropriate sample vials. The remaining sample was transferred into a decontaminated stainless bowl, homogenized, and transferred into appropriate sample containers. Ground J

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
DRO	
Pest/PCB	
VOC	
GRO	
Metals	
CN	

NOTES/SKETCH:

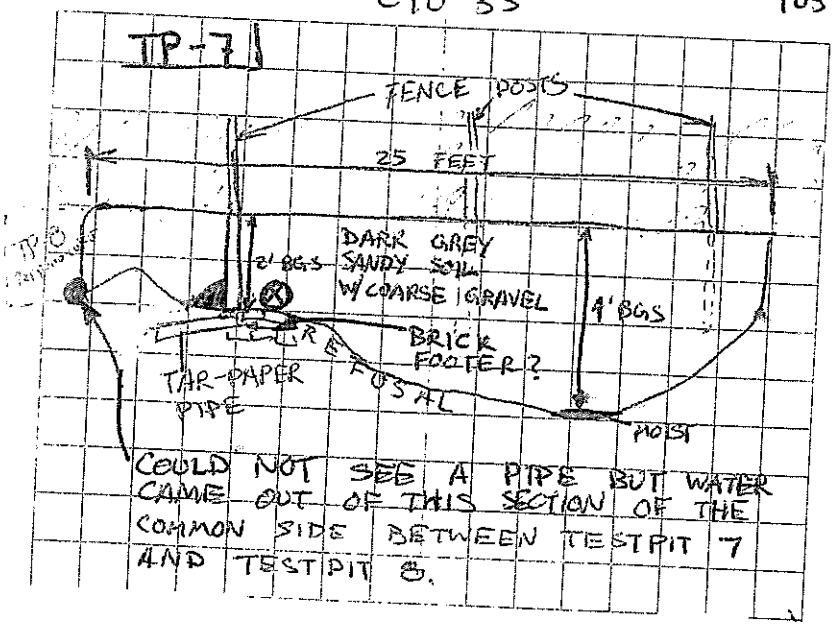
See attached sketch
location surveyed

Tt NUS Form 0005A

7/21/05 Gould Island

CTO 35

105



COULD NOT SEE A PIPE BUT WATER CAME OUT OF THIS SECTION OF THE COMMON SIDE BETWEEN TESTPIT 7 AND TESTPIT 8.

TETRA TECH NUS, INC.

Page ___ of ___

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTP08

Tetra Tech NUS Charge No. 0065
QC Information: Lab QC (if applicable)

Sample Method: Grab
Depth Sampled: 00-02 feet BGS
Sample Date & Time: 2/22/05 0845 hours Dup NA hours
Sampler(s): Craig Sanchez
Dan Harrigan

Data Recorded By: Johanne Siard
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty sand

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transferred into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
DRO	
Pest/PCB	
VOC	
GRO	
Metals	
CN	

NOTES/SKETCH:

See attached sketch

location surveyed

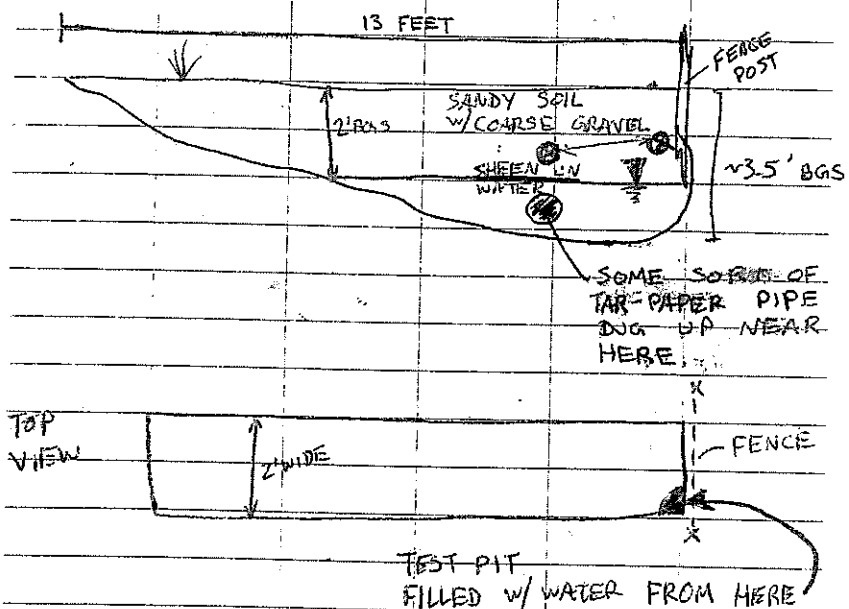
Tt NUS Form 0005A

7/21/05 Gould Island CTO 35 106

TP-8

PETROLEUM IMPACTED SOIL AREA COVERED PREVIOUSLY WITH PLASTIC SHEETING

* ODOR (PETROLEUM) PRESENT
* OIL STAINING IN SOIL



PRIOR TO DIGGING, THERE WAS A WATER-LINE (HYDRANT?) RUNNING

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTP09-01-0002

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 00-02 feet
Sample Date & Time: 7/21/05 1035 hours Dup NA hours
Sampler(s): Craig Sanchez, Dan Hartigan

Data Recorded By: Johanne Stand
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty Sand

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the ~~split spoon~~ ground and transfered into appropriate sample vials. The remaining sample was transferred into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers. JT

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
DRO	
Pest/PCB	
VOC	
GRO	
Metals	
CN	

NOTES/SKETCH:

See attached sketch
location surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

Page ___ of ___

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTP09-02-0002

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 00-02 feet BGS
Sample Date & Time: 7/21/05 1030 hours Dup N/A hours
Sampler(s): Craig Sanchez
Dan Harrigan

Data Recorded By: Johanna Ward
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty Sand

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the ~~spoon~~ ground and transfered into appropriate sample vials. The remaining sample was transferred into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
DRO	
Pest/PCB	
VOC	
GRO	
metals	
CN	

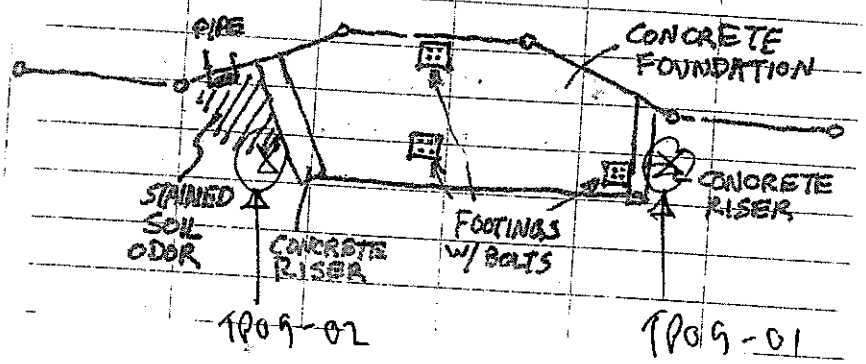
NOTES/SKETCH:

See attached sketch
location surveyed

Tt NUS Form 0005A

TP-09

DUST COLLECTOR SHED FOUNDATION



TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SUTP10-01-0002 (A)

Tetra Tech NUS Charge No. 00065
QC Information: N/A (if applicable)

Sample Method: Grab
Depth Sampled: 01-02 feet BGS
Sample Date & Time: 2/21/05 1100 hours
Dup N/A hours
Sampler(s): Craig Sanchez, Dan Hartigan

Data Recorded By: [signature]
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty sand

SAMPLE DATA/REMARKS: VOC sample was collected using a pacleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
Pest/PCB	
DRO	
VOC	
GRO	
Metals	
CN	

NOTES/SKETCH:

See attached sketch
location surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTP10-02-0002 (B)

Tetra Tech NUS Charge No. 0065
QC Information: — (if applicable)

Sample Method: Grab
Depth Sampled: 00-02 feet BGS
Sample Date & Time: 7/21/05 1110 hours Dup NA hours
Sampler(s): Craig Sanchez, Dan Hartigan

Data Recorded By: Johanna Grand
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty Sand

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the ~~split spoon~~ ground JT and transfered into appropriate sample vials. The remaining sample was transferred into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
DRO	
Pest/PCB	
VOC	
GRO	
Metals	
CN	

NOTES/SKETCH:

See atached sketch
location surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTP10-05 0002 (C)

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 00 - 02 feet BGS
Sample Date & Time: 7/21/05 1120 hours Dup NA hours
Sampler(s): Craig Sanchez, Dan Hartman

Data Recorded By: Johanna Grant
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty Sand

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the ground and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers.

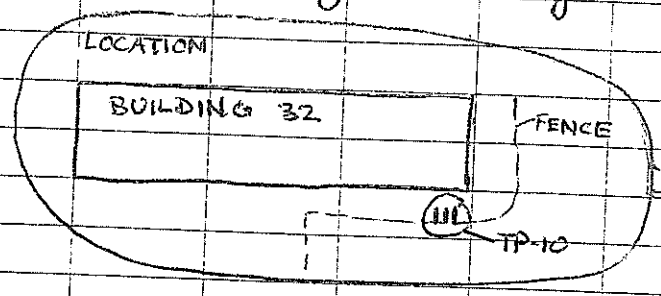
ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
Pest/PCB	
DRO	
VOC	
GRO	
Metals	
CN	

NOTES/SKETCH:

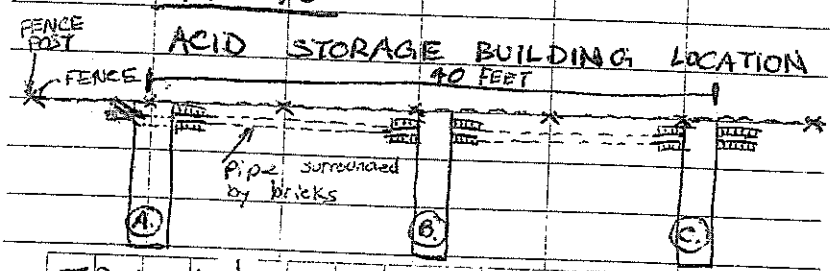
See attached sketch
location surveyed

Tt NUS Form 0005A

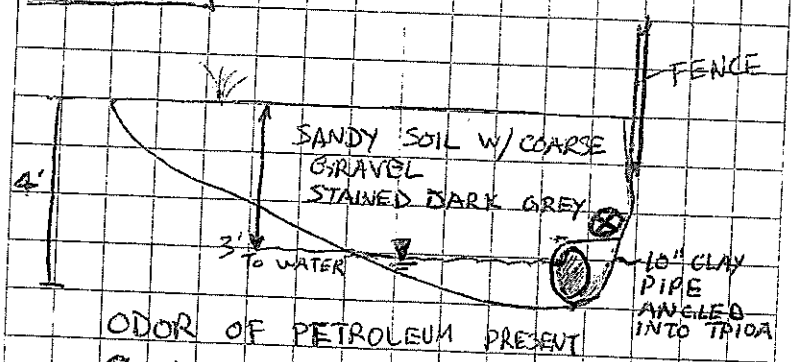
0845 Billy begin excavating three test pits to represent TP-10, the former location of the acid storage building.



TP-10



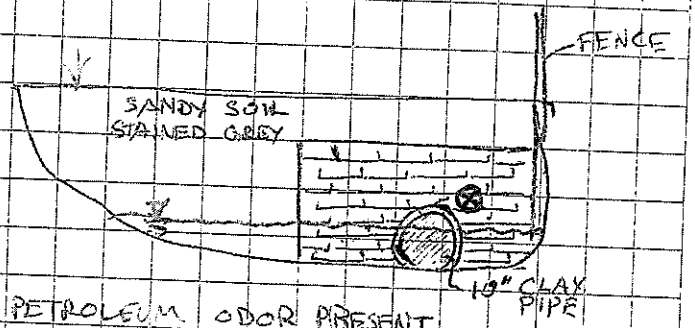
TP-10A



ODOR OF PETROLEUM PRESENT

⊗ LOCATION OF SOIL SAMPLE

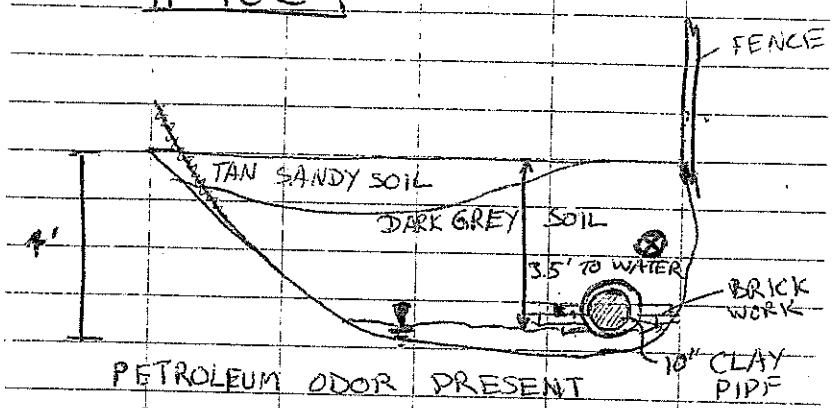
TP-10B



PETROLEUM ODOR PRESENT

⊗ LOCATION OF SOIL SAMPLE

TP-10C

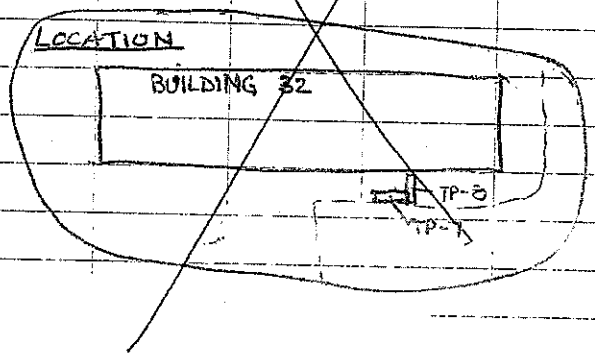


PETROLEUM ODOR PRESENT

⊗ LOCATION OF SOIL SAMPLE

1000 Billy began excavating test pit TP-7 to look for the foundation of a former transformer.

LOCATION



CS

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTP11-01

Tetra Tech NUS Charge No. 0065
QC Information: G32-SO-DUP08 (if applicable)

Sample Method: Grab
Depth Sampled: 00 - 02 feet BGS
Sample Date & Time: 7/21/05 1330 hours Dup ~~1335~~ hours
Sampler(s): Craig Sanchez
Dan Hartigan

Data Recorded By: Joanne Sears
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty Sand

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the ~~split spoon~~ ground and transfered into appropriate sample vials. The remaining sample was transferred into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers. JT

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
DRO	
Pest/PCB	
VOC	
GRO	
Metals	
CN	

NOTES/SKETCH:

"Composite" sample collected from 11A, B, C
See attached sketch
location surveyed

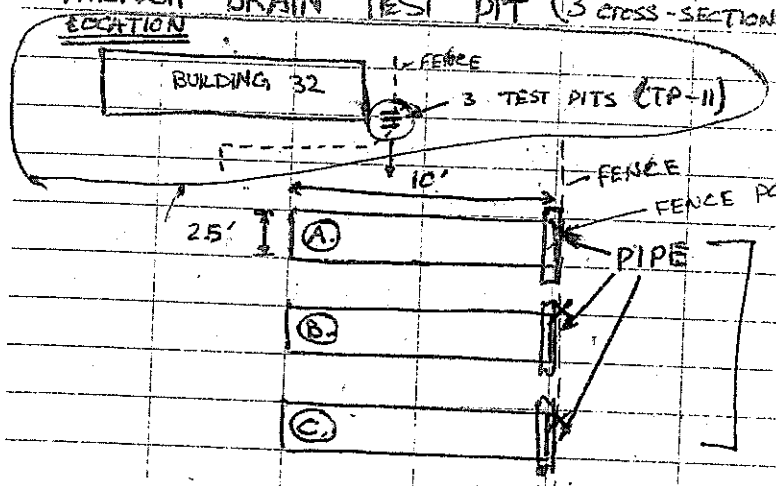
Tt NUS Form 0005A

7/20/2005 Gould Island CTO 35 96

TP-11

TRENCH DRAIN TEST PIT (3 CROSS-SECTIONS)

LOCATION



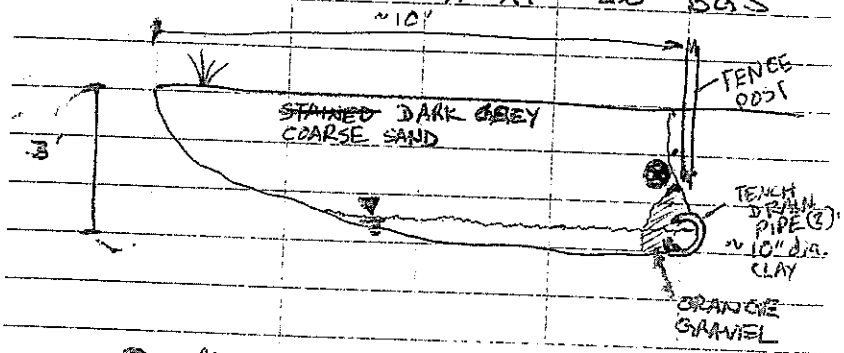
Composite Sample Collected from A, B, & C

TP-11 A VEGETATED SURFACE

GREY-BLUE COLOR TO THE SOIL

SOIL IS SANDY WITH SOME SILT AND SOME GRAVEL

WATER IN TP AT ~2.5' BGS

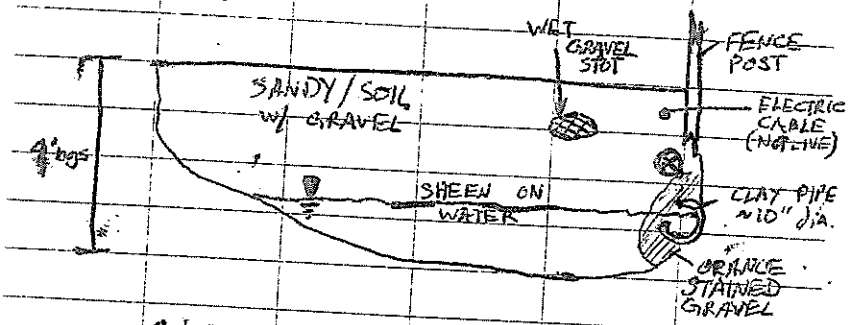


⊗ AREA WHERE SAMPLE WAS COLLECTED

7/20/05 Gould Island CTO 35 98

TP-11C

VEGETATED SURFACE
SOME BRICK FRAGMENTS AND STICKS
GREY AND TAN COLOR TO GREY/BLUE COLOR (PHILLITE OR PETROLEUM ?)
WOOD BOARDS AT 1' BGS 2"x6"x8'
SAND AND GRAVEL 0'-2' BGS

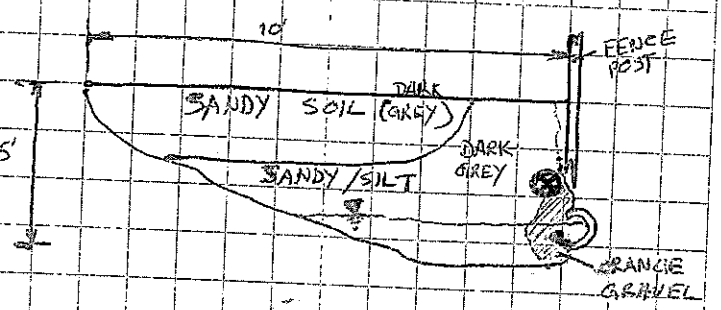


SOME LARGE BOULDERS >12" <24"
FILL PRESENT
3' BGS COLOR CHANGES TO TAN/YELLOW SAND
SHEEN ON WATER ~15% OF SURFACE

7/20/2005 Gould Island CTO 35 97

TP-11B

EXCAVATED DEBRIS - PLANK, BRICKS
ORANGE STAINED GRAVEL, PLASTIC SHEETING IN FILL SOME OLD PLYWOOD.
GREY SOIL AND WET
BOTTOM OF TP IS AT 3.5' BGS
SOIL IS SANDY/SILT WITH COARSE GRAVEL
WATER IS AT 2.5' BGS



⊗ AREA WHERE SOIL SAMPLE WAS COLLECTED

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTP12-01

Tetra Tech NUS Charge No. 0065
QC Information: G32-SO-DUP09 (if applicable)

Sample Method: Grab
Depth Sampled: 00-02 feet BGS
Sample Date & Time: 7/21/05 1405 hours Dup 910 hours
Sampler(s): Craig Sanchez
Dan Hartigan

Data Recorded By: [signature]
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty Sand

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the ~~split spoon~~ ground and transfered into appropriate sample vials. The remaining sample was transferred into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
DRO	
Pest/PCB	
VOC	
GRO	
Metals	
CN	

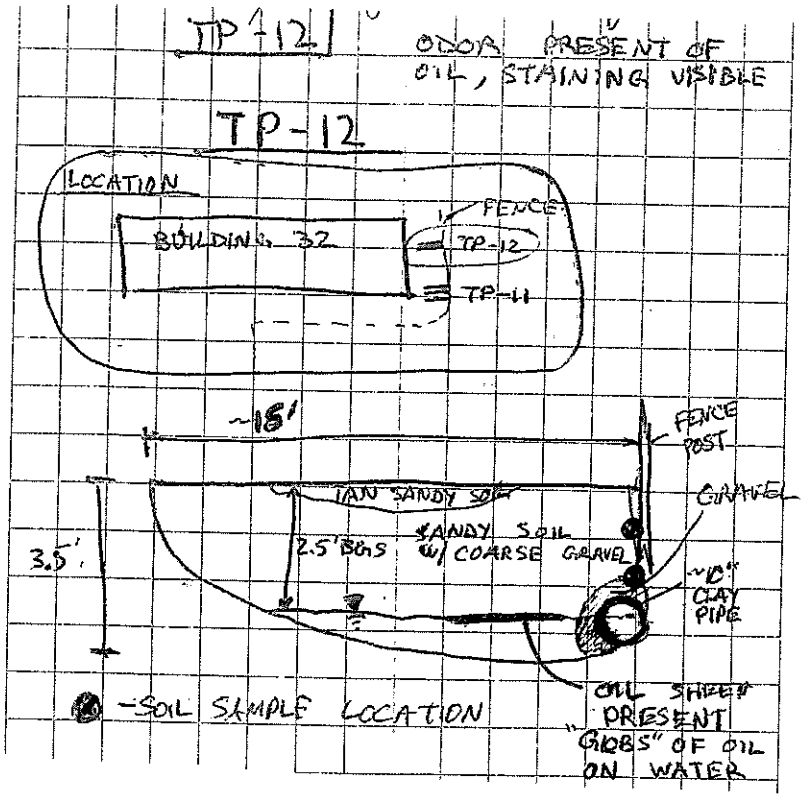
NOTES/SKETCH:

See attached sketch location surveyed

Tt NUS Form 0005A

TP-12

ODOR PRESENT OF OIL, STAINING VISIBLE



TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTP13-01

Tetra Tech NUS Charge No. 0065
QC Information: Lab QC (if applicable)

Sample Method: Grab
Depth Sampled: 00-02 feet BGS
Sample Date & Time: 7/21/05 _____ hours Dup____ hours
Sampler(s): Craig Sanchez
Dan Hartigan

Data Recorded By: Johanna Sears
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty Sand

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the ~~spatula~~ spoon grab and transfered into appropriate sample vials. The remaining sample was transferred into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
DRO	
Pest/PCB	
VOC	
GRO	
Metals	
CN	

NOTES/SKETCH:

See attached sketch
location surveyed

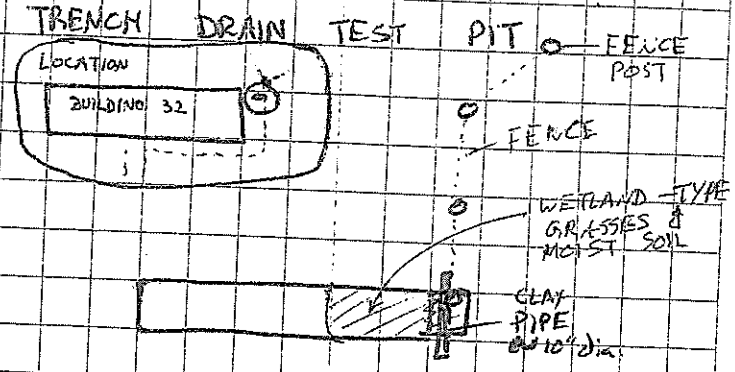
Tt NUS Form 0005A

7/20/05 Gradd Island

CTO 35

TP-13

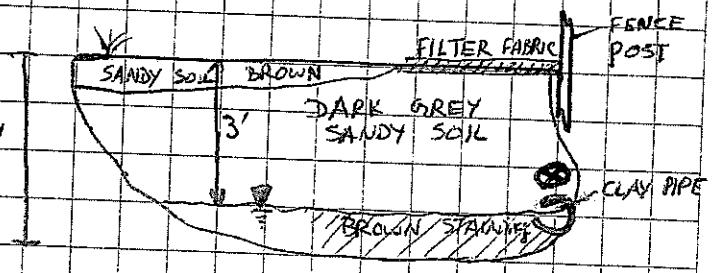
TRENCH DRAIN TEST PIT



VEGETATED SURFACE WITH SOME WETLAND TYPE FLORA GRASSES, SPONGY SOIL

SUBSURFACE SOIL WAS DARK GREY SANDY SOIL WITH SOME GRAVEL

NO FILL OR DEBRIS OBSERVED



⊗ SOIL SAMPLE LOCATION

TETRA TECH NUS, INC.

Page ___ of ___

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-OTSM001

Tetra Tech NUS Charge No. CO65
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: NA feet bgs
Sample Date & Time: 6/14/05 1032 hours Dup N/A hours
Sampler(s): Johanna Traut
Craig Sanchez

Data Recorded By: Johanna Traut
Signature

PID/OVA Monitor Reading: NA ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- X Other (Specify): waste/sludge

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) wet sand/gravel – large quantity of rocks/debris
oily smell & sheen on manhole water

SAMPLE DATA/REMARKS: All samples were collected from the manhole with a precleaned 16oz jar on a pole and transferred into a decontaminated S.S. bowl, homogenized, and decanted. The VOC samples were collected using precleaned syringe and transferred to appropriate sample vials. The remaining soil was transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
TPH DRO	
Pest/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for figure of manhole locations
Manhole location gps yes or no (circle one)
Surveyed
MH01 located near electroplating rm.

Tt NUS Form 0005A

TETRA TECH NUS, INC.

Page ___ of ___

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SO-IDW01

Tetra Tech NUS Charge No. 00065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: NA feet
Sample Date & Time: 7/28/06 0830 hours Dup NA hours
Sampler(s): Craig Sanchez
Dan Hartigan

Data Recorded By: Joanne Sears
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) _____

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the ~~split spoon~~ roll off and transfered into appropriate sample vials. The remaining sample was transferred into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
DRO	
Pest/PCB	
VOC	
GRO	
Metals	
CN	

NOTES/SKETCH:

Sampled from the roll off closest to the trailer/docking area

Tt NUS Form 0005A

TETRA TECH NUS, INC.

Page ___ of ___

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: B32-SO-IDW02

Tetra Tech NUS Charge No. 00065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: NA feet
Sample Date & Time: 7/28/05 0835 hours Dup NA hours
Sampler(s): Craig Sanchez
Dan Hartigan

Data Recorded By: Johanne Grant
Signature

PID/OVA Monitor Reading: ___ ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the ~~spoil spoon~~ rolloff and transfered into appropriate sample vials. The remaining sample was transferred into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
DRO	
Pest/PCB	
VOC	
GRO	
Metals	
CN	

NOTES/SKETCH:

Sampled from the roll off farthest from the trailer/dockingarea

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17 Building 32 Gould Island
Sample ID: G32-SB3008 0002

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 00-02 feet bgs
Sample Date & Time: 6/1/05 0907 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: Johanne Drand
Signature

PID/OVA Monitor Reading: (0.0) PID (0.0 FID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty sand w/ some gravel

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transferred into appropriate sample vials. The remaining soil was transferred into a decontaminated SS. bowl, homogenized and transferred into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
Pest / PCBs	
CN/metals	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of the boring locations

Boring Location ~~GPS~~ surveyed (yes) or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB08-0608

Tetra Tech NUS Charge No. 0005
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 06-08 feet bgs
Sample Date & Time: 10/1/05 1031 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: [signature]
Signature

PID/OVA Monitor Reading: (0.0 PID) (0.0 FID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) sand with some gravel

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining soil was transfered into a decontaminated SS bowl, homogenized and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
Metals/CN	
SVOC	
PAH	
DRO	
Pest/PCB	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of the boring locations

Boring location gps yes or no (circle one)
surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32 Gould Island
Sample ID: G32-SB301B-0002

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 00-02 feet BGS
Sample Date & Time: 7/13/05 0752 hours Dup NA hours
Sampler(s): Don Whalen

Data Recorded By: Johanna Grant
Signature

PID/OVA Monitor Reading: 0.0 PID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) dk brown silty sand some gravel some organic matter (F-M gravel) moist

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	✓
DRO	✓
Pest/PCB	✓
Metals/CN	✓
VOC	✓
GRO	✓

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps (yes) or no (circle one)
surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB301B-1012

Tetra Tech NUS Charge No. 0026S
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 10-12 feet BGS
Sample Date & Time: 7/13/05 0904 hours Dup NA hours
Sampler(s): Don Whalen

Data Recorded By: Johanne Jean
Signature

PID/OVA Monitor Reading: 6.3 PID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) 10-11 dk brown silty sand, tr clay some gravel (F-C Gravel)
11-12 dk gray & brown silt, tr clay & fine sand, finely layered

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	✓
DRO	✓
Pest/PCB	✓
Metals/CN	✓
VOC	✓
GRO	✓

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location ~~gps~~ surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB302B-0002

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 00 - 02 feet BGS
Sample Date & Time: 7/5/05 0955 hours Dup NA hours
Sampler(s): Don Winalan

Data Recorded By: Johanna Grant
Signature

PID/OVA Monitor Reading: (0.0 PID) (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) 0-1 sandy silt topsoil trace plant roots dry
1-2 gravel & silty sand fine to & coarse gravel dry USCS → SM & GM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	X
DRO	X
Pest/PCB	X
Metals/CN	X
VOC	X
GRO	X

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32 Gould Island
Sample ID: G32-SB302B-0507

Tetra Tech NUS Charge No. 0026S
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 05-07 feet BGS
Sample Date & Time: 7/5/05 ~~1154~~ 1039 hours Dup____hours
Sampler(s): Don Whalen 7-5-05

Data Recorded By: Johanna Daud
Signature

PID/OVA Monitor Reading: 12 FID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ____ Sediment
- ____ Lagoon/Pond
- X Grab
- ____ Trip Blank*
- ____ Rinsate Blank*
- ____ Field Duplicate collected
- ____ Other (Specify): ____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty sand
concrete fragments
5-6 ⇒ dry 6-7 moist
USCS ⇒ SM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	X
DRO	X
Pest/PCB	X
Metals/CN	X
VOC	X
GRO	X

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

Page ___ of ___

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB302B-2527

Tetra Tech NUS Charge No. 00065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 25-27 feet BGS
Sample Date & Time: 7/5/05 1154 hours Dup ____ hours
Sampler(s): Dom Whalen

Data Recorded By: Shanna Grant
Signature

PID/OVA Monitor Reading: 0.6 FID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty sand & gravel (fine to med. sand, fine to coarse gravel) wet USCS - SM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	X
DRO	X
Pest/PCB	X
Metals/CN	X
VOC	X
GRO	X

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location GPS surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: 032-SB303B-0002

Tetra Tech NUS Charge No. 0026S
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 00-02 feet BGS
Sample Date & Time: 7/11/05 1044 hours Dup NA hours
Sampler(s): Don Whalen

Data Recorded By: [signature] Signature

PID/OVA Monitor Reading: (0.0 PID) (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) brown silty sand some gravel (fine to med sand, fine to coarse gravel micaceous)

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	X
DRO	X
Pest/PCB	X
Metals/CN	X
VOC	X
GRO	X

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB303B-1012

Tetra Tech NUS Charge No. 00605
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 10-12 feet BGS
Sample Date & Time: 7/11/05 1240 hours Dup NA hours
Sampler(s): Don Nalen

Data Recorded By: [signature] Signature

PID/OVA Monitor Reading: 0.0 PID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silt some sand, some gravel fine sand, fine to coarse gravel phyllite fragment

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	✓
DRO	✓
Pest/PCB	✓
Metals/CN	✓
VOC	✓
GRO	✓

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17 Building 32 Gould Island
Sample ID: G32-SB304B-0002

Tetra Tech NUS Charge No. 0005
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 00 - 02 feet bgs
Sample Date & Time: 6/1/05 0913 hours Dup NA hours
Sampler(s): Dan Whalen
Johanna Traut

Data Recorded By: Johanna Traut
Signature

PID/OVA Monitor Reading: (0.0 FID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Sandy Silt to Silty sand (SM) some gravel dark brown to black

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining soil was transfered into a decontaminated S.S. bowl, homogenized and transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
Metals	
SVOC	
PAH	
DRO	
Pest / PCB	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of the boring locations

Boring location gps (yes) or no (circle one)
Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17 Building 32 Gould Island
Sample ID: G32-SB3048-0608

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 06-08 feet bgs
Sample Date & Time: 6/1/05 1042 hours Dup N/A hours
Sampler(s): Don Whalen
Johanna Traut

Data Recorded By: Johanna Traut
Signature

PID/OVA Monitor Reading: 176 PID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Sandy silt to silty sand some gravel black/dk gray fuel odor

SAMPLE DATA/REMARKS: VOC sample was collected using a preclaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining soil was transfered into a decontaminated S.S bowl, homogenized and transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
Metals/CN	
SVOC	
PAH	
DRO	
Pest/PCB	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of the boring locations

Boring location gps (yes) or no (circle one)
Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17 Building 32 Gould Island
Sample ID: G32-SB305B-0305

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 03-05 feet bgs
Sample Date & Time: 6/8/05 1512 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: [signature]
Signature

PID/OVA Monitor Reading: 0.0 (PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) silty sand w/abundant gravel
wet sand layer from 4.1-4.3 BGS

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the spoil spoon and transferred into appropriate sample vials. The remaining soil was transfered into a decontaminated S.S. bowl, homogenized and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
Pest/PCBs	
CN/metals	
VOC	
GRO	

NOTES/SKETCH:

See workplan for a figure of boring locations

Boring location gps (surveyed) yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17 Building 32, Gould Island
Sample ID: G32-SB305-0911

Tetra Tech NUS Charge No. 0065
QC Information: N/A (if applicable)

Sample Method: Grab
Depth Sampled: 09-11 feet bgs
Sample Date & Time: 6/9/05 0755 hours Dup N/A hours
Sampler(s): Dave Hickey

Data Recorded By: Johanne Drake
Signature

PID/OVA Monitor Reading: 6.7 (PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) silty sand with some gravel

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining soil was transfered into a decontaminated S.S. bowl, homogenized and transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
Pest/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

see work plan for a figure of boring locations

Boring location g/ps (yes) or no (circle one)
Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB306B-1012

Tetra Tech NUS Charge No. 0065
QC Information: N/A (if applicable)

Sample Method: Grab
Depth Sampled: 10 - 12 feet bgs
Sample Date & Time: 6/23/05 1400 hours Dup____hours
Sampler(s): Dave Hickey

Data Recorded By: Johanna Hart
Signature

PID/OVA Monitor Reading: 2.4 FID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ____ Sediment
- ____ Lagoon/Pond
- X Grab
- ____ Trip Blank*
- ____ Rinsate Blank*
- ____ Field Duplicate collected
- ____ Other (Specify): ____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) brown/red - brick material, silty sand, gravel, wet, wood
USCS - SM

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
Pest/PCB	
Metals/IN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of boring locations
Boring location ~~gps~~ surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB30-B-5052

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 50 - 52 feet bgs
Sample Date & Time: 6/24/05 1144 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: [signature] Signature

PID/OVA Monitor Reading: 0.0 FID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) dense black - fine - med sand some silt, small gravel, moist

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
DRO	
Pest/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location ~~gps~~ surveyed (yes) or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: 932-SB309-0002

Tetra Tech NUS Charge No. 0065
QC Information: Lab QC (if applicable)

Sample Method: Grab
Depth Sampled: 00-02 feet BGS
Sample Date & Time: 7/12/05 0737 hours Dup N/A hours
Sampler(s): Dave Hickey

Data Recorded By: Johanna Grant
Signature

PID/OVA Monitor Reading: 0.0 FID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) 0-1 → sandy silt, grass, gravel, dry
1-2 silty sand, some gravel, dry

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	✓
DRO	✓
Pest/PCB	✓
Metals/CN	✓
VOC	✓
GRO	✓

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32 Gould Island
Sample ID: G32-SB309-3840

Tetra Tech NUS Charge No. 0065
QC Information: G32-SB-DUP07 (if applicable)

Sample Method: Grab
Depth Sampled: 38-40 feet BGS
Sample Date & Time: 7/12/05 1141 hours Dup 1146 hours
Sampler(s): Dave Hickey

Data Recorded By: Johanna Frost
Signature

PID/OVA Monitor Reading: 0.0 FID (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Top 12 in. → fine to med. sand, some silt, gravel, wet
bottom 4 in. → silty sand, dry dense

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	✓
DRO	✓
Pest/PCB	✓
Metals/CN	✓
VOC	✓
GRO	✓

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB310-0002

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 00 - 02 feet BGS
Sample Date & Time: 7/12/05 1523 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: Johanna Grant
Signature

PID/OVA Monitor Reading: (0.0 FID) (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) 0-1 silt with some sand organics (grass/roots) gravel, dry
1-2 silty sand, gravel, dry

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	✓
DRO	✓
Pest/PCB	✓
Metals/CN	✓
VOC	✓
GRO	✓

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

Page ___ of ___

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB310-4042

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 40-42 feet BGS
Sample Date & Time: 7/13/05 0959 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: Johanne Jaus
Signature

PID/OVA Monitor Reading: (0.0 PID) (0.0 FID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Top 9" → silty sand, gravel, wet
Bottom 5" → Sandy silt, gravel dry.

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	✓
DRO	✓
Pest/PCB	✓
Metals/CN	✓
VOC	✓
GRO	✓

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB311-0103

Tetra Tech NUS Charge No. 0026S
QC Information: N/A (if applicable)

Sample Method: Grab
Depth Sampled: 01-03 feet bgs
Sample Date & Time: 6/29/05 1048 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: [signature]
Signature

PID/OVA Monitor Reading: (0.0 FID) (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) black silty sand with some gravel, dry
USCS → SM

SAMPLE DATA/REMARKS: VOC sample was collected using a preclean syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	X
DRO	X
Pest/PCB	X
Metals/CN	X
VOC	X
GRO	X

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB311-1719

Tetra Tech NUS Charge No. 00605
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 17-19 feet bgs
Sample Date & Time: 6/29/05 1302 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: Johanna [illegible] Signature

PID/OVA Monitor Reading: (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) dense black silty sand w/ some gravel, dry
USCS → SM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	X
DRO	X
Pest/PCB	X
Metals/CN	X
VOC	X
GRO	X

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location GPS surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB32-0103

Tetra Tech NUS Charge No. 0026S
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 01-03 feet bgs
Sample Date & Time: 6/29/05 1930 hours Dup NA hours
Sampler(s): Dave Hovey

Data Recorded By: Johanne Liard
Signature

PID/OVA Monitor Reading: (0.0) PID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) black silty sand with some sm-med gravel, dry
USCS → SM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	X
DRO	X
Pest/PCB	X
Metals/CN	X
VOC	X
GRO	X

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB312-3638

Tetra Tech NUS Charge No. 0026S
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 36-38 feet bgs
Sample Date & Time: 6/30/05 1402 hours Dup N/A hours
Sampler(s): Dave Hickey

Data Recorded By: Johanna Grant
Signature

PID/OVA Monitor Reading: (0.0 FID) (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) black sand with some silt and ~~gravel~~ & some gravel, wet
USCS → SM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	X
DRO	X
Pest/PCB	X
Metals/CN	X
VOC	X
GRO	X

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location GPS surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB313-0002

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 00-02 feet BGS
Sample Date & Time: 7/5/05 0804 hours Dup NA hours
Sampler(s): Johanna Traut

Data Recorded By: Johanna Traut
Signature

PID/OVA Monitor Reading: (0.0 FID) (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Sand with some silt to med gravel - small tar pieces, dry rock layer at ~1.5' USCS - SM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	X
DRO	X
Pest/PCB	X
Metals/CN	X
VOC	X
GRO	X

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB313-1012

Tetra Tech NUS Charge No. 0065
QC Information: DUP06 (if applicable)

Sample Method: Grab
Depth Sampled: 10-12 feet BGS
Sample Date & Time: 7/15/05 0926 hours Dup 0931 hours
Sampler(s): Johanna Traut

Data Recorded By: Johanna Traut
Signature

PID/OVA Monitor Reading: (0.0) FID (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty sand with a small amount of gravel, wet
USCS = SM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	X
DRO	X
Pest/PCB	X
Metals/CN	X
VOC	X
GRO	X

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB314-0204

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 02-04 feet bgs
Sample Date & Time: 7/8/05 0839 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: Johanna Lizard
Signature

PID/OVA Monitor Reading: (0.0 FID) (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty sand w/ abundant gravel, Dry FILL
USCS → SM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	X
DRO	X
Pest/PCB	X
Metals/CN	X
VOC	X
GRO	X

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB14-17/19

Tetra Tech NUS Charge No. 0026S
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 17 - 19 feet BGS
Sample Date & Time: 7/8/05 0931 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: Johanna Grant
Signature

PID/OVA Monitor Reading: (0.0 FID)(0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) silt with fine sand, some gravel, wet, FILL
USCS = SM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	✓
DRO	✓
Pest/PCB	✓
Metals/CN	✓
VOC	✓
GRO	✓

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17 Building 32 Gaula Island
Sample ID: G32-SB315-0204

Tetra Tech NUS Charge No. CC65
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 02 - 04 feet bgs
Sample Date & Time: 6/15/05 1153 hours Dup NA hours
Sampler(s): Don Winalen

Data Recorded By: Jianna Dant
Signature

PID/OVA Monitor Reading: (0.0 PID) (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) (2-3') silty sand some gravel some rust staining (3-4') silt to sandy silt some fine to course gravel

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining soil was transfered into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
PRO	
Pest/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of boring locations

boring location gps surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB315-0810

Tetra Tech NUS Charge No. 0065
QC Information: N/A (if applicable)

Sample Method: Grab
Depth Sampled: 08 - 10 feet bgs
Sample Date & Time: 10/15/05 1330 hours Dup NA hours
Sampler(s): Don Whalen

Data Recorded By: Shanna Grant
Signature

PID/OVA Monitor Reading: (0.0 PID) (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) (8-9) sandy silt - silty sand and gravel
(9-10) silt the clay some gravel

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining soil was transfered into a decontaminated S.S bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
TPH	
Pest/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of boring locations

boring location g/s ~~yes~~ or no (circle one)

Surveyed

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB316-0203

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 02-03 feet bgs
Sample Date & Time: 6/22/05 1136 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: Joanne Dart
Signature

PID/OVA Monitor Reading: (0.0 FID) (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) black silty sand w/ abundant sm.-med. rounded gravel dry

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for figure of boring locations

Boring location ~~gps~~ surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB316-12-14

Tetra Tech NUS Charge No. 0065
QC Information: G32-SB-DUP05 (if applicable)

Sample Method: Grab
Depth Sampled: 12-14 feet bgs
Sample Date & Time: 6/22/05 1218 hours Dup 1223 hours
Sampler(s): Dave Hickey

Data Recorded By: Johanna Lane
Signature

PID/OVA Monitor Reading: (0.0 FID) (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) 12-13 - black silty sand w/ abundant gravel, dry
13-14 gray bottom 0.35' is silt w/ some fine sand, phyllite

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
VOC	
PAH	
DRO	
Pest/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for figure of boring locations

Boring location gps (yes) or no (circle one)
Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: 32-SB317-0002

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 0.0-0.2 feet bgs
Sample Date & Time: 6/22/05 1835 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: Joanne Lear
Signature

PID/OVA Monitor Reading: ~~11.8 5.5 FID~~ (0.0 FID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) black to brown - silty sand w/ some rounded gravel, some organic matter

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for boring locations

Boring location gps surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB317-1517

Tetra Tech NUS Charge No. 0065
QC Information: N/A (if applicable)

Sample Method: Grab
Depth Sampled: 15-17 feet bgs
Sample Date & Time: 4/22/05 1446 hours Dup NA hours
Sampler(s): Dave McKay

Data Recorded By: Jhanna Dart
Signature

PID/OVA Monitor Reading: (0.0 PID) (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) 15-16 black silty sand w/ some gravel 16-17 dk gray silty w/ some fine sand weathered phyllite

SAMPLE DATA/REMARKS: VOC sample was collected using a pacleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
Pest/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for figure of boring locations

Boring location gps yes or no (circle one)

Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB318-0002

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 00-02 feet bgs
Sample Date & Time: 6/21/05 1401 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: [signature] Signature

PID/OVA Monitor Reading: (0.0 PID) (0.0 FID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) gray - silty sand w/ small rounded gravel brick material

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered to a decontaminated 2.5 bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
Pest	
Pest PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps (yes) or no (circle one)

Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32 Gould Island
Sample ID: 632-SB318-1012

Tetra Tech NUS Charge No. 0065
QC Information: 632-SB-DUP03 (if applicable)

Sample Method: Grab
Depth Sampled: 10 - 12 feet bgs
Sample Date & Time: 6/21/05 1444 hours Dup 1449 hours
Sampler(s): Dave Hickey

Data Recorded By: Johanna Grant
Signature

PID/OVA Monitor Reading: (0.0 FID) (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Black silty sand with some gravel - wet
USCS - SM

SAMPLE DATA/REMARKS: VOC sample was collected using a pocleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
Pest/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps (yes) or no (circle one)

Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB319-0406

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 04 - 06 feet bgs
Sample Date & Time: 10/22/05 0824 hours Dup NA hours
Sampler(s): Dave Fickey

Data Recorded By: Jhannon Lad
Signature

PID/OVA Monitor Reading: (0.0 PID) (0.0 FID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) black silty sand with some sm. to med. gravel, moist
USCS - SM

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
Pest/PCB	
VOC	
GRO	
Metals/CN	

NOTES/SKETCH:

See work plan for figure of boring locations

Boring location gps (yes) or no (circle one)

Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB319-0608

Tetra Tech NUS Charge No. 0065
QC Information: G32-SBDUP04 (if applicable)

Sample Method: Grab
Depth Sampled: 06-08 feet bgs
Sample Date & Time: 6/22/05 0840 hours Dup 0845 hours
Sampler(s): Drew Hickey

Data Recorded By: Johanna Dail
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) black, dense silty sand with some small gravel, dry
USCS - SM

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
Pest/PCB	
VOC	
GRO	
Metals/CN	

NOTES/SKETCH:

~~See boring log~~ OT
see work plan for a figure of boring locations
Boring location gps (yes) or no (circle one)
Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17 Building 32, Gould Island
Sample ID: G32-SB320-0406

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 04-06 feet bgs
Sample Date & Time: 6/2/05 1223 hours Dup____hours
Sampler(s): Dave Hickey

Data Recorded By: [signature]
Signature

PID/OVA Monitor Reading: (0.0 FID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ____ Sediment
- ____ Lagoon/Pond
- X Grab
- ____ Trip Blank*
- ____ Rinsate Blank*
- ____ Field Duplicate collected
- ____ Other (Specify): ____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) black silty sand with some gravel (sm to med), moist
USCS - SM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transferred into appropriate sample vials

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO	
*	

NOTES/SKETCH:

See work plan for figure of boring locations
Boring location gps surveyed (yes) or no (circle one)

* not enough sample recovery for SVOC/PAH/DRO/Pest/PCB/metals/CN ~~Testing~~ Analysis

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17 Building 32 Gould Island
Sample ID: G32-SB320-0810

Tetra Tech NUS Charge No. 6065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 08 - 10 feet
Sample Date & Time: 6/21/05 1250 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: [signature] Signature

PID/OVA Monitor Reading: (no PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) black silty sand w/ some small gravel, moist

USCS - SM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated SS bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
PRO	
Pest/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for figure of boring location

Boring location GPS Surveyed (yes) or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB321-0204

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 02 - 04 feet bgs
Sample Date & Time: 12/23/05 0837 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: Johanne Gray
Signature

PID/OVA Monitor Reading: (0.0 FID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty sand w/ some rounded sm-med gravel - moist

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
PRO	
Pest/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for figure of boring locations

Boring location gps yes or no (circle one)

Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: g32-SB321-1012

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: grab
Depth Sampled: 10-12 feet bgs
Sample Date & Time: 6/23/05 0927 hours Dup NA hours
Sampler(s): D. Hickey

Data Recorded By: C. Sly
Signature

PID/OVA Monitor Reading: (FID - 0.0) ppm

TYPE OF SAMPLE: (Check all that apply)

- [x] Soil
- [ ] Sediment
- [ ] Lagoon/Pond
- [x] Grab
- [ ] Trip Blank*
- [ ] Rinsate Blank*
- [ ] Field Duplicate collected
- [ ] Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) silty sand w/ some rounded gravel dry.

