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CONTAMINATION ASSESSMENT/  
REMEDIAL ACTIVITIES INVESTIGATION  
FIREFIGHTING SCHOOL (SITE 7)  
NAVAL AIR STATION PENSACOLA  
PENSACOLA, FLORIDA

INTERIM DATA REPORT

November 1992

Contract N62467-88-C-0200

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open tank used for fire-fighting training exercises formerly existed on the west side of Building 1713. A fire-fighting tower is located approximately 25 feet southeast of Building 1713, and a large clearing, possibly also used for fire-fighting exercises, is located east of the tower. The results of this investigation indicate that widespread, significant levels of soil and groundwater contamination are generally absent on and in the vicinity of Site 7. However, significant levels of soil and groundwater contamination may be present in the vicinity of the suspected former burn area in the central portion of the site. Although generally low levels of metals are present in both the soil and groundwater, total recoverable petroleum hydrocarbons are the primary soil contaminants and polynuclear aromatic hydrocarbons and possibly lead are the primary groundwater contaminants. A portion of the total recoverable petroleum hydrocarbon and polynuclear aromatic hydrocarbon contamination is potentially associated with past on-site activities (fire-fighting training activities). However, additional sources of contamination may be impacting Site 7.

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## RECORD OF DOCUMENT CHANGES

Revisions to this document were made based on comments received from the U.S. Environmental Protection Agency, Florida Department of Environmental Regulation, Florida Department of Natural Resources, and National Oceanic and Atmospheric Administration. All revisions are in bold and enclosed in brackets to denote changes to the last version of this document.

## EXECUTIVE SUMMARY

As part of the U.S. Navy's Installation Restoration Program, Phase I of the Contamination Assessment/Remedial Activities Investigation was conducted for the Firefighting School (Site 7), located on the Naval Air Station (NAS) in Pensacola, Florida. This work was performed by Ecology and Environment, Inc., under contract to the U.S. Navy, Southern Division, Naval Facilities Engineering Command.

Site 7 occupies the general vicinity of Building 1713 and is located approximately 400 feet southeast of Fort Redoubt (see figures 1-1 and 1-2). The area surrounding Building 1713, previously used for fire-fighting training exercises, is primarily wooded and unpaved. An unmaintained asphalt road leading to Redoubt Road bisects the site generally north to south. A mobile home park is located southeast and adjacent to the site. A 1983 Initial Assessment Study conducted by the Naval Energy and Environmental Support Activity indicates that a raised, open tank formerly existed on the west side of Building 1713. The tank was filled with water and topped with gasoline, which was ignited to provide a sustained fire for the training exercises. A fire-fighting tower is located approximately 25 feet southeast of Building 1713, and a large clearing, which may also have been used for fire-fighting exercises, is located east of the tower.

The site vicinity is topographically flat with a land surface elevation of approximately 20 to 25 feet above mean sea level. NAS Pensacola water supply well (Well No. 3) is located 0.25 mile south-southwest of the site. There are no existing monitoring wells at Site 7.

The purpose of the Phase I investigation was to identify principal areas and primary contaminants of concern at the site and to provide recommendations for subsequent phases of investigation. The Phase I fieldwork included a site reconnaissance, habitat/biota survey, surface

emissions survey and particulate air screenings, geophysical survey, utilities survey, soil headspace survey, the collection and analysis of soil and groundwater samples, and a hydrologic assessment.

Overall, significant levels of soil and groundwater contamination are absent across most of Site 7. However, some degree of soil and groundwater contamination may be present in the vicinity of the suspected former burn area in the central portion of the site. While generally low levels of metals are present in both the soil and groundwater, total recoverable petroleum hydrocarbons (TRPHs) are the primary soil contaminants and polynuclear aromatic hydrocarbons (PAHs) and possibly lead are the primary groundwater contaminants. A portion of the TRPH and PAH contamination is potentially associated with past on-site activities (fire-fighting training exercises). However, additional sources of contamination may be impacting Site 7.

Although soil samples collected across Site 7 display only low concentrations of metals, a single sample (S012A) collected along the southern boundary of the site exhibited the highest total metals concentration and an anomalous arsenic concentration. This suggests that an isolated source of metals may be present in this area. None of the metals concentrations exceed the respective Resource Conservation and Recovery Act Proposed Corrective Action Levels for soils.

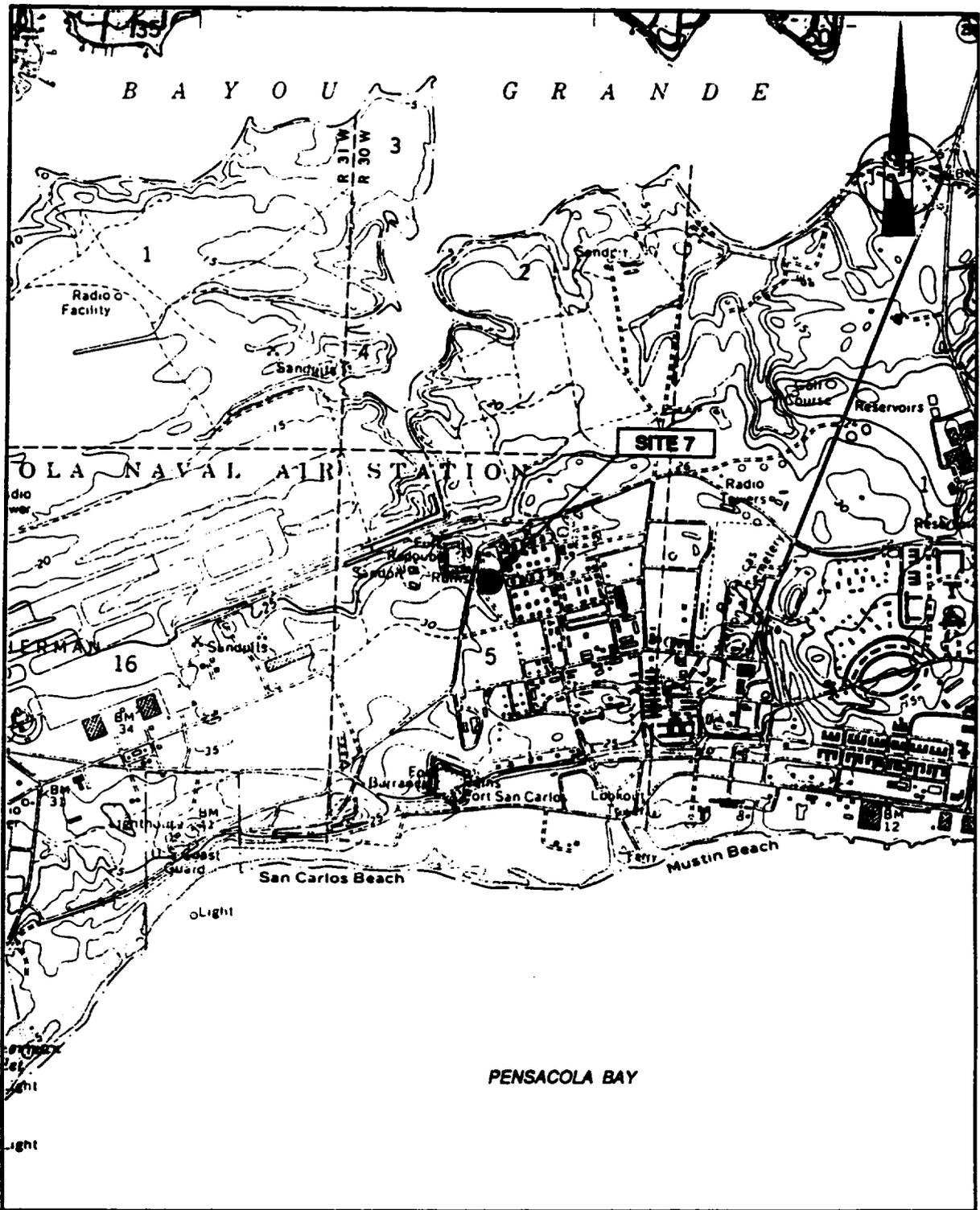
Generally, low levels of TRPHs are present in the soils across Site 7. These low levels may be associated with an ambient TRPH source (such as nearby automobile and/or aircraft traffic). However, relatively higher TRPH concentrations located in the central and northern portions of the site may be attributable to past fire-fighting training activities.

While groundwater metals concentrations (chromium and lead) above the Florida primary drinking water standards occur on Site 7, it is not apparent whether these concentrations represent actual contamination from on-site activities or are the result of groundwater samples with varying turbidities undergoing acid preservation without prior filtration. A significant concentration (above Florida Department of Environmental Regulation target cleanup levels) of PAHs was detected in the sample collected from the upgradient well (TW007) on site. This concentration appears to be related to past fire-fighting training activities.

## 1. INTRODUCTION

This Interim Data Report presents the findings of the Phase I investigation activities performed for Site 7, the Firefighting School, located at the Naval Air Station (NAS) in Pensacola, Escambia County, Florida. This report has been prepared by Ecology and Environment, Inc., (E & E) for the Southern Division, U.S. Navy, Naval Facilities Engineering Command, under Contract No. N62467-88-C-0200. The information presented in this report is based on information and file documents provided by the Navy and on information gathered during the Phase I fieldwork conducted on the site from April 1991 to August 1991. The investigation was conducted in accordance with the administrative documents prepared by E & E for this project, which include the June 1990 Project Management Plan, June 1990 Site Management Plan, July 1990 Generic Quality Assurance Project Plan (GQAPP), July 1990 General Health and Safety Plan, and June 1990 Contamination Assessment/Remedial Activities Investigation Work Plan--Group K with appended Site-Specific Health and Safety Plan and Site-Specific Quality Assurance Plan. All references to these documents in this report apply only to the 1990 versions.

Site 7 occupies the general vicinity of Building 1713 and is located approximately 400 feet southeast of Fort Redoubt (see figures 1-1 and 1-2). The area surrounding Building 1713, previously used for fire-fighting training exercises, is primarily wooded and unpaved. An unmaintained asphalt road leading to Redoubt Road bisects the site generally north to south. A mobile home park is located southeast and adjacent to the site. A 1983 Initial Assessment Study (IAS) conducted by the Naval Energy and Environmental Support Activity (NEESA) indicates that a raised, open tank formerly existed on the west side of Building 1713. The tank was formerly filled with water and topped with gasoline,



SOURCE: U.S.G.S. 7.5 Minute Series (Topographic) Quadrangles: Fort Barrancas, FL 1970 and West Pensacola, FL 1970, Photorevised 1987

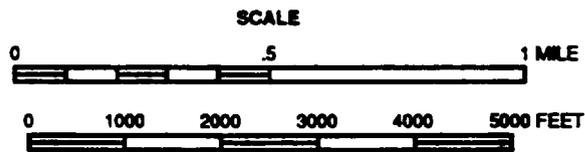
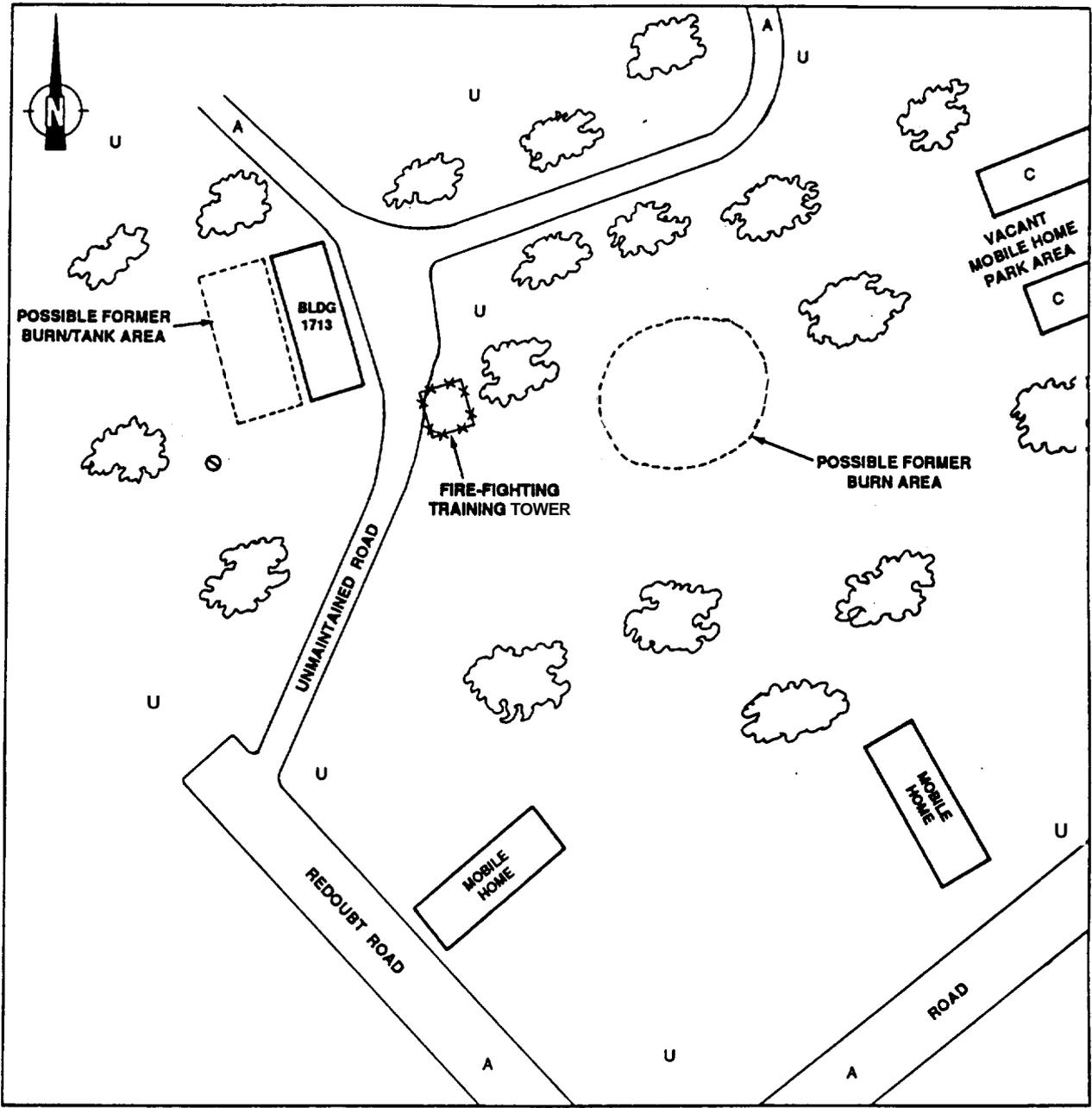
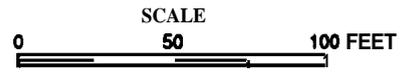


Figure 1-1  
LOCATION MAP — NAS PENSACOLA SITE 7



SOURCE: U.S. Naval Air Station, Pensacola, Florida 1991; Ecology and Environment, inc. 1991

<b>KEY:</b>	
	Building
	Trees
	Fence
	Manhole
	Asphalt Paved
	Concrete Paved
	Unpaved



**Figure 1-2**  
**SITE VICINITY MAP — NAS PENSACOLA SITE 7**

3330000

which was ignited to provide a sustained fire for the training exercises. A fire-fighting tower is located approximately 25 feet southeast of Building 1713, and a large clearing, which **may** also have been used for fire-fighting exercises, is located east of the tower.

The site vicinity is topographically flat with a land surface elevation of approximately 20 to 25 feet above mean sea level (MSL). NAS Pensacola water supply well (Well No. 3) is located 0.25 mile south-southwest of the site. There are no existing monitoring wells at Site 7. A more detailed description of the site history and physical setting is contained in the Group K work plan.

The purpose of the Phase I investigation was to identify principal areas and primary contaminants of concern at the site and to provide recommendations for subsequent phases of investigation. The Phase I fieldwork included a site reconnaissance, habitat/biota survey, surface emissions survey and particulate air screening, geophysical survey, utilities survey, soil headspace survey, and the collection and analysis of soil and groundwater samples. In addition, a hydrologic assessment, which included the determination of groundwater elevations, groundwater flow direction, and hydraulic gradient, was performed at the site. The recommendations for additional work at this site will be incorporated into the revised Group K work plan.

## 2. INVESTIGATION METHODOLOGY

### 2.1 AERIAL PHOTOGRAPH AND EXISTING DATA ANALYSIS

Prior to the initiation of fieldwork, E & E personnel examined all available aerial photographs of NAS Pensacola for past and present conditions, features, and developments that might have had direct relevance to the fieldwork methodology. The aerial photograph analysis task involved assembling and stereoscopically analyzing historical photographic imagery and topographic maps available for the site area. Photographs were scaled to allow analysis of past and present surface conditions, drainage, and land use. The aerial photographs used in the analysis are listed in Table 2-1. The photographs were analyzed to obtain information regarding the evolution of site features and activities that might have affected hydrologic conditions and to aid in the performance of such tasks as field reconnaissance and monitoring well placement.

### 2.2 SITE RECONNAISSANCE

A field reconnaissance survey was conducted on and around the site. Available aerial photographs and maps were used as guides in locating surface features. Visual inspections were made of surface conditions, cultural features, site vegetation, and surface drainage patterns. These observations of surface conditions on the site were used to update the site map. During the reconnaissance survey, the field team identified areas which presented the most suitable conditions for the establishment of survey grid baselines. The use of a grid system as part of the Phase I field investigation is discussed in the following sections.

The reconnaissance survey team utilized radiation and air monitoring equipment during walkovers of site areas, in accordance with

**Table 2-1**  
**PHOTOGRAPHS AND MAPS USED IN THE AERIAL PHOTOGRAPH ANALYSIS**  
**NAS PENNACOLA SITE 7**

Source	Photograph/Map Number	Date	Scale
Florida Department of Transportation	PD-3886-12-03	10/26/89	1:24,000
	PD-3618-12-03	11/21/86	1:24,000
	PD-3109-12-03	9/22/83	1:24,000
	PD-2684-10-04	3/9/81	1:24,000
	PD-1888-11-04	4/28/76	1:24,000
	PD-1331-11-03	5/4/73	1:24,000
	PD-868-4-09	4/6/70	1:24,000
	OD-616-8-04	3/25/68	1:24,000
	PD-285-6-01	10/8/64	1:12,000
	PMS-7054-2-1	10/12/61	1:24,000
U.S. Department of Agriculture	CPF-1V-78	1/3/58	1:24,000
	CPF-4H-17	1/22/51	1:24,000

14[NASP]UH8049:T0362/621/23

Source: Ecology and Environment, Inc., 1992.

Section 6.1.1 of the GQAPP. Areas with readings above background were located, flagged, and identified on a site map for future reference. All findings of the physical reconnaissance were mapped in detail and recorded in the field logbook.

### 2.3 HABITAT/BIOTA SURVEY

A habitat/biota survey was conducted for the site, as well as an evaluation of applicable literature pertaining to NAS Pensacola. During the physical reconnaissance, an E & E biologist/ecologist determined the on-site terrestrial and aquatic habitats and the surrounding habitats that could be affected by site conditions and/or investigation activities. During the walkover survey, rare, threatened, and endangered species and their potential habitats were identified, and general site conditions were evaluated regarding the site's ability to support viable populations of plants and animals.

### 2.4 OVA SURFACE EMISSIONS SURVEY AND PARTICULATE AIR **SCREENING**

Following the establishment of the survey grid network (discussed in Section 2.5), a surface emissions survey was conducted using organic vapor analyzer (OVA) air monitoring equipment. The survey was conducted in accordance with Section 6.1.1 of the GQAPP. Measurements were made at each established grid point, and readings were recorded in the field logbook. In addition, preliminary air screening was conducted with a particulate monitor to determine if the site represents a source of particulates in the air. The air screening was conducted in accordance with Section 6.1.1 of the GQAPP.

### 2.5 GEOPHYSICAL SURVEY

Magnetometer and electromagnetic terrain conductivity surveys were conducted at the site and surrounding local areas. The magnetometer survey was conducted using a Geometrics G-856AX proton precession magnetometer, which measures the Earth's total magnetic field near the ground surface in units of gammas. The electromagnetic terrain conductivity survey was conducted using a Geonics, Ltd., EM-31 instrument. (The electromagnetic survey is discussed in this report as the EM-31 survey.) The EM-31 conductivity instrument measures the

apparent terrain conductivity, allowing quick screening for changes in conductivity potentially associated with buried utilities or changes in soil conditions due to lithology, water content, or leachate plumes, if present. The EM-31 has a fixed intercoil spacing of 12.1 feet which yields an effective exploration depth of approximately 19.7 feet in the vertical dipole (deep) mode. Operation of the EM-31 in the horizontal dipole (shallow) mode yields an effective exploration depth of approximately 9.8 feet.