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	~~BOTTLE NUMBER~~ ✓ all that apply
SVOC/PAH	X
DRO	X
Pest/PCB	X
Metal/CN	X
VOC	X
GRO	X

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring locations ~~GPS~~ Surveyed (Yes) or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB322-0204

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 02-04 feet bgs
Sample Date & Time: 10/20/05 1330 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: Jehanna Davis
Signature

PID/OVA Monitor Reading: (0.0 PID) (0.0 FID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) silty sand w/ some gravel slightly moist USCS - (SM)

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate vials. The remaining soil was transfered into a decontaminated SS bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
PEST/PCB	
~~Me~~ MUS/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of boring locations

boring locations ~~gps~~ surveyed (yes) or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17 Building 32 Gould Island
Sample ID: 032-SB322-0608

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 06-08 feet bgs
Sample Date & Time: 6/20/05 1357 hours Dup NA hours
Sampler(s): Dave Harvey

Data Recorded By: Jhanne Dad
Signature

PID/OVA Monitor Reading: 0.6 PID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) black - 0.5 inches of silty sand with gravel
0.3 inches of silt with some sand
0.6 inches of fine sand - wet (USCS: SM)

SAMPLE DATA/REMARKS: VOC sample was collected using a preclean syringe directly from the split spoon and transfered into appropriate sample vials. The remaining soil was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
PEST/PCB	
METALS/CN	
VOC	
GRO	

NOTES/SKETCH:
See work plan for a figure of boring location map

Boring location gps surveyed (yes) or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB323-0204

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 02-04 feet bgs
Sample Date & Time: 6/21/05 0811 hours Dup____hours
Sampler(s): Dave Hickey

Data Recorded By: Johanna Dwyer
Signature

PID/OVA Monitor Reading: (0.0 PID) (0.0 FID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ____ Sediment
- ____ Lagoon/Pond
- X Grab
- ____ Trip Blank*
- ____ Rinsate Blank*
- ____ Field Duplicate collected
- ____ Other (Specify): ____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) black - silty sand w/ some small to med rounded gravel - upper portion of spoon is wet USCS - SM

SAMPLE DATA/REMARKS: VOC sample was collected using a preclaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining soil was transfered into a decontaminated S.S. bowl, homogenized and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
Pest/PCBs	
CN/cmemis	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location ~~GPS~~ Surveyed (Yes) or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB323-10/12

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 10 - 12 feet bgs
Sample Date & Time: 6/21/05 0858 hours Dup____hours
Sampler(s): Dave Hickey

Data Recorded By: Johanne Lau
Signature

PID/OVA Monitor Reading: (1.9 FID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) 10 - black silty sand w/ some gravel - wet
11.5 - gray silt w/ trace of sand (weathered phyllite) dry USCS - SM ML

SAMPLE DATA/REMARKS: VOC sample was collected using a preclean syringe directly from the split spoon and transfered into appropriate vials. The remaining soil was transfered into a decontaminated S.S bowl, homogenized and transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
Pest/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps surveyed (Yes) or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

Page ___ of ___

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB324-0204

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 02 - 04 feet bgs
Sample Date & Time: 6/20/05 0930 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: Julianna Grant
Signature

PID/OVA Monitor Reading: (0.0 PID) (0.0 FID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) black silty sand with some small to med gravel - moist USCS (SM)

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transferred into appropriate sample vials. The remaining soil was transfered into a decontaminated S.S. bowl, homogenized and transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
Pest/PCBs	
CN/Metals	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of the boring locations

Boring location ~~gps~~ surveyed (yes) or no (circle one)

YES

t NUS Form 0005A

TETRA TECH NUS, INC.

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SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB324-0810

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 08-10 feet bgs
Sample Date & Time: 6/20/05 1037 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: Jhanna Lund
Signature

PID/OVA Monitor Reading: (6.0 PID) (0.0 FID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) 8-8.5 silty sand w/ gravel, wet bedrock @ ~8.5 bgs

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. ~~The remaining soil was transfered into a decontaminated 8.5 bowl, homogenized, and transfered into appropriate sample containers~~ CS 6-20-5

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO	
*	

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location surveyed GPS yes OR no (circle one)

* not enough recovery for SVOC/PAH/DRO/Pest/PCB/Metals/CN Testing analysis

t NUS Form 0005A

TETRA TECH NUS, INC.

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SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB325-0305

Tetra Tech NUS Charge No. 0065
QC Information: G32-SB-DUP02 (if applicable)

Sample Method: Grab
Depth Sampled: 03-05 feet bgs
Sample Date & Time: 12/17/05 0803 hours Dup 0808 hours
Sampler(s): Drew Hickey

Data Recorded By: Johanna Lear
Signature

PID/OVA Monitor Reading: (0.0 PID) (0.0 FID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty sand w/ small to medium gravel, dry.
USCS (SM)

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining soil was transfered into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
Pest/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of boring locations
Boring location ~~gps~~ surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

Page ___ of ___

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB325-0709

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 07-09 feet bgs
Sample Date & Time: 11/17/05 0843 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: Johanna Jordt
Signature

PID/OVA Monitor Reading: (0.0 FID) (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) (7-8.2) - Silty sand with some gravel, dense, wet
(8.2-9.0) - weathered argillite w/ scattered pyrite (bedrock) USCS - (SM)

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining soil was transfered into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
Pest/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location ~~gps~~ surveyed (yes) or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB32b-0406

Tetra Tech NUS Charge No. 0005
QC Information: ~~NAD~~ / ab QC (if applicable)

Sample Method: Grab
Depth Sampled: 04-06 feet bgs
Sample Date & Time: 6/15/05 0902 hours Dup NA hours
Sampler(s): Don Whalen

Data Recorded By: Johanna Drake
Signature

PID/OVA Monitor Reading: (0.0 FID) (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) silty sand - sandy silt, some gravel, some phylite fragments SM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining soil was transfered into a decontaminated SS bowl, homogenized and transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
Pest/PCB	
VOC	
GRO	
Metals ON	

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location ~~gps~~ surveyed (yes) or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

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SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB326-0608

Tetra Tech NUS Charge No. 00065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 06 - 08 feet bgs
Sample Date & Time: 6/15/05 0926 hours Dup NA hours
Sampler(s): Dan Wroten

Data Recorded By: Johanna Lowe
Signature

PID/OVA Monitor Reading: (0.0) FID (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silt to clay to sandy silt phyllite

SAMPLE DATA/REMARKS: VOC sample was collected using a preclean and syringe directly from the split spoon and transfered into appropriate sample vials. The remaining soil was transfered into a decontaminated S.S. bowl, homogenized and transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
Pest/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location ~~gps~~ surveyed (yes) or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB327-0103

Tetra Tech NUS Charge No. 0065
QC Information: G32-SB-DUP01 (if applicable)

Sample Method: Grab
Depth Sampled: 01 -03 feet bgs
Sample Date & Time: 01/16/05 0925 hours Dup ___ hours
Sampler(s): Dave Hickey

Data Recorded By: [signature]
Signature

PID/OVA Monitor Reading: (0.0 PID) (0.0 FID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty sand w/ some rounded gravel, dry SM USCS

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining soil was transfered into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
PRO	
PEST/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of boring locations

boring location gps surveyed (yes) or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

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SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB327-0709

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 07-09 feet bgs
Sample Date & Time: 6/16/05 1010 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: Jeanne Dept
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty sand w/ some gravel dry
7.5ft-8.5 → fine to med sand w/ some silt, wet USCS → SM

SAMPLE DATA/REMARKS: VOC sample was collected using a preclean syringe directly from the split spoon and transfered into appropriate sample vials. The remaining soil was transfered into a decontamited s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
Pest/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of boring locations

boring location gps (yes) or no (circle one)
surveyed

t NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB328-0406

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 04-06 feet bgs
Sample Date & Time: 6/21/05 1041 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: Johanna Dart
Signature

PID/OVA Monitor Reading: NA ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) silty sand with some small to med. gravel, wet
USCS - SM

SAMPLE DATA/REMARKS: VOC sample was collected using preclearned syringes directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
PCB/PPB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps surveyed (yes) or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB328-0810

Tetra Tech NUS Charge No. 00065
QC Information: NA (if applicable)

Sample Method: corab
Depth Sampled: 08-10 feet bgs
Sample Date & Time: 11/21/05 1111 hours Dup____hours
Sampler(s): Dave Hickey

Data Recorded By: Johanna Daly
Signature

PID/OVA Monitor Reading: NA ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ____ Sediment
- ____ Lagoon/Pond
- X Grab
- ____ Trip Blank*
- ____ Rinsate Blank*
- ____ Field Duplicate collected
- ____ Other (Specify): ____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) dense black silt with some fine grained sand, dry
USCS - SM

SAMPLE DATA/REMARKS: VOC sample was collected using a preclaned syringe directly from the split spoon and transfered into appropriate sample vials. ~~The remaining soil was transfered into a decontaminated 5 gal bucket, homogenized, and transfered into appropriate sample containers.~~

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO*	

NOTES/SKETCH:

See work plan for figure of boring locations

Boring location surveyed gps yes or no (circle one)

*not enough sample recovery for SVOC/PAH/DRO/Pest/PCB/Metals/CN ~~Testing~~ Analysis

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB331-0204

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 02 - 04 feet
Sample Date & Time: 6/24/05 1358 hours Dup NA hours
Sampler(s): Johanna Traut
Don Winalen

Data Recorded By: Johanna Traut
Signature

PID/OVA Monitor Reading: (00 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Sandy silt w/ some gravel
Some rust staining
USCS - SM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	X
DRO	X
Pest/PCB	X
Metals/CN	X
VOC	X
GRO	X

NOTES/SKETCH:

See work plan for figure of boring locations

Boring location g/ps yes or no (circle one)

Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

Page ___ of ___

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB331-5254

Tetra Tech NUS Charge No. 0065
QC Information: ~~NA~~ Lab QC (if applicable)

Sample Method: Grab
Depth Sampled: 52-54 feet bgs
Sample Date & Time: 6/27/05 1455 hours Dup NA hours
Sampler(s): ~~Johanna Frant~~ JF
Dave Mickey

Data Recorded By: Johanna Frant
Signature

PID/OVA Monitor Reading: (0.0 PID) (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) black fine sand w/some silt some small gravel, wet
USCS → SM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	X
DRO	X
Pest/PCB	X
Metals/CN	X
VOC	X
GRO	X

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps (yes) or no (circle one)

SUGVOYE

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB332-0002

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 00-02 feet BGS
Sample Date & Time: 7/14/05 1409 hours Dup NA hours
Sampler(s): Dave Hrey

Data Recorded By: Johanna Grant
Signature

PID/OVA Monitor Reading: 0 / PID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) brown → black - silty sand gravel, grass, wet
USCS → SM

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
PRO	
Pest/PCB	
VOC	
GRO	
Metals/CN	

NOTES/SKETCH:

See work plan for a figure of boring locations
Boring location ~~gps~~ yes or no (circle one)
Surveyed

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB332-0406

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 04-06 feet BGS
Sample Date & Time: 7/14/05 1423 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: Johanna Grant
Signature

PID/OVA Monitor Reading: 0.1 PID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) dense dark gray - silt w/ some fine sand, dry
USCS = SM

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC / PAH	
DRO	
Pest / PCB	
Metals/CN	

NOTES/SKETCH:

See work plan for a figure of boring locations
Boring location ~~gps~~ yes or no (circle one)
Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: 032-SB333-0406

Tetra Tech NUS Charge No. 0065
QC Information: — (if applicable)

Sample Method: grab
Depth Sampled: 1012 feet bgs
Sample Date & Time: 6/23/05 1037 hours Dup NA hours
Sampler(s): D. Hickey

Data Recorded By: C. SL
Signature

PID/OVA Monitor Reading: (FID - 231.9) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) silty sand, gravel, wood, wet, slight solvent odor.

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	~~BOTTLE LOT NO.~~ CS ✓ All that apply
SVOC/PAH	X
ORO	X
Pest/PCB	X
Metals/CN	X
VOC	X
GRO	X

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring locations GPS yes or no (circle one)

Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32 Gould Island
Sample ID: g32-SB333-1214

Tetra Tech NUS Charge No. 0065
QC Information: — (if applicable)

Sample Method: grab
Depth Sampled: 12-14 feet bgs
Sample Date & Time: 6/23/05 1134 hours Dup NA hours
Sampler(s): D. Hickey

Data Recorded By: C. Sh
Signature

PID/OVA Monitor Reading: (FID-0.0) ppm

TYPE OF SAMPLE: (Check all that apply)

- [x] Soil
- [ ] Sediment
- [ ] Lagoon/Pond
- [x] Grab
- [ ] Trip Blank*
- [ ] Rinsate Blank*
- [ ] Field Duplicate collected
- [ ] Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) silty w/ fine sand, scattered phytite, dry.

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	~~BOTTLE LOT NO.~~ ✓ All that apply
SVOC/PAH	x
DRO	x
Pest/PCB	x
Metals/CN	x
VOC	x
GRO	x

NOTES/SKETCH:

See work plan for a figure of boring location

Boring locations ~~gps~~ surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB334-0002

Tetra Tech NUS Charge No. 0065
QC Information: ~~MS/MSD~~ Lab QC (if applicable)

Sample Method: Grab
Depth Sampled: 00-02 feet bgs
Sample Date & Time: 6/22/05 0929 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: [signature] Signature

PID/OVA Monitor Reading: (0.0 PID) (0.0 FID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Gray silty sand w/ some small to med. gravel, dry (1-2) brick material - practically pulverized from driving spoon

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
DRO	
Pest/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for figure of boring locations

Boring location gps (yes) or no (circle one)
Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB334-0008

Tetra Tech NUS Charge No. 0065
QC Information: Lab QC (if applicable)

Sample Method: Grab
Depth Sampled: 06-08 feet bgs
Sample Date & Time: 6/22/05 1021 hours Dup N/A hours
Sampler(s): Dave Hickey

Data Recorded By: [signature] Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) 6-7 - black fine grained sand w/some silt, some gravel, wet
7-8 black silty sand w/ some gravel, dry

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC	
PAH	
PEST/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See workplan for figure of boring locations
Boring location gps (yes) or no (circle one)
Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB335-0002

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 00-02 feet BGS
Sample Date & Time: 7/5/05 1032 hours Dup NA hours
Sampler(s): Johanna Traut

Data Recorded By: Johanna Traut
Signature

PID/OVA Monitor Reading: (0.0 FID) (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty sand with a few large pieces of gravel, some rust staining, dry USCS → SM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	X
DRO	X
Pest/PCB	X
Metals/CN	X
VOC	X
GRO	X

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps (yes) or no (circle one)

Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: 032-SB335-10/12

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 10-12 feet BGS
Sample Date & Time: 7/5/05 1112 hours Dup NA hours
Sampler(s): Johanna Traut

Data Recorded By: Johanna Traut
Signature

PID/OVA Monitor Reading: (0.0 FID) (0.0 PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty sand with some sm to med. gravel, moist
USCS → SM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	X
DRO	X
Pest/PCB	X
Metals/CN	X
VOC	X
GRO	X

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location g/ps (yes) or no (circle one)

Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB33W-0002

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 00-02 feet BGS
Sample Date & Time: 7/6/05 1437 hours Dup NA hours
Sampler(s): Don Wingen

Data Recorded By: Johanna Grant
Signature

PID/OVA Monitor Reading: 8.6 FID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Sand & gravel some silt (charred material → has tar odor at surface, copper pieces. Fine to coarse gravel USCS → GM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	X
DRO	X
Pest/PCB	X
Metals/CN	X
VOC	X
GRO	X

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32 Gould Island
Sample ID: G32-SB33b-0608

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 06-08 feet BGS
Sample Date & Time: 7/6/05 1118 hours Dup NA hours
Sampler(s): Don Winalen

Data Recorded By: Johanna Traub
Signature

PID/OVA Monitor Reading: 13.3 FID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Silty Sand → wet

USCS → SM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample wals. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	X
DRO	X
Pest/PCB	X
Metals/CN	X
VOC	X
GRO	X

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps surveyed (yes) or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB337-0002

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 00-02 feet BGS
Sample Date & Time: 7/14/05 1115 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: Johanna Frauer
Signature

PID/OVA Monitor Reading: 2.5 PID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) silty sand, abund gravel, wet

USCS → SM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
DRO	
Pest/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of boring locations
Boring location gps surveyed yes or no (circle one)

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB337-1012

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 10-12 feet BGS
Sample Date & Time: 7/18/05 1254 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: [signature] Signature

PID/OVA Monitor Reading: (no PID) ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) silty sand, gravel, wet dense

USCS = SM

SAMPLE DATA/REMARKS: VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
DRO	
Pest/PCB	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

See work plan for a figure of boring locations
Boring location gps yes or no (circle one)
Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB338-0002'

Tetra Tech NUS Charge No. 0065
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 00 - 02 feet BGS
Sample Date & Time: 7/14/05 0910 hours Dup NA hours
Sampler(s): Dave Hickey

Data Recorded By: Johanna Grant
Signature

PID/OVA Monitor Reading: 9.1 FID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) silty sand, gravel, moist

USCS → SM

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	✓
DRO	✓
Pest/PCB	✓
Metals/CN	✓
VOC	✓
GRO	✓

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps (yes) or no (circle one)

Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SB338-1012

Tetra Tech NUS Charge No. 00605
QC Information: NA (if applicable)

Sample Method: Grab
Depth Sampled: 10-12 feet BGS
Sample Date & Time: 7/14/05 1001 hours Dup____hours
Sampler(s): Dave Hickey

Data Recorded By: Johanna Grant
Signature

PID/OVA Monitor Reading: 0.0 FID ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) silty sand with abundant gravel, quartz, wet

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
SVOC/PAH	✓
DRO	✓
Pest/PCB	✓
Metals/CN	✓
VOC	✓
GRO	✓

NOTES/SKETCH:

See work plan for a figure of boring locations

Boring location gps (yes) or no (circle one)

Surveyed

Tt NUS Form 0005A

TETRA TECH NUS, INC.

Page ___ of ___

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-BR01

Tetra Tech NUS Charge No. 0065
QC Information: _____ (if applicable)

Sample Method: Grab
Depth Sampled: — feet
Sample Date & Time: 7/26/05 1430 hours Dup N/A hours
Sampler(s): Johanna Traut

Data Recorded By: Johanna Traut
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- X Other (Specify): Bedrock

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) weathered phyllite

SAMPLE DATA/REMARKS: ~~VOC sample was collected using a pre-treated syringe directly from the split spoon and transferred into appropriate sample vials. The remaining sample was transferred into a decontaminated S.S. bowl homogenized, and transferred into appropriate sample containers.~~ Sample was taken directly from the exposed bedrock using a hammer and put in appropriate sample containers

ANALYSIS	BOTTLE LOT NO.
Metals	

NOTES/SKETCH:

Sample taken from the exposed bedrock along the shoreline just north of the concrete pad / building 32

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-C0301-090905

Tetra Tech NUS Charge No. G000065
QC Information: DUP01 (if applicable)

Sample Method: Grab
Depth Sampled: 0-6" - ~~feet~~ 2 ~~2~~ 9/9/05
Sample Date & Time: 9 / 9 / 05 1200 hours Dup 1230 hours
Sampler(s): C. Sanchez, D. Hartigan

Data Recorded By: L. Seydel
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- X Other (Specify): Concrete

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)

SAMPLE DATA/REMARKS:

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO	
SVOC	
PAH	
Pest	
PCB	
Metals	
CN	

NOTES/SKETCH:

Sample co-located with Soil Boring 331

Sample collected per the work plan using a jack hammer to break up concrete before filling sample jars.

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-C0302-090905

Tetra Tech NUS Charge No. G000065
QC Information: none (if applicable)

Sample Method: Grab
Depth Sampled: 0-6" ~~- feet~~ 9/9/05
Sample Date & Time: 9/9/05 1230 hours Dup — hours
Sampler(s): C. Sanchez, D. Hartigan

Data Recorded By: L. Seydel
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- X Other (Specify): Concrete

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)

SAMPLE DATA/REMARKS:

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO	
SVOC	
PAH	
Pest	
PCB	
Metals	
CN	

NOTES/SKETCH:

Sample co-located with Soil Boring 311.

Sample collected per the work plan using a jack hammer to break up concrete before filling sample jars.

Tt NUS Form 0005A

APPENDIX D5

SEDIMENT AND BIOTA SAMPLE COLLECTION SUMMARY FORMS, FIELD LOGS

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD301 - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: Lab QC (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 9/1/2/05 0945 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Dark gray silt and sand, roots (eel grass), some gravel

SAMPLE DATA/REMARKS: 8 cores collected; 0-6" recovery in each core

ANALYSIS	check all that ~~BOTTLE LOT No.~~ apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: 9/2/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

*Deep interval collected at SD301 location. See separate logsheet for details.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island

Sample ID: ~~G32-SD3 -0000.5~~ G32-SD301-0.5-1.0

Tetra Tech NUS Charge No. G00065-0000.0260

QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers

Depth Sampled: ~~0000.5~~ 0.5-1.0 feet

Sample Date & Time: 9/2/05 1000 hours Dup -- hours

Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

	Soil		Trip Blank*
X	Sediment		Rinsate Blank*
	Lagoon/Pond		Field Duplicate collected
X	Grab		Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Dark brown sand, gravel, shell fragments

SAMPLE DATA/REMARKS: 4 cores collected; 2 cores have 0-12" recovery; 2 cores have 0-10" recovery

ANALYSIS	check all that ~~BOTTLE LOT NO.~~ apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: 9/2/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3~~02A~~ - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: _____ (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 25 / 05 1020 hours Dup____ hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz + Divers

Data Recorded By: T. A. Campbell
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

____	Soil	____	Trip Blank*
X	Sediment	____	Rinsate Blank*
____	Lagoon/Pond	____	Field Duplicate collected
X	Grab	____	Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Black sandy, organics
some silt

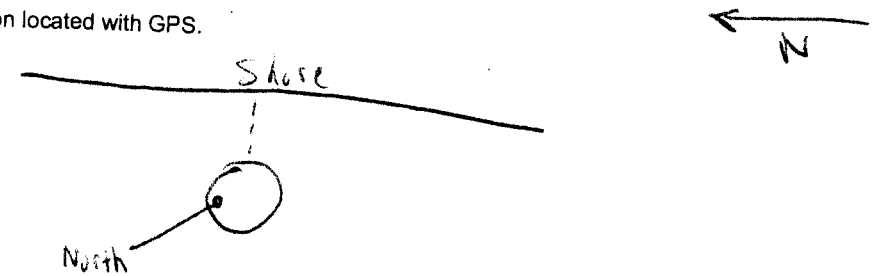
SAMPLE DATA/REMARKS: 3 cores w/ 6" recovery

ANALYSIS	~~BOTTLE LOT No.~~ Check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.



TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3026 - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: _____ (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 25 / 05 1130 hours Dup ____ hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: T A Campbell
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ____ Soil
- X Sediment
- ____ Lagoon/Pond
- X Grab
- ____ Trip Blank*
- ____ Rinsate Blank*
- ____ Field Duplicate collected
- ____ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Black sand w/ some silt

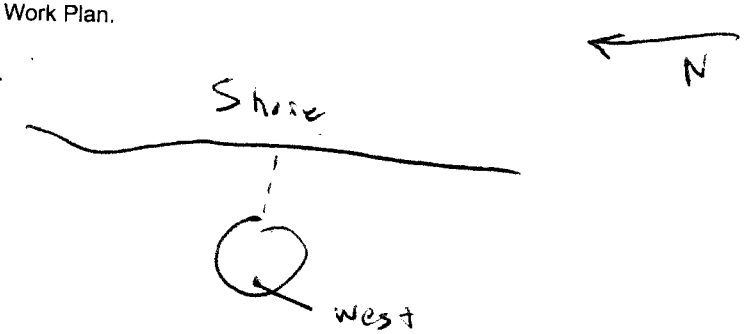
SAMPLE DATA/REMARKS:

ANALYSIS	~~BOTTLE LOT No.~~ Check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.



TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3026 - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: _____ (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 25 / 05 1105 hours Dup ____ hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz + Divers

Data Recorded By: T. Campbell
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

____	Soil	____	Trip Blank*
X	Sediment	____	Rinsate Blank*
____	Lagoon/Pond	____	Field Duplicate collected
X	Grab	____	Other (Specify): ____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Black sand w/ some silt

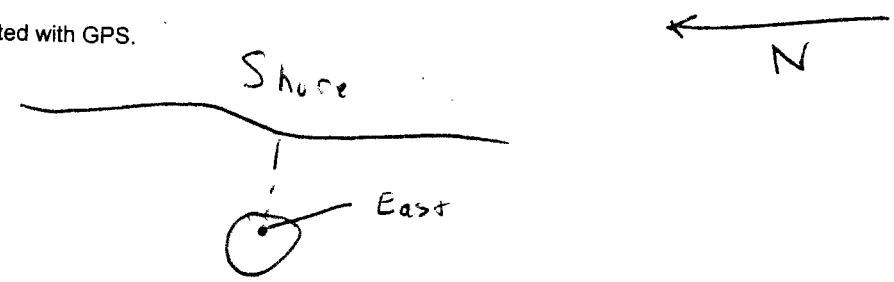
SAMPLE DATA/REMARKS:

ANALYSIS	~~BOTTLE LOT No.~~ Check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.



TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3~~02~~ - 0000.5 Center

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: _____ (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 25 / 05 1000 hours Dup ____ hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz Divers

Data Recorded By: Tom A. Campbell
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ____ Soil
- X Sediment
- ____ Lagoon/Pond
- X Grab
- ____ Trip Blank*
- ____ Rinsate Blank*
- ____ Field Duplicate collected
- ____ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Black sandy, organics
small sand, some silt

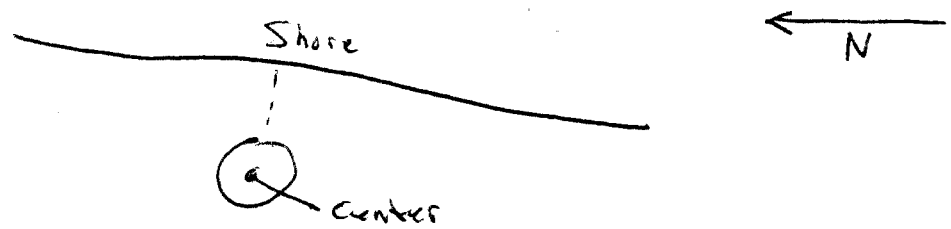
SAMPLE DATA/REMARKS: 3 cores with 6" recovery

ANALYSIS	~~BOTTLE LOT NO.~~ THE Check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.



TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD30[illegible]E - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: _____ (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 25 / 05 1045 hours Dup ____ hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz + Divers

Data Recorded By: [signature]
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ____ Soil
- X Sediment
- ____ Lagoon/Pond
- X Grab
- ____ Trip Blank*
- ____ Rinsate Blank*
- ____ Field Duplicate collected
- ____ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Black sand w/ some silt
shell fragments

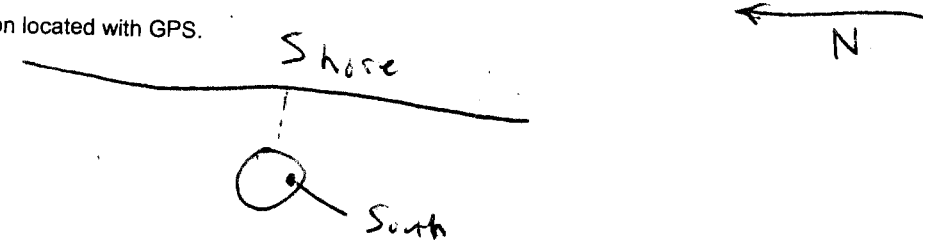
SAMPLE DATA/REMARKS: 2 ft core attempted. Refusal met at 6"

ANALYSIS	~~BOTTLE LOT NO.*~~ Check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.



TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3~~0~~1F - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 9/2/05 1110 hours Dup – hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Gravel w/ some sand, shell fragments, brown in color

SAMPLE DATA/REMARKS: 4 cores collected; 0-1" recovery

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: LS 9/2/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

* station at direct outfall of pipe
** mussels collected from this location

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3~~0~~3 - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: ~~[illegible]~~ 0000.5 feet
Sample Date & Time: 9/1/05 0945 hours Dup – hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Dark grey sand and gravel, crab in top of core

SAMPLE DATA/REMARKS: 4 cores collected; 0-6" recovery in each

ANALYSIS	check all that ~~BOTTLE LOT NO.~~ apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

LS 9/1/05
NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

Deep sample collected from this location.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island

Sample ID: ~~G32-SD3 - 0000.5~~ G32-SD303-0.5-1.0 LS 9/1/05

Tetra Tech NUS Charge No. G00065-0000.0260

QC Information: Done (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers

Depth Sampled: 0000.5 feet

Sample Date & Time: 9/1/05 1010 hours Dup – hours

Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz

Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) Dark grey, anoxic mud, some sand and shells

SAMPLE DATA/REMARKS: 4 cores collected; 0-6" recovery in each

ANALYSIS	~~BOTTLE LOT No.~~ check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

LS 9/1/05

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3~~04~~A - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 26 / 05 0820 hours Dup N/A hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

	Soil		Trip Blank*
X	Sediment		Rinsate Blank*
	Lagoon/Pond		Field Duplicate collected
X	Grab		Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
organic materials, dark grey, sand w/ some silt, gravel, shell fragments

SAMPLE DATA/REMARKS: 4 cores collected. Recovery ~ 0-6"

ANALYSIS	~~BOTTLE LOT No.~~ Check all that apply 23 8/26/05
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:
Sediment sample collected per the Work Plan.

Sediment station located with GPS.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3~~04~~B - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 26 / 05 0945 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

	Soil		Trip Blank*
X	Sediment		Rinsate Blank*
	Lagoon/Pond		Field Duplicate collected
X	Grab		Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
organic materials, dark grey, sand w/ some silt, gravel, shell fragments throughout

SAMPLE DATA/REMARKS: 5 cores collected, 0-6" recovery from each

ANALYSIS	Check all that ~~BOTTLE LOT No.~~ apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: 8/26/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

2 small clams noted.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3046-0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: MS/MSD (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 26 / 05 0900 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

	Soil		Trip Blank*
X	Sediment		Rinsate Blank*
	Lagoon/Pond		Field Duplicate collected
X	Grab		Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
~~oil~~ sheen noted on core surface, organic materials (eel grass bed), dark gray, sand w/some silt, shell fragments -> tiny gravel

SAMPLE DATA/REMARKS: 9 cores collected with total recovery of 0-8". Only collected sample from the 0-6" interval

ANALYSIS	check all that apply ~~BOTTLE LOT No.~~ 8/26/05
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

MS/MSD collected.

Sheen noted in top of 3 of 9 cores.

Deep sample collected from this location. See separate logsheet.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: ~~G32-SD3 0000.5~~ G32-SD304C-0.5/1.0

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: ~~0000.5~~ 0.5-1.0 feet
Sample Date & Time: 8 / 26 / 05 0920 hours Dup – hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: Lauren J. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

	Soil		Trip Blank*
X	Sediment		Rinsate Blank*
	Lagoon/Pond		Field Duplicate collected
X	Grab		Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
sheen noted on top of 1, organic materials, dark grey, gravel w/ some sand and silt, some shell fragments

SAMPLE DATA/REMARKS: 4 cores collected, recovery 0-12" on each

ANALYSIS	~~BOTTLE LOT No.~~ Check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

sheen noted on surface of 1 core but not included in sample since this is a deep sample

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3640 - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: DUP02 (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 26 / 05 0810 hours Dup 0815 hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

	Soil		Trip Blank*
X	Sediment		Rinsate Blank*
	Lagoon/Pond		Field Duplicate collected
X	Grab		Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
organic materials, dark grey, sand w/ some silt, shell materials

SAMPLE DATA/REMARKS: 4 cores collected for station and another 4 for the duplicate. Recovery is 0-6" for each. Collected from the center.

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply X 8/26/05
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD304E - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 26 / 05 0930 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

	Soil		Trip Blank*
X	Sediment		Rinsate Blank*
	Lagoon/Pond		Field Duplicate collected
X	Grab		Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
some organic materials; ground up shell fragments, 3-4", gravel w/ some sand

SAMPLE DATA/REMARKS: 4 cores collected, recovery 0-6"

ANALYSIS	check all that apply ~~BOTTLE LOT No.~~
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3041F - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 9/2/05 1215 hours Dup -- hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
1" rocks, gravel and shell fragments, little sand

SAMPLE DATA/REMARKS: 4 cores collected; 0-1" recovery

ANALYSIS	check all that ~~BOTTLE LOT No.~~ apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

LS 9/2/05
NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

* mussels collected from this location.
** sample collected at pipe outfall.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3~~05~~A - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 26 / 05 1110 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
tight sand, some gravel and shells, dark grey

SAMPLE DATA/REMARKS: 4 cores collected, 0-6" recovery in each

ANALYSIS	~~BOTTLE LOT No.~~ Check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

8/26/05
NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3~~05~~B - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 26 / 05 1115 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
(roots, grass, clam) organic material, dark grey, gravel w/ some sand

SAMPLE DATA/REMARKS: 4 cores collected, 0-6" recovery in each

ANALYSIS	Check all that ~~BOTTLE LOT No.~~ apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

8/26/05
NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3056 - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 26 / 05 1030 hours Dup -- hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: Laura Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
a lot of shell pieces, grey (dark), gravel w/ sand

SAMPLE DATA/REMARKS: 4 cores collected, 0-6" recovery on each

ANALYSIS	~~BOTTLE LOT No.~~ check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: LS 8/26/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

sea star (~1" diameter)
small clam (~1" diameter)

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3050 - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 26 / 05 1010 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
gravel, some sand w/ shell fragments, dark grey

SAMPLE DATA/REMARKS: 4 cores, recovery 0-6" in each

ANALYSIS	~~BOTTLE LOT No.~~ check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: 8/26/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

Location was moved east of where original GPS location ~20' due to rocks/riprap and the lack of deposition. Located approximately 30' from end of the pipe.

Deep sample collected from this location. See separate logsheet.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD305E - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 26 / 05 1130 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

	Soil		Trip Blank*
X	Sediment		Rinsate Blank*
	Lagoon/Pond		Field Duplicate collected
X	Grab		Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
tight sand, some gravel, dark grey,

SAMPLE DATA/REMARKS: 4 cores collected, 0-6" recovery collected from south location.

ANALYSIS	check all that ~~BOTTLE LOT No.~~ apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

8/26/05
NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3~~05~~F - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: ~~9/8~~ 9/1/05 / 05 1330 hours Dup – hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Lots of 1" + rocks, gravel, dark grey, very little sand.

SAMPLE DATA/REMARKS: 4 cores collected; 0-3" recovery

ANALYSIS	check all that apply ~~BOTTLE LOT No.~~
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: LS 9/1/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

mussels collected at this location

sample collected at pipe outfall

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD306A - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 29 / 05 1000 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

	Soil		Trip Blank*
X	Sediment		Rinsate Blank*
	Lagoon/Pond		Field Duplicate collected
X	Grab		Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Coarse gravel with shell fragments, brown-dark grey, no anoxic layer

SAMPLE DATA/REMARKS: 4 cores collected; 3 of 4 cores have 0-6" recovery; one core had 0-3" recovery
collected in the north

ANALYSIS	check all that apply ~~BOTTLE LOT No.~~
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

~~25~~ 2 small horseshoe crabs at top of 1 core.
razor clam (~3" long)

* station 306 moved east of original GPSed location due to limited deposition from rocky bottom/riprap.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD306B - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 29 / 05 1105 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
0-5" → coarse gravel w/ shell fragments,
5"-6" → anoxic, dark grey, sand w/ silt and clay.

SAMPLE DATA/REMARKS: 5 cores collected; 4 cores with 0-6" recovery; one core ≈2" recovery collected from the west

ANALYSIS	check all that ~~BOTTLE LOT No.~~ apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: 8/29/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

* station 306 moved away from shore from original GPS located position due to riprap/lack of deposition.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD306C-0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 29 / 05 1015 hours Dup – hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

	Soil		Trip Blank*
X	Sediment		Rinsate Blank*
	Lagoon/Pond		Field Duplicate collected
X	Grab		Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
top 2" → coarse gravel, some shell fragments
bottom 4" → anoxic layer, organic, dark grey w/ sand and silt and clay

SAMPLE DATA/REMARKS: 4 cores collected; 0-6" recovery of each collected from the east

ANALYSIS	Check all that ~~BOTTLE LOT No.~~ apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

8/29/05
NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

~25 hermit crabs noted at top of one core.
- sea star (~1" diameter)

* Station 306 moved east of original GPSed location due to limited deposition from rocky bottom/riprap.

Deep sample collected from this location. See separate logsheet.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island LZ 8/29/05

Sample ID: ~~G32-SD3 0000.5~~ G32-SD306C-0.5-1.0

Tetra Tech NUS Charge No. G00065-0000.0260

QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers

Depth Sampled: LZ 8/29/05 ~~0000.5~~ 0.5-1.0 feet

Sample Date & Time: 8 / 29 / 05 1030 hours Dup — hours

Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

	Soil		Trip Blank*
X	Sediment		Rinsate Blank*
	Lagoon/Pond		Field Duplicate collected
X	Grab		Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Anoxic mud, dark grey, sand w/ some silt and clay, few shell fragments.

SAMPLE DATA/REMARKS: 4 cores collected. 0-12" recovery of each, 6-12" used for sample collected from the east

ANALYSIS	check all that apply ~~BOTTLE LOT No.~~ LZ 8/29/05
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

* Station SD306 was moved out from shore from original coordinates due to available deposition. Significant riprap, concrete debris located on bottom closer to island.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3~~06~~D - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: DUP03 (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 29 / 05 0910 hours Dup 0910 hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

	Soil		Trip Blank*
X	Sediment		Rinsate Blank*
	Lagoon/Pond		Field Duplicate collected
X	Grab		Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Top 3" -> course gravel with shell fragments
Bottom 3" -> distinct anoxic layer, dark grey, sand w/ some silt and clay

SAMPLE DATA/REMARKS: A total of 8 cores collected; 0-6" recovery from each collected from the center

ANALYSIS	check all that apply ~~BOTTLE LOT No.~~ 8/29/05
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

* Station 306 moved east of original GPS location due to limited deposition in rocky bottom/riprap.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD306E - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: DUP04 (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 29 / 05 1045 hours Dup 1100 hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Top 1" -> coarse gravel w/ some shell fragments
Bottom 5" -> anoxic, dark grey, sand w/ silt and clay

SAMPLE DATA/REMARKS: A total of 8 cores collected; 0-6" recovery of each. collected from the south

ANALYSIS	check all that ~~BOTTLE LOT No.~~ apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

8/29/05
NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

* Station 306 moved away from shore from original GPS location due to limited deposition (concrete riprap etc.)

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3~~06~~ F - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: ~~9/8~~ 9/1/05 / 05 1250 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
1" rocks, gravel with sand and shell fragments

SAMPLE DATA/REMARKS: 4 cores recovered, 0-8" recovery

ANALYSIS	check all that ~~BOTTLE LOT No.~~ apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

LS 9/1/05
NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

clams collected at this location

sample collected at pipe outfall

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3~~0~~7 - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: None (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 30 / 05 1215 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

	Soil		Trip Blank*
X	Sediment		Rinsate Blank*
	Lagoon/Pond		Field Duplicate collected
X	Grab		Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Organic materials, sand w/ some silt

SAMPLE DATA/REMARKS: 4 cores collected; 0-3" recovery for each core

ANALYSIS	Check all that ~~BOTTLE LOT No.~~ apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

LS 8/30/05
NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

clam, eel grass roots noted

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3~~08~~A - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: _____ (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 25 / 05 1200 hours Dup____ hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: TACampbell
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

____	Soil	____	Trip Blank*
X	Sediment	____	Rinsate Blank*
____	Lagoon/Pond	____	Field Duplicate collected
X	Grab	____	Other (Specify): ____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Black + Grey Sand w/ silt
clams, worms, shell fragments
pieces of algae

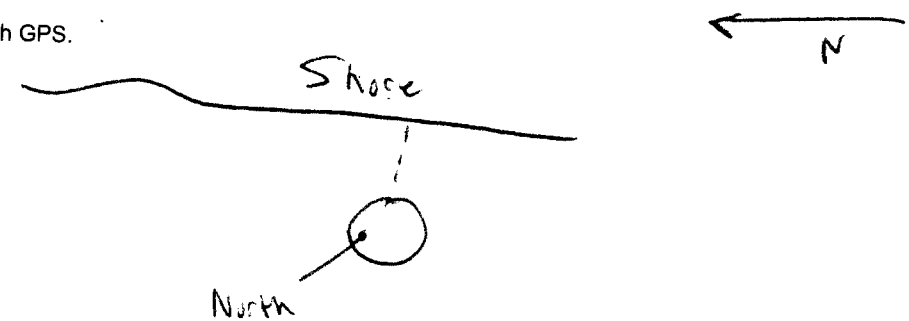
SAMPLE DATA/REMARKS: 6 cores collected. Recovery ranged from 3" to 6"

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.



TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3~~0~~3B - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: _____ (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 25 / 05 1300 hours Dup ____ hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: _____
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ____ Soil
- X Sediment
- ____ Lagoon/Pond
- X Grab
- ____ Trip Blank*
- ____ Rinsate Blank*
- ____ Field Duplicate collected
- ____ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Black/grey sand w/ some silt shell fragments

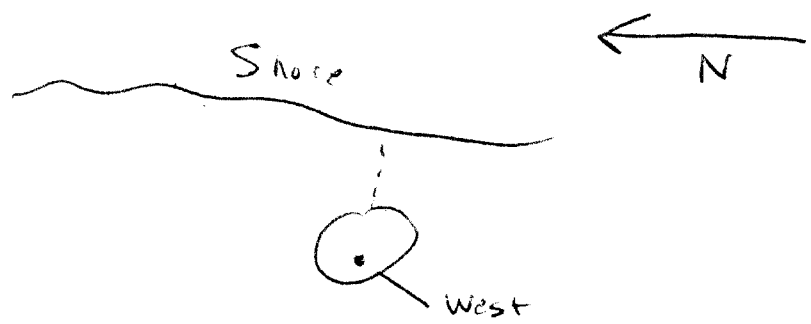
SAMPLE DATA/REMARKS: 5 cores collected. Recovery was 6"

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.



TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3~~05~~C - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: _____ (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 25 / 05 1245 hours Dup ____ hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: [signature]
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

____	Soil	____	Trip Blank*
X	Sediment	____	Rinsate Blank*
____	Lagoon/Pond	____	Field Duplicate collected
X	Grab	____	Other (Specify): ____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Black, grey sand w/ some silt
shell fragments little gravel
crab, snail,
Larval fish or invert in 1 core

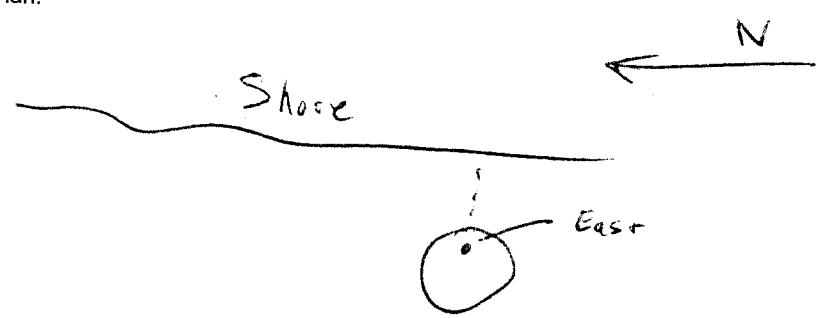
SAMPLE DATA/REMARKS: 5 cores collected. Recovery 2" to 6"

ANALYSIS	~~BOTTLE LOT No.~~ Check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.



TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD308D - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: _____ (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 25 / 05 1145 hours Dup ____ hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: TAC Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ____ Soil
- X Sediment
- ____ Lagoon/Pond
- X Grab
- ____ Trip Blank*
- ____ Rinsate Blank*
- ____ Field Duplicate collected
- ____ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Black + grey sand w/ some silt

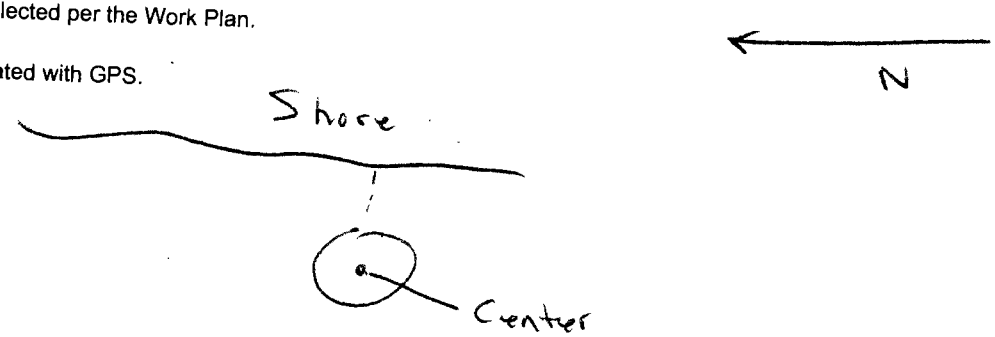
SAMPLE DATA/REMARKS: Snails + Polychaetes present
Max depth at this station (SD308) was 13 - 10.5 ft

ANALYSIS	~~BOTTLE LOT No.~~ Check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.



TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3088 - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: _____ (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 25 / 05 1225 hours Dup ____ hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: TACampbell
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

	Soil		Trip Blank*
X	Sediment		Rinsate Blank*
	Lagoon/Pond		Field Duplicate collected
X	Grab		Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Black + Grey sand w/ some silt
Clam, little gravel
Algae pieces, shell fragments

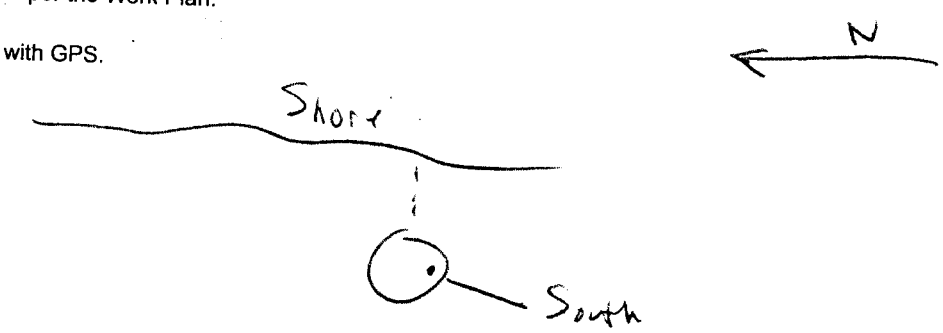
SAMPLE DATA/REMARKS: 5 cores collected. Recovery 1" to 5"

ANALYSIS	~~BOTTLE LOT NO.~~ Check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.



TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3 05F - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 9/8 / 2 / 05 1140 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
1" rocks, gravel with shells, little sand

SAMPLE DATA/REMARKS: 4 cores collected; 0-1" recovery

ANALYSIS	check all that ~~BOTTLE LOT NO.~~ apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: 9/2/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

* sample collected immediately at pipe outfall

** mussels collected from this location

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD309A - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: Lab QC (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 29 / 05 1215 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Coarse gravel w/ shell fragments

SAMPLE DATA/REMARKS: 6 cores collected; 0-3" recovery in each collected from station to the north

ANALYSIS	check all that ~~BOTTLE LOT No.~~ apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

LL 8/29/05
NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

* station 309 moved east from original coordinate location due to rocky bottom/debris covered bottom and lack of deposition.

· no deep sample collected -> shallow sedimentation

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3~~04~~B - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 29 / 05 1255 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Coarse gravel w/ shell fragments

SAMPLE DATA/REMARKS: 4 cores collected; 0-3" recovery in each. collected from the west.