The survey effort required the initial establishment of a grid system over the study area. To construct the grid, the site was subdivided into two subsections so that separate grids (grids A and B) could be established. These two grids provided sufficient coverage of potentially contaminated areas. Each subsection was then gridded with spacings based on 25-foot centers. Baseline transects were established using a transit survey instrument and flagged at 25-foot intervals. Each grid system was completed relative to an arbitrarily established origin point using a Brunton compass and tape measure. Grid points were flagged and numbered as follows:

Grid X, S  $n_1$  + yy, E  $n_2$  + zz,

where:

X = Grid letter;

$n_1$  = Distance in 100-foot increments south (S) from the origin point;

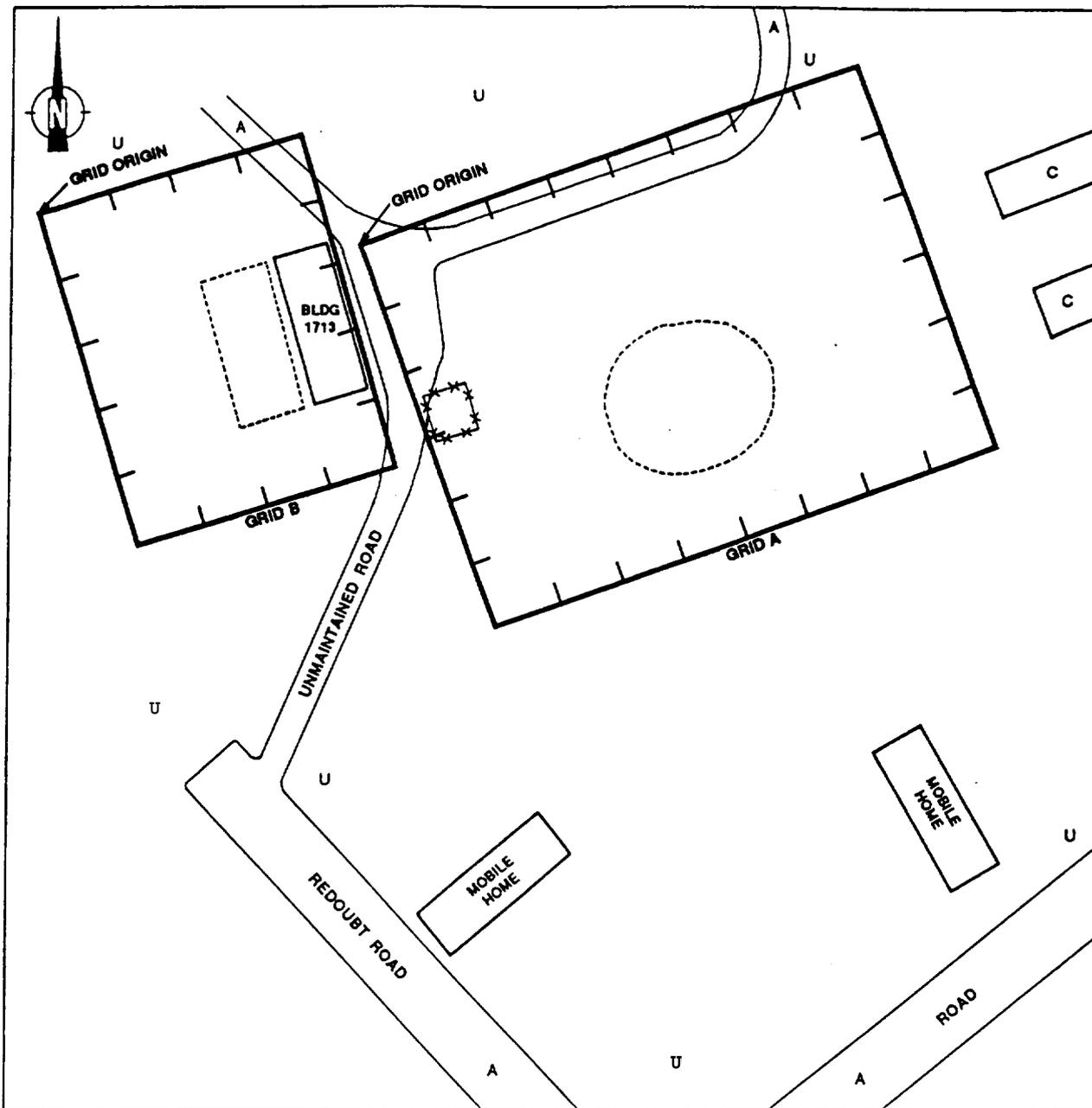
$n_2$  = Distance in 100-foot increments east (E) from the origin point;

yy = Additional distance in feet south from the nearest previously located  $n_1$  grid point; and

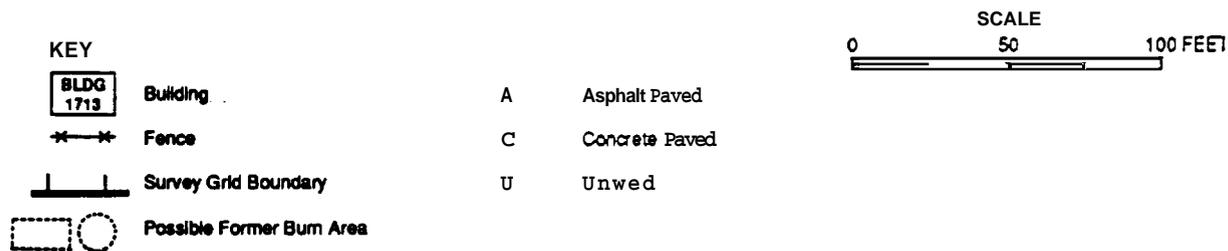
zz = Additional distance in feet east from the nearest previously located  $n_2$  grid point.

Figure 2-1 shows the location of the two survey grids and origin points established on Site 7 and surrounding areas.

The EM-31 and magnetometer surveys were conducted by obtaining measurements at each 25-foot interval grid point. The geophysical survey was performed in accordance with field methodologies and data interpretation techniques discussed in Sections 6.2.1 and 6.2.3 of the GQAPP.



SOURCE: U.S. Naval Air Station, Pensacola, Florida 1901; Ecology and Environment, Inc. 1991



**Figure 2-1**  
**SURVEY GRID MAP — NAS PENSACOLA SITE 7**

## 2.6 UTILITIES SURVEY

Prior to conducting any augering, boring, or drilling, E & E located all underground cables, pipes, utilities, and other subsurface features that could potentially be damaged, create a safety hazard, or otherwise hinder fieldwork. The appropriate authorities (e.g., NAS Pensacola Public Works and Southern Bell) were contacted to identify the location of all underground utilities in the site area. In addition, E & E examined available maps and documents to determine the potential presence of any other potentially hazardous subsurface features on site. The locations of all underground utilities and other obstructing features were marked with surveyor flags, fluorescent paint, or by other methods, as appropriate.

## 2.7 SOIL HEADSPACE SURVEY

To aid in the placement of soil borings and temporary monitoring wells and to provide information on the presence and extent of soil volatile organic compound (VOC) contamination, a soil headspace survey was conducted at Site 7, in accordance with the procedures described in Section 6.4 of the GQAPP. Eighty-eight soil borings were completed (one at each survey grid coordinate) using stainless steel hand augers. However, due to the presence of paved surfaces (along the western border of grid area A) and auger refusal in isolated locations (eastern portion of grid area A) several grid coordinate locations were not sampled (see Figure 3-2). Each boring was completed to a depth just penetrating the water table, which was 8 to 10 feet below land surface (BLS) across Site 7. Composite soil samples were collected at each boring location at 5-foot depth intervals. Each 5-foot interval was assigned a letter designation as follows: A interval = surface to 5 feet BLS; B interval = 5 to 10 feet BLS; and so on to the water table. Soil samples were collected from the bucket portion of the hand auger as the auger was withdrawn from the borehole.

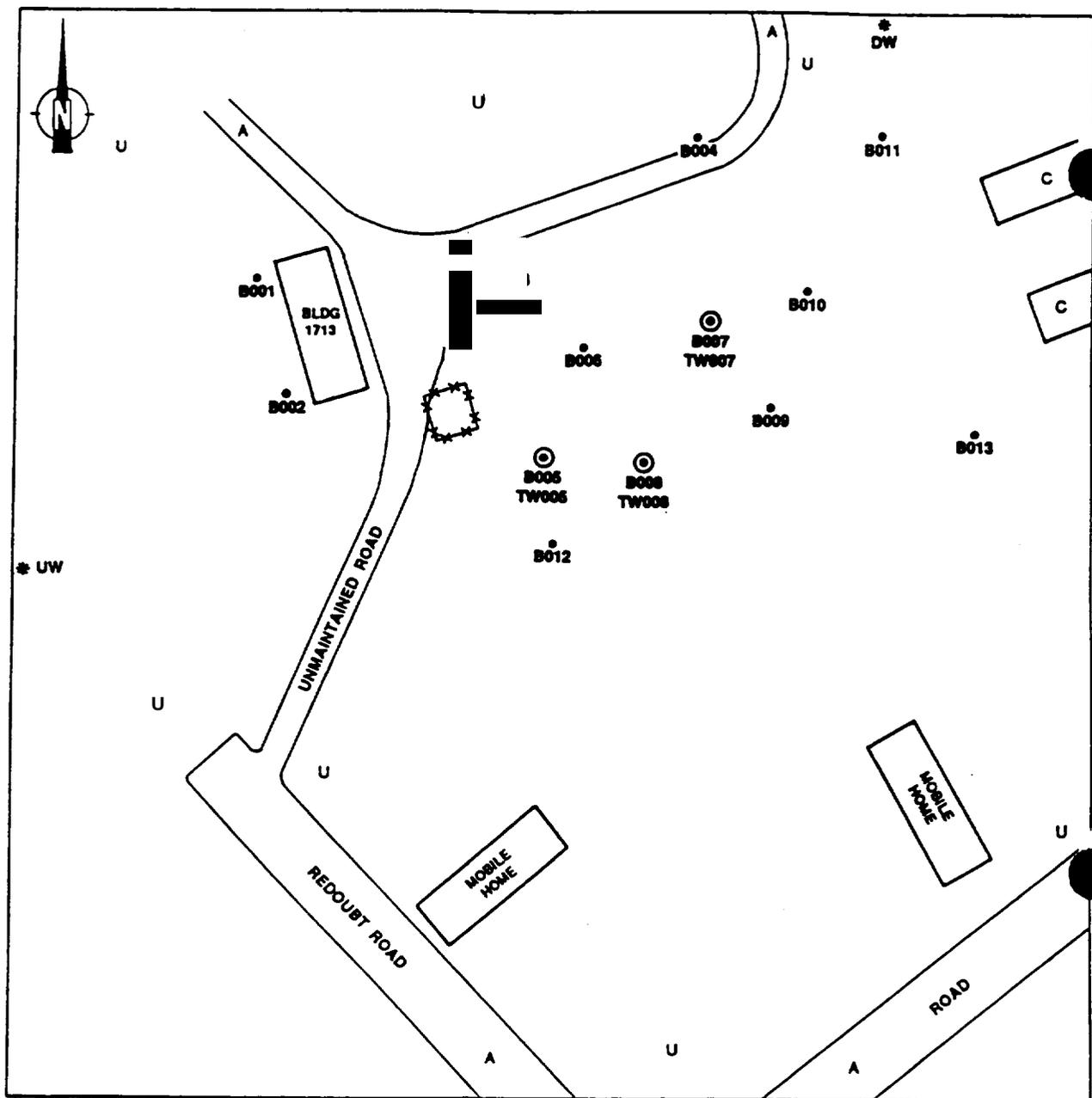
Sample aliquots were composited from each depth interval soil sample using stainless steel implements. The composite soil samples were then sealed in 16-ounce jars, leaving a headspace volume of approximately 50%.

After the samples had equilibrated to a temperature between approximately 20°C and 30°C, an OVA was employed to analyze soil vapors. Each composite sample was screened using the OVA in survey mode to determine the total organic vapor concentration in the soil. A volume of soil vapor from each sample was also injected into the granular activated carbon chamber of the OVA to screen for the presence of methane. In addition, an OVA reading was taken from the open borehole after each depth interval soil sample was collected. Upon collection of the last interval sample, the borehole was checked for free product with a Solinst oil/water interface probe.

Detailed records of the boring locations, soil lithologies, OVA readings (unfiltered and filtered for methane), and the temperature of each sample at the time of the OVA headspace analysis were recorded in the field logbook. Borehole cuttings were backfilled into the borehole upon completion of sampling. All soil sampling equipment was thoroughly decontaminated prior to conducting the soil headspace survey at Site 7 according to the procedures described in Section 6.10 of the GQAPP. In addition, drilling and sampling equipment used to collect each sample were decontaminated after the detection of elevated headspace readings, or after the collection of eight successive soil samples, whichever occurred first.

## 2.8 DATA ANALYSIS

Information obtained from the results of the above-described physical surveys was given primary consideration in the development of placement strategies for the Phase I soil borings and temporary monitoring wells. Prior to establishing the Phase I soil boring or temporary monitoring well locations, the results of the aerial photograph analysis, site reconnaissance, habitat/biota survey, surface emissions survey and particulate air screening, geophysical survey, utilities survey, and soil headspace survey were evaluated to identify potential areas of surface or subsurface contamination and areas of stressed vegetation. The proposed Phase I soil boring and temporary monitoring well locations, shown on Figure 14-2 of the work plan, were then revised, as appropriate, upon approval by Southern Division.



SOURCE: U.S. Naval Air Station, Pensacola, Florida 1991; Ecology and Environment, Inc. 1991



KEY:			
	Building		Soil Boring
	Fence		Temporary Monitoring Well
A	Asphalt Paved	B005	Soil Boring Number
C	Concrete Paved	TW005	Temporary Monitoring Well Number
U	Unpaved	*	Particulate Air Screening Location
		DW/UW	Downwind/Upwind

**Figure 2-2**  
**PARTICULATE AIR SCREENING, SOIL BORING, AND TEMPORARY MONITORING WELL LOCATIONS**  
**NAS PENSACOLA SITE 7**

## 2.9 SOIL BORINGS AND TEMPORARY MONITORING WELL INSTALLATION

Thirteen soil borings were completed at Site 7 (see Figure 2-2). At each boring location, samples were collected by compositing soils over 5-foot depth intervals from land surface to the water table. Each 5-foot depth interval was assigned a letter designation as follows: A interval = surface to 5 feet BLS; B interval = 5 to 10 feet BLS; and so on to the water table. Samples were collected using a solid-stem auger powered by a drill rig. Lithologic characteristics of the materials encountered in each borehole were recorded in the field logbook. All soil sampling, compositing, and lithologic logging activities were performed in accordance with Section 6.6 of the GQAPP. Equipment decontamination was performed in accordance with Section 6.10 of the GQAPP .

Temporary, stainless steel monitoring wells were installed in three of the 13 borings (see Figure 2-2). Each well was constructed with 5 feet of 0.01-inch-slot, continuously wire-wound, stainless steel screen, and installed to a depth that allowed the well screen to bracket the water table. The wells were installed using solid-stem augers powered by a drill rig. Lithologic characteristics of materials encountered during installation of the wells were recorded in the field logbook in accordance with Section 6.6 of the GQAPP. All equipment decontamination activities were performed in accordance with Section 6.10 of the GQAPP.

## 2.10 SOIL SAMPLING

Thirty-two soil samples, plus two duplicate samples, were collected as described in Section 2.9 (see Figure 2-2). All soil samples were shipped to E & E's Analytical Services Center (ASC) in Buffalo, New York, and analyzed for the screening parameters listed in Table 2-2.

## 2.11 GROUNDWATER SAMPLING

Three groundwater samples, plus one duplicate sample, were collected from the three temporary monitoring wells shown on Figure 2-2. Weather conditions; water levels; purge volumes; and groundwater pH, specific conductance, temperature, and visual description were recorded in the field logbook prior to sampling. In addition, prior to purging, each well was checked for the presence of floating and/or sinking

**Table 2-2**  
**SAMPLING AND ANALYTICAL SUMMARY**  
**NAS PENSACOLA SITE 7**

Medium	No. of Samples	Duplicates	Total	Analytical Suite <sup>a,b</sup>
Soil	32	2	34	A
Groundwater <sup>c</sup>	3	1	4	A

14(NASP)UH8049:T0362/622/28

**Key:**

<sup>a</sup>Analytical suite designation is as follows:

A = Volatile organic compounds (VOCs) including chlorobenzene, polynuclear aromatic hydrocarbons (PAHs), phenols, pesticides and total polychlorinated biphenyls (PCBs), total recoverable petroleum hydrocarbons (TRPHs), and metals (total, unfiltered).

<sup>b</sup>Specific constituents encompassed by the various chemical groups included within analytical suite A are identified in tables 9-1 through 9-4 of the 1990 GQAPP.

<sup>c</sup>Groundwater samples and analyses shown are for temporary wells only.

Source: Ecology and Environment, Inc., 1992.

immiscible hydrocarbons using a Solinst oil-water interface probe. Each groundwater sample was collected immediately following well purging. All well purging and sampling activities were performed in accordance with sections 6.8 and 6.11 of the GQAPP. Equipment decontamination was performed in accordance with Section 6.10 of the GQAPP. All groundwater samples collected from the temporary monitoring wells were shipped to E & E's ASC and analyzed for the screening parameters listed in Table 2-2.

#### 2.12 HYDROLOGIC ASSESSMENT

The hydrologic assessment of the site and surrounding areas included determination of water level elevations in the temporary monitoring wells. Wellhead top-of-casing (TOC) elevations for the temporary monitoring wells were measured relative to the top of a driven reference stake located adjacent to each well using a spirit level and tape measure. Following groundwater sampling and removal of the temporary monitoring wells, the elevations of the driven reference stakes were surveyed using an automatic level with reference to an arbitrary benchmark. This arbitrary benchmark was established due to the lack of a pre-existing survey benchmark in the Site 7 vicinity. The temporary benchmark was assigned an elevation of 30 feet above mean sea level (MSL) based on the 30-foot contour line that passes through the central portion of the site (U.S. Geological Survey [USGS] 1970a).

Wellhead TOC elevations and static water levels measured in each temporary monitoring well were referenced directly to the established arbitrary benchmark. Static water levels in the temporary monitoring wells were measured on July 11, 1991, over a 2-hour period. These water levels were used to determine the shallow aquifer water table elevation, shallow groundwater flow direction, and horizontal hydraulic gradient in the site vicinity.

#### 2.13 FIELD QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

All field tasks performed during the investigation were documented in the field logbooks according to the procedures specified in Section 7.2 of the GQAPP.

### 2.13.1 Field QA/QC Samples

Field QA/QC samples were prepared for all samples collected at the site during the Phase I investigation according to the procedures described in Section 6.12 of the GQAPP. Chain-of-custody was maintained for all samples collected, packaged, and shipped to E 6 E's ASC for analysis. Sample management was performed as specified in Section 7 of the GQAPP. The collected field QA/QC samples and corresponding analytical parameters are listed in Table 2-2.

### 2.13.2 Decontamination Procedures

All equipment used during field activities were decontaminated in accordance with Section 6.10 of the GQAPP.

## 2.14 INVESTIGATION-DERIVED WASTE MANAGEMENT

Excess soil generated during soil boring and temporary monitoring well installation activities was temporarily contained adjacent to the well or boring and then backfilled into the borehole after the auger flights or temporary well casings had been removed following sample collection. Any soil material remaining after completion of borehole backfilling was placed in 55-gallon drums, sealed, labeled, and moved to a central area on the site. Each drum has a painted-on label listing the site number and the type of material contained in the drum.

All water generated during development and purging of the temporary monitoring wells was temporarily contained adjacent to the well and then poured back into the well following collection of samples.

Potentially contaminated, personal protective clothing and disposable materials, wastes generated during decontamination activities, and other potentially contaminated, investigation-derived materials were placed in 55-gallon drums, labeled, and moved to a central area on the site. These drums were sealed and labeled "trash". All drummed investigation-derived materials were subsequently picked up and disposed of by NAS Pensacola.

### 3. RESULTS

#### 3.1 AERIAL **PHOTOGRAPH** AND EXISTING DATA ANALYSIS

The aerial photographs from 1951 to 1989 offer a limited view of Site 7. Very few site features are distinguishable on the photographs because the area is densely wooded and tree tops obstruct most land surfaces. In the aerial photographs, nondescript clearings are evident in the immediate site area, but none of these offered a significant view of Building 1713, the fire-fighting tower, or possible burn areas.