ANALYSIS	check all that ~~BOTTLE LOT No.~~ apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: L.S. 8/29/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

dam noted

*station 309 moved east of original GPSed ~~[illegible]~~ L.S. 8/29/05 location, Limited deposition due to rocky bottom/concrete debris.

no deep sample collected -> shallow sedimentation

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD309C - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 29 / 05 1230 hours Dup – hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Coarse gravel w/ shell fragments, 1" rock, brown

SAMPLE DATA/REMARKS: 4 cores collected; 0-3" recovery in each collected from the east of the station

ANALYSIS	check all that ~~BOTTLE LOT No.~~ apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

8/29/05
NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

* Station 309 was moved east of original GPSed location due to limited deposition from concrete/rocky bottom.

no deep sample collected → shallow sedimentation

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD309 D - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 29 / 05 1200 hours Dup – hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

	Soil		Trip Blank*
X	Sediment		Rinsate Blank*
	Lagoon/Pond		Field Duplicate collected
X	Grab		Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Coarse gravel w/ shell fragments, 1" rocks.

SAMPLE DATA/REMARKS: 4 cores; 0-3" recovery in each collected from the center of the station

ANALYSIS	Check all that apply ~~BOTTLE LOT NO.~~
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

LS 8/29/05
NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

* Station 309 moved location out from original GPSed coordinates off end of pipe due to limited deposition, rock bottom, debris covering bottom.

no deep sample collected - shallow sedimentation

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD309E - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 29 / 05 1245 hours Dup - hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
More sand than gravel, worms, some shell fragments, grey

SAMPLE DATA/REMARKS: 4 cores collected; 0-3" recovery collected from the south

ANALYSIS	check all that apply ~~BOTTLE LOT No.~~
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: 8/29/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

* Station 309 moved east of original GPS location. Limited deposition due to concrete debris/rocky bottom.

- worms noted in cores

no deep sample collected -> shallow sedimentation

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3009F - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: DUP01 (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 9/8/05 1200 hours Dup 1215 hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- X Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Shiny, gravel, sand, some eel grass sand roots

SAMPLE DATA/REMARKS: 8 cores recovered; 0-2" recovery

ANALYSIS	~~BOTTLE LOT No.~~ check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: LS 9/1/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

mussels collected from this location

sample collected at pipe outfall

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD310A - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: DUP05 (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 30 / 05 0930 hours Dup 0935 hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

	Soil		Trip Blank*
X	Sediment		Rinsate Blank*
	Lagoon/Pond		Field Duplicate collected
X	Grab		Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Coarse gravel with shell fragments, brown

SAMPLE DATA/REMARKS: 6 cores collected; 0-3" recovery collected from the north

ANALYSIS	check all that apply ~~BOTTLE LOT No.~~
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

LS 8/30/05
NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

* clam worm, crab, worm noted

no deep sample collected → shallow sedimentation

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3106 - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 30 / 05 1015 hours Dup – hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Coarse gravel w/ shell fragments

SAMPLE DATA/REMARKS: 4 cores collected; 0-3" recovery in each collected from the west

ANALYSIS	~~BOTTLE LOT No.~~ check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

LS 8/30/05

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

no deep sample collected

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3 10 C - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 30 / 05 0940 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
coarse gravel w/ shell fragments, 1-2" rocks, brown

SAMPLE DATA/REMARKS: 4 cores collected; 0-3" recovery in each collected from the east

ANALYSIS	check all that apply ~~BOTTLE LOT No.~~
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

LL 8/30/05
NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

no deep sample collected → shallow sedimentation

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD31D - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 30 / 05 0915 hours Dup - hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Coarse gravel and shell fragments

SAMPLE DATA/REMARKS: 4 cores collected; 0-3" recovery in each collected from the center

ANALYSIS	check all that ~~BOTTLE LOT No.~~ apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: 8/30/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

- beneath ~5' of water

no deep sample collected → shallow sedimentation

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3 10 E - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 30 / 05 0950 hours Dup – hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Coarse gravel w/ shell fragments

SAMPLE DATA/REMARKS: 4 cores collected; 0-3" recovery in each collected from the south

ANALYSIS	check all that apply ~~BOTTLE LOT No.~~
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

LS 8/30/05
NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

- worm noted

no deep sample collected → shallow sedimentation

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3~~10~~F - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: ~~9/8~~ 9/1/05 1120 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

	Soil		Trip Blank*
X	Sediment		Rinsate Blank*
	Lagoon/Pond		Field Duplicate collected
X	Grab		Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
shiny, gravel, shells, black, odor noted

SAMPLE DATA/REMARKS: 4 cores collected; 0-2" recovery

ANALYSIS	Check all that apply ~~BOTTLE LOT No.~~
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: 9/1/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

odor noted

sample collected at pipe outfall.
mussels collected

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD311 - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: ~~Dupose~~ JS 9/2/05 (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: ~~9/8~~ 9/2/05 / 05 0850 hours Dup ~~0900~~ JS 9/2/05 hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- X Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Dark grey sand, eel grass roots, shell fragments, some gravel, hermit crab on core surface

SAMPLE DATA/REMARKS: A total of 2 cores recovered; 0-6" recovery in each

ANALYSIS	Check all that apply ~~BOTTLE LOT No.~~
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: JS 9/2/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

* a deep sample was collected at SD311. See separate logsheet for details.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: ~~G32-SD3 -0000.5~~ G32-SD311-0.5/1.0

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: ~~0000.5~~ 0.5-1.0 feet
Sample Date & Time: 9/8/2/05 0915 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Dark grey sand, no roots, some silt/clay

SAMPLE DATA/REMARKS: 4 cores collected; 3 cores had 0-12" recovery; one core had 0-10" recovery.

ANALYSIS	~~BOTTLE LOT No.~~ check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD312 - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 30 / 05 1105 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

___	Soil	___	Trip Blank*
X	Sediment	___	Rinsate Blank*
___	Lagoon/Pond	___	Field Duplicate collected
X	Grab	___	Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Pet. odor, shiny, gravel in top ~1" and rest sludge, metal fragments throughout

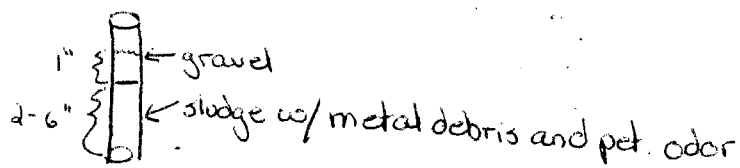
SAMPLE DATA/REMARKS: 4 cores collected; 0-6" recovery on each.

ANALYSIS	~~BOTTLE LOT No.~~ check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.



deep sample collected → see separate logsheet

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: ~~G32-SD312 - 0000.5~~ G32 - SD312 - 0.5-1.0

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: ~~0000.5~~ 0.5-1.0 feet
Sample Date & Time: 8 / 30 / 05 1115 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Pet odor 6-7" of core, shine to sediment, sludge, metal fragments. Anoxic mud 8-12", sand w/ silt and clay, BLACK

SAMPLE DATA/REMARKS: 4 cores collected; 0-12" recovery for each core; 6-12" collected for sample

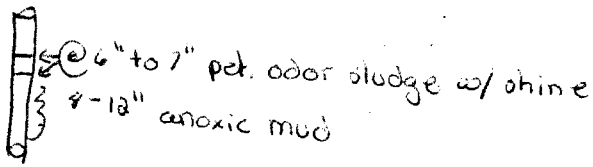
ANALYSIS	~~BOTTLE LOT No.~~ check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: 8/30/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

Deep sample collected.



TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3 13A - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: _____ (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 25 / 05 1400 hours Dup ____ hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: TACampbell
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ____ Soil
- X Sediment
- ____ Lagoon/Pond
- X Grab
- ____ Trip Blank*
- ____ Rinsate Blank*
- ____ Field Duplicate collected
- ____ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Black/grey with some silt
Crabs, worm

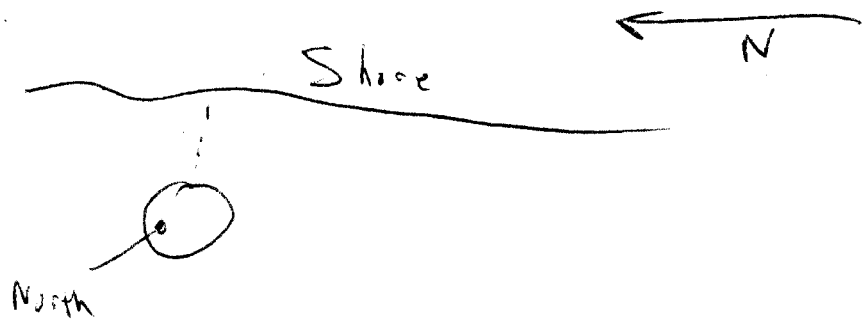
SAMPLE DATA/REMARKS: 4 cores collected w/ 3" to 6" recovery

ANALYSIS	~~BOTTLE LOT No.~~ Check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.



TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3BB - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: _____ (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 25 / 05 1440 hours Dup ____ hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: T. Campbell
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ____ Soil
- X Sediment
- ____ Lagoon/Pond
- X Grab
- ____ Trip Blank*
- ____ Rinsate Blank*
- ____ Field Duplicate collected
- ____ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Grey sand w/ some silt, little gravel
white shell fragments
warm

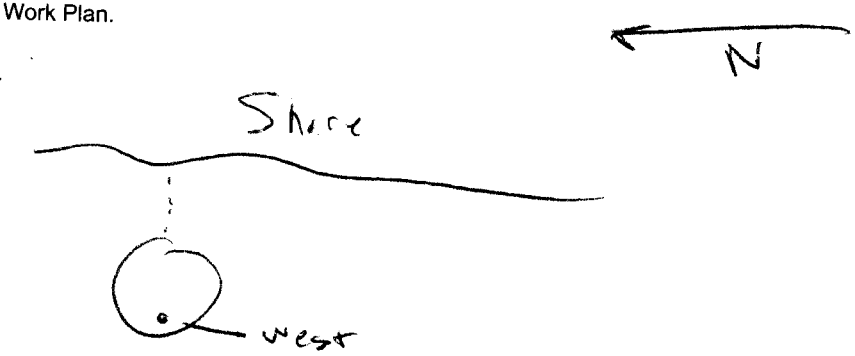
SAMPLE DATA/REMARKS: 6 cores collected with 2" to 6" recovery

ANALYSIS	~~BOTTLE LOT No.~~ Check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.



TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3 BC - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: _____ (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 25 / 05 1410 hours Dup ____ hours
Sampler(s): C. Sanchez, T. Campbell, J. Seydewitz

Data Recorded By: [signature]
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

___	Soil	___	Trip Blank*
X	Sediment	___	Rinsate Blank*
___	Lagoon/Pond	___	Field Duplicate collected
X	Grab	___	Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Black sand with some silt
~~with~~ some gravel
crabs, eelgrass strands

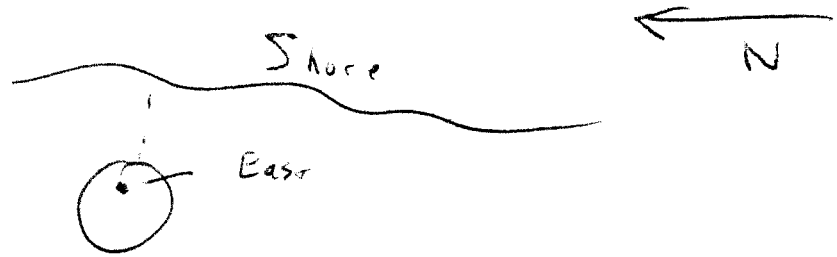
SAMPLE DATA/REMARKS: 4 cores collected with 3" to 6" recovery

ANALYSIS	~~BOTTLE LOT No.~~ Check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.



TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3,3D - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: _____ (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 25 / 05 1345 hours Dup____ hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: [signature]
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ____ Soil
- X Sediment
- ____ Lagoon/Pond
- X Grab
- ____ Trip Blank*
- ____ Rinsate Blank*
- ____ Field Duplicate collected
- ____ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Black/grey sand w/ some silt
worm

SAMPLE DATA/REMARKS: 5 cores collected. Recovery was 2" to 6"
Max depth at Station 313 was 8 ft

ANALYSIS	~~BOTTLE LOT No.~~ Check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: ~~G32-SD3 - 0000.5~~ the
G32-DUP1-000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: Dup of SD313 D (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 25 / 05 1355 hours Dup ____ hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: TACampbell
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ____ Soil
- X Sediment
- ____ Lagoon/Pond
- X Grab
- ____ Trip Blank*
- ____ Rinsate Blank*
- ____ Field Duplicate collected
- ____ Other (Specify): ____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Gray Sand w/ silt
Shell fragments

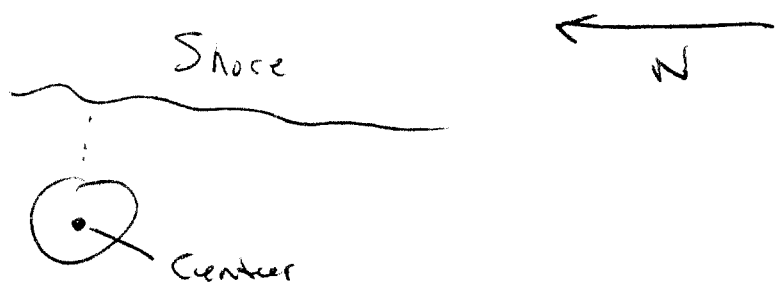
SAMPLE DATA/REMARKS: 5 cores collected with 6" recovery

ANALYSIS	~~BOTTLE LOT No.~~ Check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.



TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3 13E - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: _____ (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 25 / 05 1425 hours Dup ____ hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: TACampbell
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

____	Soil	____	Trip Blank*
X	Sediment	____	Rinsate Blank*
____	Lagoon/Pond	____	Field Duplicate collected
X	Grab	____	Other (Specify): ____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Black sand w/ some silt and little gravel
worms, eelgrass strands, organic odor

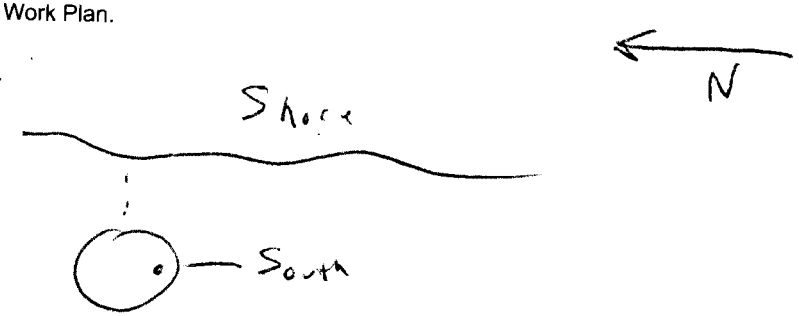
SAMPLE DATA/REMARKS: 4 cores collected with 4" to 6" recovery

ANALYSIS	Check all that apply ~~BOTTLE LOT NO.~~ TAC
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.



TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD3~~13~~F - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 9/2/05 1040 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

	Soil		Trip Blank*
X	Sediment		Rinsate Blank*
	Lagoon/Pond		Field Duplicate collected
X	Grab		Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
1" rocks, large gravel, shells, little sand

SAMPLE DATA/REMARKS: 4 cores collected; 0-1" recovery

ANALYSIS	~~BOTTLE LOT No:~~ check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: 9/2/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

*mussels collected from this location.

** sample collected immediately at pipe outfall

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD31-1 - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: DUP 06 (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 9/1/05 0900 hours Dup 0910 hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- X Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Brown sand, some 0.5" rocks, pebbles, worm

SAMPLE DATA/REMARKS: 8 cores recovered; 0-6" recovery in each

ANALYSIS	Check all that apply ~~BOTTLE LOT No.~~
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

LS 9/1/05
NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

Deep sample collected from this location; see separate logsheet.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: ~~G32-SD3 - 0000.5~~ G32-SD314-0.5-1.0
LS 9/1/05

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: LS 9/1/05 ~~0000.5~~ 0.5-1.0 feet
Sample Date & Time: 9 / 1 / 05 0930 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Dark grey-brown, some anoxic mud, 0-1" rocks, mainly sand

SAMPLE DATA/REMARKS: 4 cores collected; 0-12" recovery in each core

ANALYSIS	~~BOTTLE LOT No.~~ Check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

LS 9/1/05
NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

strong current noted at this location

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD315 - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 30 / 05 1210 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
coarse gravel with shell fragments, 1" rocks

SAMPLE DATA/REMARKS: 4 cores collected; 0-3" recovery for each

ANALYSIS	check all that apply ~~BOTTLE LOT No.~~
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: LS 8/30/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

No deep sample collected

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD31 - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: Lab QC (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 30 / 05 1030 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Anoxic mud, dark grey, sand w/ silt and clay

SAMPLE DATA/REMARKS: 6 cores collected; 0-6" recovery

ANALYSIS	~~BOTTLE LOT No.~~ check all that apply
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: LS 8/30/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

a deep sample was collected from this location. See separate logsheet. beneath ~20' of water

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: ~~G32-SD31~~ ~~0000.5~~ G32-SD316-0.5/1.0 8/30/05

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: ~~0000.5~~ 0.5-1.0 feet
Sample Date & Time: 8 / 30 / 05 1100 hours Dup — hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
anoxic mud, silt, sand and clay, dark grey

SAMPLE DATA/REMARKS: 4 cores collected; 0-12" recovery in each; sample collected from the 6-12"

ANALYSIS	check all that apply ~~BOTTLE LOT No.~~
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH: 8/30/05

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

deep sample collected

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SD317 - 0000.5

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: none (if applicable)

Sample Method: Grab - Core Tube Samplers by Divers
Depth Sampled: 0000.5 feet
Sample Date & Time: 8 / 30 / 05 1010 hours Dup - hours
Sampler(s): C. Sanchez, T. Campbell, L. Seydewitz

Data Recorded By: L. Seydewitz
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- X Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)
Coarse gravel with shell fragments, 1" rocks and metal fragments

SAMPLE DATA/REMARKS: 4 cores collected; 0-3" recovery for each

ANALYSIS	Check all that apply ~~BOTTLE LOT No.~~
TCL VOCs	✓
TCL SVOCs	✓
Pesticides/PCBs	✓
DRO/GRO	✓
TAL Metals	✓
Cyanide	✓
AVS/SEM	✓
Grain Size	✓
Percent Moisture	✓

NOTES/SKETCH:

Sediment sample collected per the Work Plan.

Sediment station located with GPS.

TtNUS Form 0005

TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32- ET301-090205

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: DUP02 (if applicable)

Sample Method: HAND

by: DIVER : WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: 9 / 2 /2005 1415 hours
Duplicate: 1420 hours (military)
Sampler(s): C Sanchez T Campbell
L. Seydewitz (circle appropriate)

Data Recorded By: TR
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
Other_____

_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
_X_ Composite

Description: (Blue Mussel, Hardshell Clam, Etc.)
See data sheet for sizes
n = 6

*include DIUF lot # in "other"

Water Parameters: See Sediment data sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate
TCL SVOCs/PAHS	~~8~~ 16 oz. Jar
TCL Pest/PCB	
TAL Metals	
Cyanide	
% Lipids	

NOTES/SKETCH:

Number Bivalves Collected: 6
Estimated Area Sampled: 441 ft2 25' Dia Circle
Tissue weights sent to Lab: 210.34 g
Mitkem: (need ~ 30 grams, minimum)

Duplicate 02 collected from this station. Approximately 1/2 of sample portioned to duplicate aliquot.

Tt NUS Form 0005revised

JUP 02 1420

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: 632 JOB NO. N0065-0350

SAMPLE ID: 632- ET301-090205 DATE: 9-2-5 / 1415

DATA RECORDED BY: C. Sonchey

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	91.5	73.5	48.7	200.1	30.13
02	80.0	67.0	46.0	76.95	24.67
03	85.0	65.0	44.0	171.17	24.80
04	85.0	69.0	45.0	192.13	28.50
05	79.9	63.1	46.1	150.12	19.69
06	87.0	66.0	46.0	198.60	26.30
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: B32-ETSCR-082405

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: NA (if applicable)

Sample Method: HAND

by: DIVER : WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: 08 / 24 /2005 0930 hours
Duplicate: _____ hours (military)
Sampler(s): C. Sanchez, T. Campbell
L. Seydewitz (circle appropriate)

Data Recorded By: JAC
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
Other _____

_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
_X_ Composite

Description: (Blue Mussel, Hardshell Clam, Etc.)
Reference data sheets for sizes
n = 5

*include DIUF lot # in "other"

Water Parameters: See Sediment data sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	~~8 oz.~~ Jar 16 oz	Number Bivalves Collected: 5
TCL Pest/PCB		Estimated Area Sampled: 491 ft² 25' Circle
TAL Metals		**Tissue weights sent to Lab:** 130.07 g
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

Tt NUS Form 0005revised

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: Gould Island JOB NO. G00065-0260

SAMPLE ID: G32-ET302-082905 DATE: 8-29-05

DATA RECORDED BY: Campbell

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	~~75.5~~	~~66.3~~	~~41.3~~	~~150.8~~	TC
02	71.5	58.0	36.0	101.3	14.89
03	~~70~~ 71.1	66.1	39.4	122.67	18.76
04	90.8	73.0	45.5	>200.9	28.13
05	82.8	70.0	45.2	184.72	35.60
06	86.0	74.8	45.3	192.35	32.69
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
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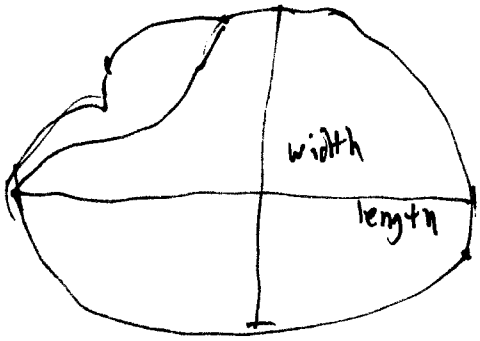
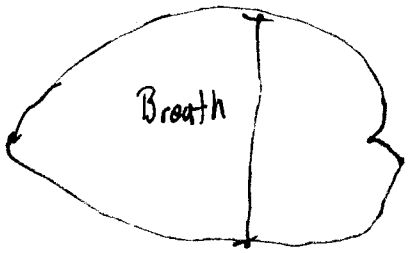
22					
23					
24					
25					





TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32 - ET302F - 090205

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: NA (if applicable)

Sample Method: HAND

by: DIVER : WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: 9 / 2 /2005 1440 hours
Duplicate: _____ hours (military)
Sampler(s): C. Sanchez T. Campbell
L. Seydewitz _____ (circle appropriate)

Data Recorded By: TAC
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
Other _____

_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
_X_ Composite

Description: (Blue Mussel, Hardshell Clam, Etc.)
See data sheet for sizes
n = 20

*include DIUF lot # in "other"

Water Parameters: See Sediment Log Sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	~~8~~ oz. Jar	Number Bivalves Collected: 20
TCL Pest/PCB	16	Estimated Area Sampled: 491 ft² 25' Circle
TAL Metals		**Tissue weights sent to Lab:** 104.86
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

Tt NUS Form 0005revised

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: 632 JOB NO. N0065-0350

SAMPLE ID: 932- ET302F-090205 DATE: 9-2-5/1440

DATA RECORDED BY: T. Campbell

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	57.5	28.0	22.1	18.17	7.04
02	54.0	27.5	19.0	14.44	5.24
03	57.0	28.9	21.9	18.88	3.52
04	59.8	27.0	24.2	20.68	5.89
05	53.1	27.1	22.9	15.08	7.06
06	59.5	29.5	21.5	19.01	5.36
07	63.0	32.0	22.5	23.39	8.34
08	60.5	25.0	23.5	21.19	6.98
09	57.9	29.9	21.5	22.27	6.28
10	54.3	29.5	20.5	15.90	6.16
11	55.7	27.8	19.9	16.33 ~~20.00~~	5.63
12	53.1	25.9	20.00	12.35	4.10
13	55.1	25.1	22.91	13.50	4.45
14	55.3	20.1	21.9	17.67	4.50
15	53.0	27.1	19.9	17.33	4.35
16	52.5	26.1	18.5	13.93	5.05
17	53.1	28.1	18.1	14.14	3.57
18	51.1	28.0	18.1	17.77	3.61
19	53.0	23.9	19.1	14.04	4.40
20	51.9	26.3	18.9	14.00	3.30
21					
22					
23					
24					
25					

TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32- ETØ303 - ~~08~~ 09 TC 090105

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: _____ (if applicable)

Sample Method: HAND

by: DIVER : WADING (Circle One)
ID: ~~HARDSHELL CLAM or~~ BLUE MUSSEL (Circle One)

Sample Date & Time: ~~08~~ 09 / 1 /2005 1130 hours
Duplicate: _____ hours (military)
Sampler(s): C. Sanchez T. Campbell
L. Seydewitz _____ (circle appropriate)

Data Recorded By: _____
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
Other _____

_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
__X__ Composite

Description: (Blue Mussel, Hardshell Clam, Etc.)
Reference data sheets for sizes
n = 6

*include DIUF lot # in "other"

Water Parameters: See Sediment Log Sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	~~8~~ oz. Jar	Number Bivalves Collected: 6
TCL Pest/PCB	16	Estimated Area Sampled: 491 ft2 25' Dia Circle
TAL Metals		**Tissue weights sent to Lab:** 223.22
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

Samples collected per Work Plan.
Stations marked with GPS.

Tt NUS Form 0005revised

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: G32 303 (S) JOB NO. G00065-0260

SAMPLE ID: ET 310-090105 DATE: 9-1-05

DATA RECORDED BY: Campbell

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm).	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	79.0	71.1	43.5	179.91	34.15
02	~~80~~ 82.0	72.0	51.0	195.97	22.34
03	86.0	63.0	40.9	165.78	37.08
04	105.1	82.0	51.0	200+	62.08
05	99.1	80.0	47.8	200+	37.39
06	86.0	71.8	48.0	200+	35.18
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
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25					

TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-E7304 ~~-08-29-05~~ 082905

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: _____ (if applicable)

Sample Method: HAND

by: DIVER : WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: 8 / 29 /2005 1015 hours
Duplicate: _____ hours (military)
Sampler(s): C. Sanchez T. Campbell
L. Seydewitz _____ (circle appropriate)

Data Recorded By: TACampbell
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
_X_ Composite
Other _____

Description: (Blue Mussel, Hardshell Clam, Etc.)
See data sheet for sizes
n = 7

*include DIUF lot # in "other"

Water Parameters: See Sediment Data Sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	~~8~~ 16 oz. Jar	Number Bivalves Collected: 7
TCL Pest/PCB	16 oz	Estimated Area Sampled: 491 ft² 25' Dia Circle
TAL Metals		**Tissue weights sent to Lab:** 161.52
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

Samples collected per Work Plan,
Stations marked with GPS.

Tt NUS Form 0005revised

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: Gould Island JOB NO. G00065-0260

SAMPLE ID: 632- ET 304 -082905 DATE: 8-29-05

DATA RECORDED BY: Campbell

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	80.0	70.8	42.0	143.60	21.16
02	72.8	62.2	38.0	111.93	14.18
03	73.8	64.2	41.0	132.27	17.82
04	80.5	68.2	42.5	149.19	20.55
05	83.2	73.0	40.5	156.12	25.50
06	84.5	74.0	43.8	174.91	26.48
07	89.0	77.8	48.2	>200	35.83
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32 - ET304F-090205

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: _____ (if applicable)

Sample Method: HAND

by: DIVER : WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: 9 / 2 /2005 1435 hours
Duplicate: _____ hours (military)
Sampler(s): C. Sanchez T. Campbell
L. Seydewitz _____ (circle appropriate)

Data Recorded By: TAC
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
Other _____

_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
_X_ Composite

Description: (Blue Mussel, Hardshell Clam, Etc.)
See data sheet for sizes
n = 20

*include DIUF lot # in "other"

Water Parameters: See Sediment Log Sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	~~8~~ oz. Jar	Number Bivalves Collected: 20
TCL Pest/PCB	16	Estimated Area Sampled: 491 ft2 25' Dia Circle
TAL Metals		**Tissue weights sent to Lab:** 62.37 g
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

Tt NUS Form 0005revised

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: 304F JOB NO. N0065-0350

SAMPLE ID: G32-ET304F-090205 DATE: 9/2/05 1435

DATA RECORDED BY: L. Seydut

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	49.3	28.1	21.3	13.72	3.81
02	43.5	24.1	19.8	8.10	3.60
03	44.7	22.9	17.4	9.00	2.44
04	47.3	23.1	19.6	10.18	3.45
05	44.5	24.2	17.8	9.08	2.78
06	41.1	23.5	17.6	7.14	3.42
07	45.8	29.7	19.6	11.49	3.32
08	43.6	22.5	16.7	7.84	2.38
09	51.6	28.7	21.3	15.76	4.28
10	52.0	27.2	21.1	15.94	4.96
11	47.6	26.5	21.8	12.50	4.75
12	48.5	26.2	21.5	15.25	5.52
13	42.6	22.4	16.7	8.34	2.70
14	42.7	21.5	20.0	5.96	2.69
15	38.2	22.6	19.2	7.29	2.19
16	36.5	21.3	15.8	5.93	1.82
17	37.2	19.7	14.2	5.12	1.73
18	40.2	21.4	15.2	6.96	1.66
19	42.3	22.7	18.6	8.58	2.58
20	42.1	23.6	19.6	9.85	2.29
21					
22					
23					
24					
25					

62.37

TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-ET305-082905 → AND → Tetra Tech NUS Job No./PMS G00065-0260
QC Information: DUP01 (if applicable)

Sample Method: HAND

by: DIVER : WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: 8 / 29 /2005 1055 hours
Duplicate: 1100 hours (military)
Sampler(s): C. Sanchez T. Campbell
L. Seydewitz (circle appropriate)

Data Recorded By: Craig Sanchez
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
Other_____

_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
_X_ Composite

Description: (Blue Mussel, Hardshell Clam, Etc.)
Clam See data sheet for sizes
n = 5 (sample)
n = 5 (Dup)

*include DIUF lot # in "other"

Water Parameters: See Sediment Log Sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	8 oz. Jar	Number Bivalves Collected: 5/5
TCL Pest/PCB		Estimated Area Sampled: 491 Ft.² 25' Dia. Circle
TAL Metals		**Tissue weights sent to Lab:** 117.7 / 169.58
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: 632 JOB NO. G00065-0260

SAMPLE ID: 632 - ET305 - 082905 AND DUP 01 DATE: 8-29-05

DATA RECORDED BY: Campbell

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	88.0	65.1	37.2	149.77	30.61
02	80.1	70.0	40.0	149.98	27.77
03	70.2	55.2	35.0	117.19	19.28
04	73.2	60.8	36.2	111.90	24.24
05	63.0	59.0	34.9	85.51	15.80
06	72.2	63.8	39.7	129.77	26.85
07	107.8	80.0	49.5	>200	50.23
08	94.0	84.0	44.0	199.56	41.60
09	81.5	64.1	41.2	146.32	26.10
10	76.0	65.0	35.9	125.7	24.80
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

ET305 (1–5)

DUP01 (6–10)

ET 305-082905

TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: ~~G32-ET0312-08~~ G32-ET305F-090105
TC

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: _____(if applicable)

Sample Method: HAND

by: DIVER : WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: ~~8~~ 9 / 1 /2005 1340 hours
Duplicate: _____ hours (military)
Sampler(s): C. Sanchez T. Campbell
L. Seydewitz (circle appropriate)

Data Recorded By:

(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
Other_____

_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
_X_ Composite

Description: (Blue Mussel, Hardshell Clam, Etc.)
Reference data sheets for sizes.
n = 20

*include DIUF lot # in "other"

Water Parameters: See Sediment Log Sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	~~8~~ 16 oz. Jar	Number Bivalves Collected: 20
TCL Pest/PCB		Estimated Area Sampled: 491 ft2. 25' Dia Circle
TAL Metals		**Tissue weights sent to Lab:** 77.15
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

Samples collected per Work Plan.
Station marked with GPS.

Tt NUS Form 0005revised

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: G32 JOB NO. G00065-0260

SAMPLE ID: ET~~312~~ 305F-090105 DATE: 9-1-05

DATA RECORDED BY: Campbell

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	51.8	22.1	21.5	15.16	4.14
02	50.2	28.5	19.9	13.77	4.14
03	46.0	25.2	18.0	10.42	4.93
04	40.1	24.1	16.0	8.29	2.60
05	46.0	23.0	17.4	9.69	4.14
06	48.2	25.0	19.0	11.69	4.39
07	49.0	23.9	20.0	12.20	4.64
08	44.1	25.9	19.0	11.40	3.78
09	53.5	27.8	22.5	18.0	6.81
10	47.5	26.0	18.9	11.36	3.39
11	47.5	24.2	20.0	11.14	4.26
12	47.5	27.1	19.8	13.96	4.88
13	45.6	27.0	17.5	11.08	3.00
14	49.0	28.5	17.5	12.30	3.67
15	40.0	23.2	15.7	7.64	2.95
16	46.1	25.7	15.1	8.05	3.00
17	49.1	25.5	19.0	12.48	3.16
18	43.0	24.0	16.8	8.80	3.68
19	47.3	26.0	19.1	11.84	2.16
20	47.5	26.9	20.0	12.37	3.33
21					
22					
23					
24					
25					

TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32- ETO306- ~~08~~ 090105 TC

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: _____ (if applicable)

Sample Method: HAND

by: DIVER : WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: TC ~~08~~ 9 / 1 /2005 0945 hours
Duplicate: _____ hours (military)
Sampler(s): C. Sanchez T. Campbell
L. Seydewitz _____ (circle appropriate)

Data Recorded By: TAC
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
__X__ Composite
Other _____

Description: (Blue Mussel, Hardshell Clam, Etc.)
Reference data sheets for sizes
n = 6

*include DIUF lot # in "other"

Water Parameters: See Sediment Log Sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	TC ~~8~~ oz. Jar	Number Bivalves Collected: 6
TCL Pest/PCB	16	Estimated Area Sampled: 491 ft2
TAL Metals		**Tissue weights sent to Lab:** 177.79
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

Samples collected per Work Plan.
Station marked with GPS.

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: G32 JOB NO. G00065-0260

SAMPLE ID: ET 306 -090105 DATE: 9-1-5

DATA RECORDED BY: Craig Sawyer

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	79.0	62.5	39.0	131.91	22.62
02	75.0	60.0	39.5	127.63	17.24
03	92.8	73.5	50.0	200+	41.72
04	100.10	79.0	60.0	200+	39.40
05	80.0	~~41.3~~ 63.0	41.3	148.72	30.44
06	82.9	63.5	42.1	151.18	26.40
07					
08					
09					
10					
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TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: 632 - ~~ET0311-08~~ ET306F-090105

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: _____ (if applicable)

Sample Method: HAND

by: DIVER ; WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: ~~08~~ 09 / 01 /2005 1500 hours
Duplicate: _____ hours (military)
Sampler(s): C. Sanchez T. Campbell
L. Seydewitz D. Banks (circle appropriate)

Data Recorded By: [signature]
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
_X_ Composite
Other _____

Description: (Blue Mussel, Hardshell Clam, Etc.)
Reference data sheets for sizes.
n = 6

*include DIUF lot # in "other"

Water Parameters: See Sediment Log Sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	8 oz. Jar	Number Bivalves Collected: 6
TCL Pest/PCB		Estimated Area Sampled: 441 ft²
TAL Metals		**Tissue weights sent to Lab:** 188.69
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

Samples collected per Work Plan
Stations marked with GPS.

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: G32 JOB NO. G00065-0260

SAMPLE ID: ET 306F-090105 DATE: 9/1/05

DATA RECORDED BY: Dana Banks

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	93.5	78.2	48	251.04	49.87
02	54.8	45.1	30.9	48.02	10.02
03	85.3	73.6	48	212.47	42.07
04	74.5	62	40.7	134.58	21.64
05	86.5	69.5	48.5	198.07	38.24
06	84.9	68.5	43.8	168.55	26.83
07					
08					
09					
10					
11					
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TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32- ET0307 - ~~08~~ 090105 TC

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: _____ (if applicable)

Sample Method: HAND

by: DIVER : WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: TC ~~08~~ 09 / 1 /2005 0930 hours
Duplicate: _____ hours (military)
Sampler(s): C. Sanchez T. Campbell
L. Seydewitz _____ (circle appropriate)

Data Recorded By: TAC
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
Other _____

_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
_X_ Composite

Description: (Blue Mussel, Hardshell Clam, Etc.)
Reference data sheets for sizes
n=6

*include DIUF lot # in "other"

Water Parameters: See Sediment data sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	TC ~~8~~ oz. Jar	Number Bivalves Collected: TC ~~16~~ 6
TCL Pest/PCB	16	Estimated Area Sampled: 491 ft²
TAL Metals		**Tissue weights sent to Lab:** 204.83
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

Samples collected per Work Plan.
Station marked with GPS.

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: 632 JOB NO. G00065-0260

SAMPLE ID: ET307 - 090105 DATE: 9-1-5

DATA RECORDED BY: C. Sanchez

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	81.5	64.5	45.0	169.30	28.49
02	~~64.3~~ 8.20	69.0	47.0	200.00	29.45
03	74.8	69.5	49.5	200+	34.30
04	85.5	69.5	44.0	186.66	36.29
05	91.0	76.0	47.1	200	47.33
06	83.9	67.8	45.9	193.92	28.97
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TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: 632- ET0315- 08 2905 +C 308

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: _____(if applicable)

Sample Method: _____HAND_____

by: DIVER : WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: 08 / 29 /2005 1225 hours
Duplicate:_____hours (military)
Sampler(s): (C) Sanchez (T.) Campbell
L. Seydewitz_____ (circle appropriate)

Data Recorded By: Craig Sanchez
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
__X__ Composite
Other_____

Description: (Blue Mussel, Hardshell Clam, Etc.)
Reference data sheets for sizes.
n = 8

*include DIUF lot # in "other"

Water Parameters: See Sediment Data Log Sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	8 oz. Jar	Number Bivalves Collected: 8
TCL Pest/PCB		Estimated Area Sampled: 491 ft2
TAL Metals		**Tissue weights sent to Lab:** 220.81
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

Samples collected per Work Plan.
Stations marked with GPS.

Tt NUS Form 0005revised

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: G32 JOB NO. G00065-0260

SAMPLE ID: ET ~~313~~ 308-082905 DATE: 8-29-05

DATA RECORDED BY: T. Campbell

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	88.1	72.9	48.2	200+	35.57
02	97.1	75.1	47.5	200+	46.25
03	89.3	72.0	49.0	200+	32.25
04	75.8	64.5	40.0	145.23	22.44
05	59.1	53.0	37.9	95.45	15.50
06	69.1	66.0	36.0	94.94	17.07
07	77.1	63.0	39.8	130.80	23.54
08	83.0	65.9	42.9	162.54	28.19
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TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: 632-ET308F-090205

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: _____ (if applicable)

Sample Method: HAND

by: DIVER : WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: 9 / 2 /2005 1535 hours
Duplicate: _____ hours (military)
Sampler(s): C. Sanchez T. Campbell
L. Seydewitz _____ (circle appropriate)

Data Recorded By: _____
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
_X_ Composite
Other _____

Description: (Blue Mussel, Hardshell Clam, Etc.)
See data sheet for sizes
n = 20

*include DIUF lot # in "other"

Water Parameters: See Sediment Log Sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	~~8~~ oz. Jar	Number Bivalves Collected: 20
TCL Pest/PCB	16	Estimated Area Sampled: 491 ft2
TAL Metals		**Tissue weights sent to Lab:** 67.27
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

Tt NUS Form 0005revised

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: 308F

JOB NO. N0065-0350

SAMPLE ID: G32-ET308F

DATE: 9/2/05 / 1535

DATA RECORDED BY: L. Sagdurf

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	42.7	21.3	19.1	6.93	2.43
02	49.2	25.1	17.6	11.85	4.27
03	51.4	25.5	21.6	13.70	3.49
04	52.6	26.6	19.3	12.68	3.03
05	41.5	21.0	16.8	7.75	2.55
06	45.1	22.3	16.1	8.40	2.76
07	53.0	25.6	22.2	15.01	5.75
08	46.3	22.5	20.1	9.21	2.57
09	56.1	26.0	22.3	16.53	5.91
10	43.5	21.7	20.1	8.23	3.15
11	46.4	25.2	16.5	9.49	2.97
12	45.2	21.4	17.2	8.61	3.49
13	46.7	24.5	18.7	11.10	3.24
14	49.6	24.8	17.6	10.68	3.43
15	49.1	25.3	18.1	11.69	4.32
16	45.7	23.0	17.2	8.52	2.65
17	39.3	21.1	15.4	6.69	2.30
18	43.4	20.9	15.6	7.59	2.18
19	52.6	24.8	19.4	12.14	4.39
20	45.2	21.6	16.9	8.58	2.39
21					
22					
23					
24					
25					

TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-ET0309-~~08~~ 090105 TC

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: _____ (if applicable)

Sample Method: HAND

by: DIVER : WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: TC ~~8~~ 9 / 1 /2005 1000 hours
Duplicate: _____ hours (military)
Sampler(s): C. Sanchez ~~T. Campbell~~
L. Seydewitz _____ (circle appropriate)

Data Recorded By: _____
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
Other _____

_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
_X_ Composite

Description: (Blue Mussel, Hardshell Clam, Etc.)
Reference data sheets for sizes.
n = 6

*include DIUF lot # in "other"

Water Parameters: See Sediment Log Sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	TC ~~8~~ oz. Jar	Number Bivalves Collected: 6
TCL Pest/PCB	16	Estimated Area Sampled: 491 ft²
TAL Metals		**Tissue weights sent to Lab:** 191.63
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

Samples collected per Work Plan.
Station marked with BPS.

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: G32 JOB NO. G00065-0260

SAMPLE ID: ET309 - 090105 DATE: 9-1-05

DATA RECORDED BY: Craig Sawyer

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	96.5	76.8	50.5	> 200	40.61
02	91.0	78.1	47.0	200+	35.88
03	87.5	72.0	48.0	200+	29.92
04	84.0	68.0	42.1	168.82	28.17
05	82.8	69.1	42.8	167.92	26.79
06	83.5	76.0	44.3	178.93	30.26
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
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23					
24					
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TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: 032-ET309F-040105

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: _____ (if applicable)

Sample Method: HAND

by: DIVER : WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: 9 / 1 /2005 1430 hours
Duplicate: _____ hours ~~(military)~~
Sampler(s): C. Sanchez T. Campbell
L. Seydewitz _____ (circle appropriate)

Data Recorded By: _____
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
_X_ Composite
Other _____

Description: (Blue Mussel, Hardshell Clam, Etc.)
n = 22

*include DIUF lot # in "other"

Water Parameters: See Sediment Log Sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	~~4~~ 8 oz. Jar	Number Bivalves Collected: 22
TCL Pest/PCB	8 oz	Estimated Area Sampled: 491 ft2
TAL Metals		**Tissue weights sent to Lab:** 53.83
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

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SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: G32 JOB NO. G00065-0260

SAMPLE ID: ~~ET362~~ ET309F-090105 DATE: 9-1-5

DATA RECORDED BY: T. Campbell

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	57.1	28.5	21.3	12.26	3.23
02	50.2	25.5	19.0	12.40	2.80
03	49.9	25.5	18.0	9.20	2.26
04	46.3	24.0	16.1	7.50	1.98
05	57.0	29.0	22.0	17.87	5.59
06	51.1	27.5	19.0	12.98	2.63
07	51.1	26.9	20.0	13.60	2.71
08	50.2	26.1	20.1	9.89	3.19
09	46.1	22.9	21.0	9.35	2.45
10	45.0	23.5	18.0	7.10	1.86
11	47.0	23.5	17.0	8.59	2.14
12	45.1	23.2	17.0	9.03	3.10
13	46.5	23.5	14.5	6.02	1.98
14	43.0	23.0	20.1	4.90	1.12
15	44.0	23.0	17.0	8.02	2.71
16	46.3	21.1	15.9	7.36	2.67
17	43.0	18.0	17.5	9.02	2.17
18	44.5	24.3	18.1	~~44.5~~ 9.85	2.51
19	43.0	22.0	17.0	7.41	2.27
20	43.0	22.1	15.0	5.80	1.4
21	43.1	22.0	15.5	5.90	1.2
22	43.0	22.2	15.3	5.35	1.5
23					
24					
25					

TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32- ET0310 - ~~08~~ 12 090105

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: _____(if applicable)

Sample Method: _____HAND_____

by: DIVER : WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: ~~8~~ 12/ 1 /2005 1145 hours
Duplicate:_____ hours (military)
Sampler(s): C. Sanchez T. Campbell
L. Seydewitz_____ (circle appropriate)

Data Recorded By: TAC
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
__X__ Composite
Other_____

Description: (Blue Mussel, Hardshell Clam, Etc.)
Reference data sheets for sizes.
n = 6

*include DIUF lot # in "other"

Water Parameters: See Sediment Log Sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	~~8~~ 12 oz. Jar	Number Bivalves Collected: 6
TCL Pest/PCB	16	Estimated Area Sampled: 491. ft2
TAL Metals		**Tissue weights sent to Lab:** 191.35
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

Samples collected per Work Plan.
Station marked with GPS.

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: G32 JOB NO. G00065-0260

SAMPLE ID: ET ~~303~~ 310 - 040105 TC DATE: 9-1-5

DATA RECORDED BY: C. Sanchez

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	73.1	73.0	52.1	200+	35.18
02	86.0	69.5	46.9	200+	33.25
03	84.9	70.0	45.9	195.03	31.92
04	85.5	68.0	44.1	200	31.44
05	89.1	72.9	44.8	>200	31.47
06	77.5	66.7	66.5	168.48	28.09
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10					
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TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32- GT31OF-090105

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: _____ (if applicable)

Sample Method: HAND

by: DIVER : WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: 9 / 1 /2005 1400 hours
Duplicate: _____ hours (military)
Sampler(s): C. Sanchez T. Campbell
L. Seydewitz _____ (circle appropriate)

Data Recorded By: [signature]
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
Other _____

_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
_X_ Composite

Description: (Blue Mussel, Hardshell Clam, Etc.)
n=21

*include DIUF lot # in "other"

Water Parameters: See Sediment Log Sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	8 oz. Jar	Number Bivalves Collected: 21
TCL Pest/PCB	16	Estimated Area Sampled: 441 ft²
TAL Metals		**Tissue weights sent to Lab:** 71.72
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

Tt NUS Form 0005revised

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: G32 JOB NO. G00065-0260

SAMPLE ID: ET ~~305-DB~~ 310F-090105 DATE: 9/1/05

DATA RECORDED BY: Dana Banks

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	49.4	24	18.2	10.625	3.57
02	46.5	21.1	18	6.93	2.98
03	47.1	25	18.1	10.15	2.95
04	48.9	24.1	19	8.78	3.34
05	44.5	21.3	20.8	6.06	2.57
06	49.1	24.2	18	9.09	2.23
07	48.5	22	18.8	10.25	3.59
08	50	23	18.8	10.73	3.63
09	51	26	18.5	12.01	4.53
10	45.1	24	21.1	8.63	3.47
11	54.9	25.5	22	11.38	4.92
12	43.2	22	15.4	7.77	2.18
13	52.4	25.2	19.9	12.57	3.59
14	52.3	26.8	19	12.43	2.85
15	44.5	24.1	18	8.70	2.33
16	52.3	27.1	19	8.29	3.11
17	49.8	26	19.8	10.86	4.77
18	50.9	20.8	21	11.52	4.12
19	46.2	22.7	16.5	9.45	3.18
20	54.2	25.5	20.0	13.70	5.13
21	50.9	25.6	20.5	11.08	3.18
22					
23					
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TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32 - ET311 - 090205

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: _____ (if applicable)

Sample Method: HAND

by: DIVER : WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: 9 / 2 /2005 0935 hours
Duplicate: _____ hours (military)
Sampler(s): C. Sanchez T. Campbell
L. Seydewitz _____ (circle appropriate)

Data Recorded By: TAC
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
Other _____

_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
_X_ Composite

Description: (Blue Mussel, Hardshell Clam, Etc.)
See data sheet for sizes
n = 7

*include DIUF lot # in "other"

Water Parameters: See Sediment Log Sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	~~8~~ oz. Jar	Number Bivalves Collected: 7
TCL Pest/PCB	16	Estimated Area Sampled: 491 ft2
TAL Metals		**Tissue weights sent to Lab:** 109.11
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

Tt NUS Form 0005revised

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: G32 JOB NO. G00065-0260

SAMPLE ID: ET ~~308~~ 311-090205 DATE: 9-2-5 0935

DATA RECORDED BY: Craig Sawchuk

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	70.2	53.5	37.5	101.83	16.11
02	57.0	44.8	28.5	51.18	8.35
03	58.0	46.5	30.0	56.59	9.66
04	75.0	64.0	41.0	~~79.~~ 141.34	22.37
05	76.0	64.3	39.1	123.25	19.74
06	65.5	55.5	35.2	89.7	12.03
07	79.5	64.0	40.1	144.48	20.85
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: 632 - ET~~0301~~ 312 - 082905

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: _____ (if applicable)

Sample Method: HAND

by: DIVER : WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: 08/29/2005 1330 hours
Duplicate: _____ hours (military)
Sampler(s): C. Sanchez T. Campbell
L. Seydewitz _____ (circle appropriate)

Data Recorded By: C. SLa
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
Other _____

_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
_X_ Composite

Description: (Blue Mussel, Hardshell Clam, Etc.)
Reference data sheets for sizes.
n=21

*include DIUF lot # in "other"

Water Parameters: See Sediment data sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	~~TC~~ 8 oz. Jar 16	Number Bivalves Collected: 21
TCL Pest/PCB		Estimated Area Sampled: 49 ft²
TAL Metals		**Tissue weights sent to Lab:** 103.16
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

Samples collected per Work Plan.
Stations marked with GPS.

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: G32 JOB NO. G00065-0260

SAMPLE ID: ET ~~311~~ 312 - 082905 DATE: 8-29

DATA RECORDED BY: C. SLo

SHELLFISH SPECIES (circle one): Hardshell Clam / (Blue Mussell)

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	~~[illegible]~~ 57.0	~~[illegible]~~ 27.4	~~[illegible]~~ 20.8	20.38	4.48
02	~~[illegible]~~ 53.0	~~[illegible]~~ 27.0	~~[illegible]~~ 21.0	15.82	4.38
03	60.0	30.0	22.5	16.92	7.66
04	60.0	27.5	22.0	21.90	7.32
05	49.5	27.0	19.0	13.00	4.21
06	54.0	25.0	21.1	14.70	6.04
07	55.0	~~[illegible]~~ 27.0	20.1	15.28	4.20
08	57.0	29.9	20.1	15.73	6.61
09	59.0	30.0	21.5	19.92	5.08
10	61.0	28.9	20.0	19.92	5.93
11	59.2	29.8	23.2	16.79	5.72
12	53.0	25.9	18.0	13.02	4.74
13	55.0	26.2	20.0	15.35	4.12
14	58.0	27.2	20.9	9.78	3.52
15	57.5	29.5	20.0	16.95	4.68
16	60.0	30.8	20.5	19.22	6.05
17	54.8	25.2	20.5	15.44	4.60
18	51.6	24.1	22.1	14.40	4.66
19	48.0	25.0	16.5	9.94	2.88
20	50.0	24.5	16.9	10.76	2.97
21	50.0	25.0	18.5	12.04	3.31
22					
23					
24					
25					

103.16g

TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: 632- ET0304- 082905
13

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: _____(if applicable)

Sample Method: _____HAND_____

by: DIVER : WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: 08 / 29 /2005 1245 hours
Duplicate:_____hours (military)
Sampler(s): C. Sanchez T. Campbell
L. Seydewitz_____ (circle appropriate)

Data Recorded By: C. Sl
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
__X__ Composite
Other_____

Description: (Blue Mussel, Hardshell Clam, Etc.)
Reference data sheets for sizes.
n = 6

*include DIUF lot # in "other"

Water Parameters: See Sediment Data Sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	8 oz. Jar	Number Bivalves Collected: 6
TCL Pest/PCB		Estimated Area Sampled: 491 ft2
TAL Metals		**Tissue weights sent to Lab:** 166.67g
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

Samples collected per Work Plan.
Station marked with GPS.

Tt NUS Form 0005revised

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: G32 JOB NO. G00065-0260

SAMPLE ID: ET ~~304~~ 313 - 082905 DATE: 8/21/05

DATA RECORDED BY: T. Campbell

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	98.0	8.09	~~5.41~~ 54.1	200+	39.90
02	73.9	60.8	40.0	129.14	21.90
03	82.0	73.8	42.1	171.37	28.80
04	84.9	71.5	45.0	156.70	31.74
05	78.0	63.9	42.0	155.92	23.43
06	79.5	61.9	41.5	146.88	[illegible]
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

TETRA TECH NUS, INC.

SAMPLE LOG SHEET – BIOTA

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-ET313F-040205

Tetra Tech NUS Job No./PMS G00065-0260
QC Information: _____ (if applicable)

Sample Method: HAND

by: DIVER : WADING (Circle One)
ID: HARDSHELL CLAM or BLUE MUSSEL (Circle One)

Sample Date & Time: 9 / 2 /2005 1540 hours
Duplicate: _____ hours (military)
Sampler(s): C. Sanchez T. Campbell
L. Seydewitz _____ (circle appropriate)

Data Recorded By: [signature]
(Signature)

TYPE OF SAMPLE: (Check all that apply)

_n/a_ Soil
_n/a_ Sludge
_n/a_ Lagoon/Pond
_____ Grab
Other _____

_____ Trip Blank*
_____ Rinsate Blank*
_____ Field Duplicate collected
_X_ Composite

Description: (Blue Mussel, Hardshell Clam, Etc.)
See data sheet for
n = 20

*include DIUF lot # in "other"

Water Parameters: See Sediment Log Sheet

Temperature (° C): _____
Salinity (ppt): _____
Specific conductivity (µS) _____
Dissolved oxygen ( ): _____

ANALYSIS	Appropriate	NOTES/SKETCH:
TCL SVOCs/PAHS	~~8~~ 16 oz. Jar	Number Bivalves Collected: 20
TCL Pest/PCB		Estimated Area Sampled: 441 ft²
TAL Metals		**Tissue weights sent to Lab:** 79.97 g
Cyanide		Mitkem: (need ~ 30 grams, minimum)
% Lipids		

SITE 17, BUILDING 32, GOULD ISLAND SITE
HARDSHELL CLAM/MUSSELL SAMPLING FIELD DATA SHEET

LOCATION/STATION: 632 JOB NO. N0065-0350

SAMPLE ID: g32-ET313F-090205 DATE: 9-2/ 1540

DATA RECORDED BY: C. Sanchez

SHELLFISH SPECIES (circle one): Hardshell Clam / Blue Mussell

No.	Shell Length (mm)	Shell Width (mm)	Shell Breadth (mm)	Total Live weight. (g)	Tissue weight (g)
01	47.5	26.1	17.1	12.28	2.93
02	51.0	28.0	20.9	13.58	4.10
03	51.2	25.5	18.0	11.19	3.38
04	53.5	23.5	17.2	12.13	3.53
05	48.7	24.5	19.1	11.92	3.57
06	54.0	24.3	20.0	16.90	3.30
07	50.1	27.0	18.0	14.00	5.65
08	49.8	27.1	18.7	14.53	5.30
09	54.5	25.0	20.9	~~9.17~~ 14.47	5.41
10	45.0	~~17.5~~ 24.9	~~24.9~~ 15.0	9.77	4.88
11	56.0	28.0	17.0	12.62	4.49
12	47.0	23.5	20.5	7.89	2.80
13	48.0	24.7	20.1	12.01	4.80
14	47.1	19.9	26.0	10.90	2.90
15	43.1	20.1	17.5	8.20	2.94
16	46.0	18.5	23.5	9.50	2.98
17	47.0	27.0	21.5	11.60	3.57
18	46.1	24.0	18.2	9.82	3.87
19	44.9	24.0	16.1	9.31	2.75
20	54.5	24.5	20.9	14.78	6.27
21					
22					
23					
24					
25					

APPENDIX D6

CHAINS OF CUSTODY FOR ALL SAMPLES COLLECTED

TABLE D6-1
PHASE I RI SAMPLES
SITE 17, GOULD ISLAND
FINAL REMEDIAL INVESTIGATION
NAVSTA NEWPORT, NEWPORT, RHODE ISLAND

Matrix	Sample ID
Groundwater (26)	G32-GW-DUP01
	G32-GW-DUP02
	G32-GW-DUP03
	G32-MW300B
	G32-GWMW300B-5767
	G32-GWMW300B-6777
	G32-GWMW300B-7784
	G32-MW300S
	G32-MW301B
	G32-MW301S
	G32-MW302B
	G32-MW302S
	G32-MW303B
	G32-MW303S
	G32-MW304B
	G32-GWMW304B-061005
	G32-GWMW304B-113120
	G32-GWMW304B-103113
	G32-MW304S
	G32-MW305B
	G32-GWMW305B-6474
	G32-GWMW305B-7282
	G32-GWMW305B-8495
	G32-MW305S
	G32-MW306B
	G32-MW306S
Aqueous Test Pit Samples (9)	G32-AQTP02-0006
	G32-AQTP05
	G32-AQTP06
	G32-AQTP08
	G32-AQTP10-02
	G32-AQTP11
	G32-AQTP12
	G32-AQTP13
	G32-AQMH01
Surficial Soil (19)	G32-SB300B-0002
	G32-SB301B-0002
	G32-SB302B-0002
	G32-SB303B-0002
	G32-SB304B-0002
	G32-SB309-0002

Surficial Soil (continued)	G32-SB310-0002
	G32-SB311-0103
	G32-SB312-0103
	G32-SB313-0002
	G32-SB317-0002
	G32-SB318-0002
	G32-SB327-0103
	G32-SB332-0002
	G32-SB334-0002
	G32-SB335-0002
	G32-SB336-0002
	G32-SB337-0002
	G32-SB338-0002
Subsurface Soil (59)	G32-SB300B-0608
	G32-SB301B-1012
	G32-SB302B-0507
	G32-SB302B-2527
	G32-SB303B-1012
	G32-SB304B-0608
	G32-SB305B-0305
	G32-SB305B-0911
	G32-SB306B-1012
	G32-SB306B-5052
	G32-SB309-3840
	G32-SB310-4042
	G32-SB311-1719
	G32-SB312-3638
	G32-SB313-1012
	G32-SB314-0204
	G32-SB314-1719
	G32-SB315-0204
	G32-SB315-0810
	G32-SB316-0203
	G32-SB316-1214
	G32-SB317-1517
	G32-SB318-1012
	G32-SB319-0406
	G32-SB319-0608
	G32-SB320-0406
	G32-SB320-0810
	G32-SB321-0204
	G32-SB321-1012
	G32-SB322-0204
	G32-SB322-0608
	G32-SB323-0204
	G32-SB323-1012
	G32-SB324-0204
	G32-SB324-0810
	G32-SB325-0305

Subsurface Soil (continued)	G32-SB325-0709
	G32-SB326-0406
	G32-SB326-0608
	G32-SB327-0709
	G32-SB328-0406
	G32-SB328-0810
	G32-SB331-0204
	G32-SB331-5254
	G32-SB332-0406
	G32-SB333-0406
	G32-SB333-1214
	G32-SB334-0608
	G32-SB335-1012
	G32-SB336-0608
	G32-SB337-1012
	G32-SB338-1012
	G32-SB-DUP01
	G32-SB-DUP02
	G32-SB-DUP03
	G32-SB-DUP04
	G32-SB-DUP05
	G32-SB-DUP06
	G32-SB-DUP07
Concrete/Other (4)	G32-CO301-090905
	G32-CO302-090905
	G32-CO-DUP01
	G32-BR01
Residue sample (6)	G32-SOTP01-01-0007
	G32-SOTP02-0006
	G32-SOTP02-02-0007
	G32-SOTP03-01-0007
	G32-SOTP04-01
	G32-OTSMH01
Test Pit (18)	G32-SO-DUP08
	G32-SO-DUP09
	G32-SO-DUP10
	G32-SOTP05-01-0000
	G32-SOTP05-02-0000
	G32-SOTP05-03-0002
	G32-SOTP05-MH
	G32-SOTP06-01-0002
	G32-SOTP07
	G32-SOTP08
	G32-SOTP09-01-0002
	G32-SOTP09-02-0002
	G32-SOTP10-01-0002
	G32-SOTP10-02-0002
	G32-SOTP10-03-0002
	G32-SOTP11-01

Test Pit (continued)	G32-SOTP12-01
	G32-SOTP13-01
Intertidal Sediment (8)	G32-SD302F-000.5
	G32-SD304F-000.5
	G32-SD305F-000.5
	G32-SD306F-000.5
	G32-SD308F-000.5
	G32-SD309F-000.5
	G32-SD310-000.5
	G32-SD313F-000.5
Subtidal Sediment (65)	G32-SD301-000.5
	G32-SD301-0.51.0
	G32-SD302A-000.5
	G32-SD302B-000.5
	G32-SD302C-000.5
	G32-SD302D-000.5
	G32-SD302E-000.5
	G32-SD303-000.5
	G32-SD303-0.51.0
	G32-SD304A-000.5
	G32-SD304B-000.5
	G32-SD304C-000.5
	G32-SD304D-000.5
	G32-SD304D-0.51.0
	G32-SD304E-000.5
	G32-SD305A-000.5
	G32-SD305B-000.5
	G32-SD305C-000.5
	G32-SD305D-000.5
	G32-SD305D-0.51.0
	G32-SD305E-000.5
	G32-SD306A-000.5
	G32-SD306B-000.5
	G32-SD306C-000.5
	G32-SD306D-000.5
	G32-SD306C-0.51.0
	G32-SD306E-000.5
	G32-SD307-000.5
	G32-SD308A-000.5
	G32-SD308B-000.5
	G32-SD308C-000.5
	G32-SD308D-000.5
	G32-SD308E-000.5
	G32-SD309A-000.5
	G32-SD309B-000.5
	G32-SD309C-000.5
	G32-SD309D-000.5
	G32-SD309E-000.5

Sediment (continued)	G32-SD310A-000.5
	G32-SD310B-000.5
	G32-SD310C-000.5
	G32-SD310D-000.5
	G32-SD310E-000.5
	G32-SD311-000.5
	G32-SD311-0.51.0
	G32-SD312-000.5
	G32-SD312-0.51.0
	G32-SD313A-000.5
	G32-SD313B-000.5
	G32-SD313C-000.5
	G32-SD313D-000.5
	G32-SD313E-000.5
	G32-SD314-000.5
	G32-SD314-0.51.0
	G32-SD315-000.5
	G32-SD316-000.5
	G32-SD316-0.51.0
	G32-SDDUP01
	G32-SDDUP02
	G32-SDDUP03
	G32-SDDUP04
	G32-SDDUP05
	G32-SDDUP06
	G32-SDDUP07
	G32-SD317-000.5
Biota/Clams (15)	G32-ET301-090205
	G32-ET302-082905
	G32-ET303-090105
	G32-ET304-082905
	G32-ET305-082905
	G32-ET306-090105
	G32-ET306F-090105
	G32-ET307-090105
	G32-ET308-082905
	G32-ET309-090105
	G32-ET310-090105
	G32-ET311-090205
	G32-ET313-082905
	G32-ETDUP01
	G32-ETDUP02
Biota/Mussels (8)	G32-ET302F-090205
	G32-ET304F-090205
	G32-ET305F-090105
	G32-ET308F-090205
	G32-ET309F-090105
	G32-ET310F-090105

Biota/Mussels (continued)	G32-ET312-082905
	G32-ET313F-090205

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. NA
Subcontract No. NA
Page 1 of 1

Project No. 6665
Laboratory Name: Mitkem
Sampler Signatures: Johanna Sands, C.S.
Date Shipped: 6/3/05
Airbill No. 845500730654
Carrier: FedEX
No. of Coolers: 1

Sample Number	Matrix	Date/Time (YR-2005)	Sample Location	Tag Number(s)	QC	Container Type: 8oz amber	Container Type: 8oz amber	Container Type: 40mL vial	Container Type: 40mL vial	Container Type: 40mL vial
						Analysis: metals/CN	Analysis: SVOC/PAH/DRO/Pest/PCB	Analysis: VOC	Analysis: VOC	Analysis: GRO
						Preservative: ice	Preservative: ice	Preservative: DI	Preservative: MEOH	Preservative: MEOH
1 x	SO	6/1/0907	G32-SB300B-0002		–	1	1	2	1	1
2 x	SO	6/1/1031	G32-SB300B-0008		–	1	1	2	1	1
3 x	SO	6/1/0913	G32-SB304B-0002		–	1	1	2	1	1
4 x	SO	6/1/1042	G32-SB304B-0008		–	1	1	2	1	1
5 x	SO	6/2/1400	G32-SOTP01-01-0007		–	1	1	2	1	1
6 x	SO	6/2/1400	G32-SOTP02-02-0007	JT	–	1	1	2	1	1
7 x	SO	6/2/1400	G32-SOTP03-01-0007		–	1	1	2	1	1
8 x	AQ	6-2/1400	G32-SOTB03 **		TB	–	–	2	1	1
9 x	AQ	6-2/1300	G32-AQMW01 *		–	–	–	(*)	–	–
x	~~AQ~~	~~6-2~~	~~G32~~ (CS) 6-3-5							
	(CS)									

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
C.S.	6-3-5/1700		YES (NO)	(*) Free product sample ~~opp~~ unpreserved
Relinquished By: (Signature)	**Date/Time**	**Received for Laboratory By:**	**Date/Time**	

Tt NUS Form 0022

03269

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No.: NA
Subcontract No.: NA
Page 1 of 1

Project No.: 0065
Laboratory Name: Mitkem
Sampler Signatures: [illegible]
Date Shipped: NA
Airbill No.: NA
Carrier: Mitkem
No. of Coolers: 1

Container Type	Container Type	Container Type	Container Type	Container Type
40 mL vial				
Analysis	**Analysis**	**Analysis**	**Analysis**	**Analysis**
VOC				
Preservative	**Preservative**	**Preservative**	**Preservative**	**Preservative**
HCl				

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC	Container Type	Container Type	Container Type	Container Type	Container Type
-1>	AQ	6-7/0330	B37 ~~FMW-01~~ CS 6-2		NA	2				
-1>	AQ	6-7/0300	B37 ~~MTBOZ~~ CS 6-2 -AQTBOZ		TB	2			CS 6-7-5	
NA CS 6-7-05		CS 6-7-5		NA CS 6-7-5						

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
[illegible]	6-7-5/1315	[illegible]	YES NO	24 hr TAT
Relinquished By: (Signature)	**Date/Time**	**Received for Laboratory By:**	**Date/Time**	

Tt NUS Form 0022

03274

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. NA

Subcontract No. NA

Page 1 of 1

Project No. 0065

Laboratory Name: Mitkem

Sampler Signatures

Date Shipped: NA

Carrier: Mitkem

Airbill No. NA

No. of Coolers: 1

Sample Number	Matrix	VC-2005 Date/Time	Sample Location	Tag Number(s)	QC	Container Type: 8oz amber	Container Type: 8oz amber	Container Type: 40 mL vial	Container Type: 40 mL vial	Container Type: 40 mL vial
						Analysis: Metals/CN	Analysis: SVOC/PAH/PRO/Pest/PCB	Analysis: VOC	Analysis: VOC	Analysis: gro
						Preservative: ice	Preservative: ice	Preservative: DI	Preservative: MEOH	Preservative: MEOH
X	SO	6-2/0900	032-SO7B07-0006		—	1	1	2	1	1
X	AQ	6-2/0930	032-SO7B01			—	—	2	1	1

CS

CS 6-2-5

CS

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
[signature]	6-2-5/1315	[signature]	YES NO	
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	

Tt NUS Form 0022

03272

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No.: NA
Subcontract No.: NA
Page 1 of 2

Project No.: 0065
Laboratory Name: Mitkem
Sampler Signatures: [signature]
Date Shipped: NA
Airbill No.: NA
Carrier: Mitkem
No. of Coolers: 1

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC	Container Type: L Amber	Container Type: L Amber	Container Type: L Amber	Container Type: 40 mL vial	Container Type: 40 mL vial
						Analysis: TPH	Analysis: Pest/PCB	Analysis: SVOC/PAH	Analysis: VOC	Analysis: 8260
						Preservative: ice	Preservative: ice	Preservative: ice	Preservative: HCl	Preservative: HCl
→	AQ	5-7/1030	937-AQ1807-0006			1	1	1	1	1
→	AQ	5-7/1030	937-AQ7B01		TB	—	—	—	1	1
				CS 6-7-5						
CS 6-7-5		CS 6-7-5								

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
[signature]	6-7-95	[signature]	YES NO	
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	

Tt NUS Form 0022

03273

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. NA

Subcontract No. NA

Project No. 0065

Laboratory Name: Mitkem

Sampler Signatures

Date Shipped NA

Carrier Mitkem

Airbill No. NA

No. of Coolers 1

Container Type	Container Type	Container Type	Container Type	Container Type
250 mL PE	125 mL PE			
Analysis	**Analysis**	**Analysis**	**Analysis**	**Analysis**
metals	CN			
Preservative	**Preservative**	**Preservative**	**Preservative**	**Preservative**
HNO_3	NaOH			
1	2			

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC
7)	AQ	6-7/1630	032-AB7P07-0006		

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
	6-7-5/1815		YES NO	
Relinquished By: (Signature)	**Date/Time**	**Received for Laboratory By:**	**Date/Time**	

Tt NUS Form 0022

03271

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. NA

Subcontract No. NA

Page 1 of 1

Project No. 0065

Laboratory Name: MitKem

Sampler Signatures: [illegible]

Date Shipped: 6/10/05

Carrier: FedEx

Airbill No. 8455 0073 0426

No. of Coolers: 1

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC	Container Type: 8oz amber	Container Type: 4oz amber	Container Type: 40mL vial	Container Type: 40mL vial	Container Type: 40mL vial	Container Type:
						Analysis: SVOC/PAH/DRO/PCB	Analysis: Metals/CN	Analysis: VOC	Analysis: VOC	Analysis: GRO	Analysis: VOC
						Preservative: ICE	Preservative: ICE	Preservative: DI	Preservative: MEOH	Preservative: MEOH	Preservative: HCl
x	SO	6-8/1512	G32-SB305B-0305		—	4	4	2	1	1	—
x	SO	6-9/0755	G32-SB305B-0911		—	1	1	2	1	1	—
x	AQ	6-8/0800	G32-SOTB04		TB	—	—	2	1	1	—
	AQ	6-10/0800	G32-TBGW-061005		TB	—	—	—	—	—	2
	gw	6-10/1415	g32-gwMW304B-061005		—	—	—	—	—	—	2
		CS 6-10-5									

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
[illegible]	6-10-5/1400	-	YES NO	
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	

Tt NUS Form 0022

03268

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. NA
Subcontract No. NA

Project No.	Laboratory Name:	Container Type	Container Type	Container Type	Container Type	Container Type
C0165	Mitkem	40 mL vial				

Sampler Signatures	Date Shipped	Carrier	Analysis	Analysis	Analysis	Analysis	Analysis
[illegible]	6/13/05	mitkem	VOC				
	Airbill No. NA	No. of Coolers NA					

Sample Number	Matrix	Date/Time (YR-2005)	Sample Location	Tag Number(s)	QC	Preservative	Preservative	Preservative	Preservative	Preservative
	AQ	6-13/1220	~~632-GWMW3041B-113120~~		–	HCl 2				
	AQ	6-13/0910	~~632-GWMW3041B-103113~~		–	2				
	AQ	6-13/0800	~~632-TB~~ GW-061305		TB	2				

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
[illegible]	6-13-5/1430	[illegible]	YES NO	24 hour TAT
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	

Tt NUS Form 0022

NO 03241

Chain of Custody Form

Tetra Tech NUS Inc.

COC no.	0065-01	page	1	of	1
Subcontract No.			0		
LABORATORY			Mitkem		

Pick-Up Date: June 16, 2005

Project: Gould Island RI, Job 0065

Via: Courier: Mitkem

Signatures: Craig Sandy

Sample Number	Matrix	Date	Time	Sample Location	QC	Blind Information (TTNUS ONLY)	Container Type: 8 oz amber; Preservative: Ice; Analysis: SVOC/PAH/DRO/Pest/PCB	Container Type: 8 oz amber; Preservative: Ice; Analysis: Metals/CN	Container Type: 40 mL vial; Preservative: DI; Analysis: VOCs	Container Type: 40 mL Vial; Preservative: MEOH; Analysis: VOC	Container Type: 40 mL vial; Preservative: MEOH; Analysis: GRO	Container Type: 4 oz amber; Preservative: Ice; Analysis: Metals/CN
	SO	6/14/2005	1032	632-OTSMH01	-		1	1	2	1	1	-
	AQ	6/14/2005	800	632-SOTB05	TB		-	-	2	1	1	-
	SO	6/15/2005	902	632-SB326-0406	Lab QC		1	-	4	2	2	1
	SO	6/15/2005	926	632-SB326-0608	-		1	-	2	1	1	1
	SO	6/15/2005	1153	632-SB315-0204	-		1	-	2	1	1	1
	SO	6/15/2005	1330	632-SB315-0810	-		1	-	2	1	1	1
		CS	6-15-5									
						TOTAL	5	1	14	7	7	4

Relinquished By	Date/Time	Received By:	Remarks: OTS = other soilds (waste sample)
Christine Tracy	6/16/05 0937		
Relinquished By	Date/time	Received For Laboratory By:	
	6/16/05 0937	[illegible]	

TtNUS Copy

Chain of Custody Form

Tetra Tech NUS Inc.

							COC no. 0065-01		page 1		of 1		1
							Subcontract No.			0			
		Pick-Up	June 16, 2005				LABORATORY			Mitkem			
Project: Gould Island RI, Job 0065		Via	Courier: Mitkem										
Signatures:						TTNUS ONLY	Container Type L Amber	Container Type L amber	Container Type L amber	Container Type 40 mL vial	Container Type 40 mL vial	Container Type 250 mL poly	Container Type 250 mL poly
							Preservative Ice	Preservative Ice	Preservative Ice	Preservative HCl	Preservative HCl	Preservative HNO_3	Preservative NaOH
Sample Number	Matrix	Date	Time	Sample Identification No.	QC	Blind Information	Analysis SVOC/PAH	Analysis Pest/PCBs	Analysis TPH	Analysis VOC	Analysis GRO	Analysis Metals	Analysis CN
	AQ	6/15/2005	900	G32-DIUF-SB01	SB		2	2	2	2	2	1	1
	AQ	6/14/2005	900	G32-RB01	RB		2	2	2	2	2	1	1
	AQ	6/15/2005	1030	G32-RB02	RB		2	2	2	2	2	1	1
	AQ	6/14/2005	1007	G32-AQMH02	-		2	2	2	2	2	1	1
	AQ	6/14/2005	1015	G32-AQMH03	-		2	2	2	2	2	1	1
	AQ	6/14/2005	800	G32-AQTB06	TB		-	-	-	2	2	-	-
						TOTAL	10	10	10	12	12		5

Relinquished By: Dianna Drant	Date/Time: 6/16/05 0937	Received By: Jamie Healey	Remarks:
Relinquished By:	Date/time:	Received For Laboratory By:	

TtNUS Copy

Chain of Custody Form

Tetra Tech NUS Inc.

COC no.	NA	page	1	of	1
Subcontract No.	NA				
LABORATORY	Mitkem				

Project: Gould Island RI, Job 0065

Ship Date: June 17, 2005
Via: Carrier: FedEx
Airbill No. 8466 0073 0437

Signatures: Johanna Grant

Sample Number	Matrix	Date	Time	Sample Location	QC	Blind Information (TTNUS ONLY)	Container Type: 8 oz amber; Preservative: Ice; Analysis: SVOC/PAH/DRO/Pest/PCB	Container Type: 4 oz amber; Preservative: Ice; Analysis: Metals/CN	Container Type: 40 mL vial; Preservative: DI; Analysis: VOCs	Container Type: 40 mL vial; Preservative: MEOH; Analysis: VOC	Container Type: 40 mL vial; Preservative: MEOH; Analysis: GRO	Container Type: 40 mL vial; Preservative: HCl; Analysis: VOC
	SO	6/16/2005	925	G32-SB327-0103	-	DUP01	1	1	2	1	1	-
	SO	6/16/2005	930	G32-SB-DUP01	-	DUP01	1	1	2	1	1	-
	SO	6/16/2005	1010	G32-SB327-0709	-		1	1	2	1	1	-
	AQ	6/16/2005	800	G32-SOTB07	TB		-	-	2	1	1	-
	SO	6/17/2005	803	G32-SB325-0305	-	DUP02	1	1	2	1	1	-
	SO	6/17/2005	808	G32-SB-DUP02	-	DUP02	1	1	2	1	1	-
	SO	6/17/2005	843	G32-SB325-0709	-		1	1	2	1	1	-
	AQ	6/17/2005	1340	G32-GWMW300B-5767	-		-	-	-	-	-	2*
	AQ	6/17/2005	800	G32-AQTB07	TB		-	-	-	-	-	2
	YJT											
						TOTAL	6	6	14	7	7	2

Relinquished By	Date/Time	Received By:	Remarks:
Johanna Grant	6/17/05 1445		* 24 Hour TAT
Relinquished By	Date/time	Received For Laboratory By:	

TINUS Copy

Chain of Custody Form

Tetra Tech NUS Inc.

COC no.	NA	page	1	of	1
Subcontract No.	NA				
LABORATORY	Mitkem				

Project: Gould Island RI, Job 0065

Ship Date: June 20, 2005
Via: Courier: Mitkem

Signatures: Joanna Grant

Sample Number	Matrix	Date	Time	Sample Location	QC	TTNUS ONLY Blind Information	Container Type: 8 oz amber; Preservative: Ice; Analysis: SVOC/PAH/DRO/Pest/PCB	Container Type: 4 oz amber; Preservative: Ice; Analysis: Metals/CN	Container Type: 40 mL vial; Preservative: DI; Analysis: VOCs	Container Type: 40 mL vial; Preservative: MEOH; Analysis: VOC	Container Type: 40 mL vial; Preservative: MEOH; Analysis: GRO	Container Type: 40 mL vial; Preservative: HCl; Analysis: VOC
	GW	6/17/2005	1550	G32-GWMW300B-6777	-		-	-	-	-	-	2*
	GW	6/20/2005	1050	G32-GWMW300B-7784	-		-	-	-	-	-	2*
	AQ	6/20/2005	800	G32-AQTB08	TB		-	-	-	-	-	2*
	SO	6/20/2005	930	G32-SB324-0204	-		1	1	2	1	1	-
	SO	6/20/2005	1037	G32-SB324-0810	-		-	-	2	1	1	-
	AQ	6/20/2005	800	G32-SOTB08	TB		-	-	2	1	1	-
						TOTAL	1	1	6	3	3	6

Relinquished By: Joanna Grant
Date/Time: 6/20/05 1340
Received By: Jane Healey

Relinquished By:
Date/time:
Received For Laboratory By:

Remarks:
*24 Hour TAT

TtNUS Copy

Chain of Custody Form

Tetra Tech NUS Inc.

COC no. NA	page	1	of	3

Subcontract No. NA

LABORATORY Mitkem

Ship Date: June 24, 2005
Via: Courier: Mitkem

Project: Gould Island RI, Job 0065

Signatures: Johanna Grant

Sample Number	Matrix	Date	Time	Sample Location	QC	Blind Information (TTNUS ONLY)	Container Type: 8 oz amber; Preservative: Ice; Analysis: SVOC/PAH/DRO/Pest/PCB	Container Type: 4 oz amber; Preservative: Ice; Analysis: Metals/CN	Container Type: 40 mL vial; Preservative: DI; Analysis: VOCs	Container Type: 40 mL Vial; Preservative: MEOH; Analysis: VOC	Container Type: 40 mL vial; Preservative: MEOH; Analysis: GRO	Container Type: 40 mL vial; Preservative: HCL; Analysis: VOC/GRO
	AQ	6/21/2005	1003	G32-RB03	RB		6*	2**	-	-	-	4
	AQ	6/20/2005	800	G32-SOTB09	TB		-	-	2	1	1	-
	SO	6/22/2005	929	G32-SB334-0002	Lab QC		1	1	4	2	2	-
	SO	6/20/2005	1357	G32-SB322-0608	-		1	1	2	1	1	-
	SO	6/21/2005	811	G32-SB323-0204	-		1	1	2	1	1	-
	SO	6/21/2005	858	G32-SB323-1012	-		1	1	2	1	1	-
	SO	6/21/2005	1041	G32-SB328-0406	-		1	1	2	1	1	-
	SO	6/21/2005	1111	G32-SB328-0810	-		-	-	2	1	1	-
	SO	6/21/2005	1449	G32-SB-DUP03	-	DUP03	1	1	2	1	1	-
	SO	6/21/2005	1223	G32-SB320-0406	-		-	-	2	1	1	-
	SO	6/21/2005	1250	G32-SB320-0810	-		1	1	2	1	1	-
	SO	6/21/2005	1401	G32-SB318-0002	-		1	1	2	1	1	-

Relinquished By	Date/Time	Received By:	Remarks:
GSG 6-24-5/1630	4/24/05 1630	[signature]	* 6 1 L amber ice only ** 250 mL poly with HNO3 / 250 mL poly with NaOH, respectively
Relinquished By	Date/time	Received For Laboratory By:	

TINUS Copy

Chain of Custody Form

Tetra Tech NUS Inc.

COC no.	NA	page	2	of	3
Subcontract No.	NA				
LABORATORY	Mitkem				

Ship Date: June 24, 2005
Via: Courier: Mitkem

Project: Gould Island RI, Job 0065

Signatures: Johanna Grant

Sample Number	Matrix	Date	Time	Sample Location	QC	Blind Information (TTNUS ONLY)	Container Type: 8 oz amber; Preservative: Ice; Analysis: SVOC/PAH/DRO/Pest/PCB	Container Type: 4 oz amber; Preservative: Ice; Analysis: Metals/CN	Container Type: 40 mL vial; Preservative: DI; Analysis: VOCs	Container Type: 40 mL Vial; Preservative: MEOH; Analysis: VOC	Container Type: 40 mL vial; Preservative: MEOH; Analysis: GRO	Container Type: 40 mL vial; Preservative: HCl; Analysis: VOC/GRO
	SO	6/21/2005	1444	G32-SB318-1012	-	DUP03	1	1	2	1	1	-
	SO	6/22/2005	824	G32-SB319-0406	-		1	1	2	1	1	-
	SO	6/22/2005	840	G32-SB319-0608	-	DUP04	1	1	2	1	1	-
	SO	6/22/2005	845	G32-SB-DUP04	-	DUP04	1	1	2	1	1	-
	SO	6/22/2005	1021	G32-SB334-0608	Lab QC		1	1	4	2	2	-
	AQ	6/22/2005	1425	G32-RB04	RB		6*	2**	-	-	-	4
	SO	6/20/2005	1330	G32-SB322-0204	-		1	1	2	1	1	-
	SO	6/22/2005	1136	G32-SB316-0203	-		-	1	2	1	1	-
	SO	6/22/2005	1218	G32-SB316-1214	-	DUP05	1	1	2	1	1	-
	SO	6/22/2005	1335	G32-SB317-0002	-		-	1	2	1	1	-
	SO	6/22/2005	1446	G32-SB317-1517	-		1	1	2	1	1	-
	SO	6/23/2005	837	G32-SB321-0204	-		1	1	2	1	1	-
	SO	6/22/2005	1223	G32-SB-DUP05	-	DUP05	1	1	2	1	1	-
	SO	6/23/2005	927	G32-SB321-1012	-		1	1	2	1	1	-

6-24-05

Relinquished By	Date/Time	Received By	Remarks
C.S.G.	6-24-5 / 1630	[signature]	* 6 1 L amber ice only ** 250 mL poly with HNO3 / 250 mL poly with NaOH, respectively
Relinquished By	Date/time	Received For Laboratory By:	

TTNUS Copy

Chain of Custody Form

Tetra Tech NUS Inc.

COC no.	NA	page	3	of	3
Subcontract No.	NA				
LABORATORY	Mitkem				

Ship Date: June 24, 2005
Via: Courier: Mitkem

Project: Gould Island RI, Job 0065

Signatures: Joanna Grant

Sample Number	Matrix	Date	Time	Sample Location	QC	Blind Information (TTNUS ONLY)	Container Type: 8 oz amber; Preservative: Ice; Analysis: SVOC/PAH/DRO/Pest/PCB	Container Type: 4 oz amber; Preservative: Ice; Analysis: Metals/CN	Container Type: 40 mL vial; Preservative: DI; Analysis: VOCs	Container Type: 40 mL Vial; Preservative: MEOH; Analysis: VOC	Container Type: 40 mL vial; Preservative: MEOH; Analysis: GRO	Container Type: 40 mL vial; Preservative: HCl; Analysis: VOC/GRO
	SO	6/23/2005	1037	G32-SB333-0406	-		1***	1	2	1	1	-
	SO	6/23/2005	1134	G32-SB333-1214	-		1	1	2	1	1	-
	AQ	6/23/2005	1100	G32-RB05	RB		6*	2**	-	-	-	4
	SO	6/23/2005	1400	G32-SB306B-1012	-		1	1	2	1	1	-
	AQ	6/24/2005	800	G32-GWTB09	TB		-	-	-	-	-	2****
	GW	6/24/2005	845	G32-GWMW305B-6474	-		-	-	-	-	-	2****
	GW	6/24/2005	1030	G32-GWMW305B-7282	-		-	-	-	-	-	2****
	GW	6/24/2005	1355	G32-GWMW305B-8495	-		-	-	-	-	-	2****
	SO	6/24/2005	1144	G32-SB306B-5052	-		1	1	2	1	1	-
	AQ	6/21/2005	800	G32-SOTB10	TB		-	-	2	1	1	-

Relinquished By: L.S.L.
Date/Time: 6-24-5/1630
Received By: [signature]

Relinquished By:
Date/time:
Received For Laboratory By:

Remarks:
G32-SB333-0406 = high head space reading-potential high VOC concentrations
* 6 1 L amber ice only
** 250 mL poly with HNO3 / 250 mL poly with NaOH, respectively
***Order of analysis if there is not enough soil- SVOC/Pest/PCB/DRO
24 Hour TAT

6-24-05

TtNUS Copy

Chain of Custody Form

Tetra Tech NUS Inc.

COC no.	NA	page	1	of	1
Subcontract No.	NA				
LABORATORY	Mitkem				

Project: Gould Island RI, Job 0065

Ship Date: June 30, 2005
Via: Courier: Mitkem

Signatures:

Sample Number	Matrix	Date	Time	Sample Location	QC	Blind Information	Container Type: 8 oz amber Preservative: Ice Analysis: SVOC/PAH/DRO/Pest/PCB	Container Type: 4 oz amber Preservative: Ice Analysis: Metals/CN	Container Type: 40 mL vial Preservative: DI Analysis: VOCs	Container Type: 40 mL Vial Preservative: MEOH Analysis: VOC	Container Type: 40 mL vial Preservative: MEOH Analysis: GRO	Container Type: 40 mL vial Preservative: HCl Analysis: VOC/GRO
	SO	6/24/2005	1538	G32-SB331-0204	-		1	1	2	1	1	-
	SO	6/27/2005	1455	G32-SB331-5254	LabQC		1	1	~~4~~	2	2	-
	SO	6/29/2005	1048	G32-SB311-0103	-		1	1	2	1	1	-
	SO	6/29/2005	1302	G32-SB311-1719	-		1	1	2	1	1	-
	SO	6/29/2005	1436	G32-SB312-0103	-		1	1	2	1	1	-
	AQ	6/24/2005	800	G32-SOTB11	TB		-	-	2	1	1	-
	AQ	6/30/2005	838	G32-RB06	RB		6*	2**	-	-	-	4
						TOTAL	5	5	12	6	6	4

Relinquished By	Date/Time	Received By	Remarks
Shanna Sears	6/30/05 10:30	Carl Healey	*6 1 L ambers, ice only **250 mL poly with HNO3/ 250 mL poly with NaOH, respectively
Relinquished By	Date/time	Received For Laboratory By:	

TINUS Copy

Chain of Custody Form

Tetra Tech NUS Inc.

COC no.	NA	page	1	of	1
Subcontract No.	NA				
LABORATORY	Mitkem				

Ship Date: July 8, 2005
Via: Courier: Mitkem

Project: Gould Island RI, Job 0065

Signatures:

Sample Number	Matrix	Date	Time	Sample Location	QC	Blind Information (TTNUS ONLY)	Container Type: 8 oz amber; Preservative: Ice; Analysis: SVOC/PAH/DRO/Pest/PCB	Container Type: 4 oz amber; Preservative: Ice; Analysis: Metals/CN	Container Type: 40 mL vial; Preservative: DI; Analysis: VOCs	Container Type: 40 mL Vial; Preservative: MEOH; Analysis: VOC	Container Type: 40 mL vial; Preservative: MEOH; Analysis: GRO	Container Type: 40 mL vial; Preservative: HCl; Analysis: VOC/GRO
	SO	6/30/2005	1402	G32-SB312-3638	-		1	1	2	1	1	-
	SO	7/5/2005	931	G32-SB-DUP06	-	DUP06	1	1	2	1	1	-
	AQ	6/30/2005	800	G32-SOTB12	TB		-	-	2	1	1	-
	SO	7/5/2005	804	G32-SB313-0002	-		1	1	2	1	1	-
	SO	7/5/2005	926	G32-SB313-1012	-	DUP06	1	1	2	1	1	-
	SO	7/5/2005	1032	G32-SB335-0002	-		1	1	2	1	1	-
	SO	7/5/2005	1112	G32-SB335-1012	-		1	1	2	1	1	-
	SO	7/5/2005	955	G32-SB302B-0002	-		1	1	2	1	1	-
	SO	7/5/2005	1154	G32-SB302B-2527	-		1	1	2	1	1	-
	AQ	7/8/2005	820	G32-RB07	RB		6*	2**	-	-	-	4
	SO	7/6/2005	1437	G32-SB336-0002	-		1	1	2	1	1	-
	SO	7/6/2005	1118	G32-SB336-0608	-		1	1	2	1	1	-
	SO	7/5/2005	1039	G32-SB302B-0507	-		1	1	2	1	1	-
	SO	7/8/2005	839	G32-SB314-0204	-		1	1	2	1	1	-
	SO	7/8/2005	931	G32-SB314-1719	-		1	1	2	1	1	-
						TOTAL	13	13	28	14	14	4

Relinquished By	Date/Time	Received By:	Remarks:
Jeanne Grant	7/8/05 1430	Jane Healey	*6 1 L ambers, ice only **250 mL poly with HNO3/250 mL poly with NaOH, respectively
Relinquished By	Date/time	Received For Laboratory By:	

TTNUS Copy

Chain of Custody Form

Tetra Tech NUS Inc.

COC no.	NA	page	1	of	1
Subcontract No.	NA				
LABORATORY	Mitkem				

Ship Date: July 14, 2005
Via: Courier: Mitkem

Project: Gould Island RI, Job 0065

Signatures: Johanna Grant

Sample Number	Matrix	Date	Time	Sample Location	QC	Blind Information (TTNUS ONLY)	Container Type: 8 oz amber; Preservative: ice; Analysis: SVOC/PAH/DRO/Pest/PCB	Container Type: 4 oz amber; Preservative: ice; Analysis: Metals/CN	Container Type: 40 mL vial; Preservative: DI; Analysis: VOCs	Container Type: 40 mL Vial; Preservative: MEOH; Analysis: VOC	Container Type: 40 mL vial; Preservative: MEOH; Analysis: GRO	Container Type: 40 mL vial; Preservative: HCl; Analysis: VOC/GRO
	AQ	7/11/2005	800	G32-SOTB13	TB		-	-	2	1	1	-
	SO	7/11/2005	1044	G32-SB303B-0002	-		1	1	2	1	1	-
	SO	7/11/2005	1240	G32-SB303B-1012	-		1	1	2	1	1	-
	SO	7/12/2005	737	G32-SB309-0002	Lab QC		1	1	4	2	2	-
	SO	7/12/2005	1141	G32-SB309-3840	-	DUP07	1	1	2	1	1	-
	SO	7/12/2005	1146	G32-SB-DUP07	-	DUP07	1	1	2	1	1	-
	SO	7/12/2005	1523	G32-SB310-0002	-		2*	1	2	1	1	-
	AQ	7/14/2005	1400	G32-RB08	RB		6**	2***	-	-	-	4
	SO	7/13/2005	752	G32-SB301B-0002	-		2*	1	2	1	1	-
	SO	7/13/2005	954	G32-SB310-4042	-		2*	1	2	1	1	-
	SO	7/13/2005	904	G32-SB301B-1012	-		2*	1	2	1	1	-
	SO	7/14/2005	910	G32-SB338-0002	-		2*	1	2	1	1	-
	SO	7/14/2005	1001	G32-SB338-1012	-		2*	1	2	1	1	-
	SO	7/14/2005	1115	G32-SB337-0002	-		2*	1	2	1	1	-
	SO	7/14/2005	1254	G32-SB337-1012	-		2*	1	2	1	1	-
	SO	7/14/2005	1409	G32-SB332-0002	-		2*	1	2	1	1	-
	SO	7/14/2005	1423	G32-SB332-0406	-		2*	1	2	1	1	-
						TOTAL	5	15	34	17	17	4

7-14-05

Relinquished By	Date/Time	Received By	Remarks
Johanna Grant	7/14/05 1617	John Healy	* 2-4oz jars instead of 1-8oz ** 6 1 L ambers, ice only *** 250 mL poly with HNO3/ 250 mL poly with NaOH, respectively
Relinquished By	Date/time	Received For Laboratory By:	

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Chain of Custody Form

Tetra Tech NUS Inc.

COC no.	NA	page	1	of	2	0
Subcontract No.	NA					
LABORATORY	Mitkem					

Project: Gould Island RI, Job 0065

Ship Date: ~~June 15, 2005~~ JUN 20

Via: Courier: Mitkem

Signatures: Johanne Grant

Location	Matrix	Date	Time	Sample Identification No.	QC	Blind Information (TTNUS ONLY)	Container Type: L Amber; Preservative: Ice; Analysis: SVOC/PAH	Container Type: L amber; Preservative: Ice; Analysis: Pest/PCBs	Container Type: L amber; Preservative: Ice; Analysis: TPH	Container Type: 40 mL vial; Preservative: HCl; Analysis: VOC	Container Type: 40 mL vial; Preservative: HCl; Analysis: GRO	Container Type: ~~250 mL poly~~ 40 mL vial; Preservative: ~~HNO3~~ HCl JT; Analysis: ~~Metals~~ TPC JT 7-20-05	Container Type: 250 mL poly; Preservative: NaOH; Analysis: CN
	GW	7/19/2005	1235	G32-MW303B	-		2	2	2	2	2	2	1
	GW	7/19/2005	1345	G32-MW305B	-		2	2	2	2	2	2	1
	AQ	7/19/2005	800	G32-GWTB10	TB		-	-	-	2	2	-	-
	GW	7/20/2005	1100	G32-MW300S	-	DUP01	2	2	2	2	2	2	1
	GW	7/20/2005	1135	G32-GW-DUP01	-	DUP01	2	2	2	2	2	2	1
						TOTAL	8	8	8	10	10		4

7-20-05

7-20-05

Relinquished By	Date/Time	Received By	Remarks
Johanne Grant	7/20/05 1930	Jane Healey	
Relinquished By	Date/time	Received For Laboratory By:	

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Chain of Custody Form

Tetra Tech NUS Inc.

						COC no.	NA	page	1	of		0
		Ship Date	July 20, 2005			Subcontract No.			NA			
Project:		Via	Courier: Mitkem			LABORATORY			Mitkem			
Gould Island RI, Job 0065						Container Type	250 mL poly	250 mL poly	250 mL poly	0	0	250 mL poly	0
Signatures: Johanne Grant					TTNUS ONLY	Preservative	HNO3	NaOH/ZnAc	Ice	0	0	HNO_3	0
Location	Matrix	Date	Time	Sample Identification No.	QC	Blind Information	Analysis Metals	Analysis Sulfides	Analysis Alkalinity	Analysis 0	Analysis 0	Analysis Metals	Analysis 0
	GW	7/19/2005	1235	G32-MW303B	-		1	1	1	0	0	0	0
	GW	7/19/2005	1345	G32-MW305B	-		1	1	1	0	0	0	0
	AQ	7/19/2005	800	G32-GWTB10	TB		-	-	-	0	0	0	0
	GW	7/20/2005	1100	G32-MW300S	-	DUP01	1	1	1	0	0	0	0
	GW	7/20/2005	1135	G32-GW-DUP01	-	DUP01	1	1	2*	0	0	0	0
						TOTAL	4	4	3	0	0		0

Relinquished By: Johanne Grant	Date/Time 7/20/05 1430	Received By: Jane Healy	Remarks: * 2 125 mL polys instead of 1 250 mL
Relinquished By	Date/time	Received For Laboratory By:	

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Chain of Custody Form

Tetra Tech NUS Inc.