The October 8, 1964, aerial photograph shows that the intersection of Redoubt and Taylor roads (observed in a previous aerial photograph dated October 12, 1961), located just west of Site 7, had been modified. The modification prevents Redoubt Road from intersecting Taylor Road.

The April 28, 1976, aerial photograph shows that a mobile home park has been established immediately southeast of Site 7; this park still exists.

#### 3.2 SITE RECONNAISSANCE

During the site reconnaissance, a visual inspection was performed in the general vicinities of Building 1713, the fire-fighting training tower, and the possible former burn areas. HNu and Mini-Rad instruments were also used to generally survey these areas. All instrument readings were observed to be within the background levels established at Site 7, 1.0 ppm or less for the HNu and approximately 12 counts per minute (cpm) for the Mini-Rad meter.

Building 1713 is presently boarded up to prevent entry. A sewer manhole is located approximately 50 feet southwest of Building 1713. The possible former burn areas located west of Building 1713 and east of the fire tower (see Figure 1-2) are grass covered and appear

undisturbed. No stained soils or significantly stressed vegetation was observed at Site 7.

The immediate site area was observed to be heavily wooded with pines and oaks. A general clearing was identified east of the fire-fighting training tower that contained one of the possible former burn areas. A second sewer manhole is located at the eastern boundary of the site. Two concrete slabs were found along the eastern site boundary that are associated with the adjacent mobile home park (see Figure 1-2). Several mobile homes are currently located south and southeast of the site area.

### 3.3 HABITAT/BIOTA SURVEY

Appendix A presents a list of birds observed in the NAS Pensacola vicinity. The habitat/biota survey for Site 7 revealed that the entire site is a forested area with an open, park-like appearance. A sand pine scrub community habitat occupies the site. The canopy consists of sand pine (Pinus clausa), laurel oak (Quercus heais-phaerica), live oak (Q. virginiana), turkey oak (Q. laevis), black cherry (Prunus serotina), and longleaf pine (P. palustris). The subcanopy is extremely sparse and groundcover consists of winged sumac (Rhus copallina), lyre-leaved sage (Salvia lyrata), common spiderwort (Tradescantia ohicnsis), lantana (Lantana camera), ragweed (Ambrosia artemisiifolia), chickweed (Stellaria media), sorrel (Oxalis sp.), dandelion (Taraxacum officinale), cranesbill (Geranium carolinianum), bahia grass (Paspalum notatum), pennywort (Hydrocotyle bonariensis), virginia creeper (Parthenocissus quinquefolia), sourdock (Rumex hastatulus), Vahlenbergia marginata, toad-flax (Linaria canadensis), and elephant's foot (Blephantopus tomentosus).

Squirrels and other small mammals may use Site 7 for nesting or feeding. It is expected that faunal species from surrounding habitats use the site as a feeding area and a migration/traveling corridor. Birds commonly found in this habitat include bluejay, mockingbird, white-eyed vireo, tufted titmouse, and brown thrasher (see Appendix A).

No environmentally sensitive areas or threatened, rare, or endangered species were observed on Site 7. With the exception of an area of sparse vegetation located in the eastern possible former burn

area (see Figure 1-2), no stressed vegetation or visible impacts of contamination were observed on site. No aquatic habitats are associated with Site 7.

Habitats adjacent to Site 7 include a sand pine scrub community located west and on the opposite side of Taylor Road from the site. No evidence of contaminant migration from Site 7 was observed.

### 3.4 OVA **SURFACE EMISSIONS SURVEY AND PARTICULATE AIR SCREENING**

An OVA was used to monitor VOC surface emissions across the two survey grids (A and B) developed at Site 7 (see Figure 2-1). All measurements of organic vapors were found to be at or near the background level (<1.0 ppm) established at Site 7 during the survey. Appendix B presents the results of the OVA surface emissions survey.

On May 15, 1991, a Mini-Ram particulate air monitoring device was used to determine if Site 7 represents a source of particulates in the air (see Figure 2-2). Appendix B presents the results of the particulate air screening. During the test, a light wind was blowing from the west-southwest at approximately 1 to 2 miles per hour (mph). The Mini-Ram was placed upwind at a location approximately 150 feet west-southwest of Building 1713. After 15 minutes, the time weighted average (TWA) of particulates was 0.00 milligrams per cubic meter ( $\text{mg}/\text{m}^3$ ). The Mini-Ram was then placed directly downwind and approximately 255 feet east-northeast of Building 1713 (see Figure 2-2). After 15 minutes, the TWA was recorded as  $0.00 \text{ mg}/\text{m}^3$ . Based on these results, the central area of the site does not appear to be a source of particulates in the air.

### 3.5 **GEOPHYSICAL SURVEY**

The geophysical survey was conducted across the two gridded areas (A and B) on Site 7 (see Figure 2-1). Field data, including the geophysical survey readings for the proton magnetometer and the EM-31, and grid coordinates are presented in Appendix C. As noted in Appendix C, "NA" indicates that a geophysical survey reading was not obtained at the given location due to physical obstructions that prevented the surveyor from achieving the proper instrument orientation. Background

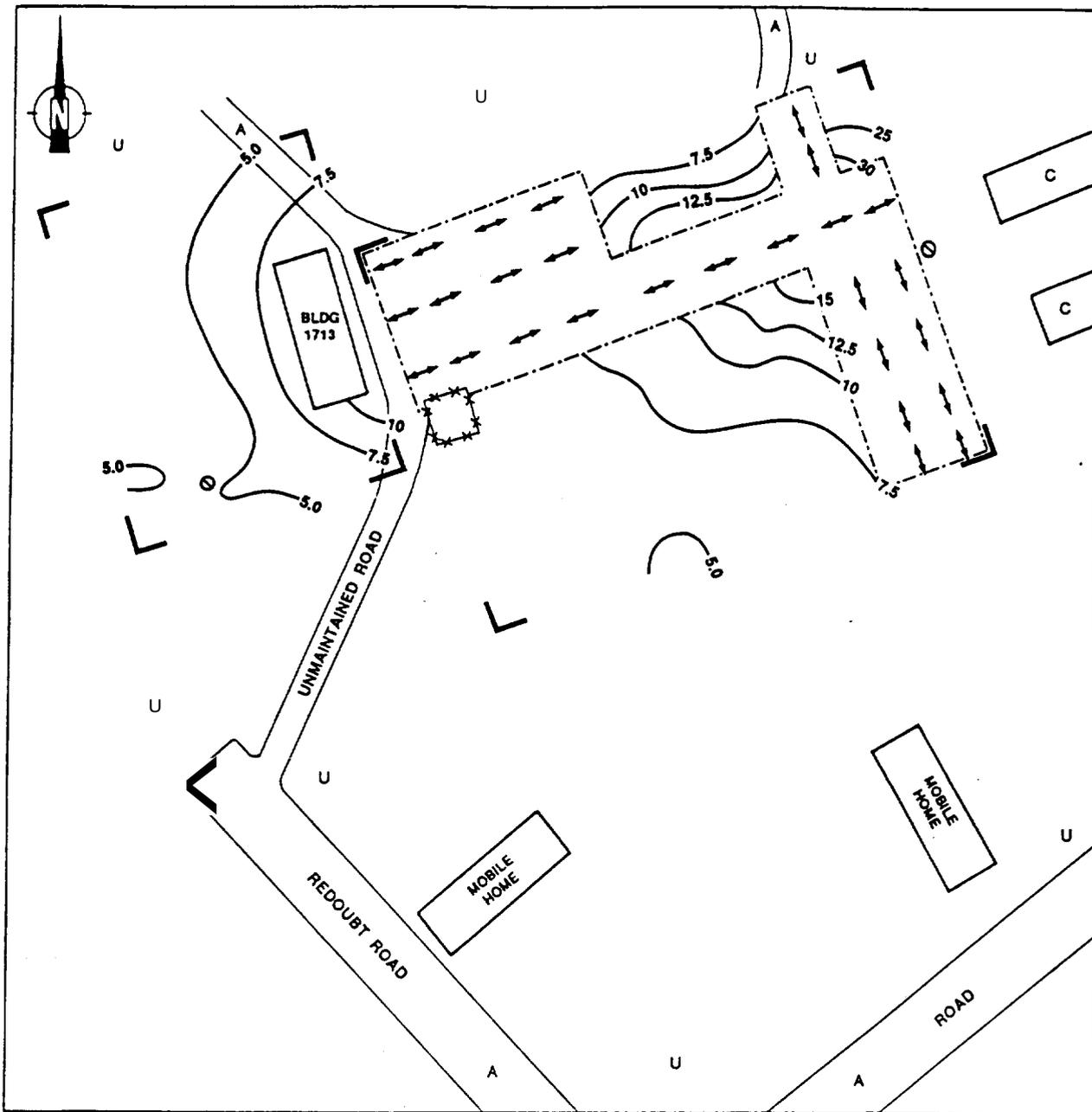
magnetometer and EM-31 readings were recorded at a base station established in the northeastern portion of NAS Pensacola on both days geophysical surveys were conducted (May 7 and 9, 1991).

The magnetometer survey was performed to locate buried metal objects possibly associated with past on-site activities. Background magnetometer readings recorded at the base station ranged from 50,139 to 50,164 gammas during the two days of the survey. Magnetometer readings recorded across Site 7 ranged from 48,369 to 52,126 gammas.

Several magnetometer readings significantly above or below the background range were obtained at Site 7. However, all of these readings are apparently associated with various on-site artificial structures (i.e., the fire-fighting training tower fence, an iron manhole cover, and Building 1713). No other anomalies or subsurface features of concern were identified by the magnetometer.

The EM-31 survey was performed by taking horizontal dipole (shallow) and vertical dipole (deep) readings in both a north-south and an east-west orientation at each survey grid point. The results of the EM-31 vertical dipole survey are presented on Figure 3-1. Background EM-31 readings recorded at the base station ranged from 2.4 to 5.5 millimhos per meter (mmhos/m) during the two days of this survey. EM-31 readings recorded across Site 7 ranged from 0 to 440 mmhos/m.

Linear anomalies corresponding to identified underground utility pathways are present in the area of survey grid A. Conductivity readings for linear anomalies characteristically vary significantly in magnitude from one orientation to the other (north-south versus east-west). Therefore, the numerical values (in mmhos/m) corresponding to these linear anomalies are not shown in the linear anomaly area on Figure 3-1. The highest EM-31 readings were recorded in the northeastern corner of grid area A at the intersection of two utility pathways and at grid points in grid area A adjacent to Building 1713. The physical structure or contents of Building 1713 (within survey grid B) are apparently influencing the electromagnetic conductivity field and are responsible for these elevated readings. In addition, an iron manhole cover located in the southwestern corner of grid area B appears



SOURCE: U.S. Naval Air Station, Pensacola, Florida 1991; Ecology and Environment, Inc. 1991



KEY:

BLDG  
1713

Building

✕—✕

Fence

⊙

Manhole

A

Asphalt Paved

C

Concrete Paved

L

Corner of Survey Grid

U

unpaved

5.0

Electromagnetic Conductivity Isopleth  
(millimhos/meter)

↔

Direction of Linear Anomaly

- - -

Area of Linear Anomalies

Figure 3-1  
EM-31 SURVEY MAP, VERTICAL DIPOLE — NAS PENSACOLA SITE 7

to be influencing a localized area within grid area B. No other significant anomalies or disturbances in the electromagnetic conductivity field were detected by the EM-31.

No significant anomalies indicative of subsurface contamination or potential contaminant sources (e.g., buried drums) were identified at Site 7. However, it should be noted that the presence of various artificial structures created substantial "noise" in the geophysical data. Therefore, although the presence of subsurface contamination or contaminant sources appears unlikely, the data "noise" may have interfered with the detection of contamination or contaminant sources.

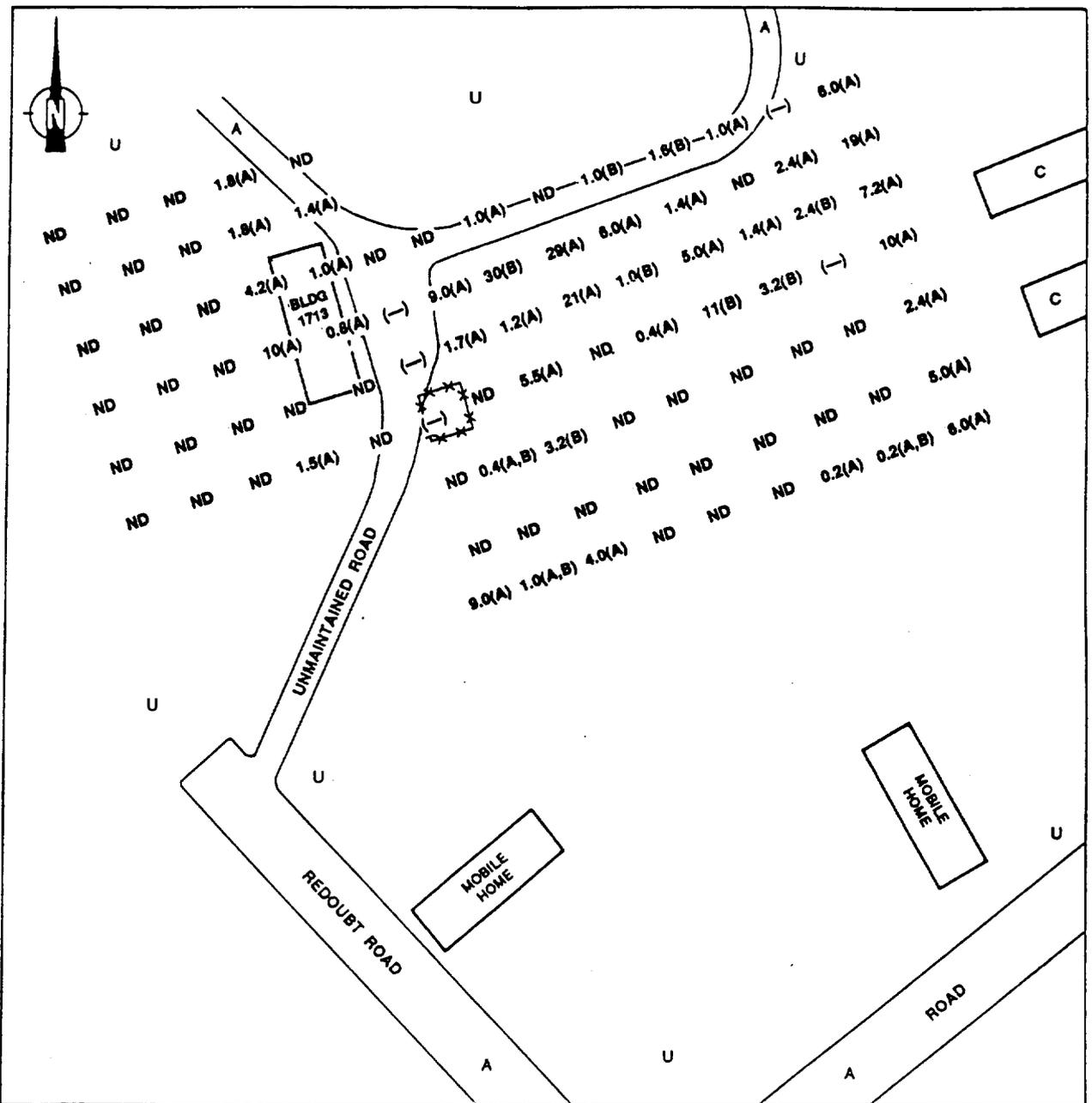
### 3.6 SOIL HEADSPACE SURVEY

A soil headspace survey was conducted at Site 7 across gridded areas A and B. Only two soil depth intervals were sampled at each grid point because the water table occurred between 8 and 10 feet BLS across Site 7. Figure 3-2 illustrates the highest non-methane OVA soil headspace reading obtained at each location and the sampling depth interval from which it was obtained. All soil headspace field data are presented in Appendix D. As noted in the appendix data, "NA" indicates that the soil headspace survey was not performed at a given location due to auger refusal or the existence of paved surfaces.

Headspace readings across Site 7 were generally low, ranging from 1 to 30 ppm across both sampling intervals. In general, the highest headspace readings were observed in the A sampling interval. In addition, elevated open-borehole OVA readings were recorded at the locations where elevated headspace readings were obtained.

The highest headspace readings observed in grid area A were in two locations: approximately 50 feet northwest of the possible former burn area (east of Building 1713) and approximately 100 feet northeast of the same burn area (see figures 1-2 and 3-2). Relatively high headspace readings were also observed along the west side of Building 1713 in grid area B (see Figure 3-2).

The results of the soil headspace survey at Site 7 were used to modify the proposed soil boring and monitoring well locations, upon approval by Southern Division. However, as will be discussed in Section 3.8, the significance of the elevated readings is not known as none of



SOURCE: U.S. Naval Air Station, Pensacola, Florida 1991; Ecology and Environment, Inc. 1991



KEY:			
	Building	U	Unpaved
	Fence	1.4(A)	Highest Non-Methane Soil Headspace Reading and Sample Interval at Each Location.
A	Asphalt Paved	ND	Not Detected
C	Concrete Paved	(-)	Not Sampled

Figure 3-2  
SOIL HEADSPACE SURVEY MAP — NAS PENSACOLA SITE 7

the soil samples collected at Site 7 contained VOCs, and no correlation appears to exist between headspace readings and detected total recoverable petroleum hydrocarbon (TRPH) concentrations.

### 3.7 HYDROLOGIC ASSESSMENT

#### 3.7.1 Shallow Subsurface Lithology

Appendix E presents the lithologic logs for the 13 soil borings completed at Site 7. Based on information collected during completion of the borings, the shallow subsurface lithology at Site 7 can be generally characterized as 0.2 to 1.0 foot BLS of dark brown to gray, fine-grained, silty-sandy soils, underlain by a medium brown to tan, fine- to medium-grained quartz sand. In general, the sand becomes a light tan to buff white, fine- to medium-grained quartz sand at the water table (approximately 8 to 12 feet BLS). At soil boring B004, a red clayey fill dirt, apparently associated with a previous road bed, was encountered at a depth of 0 to 1 foot BLS. OVA readings taken in the open boreholes during drilling at Site 7 ranged from 2 to 160 ppm. These readings are also presented in Appendix E.

As noted in Appendix E, open-borehole HNu readings up to 160 ppm were recorded during boring installation activities. However, the significance of these readings is not known as no VOCs or polynuclear aromatic hydrocarbons (PAHs) were detected in any of the Site 7 soil samples (see also Section 3.8.1).

#### 3.7.2 Water Levels and Groundwater Flow

Table 3-1 presents the water level elevations measured in the temporary monitoring wells at Site 7. Based on the water level elevation measurements obtained from the temporary monitoring wells, the depth to the water table across the central portion of the site ranges from 7.98 feet BLS (in TW008) to 8.65 feet BLS (in TW005; see Table 3-1 and Figure 3-3).

Figure 3-3 illustrates the water level elevations and the groundwater flow direction, based on the temporary monitoring well data, in the upper portion of the surficial zone of the Sand-and-Gravel Aquifer at Site 7. Based on the water level elevations, the direction of shallow groundwater flow is generally to the southwest (see Figure 3-3).