COC no.	NA
page	1 of 1
Subcontract No.	NA
LABORATORY	Mitkem

Project: Gould Island RI, Job 0065

Ship Date: July 22, 2005
Via: Courier: Mitkem

Signatures: Johanna Sias

Sample Number	Matrix	Date	Time	Sample Location	QC	TTNUS ONLY Blind Information	Container Type: 8 oz amber; Preservative: Ice; Analysis: SVOC/PAH/DRO/Pest/PCB	Container Type: 4 oz amber; Preservative: Ice; Analysis: Metals/CN	Container Type: 40 mL vial; Preservative: DI; Analysis: VOCs	Container Type: 40 mL Vial; Preservative: MEOH; Analysis: VOC	Container Type: 40 mL vial; Preservative: MEOH; Analysis: GRO	Container Type: 40 mL vial; Preservative: HCl; Analysis: VOC/GRO
	SO	7/21/2005	830	G32-SOTP05-01-0000	-		1	1	2	1	1	-
	AQ	7/21/2005	800	G32-SOTB14	TB		-	-	2	1	1	-
	SO	7/21/2005	900	G32-SOTP05-02-0000	-		1	1	2	1	1	-
	SO	7/21/2005	905	G32-SOTP05-03-0002	-		1	1	2	1	1	-
	SO	7/21/2005	1410	G32-SO-DUP09	-	DUP09	1	1	2	1	1	-
	SO	7/21/2005	1120	G32-SOTP10-03-0002	-		1	1	2	1	1	-
	SO	7/21/2005	1100	G32-SOTP10-01-0002	-		1	1	2	1	1	-
	SO	7/21/2005	1110	G32-SOTP10-02-0002	-		1	1	2	1	1	-
	SO	7/21/2005	1030	G32-SOTP09-02-0002	-		1	1	2	1	1	-
	SO	7/21/2005	1040	G32-SOTP06-01-0002	-		1	1	2	1	1	-
	SO	7/21/2005	1035	G32-SOTP09-01-0002	-		1	1	2	1	1	-
	SO	7/21/2005	1405	G32-SOTP12-01	-	DUP09	1	1	2	1	1	-
	SO	7/21/2005	1330	G32-SOTP11-01	-	DUP08	1	1	2	1	1	-
	SO	7/21/2005	1335	G32-SO-DUP08	-	DUP08	1	1	2	1	1	-
	SO	7/21/2005	1400	G32-SOTP13-01	Lab QC		1	1	4	2	2	-
	SO	7/22/2005	800	G32-SOTP04-01	-		1	1	2	1	1	-
	SO	7/22/2005	900	G32-SOTP07	-		1	1	2	1	1	-
	SO	7/22/2005	845	G32-SOTP08	Lab QC		1	1	4	2	2	-
						TOTAL	17	17	40	20	20	0

Relinquished By: Johanna Sias	Date/Time: 7/25/05 1922	Received By: [signature]	Remarks: All TP samples have strong odor potential high readings
Relinquished By:	Date/time:	Received For Laboratory By:	

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Chain of Custody Form

Tetra Tech NUS Inc.

COC no.	NA	page	1 of 2 0
Subcontract No.	NA		
LABORATORY	Mitkem		

Project: Gould Island RI, Job 0065

Ship Date: July 22, 2005

Via: Courier: Mitkem

Signatures: Johanna Deard

Location	Matrix	Date	Time	Sample identification No.	QC	TTNUS ONLY Blind Information	Container Type: L Amber, Preservative: Ice, Analysis: SVOC/PAH	Container Type: L amber, Preservative: Ice, Analysis: Pest/PCBs	Container Type: L amber, Preservative: Ice, Analysis: TPH	Container Type: 40 mL vial, Preservative: HCl, Analysis: VOC	Container Type: 40 mL vial, Preservative: HCl, Analysis: GRO	Container Type: 250 mL poly, Preservative: HCl, Analysis: TOC	Container Type: 250 mL poly, Preservative: NaOH, Analysis: CN
	GW	7/21/2005	1104	G32-MW301S	-		2	2	2	2	2	2	2*
	AQ	7/21/2005	800	G32-GWTB11	TB		-	-	-	2	2	-	-
	AQ	7/21/2005	1030	G32-AQTP06	-		2	2	2	2	2	-	1
	AQ	7/21/2005	820	G32-AQTP05	-		2	2	2	2	2	-	1
	AQ	7/21/2005	1130	G32-AQTP10-02	-		2	1	1	2	2	-	1
	AQ	7/21/2005	1330	G32-AQTP11	-		2	1	1	2	2	-	1
	AQ	7/21/2005	1335	G32-AQTP12	-		2	1	1	2	2	-	1
	AQ	7/21/2005	1340	G32-AQTP13	-		2	1	1	2	2	-	1
	GW	7/21/2005	1450	G32-MW301B	-		2	1	1	2	2	2	2*
	AQ	7/22/2005	930	G32-AQTP08	-		2	1	1	2	2	-	2*
						TOTAL	18	12	12	20	20		6

7-22-05

Relinquished By: Johanna Deard

Date/Time: 7/22/05 1920

Received By: [signature]

Relinquished By

Date/time

ed For Laboratory By:

Remarks:
* 2 125 mL poly instead of 1 250 mL poly
All TP samples have strong petroleum odor ~ potentially high readings

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Chain of Custody Form

Tetra Tech NUS Inc.

						COC no.	NA	page	2	of	2	0
		Ship Date	July 22, 2005			Subcontract No.			NA			
Project:		Via	Courier: Mitkem			LABORATORY			Mitkem			
Gould Island RI, Job 0065						Container Type	250 mL poly	250 mL poly	125 mL poly	Container Type	Container Type	Container Type	Container Type
Signatures: Johanna Grant					TTNUS ONLY	Preservative	HNO3	NaOH/ZnAc	Ice	Preservative	Preservative	Preservative	Preservative
Location	Matrix	Date	Time	Sample Identification No.	QC	Blind Information	Analysis Metals	Analysis Sulfides	Analysis Alkalinity	Analysis	Analysis	Analysis	Analysis
	GW	7/21/2005	1104	G32-MW301S	-		1	1	2				
	AQ	7/21/2005	800	G32-GWTB11	TB		-	-	-				
	AQ	7/21/2005	1030	G32-AQTP06	-		1	-	-				
	AQ	7/21/2005	820	G32-AQTP05	-		1	-	-				
	AQ	7/21/2005	1130	G32-AQTP10-02	-		1	-	-				
	AQ	7/21/2005	1330	G32-AQTP11	-		1	-	-				
	AQ	7/21/2005	1335	G32-AQTP12	-		1	-	-				
	AQ	7/21/2005	1340	G32-AQTP13	-		1	-	-				
	AQ	7/21/2005	1450	G32-MW301B	-		1	1	2				
	AQ	7/22/2005	930	G32-AQTP08	-		1	-	-				
						TOTAL		2	4	0	0		0

Relinquished By: Johanna Grant	Date/Time 7/22/05 1422	Received By: [signature]	Remarks: All TP samples have strong odor potential high readings
Relinquished By	Date/time	Received For Laboratory By:	

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7-22-05

7-22-05

Chain of Custody Form

Tetra Tech NUS Inc.

COC no.	NA	page	1 of 1
Subcontract No.	NA		
LABORATORY	Mitkem		

Project: Gould Island RI, Job 0065

Ship Date: July 28, 2005
Via: Courier: Mitkem

Signatures: Johanna Grant

Sample Number	Matrix	Date	Time	Sample Location	QC	TTNUS ONLY Blind Information	Container Type: 8 oz amber; Preservative: Ice; Analysis: SVOC/PAH/DRO/Pest/PCB	Container Type: 4 oz amber; Preservative: Ice; Analysis: Metals/CN	Container Type: 40 mL vial; Preservative: DI; Analysis: VOCs	Container Type: 40 mL Vial; Preservative: MEOH; Analysis: VOC	Container Type: 40 mL vial; Preservative: MEOH; Analysis: GRO	Container Type: 40 mL vial; Preservative: HCl; Analysis: VOC/GRO/TOC
	SO	7/28/2005	830	G32-SO-IDW01	-		1	1	2	1	1	-
	SO	7/28/2005	835	G32-SO-IDW02	-		1	1	2	1	1	-
	AQ	7/28/2005	850	G32-AQ-IDW01	-		6*	3**	-	-	-	6
	AQ	7/28/2005	800	G32-SOTB16	TB		-	-	2	1	1	-
						TOTAL	2	2	6	3	3	6

7-28-05 7-28-05

Relinquished By: Johanna Grant	Date/Time: 7/28/05 1520	Received By: [signature]	Remarks: *6 L ambers, ice only **2 250 mL poly with HNO3/ 250 mL poly with NaOH, respectively [redacted]
Relinquished By:	Date/time:	Received For Laboratory By: [signature]	

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Chain of Custody Form

Tetra Tech NUS Inc.

COC no.	NA	page	1 of 2
Subcontract No.	NA		
LABORATORY	Mitkem		

Project: Gould Island RI, Job 0065

Ship Date: July 28, 2005
Via: Courier: Mitkem

Signatures: Shanna Grant

Location	Matrix	Date	Time	Sample Identification No.	QC	Blind Information (TTNUS ONLY)	Container Type: L Amber, Preservative: Ice, Analysis: SVOC/PAH	Container Type: L amber, Preservative: Ice, Analysis: Pest/PCBs	Container Type: L amber, Preservative: Ice, Analysis: TPH	Container Type: 40 mL vial, Preservative: HCl, Analysis: VOC	Container Type: 40 mL vial, Preservative: HCl, Analysis: GRO	Container Type: 40 mL vial, Preservative: HCl, Analysis: TOC	Container Type: 250 mL poly, Preservative: NaOH, Analysis: Cyanide
	AQ	7/27/2005	800	G32-GWTB13	TB		-	-	-	2	2	-	-
	GW	7/27/2005	1300	G32-MW306B	-		2	2	2	2	2	2	1
	GW	7/27/2005	1345	G32-MW306S	-		2	2	2	2	2	2	1
	GW	7/27/2005	1230	G32-MW304B	-		2	2	2	2	2	2	1
	GW	7/27/2005	1245	G32-MW304S	Lab QC		4	4	4	6	6	6	2
	AQ	7/28/2005	1000	G32-RB11	RB		2	2	2	2	2	2	1
						TOTAL	12	12	12	16	16		6

7-28-05

Relinquished By: Shanna Grant	Date/Time: 7/28/05 1520	Received By: Jason Healey	Remarks:
Relinquished By:	Date/time:	Received For Laboratory By:	

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Chain of Custody Form

Tetra Tech NUS Inc.

COC no.	NA	page	2	of	2
Subcontract No.	NA				
LABORATORY	Mitkem				

Project: Gould Island RI, Job 0065

Ship Date: July 28, 2005

Via: Courier: Mitkem

Signature: Joanna Grant

Location	Matrix	Date	Time	Sample Identification No.	QC	TTNUS ONLY Blind Information	Container Type 250 mL poly	Container Type 250 mL poly	Container Type 250 mL poly	Container Type	Container Type	Container Type	Container Type
							Preservative HNO3	Preservative NaOH/ZnAc	Preservative ice	Preservative	Preservative	Preservative	Preservative
							Analysis Metals	Analysis Sulfides	Analysis Alkalinity	Analysis	Analysis	Analysis	Analysis
	AQ	7/27/2005	800	G32-GWTB13	TB		-	-	-				
	GW	7/27/2005	1300	G32-MW306B	-		1	1	2*				
	GW	7/27/2005	1345	G32-MW306S	-		1	1	2*				
	GW	7/27/2005	1230	G32-MW304B	-		1	1	2*				
	GW	7/27/2005	1025 ~~1245~~ CS	G32-MW304S	Lab QC		2	2	2				
	AQ	7/28/2005	1000 7-27-5	G32-RB11	RB		1	1	1				
						TOTAL	6	6	3	0	0		0

Relinquished By: Joanna Grant

Date/Time: 7/28/05 1526

Received By: Jana Healey

Relinquished By

Date/time

ed For Laboratory By:

Remarks:
*2 125 mL polys instead of 1 250 mL poly

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Chain of Custody Form

Tetra Tech NUS Inc.

COC no. NA	page 2	of 2			
Subcontract No. NA					
LABORATORY Mitkem					

Project: Gould Island RI, Job 0065

Ship Date: July 27, 2005

Via: Courier: Mitkem

Signatures: Joanne Grau

Location	Matrix	Date	Time	Sample Identification No.	QC	TTNUS ONLY Blind Information	Container Type 250 mL poly / Preservative HNO3 / Analysis Metals	Container Type 250 mL poly / Preservative NaOH/ZnAc / Analysis Sulfides	Container Type 250 mL poly / Preservative Ice / Analysis Alkalinity	Container Type / Preservative / Analysis	Container Type / Preservative / Analysis	Container Type / Preservative / Analysis	Container Type / Preservative / Analysis
	AQ	7/26/2005	1500	G32-RB09	RB		1	1	1				
	AQ	7/25/2005	800	G32-GWTB12	TB		-	-	-				
	GW	7/25/2005	1000	G32-MW300B	-		1	1	1				
	GW	7/25/2005	1245	G32-MW303S	Lab QC		2	2	2				
	GW	7/26/2005	1100	G32-GW-DUP02	-	DUP02	1	1	1				
	GW	7/25/2005	1345	G32-MW302B	-		1	1	1				
	GW	7/26/2002	1045	G32-MW302S	-	DUP02	1	1	1				
	AQ	7/27/2005	830	G32-RB10	RB		1	1	1				
	GW	7/26/2005	1100	G32-MW305S	-	DUP03	1	1	1				
	GW	7/26/2005	1115	G32-GW-DUP03	-	DUP03	1	1	1				
	0	1/0/1900	0	0	0		0	0	0				
						TOTAL	10	10	10	0	0		0

7/27/05

Relinquished By	Date/Time 7/27/05 11:05	Received By:	Remarks:
Relinquished By	Date/time	ed For Laboratory By:	

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Chain of Custody Form

Tetra Tech NUS Inc.

COC no.	NA	page	1	of	2	0
Subcontract No.	NA				
LABORATORY	Mitkem				

Project: Gould Island RI, Job 0065

Ship Date: July 28, 2005

Via: Courier: Mitkem

Signature: Johanne Tran

Location	Matrix	Date	Time	Sample Identification No.	QC	TTNUS ONLY Blind Information	Container Type: L Amber	Container Type: L amber	Container Type: L amber	Container Type: 40 mL vial	Container Type: 40 mL vial	Container Type: 40 mL vial	Container Type: 250 mL poly
							Preservative: Ice	Preservative: Ice	Preservative: Ice	Preservative: HCl	Preservative: HCl	Preservative: HCl	Preservative: NaOH
							Analysis: SVOC/PAH	Analysis: Pest/PCBs	Analysis: TPH	Analysis: VOC	Analysis: GRO	Analysis: TOC	Analysis: Cyanide
	AQ	7/26/2005	1500	G32-RB09	RB		2	2	2	2	2	2	1
	AQ	7/25/2005	800	G32-GWTB12	TB		-	-	-	2	2	-	-
	GW	7/25/2005	1000	G32-MW300B	-		2	2	2	2	2	2	1
	GW	7/25/2005	1245	G32-MW303S	Lab QC		6	6	6	6	6	6	2
	GW	7/26/2005	1100	G32-GW-DUP02	-	DUP02	2	2	2	2	2	2	1
	GW	7/25/2005	1345	G32-MW302B	-		2	2	2	2	2	2	1
	GW	7/26/2005	1045	G32-MW302S	-	DUP02	2	2	2	2	2	2	1
	AQ	7/27/2005	830	G32-RB10	RB		2	2	2	2	2	2	1
	GW	7/26/2005	1100	G32-MW305S	-	DUP03	2	2	2	2	2	2	1
	GW	7/26/2005	1115	G32-GW-DUP03	-	DUP03	2	2	2	2	2	2	1
						TOTAL	22	22	22	24	24		10

7/27/05

Relinquished By: D. Hall	Date/Time: 7/27/05 11:05	Received By: Jerry Healey	Remarks:
Relinquished By:	Date/time	Received For Laboratory By:	

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Chain of Custody Form

Tetra Tech NUS Inc.

COC no. NA	page 1	of 1	
Subcontract No. NA			
LABORATORY Mitkem			

Project: Gould Island RI, Job 0065

Ship Date July 27, 2005

Via Courier: Mitkem

Signature: Johanna Dean

Sample Number	Matrix	Date	Time	Sample Location	QC	TTNUS ONLY Blind Information	Container Type 8 oz amber / Preservative Ice / Analysis SVOC/PAH/DRO /Pest/PCB	Container Type 4 oz amber / Preservative Ice / Analysis Metals/CN	Container Type 40 mL vial / Preservative DI / Analysis VOCs	Container Type 40 mL Vial / Preservative MEOH / Analysis VOC	Container Type 40 mL vial / Preservative MEOH / Analysis GRO	Container Type 40 mL vial / Preservative HCl / Analysis VOC/GRO
	AQ	7/26/2005	800	G32-SOTB15	TB		-	-	2	1	1	-
	SO	7/26/2005	1350	G32-SOTP05-MH	-	DUP10	1	1	2	1	1	-
	SO	7/26/2005	1355	G32-SO-DUP10	-	DUP10	1	1	2	1	1	-
	SO	7/26/2005	1430	G32-BR01	-		-	1*	-	-	-	-
						TOTAL	2	2	6	3	3	0

Relinquished By: [signature]

Date/Time: 7/27/05 11:05

Received By: [signature]

Relinquished By:

Date/time:

Received For Laboratory By:

Remarks: * No CN analysis

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Chain of Custody Form

Tetra Tech NUS Inc.

COC no.	NA	page	1	of	1
Subcontract No.	NA				
LABORATORY	Mitkem				

Project: Gould Island RI, Job 0065

Ship Date: July 28, 2005

Via: Courier: Mitkem

Signatures: Johanna Grant

Sample Number	Matrix	Date	Time	Sample Location	QC	TTNUS ONLY Blind Information	Container Type 8 oz amber / Preservative Ice / Analysis SVOC/PAH/DRO/Pest/PCB	Container Type 4 oz amber / Preservative Ice / Analysis Metals/CN	Container Type 40 mL vial / Preservative DI / Analysis VOCs	Container Type 40 mL Vial / Preservative MEOH / Analysis VOC	Container Type 40 mL vial / Preservative MEOH / Analysis GRO	Container Type 40 mL vial / Preservative HCl / Analysis VOC/GRO
	AQ	7/28/2005	830	G32-RB12	RB		6*	2*	-	-	-	4
						TOTAL	0	0	0	0	0	4

Relinquished By: Johanna Grant — Date/Time: 7/28/05 1520

Relinquished By — Date/time:

Received By: Jane H Healey

Received For Laboratory By:

Remarks:
*6 L ambers, ice only
**2 250 mL poly with HNO3/ 250 mL poly with NaOH, respectively
~~Total 12 for all samples~~

7-28-05

7-28-05

TtNUS Copy

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No.: NA
Subcontract No.: NA

Project No.: 60000065-0260
Laboratory Name: Mitkem
Sampler Signatures: Craig Sandy
Date Shipped: 8-26-5
Airbill No.: NA
Carrier: Pick Up
No. of Coolers: 5

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC	Container Type: VOC meOH	Container Type: g50	Container Type: 40 mL vial	Container Type: 16 oz amber	Container Type: 8 oz	Container Type: 4 oz
						Analysis: 40 mL vial	Analysis: 40 mL vial	Analysis: VOC Low	Analysis: SVOC / PAH Pest / PCB metals/CN ~~PAH/VOC~~	Analysis: grain size	Analysis: AVS/SEM
						Preservative: MEOH	Preservative: MEOH	Preservative: DI	Preservative: Ice	Preservative: Ice	Preservative: Ice
	SO	8-26 / 1100	g32-SO305D-0.5 1.0			1	1	7	1	1	1
	SO	~~8-26/1345~~	~~g32-SO312D-000.5~~			~~1~~	~~1~~	~~7~~	~~1~~	~~1~~	~~1~~
		8-26/0820	g32-SO304A-000.5 (304 CS 8-26)			1	1	7	1	1	1
		/ 0945	g32-SO304B-000.5			1	1	7	1	1	1
		/ 0900	g32-SO304C-000.5		LAB QC	3	3	6	2	1	3
		/ 0810	- SO304D-000.5	CS	~~DI~~	1	1	7	1	1	1
		/ 0930	- SO304E-000.5		-	1	1	7	1	1	1
		/ 0920	- SO304F-0.5 1.0 (CS 8-26-5)		-	1	1	7	1	1	1
CS 8-26	SO	8-26 / 0815	g32-SO304P02-000.5	CS	~~DI~~	1	1	7	1	1	1
	CS	8-26-5									

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
[signature]	8/26/05 1810	[signature]	YES NO	
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	

Tt NUS Form 0022

03266

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. NA
Subcontract No. NA

Project No. (5) X00065-0260

Laboratory Name: Mitkem

Sampler Signatures: Craig Sanchez

Date Shipped: 8-26
Airbill No. NA

Carrier: LAB Pick-Up
No. of Coolers: 5

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC	Container Type: 16oz amber	Container Type: 8oz	Container Type: 4oz	Container Type: 40 ml vial	Container Type: 40ml vial	Container Type: 40ml vial
						Analysis: SVOC/PAH Pest/PCB Metals/CN OSO/TOC	Analysis: grain size	Analysis: AVS/SEM	Analysis: VOC LOW	Analysis: VOC MED	Analysis: DRO GRO
						Preservative: Ice	Preservative: Ice	Preservative: Ice	Preservative: DI	Preservative: MEOH	Preservative: MEOH
	SD	8-25/1345	g32-SD313D-000.5		D1	1	1	1	2	1	1
	SD	8-25/1350	g32-SDDUP01-000.5		D1	1	1	1	2	1	1
	SD	8-25/1400	g32-SD313A-000.5		—	1	1	1	2	1	1
	SD	8-25/1410	g32-SD313C-000.5		—	1	1	1	2	1	1
	SD	8-25/1425	g32-SD313E-000.5		—	1	1	1	2	1	1
	SD	8-25/1440	g32-SD313B-000.5		—	1	1	1	2	1	1
	SD	8-25/0900	g32-SDTB01		TB	—	—	—	2	1	1
	SD	8-26/1110	g32-SD305A-000.5			2(*)	1	1	2	1	1
	↓	1115	g32-SD305B-000.5			2(*)	1	1	2	1	1
		1030	g32-SD305C-000.5			1	1	1	2	1	1
CS 8-26-5	↓	↓ 1010 ~~1100~~	g32-SD305D-000.5			1	1	1	2	1	1
	SD	8-26/1130	g32-SD305E-000.5			1	1	1	2	1	1

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
Lauren Zepeda	8/26/05 1610	[signature]	YES NO	(*) 1-8oz for SVOC/PAH Pest/PCB; 1-4oz for Metals/CN/TOC
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	

Tt NUS Form 0022

02358

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. NA
Subcontract No. NA

Project No. G000665-0260

Laboratory Name: Mitkem

Sampler Signatures: Craig Sandy

Date Shipped: 8-26-5
Airbill No. NA
Carrier: Lab Pick-up
No. of Coolers: 5

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC	Container Type: 8oz amber	Container Type: 8oz amber	Container Type	Container Type	Container Type
						Analysis: SVOC/PAH Pest/PCB DRO	Analysis: Glass Size	Analysis	Analysis	Analysis
						Preservative: Ice	Preservative: Ice	Preservative	Preservative	Preservative
	SD	8-25/1000	g32-SD302D-000.5		-	1	1			
	SD	8-25/1020	g32-SD302A-000.5		-	1	1			
	AQ	8-26/0900	g32-SDRB01		RB	6*				
	SD	8-25/1045	g32-SD307E-000.5		-	1	1			
	SD	8-25/1105	g32-SD302C-000.5		-	1	1			
	SD	8-25/1130	g32-SD302B-000.5		-	1	1			
	SD	8-25/1145	g32-SD308D-000.5		-	1	1		CS 8-26-5	
	SD	8-25/1200	g32-SD308A-000.5		-	1	1			
	SD	8-25/1225	g32-SD308E-000.5		-	1	1			
	SD	8-25/1245	g32-SD308C-000.5		-	1	1			
	SD	8-25/1300	g32-SD308B-000.5		-	1	1			
				CS 8-26-5						

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
Lauren J Seyfert	8/26/05 1610	Jim Healy	YES NO	* Rinsate Blank 6 (1L) ambers total 2 for SVOC/PAH 2 for Pest/PCB 2 for DRO
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	

Tt NUS Form 0022

02359

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. NA

Subcontract No. NA

Project No. G000065-0260

Laboratory Name: Mitkem Corp.

Sampler Signatures: Craig Sanchez

Date Shipped: 8-26

Airbill No. NA

Carrier: Lab Pick-up ~~Fed Ex~~ (CS)

No. of Coolers: 5

Sample Number	Matrix	Date/Time (YR=2005)	Sample Location	Tag Number(s)	QC	Container Type: 40mL vial	Container Type: 40mL vial	Container Type: 40mL vial	Container Type: 4oz amber	Container Type: 4oz amber
						Analysis: VOC Low	Analysis: VOC Med	Analysis: CS 8-26-5 GRO	Analysis: AVS/SEM	Analysis: Metals/CN TOC
						Preservative: DI	Preservative: MEOH	Preservative: MEOH	Preservative: Ice	Preservative: Ice
	SO	8-25/1000	g32-SD302D-000.5		–	2	1	1	1	1
	SO	8-25/1020	g32-SD302A-000.5		–	2	1	1	1	1
	AQ	8-26/0900	g32-SDRB01		RB	–	2*	2*	–	4*
	SO	8-25/1045	g32-SD302E-000.5		–	2	1	1	1	1
	SO	8-25/1105	g32-SD302C-000.5		–	2	1	1	1	1
	SO	8-25/1130	g32-SD302B-000.5		–	2	1	1	1	1
CS 8-26-5	SO	8-25/~~1125~~ 1145	g37-SD308D-000.5		–	2	1	1	1	1
	SO	8-25/1200	g32-SD308A-000.5		–	2	1	1	1	1
	SO	8-25/1225	g32-SD308E-000.5		–	2	1	1	1	1
	SO	8-25/1245	g32-SD308C-000.5		–	2	1	1	1	1
	SO	8-25/1300	g32-SD308B-000.5		–	2	1	1	1	1
				CS 8-26-5						

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
Lawrence J Seydel	8/26/05 1610	[signature]	YES (NO)	(*) Rinsate Blank VOC preserved w/ HCl; DRO preserved w/ HCl; Metals preserved w/ HNO_3; CN preserved w/ NaOH
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	

Tt NUS Form 0022

02357

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. NA

Subcontract No. NA

Project No. 6000065-0200

Laboratory Name: Mitkem

Sampler Signatures: Craig Sandy

Date Shipped: 8-26-5

Airbill No.: NA

Carrier: Pick Up

No. of Coolers: 5

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC	Container Type: VOC meq	Container Type: gso	Container Type: 40 mL vial	Container Type: 16 oz amber	Container Type: 8 oz	Container Type: 4 oz
						Analysis: 40 mL vial	Analysis: 40 mL vial	Analysis: VOC Low	Analysis: SVOC / PAH Pest / PCB Metals/CN ~~SVOC/TOC~~	Analysis: glass Size	Analysis: AVS/ SEM
						Preservative: MeOH	Preservative: MeOH	Preservative: DI	Preservative: Ice	Preservative: Ice	Preservative: Ice
	SO	~~8-26 / 1100~~	~~g32-S0305D-0.5,0~~			1	1	7	1	1	1
	SO	~~8-26/1345~~	~~g32-S0312D-000.5~~			1	1	7	1	1	1
		8-26/0820	g32-S0304A-000.5 (304, CS 8-26)			1	1	7	1	1	1
		/0945	g32-S0304B-000.5			1	1	7	1	1	1
		/0000	g32-S0304C-000.5		LAB QC	3	3	6	2	1	3
		/0810	-S0304D-000.5	CS	~~DZ~~	1	1	7	1	1	1
		/0930	-S0304E-000.5		—	1	1	7	1	1	1
		/0720	-S0304F-0.5,0 (CS 8-26-5)		—	1	1	7	1	1	1
CS 8-26	SO	8-26 / 0815	g32-S0000P02-000.5	CS	~~DZ~~	1	1	7	1	1	1
	CS	8-26-5									

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
Laura Sigulist	8/26/05 1810	[signature]	YES NO	
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	

Tt NUS Form 0022

03266

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. NA
Subcontract No. NA

Project No. CS 800065-0260

Laboratory Name: Mitkem

Sampler Signatures: Craig Somchay

Date Shipped: 8-26
Airbill No.: NA
Carrier: LAB Pick-Up
No. of Coolers: 5

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC	Container Type: 16oz amber	Container Type: 8oz	Container Type: 4oz	Container Type: 40mL vial	Container Type: 40mL vial	Container Type: 40mL vial
						Analysis: SVOC/PAH Pest/PCB Metals/CN ORO/TOC	Analysis: Grain Size	Analysis: AVS/SEM	Analysis: VOC Low	Analysis: VOC Med	Analysis: CS GRO
						Preservative: Ice	Preservative: Ice	Preservative: Ice	Preservative: DI	Preservative: MeOH	Preservative: MeOH
	SD	8-25/1345	g32-SD313D-000.5		D1	1	1	1	2	1	1
	SD	8-25/1350	g32-SDDUP01-000.5		D1	1	1	1	2	1	1
	SD	8-25/1400	g32-SD313A-000.5		—	1	1	1	2	1	1
	SD	8-25/1410	g32-SD313C-000.5		—	1	1	1	2	1	1
	SD	8-25/1425	g32-SD313E-000.5		—	1	1	1	2	1	1
	SD	8-25/1440	g32-SD313B-000.5		—	1	1	1	2	1	1
	SD	8-25/0900	g32-SDTB01		TB	—	—	—	2	1	1
	SD	8-26/1110	g32-SD305A-000.5			2(*)	1	1	2	1	1
		1115	g32-SD305B-000.5			2(*)	1	1	2	1	1
		1030	g32-SD305C-000.5			1	1	1	2	1	1
CS 8-26-5		1010 ~~1100~~	g32-SD305D-000.5			1	1	1	2	1	1
	SD	8-26/1130	g32-SD305E-000.5			1	1	1	2	1	1

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
Lauren Leopold	8/26/05 1610	[signature]	YES NO	(*) - 1-8oz for SVOC/PAH Pest, PCB; 1-4oz for Metals/CN/TOC
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	

Tt NUS Form 0022

02358

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No.: NA
Subcontract No.: NA

Project No.: 6000665-0260

Laboratory Name: Mitkem

Sampler Signatures: Craig Sandy

Date Shipped: 8-26-5
Airbill No.: NA
Carrier: Lab Pick-up
No. of Coolers: 5

Container Type	Container Type	Container Type	Container Type	Container Type
8oz amber	8oz amber			

Analysis	Analysis	Analysis	Analysis	Analysis
SVOC/PAH Pest/PCB DRO	Mercury			

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC	Preservative: Ice	Preservative: Ice	Preservative	Preservative	Preservative
	SO	8-25/1000	g32-SO302D-000.5		-	1	1			
	SO	8-25/1020	g32-SO302A-000.5		-	1	1			
	AQ	8-26/0900	g32-SORB01		RB	6*				
	SO	8-25/1045	g32-SO302E-000.5		-	1	1			
	SO	8-25/1105	g32-SO302C-000.5		-	1	1			
	SO	8-25/1130	g32-SO302B-000.5		-	1	1		CS	
	SO	8-25/1145	g32-SO308D-000.5		-	1	1		8-26-5	
	SO	8-25/1200	g32-SO308A-000.5		-	1	1			
	SO	8-25/1225	g32-SO308E-000.5		-	1	1			
	SO	8-25/1245	g32-SO308C-000.5		-	1	1			
	SO	8-25/1300	g32-SO308B-000.5		-	1	1			
				CS 8-26-5						

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
Lauren J Seyfert	8/26/05 1610	Jim Healy	YES NO	* Rinsate Blank 6 (1L) ambers total 2 for SVOC/PAH 2 for Pest/PCB 2 for DRO
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	

Tt NUS Form 0022

02359

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. NA
Subcontract No. NA

Project No. G000065-0260

Laboratory Name: MitKem Corp.

Sampler Signatures: Craig Sanchez

Date Shipped: 8-26
Airbill No.: NA
Carrier: Lab Pick-up ~~Fed Ex~~ (CS)
No. of Coolers: 5

Sample Number	Matrix	Date/Time (YR=2005)	Sample Location	Tag Number(s)	QC	Container Type: 40 mL vial	Container Type: 40 mL vial	Container Type: 40 mL vial	Container Type: 4 oz amber	Container Type: 4 oz amber
						Analysis: VOC LOW	Analysis: VOC med	Analysis: CS 8-26-5 GRO	Analysis: ANS/SEM	Analysis: Metals/CN TOC
						Preservative: DI	Preservative: MEOH	Preservative: MEOH	Preservative: Ice	Preservative: Ice
	SO	8-25/1000	g32-SD302D-000.5		-	2	1	1	1	1
	SO	8-25/1020	g32-SD302A-000.5		-	2	1	1	1	1
	AQ	8-26/0900	g32-SDRB01		RB	—	2*	2*	—	4*
	SO	8-25/1045	g32-SD302E-000.5		-	2	1	1	1	1
	SO	8-25/1105	g32-SD302C-000.5		-	2	1	1	1	1
	SO	8-25/1130	g32-SD302B-000.5		-	2	1	1	1	1
CS 8-26-5	SO	8-25/~~1125~~ 1145	g32-SD308D-000.5		-	2	1	1	1	1
	SO	8-25/1200	g32-SD308A-000.5		-	2	1	1	1	1
	SO	8-25/1225	g32-SD308E-000.5		-	2	1	1	1	1
	SO	8-25/1245	g32-SD308C-000.5		-	2	1	1	1	1
	SO	8-25/1300	g32-SD308B-000.5		-	2	1	1	1	1
				CS 8-26-5						

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
Lawrence J Seydel	8/26/05 1610	[signature]	YES NO	(*) Rinsate Blank VOC preserved w/ HCl; DRO preserved w/ HCl; metals preserved w/ HNO_3; CN preserved w/ NaOH
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	

Tt NUS Form 0022

02357

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. N/A
Subcontract No. N/A
Page 1 of 1

Project No. G00065-0260
Laboratory Name: Mitkem Corp
Sampler Signatures: L. Seydlak
Date Shipped: 8/30/05
Airbill No.: N/A
Carrier: Lab courier
No. of Coolers: 1

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC	Container Type: 16-oz Amber	Container Type: 1-liter Amber	Container Type: 1-liter Amber	Container Type: 250-ml Poly	Container Type: 250-ml Poly
						Analysis: SVOC/PAH, % Lipids, Pest/PCBs, Metals/CN	Analysis: SVOC/PAH	Analysis: Pest/PCBs	Analysis: Metals	Analysis: CN
						Preservative: Ice only	Preservative: Ice Only	Preservative: Ice only	Preservative: HNO_3 ~~NaOH~~ and ice	Preservative: NaOH and ice
	AQ	8/29/05 1130	G32-ETRB01		RB	–	2	2	2	2
	ET	0930	G32-ET302		–	1	–	–	–	–
		1015	G32-ET304		–	1				
		1055	G32-ET305		DI	1				
		1100	G32-ETDUP01		DI	1				
		1225	G32-ET308		–	1				
		1245	G32-ET313		–	1				
		1330	G32-ET312		–	1	–	–	–	–
			~~1130 G32~~							

LS 8/30/05

LS 8/30/05

LS 8/30/05

LS 8/30/05

LS 8/30/05

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
L. Seydlak	8/30/05 1525	[signature]	YES NO	
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	

Tt NUS Form 0022

03245

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. N/A

Subcontract No. N/A

Page 2 of 2

Project No. G00065-0260

Laboratory Name: Mitkem Corp.

Sampler Signatures: A. Leydenf

Date Shipped: 8-30-5

Airbill No.: N/A

Carrier: Lab courier 8/29/05

No. of Coolers: 3

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC	Container Type: 16-oz Amber	Container Type: 8-oz Amber	Container Type: 4-oz Amber	Container Type: 40-ml VOA vial	Container Type: 40-ml VOA vial	Container Type: 40-ml VOA vial
						Analysis: SVOC/PAH Pest/PCB Metals/CN DRO/TOC	Analysis: Grain Size	Analysis: AUS/SEM	Analysis: VOC Low	Analysis: VOC Med	Analysis: GRO
						Preservative: Ice Only	Preservative: Ice Only	Preservative: Ice Only	Preservative: DI water ice	Preservative: MeOH ice	Preservative: MeOH ice
	SD	8/29/05/1245	G32-SD309E-000.5		-	1	1	1	2	1	1
	SD	8/29/05/1255	G32-SD309B-000.5		-	1	1	1	2	1	1
	AQ	8/30/05/1100	G32-SDRB02		RB	10 g*	–	–	–	–	–
	AQ	8/30/05/1100	G32-SDRB03		RB	10 g*	–	–	–	–	–
			CS 8-30-5								

Relinquished By: (Signature) Craig Saunders — Date/Time: 8-30-5/1525 — Received By: (Signature) [signature]

Shipment for Case Complete? YES NO

Relinquished By: (Signature) — Date/Time — Received for Laboratory By: — Date/Time

Remarks:
*: Rinsate Blank
4 40mL vial VOC/DRO HCl
2 1L Amber SVOC/PAH ice
2 1L Amber Pest/PCB ice
2 1L Amber DRO ice
2 Poly metals, HNO3
2 Poly CN, NaOH

Tt NUS Form 0022

02853

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. N/A
Subcontract No. N/A

Project No. G00065-0260

Laboratory Name: Mitkem Corp.

Sampler Signatures: L. Seydewitz

Date Shipped: 8-30-5
Airbill No.: N/A
~~Carrier~~ Lab courier 8/29/05
No. of Coolers: 3

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC	Container Type: 16-oz Amber	Container Type: 8-oz Amber	Container Type: 4-oz Amber	Container Type: 40-ml VOA vial	Container Type: 40-ml VOA vial	Container Type: 40 ml VOA vial
						Analysis: SVOC/PAH Pest/PCB Metals/CN DRO/TOC	Analysis: Grain Size	Analysis: AVS/SEM	Analysis: VOC Low	Analysis: VOC MeOH	Analysis: GRO
						Preservative: Ice only	Preservative: Ice only	Preservative: Ice only	Preservative: DI water and ice	Preservative: MeOH and ice	Preservative: MeOH and ice
	AQ	8/29/05/0800	G32-SDTB02		TB	–	–	–	–	2*	2*
	SD	0940	G32-SDDUP03		D3	1	1	1	2	1	1
		1100	G32-SDDUP04		D4	1	1	1	2	1	1
		1215	G32-SD309A-000.5		MS/MSD	2	1	3	6	3	3
		0910	G32-SD306D-000.5		D3	1	1	1	2	1	1
		1000	G32-SD306A-000.5		–	1	1	1	2	1	1
		1015	G32-SD306C-000.5		–	1	1	1	2	1	1
		1030	G32-SD306C-0.5-1.0		–	1	1	1	2	1	1
		1045	G32-SD306E-000.5		D4	1	1	1	2	1	1
		1105	G32-SD306B-000.5		–	1	1	1	2	1	1
		1200	G32-SD309D-000.5		–	1	1	1	2	1	1
		1230	G32-SD309C-000.5		–	1	1	1	2	1	1

JB 8/29/05

JB 8/29/05

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
Craig Sandy	8-30-5/1525	[signature]	YES (NO)	* Trip blank preserved w/ HCl
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	

Tt NUS Form 0022

02852

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. N/A

Subcontract No. N/A

Project No. G00065-0260

Laboratory Name: Mitkem Corp

Sampler Signatures: J. Seydel

Date Shipped: 8/31/05

Airbill No.: N/A

Carrier: Lab courier

No. of Coolers: 2

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC	Container Type: 16-oz Amber	Container Type: 8-oz Amber	Container Type: 4-oz Amber	Container Type: 40-ml VOA vial	Container Type: 40-ml Vial	Container Type: 40-ml Vial
						Analysis: SVOC/PAH Pest/PCB Metals/CN DRO/TOC	Analysis: Grain Size	Analysis: AVS/SEM	Analysis: VOC Low	Analysis: VOC Med	Analysis: GRO
						Preservative: Ice only	Preservative: Ice only	Preservative: Ice only	Preservative: DI and Ice	Preservative: MeOH + Ice	Preservative: MeOH + Ice
	SD	8/30/05/1210	G32-SD315-000.5			1	1	1	2	1	1
	SD	8/30/05/1215	G32-SD307-000.5			1	1	1	2	1	1

JB 8/31/05 JB 8/31/05 JB 8/31/05 JB 8/31/05

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
Craig Sanchy	8-30-5 1300	James Henley	YES NO	* Petroleum odor noted.
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	

Tt NUS Form 0022

02857

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. N/A
Subcontract No. N/A
Page 1 of 2

Project No. 600065 0260
Laboratory Name: Mitkem Corp.
Sampler Signatures: L. Seyfried
Date Shipped: 8/31/05
Carrier: Lab courier
Airbill No.: N/A
No. of Coolers: 2

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC	Container Type: 16-oz Amber	Container Type: 8-oz Amber	Container Type: 4-oz Amber	Container Type: 40-ml VOA vial	Container Type: 40-ml vial	Container Type: 40-ml vial
						Analysis: SVOC/PAH Pest/PCB Metals/CN DRO/TOC	Analysis: Grain Size	Analysis: ANS/SEM	Analysis: VOC Low	Analysis: VOC Med	Analysis: GRO
						Preservative: Ice only	Preservative: Ice only	Preservative: Ice only	Preservative: DI and ice	Preservative: MEOH + ice	Preservative: MEOH + ice
	AQ	8/30/05/0800	G32-SDTB03		TB				2	1*	1
	SD	0915	G32-SD310D-000.5			1	1	1	2	1	1
		0930	G32-SD310A-000.5		D5	1	1	1	2	1	1
		0940 ~~0935~~	G32-SD310C-000.5			1	1	1	2	1	1
		0935	G32-SDDUP05		D5	1	1	1	2	1	1
		0950	G32-SD310E-000.5			1	1	1	2	1	1
		1015	G32-SD310B-000.5			1	1	1	2	1	1
		1010	G32-SD317-000.5			1	1	1	2	1	1
		1030	G32-SD316-000.5		Lab QC	2	1	3	6	3	3
		1100	G32-SD316-0.5-1.0			1	1	1	2	1	1
		1105	G32-SD312-000.5 *			1	1	1	2	1	1
		1115	G32-SD312-0.5-1.0 *			1	1	1	2	1	1

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
Craig Sanchez	8-30-5 1300	James Henley	YES NO	* Petroleum odor noted.
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	

Tt NUS Form 0022

02856

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. N/A
Subcontract No. N/A

Project No. G00065-0260

Laboratory Name: Mitkem Corp

Sampler Signatures: Tu A. Cuplell

Date Shipped: 9/2/05
Airbill No.: N/A
Carrier: Lab courier
No. of Coolers: 1

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC	Container Type: 8-oz or 8-oz amber	Container Type: 1-L amber	Container Type: 1-L amber	Container Type: 250-mL poly	Container Type: 250-mL poly
						Analysis: SVOC/PAH % Lipids Pest/PCB Metals/CN	Analysis: SVOC/PAH	Analysis: Pest/PCB	Analysis: Metals	Analysis: CN
						Preservative: ICE ONLY	Preservative: ICE only	Preservative: ICE only	Preservative: HNO_3 and ICE	Preservative: NaOH and ICE
	ET	9/2/05 1440	632-ET302F-090205			1	-	-	-	-
	↓	1445	632-ET304F-090205			1	-	-	-	-
		1535	632-ET308F-090205			1	-	-	-	-
		1540	632-ET313F-090205			1	-	-	-	-
	AQ	0900	632-ETRB02		RB	-	2	2	2	2

TU 9/2/05 TU 09/02/05 TU 9/2/05

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
Tu A Cuplell	9/2/05 1715	James Hedly	YES NO	
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	

Tt NUS Form 0022

02860

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. N/A

Subcontract No. N/A

Project No. 600065 - 0260

Laboratory Name: Mitkem

Sampler Signatures: Tom A Cuplak

Date Shipped: 9/2/05

Airbill No.: N/A

Carrier: Lab courier

No. of Coolers: 1

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC	Container Type: 16-oz or 8-oz amber	Analysis: SVOC/PAH, % Lipids, Pest/PCB, Metals/CN	Preservative: ICE ONLY
	ET	9/1/05 0930	632-ET307-090105			1		
		0945	632-ET306-090105			1		
		1000	632-ET309-090105			1		
		1130	632-ET303-090105			1		
		1145	632-ET310-090105			1	CS 09-02-05	
		1340	632-ET305F-090105			1		
		1400	632-ET310F-090105			1		
		1430	632-ET309F-090105			1		
		1500	632-ET306F-090105			1		
		9/2/05 0935	632-ET311-090205			1		
		1415	632-ET301-090205			1		
		1420	632-ET DUP02		D2	1		

Tom A Cuplak 09/02/05

N 09/02/05

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
Tom A Cuplak	9/2/05 1715	Jerry Hearley	YES NO	
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	

Tt NUS Form 0022

02861

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. N/A
Subcontract No. N/A
Page 2 of 2

Project No. G00065-0260
Laboratory Name: Mitkem Corp
Sampler Signatures: L. Sayplat
Date Shipped: 9/2/05
Airbill No. N/A
Carrier: Lab courier
No. of Coolers: 3

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC	Container Type: 16-oz Amber	Container Type: 8-oz amber	Container Type: 4-oz amber	Container Type: 40 ml VOA vial	Container Type: 40-ml vial	Container Type: 40-ml vial
						Analysis: SVOC/PAH Pest/PCB DRO/MOC ~~Metals/CN~~	Analysis: Grain Size	Analysis: AVS/SEM	Analysis: VOC Low	Analysis: VOC Med	Analysis: GRO
						Preservative: ice only	Preservative: ice only	Preservative: ice only	Preservative: DI water + ice	Preservative: MEOH + ice	Preservative: MEOH + ice
	AQ	9/1/05 0800	G32-SDTB04		TB	–	–	–	2	1	1
	SD	0900	G32-SD314-000.5		D6	1	1	1	2	1	1
		0910	G32-SDDUP06		D6	1	1	1	2	1	1
		0930	G32-SD314-0.5-1.0			1	1	1	2	1	1
		0945	G32-SD303-000.5			1	1	1	2	1	1
		1010	G32-SD303-0.5-1.0			1	1	1	2	1	1
		1120	G32-SD310-000.5			1	1	1	2	1	1
		1200	G32-SD309F-000.5		D7	1	1	1	2	1	1
		1215	G32-SDDUP07		D7	1	1	1 *	2	1	1
		1250	G32-SD306F-000.5			1	1	1	2	1	1
		1330	G32-SD305F-000.5			1	1	1	2	1	1
–	–	–	–			–	–	–	–	–	–

LS 9/2/05

LS 9/2/05

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
L. Sayplat	9/2/05 1715	Simon Hedley	YES NO	* AVS/SEM sample in 8-oz amber
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	

Tt NUS Form 0022

02862

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No. N/A

Subcontract No. N/A

Project No. G00065-0260

Laboratory Name: Mitkem Corp

Sampler Signatures: L. Seydel

Date Shipped: 9/2/05

Carrier: Lab courier

Airbill No.: N/A

No. of Coolers: 3

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC	Container Type: 40-ml VOA vial	Container Type: 40-ml VOA vial	Container Type: 1-liter Amber	Container Type: 250 ml poly	Container Type: 125 ml poly
						Analysis: VOC	Analysis: GRO	Analysis: SVOC/PAH Pest/PCB TOC/DRO	Analysis: CN	Analysis: Metals
						Preservative: HCl + ice	Preservative: HCl + ice	Preservative: ice only	Preservative: NaOH + ice	Preservative: HNO_3 + ice
	AQ	9/1/05/0800	G32-SDRB04 ***		RB	2	2	4	2	4
	AQ	9/2/05/0830	G32-SDRB05 ***		RB	2	2	4	2	4
	AQ	9/2/05/0900	G32-DIUF-SB01 *		SB	2	2	4	2	2 **

LS 9/2/05

LS 9/2/05

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
L. Seydel	9/2/05 1715	Jamy Henley	YES NO	* Source blank of DI water (lot # 050 3195 Exp date 5/06)
Relinquished By: (Signature)	Date/Time	Received for Laboratory By:	Date/Time	*** Rinsate Blank collected by pouring DIUF water over a decontaminated acetate sleeve.
				** Metal Source Blank in 2-250 ml poly

Tt NUS Form 0022

02858

TETRA TECH NUS, INC.