Table 3-1

TEMPORARY MONITORING WELL CONSTRUCTION INFORMATION  
AND WATER LEVEL ELEVATIONS  
NAS PENSACOLA SITE 7

Well Number	Total Depth (BLS)	Depth to Water (BLS)	Depth to Water BTOC	TOC Elevation	Water Level Elevation	Date Measured
TW005	12.55	8.65	11.00	31.52	20.52	7/11/91
TW007	12.45	0.15	10.70	31.78	21.08	7/11/91
TW008	12.40	7.90	10.58	31.26	20.68	7/11/91

14[NASP]UH8049:T0362/640/22

Notes:

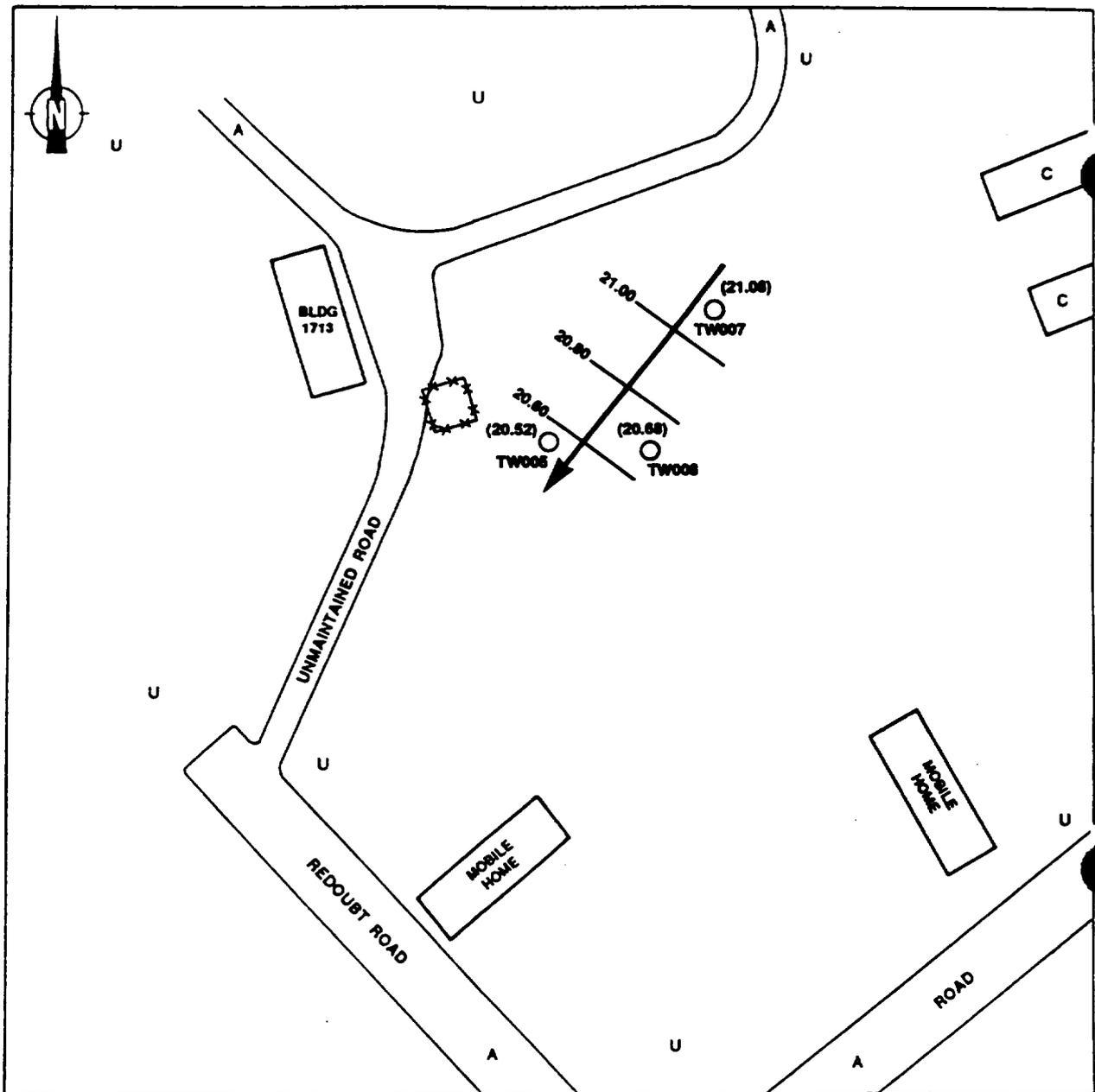
All depths are in feet; all elevations are in feet referenced to mean sea level (MSL); and all wells were constructed of 2-inch diameter stainless steel with 5 feet of 0.01-inch screen.

Key:

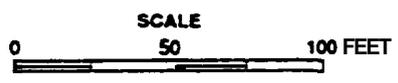
BLS = Below land surface.  
TOC = Top of casing.  
BTOC = Below top of casing.

Source: Ecology and Environment, Inc., 1992.

[Bold items enclosed in brackets denote changes to last version of document]



SOURCE: U.S. Naval Air Station, Pensacola, Florida 1991; Ecology and Environment, Inc. 1991



- KEY:**
- |           |                |         |   |
|-----------|----------------|---------|---|
| BLDG 1713 | Building       | TW007   | Temporary Monitoring Well                       |
|           | Fence          | (20.68) | Water Level Elevation (feet above MSL)          |
| A         | Asphalt Paved  | 21.00 — | Water Level Elevation Isopleth (feet above MSL) |
| C         | Concrete Paved |         | Groundwater Flow Direction                      |
| U         | Unpaved        |         |   |

Figure 3 9  
SURFICIAL ZONE WATER LEVEL ELEVATIONS — NAS PENSACOLA SITE 7

The horizontal hydraulic gradient is approximately 0.0071. Given that no surface water bodies or distinct drainage features are located near Site 7, it is not apparent what is controlling shallow groundwater flow. However, the groundwater flow direction and gradient appear consistent with local topography which was observed sloping gently to the south-southwest.

### **3.8 CHEMICAL ANALYSES**

The following section presents the results of the laboratory analyses of the Site 7 soil and groundwater samples. The specific analytical parameters and parameter groups are listed or referenced in Table 2-2.

#### **3.8.1 Soil**

Table 3-2 summarizes the analytical screening results for soil samples collected at Site 7, and presents the Resource Conservation and Recovery Act (RCRA) Proposed Corrective Action Levels (PCALs) for soil contamination (EPA 1990). Figure 2-2 shows the soil boring locations. The complete analytical screening results for soil samples are presented in Appendix F.

The depth to the water table observed during soil boring activities ranged from approximately 9 feet BLS (at borings B005, B007, B008, B012, and B013) to 12 feet BLS (at B003). Due to this variance, soil samples were collected over the A, B, and C depth intervals at borings B001, B002, B003, B004, B006, and B011 but only over the A and B depth intervals at borings B005, B007, B008, B009, B010, B012, and B013. Soil sample numbers correspond to the number of the soil boring and the depth interval from which they were collected. For example, sample S002A was collected from boring B002 over the A depth interval. However, parameter concentrations are generally discussed for soil borings rather than for soil sample depth intervals. When present, trends in the parameter concentration data that are relevant to a given depth interval are noted and discussed.

In general, low levels of metals and low to moderate levels of TRPHs were detected in one or more of the soil samples collected at Site 7. However, relatively elevated TRPH concentrations were only detected

Table 3-2  
 SUMMARY ANALYTICAL SCREENING RESULTS FOR SOIL SAMPLES  
 NAS PENSACOLA SITE 7  
 (All results in mg/kg)

Parameter	Detection Limit	Sample Number (Location and Depth Interval)							RCRA PCAL
		P7S001A (B001A)	P7S001B (80018)	P7S001C (B001C)	P7S002A (B002A)	P7S002B (80018)	P7S002BD <sup>A</sup> (B002B)	P7S002C (B002C)	
Arsenic	6.0	--	--	--	--	--	--	--	80
Chromium	1.0	--	--	--	--	1.5	1.4	1.1	400 <sup>C</sup>
Zinc	2.0	--	2.7	--	--	--	--	--	16,000
Lead	4.0	--	--	--	--	8.9	--	--	
TRPHs	5.0	5.2	7.0	13.0	8.9	11.0	5.6	7.9	

14[NASP]UH8049:T0362/612/6

Key at end of table.

[Bold items enclosed in brackets denote  
 changes to last version of document]

**Table 3-2 (Cont.)**

Parameter	Detection Limit	Sample Number (Location and Depth Interval)							RCRA PCAL
		P7S003A (B003A)	P7S003B (B003B)	P7S003C (B003C)	P7S004A (B004A)	P7S004B (B004B)	P7S004C (B004C)	P7S005A (B005A)	
Arsenic	6.0	--	--	--	--	--	--	--	80
Chromium	1.0	<b>1.5</b>	1.1	--	--	--	--	--	400 <sup>C</sup>
Zinc	2.0	--	3.3	--	--	--	4.8	6.8	16,000
Lead	4.0	--	--	--	--	--	--	--	
TRPHs	5.0	--	--	--	5.2	19.0	54.0	--	

Key at end of table.

14[NASP]UH8049:T0362/612/6

W-1

(Bold items enclosed in brackets denote changes to last version of document)

Table 3-2 (Cont.)

Parameter	Detection Limit	Sample Number (Location and Depth Interval)							RCRA PCAL
		P7S005B (B005B)	P7S006A (B006A)	P7S006AD <sup>b</sup> (B006A)	P7S006B (B006B)	P7S006C (B006C)	P7S007A (B007A)	P7S007B (B007B)	
Arsenic	6.0	--	--	--	--	--	--	--	80
Chromium	1.0	--	1.0	--	--	--	--	--	400 <sup>c</sup>
Zinc	2.0	--	2.3	--	--	--	2.4	--	16,000
Lead	4.0	--	--	--	--	--	--	--	
TRPHs	5.0	--	77.0	85.0	57.0	62.0	--	--	

14[NASP]UH8049:T0362/612/6

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Table 3-2 (Cont.)

Parameter	Detection Limit	Sample Number (Location and Depth Interval)							RCRA PCAL
		P7S008A (B008A)	P7S008B (B008B)	P7S009A (B009A)	P7S009B (B009B)	P7S010A (B010A)	P7S010B (B010B)	P7S011A (B011A)	
Arsonic	6.0	--	--	--	--	--	--	--	80
Chromium	1.0	<b>1.6</b>	--	--	--	--	--	1.6	400 <sup>c</sup>
Zinc	2.0	--	<b>3.6</b>	<b>2.8</b>	<b>2.7</b>	--	--	3.4	16,000
Lead	4.0	--	--	<b>14.0</b>	--	--	--	--	
TRPHs	5.0	5.0	--	120.0	87.0	22.0	19.0	21.0	

Key at end of table.

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3-15

[Bold items enclosed in brackets denote changes to last version of document]

Table 3-2 (Cont.)

Parameter	Detection Limit	Sample Number (Location and Depth Interval)						RCRA PCAL
		P7S011B (B011B)	P7S011C (B011C)	P7S012A (B012A)	P7S012B (B012B)	P7S013A (B013A)	P7S013B (B013B)	
Arsonic	6.0	--	--	12.0	--	--	--	80
Chromium	1.0	--	--	1.1	--	--	--	400 <sup>c</sup>
zinc	2.0	--	--	2.4	--	--	--	16,000
Lead	4.0	--	--	11	--	--	--	
TRPHs	5.0	9.5	5.2	--	--	--	--	

14[NASP]UH8049:T0362/612/6

## Key:

<sup>a</sup> Duplicate of sample P7S002B.<sup>b</sup> Duplicate of sample P7S006A.<sup>c</sup> This PCAL is for hexavalent chromium.RCRA PCAL = Resource Conservation and Recovery Act Proposed Corrective Action Level.  
Dash (--) indicates compound not detected.

Source: Ecology and Environment, Inc., 1992.

in two areas: in the vicinity of the suspected former burn area in the central portion of the site and near the northern site boundary. No VOCs, PAHs, phenols, polychlorinated biphenyls (PCBs), or pesticides were detected in any of the Site 7 soil samples.

### **Metals**

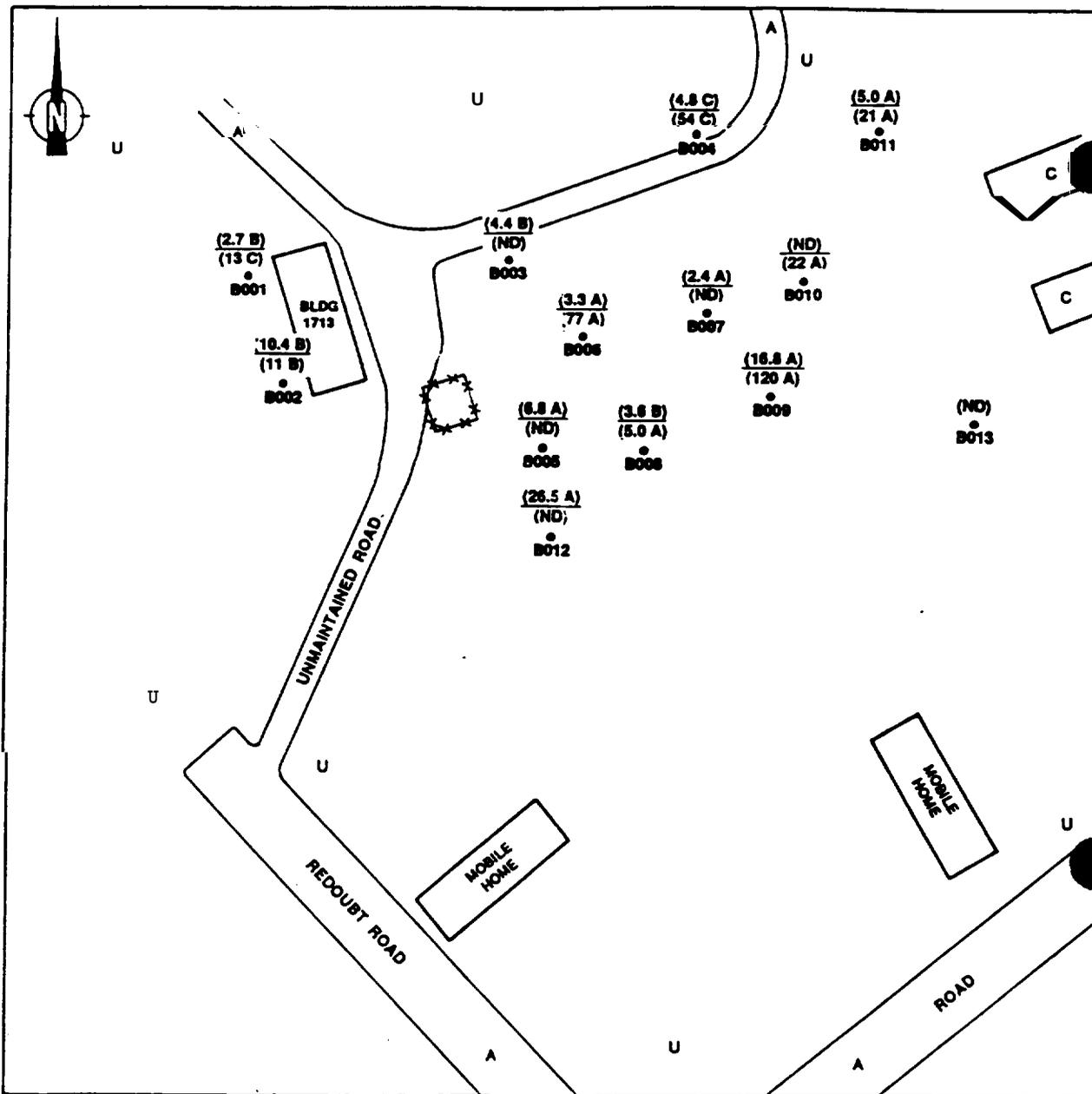
Arsenic, chromium, zinc, and lead were detected in soil samples collected at Site 7. Figure 3-4 shows the highest total metals concentration detected at each boring location across Site 7 as well as the corresponding sampling depth interval. One or more soil samples from each soil boring, except borings B010 and B013, exhibited low total metals concentrations. No metals concentrations exceeded the respective RCRA PCALs (see Table 3-2); there is no RCRA PCAL established for lead. Soil samples collected from borings B010 and B013 did not exhibit metals concentrations above the detection limits. The detection of metals was generally widespread across the site, and the concentrations were detected in samples collected from all depth intervals. However, there is no clear pattern to the lateral or vertical distribution of metals concentrations.

Chromium was the most frequently detected metal, occurring in eight soil samples collected at six boring locations. The maximum concentration was 1.6 mg/kg (in samples S008A and S011A). Zinc was detected in 11 soil samples collected at 10 boring locations; the maximum concentration of zinc was 6.8 mg/kg (in sample S005A). Lead was detected in three soil samples collected at three boring locations; the maximum concentration of lead was 14 mg/kg (in sample S009A).

Arsenic was detected in only one soil sample (S012A) at 12 mg/kg. Sample S012A also contained the highest total metals concentration (26.5 mg/kg).

### **TRPHs**

TRPHs were detected in samples collected from eight of the 13 soil borings at Site 7. Figure 3-4 shows the distribution of the highest TRPH concentration detected at each boring location on Site 7 as well as the depth interval from which it was collected. As indicated, low to moderate levels of TRPHs are present across the site. When detected at



SOURCE: U.S. Naval Air Station, Pensacola, Florida 1991; Ecology and Environment, Inc. 1991



KEY:



Building



Fence

A

Asphalt Paved

C

Concrete Paved

U

Unpaved

(ND)

Not Detected

(4.8 C)

Highest Total Metals Concentration

(54 C)

(mg/kg) and Corresponding Sample Interval

Highest TRPH Concentration

(mg/kg) and Corresponding Sample Interval



Soil Boring

Figure 3-4  
 HIGHEST TOTAL METALS AND TRPH CONCENTRATIONS DETECTED  
 AT EACH SOIL BORING LOCATION — NAS PENSACOLA SITE 7

a given boring location, TRPH concentrations were present in all depth intervals sampled, except boring B008 from which only the A-interval sample contained detectable TRPHs.

Concentrations of TRPHs detected in soil samples collected across Site 7 ranged from 5 mg/kg in sample S008A to 120 mg/kg in sample S009A. The highest TRPH concentrations (77 mg/kg, 87 mg/kg, and 120 mg/kg) were detected in soil samples S006A, S009B, and S009A, respectively, collected from borings located in the central portion of the site in the vicinity of the suspected former burn area. In general, soil samples collected in the central (borings B006, B008, B009, and B010) and northeast (B011) portions of the site exhibited the highest TRPH concentrations in the A sampling interval. In contrast, soil samples collected west of Building 1713 (borings B001 and B002) and north of the unmaintained road (boring B004) exhibited the highest TRPH concentrations in the B and C sampling intervals.

There does not appear to be a distinct correlation between the occurrences of TRPHs and metals in Site 7 soil samples, except that the highest TRPH and highest lead concentration occurred in the same sample (S009A). However, this occurrence appears to be relatively insignificant as the lead concentration detected was low (14 mg/kg), and as lead was only detected in three of the 32 soil samples collected across the site. Furthermore, there also does not appear to be any significant correlation between the occurrence of TRPHs and soil headspace readings.

### 3.8.2 Groundwater Field Parameters

Table 3-3 lists the groundwater temperature, pH, and specific conductance values measured in the groundwater samples collected from the temporary monitoring wells at Site 7. The field parameter measurements for these wells are within the reported range of values for ambient groundwater in Escambia County (Clemens *et al.* 1989). No immiscible hydrocarbons were observed in any of the wells. Appendix E presents the temporary monitoring well information, including field parameter and groundwater elevation data.

**Table 3-3**  
**GROUNDWATER FIELD PARAMETERS**  
**NAS PENSACOLA SITE 7**

<b>Well Number</b>	<b>Temperature (°C)</b>	<b>pH (units)</b>	<b>Specific Conductance (µmhos/cm)</b>	<b>Date Measured</b>
<b>TW005</b>	24	6.1	290	7/11/91
<b>TW007</b>	24	6.1	250	7/11/91
<b>TW008</b>	23	6.1	324	7/11/91

**14[NASP]UH8049:T0362/641/26**

Source: Ecology and Environment, Inc., 1992.

## Analytical Screening Parameters

Table 3-4 summarizes the analytical results for the groundwater samples collected from the three temporary wells installed on Site 7. Figure 2-2 shows the temporary well locations at Site 7. The complete analytical screening results for the groundwater samples are presented in Appendix G. As noted in Appendix E, groundwater samples collected from temporary well TW007 exhibited a slight petroleum odor which is consistent with the detection of elevated PAH concentrations in these samples (see discussion below).

In general, one or more of the temporary well groundwater samples collected at Site 7 exhibited elevated concentrations of metals and PAHs and detectable levels of phenols. As discussed in Section 3.10.1, the elevated metals concentrations may reflect leaching or dissolution of aquifer matrix sediments entrained in these unfiltered samples by the acid preservation rather than actual groundwater contamination. No VOCs, pesticides, PCBs, or TRPHs were detected in any of the temporary monitoring well groundwater samples.

**Metals.** Concentrations of chromium, zinc, lead, cadmium, and copper were detected in groundwater samples collected from the three temporary monitoring wells at Site 7. Lead and chromium were detected at levels exceeding the respective Florida Primary Drinking Water Standards (FPDWSs) of 50 micrograms per liter ( $\mu\text{g/L}$ ; FDER 1991; see Table 3-4). Figure 3-5 shows the distribution of lead and chromium concentrations detected in groundwater samples collected from the temporary monitoring wells at Site 7.

The highest concentrations of lead and chromium occurred in sample GW005 collected from temporary well TW005. In addition, the concentrations of chromium ( $85 \mu\text{g/L}$ ) and lead ( $130 \mu\text{g/L}$ ) detected in sample GW005 exceeded the respective FPDWSs of  $50 \mu\text{g/L}$ . However, the elevated lead concentration was not confirmed by the duplicate groundwater sample GW005D. The concentration of cadmium detected in sample GW007 collected from well TW007 is equal to the FPDWS for cadmium ( $10 \mu\text{g/L}$ ). No other metal concentration exceeded either primary or secondary Florida drinking water standards.

Table 3-4

**SUMMARY ANALYTICAL SCREENING RESULTS FOR GROUNDWATER SAMPLES  
(FROM TEMPORARY MONITORING WELLS)  
HAS PENSACOLA SITE 7  
(All results in µg/L, unless noted)**

Parameter	Detection Limit	Sample Number (Well Number)				FPDWS/ FSDWS
		P7GW005 (TW005)	P7GW005D <sup>a</sup> (TW005)	P7GW007 (TW007)	P7GW008 (TW008)	
Chromium	10	<b>85</b>	65	--	40	<b>50</b>
Zinc	20	660	650	260	610	5,000
Lead	40	130	--	--	--	<b>50</b>
cadmium	<b>5</b>	--	--	10	--	10
Copper	25	53	42	--	33	1,000
Total PAHs as Benzo-a-pyren	100	--	--	190	--	
Phenols as Trichlorophenol	100	--	--	(L)	(L)	

14[NASP]UH6049:T0362/611/23

**Key:**

<sup>a</sup>Duplicate of sample P7GW005.

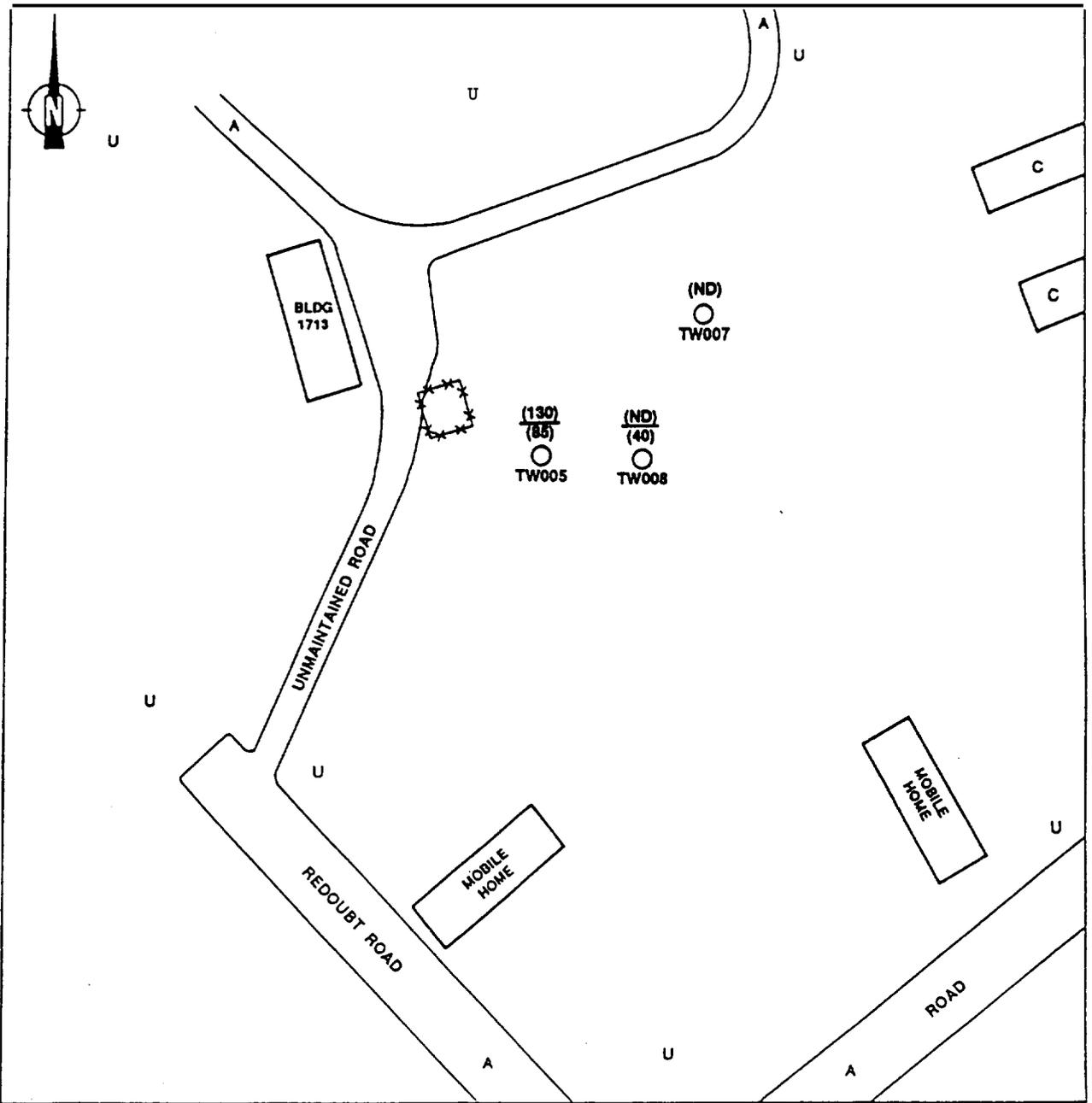
FPDWS = Florida Primary Drinking Water Standard.  
FSDWS = Florida Secondary Drinking Water Standard.

Dash (--) indicates compound not detected.

**Qualifier:**

(L) = Present below stated detection limit.

Source: Ecology and Environment, Inc., 1992.



SOURCE: U.S. Naval AC Station, Pensacola, Florida 1991; Ecology and Environment, Inc. 1991

SCALE  
0 50 100 FEET

- KEY:**
- |  |                |              |                                |
|--|----------------|--------------|--------------------------------|
|  | Building       |              | Temporary Monitoring Well      |
|  | Fence          | <u>(130)</u> | Lead Concentrations (ug/L)     |
|  | Asphalt Paved  | <u>(85)</u>  | Chromium Concentrations (ug/L) |
|  | Concrete Paved | (ND)         | Not Detected                   |
|  | Unpaved        |              |                                |

**Figure 3-5**  
**LEAD AND CHROMIUM CONCENTRATIONS IN GROUNDWATER SAMPLES**  
**NAS PENSACOLA SITE 7**

940010

PAHs and Phenols. Figure 3-6 shows the distribution of PAE and phenol concentrations present in groundwater samples collected at Site 7. As shown, PAHs were detected (at 190 µg/L) only in groundwater sample GW007 collected from temporary well TW007. This concentration exceeds both of the potentially applicable Florida Department of Environmental Regulation [FDER] target cleanup levels for petroleum-contaminated groundwater: total naphthalenes = 100 µg/L; and total PAHs (excluding naphthalenes) = 10 µg/L (Chapter 17-770, PAC). Trace concentrations of phenols, present below the detection limit of 100 µg/L, were identified in groundwater samples GW007 and GW008, collected from temporary wells TW007 and TW008, respectively.

### 3.9 CONTAMINATION DISTRIBUTION/SOURCE DISCUSSION

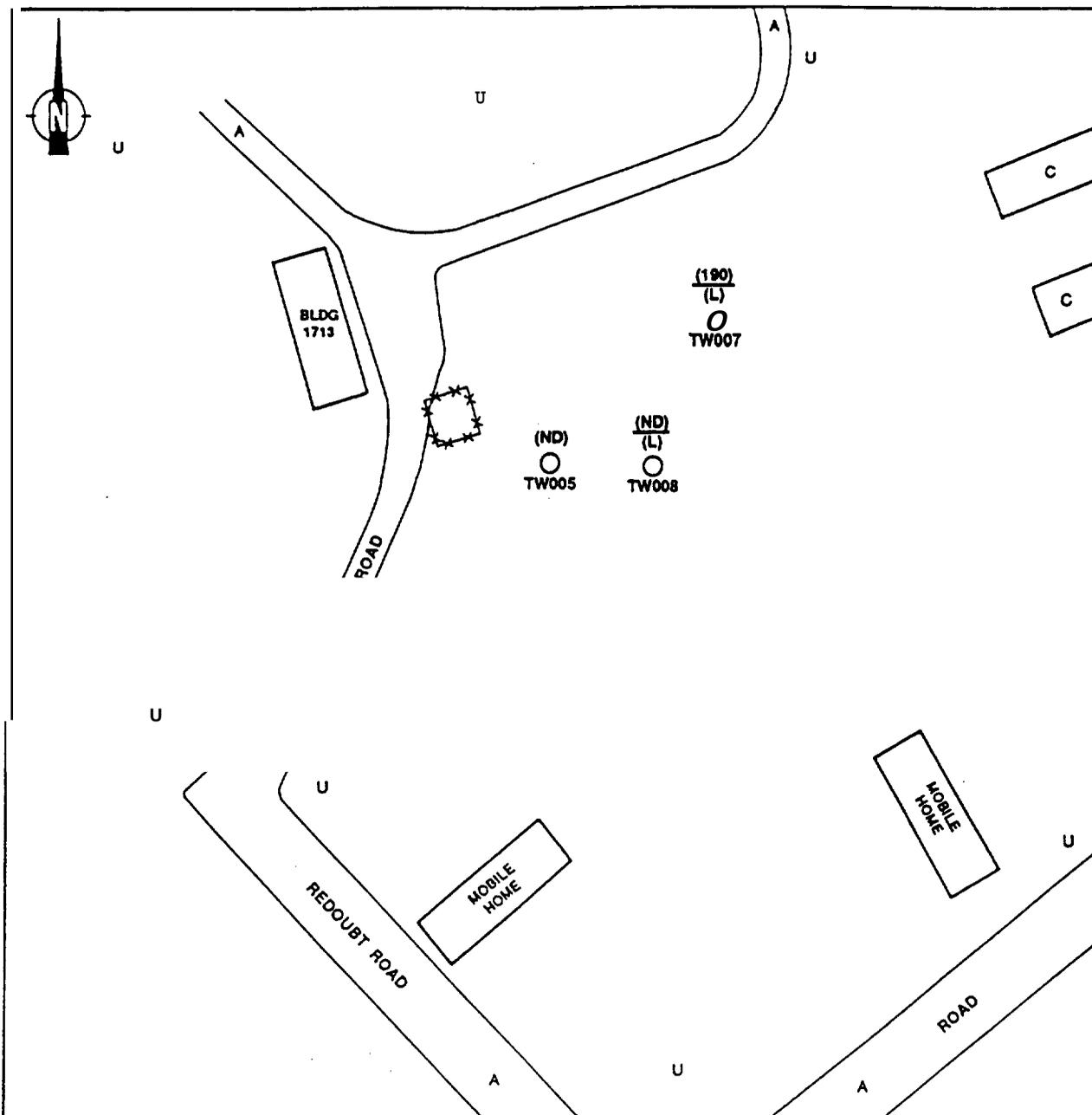
The media, soil and groundwater, sampled on Site 7 exhibit at least trace levels of one or more of the parameter groups (metals, TRPHs, PAHs, and phenols) included in the Phase I screening analyses. Overall, significant levels of soil and groundwater contamination are absent across most of Site 7. However, soil and groundwater contamination may be present in the vicinity of the suspected former burn area. In some cases, the detected contamination may be associated with former fire-fighting training exercises conducted on Site 7. However, the results also indicate that other sources of contamination potentially impacting Site 7 may exist in the area.

In the following sections, each of the sampled media will be discussed separately regarding the nature, distribution, and potential source(s) of contamination.

#### 3.9.1 Soil

Low levels of metals and low to moderate levels of TRPHs were detected in one or more of the soil samples collected at Site 7. Pesticides, PAHs, PCBs, phenols, and VOCs were not detected in any of the soil samples.

All the soil headspace measurements across Site 7 were relatively low. Slightly elevated headspace readings were measured in the soils north of the possible former burn area in grid area A. However, these slightly elevated measurements do not appear to represent significant



SOURCE: U.S. Naval Air Station, Pensacola, Florida 1991; Ecology and Environment, Inc. 1991

**KEY:**

BLDG  
1713

Building

x-x

Fence

A

Asphalt Paved

C

Concrete Paved

U

Unpaved

○

Temporary Monitoring Well

(190)  
(L)

PAH Concentrations (ug/L)  
Phenol Concentrations (ug/L)

(ND)

Not Detected

(L)

Present Below Stated Detection Limit

SCALE  
0 50 100 FEET

**Figure 3-6**  
**PAH AND PHENOL CONCENTRATIONS IN GROUNDWATER SAMPLES**  
**NAS PENSACOLA SITE 7**

contamination as no VOCs were detected in any of the Site 7 soil samples and there is no correlation between headspace readings and TRPE concentrations.

The lateral distribution of metals detected at Site 7 was generally widespread. In addition, low concentrations of one or more metals were detected in samples collected from all depth intervals. However, the highest concentration of any given metal always occurred in an A-interval sample. Also, the highest concentration of total metals occurred in an A-interval sample. The significance of this occurrence is not known given that these metals concentrations are generally low. Chromium and zinc were the most frequently detected metals, occurring in samples collected at most boring locations. Lead was detected in only three samples and arsenic in one sample. No metals concentrations exceeded the respective RCRA PCALs.

TRPH concentrations were generally detected at most boring locations across Site 7. When detected at any given boring location, TRPHs were present in all the intervals sampled with the exception of boring B008. In the central and northeastern portions of the site, the A-interval samples contained the highest TRPH concentrations. In the northern and western portions of the site, the B- and C-interval samples contained the highest TRPH concentrations.

The widespread occurrences of low chromium and zinc concentrations appear to be indicative of either background levels or a general ambient source(s). Most of the TRPE concentrations detected are also low and may be the result of an ambient source as well (such as nearby automobile and aircraft traffic). However, the TRPH concentrations detected in some samples collected from the central and northern portions of the site are relatively high compared to the other TRPH concentrations. These relatively elevated concentrations are more likely to be associated with an on-site source such as historical fire-fighting training activities. The presence of arsenic in only one soil sample (S012A), which also contains the highest total metals concentration, is indicative of an apparently isolated metals source of unknown origin along the southern boundary of the site.

### 3.9.2 Groundwater

Elevated levels of metals and PAHs and trace levels of phenols were detected in the groundwater samples collected at Site 7. Pesticides, PCBs, TRPHs, and VOCs were not detected in any of the groundwater samples.

Elevated concentrations, with respect to the applicable FPDWSs, for chromium and lead were detected; however, it is possible that some of the occurrences of elevated metal concentrations reflect acid preservation leaching/dissolution of aquifer matrix sediments entrained in the unfiltered groundwater samples, rather than actual groundwater contamination.

The elevated chromium and lead concentrations were detected in sample GW005 collected from downgradient temporary well TW005. The chromium concentration was confirmed by a duplicate sample collected from this well, but the lead concentration was not (see Table 3-4). Samples collected from wells TW005 and TU008 exhibited higher total metals concentrations than those detected in upgradient well TU007 (see Table 3-4 and Figure 3-5). It is not apparent whether these elevated total metals or specific metal concentrations are representative of actual groundwater contamination (from historical or current on-site activities) or are a result of the preservation leaching/dissolution of sediments entrained in groundwater samples of varying turbidity. However, all metal concentrations detected in the Site 7 groundwater samples are within the range of ambient groundwater conditions observed in Escambia County (Clemens *et al.* 1989).

The only PAH concentration (which exceeded the potentially applicable FDER target cleanup levels for petroleum-contaminated groundwater) was detected in sample GW007, while trace levels of phenols (below detection limits) were identified in samples GW007 and GW008. As hydraulically upgradient temporary well TW007 was located on the boundary of the suspected former burn area, the elevated PAH level detected in this well apparently reflects a PAH source in the suspected former burn area attributable to former fire-fighting training activities.

### 3.10 QA/QC

#### 3.10.1 Field QA/QC samples

Two field duplicate soil samples and one field duplicate groundwater sample were collected for the Site 7 screening samples. The analytical results for the duplicate samples are presented in the summary tables for the respective media (tables 3-2 and 3-4). Both the soil (S002BD and S006AD) and the groundwater (GW005D) samples were in general agreement with the results of the original samples (S002B, S006A, and GW005, respectively), with two exceptions: the lead concentrations detected in soil sample S002B and groundwater sample GW005 were not detected in corresponding duplicate samples S002BD and GW005D; and chromium and zinc, detected only in the original soil sample S006A (near the respective detection limits), were not detected in the corresponding duplicate.

#### 3.10.2 Laboratory QA/QC Samples

All laboratory method blanks were found to be free of contaminants during sample analysis. For screening purposes, the laboratory QA/QC analytical results were within the range of acceptable limits.

#### 4. CONCLUSIONS

Overall, significant soil and groundwater contamination are absent across most of Site 7. However, significant soil and groundwater Contamination may be present in the vicinity of the suspected former burn area located in the central portion of the site. Although generally low levels of metals are present in both the soil and groundwater, TRPHs are the primary soil contaminants and PAHs and possibly lead are the primary groundwater contaminants. A portion of the TRPH and PAH contamination is potentially associated with past on-site activities (fire-fighting training exercises). However, additional sources of contamination may be impacting Site 7.

Although soil samples collected across Site 7 display only low concentrations of metals, a single sample (S012A) collected along the southern boundary of the site exhibited the highest total metals concentration and an anomalous arsenic concentration. This suggests that an isolated source of metals may be present in this area. No metals concentrations exceed the respective RCRA PCALs for soils.

Generally, low levels of TRPHs are present in the soils across Site 7. These low levels may be associated with an ambient TRPH source (such as nearby automobile and/or aircraft traffic). However, relatively higher TRPH concentrations located in the central and north portions of the site may be attributable to past fire-fighting training activities.

While groundwater metals concentrations (chromium and lead) above the FPDWSs occur on Site 7, it is not apparent whether these concentrations represent actual contamination from on-site activities or are the result of groundwater samples with varying turbidities undergoing acid preservation without prior filtration. A significant concentration (above the FDER target cleanup levels) of PAHs was

detected in the sample collected from the upgradient well (TW007) on site. This concentration may be related to past fire-fighting training activities or some other source upgradient of this area.

Further assessment activities are required at and in the vicinity of Site 7.

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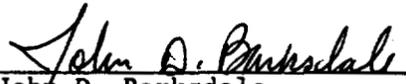
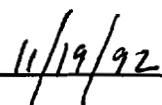
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6. FLORIDA PROFESSIONAL GEOLOGIST SEAL

I hereby affix my seal to the Interim Data Report for The Firefighting School (Site 7), located at the Naval Air Station in Pensacola, Escambia County, Florida, in accordance with Chapter 492 of the Florida Statutes and applicable rules and regulations developed pursuant thereto:

Name : John D. Barksdale  
License Number: P.G. No. 1150  
State: Florida  
Expiration Date: July 31, 1994

  
\_\_\_\_\_  
John D. Barksdale  
  
  
\_\_\_\_\_  
Date

**A**

**APPENDIX A**

**BIRDS OBSERVED DURING  
HABITAT/BIOTA SURVEY**

Table A-1

BIRDS OBSERVED **DURING HABITAT/BIOTA SURVEY**  
OCTOBER 1990

nature pine forest, including grassy margins along dirt roads and thickets bordering forests.

Cardinal	<u>Cardinalis cardinalis</u>
Bluejay	<u>Cyanocitta cri ta</u>
Gray Catbird	<u>Dumetella carolinensis</u>
Northern Mockingbird	<u>Mimus polyglottos</u>
Rufous-sided Towhee	<u>Pipilo erythrophthalmus</u>
Boat-tailed Grackle	<u>Quiscalus major</u>
Common Grackle	<u>Quiscalus quiscula</u>
Eastern Phoebe	<u>Sayornis phoebe</u>
Carolina Wren	<u>Thryothorus ludovicianus</u>
Brown Thrasher	<u>Toxostoma rufum</u>
House Wren	<u>Troglodytes aedon</u>
Yellow-throated Vireo	<u>Vireo flavifrons</u>
White-eyed Vireo	<u>Vireo griseus</u>
Mourning Dove	<u>Zenaida macroura</u>

Upland mature hardwood forest with some mix of pines.

Red-tailed Hawk	<u>Buteo jamaicensis</u>
Bluejay	<u>Cyanocitta cristata</u>
Prairie Warbler	<u>Dendroica discolor</u>
Mississippi Kite	<u>Ictinia mississippiensis</u>
Northern Mockingbird	<u>Mimus polyglottos</u>
Tufted Titmouse	<u>Parus bicolor</u>
Carolina Chickadee	<u>Parus carolinensis</u>
Ruby Crowned Kinglet	<u>Regulus calendula</u>
Golden Crowned Kinglet	<u>Regulus satrapa</u>
Ovenbird	<u>Seiurus aurocapillus</u>
Nashville Warbler	<u>Vermivora ruficapilla</u>
Hourning Dove	<u>Zenaida macroura</u>

Beachfront, including shoreline along waterfront apron; Pensacola Bay open water; Bayou Grande open water; shoreline along dredge spoil fill area; interior mudflats of dredge spoil fill area; and primary dune/scrubby areas of beach.