ANALYTICAL SERVICE
Packing List/Chain-of-Custody

Case No.: NA
Subcontract No.: NA
Page 1 of 1

Project No.: 6000065-0260
Laboratory Name: Mitkem Corp
Sampler Signatures: T. A. Caplell
Date Shipped: 9-6-05
Airbill No.: 8455 0073 0448
Carrier: Fed Ex
No. of Coolers: 2

Sample Number	Matrix	Date/Time	Sample Location	Tag Number(s)	QC	Container Type: 40mL vial	Container Type: 40mL vial	Container Type: 16oz	Container Type: 40mL vial	Container Type: 4oz	Container Type: 8oz
						Analysis: VOC Low	Analysis: VOC Med	Analysis: SVOC/PAH Pest/PCB/DRO Metals/CN TOC	Analysis: GRO	Analysis: AVS/SEM	Analysis: Grain Size
						Preservative: DI	Preservative: MeOH	Preservative: ICE	Preservative: MeOH	Preservative: ICE	Preservative: ICE
	~~SD~~ AQ (TC 9/6/05)	9/2/05 0800	G32-SDTB05		TB	2	1	–	1	–	–
	SD	1000	G32-SD301-0.5 1.0		–	2	1	1	1	1	1
	SD	1110	G32-SD302F-000.5		–	2	1	1	1	1	1
	SD	1215	G32-SD304F-000.5		–	2	1	1	1	1	1
	SD	1140	G32-SD308F-000.5		–	2	1	1	1	1	1
	SD	0850	G32-SD311-000.5		–	2	1	1	1	1	1
	SD	1040	G32-SD313F-000.5		–	2	1	1	1	1	1
	SD	0915	G32-SD311-0.5 1.0		–	~~2~~ 1 (TC 9/6/05)	1	1	1	1	1
		~~0900~~	~~G32-SDDUP08~~ TC 09/6/05								
	SD	9/2/05 0945	G32-SD301-000.5		Lab QC	6	3	2	3	~~2~~ 3 (TC 09/06/05)	1
			CS 9-6-5								

TC 9/6/05 (Matrix column)
TC 09/06/05 (Matrix column)
TC 9/6/05 (Tag Number(s) column)
TC 9/6/05 (Tag Number(s) column)

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Shipment for Case Complete?	Remarks
[signature]	9-6-5/1400		YES NO	
Relinquished By: (Signature)	**Date/Time**	**Received for Laboratory By:**	**Date/Time**	

Tt NUS Form 0022

03263

APPENDIX D7

FIELD MODIFICATION RECORDS

FMR 1

TETRA TECH NUS INC.

FIELD MODIFICATION RECORD

Site Name: Site 17, Gould Island
Location: Newport Rhode Island
Project Number: 112G0065
Task Assignment: Drilling, Sample Collection
To: Project Team
Location:
Date: 5/23/05

Description: Work Plan states use of DPT to conduct "SB" borings. However late comments to the work plan requested these borings be advanced to bedrock, which would involve drilling through dense till. DPT will not be adequate, need to change from DPT to another drilling method: D&W or Air.

Reason for Change: Till to dense to allow DPT methods

Recommended Action: Conduct "SB" borings using drive and wash, ~~as~~ spin casing or air rotary as needed.

Field Operations Leader (Signature): Date:

Disposition/Action:
provide recommendation to EPA, RIDEM & Navy as notification in weekly report.

Project Manager (Signature): Date: 5/23/05

Distribution:

		Others as Required:
Program Manager:	Trepanowski	
Project Manager:	Parker	
Quality Assurance Officer:	Carper	
Field Operations Leader:	Sanchez	
Project File:	0065-2.5	

Tt NUS Form 0003

FMR 2

TETRA TECH NUS INC.

FIELD MODIFICATION RECORD

Site Name: Site 17 Gould Island Location: Newport RI

Project Number: 112G00065 Task Assignment: Drilling, Sample Collection

To: Project Team Location: Date: 5/23/05

Description: Work plan states use of drive & wash methods to install wells. Subcontractor suggests spin casing and/or use of compressed air instead of water to flush casing.

Reason for Change: Use of water to flush casing will use & generate large quantities of water which has to be shipped to the island & disposed of as IDW, incurring high cost. Air can be used in the same manner as water to flush the cuttings out of the casing.

Recommended Action: Conduct first boring using water to determine density of till. If till is dense & continuous, then use air to clear hole instead of water.

Field Operations Leader (Signature): Date:

Disposition/Action:

Provide recommendation to EPA & RIDEM as request for change in next weekly report (May 27, 2005).

Project Manager (Signature): [signature] Date: 5/23/05

Distribution:

		Others as Required:
Program Manager:	Trepanowski	
Project Manager:	Porter	
Quality Assurance Officer:	Carper	
Field Operations Leader:	Sanchez	
Project File:	00652.5	

Tt NUS Form 0003

FMR #3

TETRA TECH NUS INC.

FIELD MODIFICATION RECORD

Site Name: Site 17 Gould Island

Location: Newport Rhode Island

Project Number: 112G-0000065

Task Assignment: RI: Drilling Sample Coll.

To: Project Team

Location:

Date: 6/3/05

Description: Work Plan states use of Drive and Wash for advancing borings. Driller has requested use of Augers to advance borings through fill to top of till.

Reason for Change: Use of 6" ID Augers will allow driving 5" ID Casing into till, and allow for a telescope to 4" ID dam hole if needed.

Recommended Action: Allow use of Augers in fill for deep borings. Augers not allowed for use on intervals where wells will be screened.

Field Operations Leader (Signature):

Date:

Disposition/Action:

Provide as direction to field geologists

Project Manager (Signature): [signature]

Date: 6/8/05

Distribution:

		Others as Required:
Program Manager:	Trepanowski	D. Hatcher
Project Manager:	Parker	D. Walsh
Quality Assurance Officer:	Carper	
Field Operations Leader:	Sanchez	
Project File:	0065-2.5	

Tt NUS Form 0003

FMR #4

TETRA TECH NUS INC.

FIELD MODIFICATION RECORD

Site Name: Site 17 Gould Island
Location: Newport RI
Project Number: 112G00065
Task Assignment: RI: Well Construction
To: Project Team
Location:
Date: 6/8/05

Description: Work plan and drilling specifications do not call for sand pack around bedrock well screens. Well sand packs may be needed.

Reason for Change: Cored rock shows poor competence: Highly fractured phylite with fines, likely to slough, provide sedimentation into the screen interval and/or collapse.

Recommended Action: Construct bedrock wells using sand pack and 2" PVC well screens. Use HQ coring to maximize space for sand pack & prevent bridging sands during construction

Field Operations Leader (Signature):
Date:

Disposition/Action:
Implement per above in highly fractured bedrock

Project Manager (Signature):
Date: 6/10/05

Distribution:

		Others as Required:
Program Manager:	Trepanowski	
Project Manager:	Parker	D. Hickey
Quality Assurance Officer:	Capo	D. Walen
Field Operations Leader:	Sanchez	
Project File:	0065-2.5	

Tt NUS Form 0003

FMR #5

TETRA TECH NUS INC.

FIELD MODIFICATION RECORD

Site Name: Site 17 Gould Island Location: Newport RI

Project Number: 112G00065 Task Assignment: RI: Well Construction

To: Project Team Location: Date: 6/10/05

Description: Work plan calls for continuous sampling of overburden to top of bedrock at all borings. Need to reduce frequency of sampling & not continue all borings to bedrock.

Reason for Change: Dense Till is present 8' below grand surface (bgs) to top of rock, found at 84' bgs (MW304), 46' bgs (MW300) and ~63' bgs (MW305). Till will prevent penetration of most contaminants to this depth. This can be confirmed by several borings. Others should be terminated no more than 5' into till. Bedrock wells planned should have boreholes advanced using samples every 5 feet instead of continuously. Collect analytical samples of till at various depths for confirmation (one additional sample per boring completed as a monitoring well). See Table Attached.

Field Operations Leader (Signature): Date:

Disposition/Action:

Recommendation provided to EPA & RIDEM for review. Boring logs for MW 300, 304, 305 to follow.

6/17/05 - Instructed to implement per CF, EFANE

Project Manager (Signature): Date: 6/16/05

Distribution:

Program Manager:	Trepanowski	Others as Required:	
Project Manager:	Porter		D. Hickey
Quality Assurance Officer:	Cooper		D. Whalen
Field Operations Leader:	Sanchez		
Project File:	0065-2.5		

Tt NUS Form 0003

TABLE 1
FIELD MODIFICATION TO SOIL SAMPLING FREQUENCY, DEPTH OF SBs
REFER TO TABLES 3-1B, 3-1C OF THE WORK PLAN
GOULD ISLAND REMEDIAL INVESTIGATION, 6/15/05

Location	Sample Frequency	Target Depth	Comments
MW300B	Continuous	30 feet into BR	Completed as per work plan
MW300S	See 300B	Water table	Completed as per work plan
MW301B	Continuous	30 feet into BR	Upgradient well, expect shallow bedrock
MW301S	See 301B	Water table	May not have an overburden aquifer at this location.
MW302B	5 foot intervals	30 feet into BR	In roadway
MW302S	See 302B	Water table	In roadway
MW303B	Continuous	30 feet into BR	Expect shallow bedrock
MW304B	Continuous	30 feet into BR	Completed as per work plan
MW304S	See 304B	Water table	Completed as per work plan
MW305B	Continuous	30 feet into BR	Completed as per work plan
MW305S	See 305B	Water table	Completed as per work plan
MW306B	10 foot intervals	30 feet into BR	NE of Building 44 area
SBs:			
307	TBD	TBD	Location TBD, not marked may finish as WT well
308	TBD	TBD	Location TBD, not marked may finish as WT well
309	Continuous	4 feet into till	Target possible TCE area, to Do not go to BR
310	5 foot intervals	Bedrock	Target possible TCE area, to BR
311	Continuous	4 feet into till	Target possible TCE Under slab
312	5 foot intervals	Bedrock	Target possible TCE Under slab Continue to bedrock for x sect.
313	Continuous	4 feet into till	Target possible PAHs/Metals under trench
314	5 foot intervals	Bedrock	Target possible TCE Under slab
315	Continuous	Bedrock	Target possible TCE Under slab
316	Continuous	4 feet into till	Determine possible drain line leakage
317	5 foot intervals	Bedrock	under parts washer to top of BR
318	5 foot intervals	Bedrock	under parts washer to top of BR
319	Continuous	4 feet into till	Determine possible drain line leakage
320	Continuous	4 feet into till	Determine possible drain line leakage
321	Continuous	Bedrock	Electroplating Room and Drain, to BR
322	Continuous	Bedrock	Electroplating Room and Drain, to BR
323	Continuous	Bedrock	Electroplating Room and Drain, to drain depth
324	Continuous	Bedrock	Electroplating Room and Drain, to drain depth
325	Continuous	Bedrock	Electroplating Room and Drain, to drain depth
326	Continuous	Bedrock	Electroplating Room and Drain, to BR
327	Continuous	Bedrock	Electroplating Room and Drain, to drain depth
328	Continuous	Bedrock	Electroplating Room and Drain, to BR
329	TBD	TBD	Location TBD, not marked may finish as WT well
330	TBD	TBD	Location TBD, not marked may finish as WT well
331	5 foot intervals	Bedrock	Mixing tank, to BR
332	Continuous	4 feet into till	To top of till
333	Continuous	Bedrock	EP Booth, to BR
334	Continuous	4 feet into till	under trench to top of till
335	5 foot intervals	Bedrock	PAHs/Metals under trench
336	Continuous	4 feet into till	To top of till
337	Continuous	4 feet into till	To top of till
338	Continuous	4 feet into till	To top of till
339	TBD	TBD	Location TBD, not marked may finish as WT well

Concrete Core

Shaded cells indicate proposed change from work plan.

Remaining As of 6/30:

14 Borings
3 BR wells
4 WT wells

FMR # 6

TETRA TECH NUS INC.

FIELD MODIFICATION RECORD

Site Name: Site 17 Gould Island

Location: Newport Rhode Island

Project Number: 112G0065

Task Assignment: RI: Sediment sampling

To: Project Team

Location:

Date:

Description: Work Plan and Marine Investigations specifications calls for sediment and biota sample stations to be located in areas of depositional sediments proximal to existing terminus of each outfall pipeline

Reason for Change: Preliminary scouting efforts shifted the location of sediment/biota sample stations further offshore from outfall pipelines to areas of collectable sediment. Further investigations of nearshore areas associated with outfall pipelines located sufficient depositional sediment for an additional sediment and biota sample.

Recommended Action: Collect an additional sediment and biota sample in nearshore areas closer to outfall pipelines and designate the sample with the letter "F".

Field Operations Leader (Signature):

Date:

Disposition/Action:

Collect additional sample @ existing pipe terminus in addition to the depositional sediment samples described in the work plan

Project Manager (Signature):

Date: 8/31/05

Distribution:

Program Manager: Drepanuski

Project Manager: Potter

Quality Assurance Officer:

Field Operations Leader: Sanchez

Project File: 0065-2.5

Others as Required:

Tt NUS Form 0003

APPENDIX D8

CALIBRATION LOGS, OTHER QA FORMS NOT ELSEWHERE.

TETRA TECH NUS, INC.

YSI 6820 MULTIPARAMETER METER

Serial No.: 97K1095 Model No.: 6820 - CO-Y Decal No.: A

Site Name: Gould Island, Site 17, Building 32 Job No.: 0065

Instrument is calibrated in accordance with Manufacturer's Instructions

DATE: 7/18/05	Pre Calibration Readings	Post Calibration Readings	PM Check	Calibration STDs (lot #'s)	Signature	Remarks
Cond. ~~mS~~ µS/cm	886	1000	588 ~~[illegible]~~	4855 Exp 4-16-06		
pH=4.0	4.05	4.00	4.05	4439 Exp 2/23/06		
pH=7.0	6.85	7.00	7.05	4742 Exp 11-18-06		
pH=10.0	10.24	10.09	9.90	4724 Exp 05-03-06		
D.O. mg/l	8.62	8.89	8.41			
REDOX mV	238	237.6	430	OSE 2186 Exp 05-07		
Turbidity 0 NTUs						
Turbidity 100 NTUs						
Temp °C		20.94				
Salinity 0/00						

DATE: 7/19/05						
Cond. ~~mS~~ µS/cm		1000	981	4855 Exp 4-16-06		
pH=4.0		4.00	3.98	4439 Exp 2-23-06		
pH=7.0		7.00	7.05	4742 Exp 11-18-06		
pH=10.0		9.98	9.99	4724 Exp 05-03-06		
D.O. mg/l		8.58	7.71			
REDOX mV		232	230	OSE 2186 Exp 05-07		
Turbidity 0 NTUs						
Turbidity 100 NTUs						
Temp °C		22.79	27.7			
Salinity 0/00						

Tt NUS Form 0024

TETRA TECH NUS, INC.

YSI 6820 MULTIPARAMETER METER

Serial No.: 97K1095 Model No.: 9820-60-X Decal No.: A

Site Name: Gould Island, Site 17, Building 32 Job No.: 0065

Instrument is calibrated in accordance with Manufacturer's Instructions

DATE: 7-20	Pre Calibration Readings	Post Calibration Readings	PM Check	Calibration STDs (lot #'s)	Signature	Remarks
Cond. mS/cm M		1000	1841			
pH = 4.0		4.00				
pH = 7.0		7.01				
pH = 10.0		10.05				
D.O. mg/l		7.88 mg/l @ 100.4%	8.10 @ ~~500 mm Hg~~			
REDOX mV		237.5				
Turbidity 0 NTUs		-				
Turbidity 100 NTUs		-				
Temp °C		25.71				
Salinity 0/00						

DATE: 7-25						
Cond. mS/cm M		1000	~~1000~~/003			
pH = 4.0		4.04	4.01			
pH = 7.0		7.00	7.05			
pH = 10.0		9.96	9.85			
D.O. mg/l		8.55 29.99 mm Hg	8.69 29.93			
REDOX mV		236.8	446.6			
Turbidity 0 NTUs						
Turbidity 100 NTUs						
Temp °C						
Salinity 0/00						

Tt NUS Form 0024

TETRA TECH NUS, INC.

YSI 6820 MULTIPARAMETER METER

Serial No.: 96D49277 Model No.: 6820-C-6-Y Decal No.: B

Site Name: Gould Island, Site 17, Building 32 Job No.: 0065

Instrument is calibrated in accordance with Manufacturer's Instructions

DATE: 7/18/05	Pre Calibration Readings	Post Calibration Readings	PM Check	Calibration STDs (lot #'s)	Signature	Remarks
Cond. ~~m~~S/cm µ	962	1000	553	4855 Exp 4-16-06	Johanna Grant	
pH=4.0	4.09	4.00	4.05	4439 Exp 2-23-06	Johanna Grant	
pH=7.0	6.91	7.01	7.00	4742 Exp 11-18-06	J Grant	
pH=10.0	10.11	10.02	9.97	4724 Exp 05-03-06	J Grant	
D.O. mg/l	9.27	9.39	8.49		J Grant	from text 30.23 in Hg → 101% sat 19.0°C → 9.28 mg/L ∴ ✓
REDOX mV	226	238.8	200.8	OSE 2186 Exp 05-07	J Grant	
Turbidity 0 NTUs						
Turbidity 100 NTUs						
Temp °C		22.5	22.75		J Grant	
Salinity 0/00						

DATE: 7/19/05						
Cond. mS/cm		999	1880	4855 Exp. 4-16-06	J Grant	
pH=4.0		4.00	3.94	4439 Exp 2-23-06	J Grant	
pH=7.0		7.00	7.64	4742 Exp 11-18-06	J M Grant	
pH=10.0		10.00	9.87	4724 Exp 05-03-06	J Grant	
D.O. mg/l		8.49	P.10@31.0 mm Hg		J Grant	
REDOX mV		237.5	190.7	OSE 2186 Exp 05/07	J Grant	
Turbidity 0 NTUs						
Turbidity 100 NTUs						
Temp °C		22.75			J Grant	
Salinity 0/00						

Tt NUS Form 0024

TETRA TECH NUS, INC.

YSI 6820 MULTIPARAMETER METER

Serial No.: SN97K1095 Model No.: 5820-C-0-Y Decal No.: C

Site Name: Gould Island, Site 17, Building 32 Job No.: 00065

Instrument is calibrated in accordance with Manufacturer's Instructions

DATE: 7/20	Pre Calibration Readings	Post Calibration Readings	PM Check	Calibration STDs (lot #'s)	Signature	Remarks
Cond. mS/cm		1000		See tab B		
pH = 4.0		4.02	3.90			
pH = 7.0		7.02	6.99			
pH = 10.0		10.00	9.92			
D.O. mg/l		8.53 @ 30.02 mm Hg	7.71 @ 30.1 mm Hg			
REDOX mV		237.5	288.4			
Turbidity 0 NTUs			0.03			
Turbidity 100 NTUs						
Temp °C		22.94	25.40			
Salinity 0/00				See tab B		

DATE: 7/21						
Cond. mS/cm		997	833			
pH = 4.0		4.01	4.12			
pH = 7.0		7.01	6.96			
pH = 10.0		10.02	9.99			
D.O. mg/l		7.71 @ 30.1 mm Hg	~~270.2~~ 8.09 @ 29.7 mm Hg			
REDOX mV		237.5	270.2			
Turbidity 0 NTUs						
Turbidity 100 NTUs						
Temp °C		23.40	22.59			
Salinity 0/00						

Tt NUS Form 0024

TETRA TECH NUS, INC.

YSI 6820 MULTIPARAMETER METER

Serial No.: 97K1095 Model No.: 6820-C-0-Y Decal No.: A

Site Name: Gould Island, Site 17, Building 32 Job No.: 0065

Instrument is calibrated in accordance with Manufacturer's Instructions

DATE: 7/26	Pre Calibration Readings	Post Calibration Readings	PM Check	Calibration STDs (lot #'s)	Signature	Remarks
Cond. mS/cm		1002	1038	See previous		
pH=4.0		4.0	4.03			
pH=7.0		7.01	7.08			
pH=10.0		9.97	9.80			
D.O. mg/l		8.45 @29.93mmHg	9.37 @29.87			
REDOX mV		236.9	91.4			
Turbidity 0 NTUs						
Turbidity 100 NTUs						
Temp °C		22.02	22.99			
Salinity 0/00						

DATE: 7/27						
Cond. mS/cm		1002	1010			
pH=4.0		3.99	4.07			
pH=7.0		7.00	7.05			
pH=10.0		9.97	9.91			
D.O. mg/l		8.59 @29.87mmHg	8.71			
REDOX mV		237.4	237.5			
Turbidity 0 NTUs						
Turbidity 100 NTUs						
Temp °C		22.97	23.1			
Salinity 0/00						

Tt NUS Form 0024

TETRA TECH NUS, INC.

YSI 6820 MULTIPARAMETER METER

Serial No.: 03A0522/01K1222AD Model No.: 650 MDS Decal No.: A

Site Name: Site 17, Gould Island Job No.: G00065-0260

Instrument is calibrated in accordance with Manufacturer's Instructions

DATE: 9/1/05	Pre Calibration Readings	Post Calibration Readings	PM Check	Calibration STDs (lot #'s)	Signature	Remarks
Cond. mS/cm 1000	1.000	1.001	1.021	see previous sheet	L. Leydet	
pH = 4.0	3.97	4.00	4.08			
pH = 7.0	6.97	7.00	7.09			
pH = 10.0	9.82	9.97	10.02			
D.O. mg/l	8.15	8.98	8.21			
REDOX mV	237.5	237.5	239.1			
~~Turbidity 0 NTUs~~	—	—	—			
~~Turbidity 100 NTUs~~	—	—	—			
Temp °C	24.06	24.06	22.08			
Salinity 0/00		0.0	0.0			

DATE: 9/2/05						
Cond. mS/cm 1000	1.028	1.000	1.02	see previous sheet	L. Leydet	
pH = 4.0	3.98	4.00	4.07			
pH = 7.0	7.06	7.00	7.03			
pH = 10.0	9.83	9.97	10.01			
D.O. mg/l	9.00	8.97	8.78			
REDOX mV	239.9	237.5	237.1			
Turbidity 0 NTUs	—	—	—			
Turbidity 100 NTUs	—	—	—			
Temp °C	24.09	24.09	24.10			
Salinity 0/00						

Tt NUS Form 0024

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TETRA TECH NUS, INC.

YSI 6820 MULTIPARAMETER METER

Serial No.: 96D49277 Model No.: 6820-C-0-4 Decal No.: B

Site Name: Gould Island, Site 17, Building 32 Job No.: 0065

Instrument is calibrated in accordance with Manufacturer's Instructions

DATE: 7/21	Pre Calibration Readings	Post Calibration Readings	PM Check	Calibration STDs (lot #'s)	Signature	Remarks
Cond. ~~mS~~/cm M		1000	520	See previous	[illegible]	
pH=4.0		4.00	4.04			
pH=7.0		7.00	7.01			
pH=10.0		9.98	9.88			
D.O. mg/l		8.05 @ 30 mmHg	29.92 mmHg 8.65			
REDOX mV		238.7 ~~8.05 @ 30.00 mmHg~~	4.8			
Turbidity 0 NTUs						
Turbidity 100 NTUs						
Temp °C		22.57	22.61			
Salinity 0/00						

DATE: 7/25						
Cond. ~~mS~~/cm M		997	1001		[illegible]	
pH=4.0		3.99	4.07			
pH=7.0		7.00	6.90			
pH=10.0		9.98	10.10			
D.O. mg/l		8.48 @ 29.93 mmHg	8.53			
REDOX mV		237.6	245.7			
Turbidity 0 NTUs						
Turbidity 100 NTUs						
Temp °C		23.00	22.99			
Salinity 0/00						

Tt NUS Form 0024

TETRA TECH NUS, INC.

YSI 6820 MULTIPARAMETER METER

ial No.: SN97K1095 Model No.: 5820-C-04 Decal No.: C

e Name: Gould Island, Site 17, Building 32 Job No.: 0065

trument is calibrated in accordance with Manufacturer's Instructions

E: 7/25	Pre Calibration Readings	Post Calibration Readings	PM Check	Calibration STDs (lot #'s)	Signature	Remarks
d. mS/cm		1000	2171	Sin Pairing	GSG	
=4.0		3.99	4.10			
=7.0		7.01	7.04			
=10.0		9.98	9.83			
. mg/l		8.41	9.29			
OX mV		234.6 @ 29.98 mmHg	178.3			
idity 0 NTUs						
idity 100 NTUs						
p °C		22.54	22.7			
ity 0/00						

E: 7/26						
d. mS/cm		1000	959			
=4.0		4.00	4.12			
=7.0		7.01	6.99			
=10.0		10.03	9.87			
. mg/l		10.00	9.75			
OX mV		237.5	305.2			
idity 0 NTUs						
idity 100 NTUs						
p °C		23.67	23.8			
ity 0/00						

US Form 0024

TETRA TECH NUS, INC.

YSI 6820 MULTIPARAMETER METER

Serial No.: SN97K1095 Model No.: S820-C-0-Y Decal No.: C

Site Name: Gould Island, Site 17, Building 32 Job No.: 0065

Instrument is calibrated in accordance with Manufacturer's Instructions

DATE: 7/27	Pre Calibration Readings	Post Calibration Readings	PM Check	Calibration STDs (lot #'s)	Signature	Remarks
Cond. mS/cm		1001	1009	See Previous		
pH=4.0		4.03	4.07			
pH=7.0		7.00	6.97			
pH=10.0		9.97	10.01			
D.O. mg/l		8.61 @ 29.57 mmHg	8.69			
REDOX mV		237.a	238			
Turbidity 0 NTUs						
Turbidity 100 NTUs						
Temp °C		22.86	23.97			
Salinity 0/00						

DATE:						
Cond. mS/cm						
pH=4.0						
pH=7.0						
pH=10.0						
D.O. mg/l						
REDOX mV						
Turbidity 0 NTUs						
Turbidity 100 NTUs						
Temp °C						
Salinity 0/00						

Tt NUS Form 0024

TETRA TECH NUS, INC.

PHOTOIONIZATION DETECTOR FIELD CALIBRATION LOG

Serial No.: ED MF 353 Model No.: 2020 Decal No.: C

Site Name/Location: Site 17, Building 32, Gould Island Tetra Tech NUS Charge No.: 00605

CALIBRATION DATE	STANDARD GAS-ISOBUTYLENE	CALIBRATION READING Isobutylene Equiv. (ppm)	CALIBRATION CHECK Isobutylene Equiv. (ppm)	SIGNATURE	COMMENTS
7/13	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Johanna Lacourt am Johanna Lacourt pm	
7/14	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Johanna Lacourt am Johanna Lacourt pm	
7/15	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Johanna Lacourt am [illegible]	
8	Lot # 00324-04 Conc. = 100 ppm	0.0/100		Johanna Lacourt am	
7/19	Lot # 00324-04 Conc. = 100 ppm	0.0/100		D. Hg	~~Stop running maybe too battery would not CAL to span gas.~~
7/25	Lot # 00324-04 Conc. = 100 ppm	0.0/100		D. Hg	
7/25	Lot # Conc. = ppm				Battery low
	Lot # Conc. = ppm				
	Lot # Conc. = ppm				

TtNUS Form 0006

TETRA TECH NUS, INC.

FLAME IZATION DETECTOR FIELD CALIBRATION LOG

Serial No.: CZ FJ 211 Model No.: NA Decal No.: A

Site Name/Location: Site 17, Building 32, Gould Island/Newport, RI Tetra Tech NUS Charge No.: 0065

CALIBRATION DATE	STANDARD GAS- Methane	CALIBRATION READING Methane (ppm)	CALIBRATION CHECK Methane (ppm)	SIGNATURE	COMMENTS
7/8	Lot # 00286-04 Conc. = 100 ppm	0.0/100	98.2	Johanna Hartan Johanna Hartpm	
7/11	Lot # 00286-04 Conc. = 100 ppm	0.0/99.9	would not start	Johanna Hartan Johanna Hartpm	
7/12	Lot # 00286-04 Conc. = 100 ppm	0.0/100.2	stopped working at ~11am	Johanna Hartan Johanna Hartpm	
7/13	Lot # 00286-04 Conc. = 100 ppm	0.0/99.9	99.9	Johanna Hartan Johanna Hartpm	
7/14	Lot # 00286-04 Conc. = 100 ppm	0.0/100	would not start	Johanna Hartan Johanna Hartpm	
7/19	Lot # 00286-04 Conc. = 100 ppm	4.0/100		Daniel Hart	High humidity
	Lot # ____ Conc. = ____ ppm				
	Lot # ____ Conc. = ____ ppm				
	Lot # ____ Conc. = ____ ppm				

TtNUS Form 0006

TETRA TECH NUS, INC.

FLAME IZATION DETECTOR FIELD CALIBRATION LOG

Serial No.: CZ HE301 Model No.: N/A Decal No.: D

Site Name/Location: Site 17, Building 32, Gould Island/Newport, RI Tetra Tech NUS Charge No.: 0005

CALIBRATION DATE	STANDARD GAS- Methane	CALIBRATION READING Methane (ppm)	CALIBRATION CHECK Methane (ppm)	SIGNATURE	COMMENTS
7/5	Lot # 00286-04 Conc. = 100 ppm	0.0/99.9	to stopped working @ ~1pm	Johanna Drautam Johanna Drautpm	dripping liquid (condensation?) from the fire lighter screen area
7/8	Lot # 00286-04 Conc. = 100 ppm	0.0/100.1	did not use turned off in am	Johanna Drautam Johanna Draut	reading 102 on 1st call.
	Lot # ____ Conc. = ____ ppm				
	Lot # ____ Conc. = ____ ppm				
	Lot # ____ Conc. = ____ ppm				
	Lot # ____ Conc. = ____ ppm				
	Lot # ____ Conc. = ____ ppm				
	Lot # ____ Conc. = ____ ppm				
	Lot # ____ Conc. = ____ ppm				

TtNUS Form 0006

TETRA TECH NUS, INC.

FLAME IZATION DETECTOR FIELD CALIBRATION LOG

Serial No.: CZNK344 Model No.: NA Decal No.: C

Site Name/Location: Site 17, Building 32, Gould Island/Newport, RI Tetra Tech NUS Charge No.: 0065

CALIBRATION DATE	STANDARD GAS- Methane	CALIBRATION READING Methane (ppm)	CALIBRATION CHECK Methane (ppm)	SIGNATURE	COMMENTS
6/10	Lot # 00286-04 Conc. = 100 ppm	0.0/99.8 0.0/100.0	99.9	Johanna Grant am Johanna Grant pm	ran out of hydrogen w/in 5 minutes took off a day pick up 0930
6/13	Lot # 00286-04 Conc. = 100 ppm	0.0/100	100	Johanna Grant am Johanna Grant pm	COLD START
6/14	Lot # 00286-04 Conc. = 100 ppm	0.0/100.2	No check stem evac	Johanna Grant am Johanna Grant pm	COLD START
6/15	Lot # 00286-04 Conc. = 100 ppm	0.0/99.9	100	Johanna Grant am Johanna Grant pm	
6/16	Lot # 00286-04 Conc. = 100 ppm	0.0/99.9	100.2	Johanna Grant am Johanna Grant pm	
6/17	Lot # 00286-04 Conc. = 100 ppm	0.0/99.9	100	Johanna Grant am Johanna Grant pm	
6/20	Lot # 00286-04 Conc. = 100 ppm	0.0/99.9	99.9	Johanna Grant am Johanna Grant pm	
6/21	Lot # 00286-04 Conc. = 100 ppm	0.0/100	100	Johanna Grant am Johanna Grant pm	
6/22	Lot # 00286-04 Conc. = 100 ppm	0.0/99.9	99.9	Johanna Grant am Johanna Grant pm	

TtNUS Form 0006

TETRA TECH NUS, INC.

FLAME IZATION DETECTOR FIELD CALIBRATION LOG

Serial No.: BCZ FJ 211 Model No.: NA Decal No.: A

Site Name/Location: Site 17, Building 32, Gould Island/Newport, RI Tetra Tech NUS Charge No.: 0065

CALIBRATION DATE	STANDARD GAS- Methane	CALIBRATION READING Methane (ppm)	CALIBRATION CHECK Methane (ppm)	SIGNATURE	COMMENTS
6/21	Lot # 00286-04 Conc. = 100 ppm	0.0/100	would not start	Johanna Drautan	Alarm instead of location
6/22	Lot # 00286-04 Conc. = 100 ppm	0.0/99.9	would not start	Johanna Drautan Johanna Draut pm	
6/23	Lot # 00286-04 Conc. = 100 ppm	0.0/100	would not start	Johanna Draut	
6/24	Lot # 00286-04 Conc. = 100 ppm	0.0/100	99.8	Johanna Drautan Johanna Draut pm	
6/27	Lot # 00286-04 Conc. = 100 ppm	0.0/99.9	no check fog eva	Johanna Drautan	
6/29	Lot # 00286-04 Conc. = 100 ppm	0.0/99.9	would not start	Johanna Drautan	
6/30	Lot # 00286-04 Conc. = 100 ppm	0.0/99.8	100	Johanna Drautan Johanna Draut pm	
7/1	Lot # 00286-04 Conc. = 100 ppm	0.0/99.8	not used turned off in a m.	Johanna Drautan Johanna Draut pm	
7/5	Lot # 00286-04 Conc. = 100 ppm	0.0/99.9	would not start	Johanna Drautan Johanna Draut pm	

TtNUS Form 0006

TETRA TECH NUS, INC.

FLAME IZATION DETECTOR FIELD CALIBRATION LOG

Serial No.: CZ FJ 211 Model No.: NA Decal No.: A

Site Name/Location: Site 17, Building 32, Gould Island/Newport, RI Tetra Tech NUS Charge No.: 0065

CALIBRATION DATE	STANDARD GAS- Methane	CALIBRATION READING Methane (ppm)	CALIBRATION CHECK Methane (ppm)	SIGNATURE	COMMENTS
6/1	Lot # 00286-04 Conc. = 100 ppm	0.0 / 100.1	ran out of hydrogen	Johanna Trautam Johanna Trautpm	
6/2	Lot # 00286-04 Conc. = 100 ppm	0.0/99.9	ran out of hydrogen ~2pm	Johanna Trautam Johanna Trautpm	
6/3	Lot # 00286-04 Conc. = 100 ppm	0.4/99.9	ran out of Hydrogen	Johanna Trautam Johanna Trautpm	
6/6	Lot # 00286-04 Conc. = 100 ppm	0.0/99.9	no check- fogevacation	Johanna Trautam	
6/8	Lot # 00286-04 Conc. = 100 ppm	0.0/99.9	not starting	Johanna Trautam.	
6/10	Lot # 00286-04 Conc. = 100 ppm	not starting	NA	Johanna Trautam	
6/16	Lot # 00286-04 Conc. = 100 ppm	0.0/100	not Starting	Johanna Trautam Johanna Trautpm	
6/17	Lot # 00286-04 Conc. = 100 ppm	0.0/100	not Starting	Johanna Trautam Johanna Trautpm	says Alarm instead of locate recalled
6/20	Lot # 00286-04 Conc. = 100 ppm	0.0/100.1	not used turned off in c.m.	Johanna Trautam Johanna Trautpm	

TtNUS Form 0006

TETRA TECH NUS, INC.

FLAME IZATION DETECTOR FIELD CALIBRATION LOG

Serial No.: CZGH 337 Model No.: NA Decal No.: B

Site Name/Location: Site 17, Building 32, Gould Island/Newport, RI Tetra Tech NUS Charge No.: 0065

CALIBRATION DATE	STANDARD GAS- Methane	CALIBRATION READING Methane (ppm)	CALIBRATION CHECK Methane (ppm)	SIGNATURE	COMMENTS
6/1	Lot # 00286-04 Conc. = 100 ppm	00/998	ran out of hydrogen	Johanna Grant Johanna Grant pm	
6/2	Lot # 00286-04 Conc. = 100 ppm	0.0/100.1	Ran out of hydrogen	Johanna Grant Johanna Grant pm	
6/3	Lot # 00286-04 Conc. = 100 ppm	0.0/99.9	ran out of hydrogen	Johanna Grant a.m. Johanna Grant pm	
6/6	Lot # 00286-04 Conc. = 100 ppm	NA	NA	Johanna Grant a.m.	would not start
	Lot # Conc. = ppm	exchanged			
	Lot # Conc. = ppm				
	Lot # Conc. = ppm				
	Lot # Conc. = ppm				
	Lot # Conc. = ppm				

TtNUS Form 0006

TETRA TECH NUS, INC.

FLAME IZATION DETECTOR FIELD CALIBRATION LOG

Serial No.: 8CZHE301 Model No.: N/A Decal No.: D

Site Name/Location: Site 17, Building 32, Gould Island/Newport, RI Tetra Tech NUS Charge No.: C065

CALIBRATION DATE	STANDARD GAS- Methane	CALIBRATION READING Methane (ppm)	CALIBRATION CHECK Methane (ppm)	SIGNATURE	COMMENTS
6/12	Lot # 00286-04 Conc. = 100 ppm	0.0/99.8 0.0/99.6	was not used turned off in a.m	Johanna Swart am Johanna Swart pm	ran out of hydrogen immediately top off battery recalibrated @ 0930
6/13	Lot # 00286-04 Conc. = 100 ppm	0/99.7	would not start after 11 am	Johanna Swart am Johanna Swart pm	
6/14	Lot # 00286-04 Conc. = 100 ppm	0/99.7	would not start after a.m.	Johanna Swart am Johanna Swart pm	
6/15	Lot # 00286-04 Conc. = 100 ppm	0/99.8	99.9	Johanna Swart am Johanna Swart pm	
6/20	Lot # 00286-04 Conc. = 100 ppm	~~reading when~~ 0.0/0.0	not used	Johanna Swart am Johanna Swart pm	reading 0.0 instead of 100 when gas is connected
6/21	Lot # 00286-04 Conc. = 100 ppm	0.0/100.1	not used	Johanna Swart am	
6/23	Lot # 00286-04 Conc. = 100 ppm	0.0/100	would not restart after lunch	Johanna Swart am Johanna Swart pm	
6/24	Lot # 00286-04 Conc. = 100 ppm	0.0/100	would not start after a.m	Johanna Swart am Johanna Swart pm	
	Lot # Conc. = ppm				

TtNUS Form 0006

TETRA TECH NUS, INC.

PHOTOIONIZATION DETECTOR FIELD CALIBRATION LOG

Serial No.: EDIIIF 334 Model No.: 2020 Decal No.: A

Site Name/Location: Site 17, Building 32, Gould Island Tetra Tech NUS Charge No.: CO65

CALIBRATION DATE	STANDARD GAS-ISOBUTYLENE	CALIBRATION READING Isobutylene Equiv. (ppm)	CALIBRATION CHECK Isobutylene Equiv. (ppm)	SIGNATURE	COMMENTS
6/15	Lot # 60324-04 Conc. = 100 ppm	0.0/100	100	Johanna Grant am Johanna Grant pm	FALTZ when turned on AUTO on when called
16	Lot # 60324-04 Conc. = 100 ppm	0.0/100	100	Johanna Grant am Johanna Grant pm	
6/17	Lot # 60324-04 Conc. = 100 ppm	0.0/100	100	Johanna Grant am Johanna Grant pm	
6/20	Lot # 60324-04 Conc. = 100 ppm	0.0/100	100	Johanna Grant am Johanna Grant pm	
6/21	Lot # 60324-04 Conc. = 100 ppm	0.0/100	99.7	Johanna Grant am Johanna Grant pm	
6/22	Lot # 60324-04 Conc. = 100 ppm	0.0/100	100	Johanna Grant am Johanna Grant pm	
6/23	Lot # 60324-04 Conc. = 100 ppm	0.0/100	100	Johanna Grant am Johanna Grant pm	LBat in afternoon kept turning off
6/24	Lot # 60324-04 Conc. = 100 ppm	0.0/100	—	Johanna Grant am	exchanged
	Lot # ____ Conc. = ____ ppm				

TtNUS Form 0006

TETRA TECH NUS, INC.

PHOTOIONIZATION DETECTOR FIELD CALIBRATION LOG

Serial No.: ED KJ 327 Model No.: 2020 Decal No.: 13

Site Name/Location: Site 17, Building 32, Gould Island, Newport, RI Tetra Tech NUS Charge No.: 0065

CALIBRATION DATE	STANDARD GAS-ISOBUTYLENE	CALIBRATION READING Isobutylene Equiv. (ppm)	CALIBRATION CHECK Isobutylene Equiv. (ppm)	SIGNATURE	COMMENTS
6/15	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Shanna Drautan Shanna Drautpn	
6/16	Lot # 00324-04 Conc. = 100 ppm	0.0/100	99.8	Shanna Drautan Shanna Drautpn	
6/17	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Shanna Drautan Shanna Drautpn	
6/20	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Shanna Drautan Shanna Drautpn	
6/21	Lot # 00324-04 Conc. = 100 ppm	0.0/100	99.8	Shanna Drautan Shanna Drautpn	Needed to be calib twice
6/22	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Shanna Drautan Shanna Drautpn	
6/23	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Shanna Drautan Shanna Drautpn	
6/24	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Shanna Drautan GSL	
6/27	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Shanna Drautan Shanna Drautpn	

TtNUS Form 0006

TETRA TECH NUS, INC.

PHOTOIONIZATION DETECTOR FIELD CALIBRATION LOG

Serial No.: ED MF 334 Model No.: 2020 Decal No.: A

Site Name/Location: Site 17, Building 32, Gould Island Newport, RI Tetra Tech NUS Charge No.: 0065

CALIBRATION DATE	STANDARD GAS-ISOBUTYLENE	CALIBRATION READING Isobutylene Equiv. (ppm)	CALIBRATION CHECK Isobutylene Equiv. (ppm)	SIGNATURE	COMMENTS
6/1	Lot # 00324-04 Conc. = 100 ppm	0/100	0/~~100~~ 99.8	Johanna Grantam Johanna Grant pm	
6/2	Lot # 00324-04 Conc. = 100 ppm	0/100	100	Johanna Grantam Johanna Grant pm	
6/3	Lot # 00324-04 Conc. = 100 ppm	0/100	100	Johanna Grant am Johanna Grant pm	
6/6	Lot # 00324-04 Conc. = 100 ppm	0/100	no check - Regevacuation	Johanna Grant a.m	
6/8	Lot # 00324-04 Conc. = 100 ppm	0.0/100	not working	Johanna Grant am Johanna Grant pm	
6/9	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Johanna Grant am Johanna Grant pm	FALT 2 with MSA numbers jumping around before cal of 1 Bat, took another to start reading
6/10	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Johanna Grant am Johanna Grant pm	
6/13	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Johanna Grant am Johanna Grant pm	
6/14	Lot # 00324-04 Conc. = 100 ppm	0.0/100	no check storm evac	Johanna Grant Johanna Grant pm	

TtNUS Form 0006

TETRA TECH NUS, INC.

PHOTOIONIZATION DETECTOR FIELD CALIBRATION LOG

Serial No.: ED KJ 327 Model No.: 2020 Decal No.: B

Site Name/Location: Site 17, Building 32, Gould Island Newport RI Tetra Tech NUS Charge No.: CO05-0210

CALIBRATION DATE	STANDARD GAS-ISOBUTYLENE	CALIBRATION READING Isobutylene Equiv. (ppm)	CALIBRATION CHECK Isobutylene Equiv. (ppm)	SIGNATURE	COMMENTS
6/1	Lot # 00324-04 Conc. = 100 ppm	0.1/100	0/100	Johanna Lautam Johanna Lautpm	
6/2	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Johanna Lautam Johanna Lautpm	
6/3	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Johanna Lautam Johanna Lautpm	
6/6	Lot # 00324-04 Conc. = 100 ppm	0.0/100	no check - fog evac.	Johanna Lautam	first cal @ 110
6/8	Lot # 00324-04 Conc. = 100 ppm	0.0/100	99.8	Johanna Lautam Johanna Lautpm	went up to 140 before stopping at 100 (a.m.) recalibrated @ 0832
6/9	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Johanna Lautam Johanna Lautpm	FALT 2 when 1st turned on
6/10	Lot # 00324-04 Conc. = 100 ppm	00/100	100	Johanna Lautam Johanna Lautpm	FALT 2 when 1st turned on
6/13	Lot # 00324-04 Conc. = 100 ppm	00/100	100	Johanna Lautam Johanna Lautpm	
6/14	Lot # 00324-04 Conc. = 100 ppm	0/100	no check storm evac	Johanna Lautam Johanna Lautpm	FALT 2 when 1st started

TtNUS Form 0006

TETRA TECH NUS, INC.

PHOTOIONIZATION DETECTOR FIELD CALIBRATION LOG

Serial No.: EDMF 353 Model No.: 2020 Decal No.: C

Site Name/Location: Site 17, Building 32, Gould Island Tetra Tech NUS Charge No.: 065

CALIBRATION DATE	STANDARD GAS-ISOBUTYLENE	CALIBRATION READING Isobutylene Equiv. (ppm)	CALIBRATION CHECK Isobutylene Equiv. (ppm)	SIGNATURE	COMMENTS
6/27	Lot # 00324-04 Conc. = 100 ppm	0.0/100	no check fog equip	Johanna Grattan	
6/29	Lot # 00324-04 Conc. = 100 ppm	0.0/99.8	no check	Johanna Grattan	
6/30	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Johanna Grattan Johanna Grattan	
7/1	Lot # 00324-04 Conc. = 100 ppm	0.0/100	101	Johanna Grattan Johanna Grattan	
7/5	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Johanna Grattan Johanna Grattan	
7/6	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Johanna Grattan Johanna Grattan	
7/8	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Johanna Grattan Johanna Grattan	
7/11	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Johanna Grattan Johanna Grattan	
7/12	Lot # 00324-04 Conc. = 100 ppm	0.0/100		Johanna Grattan Johanna Grattan	

TtNUS Form 0006

TETRA TECH NUS, INC.

PHOTOIONIZATION DETECTOR FIELD CALIBRATION LOG

Serial No.: ED CJ 327 Model No.: 2020 Decal No.: B

Site Name/Location: Site 17, Building 32, Gould Island Tetra Tech NUS Charge No.: 0065

CALIBRATION DATE	STANDARD GAS-ISOBUTYLENE	CALIBRATION READING Isobutylene Equiv. (ppm)	CALIBRATION CHECK Isobutylene Equiv. (ppm)	SIGNATURE	COMMENTS
6/29	Lot # 00324-04 Conc. = 100 ppm	0.0/100	no check	Johanna Hartam	
6/30	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Johanna Hartam Johanna Hartpm	
7/1 not called OT	Lot # ~~00324-04~~ Conc. = ~~100~~ ppm	~~0.0/100~~	~~101~~	~~Johanna Hartam~~	NOT USED or called today see log OT
7/5	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Johanna Hartam Johanna Hartpm	
7/8	Lot # 00324-04 Conc. = 100 ppm	0.0/100	99.7	Johanna Hartam Johanna Hartpm	
7/11	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Johanna Hartam Johanna Hartpm	
7/12	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Johanna Hartam Johanna Hartpm	
7/13	Lot # 00324-04 Conc. = 100 ppm	0.0/100	99.7	Johanna Hartam Johanna Hart	
7/14	Lot # 00324-04 Conc. = 100 ppm	0.0/100	100	Johanna Hartam Johanna Hartpm	FALT 2 when turned on

TtNUS Form 0006

7/15 " " 1:54 am

TETRA TECH NUS, INC.

YSI 6820 MULTIPARAMETER METER

Serial No.: 02A0527/01K1272 AB Model No.: 650 MDS Decal No.: A

Site Name: Site 17, Gould Island Job No.: 600065-0260

Instrument is calibrated in accordance with Manufacturer's Instructions

DATE: 8/29/05	Pre Calibration Readings	Post Calibration Readings	PM Check	Calibration STDs (lot #'s)	Signature	Remarks
Cond. mS/cm 10/2041	1.090	25 8/29/05 ~~4.08~~ 964	992	See previous sheet	J. Seyfert	
pH = 4.0	4.01	4.00	4.09			
pH = 7.0	7.01	7.00	7.10			
pH = 10.0	9.82	9.94	10.08			
D.O. mg/l		7.93 ~~8.33~~ / ~~99.9~~ 8.25 8/29/05	8.67			
REDOX mV	237.4	237.5	232.8			
~~Turbidity 0 NTUs~~	N/A	—	—			
~~Turbidity 100 NTUs~~	N/A	—	—			
Temp °C		23.85	26.12			
Salinity 0/00		0.0	0.0			

DATE: 8/30/05						
Cond. mS/cm	.983	1.001	1030		J. Seyfert	
pH = 4.0	3.97	4.00	4.12			
pH = 7.0	7.09	7.00	7.12			
pH = 10.0	9.83	10.00	10.05			
D.O. mg/l	9.08	8.59	8.65			
REDOX mV	237.9	237.5	233.5			
~~Turbidity 0 NTUs~~	—	—	—			
~~Turbidity 100 NTUs~~	—	—	—			
Temp °C	22.71	22.71	22.54			
Salinity 0/00		0.0				

Tt NUS Form 0024

TETRA TECH NUS, INC.