Great Blue Heron	<u>Ardea herodias</u>
Ruddy Turnstone	<u>Arenaria interpres</u>
Sanderling	<u>Calidris alba</u>
Least Sandpiper	<u>Calidris minutilla</u>
Semi-palmated Sandpiper	<u>Calidris pusilla</u>
Willet	<u>Catoptrophorus semipalmatus</u>
Belted Kingfisher	<u>Ceryle alcyon</u>
Semi-palmated Plover	<u>Charadrius semipalmatus</u>
Killdeer	<u>Charadrius vociferus</u>
Eastern Wood Pewee	<u>Contopus borealis</u>
Fish Crow	<u>Corvus ossifragus</u>
Bluejay	<u>Cyanocitta cristata</u>
Little Blue Heron	<u>Egretta caerulea</u>
Acadian Flycatcher	<u>Empidonax virescens</u>
Herring Gull	<u>Larus argentatus</u>
Laughing Gull	<u>Larus atricilla</u>
Short-billed Dowitcher	<u>Limnodromus griseus</u>
Northern Hockingbird	<u>Mimus polyglottos</u>
Osprey	<u>Pandion haliaetw</u>
Brown Pelican	<u>Pelecanus occidentalis</u>
Double Crested Cormorant	<u>Phalacrocorax auritus</u>
Black-bellied Plover	<u>Pipilo squatarola</u>
Chipping Sparrow	<u>Spizella passerina</u>
Roseate Tern	<u>Sterna dougallii</u>
Common Tern	<u>Sterna hirundo</u>
Royal Tern	<del><u>Sterna maxima</u></del>
Forester's Tern	<u>Sterna forsteri</u>
Sandwich Tern	<u>Sterna sandircensis</u>
Tree Swallow	<u>Tachycineta bicolor</u>
House Wren	<u>Troglodytes aedon</u>
Mourning Dove	<u>Zenaidura macroura</u>

[Bold items enclosed in brackets denote changes to last version of document]

0000413

Marshland, including emergent vegetation found along Bayou Grande, Pensacola Bay, and brackish-water ponds.

Red-winged Blackbird	<u>Agelaius phoeniceus</u>
Northern Shoveler	<u>Anas clypeata</u>
Green-winged Teal	<u>Anas crecea</u>
Blue-winged Teal	<u>Anas discors</u>
Mottled Duck	<u>Anas fulvigula</u>
Great Blue Heron	<u>Ardea herodias</u>
Lesser Scaup	<u>Aythya affinis</u>
Cardinal	<u>Cardinalis cardinalis</u>
Great Egret	<u>Casmerodius albus</u>
Belted Kingfisher	<u>Ceryle alcyon</u>
Northern Flicker	<u>Colaptes auratus</u>
Bluejay	<u>Cyanocitta cristata</u>
Yellow-rumped Warbler	<u>Dendroica coronata</u>
Little Blue Heron	<u>Egretta caerulea</u>
Snowy Egret	<u>Egretta thula</u>
Tricolored Heron	<u>Egretta tricolor</u>
American Coot	<u>Fulica americana</u>
Yellowthroat	<u>Geothlypis trichas</u>
Northern Mockingbird	<u>Mimus polyglottos</u>
Osprey	<u>Pandion haliaetus</u>
Rufous-sided Towhee	<u>Pipilo erythrophthalmus</u>
Pied-billed Grebe	<u>Podilymbus podiceps</u>
Forester's Tern	<u>Sterna forsteri</u>
House Wren	<u>Troglodytes aedon</u>
Mourning Dove	<u>Zenaida macroura</u>

Forested wetland area, including mature hardwoods and thick undergrowth mixed with emergent vegetation such as cattails.

Cardinal	<u>Cardinalis cardinalis</u>
American Goldfinch	<u>Carduelis tristis</u>
Marsh Wren	<u>Cistothorus palustris</u>
Northern Flicker	<u>Colaptes auratus</u>
Bluejay	<u>Cyanocitta cristata</u>
Prairie Warbler	<u>Dendroica discolor</u>
Wood Thrush	<u>Eylocichla mustelina</u>
Northern Mockingbird	<b><u>Mimus polyglottos</u></b>
Yellow-bellied Sapsucker	<u>Sphyrapicus varius</u>
Brown Thrasher	<u>Toxostoma rufum</u>

0000444

[Bold i t w enclosed in brackets denote changes to last version of document]

**B**

APPENDIX B  
PARTICULATE AIR SCREENING RESULTS AND  
SURFACE EMISSIONS SURVEY DATA

B-1

[**Bold items** enclosed in brackets denote  
**changes** to last version of document]

SITE 7

**PARTICULATE AIR SCREENING DATA**

Date: Hay 15, 1991

Wind Direction: West-southwest

Wind Velocity: 1 to 2 miles per hour

Upwind Location: 150 ft. west-southwest of Bldg. 1713.

Measurement Duration: 15 minutes

Time Weighted Average Particulate Concentration': 0.00 mg/m<sup>3</sup>

Downwind Location: 255 ft. east-northeast of Bldg 1713.

Measurement Duration: 15 minutes

Time Weighted Average Particulate Concentration: 0.00 mg/m<sup>3</sup>

Upwind/Downwind Difference: 0.00 mg/m<sup>3</sup>

SITE 7 SURFACE EMISSIONS SURVEY

GRID	COORDINATE	OVA	OVA
	LOCATION	BACKGROUND	ABOVE BACKGROUND
		(ppm)	(ppm)
A	S0+00E0+00	0.3	0.1
A	S0+00E0+25	0.3	0.1
A	S0+00E0+50	0.3	0.1
A	S0+00E0+75	0.4	0.2
A	S0+00E1+00	0.4	0.2
A	S0+00E1+25	0.4	0.2
A	S0+00E1+50	0.4	0.2
A	S0+00E1+75	0.4	0.2
A	S0+00E2+00	0.4	0.2
A	S0+25E0+00	0.6	0.4
A	S0+25E0+25	0.6	0.4
A	S0+25E0+50	0.6	0.4
A	S0+25E0+75	0.6	0.4
A	S0+25E1+00	0.5	0.3
A	S0+25E1+25	0.6	0.4
A	S0+25E1+50	0.6	0.4
A	S0+25E1+75	0.5	0.3
A	S0+25E2+00	0.7	0.5
A	S0+50E0+00	0.6	0.4
A	S0+50E0+25	0.6	0.4
A	S0+50E0+50	0.6	0.4
A	S0+50E0+75	0.6	0.4
A	S0+50E1+00	0.5	0.3
A	S0+50E1+25	0.5	0.3
A	S0+50E1+75	0.5	0.3
A	S0+50E2+00	0.5	0.3
A	S0+50S1+50	0.5	0.3
A	S0+75E0+00	0.6	0.4
A	S0+75E0+25	0.6	0.4
A	S0+75E0+50	0.6	0.4
A	S0+75E0+75	0.6	0.4
A	S0+75E1+00	0.5	0.3
A	S0+75E1+25	0.5	0.3
A	S0+75E1+50	0.5	0.3
A	S0+75E1+75	0.4	0.2
A	S0+75E2+00	0.4	0.2
A	S1+00E0+00	0.5	0.3
A	S1+00E0+25	0.5	0.3
A	S1+00E0+50	0.5	0.3
A	S1+00E0+75	0.5	0.3
A	S1+00E1+00	0.5	0.3
A	S1+00E1+25	0.5	0.3
A	S1+00E1+50	0.6	0.4
A	S1+00E1+75	0.6	0.4
A	S1+00E2+00	0.6	0.4

SITE 7 SURFACE EMISSIONS SURVEY

GRID	COORDINATE	OVA	OVA
	LOCATION	BACKGROUND	ABOVE BACKGROUND
		(ppm)	(ppm)
A	S1+25E0+00	0.5	0.3
A	S1+25E0+25	0.6	0.4
A	S1+25E0+50	0.4	0.2
A	S1+25E0+75	0.4	0.2
A	S1+25E1+00	0.5	0.3
A	S1+25E1+25	0.5	0.3
A	S1+25E1+50	0.5	0.3
A	S1+25E1+75	0.5	0.3
A	S1+25E2+00	0.5	0.3
A	S1+50E0+00	0.6	0.4
A	S1+50E0+25	0.5	0.3
A	S1+50E0+50	0.6	0.4
A	S1+50E0+75	0.5	0.3
A	S1+50E1+00	0.6	0.4
A	S1+50E1+25	0.6	0.4
A	S1+50E1+50	0.6	0.4
A	S1+50E1+75	0.5	0.3
A	S1+50E2+00	0.5	0.3
B	S0+00E0+00	0.6	0.2
B	S0+00E0+25	0.5	0.1
B	S0+00E0+50	0.5	0.1
B	S0+00E0+75	0.6	0.2
B	S0+00E1+00	NA	NA
B	S0+25E0+00	0.5	0.1
B	S0+25E0+25	0.6	0.2
B	S0+25E0+50	0.5	0.1
B	S0+25E0+75	0.6	0.2
B	S0+25E1+00	NA	NA
B	S0+50E0+00	0.5	0.1
B	S0+50E0+25	0.5	0.1
B	S0+50E0+50	0.5	0.1
B	S0+50E0+75	0.5	0.1
B	S0+50E1+00	0.5	0.1
B	S0+75E0+00	0.6	0.2
B	S0+75E0+25	0.5	0.1
B	S0+75E0+50	0.5	0.1
B	S0+75E0+75	0.5	0.1
B	S0+75E1+00	0.5	0.1
B	S1+00E0+00	0.5	0.1
B	S1+00E0+25	0.4	0.0
B	S1+00E0+50	0.6	0.2
B	S1+00E0+75	0.5	0.1
B	S1+00E1+00	0.6	0.2
B	S1+25E0+00	0.5	0.1
B	S1+25E0+25	0.4	0.0

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SITE 7 SURFACE EMISSIONS SURVEY

GRID	COORDINATE	OVA	OVA
	LOCATION	BACKGROUND	ABOVE BACKGROUND
		(ppm)	(ppm)

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B	S1+25E0+50	0.5	0.1
B	S1+25E0+75	0.6	0.2
B	S1+25E1+00	NA	NA

**C**

SECRET

APPENDIX C  
MAGNETOMETER AND EM-31 SURVEY DATA

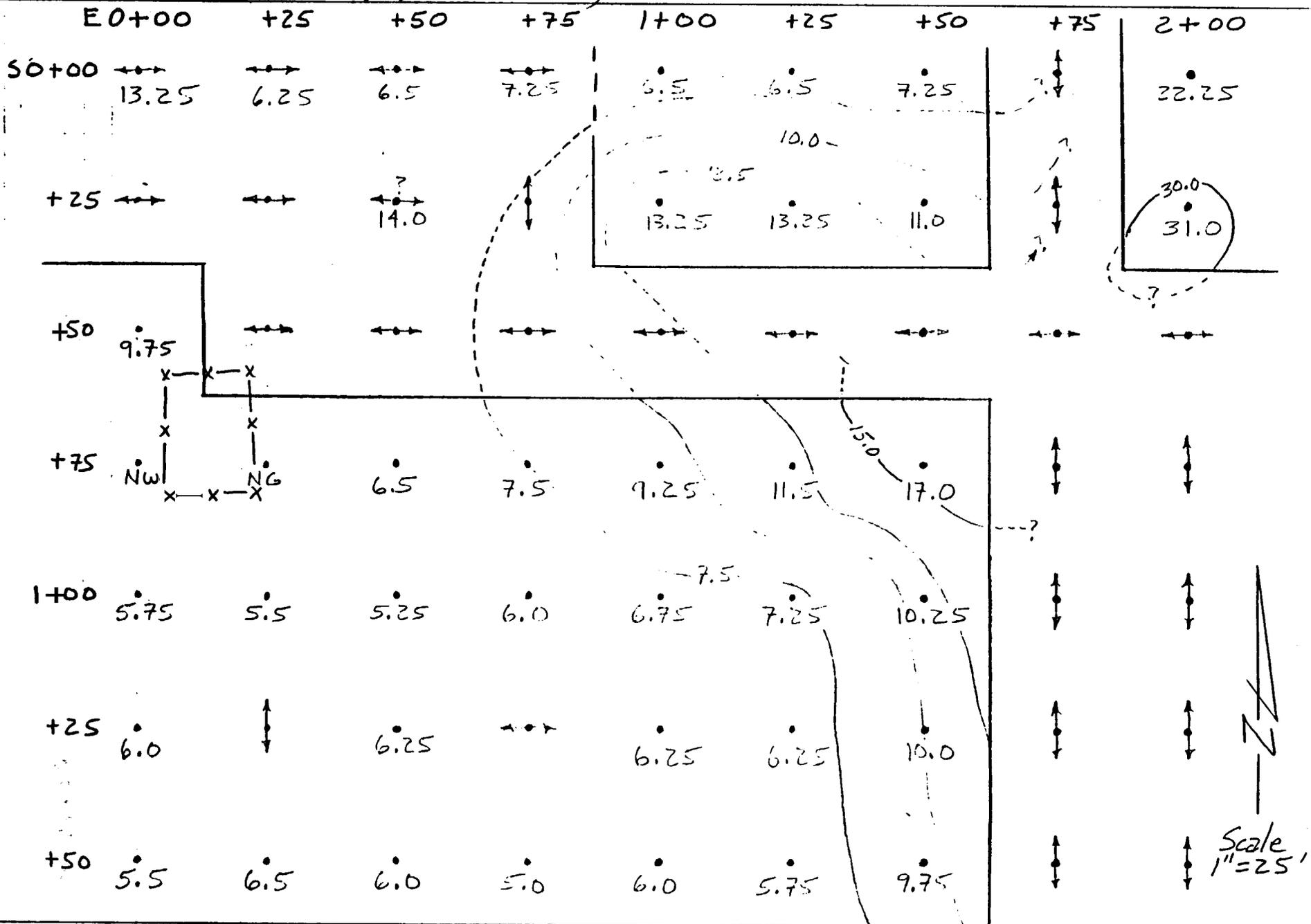
C-1

[Bold items enclosed in brackets denote  
**changes** to last version of document)

VH

NATIONAL 42 301 30 SHEETS 3 SQUARE  
42 302 10 SHEETS 3 SQUARE  
42 309 200 SHEETS 3 SQUARE  
M.D. 1966

indicates (|| to linear  
Sign deviation Assembly)



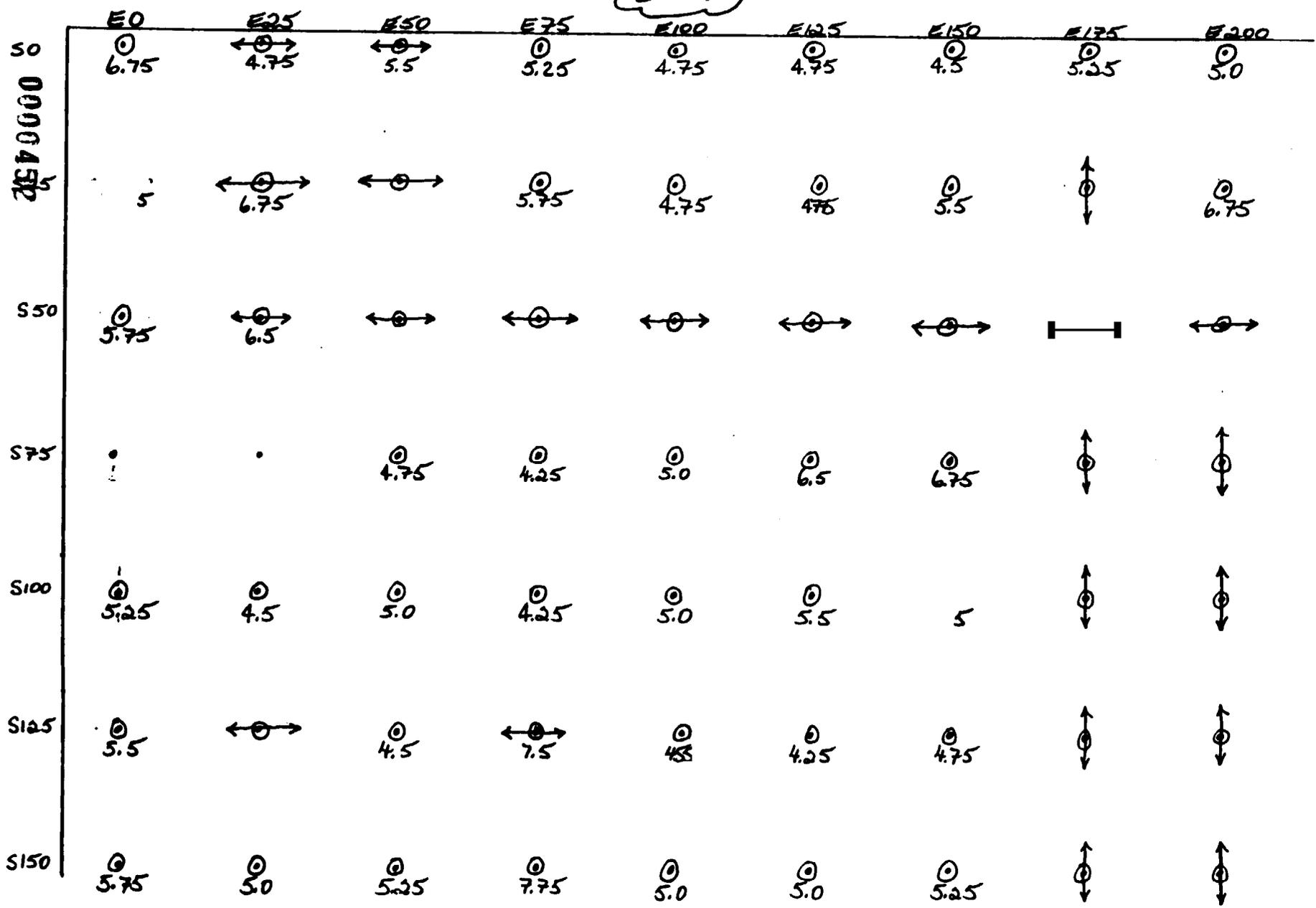
EM-31  
Vert. Dipole

Site 7, GRID "A"



Prepared by: L.J. Baer, E&E, inc., Overland Park, KS

E →



EM-31  
HORIZONTAL Dipole

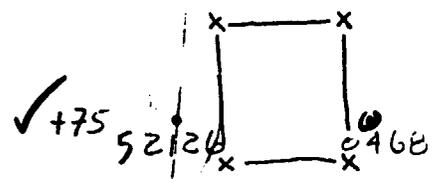
GROUP K; Site 7, Grid A (150' x 200')

Prepared by: K. Lehman  
E & E, Inc. Station House, etc.

49-53  
49-50

NATIONAL  
42 381 20 SHEETS 3 SQUARE  
42 382 100 SHEETS 3 SQUARE  
42 389 200 SHEETS 3 SQUARE

	0+00	+25	+50	+75	+100	+125	+150	+175	2+00
50+00	0229	0294	0301	0264	0333	0206	0343	0363	0377
+25	0114	0379	0322	0340	0335	0278	0340	0147	0329
+50	49517	0080	0326	0302	0286	0357	0303	0297	0393
+75	52124	0468	0245	0320	0324	0244	0217	0307	0688
+100	0266	0268	0314	0317	0308	0271	0437	0285	0078
+125	0316	0215	0300	0356	0365	0352	0317	0314	0308
+150	0320	0317	0291	0258	0302	0316	0324	0351	0608 0608

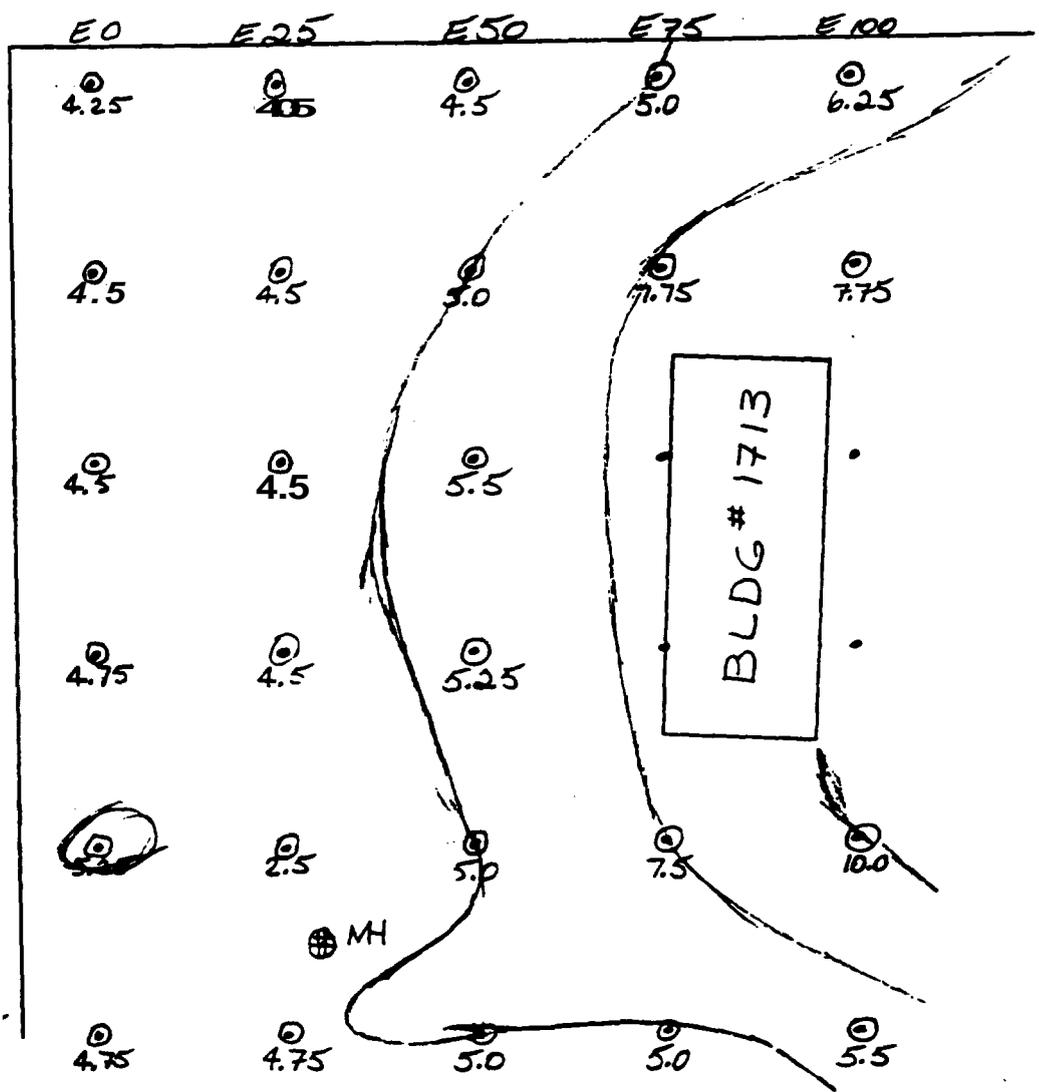


Magnetometer  
Site 7, Grid "A"

Prepared by: L. J. Baer, E&E, inc., Overland Park, KS

Scale: 1"=25'

E →



EM-31

VERTICAL Dipole

GROUP K; Site 7; Grid B (100 x 125')

Scale: 1" = 25'

Prepared by: K. Delhomme  
E & E, inc.  
Baton Rouge, LA

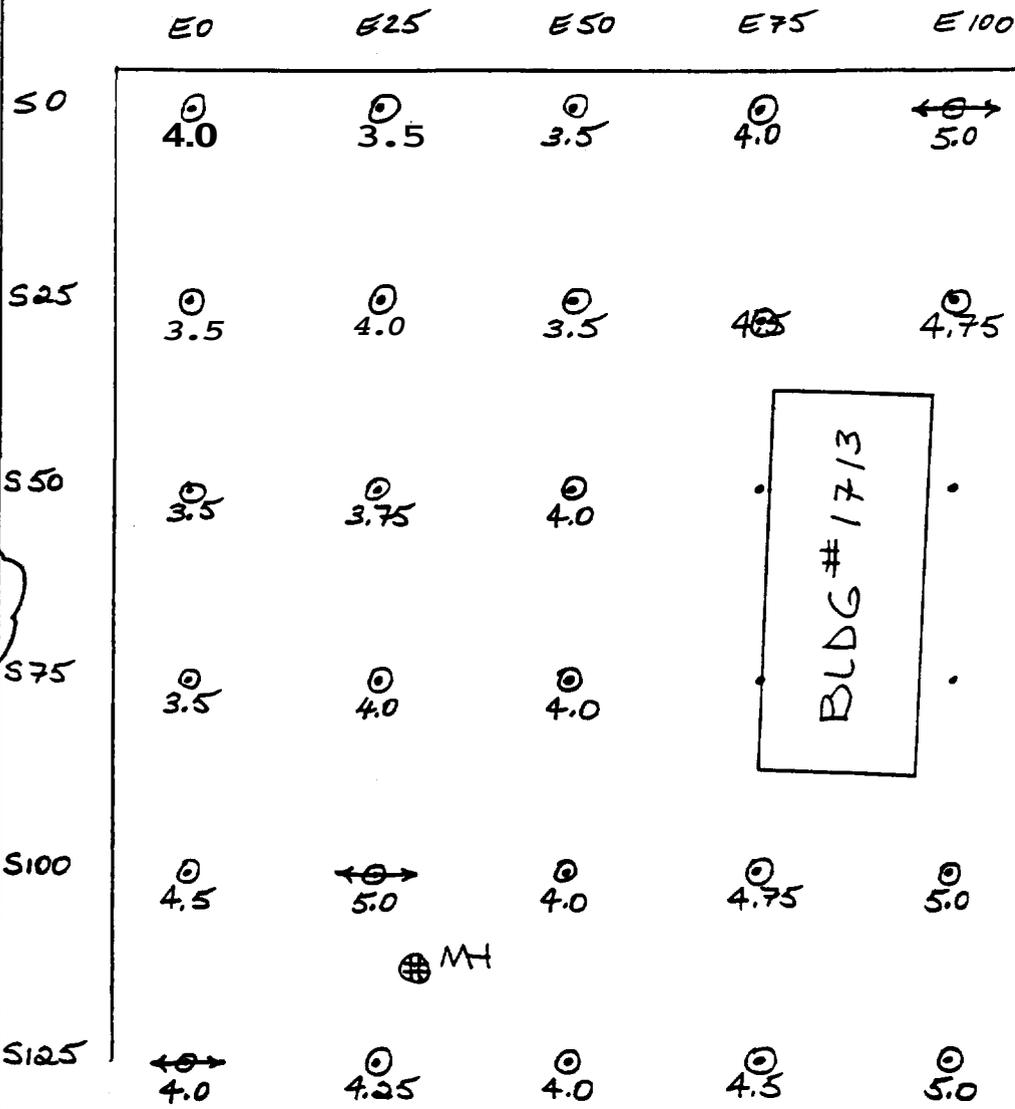
&

L.J. Baer  
E & E, inc.  
Overland Park, KS

0000453

42 SHEETS 1 SQUARE  
 43 SHEETS 1 SQUARE  
 44 SHEETS 1 SQUARE  
 NATIONAL  
 ...

E →



S ↓

↑  
 N

EM-31

HORIZONTAL DIPOLE

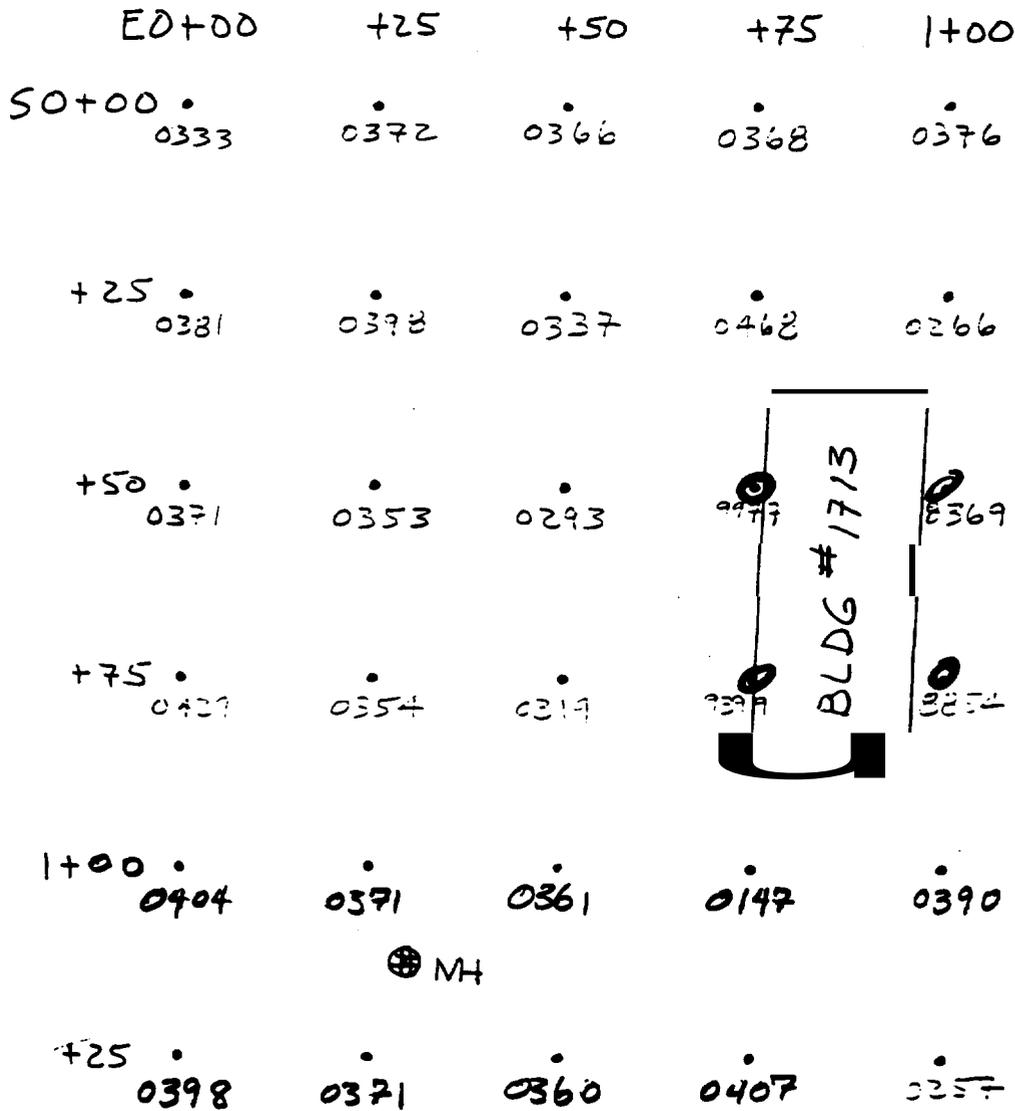
Group K; Site 7; Grid B (100' x 125')

Scale: 1" = 25'

Prepared by: K. Delhomme  
 E & E, inc.  
 Baton Rouge, LA

C.S. Baer  
 E & E, inc.  
 Overland Park, KS

# MAGNETOMETER ; SITE # - GRID E"



Scale: 1" = 25'



Prepared by: L.J. Baer  
 E&E, inc  
 Overland Park, KS

SITE 7 GEOPHYSICAL SURVEY

GRID	COORDINATE LOCATION	EM-31	EM-31	EM-31	EM-31	MAGNETOMETER (gammas)
		VERT N-S (mmhos/m)	VERT E-W (mmhos/m)	HORZ N-S (mmhos/m)	HORZ E-W (mmhos/m)	
A	S0+00E0+00	12.5	14.0	6.0	7.5	50029
A	S0+00E0+25	5.0	7.5	4.5	7.0	50294
A	S0+00E0+50	5.0	8.0	4.5	6.5	50301
A	S0+00E0+75	6.0	8.5	4.5	6.0	50264
A	S0+00E1+00	6.0	7.0	4.5	5.0	50333
A	S0+00E1+25	6.0	7.0	5.0	4.5	50406
A	S0+00E1+50	7.0	7.5	4.5	4.5	50343
A	S0+00E1+75	16.5	8.0	6.0	4.5	50363
A	S0+00E2+00	21.0	23.5	5.0	5.0	50377
A	S0+25E0+00	15.0	22.5	6.5	9.0	50114
A	S0+25E0+25	19.0	27.5	5.5	8.0	50379
A	S0+25E0+50	13.0	15.0	6.0	10.0	50332
A	S0+25E0+75	29.0	14.0	6.5	5.0	50340
A	S0+25E1+00	13.0	13.5	4.5	5.0	50335
A	S0+25E1+25	13.5	13.0	4.5	5.0	50278
A	S0+25E1+50	11.0	11.0	6.0	5.0	50340
A	S0+25E1+75	125.0	21.5	60.0	1.0	50147
A	S0+25E2+00	31.0	31.0	7.5	6.0	50329
A	S0+50E0+00	10.0	9.5	5.5	6.0	49517
A	S0+50E0+25	10.0	15.0	5.0	8.0	50080
A	S0+50E0+50	8.0	22.5	4.5	12.0	50326
A	S0+50E0+75	0.0	22.0	4.5	70.0	50302
A	S0+50E1+00	0.0	90.0	3.5	29.0	50486
A	S0+50E1+25	0.0	84.0	4.5	34.0	50357
A	S0+50E1+75	0.0	7.0	15.0	70.0	50297
A	S0+50E2+00	0.0	44.0	5.0	56.0	50393
A	S0+50S1+50	0.0	82.0	4.5	52.0	50503
A	S0+75E0+00	9.0	NA	2.0	NA	52126
A	S0+75E0+25	10.5	NA	0.0	NA	50468
A	S0+75E0+50	7.0	6.5	4.5	5.0	50245
A	S0+75E0+75	7.5	7.5	4.0	4.5	50320
A	S0+75E1+00	9.0	9.5	4.5	5.5	50324
A	S0+75E1+25	10.0	13.0	6.0	7.0	50244
A	S0+75E1+50	16.0	18.0	6.0	8.5	50217
A	S0+75E1+75	33.0	9.5	34.0	6.0	50307
A	S0+75E2+00	70.0	50.0	34.0	16.0	50688
A	S1+00E0+00	5.5	6.0	5.5	5.0	50266
A	S1+00E0+25	5.5	5.5	4.5	4.5	50268
A	S1+00E0+50	6.0	4.5	6.0	4.0	50314
A	S1+00E0+75	6.0	6.0	4.5	4.0	50317
A	S1+00E1+00	6.5	7.0	5.0	5.0	50308
A	S1+00E1+25	7.0	7.5	5.0	6.0	50271
A	S1+00E1+50	10.5	10.0	5.5	5.5	50437
A	S1+00E1+75	27.0	7.0	28.0	7.0	50285
A	S1+00E2+00	49.0	0.0	50.0	5.0	50078

SITE 7 GEOPHYSICAL SURVEY

GRID	COORDINATE LOCATION	EM-31	EM-31	EW-31	EM-31	MAGNETOMETER (gammas)
		VERT N-S (mmhos/m)	VERT E-W (mmhos/m)	HORZ N-S (mmhos/m)	HORZ E-W (mmhos/m)	
A	S1+25E0+00	6.5	5.5	5.5	5.5	50316
A	S1+25E0+25	8.0	0.0	5.5	13.0	50215
A	S1+25E0+50	6.5	6.0	4.5	4.5	50300
A	S1+25E0+75	10.5	13.0	6.5	8.5	50356
A	S1+25E1+00	6.0	6.5	4.5	4.5	50365
A	S1+25E1+25	6.5	6.0	4.0	4.5	50352
A	S1+25E1+50	10.0	10.0	4.5	5.0	50317
A	S1+25E1+75	20.0	0.0	40.0	4.5	50314
A	S1+25E2+00	40.0	0.0	140.0	7.0	50308
A	S1+50E0+00	6.0	5.0	5.5	6.0	50320
A	S1+50E0+25	6.5	6.5	5.0	5.0	50317
A	S1+50E0+50	6.0	6.0	5.0	5.5	50291
A	S1+50E0+75	4.5	5.5	8.0	7.5	50238
A	S1+50E1+00	6.0	6.0	5.0	5.0	50302
A	S1+50E1+25	5.0	6.5	5.5	4.5	50316
A	S1+50E1+50	9.5	10.0	5.0	5.5	50324
A	S1+50E1+75	31.0	16.0	14.0	6.0	50351
A	S1+50E2+00	32.0	0.0	105.0	6.0	50608
B	S0+00E0+00	4.5	4.0	4.0	4.0	50333
B	S0+00E0+25	4.5	4.5	3.5	3.5	50371
B	S0+00E0+50	4.5	4.5	3.5	3.5	50366
B	S0+00E0+75	5.0	5.0	4.0	4.0	50407
B	S0+00E1+00	6.0	6.5	4.5	5.5	50376
B	S0+25E0+00	4.5	4.5	3.5	3.5	50381
B	S0+25E0+25	4.5	4.5	4.0	4.0	50371
B	S0+25E0+50	5.0	5.0	3.5	3.5	50337
B	S0+25E0+75	8.0	7.5	4.5	4.5	50147
B	S0+25E1+00	8.0	7.5	5.0	4.5	50266
B	S0+50E0+00	4.5	4.5	3.5	3.5	50371
B	S0+50E0+25	4.5	4.5	3.5	4.0	50354
B	S0+50E0+50	5.5	5.5	4.0	4.0	50293
B	S0+50E0+75	160.0	NA	180.0	NA	49399
B	S0+50E1+00	140.0	NA	290.0	NA	48369
B	S0+75E0+00	4.5	5.0	3.5	3.5	50429
B	S0+75E0+25	4.5	4.5	4.0	4.0	50353
B	S0+75E0+50	5.0	5.5	4.0	4.0	50319
B	S0+75E0+75	250.0	NA	190.0	NA	49977
B	S0+75E1+00	150.0	NA	440.0	NA	48854
B	S1+00E0+00	5.5	5.0	5.0	4.0	50404
B	S1+00E0+25	3.0	2.0	4.5	5.5	50398
B	S1+00E0+50	5.0	5.0	4.0	4.0	50361
B	S1+00E0+75	8.0	7.0	4.5	5.0	50468
B	S1+00E1+00	10.0	10.0	5.0	5.0	50390
B	S1+25E0+00	5.0	4.5	3.5	4.5	50398
B	S1+25E0+25	4.5	5.0	4.5	4.0	50372

SITE 7 GEOPHYSICAL SURVEY

GRID COORDINATE	EM-31	EM-31	EM-31	EM-31	MAGNETOMETER
LOCATION	VERT N-S	VERT E-W	HORZ N-S	HORZ E-W	(gammas)
	(mmhos/m)	(mmhos/m)	(mmhos/m)	(mmhos/m)	

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B	S1+25E0+50	5.0	5.0	4.0	4.0	50360
B	S1+25E0+75	5.0	5.0	4.5	4.5	50368
B	S1+25E1+00	5.5	5.5	5.0	5.0	50257

**D**

10000

APPENDIX D  
SOIL HEADSPACE SURVEY DATA

SITE 7 SOIL HEADSPACE SURVEY

GRID	COORDINATE and INTERVAL	FEET (BLS)	OVA		BOREHOLE OVA	
			UNFILTERED (ppm)	FILTERED (ppm)	UNFILTERED (ppm)	FILTERED (ppm)
A	S0+00E0+00A	0-5	1.2	1.2	3.7	0.0
A	S0+00E0+00B	5-10	0.6	0.4	3.6	0.0
A	S0+00E0+25A	0-5	0.1	0.0	0.1	0.0
A	S0+00E0+25B	5-10	0.0	0.0	0.15	0.0
A	S0+00E0+50A	0-5	1.0	0.0	0.5	0.0
A	S0+00E0+50B	5-10	0.2	0.0	3.0	0.0
A	S0+00E0+75A	0-5	0.0	0.0	0.5	0.0
A	S0+00E0+75B	5-10	0.0	0.0	0.1	0.0
A	S0+00E1+00A	0-5	0.0	0.0	5.2	0.0
A	S0+00E1+00B	5-10	1.0	0.0	10.0	0.0
A	S0+00E1+25A	0-5	1.0	0.0	1.0	0.0
A	S0+00E1+25B	5-10	1.6	0.0	1.2	0.0
A	S0+00E1+50A	0-5	1.0	0.0	1.0	0.0
A	S0+00E1+50B	5-10	0.0	0.0	5.0	0.0
A	S0+00E1+75A	NA	NA	NA	NA	NOT ANALYZED (NA)
A	S0+00E1+75B	NA	NA	NA	NA	NA
A	S0+00E2+00A	0-5	6.0	0.0	18.0	NA
A	S0+00E2+00B	5-10	3.2	0.6	6.0	NA
A	S0+25E0+00A	NA	NA	NA	NA	NA
A	S0+25E0+00B	NA	NA	NA	NA	NA
A	S0+25E0+25A	0-5	9.0	0.0	19	0.0
A	S0+25E0+25B	5-10	5.0	0.8	30	0.0
A	S0+25E0+50A	0-5	15	0.0	14	0.0
A	S0+25E0+50B	5-10	30	0.0	2.0	0.0
A	S0+25E0+75A	0-5	29	0.0	19	0.0
A	S0+25E0+75B	5-10	2.4	0.0	6.0	0.0
A	S0+25E1+00A	0-5	6.2	0.0	6.5	0.0
A	S0+25E1+00B	5-10	1.0	0.0	4.7	0.0
A	S0+25E1+25A	0-5	1.4	0.0	0.0	0.0
A	S0+25E1+25B	5-10	0.0	0.0	0.1	0.0
A	S0+25E1+50A	0-5	0.0	0.0	0.0	0.0
A	S0+25E1+50B	5-10	0.0	0.0	0.0	0.0
A	S0+25E1+75A	0-5	2.4	0.6	1.0	0.0
A	S0+25E1+75B	5-10	1.0	0.0	1.2	0.0
A	S0+25E2+00A	0-5	19	0.8	19	NA
A	S0+25E2+00B	5-10	4.6	0.0	2.0	0.0
A	S0+50E0+00A	NA	NA	NA	NA	NA
A	S0+50E0+00B	NA	NA	NA	NA	NA
A	S0+50E0+25A	0-5	1.7	0.0	2.3	0.0
A	S0+50E0+25B	5-10	0.6	0.0	1.2	0.0
A	S0+50E0+50A	0-5	1.2	0.0	0.6	0.0
A	S0+50E0+50B	5-10	1.0	0.0	0.0	0.0
A	S0+50E0+75A	0-5	21	0.0	99	2.0
A	S0+50E0+75B	5-10	5.8	0.0	21	0.0