YSI 6820 MULTIPARAMETER METER

Serial No.: 02A0527 / 01K1272 AB Model No.: 650 MDS Decal No.: A

Site Name: Site 17, Gould Island Job No.: 600065-0260

Instrument is calibrated in accordance with Manufacturer's Instructions

DATE: 8/25	Pre Calibration Readings	Post Calibration Readings	PM Check	Calibration STDs (lot #'s)	Signature	Remarks
Cond. mS/cm 1000	991	1000	981	4985 exp. 06/06	Y. Jagalski AM	
pH = 4.0	4.14	4.00	4.03	4439 exp 06/06	GSL PM	
pH = 7.0	6.97	7.00	7.05	↓		
pH = 10.0	9.92	9.99	10.03	4439 exp 06/06		
D.D. mg/l	98.6% / 8.99		8.98	98.5% / 8.97		
REDDX mV		237.5	235			
~~Turbidity 0 NTUs~~	N/A	N/A	—			
~~Turbidity 100 NTUs~~	N/A	N/A	—			
Temp °C	18.6	18.6	18.7			
~~Salinity 0~~/00	NR	NR	0.0			

DATE: 8/26						
Cond. mS/cm		1000	1101		AM GSL	
pH = 4.0		4.00	4.07			
pH = 7.0		7.00	7.08			
pH = 10.0		10.01	10.00			
D.O. mg/l		8.97	8.04			
REDDX mV		237.3	231.0			
~~Turbidity 0 NTUs~~		—	—			
~~Turbidity 100 NTUs~~		—	—			
Temp °C		18.8	22.02			
Salinity 0/00		0.0				

Tt NUS Form 0024

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: B32-RB01

Tetra Tech NUS Charge No. C0065
QC Information: RB (if applicable)

Sample Method/Device: Grab / Direct Pour
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/14/05 0900 hours
Sampler(s): Johanna Traut

Recorded By: [signature]
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- X Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): DIUF lot No. 081264 Exp 08/2006 Poland Spring

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: ___ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ___ ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC / PAH				DIUF was poured into a decontaminated
Pest / PCB				S.S. bowl and then directly poured into
TPH				appropriate sample containers.
Metals / CN				Poland Spring was used for VOAs
TOC				
GRO				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-RB02

Tetra Tech NUS Charge No. C065
QC Information: RB (if applicable)

Sample Method/Device: Grab Direct Pour
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/15/05 1030 hours
Sampler(s): Johanna Trout

Recorded By: Johanna Trout
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- X Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): DIUF Lot No. 0812604 Exp. 08/2005 Poland Spring

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC				DIUF was poured into a decontaminated
PAH				S.S. bowl and then directly poured
Pest/PCB				into appropriate sample containers
TPH				Poland Spring was used for VOAs
Metals				
CN				
VOC				
6120				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-RB03

Tetra Tech NUS Charge No. 0065
QC Information: RB (if applicable)

Sample Method/Device: Grab / Direct Pour
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/21/05 1003 hours
Sampler(s): Johanna Trout

Recorded By: Johanna Trout
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- X Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): DIUF Lot No. 681264 Exp 08/2005

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC				Rinsate blank was collected first
PAH				DIUF water was directly onto a
Pest/PCB				precleaned scoopula into appropriate
TPH				sample containers
Metals				
TN				
VOC				
GRO				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17 Building 32, Gould Island
Sample ID: G32-RB04

Tetra Tech NUS Charge No. 0065
QC Information: RB (if applicable)

Sample Method/Device: Grab/Direct Pour
Depth Sampled: NA feet (Total Depth NA feet (SW Only)
Sample Date & Time: 6/22/05 1425 hours
Sampler(s): Johanna Travis

Recorded By: Johanna Travis
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- X Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): DI H2O Lot No 0812441 Exp 08/2005

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC / PAH				Rinsate blank was collected
Pest/PCB				from DIW water poured
TPH				onto a decontaminated
Metals/CN				split spoon into appropriate
VOC				sample containers
GRO				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-RB05

Tetra Tech NUS Charge No. 0065
QC Information: RB05 (if applicable)

Sample Method/Device: Grab/Direct Pour
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/23/05 1100 hours
Sampler(s): Craig Sanchez

Recorded By: Johanna Dias
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- X Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): DIUF Lot No 051264

* include sample source & lot No.

Exp 08/2005

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0	JT			
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC/PAH				Rinsate blank was collected
Pest/PCB				from DIUF water poured directly
TPH				into a decontaminated
Metals/CN				S.S. bowl then directly
VOC				into the appropriate
GRO				sample containers.

TtNUS Form 0004

Page ___ of ___

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-RB06

Tetra Tech NUS Charge No. 0065
QC Information: RB (if applicable)

Sample Method: Grab
Depth Sampled: N/A feet
Sample Date & Time: 6/30/05 0838 hours Dup N/A hours
Sampler(s): Johanna Traut

Data Recorded By: Johanna Traut
Signature

PID/OVA Monitor Reading: N/A ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- X Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

* lot no. 081264
Exp 08/2005

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)

SAMPLE DATA/REMARKS: ~~VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s bowl, homogenized, and transfered into appropriate sample containers.~~ 6-30-05
See Notes

ANALYSIS	BOTTLE LOT NO.
Sync. PAH	
Pest/PCB	
TPH	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

*DI H2O water, lot no. 081264, was run off a precleaned scoopula directly into appropriate bottleware

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-RB07

Tetra Tech NUS Charge No. 0065
QC Information: RB (if applicable)

Sample Method: Grab
Depth Sampled: NA feet
Sample Date & Time: 7/8/05 0820 hours Dup NA hours
Sampler(s): Johanna Traut

Data Recorded By: J Traut
Signature

PID/OVA Monitor Reading: NA ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- X Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Lot no. 081264
Exp 08/2005

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) NA

SAMPLE DATA/REMARKS: ~~VOC sample was collected using a pre-cleaned syringe directly from the spit spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated S.S. bowl homogenized and transfered into appropriate sample containers.~~ See notes 7/8/05

ANALYSIS	BOTTLE LOT NO.
Spec/Part	
Pest/PCB	
TPH	
Metals/CN	
VOC	
GRO	

NOTES/SKETCH:

DIUF water, lot no. 081264, was runoff of a decontaminated S.S. bowl directly into appropriate bottleware.

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-RB08

Tetra Tech NUS Charge No. 0065
QC Information: RB (if applicable)

Sample Method: Grab / Direct Pour
Depth Sampled: NA feet
Sample Date & Time: 7/14/05 1400 hours Dup NA hours
Sampler(s): Johanna Grant

Data Recorded By: Johanna Grant
Signature

PID/OVA Monitor Reading: NA ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- ___ Trip Blank*
- X Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): DIUF lot # 081264 Exp 08/2005

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) NA

SAMPLE DATA/REMARKS: ~~VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers.~~ See notes 7-14-05

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
~~PCB~~ 7-14-05	
Pest/PCB	
TPH	
Metals	
CN	
VOC	
GRO	

NOTES/SKETCH:

DIUF water, lot no. 081264, was runoff of a decontaminated split spoon directly into appropriate bottleware.

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-RB09

Tetra Tech NUS Charge No. 0665
QC Information: RB (if applicable)

Sample Method/Device: Grab / Direct Pour
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 7/12/05 1500 hours
Sampler(s): Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- X Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): DIUF # lot No. 08264

* include sample source & lot No.

Exp 08/2005

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC/PAH				Rinsate blank was collected from
Pest/PCB				DIUF water poured directly into
TPH				decontaminated plastic tubing into
VOC				appropriate sample containers.
GRO				
TOC				
Metals / CN				
Sulfides / Alkalinity				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17 Building 32, Gould Island
Sample ID: G32-GW RB10

Tetra Tech NUS Charge No. 0065
QC Information: RB (if applicable)

Sample Method/Device: Grab/Direct Pour
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 7/22/05 0830 hours
Sampler(s): Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- X Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): DIUF lot NO 081264

* include sample source & lot No.
Exp 08/2005

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC/PAH				Rinsate blank was collected
Pest/PCB				from DIUF water, lot no 081264
TPH				poured directly into decontaminated tubing
VOC				and then into appropriate sample containers
GRO				
TOC				
Metals/CN				
Sulfides/Alkalinity				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17 Building 32, Gould Island
Sample ID: G32-RB11

Tetra Tech NUS Charge No. 0065
QC Information: RB (if applicable)

Sample Method/Device: Grab/Direct Pour
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 7/28/05 1000 hours
Sampler(s): JoAnne Tract

Recorded By: JoAnne Tract
Signature

TYPE OF SAMPLE: (Check all that apply)

- X Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- X Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): DIUF lot no. 081264

* include sample source & lot No.

Exp 08/2005

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC/PAH				Rinsate blank was collected
Pest/PCB				from DIUF water lot no 081264
TPH				poured directly into decontaminated
VOC				tubing and then into appropriate
Cyan				sample containers
TOC				
Metals/CN				
Sulfides/Alkalinity				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-RB12

Tetra Tech NUS Charge No. 0065
QC Information: RB (if applicable)

Sample Method: Grab / Direct Pour
Depth Sampled: NA feet
Sample Date & Time: 8/28/05 0830 hours Dup NA hours
Sampler(s): Johanna Tract

Data Recorded By: Johanna Tract
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- X Lagoon/Pond
- X Grab
- ___ Trip Blank*
- X Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): DIUF lot no 081269 Exp 05 2005

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)

SAMPLE DATA/REMARKS: ~~VOC sample was collected using a precleaned synnge directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transferred into a decontaminated s.s. bowl, homogenized, and transfered into appropriate sample containers.~~

ANALYSIS	BOTTLE LOT NO.
SVOC/PAH	
Pest/PCB	
TPH	
VOC	
GRO	
Metals	
CN	

NOTES/SKETCH:

DIUF water was poured directly on to a precleaned scoopula and then into appropriate bottleware

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17 Building 32 Gravid Island
Sample ID: G32-SOTR01

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 4/2/05 0830 hours
Sampler(s): Craig Jaramez
Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify):

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time JT	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4		JT		

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				
GRO				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17 Building 32, Gould Island
Sample ID: 0032-ARTB01

Tetra Tech NUS Charge No. 0065
QC Information: Trip Blank (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/2/05 0960 hours
Sampler(s): Craig Sanchez
Johanna Trant
Recorded By: Johanna Trant
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify):

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time JT	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

JT

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				
GPO				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17 Building 32, Grand Island
Sample ID: 632-AQTB02

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/2/05 0800 hours
Sampler(s): Craig Sanchez
Johanna Tiaz

Recorded By: Johanna Tiaz
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify):

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTB03

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/2/05 1400 hours
Sampler(s): Craig Sanchez
Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify):

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	1 Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

JT

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				
GRD				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17 Building 32, Gould Island
Sample ID: G32-SOTB04

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/8/05 0500 hours
Sampler(s): Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): Poland Spring

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: ___ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				
GRO				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17 Building 32, Gould Island
Sample ID: 632-SOTB08

Tetra Tech NUS Charge No. 6065
QC Information: TB (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/14/05 0800 hours
Sampler(s): Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): Poland Spring

*include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				
GRO				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-AQTB06

Tetra Tech NUS Charge No. 0065
QC Information: JB (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/14/05 0800 hours
Sampler(s): Johanna Trant

Recorded By: Johanna Trant
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): Poland Spring

*Include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: ___ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ___ ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0	17			
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				
GRO				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17 Building 32, Gould Island
Sample ID: G32 - TOTB07

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 12/16/05 0850 hours
Sampler(s): Johanna Trout

Recorded By: Johanna Trout
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify):

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				
SRO				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-AQTB07

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/17/05 0850 hours
Sampler(s): Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): Poland Spring

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				

TtNUS Form 0004

TETRA TECH NUS, INC.

Page ___ of ___

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-[illegible]

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method: Grab
Depth Sampled: NA feet
Sample Date & Time: 6/20/05 0800 hours Dup NA hours
Sampler(s): Johanna Fraser

Data Recorded By: Johanna Fraser
Signature

PID/OVA Monitor Reading: NA ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) NA

SAMPLE DATA/REMARKS: ~~NA~~ CS 6-20-5 4 VOA vials sent to lab
2 w/ DI only
2 w/ MEOH only

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO	

NOTES/SKETCH: NA

CS 6-20-5

NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-TAOTB09

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/24/05 0800 hours
Sampler(s): Johanna Grant

Recorded By: Johanna Grant
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): Poland Spring

*include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

6-24-05

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-AOWTB10

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method/Device: Grab/Direct Pour
Depth Sampled: NA feet Total Depth _____ feet (SW Only)
Sample Date & Time: 7/19/05 0800 hours
Sampler(s): Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

NOT
___ Groundwater
___ Surface Water
___ Residential Supply
X Grab
___ Composite

X Trip Blank*
___ Rinsate Blank*
___ Field Duplicate Collected
___ Other (Specify): Poland Spring
* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				
GRO				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTB11

Tetra Tech NUS Charge No. 00065
QC Information: TB (if applicable)

Sample Method: Grab
Depth Sampled: NA feet
Sample Date & Time: 11/14/05 1800 hours Dup NA hours
Sampler(s): Johanna Traur

Data Recorded By: Johanna Traur
Signature

PID/OVA Monitor Reading: NA ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)

SAMPLE DATA/REMARKS: ~~VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers.~~ See Notes

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO	

NOTES/SKETCH:

4 VOA vials sent to lab
2 w/ DI only
2 w/ MEOH only

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site M Building 32, Gold Island
Sample ID: G32-GW02-1

Tetra Tech NUS Charge No. 0005
QC Information: TB (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 7/21/05 0800 hours
Sampler(s): Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): Poland Spring

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				
GRO				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 82, Gould Island
Sample ID: G82-GWTB12 1

Tetra Tech NUS Charge No. 0005
QC Information: TB (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 7/25/05 0800 hours
Sampler(s): Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): Poland Spring

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				Poland Spring water was poured directly into 4 HCL preserved 40 mL vials.
GRD				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTB12

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method: Grab
Depth Sampled: NA feet
Sample Date & Time: 6/30/05 1402 hours Dup NA hours
Sampler(s): Johanna Trout

Data Recorded By: Johanna Trout
Signature

PID/OVA Monitor Reading: NA ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) NA

SAMPLE DATA/REMARKS: ~~VOC sample was collected using a cut-off syringe directly from the split spoon and transferred into appropriate sample vials. The remaining sample was transferred into a decontaminated 5 bowl homogenized, and transferred into appropriate sample containers.~~ See Notes JT 6-30-05

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO	

NOTES/SKETCH:

4 VOA vials sent to lab
2 w/ DI only
2 w/ MEOH only

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-GWTB13

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method/Device: Grab / Direct Pour
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 7/27/05 0800 hours
Sampler(s): Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): Poland Spring

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				Poland Spring was poured directly
GRO				into 4 HCl preserved 40 mL vials

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTB13

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method: Grab
Depth Sampled: NA feet
Sample Date & Time: 7/11/05 0800 hours Dup NA hours
Sampler(s): Johanna Traut

Data Recorded By: Johanna Traut
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) _____

SAMPLE DATA/REMARKS: ~~VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated s.s. bowl, homogenized and transfered into appropriate sample containers.~~ see notes

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO	

NOTES/SKETCH:

4 VOA vials sent to lab
2 w/ DI only
2 w/ MeOH only

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTB13

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method: Grab
Depth Sampled: NA feet
Sample Date & Time: 7/11/05 0800 hours Dup NA hours
Sampler(s): Johanna Traut

Data Recorded By: Johanna Traut
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) NA

SAMPLE DATA/REMARKS: ~~VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transferred into appropriate sample vials. The remaining sample was transferred into a decontaminated S.S. bowl, homogenized, and transferred into appropriate sample containers.~~ See Notes

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO	

NOTES/SKETCH:

4 VOA vials sent to lab
2 w/ DI only
2 w/ MEOH only

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SUTP14

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method: Grab
Depth Sampled: NA feet
Sample Date & Time: 7/21/05 0800 hours Dup NA hours
Sampler(s):

Data Recorded By:
Signature

PID/OVA Monitor Reading: ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)

SAMPLE DATA/REMARKS: VOC sample was collected using a precleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers.

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO	

NOTES/SKETCH:

4 VOA vials sent to lab.
2 w/ DI only
2 w/ MEOH only

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTB15

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method: Grab TB
Depth Sampled: NA feet
Sample Date & Time: 7/26/05 0800 hours Dup NA hours
Sampler(s):

Data Recorded By:
Signature

PID/OVA Monitor Reading: ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)

SAMPLE DATA/REMARKS: ~~VOC sample was collected using a pre-cleaned synnge directly from the split spoon~~ Ground JT ~~and transferred into appropriate sample vials. The remaining sample was transferred into a decontaminated 5 gal bowl, homogenized, and transferred into appropriate sample containers.~~ JT 7-28-05

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO	

NOTES/SKETCH:

4 VOA vials sent to lab
2 w/ DI only
2 w/ MEOH only

Tt NUS Form 0005A

TETRA TECH NUS, INC.

Page ___ of ___

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTB116

Tetra Tech NUS Charge No. 00065
QC Information: TB (if applicable)

Sample Method: Grab
Depth Sampled: NA feet
Sample Date & Time: 7/28/05 0900 hours Dup NA hours
Sampler(s): Johanna Trant

Data Recorded By: Johanna Trant
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) _____

SAMPLE DATA/REMARKS: ~~VOC sample was collected using a precleaned syringe directly from the split spoon and transferred into appropriate sample vials. The remaining sample was transferred into a decontaminated S.S. bowl, homogenized, and transferred into appropriate sample containers.~~

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO	

NOTES/SKETCH:

4 VOA vials sent to lab:
2 w/ DI only
2 w/ MEOH only

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Grand Island
Sample ID: G32 - DIUF - SB01

Tetra Tech NUS Charge No. 0005
QC Information: SB (if applicable)

Sample Method/Device: Grab/Direct Pour
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/15/05 0900 hours
Sampler(s): Johanna Trout

Recorded By: Johanna Trout
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- X Other (Specify): Source blank

*include sample source & lot No.
from DIUF lot No 0810204
Exp 08/2005

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC				direct pour from DIUF into appropriate sample containers
PAH				
Pest/PCB				
TPH				
Metals/CN				
VOC				
GRO				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-TBGW-061005

Tetra Tech NUS Charge No. 6065
QC Information: TB (if applicable)

Sample Method/Device: Grab
Depth Sampled: N/A feet Total Depth N/A feet (SW Only)
Sample Date & Time: 10/10/05 0800 hours
Sampler(s): Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- X Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): Poland Spring

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: ___ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ___ ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-TBGW-061305

Tetra Tech NUS Charge No. 0060
QC Information: TB (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/13/05 0800 hours
Sampler(s): Don Whalen
Johanna Traut
Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): Poland Spring

*include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTB11

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method: Grab
Depth Sampled: NA feet
Sample Date & Time: 6/14/05 0800 hours Dup NA hours
Sampler(s): Johanna Tran

Data Recorded By: Johanna Tran
Signature

PID/OVA Monitor Reading: NA ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)

SAMPLE DATA/REMARKS: ~~VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transferred into appropriate sample vials. The remaining sample was transferred into a decontaminated S.S. bowl, homogenized, and transferred into appropriate sample containers.~~ See Notes

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO	

NOTES/SKETCH:

4 VOA vials sent to lab
2 w/ DI only
2 w/ MEOH only

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-GWTB11

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 7/21/05 0800 hours
Sampler(s): Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): Poland Spring

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				
GRO				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 82, Gould Island
Sample ID: G32-GWTB121

Tetra Tech NUS Charge No. 0045
QC Information: TB (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 7/25/05 0800 hours
Sampler(s): Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): Poland Spring

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				Poland Spring water was poured directly into 4 HCl preserved 40 mL vials.
GRD				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTB12

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method: Grab
Depth Sampled: NA feet
Sample Date & Time: 6/30/05 1402 hours Dup NA hours
Sampler(s): Johanna Traut

Data Recorded By: Johanna Traut
Signature

PID/OVA Monitor Reading: NA ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) NA

SAMPLE DATA/REMARKS: ~~VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transferred into appropriate sample vials. The remaining sample was transferred into a 1L decontaminated glass bowl homogenized and transferred into appropriate sample containers.~~ See notes 6-30-05

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO	

NOTES/SKETCH:

4 VOA vials sent to lab
2 w/ DI only
2 w/ MEOH only

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-GWTB13

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method/Device: Grab / Direct Pour
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 7/27/05 0800 hours
Sampler(s): Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): Poland Spring

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				Poland Spring was poured directly
GRO				into 4 HCl preserved 40 mL vials

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTB13

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method: Grab
Depth Sampled: NA feet
Sample Date & Time: 7/11/06 0800 hours Dup NA hours
Sampler(s): Johanna Traut

Data Recorded By: Johanna Traut
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) _____

SAMPLE DATA/REMARKS: ~~VOC sample was collected using a precleaned syringe directly from the spitspoon and transfered into appropriate sample vials. The remaining sample was transfered into a decontaminated S.S. bowl, homogenized and transfered into appropriate sample containers.~~ see notes

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO	

NOTES/SKETCH:

4 VOA vials sent to lab
2 w/ DI only
2 w/ MEOH only

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTB13

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method: Grab
Depth Sampled: NA feet
Sample Date & Time: 7/11/05 0800 hours Dup NA hours
Sampler(s): Johanna Traut

Data Recorded By: Johanna Traut
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): _____

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) NA

SAMPLE DATA/REMARKS: ~~VOC sample was collected using a precleaned syringe directly from the split spoon and transferred into appropriate sample vials. The remaining sample was transferred into a decontaminated S.S. bowl, homogenized, and transferred into appropriate sample containers.~~ See Notes

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO	

NOTES/SKETCH:

4 VOA vials sent to lab
2 w/ DI only
2 w/ MEOH only

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SUTB14

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method: Grab
Depth Sampled: NA feet
Sample Date & Time: 7/21/05 0800 hours Dup NA hours
Sampler(s):

Data Recorded By: _____
Signature

PID/OVA Monitor Reading: _____ ppm

TYPE OF SAMPLE: (Check all that apply)

- X Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)

SAMPLE DATA/REMARKS: ~~VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transferred into appropriate sample vials. The remaining sample was transferred into a decontaminated S.S. bowl, homogenized, and transferred into appropriate sample containers.~~ TI

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO	

NOTES/SKETCH:

4 VOA vials sent to lab.
2 w/ DI only
2 w/ MEOH only

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTB15

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method: Grab to
Depth Sampled: NA feet
Sample Date & Time: 7/26/05 0800 hours Dup NA hours
Sampler(s):

Data Recorded By:
Signature

PID/OVA Monitor Reading: ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify):

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.)

SAMPLE DATA/REMARKS: ~~VOC sample was collected using a precleaned syringe directly from the split spoon and transferred into appropriate sample vials. The remaining sample was transferred into a decontaminated 5 gal bowl, homogenized, and transferred into appropriate sample containers.~~ Ground JT 7-28-05

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO	

NOTES/SKETCH:

4 VOA vials sent to lab
2 w/ DI only
2 w/ MEOH only

Tt NUS Form 0005A

TETRA TECH NUS, INC.

Page ___ of ___

SAMPLE LOG SHEET - SOLID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-SOTB116

Tetra Tech NUS Charge No. 00065
QC Information: TB (if applicable)

Sample Method: Grab
Depth Sampled: NA feet
Sample Date & Time: 7/28/05 0800 hours Dup NA hours
Sampler(s): Johanna Tract

Data Recorded By: Johanna Tract
Signature

PID/OVA Monitor Reading: ___ ppm

TYPE OF SAMPLE: (Check all that apply)

- ___ Soil
- ___ Sediment
- ___ Lagoon/Pond
- X Grab
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate collected
- ___ Other (Specify): ___

Description: (Sand, Clay, Muck, Peat, Dry, Moist, Wet, Etc.) ___

SAMPLE DATA/REMARKS: ~~VOC sample was collected using a pre-cleaned syringe directly from the split spoon and transfered into appropriate sample vials. The remaining sample was transferred into a decontaminated S.S. bowl, homogenized, and transfered into appropriate sample containers.~~

ANALYSIS	BOTTLE LOT NO.
VOC	
GRO	

NOTES/SKETCH:

4 VOA vials sent to lab:
2 w/ DI only
2 w/ MEOH only

Tt NUS Form 0005A

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32 - DIUF - SB01

Tetra Tech NUS Charge No. 0065
QC Information: SB (if applicable)

Sample Method/Device: Grab/Direct Pour
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/15/05 0900 hours
Sampler(s): Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- ___ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- X Other (Specify): Source blank

*include sample source & lot No.
from DIUF lot No. 081024
Exp 08/2005

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol.#	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC				direct pour from DIUF into
PAH				appropriate sample containers
Pest/PCB				
TPH				
Metals/CN				
VOC				
GRO				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 52, Gould Island
Sample ID: G32-TB6W-061005

Tetra Tech NUS Charge No. 0065
QC Information: TB (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/10/05 0850 hours
Sampler(s): Johanna Traut

Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- X Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): Poland Spring

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Building 32, Gould Island
Sample ID: G32-TBGW-061305

Tetra Tech NUS Charge No. 0060
QC Information: TB (if applicable)

Sample Method/Device: Grab
Depth Sampled: NA feet Total Depth NA feet (SW Only)
Sample Date & Time: 6/13/05 0800 hours
Sampler(s): Don Whalen
Johanna Traut
Recorded By: Johanna Traut
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- X Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): Poland Spring

*include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32 - ET RB01

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: RB01 (if applicable)

Sample Method/Device: Grab/Direct Pour
Depth Sampled: N/A feet Total Depth N/A feet (SW Only)
Sample Date & Time: 8 / 30 / 05 1130 hours
Sampler(s): L. Seydewitz T. Campbell C. Sanchez

Recorded By: [signature]
Signature

TYPE OF SAMPLE: (Check all that apply)

- ____ Groundwater
- ____ Surface Water
- ____ Residential Supply
- ____ Grab
- ____ Composite
- ____ Trip Blank*
- ✓ Rinsate Blank*
- ____ Field Duplicate Collected
- ____ Other (Specify):

*include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp ? C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
TCL VOCs				Collected off decontaminated schucking knife
TCL SVOCs	✓			
Pesticides/PCBs	✓			
DRO/GRO	✓			
TAL Metals	✓			
Cyanide	✓			
AVS/SEM	✓			

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32 - ETRB02

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: Rinsate Blank (if applicable)

Sample Method/Device: Direct Pour
Depth Sampled: N/A feet Total Depth N/A feet (SW Only)
Sample Date & Time: 9/2/05 0900 hours
Sampler(s): T. Campbell, C. Sanchez

Recorded By: _____
Signature

TYPE OF SAMPLE: (Check all that apply)

- ____ Groundwater
- ____ Surface Water
- ____ Residential Supply
- ____ Grab
- ____ Composite
- ____ Trip Blank*
- X Rinsate Blank*
- ____ Field Duplicate Collected
- ____ Other (Specify): 0505185 expire 5/06

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

JA 9/2/05

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
SVOC/PAH				Collected off decontaminated shucking knife
Pest/PCB				
Metals				
CN				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 12, Gould Island
Sample ID: G32-SDRB01

Tetra Tech NUS Charge No. 600065-0000.0260
QC Information: Rinsate Blank (if applicable)

Sample Method/Device: Direct Pour
Depth Sampled: N/A feet Total Depth N/A feet (SW Only)
Sample Date & Time: 8/26/05 0900 hours
Sampler(s): T Campbell, C. Sanchez

Recorded By: _____
Signature

TYPE OF SAMPLE: (Check all that apply)

- ____ Groundwater
- ____ Surface Water
- ____ Residential Supply
- ____ Grab
- ____ Composite
- ____ Trip Blank*
- X Rinsate Blank*
- ____ Field Duplicate Collected
- ____ Other (Specify): _____

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ____ ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

JJ 8/26/05

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
TCL VOCs				Collected off decontaminated steel bowl
TCL SVOCs				
Pesticides/PCBs				
DRO/GRO				
TAL Metals				
Cyanide				
ANIS/SEM				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32 - SD RB02

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: RB02 (if applicable)

Sample Method/Device: Grab Direct Pour
Depth Sampled: N/A feet Total Depth N/A feet (SW Only)
Sample Date & Time: 8 / 29 / 05 1100 hours
Sampler(s): L. Seydewitz, T. Campbell, C. Sanchez

Recorded By: TAC
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- ✓ Grab
- ___ Composite
- ___ Trip Blank*
- ✓ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): 0505185 5/06

*include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp ? C	pH	Spec. Cond.	DO
	8/29/05			
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
TCL VOCs	✓			Collected off Decontaminated Steel bowl
TCL SVOCs	✓			
Pesticides/PCBs	✓			
DRO/GRO	✓			
TAL Metals	✓			
Cyanide	✓			
AVS/SEM				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32 - SDRB03

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: RB03 (if applicable)

Sample Method/Device: Grab- Direct pour
Depth Sampled: N/A feet Total Depth N/A feet (SW Only)
Sample Date & Time: 8 / 30 / 05 1110 hours
Sampler(s): L. Seydewitz, T. Campbell, C. Sanchez

Recorded By: [signature]
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- ✓ Grab
- ___ Composite
- ___ Trip Blank*
- ✓ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify): 0505185 5/06

*include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp ? C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
TCL VOCs	✓			Collected off pre-cleaned plastic scoopula
TCL SVOCs	✓			
Pesticides/PCBs	✓			
DRO/GRO	✓			
TAL Metals	✓			
Cyanide	✓			
AVS/SEM				

TtNUS Form 0004

1

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32 - SD RB04

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: RB04 (if applicable)

Sample Method/Device: Grab / Direct pour
Depth Sampled: N/A feet Total Depth N/A feet (SW Only)
Sample Date & Time: 9-8 / 1 / 05 0800 hours
Sampler(s): L. Seydewitz, T. Campbell, C. Sanchez

Recorded By: TAC
Signature

TYPE OF SAMPLE: (Check all that apply)

- ____ Groundwater
- ____ Surface Water
- ____ Residential Supply
- ____ Grab
- ____ Composite
- ____ Trip Blank*
- X Rinsate Blank*
- ____ Field Duplicate Collected
- ____ Other (Specify): exp. date Lot No. 0505185 5/06

*include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp ? C	pH	Spec. Cond.	DO
9/2/05	TAC			
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
TCL VOCs	✓			collected off acetate sleeve
TCL SVOCs	✓			used for sediment collection
Pesticides/PCBs	✓			
DRO/GRO	✓			
TAL Metals	✓			
Cyanide	✓			
AVS/SEM				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32 - SDRB05

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: RB05 (if applicable)

Sample Method/Device: Grab / Direct pour
Depth Sampled: N/A feet Total Depth N/A feet (SW Only)
Sample Date & Time: 9-8 / 8 / 05 0830 hours
Sampler(s): L. Seydewitz, T. Campbell, C. Sanchez

Recorded By: TA Campbell
Signature

TYPE OF SAMPLE: (Check all that apply)

- ____ Groundwater
- ____ Surface Water
- ____ Residential Supply
- ____ Grab
- ____ Composite
- ____ Trip Blank*
- X Rinsate Blank*
- ____ Field Duplicate Collected
- ____ Other (Specify): exp. date 05/08/06

Lot No. 0505185

*include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp ? C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
TCL VOCs	✓			Collected off acetate sleeve
TCL SVOCs	✓			used for sediment collection
Pesticides/PCBs	✓			
DRO/GRO	✓			
TAL Metals	✓			
Cyanide	✓			
AVS/SEM				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-~~SB01~~ G32-DIUF-SB01

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: (SB 01) Source Blank (if applicable)

Sample Method/Device: Grab / Direct pour
Depth Sampled: N/A feet Total Depth N/A feet (SW Only)
Sample Date & Time: 9-8 / 2 / 05 0900 hours
Sampler(s): L. Seydewitz, T. Campbell, C. Sanchez

Recorded By: [signature]
Signature

TYPE OF SAMPLE: (Check all that apply)

- ____ Groundwater
- ____ Surface Water
- ____ Residential Supply
- ____ Grab
- ____ Composite
- ____ Trip Blank*
- ____ Rinsate Blank*
- ____ Field Duplicate Collected
- x Other (Specify): Source blank Lot No. 0505185 Exp date 5/06

*include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp ? C	pH	Spec. Cond.	DO
0				
1				
3				
4				

9/2/05
TRC

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
TCL VOCs	✓			Taken as direct pour from DI water into appropriate sampler bottles
TCL SVOCs	✓			
Pesticides/PCBs	✓			
DRO/GRO	✓			
TAL Metals	✓			
Cyanide	✓			
AVS/SEM				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 12, Gould Island
Sample ID: G32 - SDTB01

Tetra Tech NUS Charge No. G000065-0000.0260
QC Information: Trip Blank (if applicable)

Sample Method/Device: Filled by Laboratory
Depth Sampled: N/A feet Total Depth N/A feet (SW Only)
Sample Date & Time: 8/25/05 0900 hours
Sampler(s):

Recorded By: L. Segalat
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- ___ Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify):

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

LS 8/26/05

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
TCL VOCs				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32 - SDTB02

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: TB02 (if applicable)

Sample Method/Device: Grab
Depth Sampled: N/A feet Total Depth N/A feet (SW Only)
Sample Date & Time: 8 / 29 / 05 0800 hours
Sampler(s): L. Seydewitz, T. Campbell, C. Sanchez

Recorded By: [signature]
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- ✓ Grab
- ___ Composite
- ✓ Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify):

*include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp ? C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
TCL VOCs	✓			Trip blank
TCL SVOCs				
Pesticides/PCBs				
DRO/GRO	✓			
TAL Metals				
Cyanide				
AVS/SEM				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32 - SDTB03

Tetra Tech NUS Charge No. G00065-0000.0260
QC Information: Trip Blank (if applicable)

Sample Method/Device: Filled at laboratory
Depth Sampled: N/A feet Total Depth N/A feet (SW Only)
Sample Date & Time: 8 / 30 / 05 0800 hours
Sampler(s): L. Seydewitz, T. Campbell, C. Sanchez

Recorded By: L. Seydewitz
Signature

TYPE OF SAMPLE: (Check all that apply)

- ____ Groundwater
- ____ Surface Water
- ____ Residential Supply
- ____ Grab
- ____ Composite
- X Trip Blank*
- ____ Rinsate Blank*
- ____ Field Duplicate Collected
- ____ Other (Specify):

*include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp ?C	pH	Spec. Cond.	DO
0				
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
TCL VOCs				
TCL SVOCs				
Pesticides/PCBs				
DRO/GRO				
TAL Metals				
Cyanide				
AVS/SEM				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32-SDTB04

Tetra Tech NUS Charge No. G000065-0000.0260
QC Information: Trip Blank (if applicable)

Sample Method/Device: Filled at Laboratory
Depth Sampled: N/A feet Total Depth N/A feet (SW Only)
Sample Date & Time: 9/1/05 0800 hours
Sampler(s): L. Seydewitz

Recorded By: L. Seydewitz
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- ___ Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify):

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0	LS 9/1/05			
1				
3				
4				

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
TCL VOCs				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 12, Gould Island
Sample ID: 632-SDTB05

Tetra Tech NUS Charge No. G000065-0000.0260
QC Information: Trip Blank (if applicable)

Sample Method/Device: Filled at Laboratory
Depth Sampled: N/A feet Total Depth N/A feet (SW Only)
Sample Date & Time: 9/2/05 0800 hours
Sampler(s): L. Seydewitz

Recorded By: L Seydewitz
Signature

TYPE OF SAMPLE: (Check all that apply)

- ___ Groundwater
- ___ Surface Water
- ___ Residential Supply
- ___ Grab
- ___ Composite
- X Trip Blank*
- ___ Rinsate Blank*
- ___ Field Duplicate Collected
- ___ Other (Specify):

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: _____ Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

LS 9/2/05

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
TCL VOCs				

TtNUS Form 0004

TETRA TECH NUS, INC.

SAMPLE LOG SHEET - LIQUID PHASE

Site Name: Site 17, Gould Island
Sample ID: G32 - COTB01

Tetra Tech NUS Charge No. G000065 -
QC Information: Trip Blank (if applicable)

Sample Method/Device: Filled by laboratory
Depth Sampled: N/A feet Total Depth N/A feet (SW Only)
Sample Date & Time: 9/9/05 0900 hours
Sampler(s):

Recorded By: L Seydlat
Signature

TYPE OF SAMPLE: (Check all that apply)

- ____ Groundwater
- ____ Surface Water
- ____ Residential Supply
- ____ Grab
- ____ Composite
- X Trip Blank*
- ____ Rinsate Blank*
- ____ Field Duplicate Collected
- ____ Other (Specify):

* include sample source & lot No.

WELL PURGE DATA:

Well Depth	feet	Purge Start	hrs
Inside Diameter	Inches	Purge Stop Time	hrs
Water Level	feet	Total Gallons Purged	
Well Volume	gal.	Purge Method	

Color: Turbidity: CLR/SL CLDY/CLDY/OPAQ

Micro Tip/OVA Monitor Reading: ppm

Sampling/Purge Data:

Vol. #	Temp °C	pH	Spec. Cond.	DO
0				
1				
3				
4				

LS 9/9/05

ANALYSIS	BOTTLE LOT NO.	TRAFFIC REPORT NO. ORGANIC	TRAFFIC REPORT NO. INORGANIC	COMMENTS
VOC/GRO				

TtNUS Form 0004

APPENDIX D9

PHOTOGRAPHS FROM FIELD INVESTIGATIONS (CD)

24 9:46 AM

Aluminum Foil
24 9:46 AM

24 9:46 AM

24 9:50 AM

24 9:49 AM

3 11:59 AM

3 12:00PM

USJetting
DANGER
PELIGRO
971-158
2 2:49PM

Fleet
Environmental Services
LLC
888-233-5338
RI619
MA319
NYMA-095
MEHWT428
TNH-0125
CT-HWT503
Cueco
2 2:51PM

2 2:49PM

2 3:00 PM

2 3:02 PM

gould island
g32-ET301
9-2-5/1415
2 2:11PM

gould island
clams
g32-ET302
8-29/0930
29 9:40 AM

gould island
g32-ET302F
92-5/1440
2 2:48PM

Gould Island
g32- ET303
9-1-5 / 1130
1 11:28 AM

S-T INDUSTRIES
Gould Island
Clams
G32-ET304
8-29/1015
SITE 17, BU
HARDSHELL CLAM/M
LOCATION/STATION:
SAMPLE ID:
DATA RECORDED BY:
SHELLFISH SPECIES (circle one):
No.
Shell Length (mm)
Shell Width (mm)
Shell Breadth (mm)
Total Live weight. (g)
Tissue weight (g)
01
02
03
04
29 10:11AM

GOULD ISLAND
G32-ET304F
9-2-5/1435
SCHERR-TUMICO
2 2:28PM

Gould Island
Clams
G32-ET304
29 10:11AM

GOULD ISLAND
G32-ET304F
9-2-5/1435
SCHERR-TUMICO
2 2:28PM

Gould Island
g32-ET305
8-29/1055
29 10:51 AM

Gould Island
g32- ET305F
9-1-5 / 1340
305 PIPE
1 1:34 PM

NITRILE GLOVES
N-DEX
N-DEX
306
Gould Island
g32-ET306
9-1-5 / 094511 10:10 AM

gavid island
832- ET306F
91-5 / 1500
1 4:48PM

307
Gould Island
Clams
G32-ET307
9/1 0930
1 9:22 AM

Gould Island
G32-ET308
8-29 @ 1225 hrs
29 12:23PM

GOULD ISLAND
G32-ET308F
9/2/05 1535
SCHERR-TUMICO
2 3:24 PM

Gould Island
932-ET309
9-1-5
1000
1 9:48 AM

Gould Island
G32- ET309
9-1-5/1430
SCHERR-TUMICO
1 4:26PM

Gould Island
g32-ET310
9-1-5 / 1145
1 11:34 AM

Gould Island
g32-ET310F
9-1-5 / 1400
1 4:20PM

gould island
g32-ET311
9-2-5/0935
2 9:32 AM

Gould Island
G32 - ET312
8-29 1330
29 1:21PM

3/3
Gould Island
G32-ET313
8-29 @ 1245
29 12:32PM

Gould Island
932-ET313F
9-2-5/21540
2 3:37PM

2 2:50PM

6-1-05
Drain Pipe # 1
Gould Island
1 1:59PM

6-1-05
Drain Pipe # 1
Gould Island
1 1:59 PM

6-1-05
Diam Pipe # 1
Gould Island
1
2:03PM

6-1-05
Drain Pipe # 1
Gould Island
1 2:03PM

1 2:08 PM

CAT
10:05 AM

2 10:05 AM

6-2-05
Drain Pipe 2
Gould Island
2 10:45 AM

6-3-05
Gould Island
Test Pit 2
East Side
3 10:43 AM

1 1:32PM

2 9:49 AM

6-3-05
Rould Island
Pit 2
3 10:43 AM

2 2:52PM

2 2:52 PM

2 2:53PM

2 2:53PM

2 2:58PM

3 11:14 AM

3 11:14AM

3 11:47 AM

TP04
19 10:16 AM

19 10:28 AM

19 10:28 AM

19 9:53 AM

19 1:18PM

19 1:25PM

20 10:05AM

CAT
Fleet
Environmental Services
LLC
888-233-5338
NT503

416C
CAT
Fleet
Environmental Services
888-233-5338
JOBCO

CAT

21 9:54 AM

21 3:08PM

21 3:08PM

21 3:06PM

21 9:54 AM

21 9:54 AM

21 9:55 AM

21 9:55 AM

21 11:15AM

21 11:15 AM

21 11:16AM

21 11:16AM

21 11:16 AM

20 8:42 AM

20 8:42 AM

20 8:15AM

20 8:15AM

20 8:16 AM

20 8:16 AM

20 8:16 AM

20 8:17 AM

20 8:17AM

20 8:17 AM

20 8:18 AM

20 8:18 AM

20 8:18AM

20 8:15AM

20 8:19 AM

21 11:17AM

21 3:18PM

21 3:16PM

21 3:17PM

21 3:17PM

20 8:32 AM

20 8:40 AM

20 8:41 AM

20 8:41AM

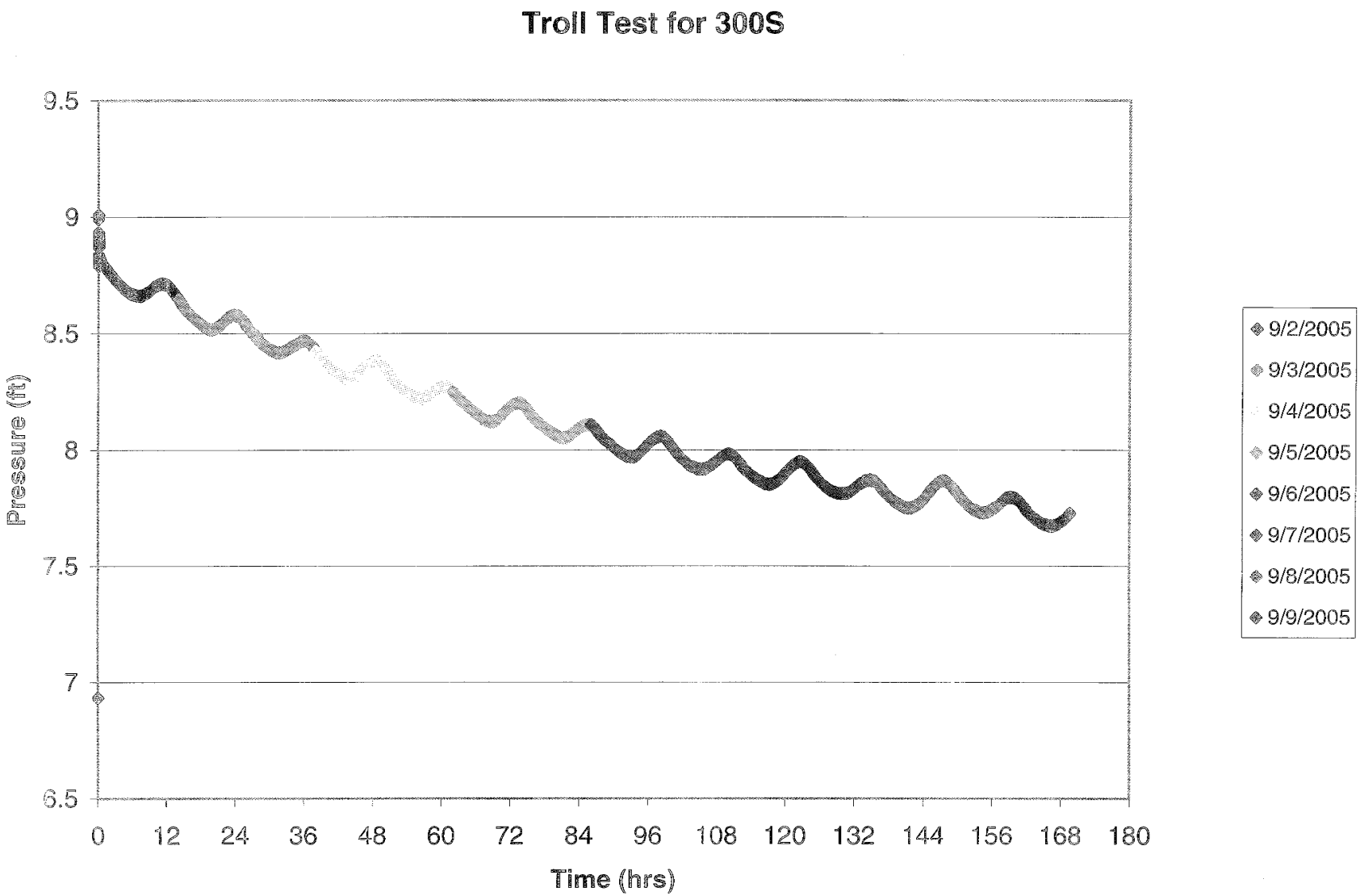
APPENDIX D-10

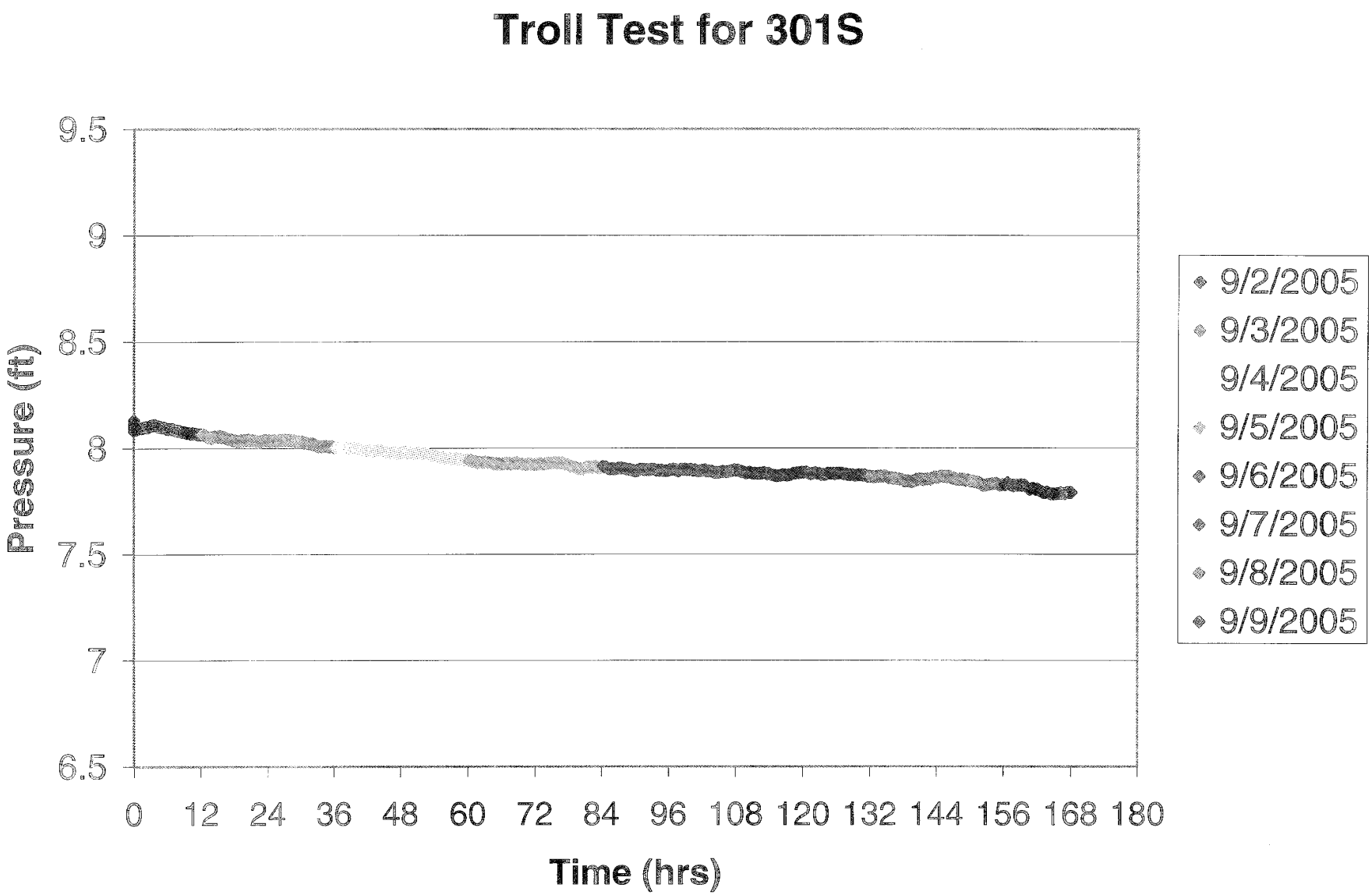
LONG TERM GROUNDWATER LEVEL TEST RESULTS

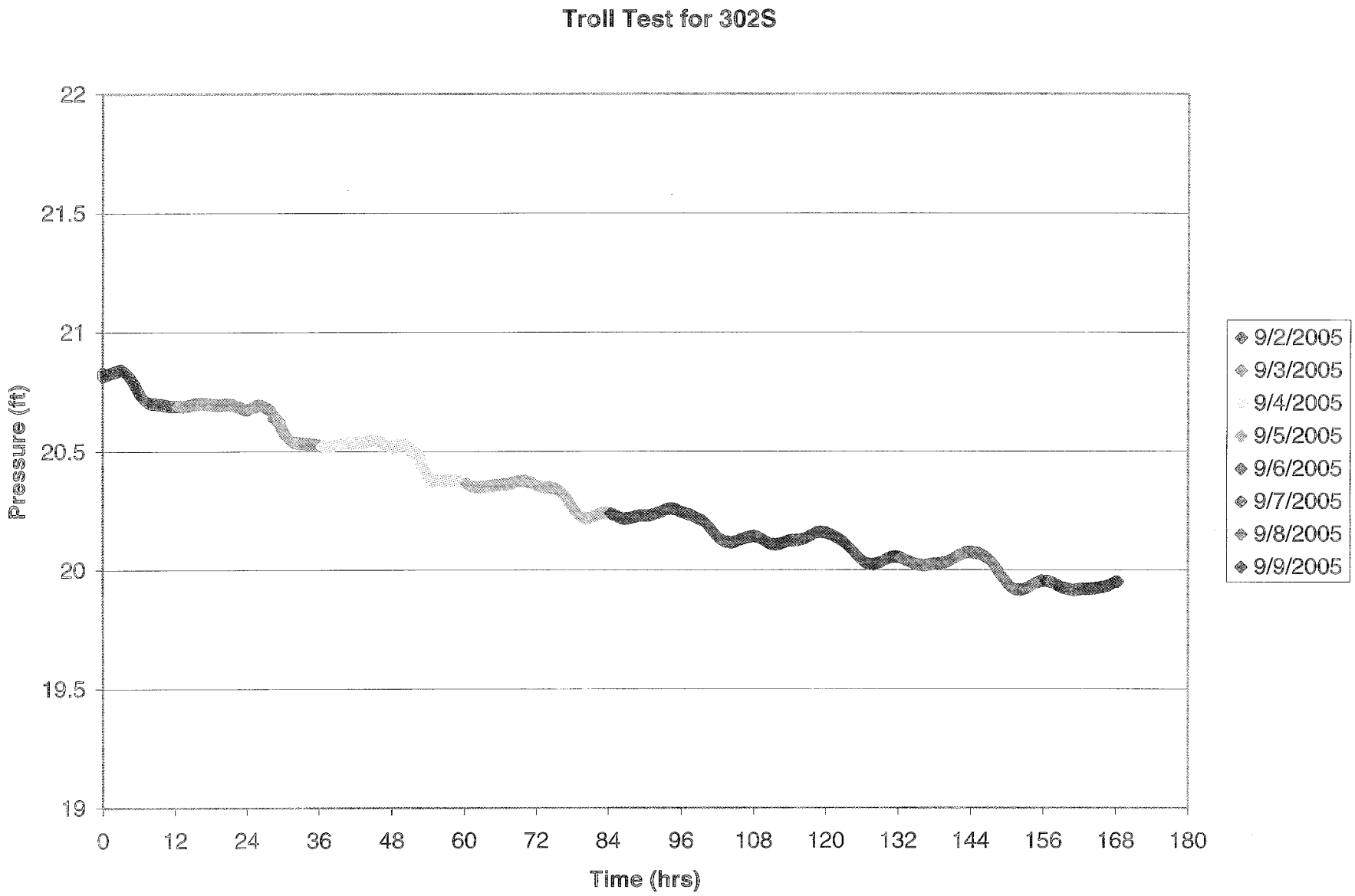
TABLE 3-1
GROUNDWATER ELEVATION DATA- AUGUST 30, 2005
REMEDIAL INVESTIGATION
SITE 17, GOULD ISLAND
NAVSTA NEWPORT, NEWPORT, RI

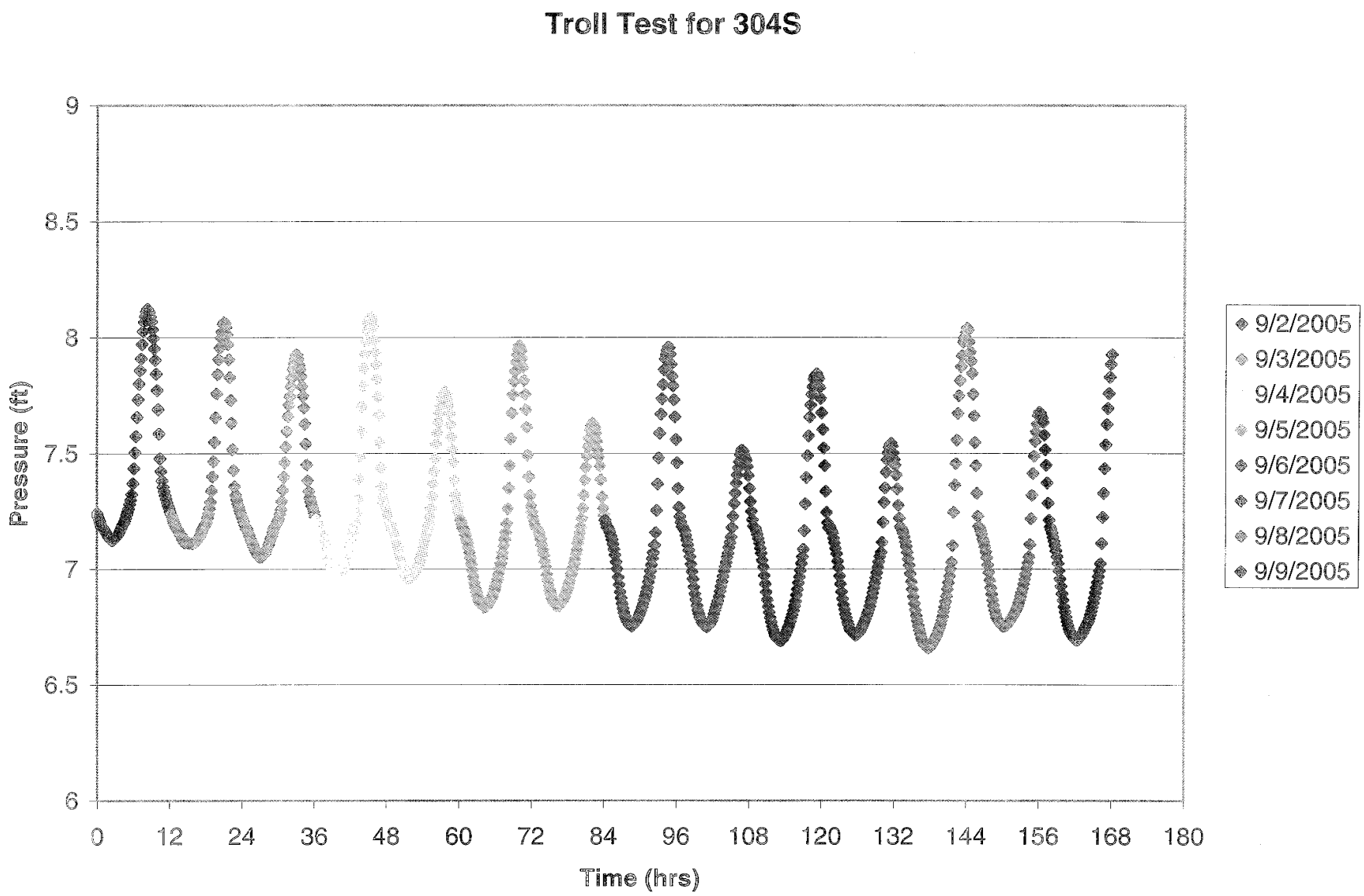
WELL ID	ELEVATION TOP OF PVC (feet- NMLW)	30 AUGUST 2005 DEPTH TO WATER (feet - BTPVC)	30 AUGUST 2005 GROUNDWATER ELEVATION (feet - NMLW)
MW300S	14.87	5.89	8.98
MW300B	13.87	NA	NA
MW301S	44.71	23.31	21.4
MW301B	44.05	24.45	19.6
MW302S	14.36	5.62	8.74
MW302B	14.34	6.22	8.12
MW303B	14.71	8.41	6.3
MW304S	14.58	9.07	5.51
MW304B	13.91	5.8	8.11
MW305S	15.1	7.2	7.9
MW305B	15.75	NA	NA
MW306B	14.98	8.32	6.66

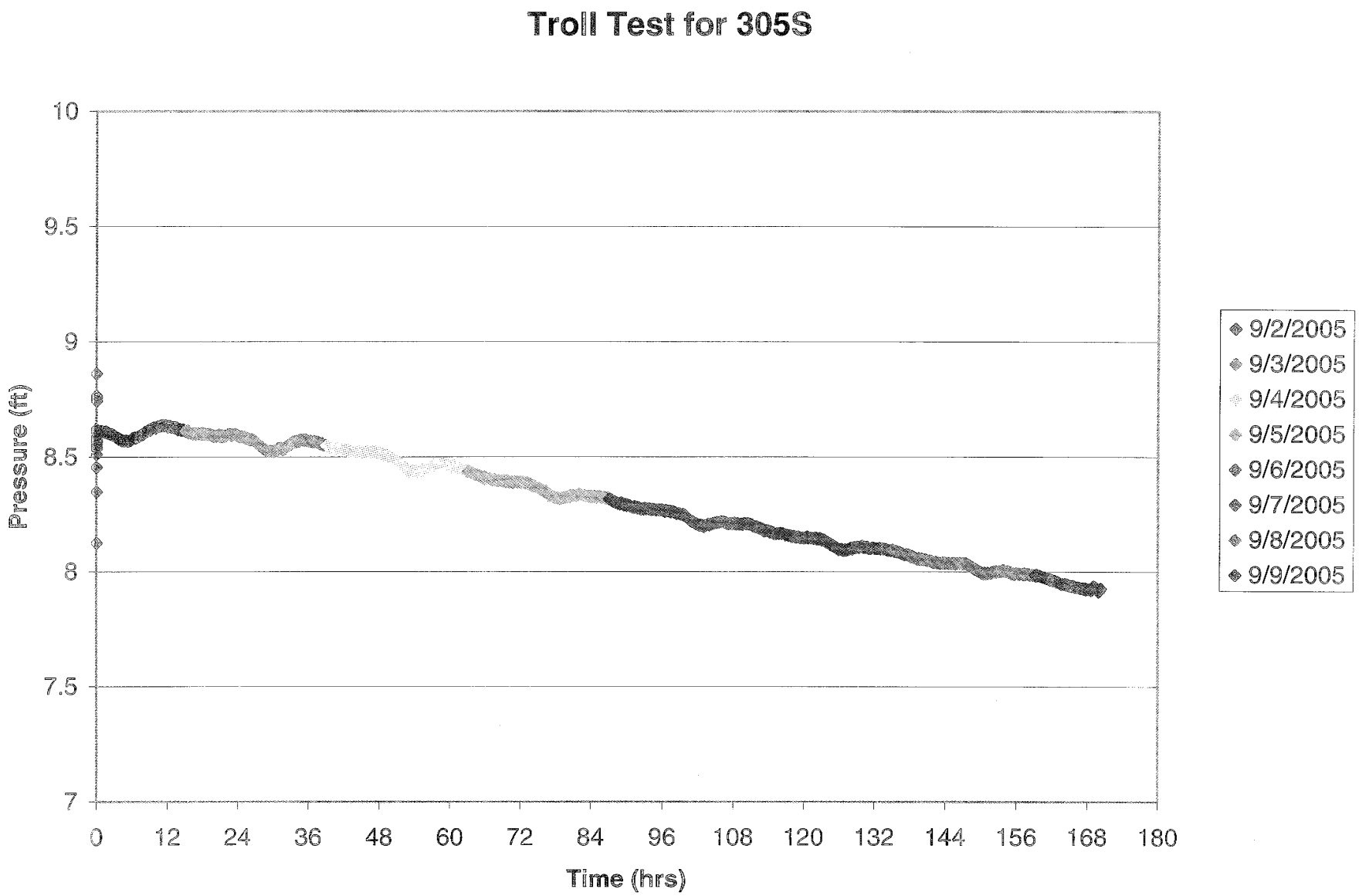
Notes:
NA = Water level not taken
NMLW = Navy Mean Low Water
BTPVC = Below Top of PVC

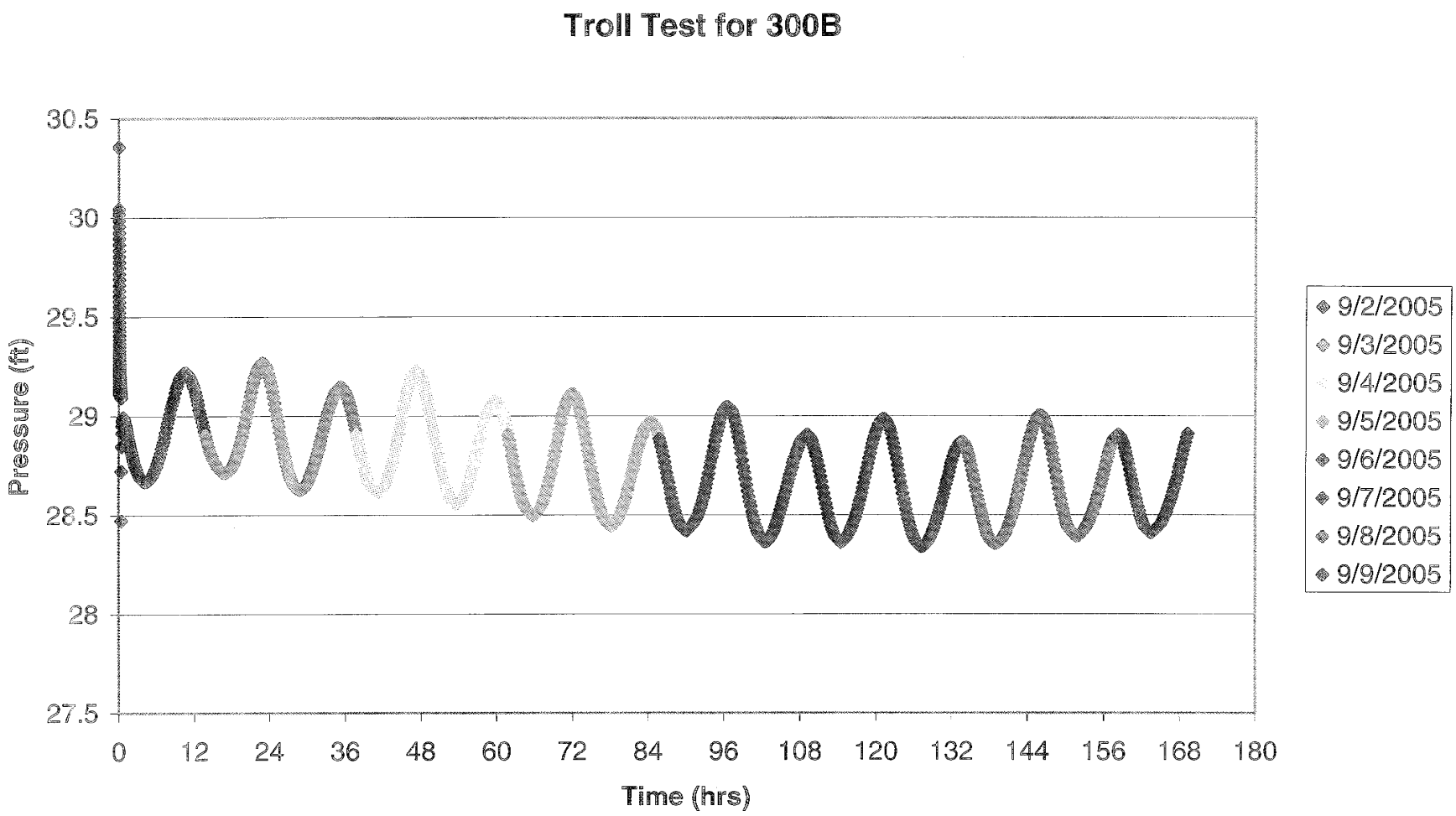

Troll Test for 300S
9.5
9
8.5
8
7.5
7
6.5
Pressure (ft)
0
12
24
36
48
60
72
84
96
108
120
132
144
156
168
180
Time (hrs)
9/2/2005
9/3/2005
9/4/2005
9/5/2005
9/6/2005
9/7/2005
9/8/2005
9/9/2005

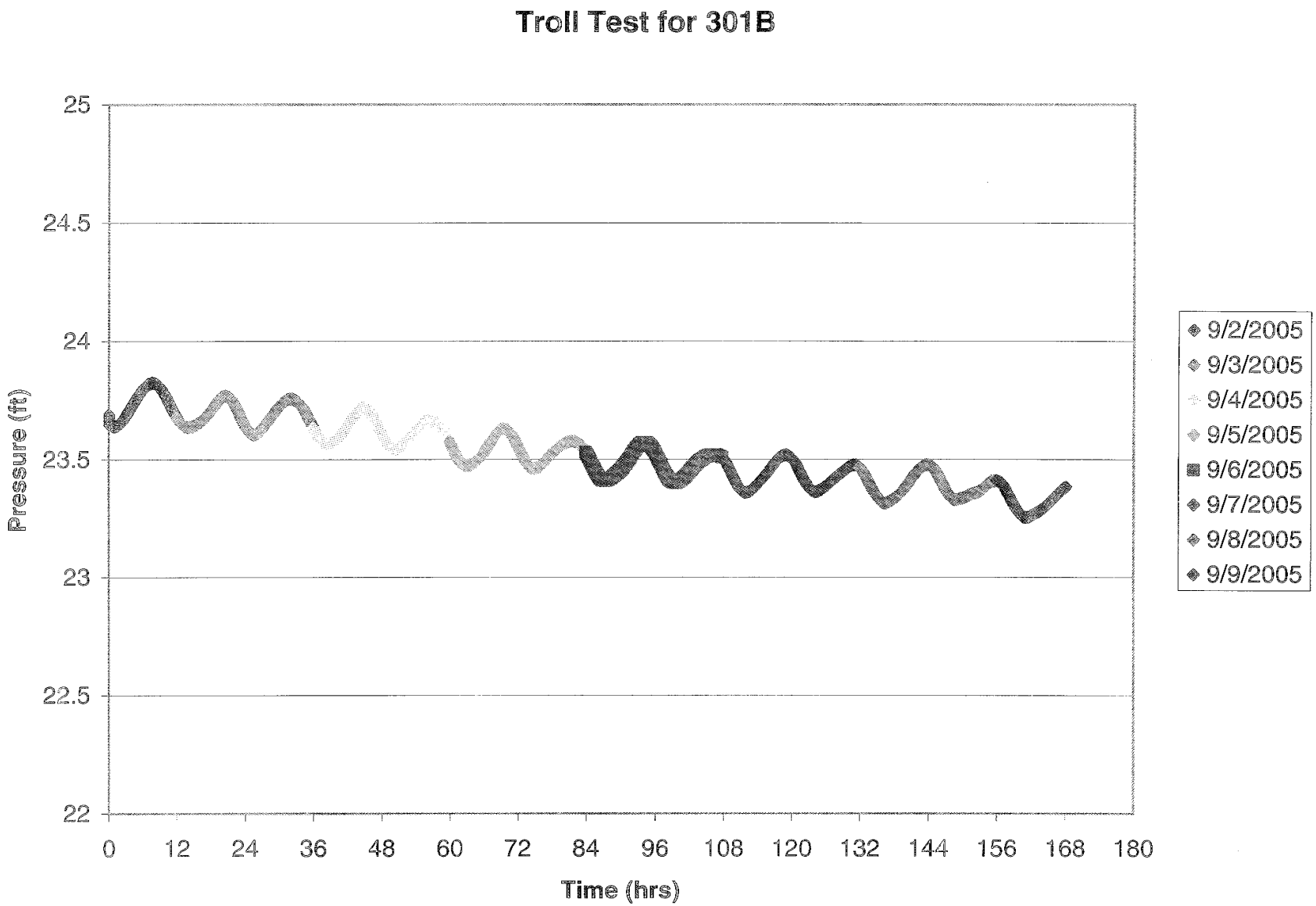

Troll Test for 301S
Pressure (ft)
9.5
9
8.5
8
7.5
7
6.5
0
12
24
36
48
60
72
84
96
108
120
132
144
156
168
180
Time (hrs)
9/2/2005
9/3/2005
9/4/2005
9/5/2005
9/6/2005
9/7/2005
9/8/2005
9/9/2005

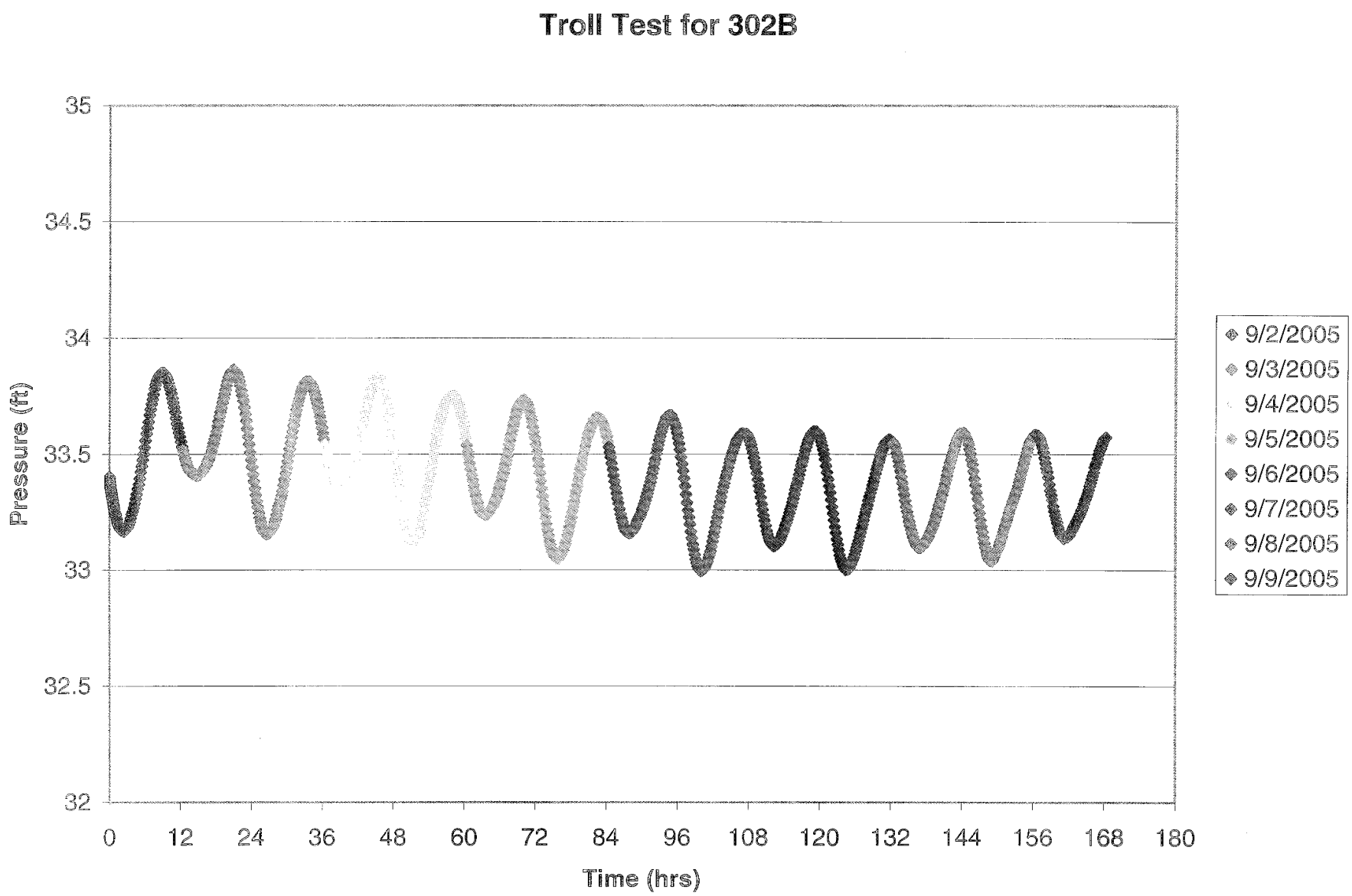

Troll Test for 302S
Pressure (ft)
22
21.5
21
20.5
20
19.5
19
0
12
24
36
48
60
72
84
96
108
120
132
144
156
168
180
Time (hrs)
9/2/2005
9/3/2005
9/4/2005
9/5/2005
9/6/2005
9/7/2005
9/8/2005
9/9/2005

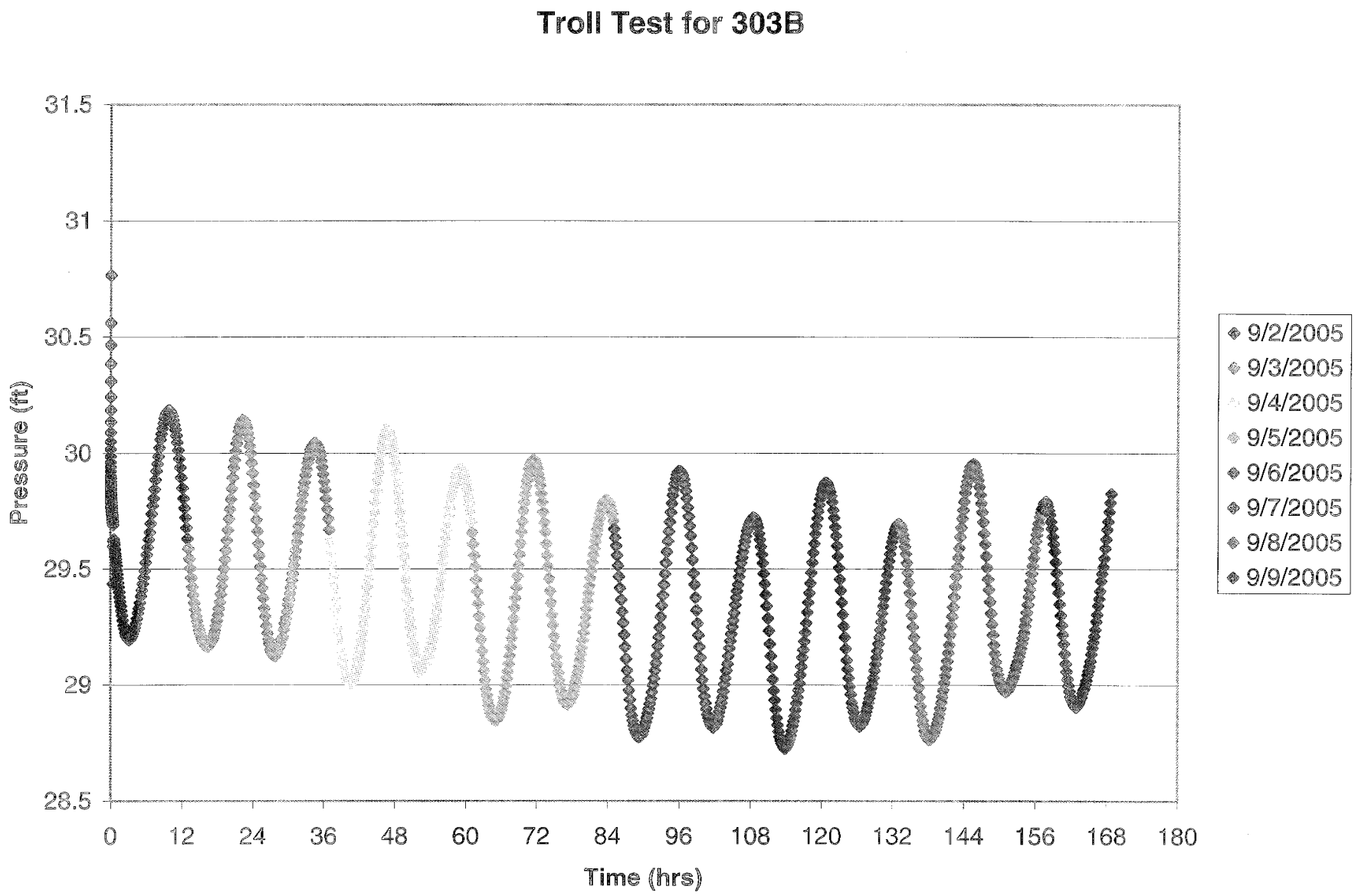

Troll Test for 304S
Pressure (ft)
9
8.5
8
7.5
7
6.5
6
0
12
24
36
48
60
72
84
96
108
120
132
144
156
168
180
Time (hrs)
9/2/2005
9/3/2005
9/4/2005
9/5/2005
9/6/2005
9/7/2005
9/8/2005
9/9/2005

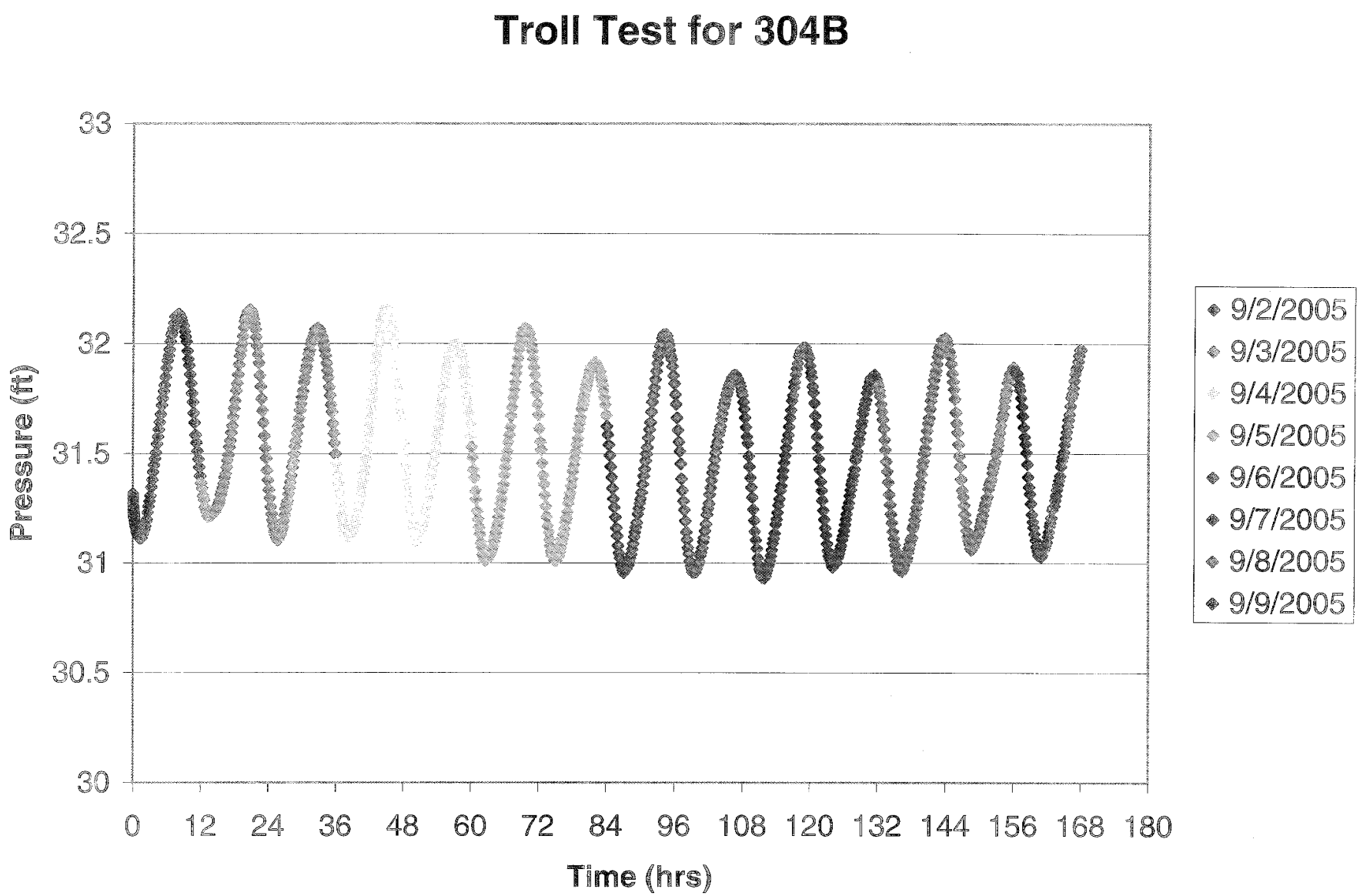

Troll Test for 305S
Pressure (ft)
10
9.5
9
8.5
8
7.5
7
0
12
24
36
48
60
72
84
96
108
120
132
144
156
168
180
Time (hrs)
9/2/2005
9/3/2005
9/4/2005
9/5/2005
9/6/2005
9/7/2005
9/8/2005
9/9/2005

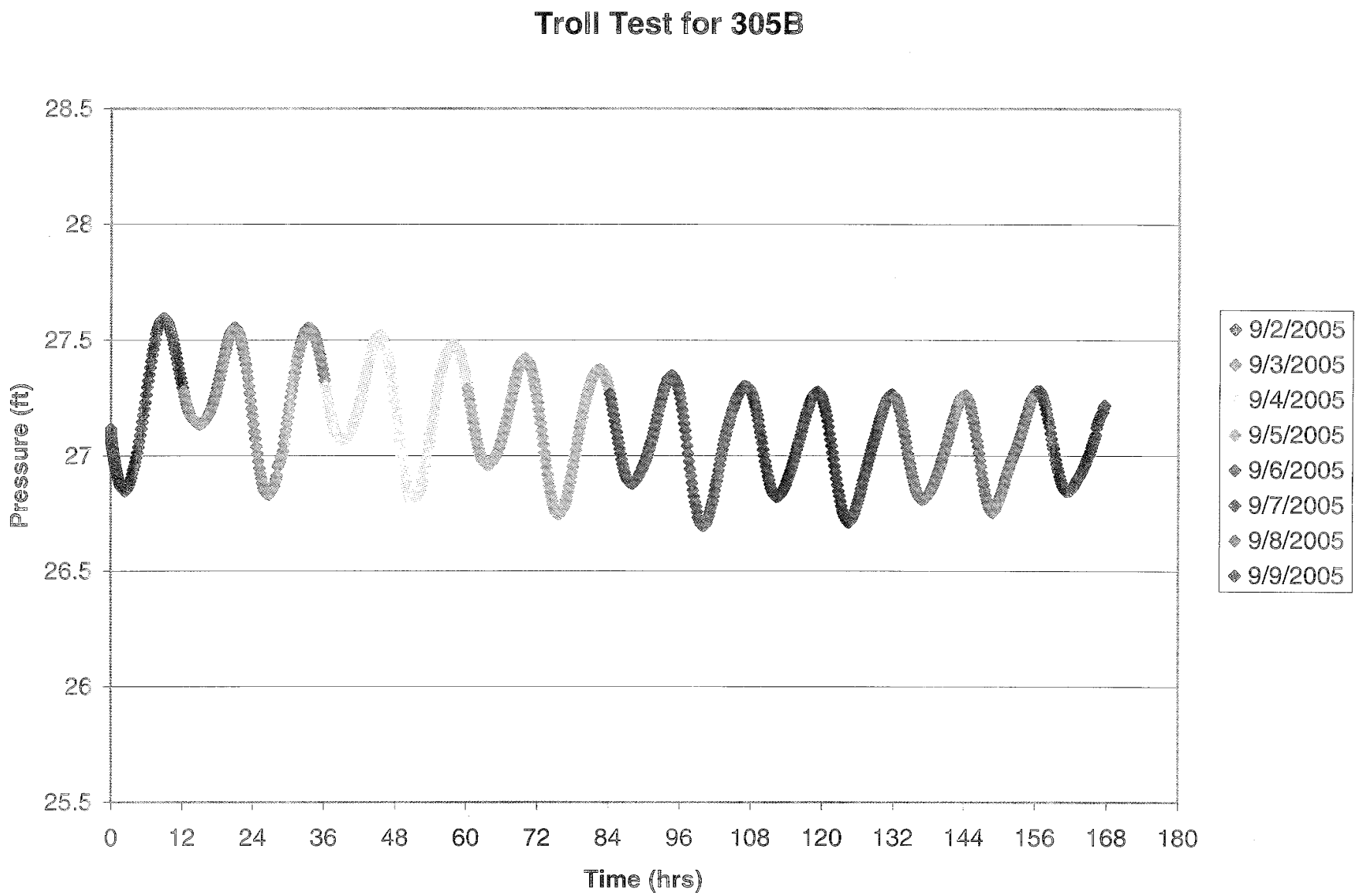

Troll Test for 300B
Pressure (ft)
30.5
30
29.5
29
28.5
28
27.5
0
12
24
36
48
60
72
84
96
108
120
132
144
156
168
180
Time (hrs)
9/2/2005
9/3/2005
9/4/2005
9/5/2005
9/6/2005
9/7/2005
9/8/2005
9/9/2005

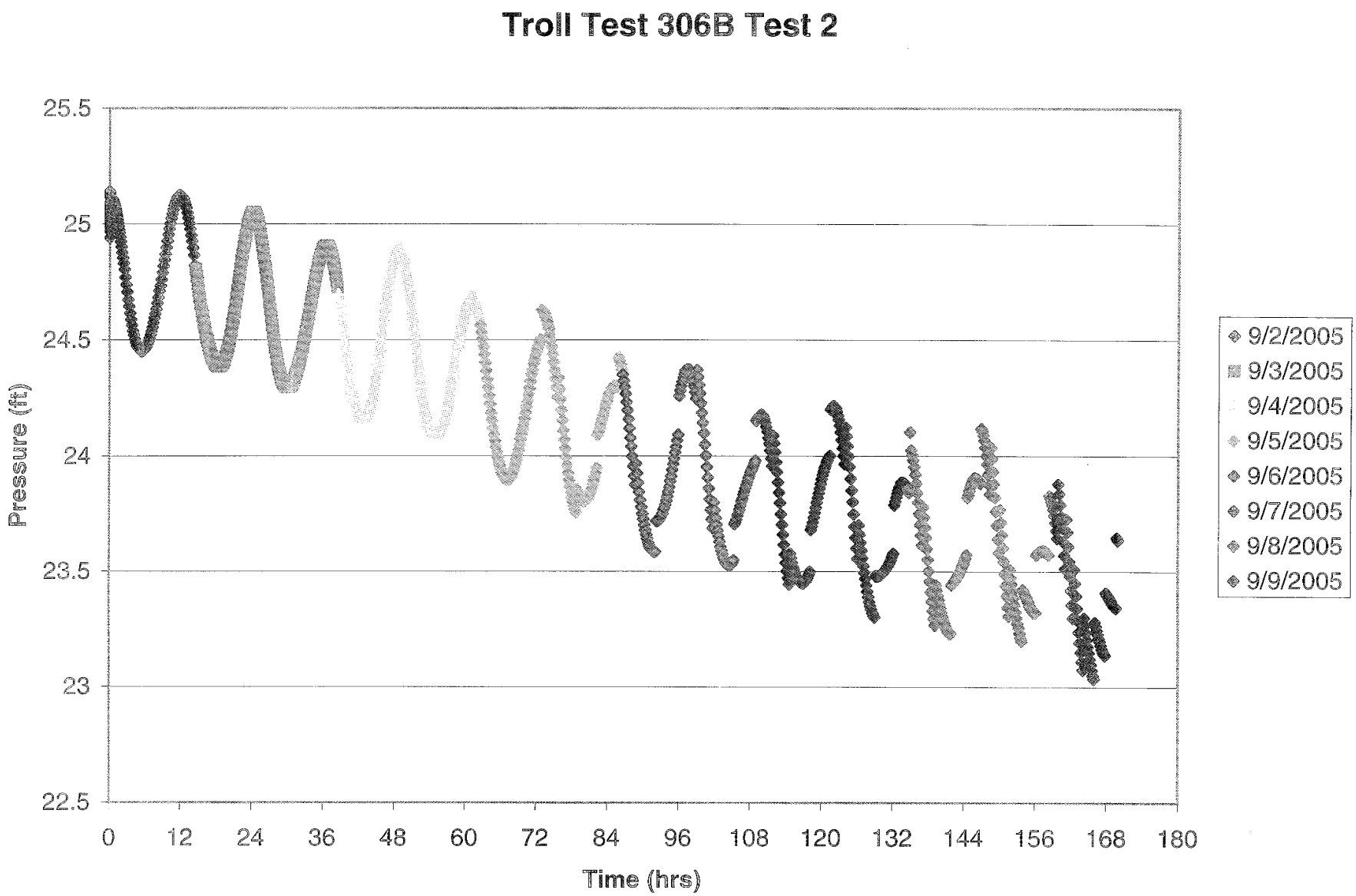

Troll Test for 301B
Pressure (ft)
25
24.5
24
23.5
23
22.5
22
0
12
24
36
48
60
72
84
96
108
120
132
144
156
168
180
Time (hrs)
9/2/2005
9/3/2005
9/4/2005
9/5/2005
9/6/2005
9/7/2005
9/8/2005
9/9/2005


Troll Test for 302B
Pressure (ft)
35
34.5
34
33.5
33
32.5
32
0
12
24
36
48
60
72
84
96
108
120
132
144
156
168
180
Time (hrs)
9/2/2005
9/3/2005
9/4/2005
9/5/2005
9/6/2005
9/7/2005
9/8/2005
9/9/2005


Troll Test for 303B
Pressure (ft)
31.5
31
30.5
30
29.5
29
28.5
0
12
24
36
48
60
72
84
96
108
120
132
144
156
168
180
Time (hrs)
9/2/2005
9/3/2005
9/4/2005
9/5/2005
9/6/2005
9/7/2005
9/8/2005
9/9/2005


Troll Test for 304B
Pressure (ft)
33
32.5
32
31.5
31
30.5
30
0
12
24
36
48
60
72
84
96
108
120
132
144
156
168
180
Time (hrs)
9/2/2005
9/3/2005
9/4/2005
9/5/2005
9/6/2005
9/7/2005
9/8/2005
9/9/2005


Troll Test for 305B
28.5
28
27.5
27
26.5
26
25.5
Pressure (ft)
0
12
24
36
48
60
72
84
96
108
120
132
144
156
168
180
Time (hrs)
9/2/2005
9/3/2005
9/4/2005
9/5/2005
9/6/2005
9/7/2005
9/8/2005
9/9/2005


Troll Test 306B Test 2
25.5
25
24.5
24
23.5
23
22.5
Pressure (ft)
0
12
24
36
48
60
72
84
96
108
120
132
144
156
168
180
Time (hrs)
9/2/2005
9/3/2005
9/4/2005
9/5/2005
9/6/2005
9/7/2005
9/8/2005
9/9/2005

APPENDIX D11

LAND SURVEY DATA

LOUIS FEDERICI and ASSOCIATES
365 Smith Street, Providence, RI 02908 Tele: 401-331-1570 Fax: 401-331-1593
land surveyors biologists planners

Tabulation of field located environmental sample points for TETRA TECH NUS, INC.
at the Gould Island Site 17, Naval Station Newport, Newport Rhode Island Survey Date : July 2005

Contract Number N62467-03-D-0057 ; Contract task order 035 ; LFA Project No. 970706

The values below are based on the following datums:
Horizontal = Rhode Island State Plane Coordinate System, NAD 1983
Vertical = Local Mean Low Water (Navy Bench Mark H-2 ,Gould Island Torpedo Station)

LFA PT.NO.	TETRA TECH / NUS I.D.	NORTHING	EASTING	TOP CASE ELEV	TOP RISER ELEV	EXISTING GRADE ELEV.
11	DRILL HOLE	164883.50	542744.84			
12	DRILL HOLE	165389.93	542363.18			13.12
13	TBM	165600.91	542191.79			12.12
128	SB-309	165426.14	542216.69			12.2
129	SB-310	165397.32	542213.19			12.5
130	SB-331	165415.29	542364.81			12.9
131	SB-311	165376.97	542364.59			13.1
132	SB-312	165251.41	542453.28			13.0
133	SB-314	165186.92	542362.73			13.0
134	MW-305B	165297.27	542287.93	16.02	15.75	13.0
135	MW-305S	165304.90	542286.34	15.37	15.10	13.1
136	MW-306B	165527.50	542344.30	15.16	14.98	12.5
137	MW-300B	165340.13	542486.37	14.09	13.87	11.9
138	MW-300S	165328.20	542487.27	15.18	14.87	12.2
139	SB-313	165083.35	542512.48			13.0
140	SB-335	165082.78	542493.56			13.0
141	SB-315	165057.19	542438.41			13.0
142	SB-336	165070.70	542445.88			12.8
143	MW-302S	165074.26	542340.47	14.55	14.36	12.4
144	MW-302B	165083.60	542335.03	14.56	14.34	12.6
145	SB-316	164943.39	542530.02			13.1
146	SMH #01	164924.92	542500.34			13.3
147	SB-317	164979.11	542527.54			11.9
148	SB-318	165011.53	542582.22			12.8
149	SB-319	164977.13	542594.38			13.0
150	MW-303B	165039.15	542631.64	14.87	14.71	11.6
151	SB-334	164956.48	542615.23			13.1
152	SB-320	164980.70	542632.59			13.1
153	SB-328	164929.84	542666.04			12.8
154	SB-327	164891.89	542602.57			13.1
155	SB-326	164882.98	542578.28			13.0
156	SB-325	164856.09	542540.00			13.0
157	SB-324	164839.46	542537.78			13.2
158	SB-322	164816.77	542516.05			13.1
159	SB-321	164870.00	542481.00			13.3
160	SB-332	164830.35	542476.18			12.4
161	SB-337	164863.74	542458.84			12.3
162	SB-338	164883.49	542447.43			11.8
163	SB-323	164894.13	542510.52			13.0
164	SB-333 /TP-6	164888.88	542469.47			13.2
165	MW-304S	165333.17	542153.98	14.78	14.58	12.2
166	MW-304B	165340.65	542152.05	14.36	13.91	12.0
167	MH	165213.46	542142.78			15.5
170	TOP CONC. PIPE CASE	165237.96	542117.90			8.6
171	TOP IP	165253.77	542076.27			3.3
172	TOP 12" IP	165279.84	542081.08			7.8
173	TOP 8" IP	165234.71	542071.98			6.4
174	MW-301B	164671.22	542360.40	44.30	44.05	42.1
175	MW-301S	164665.31	542367.11	44.90	44.71	42.8
176	TP-1 (STK)	164935.01	542676.07			
177	TP-1	164946.65	542669.20			
178	TP-2 (STK)	164986.04	542645.94			
179	TP-3 (STK)	165132.99	542565.21			
180	TP-4	165313.66	542454.28			
181	TP-4	165324.27	542447.79			
182	TP-6	164890.38	542464.68			

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land surveyors biologists planners

LFA PT.NO.	TETRA TECH / NUS I.D.	NORTHING	EASTING	TOP CASE ELEV	TOP RISER ELEV	EXISTING GRADE ELEV.
183	TP-6	164884.23	542468.30			
184	TP-4 (STK)	165316.25	542455.33			
185	TP-7	164934.80	542400.69			
186	TP-7/8	164908.43	542414.04			
187	TP-8	164919.76	542427.73			
188	TP-9 (STK)	164880.60	542436.14			
189	TP-9 (STK)	164861.71	542446.61			
190	TP-9	164854.60	542443.39			
191	TP-9	164878.95	542431.11			
192	TP-10C	164835.67	542451.40			
193	TP-10C	164840.22	542460.58			
194	TP-10B	164818.82	542457.60			
195	TP-10B	164823.74	542469.07			
196	TP-10A	164798.03	542466.57			
197	TP-10A	164803.20	542479.06			
198	TP-11C	164756.38	542518.50			
199	TP-11C	164772.49	542510.42			
200	TP-11B	164761.31	542529.30			
201	TP-11B	164772.74	542523.79			
202	TP-11A	164765.03	542537.15			
203	TP-11A	164778.34	542531.53			
204	TP-12	164815.00	542625.03			
205	TP-12	164830.55	542616.79			
206	TP-13	164837.08	542660.84			
207	TP-13	164850.49	542653.96			
208	EMH-2	164987.42	542393.12			
209	EMH	165001.76	542386.39			
210	TOP 24" CONC. CASING	165228.78	542135.93			11.90
211	TOP 12" IP	165242.13	542123.13			10.70

R.I. REG. NO. 1646