SITE 7 SOIL HEADSPACE SURVEY

GRID COORDINATE and INTERVAL	FEET (BLS)	OVA		BOREHOLE OVA	
		UNFILTERED (ppm)	FILTERED (ppm)	UNFILTERED (ppm)	FILTERED (ppm)
A S0+50E1+00A	0-5	0.0	0.0	1.0	0.0
A S0+50E1+00B	5-10	1.0	0.0	0.6	0.0
A S0+50E1+25A	0-5	1.2	0.0	0.0	0.0
A S0+50E1+25B	5-10	5.0	0.0	2.0	0.0
A S0+50E1+50A	0-5	1.4	0.0	0.0	0.0
A S0+50E1+50B	5-10	0.0	0.0	0.0	0.0
A S0+50E1+75A	0-5	0.0	0.0	2.4	0.0
A S0+50E1+75B	5-10	2.4	0.0	3.0	0.0
A S0+50E2+00A	0-5	7.2	0.0	1.0	0.0
A S0+50E2+00B	5-10	5.4	0.0	0.0	0.0
A S0+75E0+00A	NA	NA	NA	NA	NA
A S0+75E0+00B	N A N A		NA	NA	NA
A S0+75E0+25A	0-5	0.0	0.0	0.2	0.0
A S0+75E0+25B	5-10	0.0	0.0	0.0	0.0
A S0+75E0+50A	0-5	5.5	0.0	3.4	0.0
A S0+75E0+50B	5-10	0.8	0.2	3.2	0.2
A S0+75E0+75A	0-5	0.0	0.0	1.0	0.0
A S0+75E0+75B	5-10	0.0	0.0	NA	NA
A S0+75E1+00A	0-5	0.4	0.4	2.0	0.0
A S0+75E1+00B	5-10	0.0	0.0	1.0	0.0
A S0+75E1+25A	0-5	0.0	0.0	9.0	0.0
A S0+75E1+25B	5-10	11	0.0	5.1	0.0
A S0+75E1+50A	0-5	0.0	0.0	7.5	0.0
A S0+75E1+50B	5-10	3.2	0.4	0.0	0.0
A S0+75E1+75A	N A N A		NA	NA	NA
A S0+75E1+75B	N A N A		NA	NA	NA
A S0+75E2+00A	0-5	10.0	0.0	5.4	0.0
A S0+75E2+00B	5-10	2.8	0.2	0.0	0.0
A S1+00E0+00A	0-5	0.0	0.0	0.4	0.0
A S1+00E0+00B	5-10	0.0	0.0	0.0	0.0
A S1+00E0+25A	0-5	0.4	0.0	3.0	0.0
A S1+00E0+25B	5-10	0.4	0.2	2.4	0.2
A S1+00E0+50A	0-5	2.0	0.0	8.3	0.0
A S1+00E0+50B	5-10	3.2	0.4	0.2	0.2
A S1+00E0+75A	0-5	0.0	0.0	0.0	0.0
A S1+00E0+75B	5-10	0.0	0.0	0.0	0.0
A S1+00E1+00A	0-5	0.0	0.0	0.0	0.0
A S1+00E1+00B	5-10	0.0	0.0	0.0	0.0
A S1+00E1+25A	0-5	0.0	0.0	0.0	0.0
A S1+00E1+25B	5-10	0.0	0.0	0.0	0.0
A S1+00E1+50A	0-5	0.0	0.0	0.0	0.0
A S1+00E1+50B	5-10	0.0	0.0	0.0	0.0
A S1+00E1+75A	0-5	0.0	0.0	0.2	0.2
A S1+00E1+75B	5-10	0.0	0.0	0.8	0.2
A S1+00E2+00A	0-5	2.4	0.0	4.2	0.2

SITE 7 SOIL HEADSPACE SURVEY

GRID	COORDINATE and INTERVAL	FEET (BLS)	OVA		BOREHOLE OVA	
			UNFILTERED (ppm)	FILTERED (ppm)	UNFILTERED (ppm)	FILTERED (ppm)
A	S1+00E2+00B	5-10	0.0	0.0	1.2	0.0
A	S1+25E0+00A	0-5	0.0	0.0	0.0	0.0
A	S1+25E0+00B	5-10	0.0	0.0	0.0	0.0
A	S1+25E0+25A	0-5	0.0	0.0	0.0	NA
A	S1+25E0+25B	5-10	0.0	0.0	0.0	NA
A	S1+25E0+50A	0-5	0.0	0.0	0.0	0.0
A	S1+25E0+50B	5-10	0.0	0.0	0.0	0.0
A	S1+25E0+75A	0-5	0.0	0.0	0.0	0.0
A	S1+25E0+75B	5-10	0.0	0.0	0.0	0.0
A	S1+25E1+00A	0-5	0.0	0.0	0.0	0.0
A	S1+25E1+00B	5-10	0.0	0.0	0.0	0.0
A	S1+25E1+25A	0-5	0.0	0.0	0.0	0.0
A	S1+25E1+25B	5-10	0.0	0.0	0.0	0.0
A	S1+25E1+50A	0-5	0.0	0.0	0.0	0.0
A	S1+25E1+50B	5-10	0.0	0.0	0.0	0.0
A	S1+25E1+75A	0-5	0.0	0.0	0.0	0.0
A	S1+25E1+75B	5-10	0.0	0.0	0.0	0.0
A	S1+25E2+00A	0-5	5.0	0.0	5.0	0.0
A	S1+25E2+00B	5-10	0.4	0.0	3.2	0.6
A	S1+50E0+00A	0-5	9.0	0.0	8.0	0.0
A	S1+50E0+00B	5-10	5.5	0.0	5.0	0.0
A	S1+50E0+25A	0-5	1.0	0.0	7.0	0.0
A	S1+50E0+25B	5-10	1.0	0.0	1.0	0.0
A	S1+50E0+50A	0-5	4.0	0.0	9.0	0.0
A	S1+50E0+50B	5-10	0.0	0.0	5.0	0.0
A	S1+50E0+75A	0-5	0.0	0.0	0.0	0.0
A	S1+50E0+75B	5-10	0.0	0.0	0.0	0.0
A	S1+50E1+00A	0-5	0.0	0.0	0.0	0.0
A	S1+50E1+00B	5-10	0.0	0.0	0.0	0.0
A	S1+50E1+25A	0-5	0.0	0.0	0.0	0.0
A	S1+50E1+25B	5-10	0.0	0.0	0.0	0.0
A	S1+50E1+50A	0-5	0.2	0.0	0.0	0.0
A	S1+50E1+50B	5-10	0.0	0.0	0.0	0.0
A	S1+50E1+75A	0-5	0.2	0.0	0.6	0.0
A	S1+50E1+75B	5-10	0.2	0.0	0.2	0.0
A	S1+50E2+00A	0-5	6.0	0.0	2.5	0.0
A	S1+50E2+00B	5-10	0.2	0.0	4.0	0.0
B	S0+00E0+00A	0-5	0.0	0.0	0.0	0.0
B	S0+00E0+00B	5-10	0.0	0.0	0.0	NA
B	S0+00E0+25A	0-5	0.0	0.0	0.0	NA
B	S0+00E0+25B	5-10	0.0	0.0	0.0	NA
B	S0+00E0+50A	0-5	0.0	0.0	0.0	NA
B	S0+00E0+50B	5-10	0.0	0.0	0.0	NA
B	S0+00E0+75A	0-5	1.8	0.0	6.6	0.0
B	S0+00E0+75B	5-10	0.8	0.0	1.8	0.0

10/10/91

SITE 7 SOIL HEADSPACE SURVEY

GRID	COORDINATE and INTERVAL	FEET (BLS)	OVA UNFILTERED (ppm)	OVA FILTERED (ppm)	BOREHOLE OVA UNFILTERED (ppm)	BOREHOLE OVA FILTERED (ppm)
B	S0+25E0+00A	0-5	0.0	0.0	0.0	NA
B	S0+25E0+00B	5-10	0.0	0.0	0.0	NA
B	S0+25E0+25A	0-5	0.2	0.0	0.5	0.0
B	S0+25E0+25B	5-10	0.0	0.0	0.0	NA
B	S0+25E0+25B	5-10	0.0	0.0	0.0	NA
B	S0+25E0+50A	0-5	0.0	0.0	0.0	NA
B	S0+25E0+75A	0-5	1.8	0.0	7.0	0.0
B	S0+25E0+75B	5-10	1.4	0.0	4.0	0.0
B	S0+25E1+00A	0-5	1.4	0.0	6.8	0.0
B	S0+25E1+00B	5-10	1.2	0.0	4.5	0.0
B	S0+50E0+00A	0-5	0.0	0.0	0.0	NA
B	S0+50E0+00B	5-10	0.0	0.0	0.0	NA
B	S0+50E0+25A	0-5	0.0	0.0	0.2	0.0
B	S0+50E0+25B	5-10	0.0	0.0	0.0	NA
B	S0+50E0+50A	0-5	0.0	0.0	0.0	NA
B	S0+50E0+50B	5-10	0.0	0.0	0.0	NA
B	S0+50E0+75A	0-5	4.2	0.0	57	0.0
B	S0+50E0+75B	5-10	1.6	0.0	60	0.0
B	S0+50E1+00A	0-5	0.6	0.0	6.0	0.0
B	S0+50E1+00B	5-10	1.0	0.0	2.0	0.0
B	S0+75E0+00A	0-5	0.0	0.0	0.0	NA
B	S0+75E0+00B	5-10	0.0	0.0	0.0	NA
B	S0+75E0+25A	0-5	0.0	0.0	0.2	0.0
B	S0+75E0+25B	5-10	0.0	0.0	0.0	NA
B	S0+75E0+50A	0-5	0.0	0.0	0.0	NA
B	S0+75E0+50B	5-10	0.0	0.0	0.0	NA
B	S0+75E0+75A	0-5	10.0	0.0	40	1.0
B	S0+75E0+75B	5-10	7.8	0.0	NA	NA
B	S0+75E1+00A	0-5	0.8	0.0	1.6	0.0
B	S0+75E1+00B	5-10	0.0	0.0	1.8	0.0
B	S1+00E0+00A	0-5	0.0	0.0	0.0	NA
B	S1+00E0+00B	5-10	0.0	0.0	0.0	NA
B	S1+00E0+25A	0-5	0.0	0.0	0.0	NA
B	S1+00E0+25B	5-10	0.0	0.0	0.0	NA
B	S1+00E0+50A	0-5	0.0	0.0	0.0	NA
B	S1+00E0+50B	5-10	0.0	0.0	0.0	NA
B	S1+00E0+75A	0-5	0.0	0.0	0.0	NA
B	S1+00E0+75B	5-10	0.0	0.0	0.0	1.0
B	S1+00E1+00A	0-5	0.0	0.0	0.2	0.0
B	S1+00E1+00B	5-10	0.0	0.0	0.0	0.0
B	S1+25E0+00A	0-5	0.0	0.0	0.2	0.0
B	S1+25E0+00B	5-10	0.0	0.0	0.3	0.0
B	S1+25E0+25A	0-5	0.0	0.0	0.0	NA
B	S1+25E0+25B	5-10	0.0	0.0	0.0	NA
B	S1+25E0+50A	0-5	0.0	0.0	0.0	NA

SITE 7 SOIL HEADSPACE SURVEY

GRID COORDINATE and INTERVAL	FEET (BLS)	OVA		BOREHOLE OVA	
		UNFILTERED (ppm)	FILTERED (ppm)	UNFILTERED (ppm)	FILTERED (ppm)
B S1+25E0+50B	5-10	0.0	0.0	0.2	0.0
B S1+25E0+75A	0-5	0.0	2.0	12	0.0
B S1+25E0+75B	5-10	1.5	0.0	30	1.0
B S1+25E1+00A	0-5	0.0	0.0	0.4	0.0
B S1+25E1+00B	5-10	0.0	0.0	0.2	0.0

*E*

APPENDIX E

**TEMPORARY MONITORING WELL,  
SOIL BORING, AND LITHOLOGIC INFORMATION**

SOIL BORING/TEMPORARY MONITORING WELL INFORMATION

- 1) Site no.: 07
- 2) Boring no./Well no.: P07B001
- 3) Drilling firm: Meister and Assoc.
- 4) Drilling method: SSA
- 5) Date drilled/installed: 07/09/91
- 6) Geologist: JEFF LUNCEFORD
- 7) Depth of boring (BLS): 12.5
- 8) Depth to water in borehole (BLS): 11
- 9) Highest open-borehole OVA/HNu reading (ppm): 45
- 10) Depth of well (BLS): NA
- 11) Length of well screen: NA
- 12) Length of casing (BLS): NA
- 13) Approx. height of casing above land surface: NA
- 14) Depth to water in well (BTOC): NA
- 15) Elevation of TOC: NA
- 16) Water level elevation: NA
- 17) Date groundwater sampled:
- 18) pH (units): NA
- 19) Temperature (degrees C): NA
- 20) Specific conductance (umhos/cm): NA
- 21) Borehole/Well abandonment method: Backfilled with cuttings.
- 22) Comments:

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BOREHOLE LITHOLOGIC LOG

Sample Depth (BLS)	Sample Description
0- 5.0	Medium brown to tan sand, fine to medium grained.
5.0- 6.0	Medium brown to tan sand, fine to medium grained.
6.0- 10.0	Light brown sand, fine to medium grained.
10.0- 12.5	Light tan to buff white sand, fine to medium grained. Wet at 11 ft.

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Notes: All depths, lengths, heights, and elevations are measured in feet. All boreholes are 4 inches in diameter. All well casings and screens are 2-inch-diameter; well screen slot sizes are .010 inches. No annular material (i.e. filter pack, seal or grout) was used in well installation. Unless otherwise noted, all sand grains are quartz.

NA = not applicable  
 SSA = solid stem auger  
 HA = hand auger  
 NR = No Reading

BLS = below land surface  
 TOC = top of casing  
 BTOC = below top of casing

SOIL BORING/TEMPORARY MONITORING WELL INFORMATION

- 1) Site no.: 07
- 2) Boring no./Well no.: P07B002
- 3) Drilling firm: Heister and Assoc.
- 4) Drilling method: SSA
- 5) Date drilled/installed: 07/09/91
- 6) Geologist: JEFF LUNCEFORD
- 7) Depth of boring (BLS): 12
- 8) Depth to water in borehole (BLS): 11
- 9) Highest open-borehole OVA/HNu reading (ppm): 120
- 10) Depth of well (BLS): NA
- 11) Length of well screen: NA
- 12) Length of casing (BLS): NA
- 13) Approx. height of casing above land surface: NA
- 14) Depth to water in well (BTOC): NA
- 15) Elevation of TOC: NA
- 16) Water level elevation: NA
- 17) Date groundwater sampled:
- 18) pH (units): NA
- 19) Temperature (degrees C): NA
- 20) Specific conductance (umhos/cm): NA
- 21) Borehole/Well abandonment method: Backfilled with cuttings.
- 22) Comments:

BOREHOLE LITHOLOGIC LOG

Sample Depth (BLS)	Sample Description
0- 1.0	Dark brown silty soil.
1.0- 5.0	Medium brown sand, fine to medium grained.
5.0- 6.0	Medium brown to tan sand, fine to medium grained.
6.0- 10.0	Light tan sand, fine to medium grained.
10.0- 12.0	Light tan to buff white sand, fine to medium grained. Wet at 11 ft.

Notes: All depths, lengths, heights, and elevations are measured in feet. All boreholes are 4 inches in diameter. All well casings and screens are 2-inch-diameter; well screen slot sizes are .010 inches. No annular material (i.e. filter pack, seal or grout) was used in well installation. Unless otherwise noted, all sand grains are quartz.

NA = not applicable	BLS = below land surface
SSA = solid stem auger	TOC = top of casing
EA = hand auger	BTOC = below top of casing
NR = No Reading	

SOIL BORING/TEMPORARY MONITORING WELL INFORMATION

- 1) Site no.: 07
- 2) Boring no./Well no.: P07B003
- 3) Drilling firm: Meister and Assoc.
- 4) Drilling method: SSA
- 5) Date drilled/installed: 07/09/91
- 6) Geologist: JEFF LUNCEFORD
- 7) Depth of boring (BLS): 13
- 8) Depth to water in borehole (BLS): 12
- 9) Highest open-borehole OVA/HNu reading (ppm): 60
- 10) Depth of well (BLS): NA
- 11) Length of well screen: NA
- 12) Length of casing (BLS): NA
- 13) Approx. height of casing above land surface: NA
- 14) Depth to water in well (BTOC): NA
- 15) Elevation of TOC: NA
- 16) Water level elevation: NA
- 17) Date groundwater sampled:
- 18) pH (units): NA
- 19) Temperature (degrees C): NA
- 20) Specific conductance (umhos/cm): NA
- 21) Borehole/Well abandonment method: Backfilled with cuttings.
- 22) Comments:

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BOREHOLE LITHOLOGIC LOG

Sample Depth (BLS)	Sample Description
0- 1.0	Dark brown silty sandy soil, fine grained.
1.0- 5.0	Medium brown sand, fine to medium grained.
5.0- 7.0	Medium brown sand, fine to medium grained.
7.0- 10.0	Light brown sand, fine to medium grained.
10.0- 13.0	Light tan to buff white sand, fine to medium grained. Wet at 12 ft.

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Notes: All depths, lengths, heights, and elevations are measured in feet. All boreholes are 4 inches in diameter. All well casings and screens are 2-inch-diameter; well screen slot sizes are .010 inches. No annular material (i.e. filter pack, seal or grout) was used in well installation. Unless otherwise noted, all sand grains are quartz.

NA = not applicable  
 SSA = solid stem auger  
 HA = hand auger  
 NR = No Reading

BLS = below land surface  
 TOC = top of casing  
 BTOC = below top of casing

SOIL BORING/TEMPORARY MONITORING WELL INFORMATION

- 1) Site no.: 07
- 2) Boring no./Well no.: P07B004
- 3) Drilling firm: Meister and Assoc.
- 4) Drilling method: SSA
- 5) Date drilled/installed: 07/10/91
- 6) Geologist: JEFF LUNCEFORD
- 7) Depth of boring (BLS): 12
- 8) Depth to water in borehole (BLS): 11
- 9) Highest open-borehole OVA/HNu reading (ppm): 20
- 10) Depth of well (BLS): NA
- 11) Length of well screen: NA
- 12) Length of casing (BLS): NA
- 13) Approx. height of casing above land surface: NA
- 14) Depth to water in well (BTOC): NA
- 15) Elevation of TOC: NA
- 16) Water level elevation: NA
- 17) Date groundwater sampled:
- 18) pH (units): NA
- 19) Temperature (degrees C): NA
- 20) Specific conductance (umhos/cm): NA
- 21) Borehole/Well abandonment method: Backfilled with cuttings.
- 22) Comments:

BOREHOLE LITHOLOGIC LOG

Sample Depth (BLS)	Sample Description
0- 1.0	Red clayey fill dirt (road bed).
1.0- 6.0	Tan sand, fine to medium grained.
6.0- 10.0	Light tan sand, fine to medium grained.
10.0- 12.0	Light tan to buff white sand, fine to medium grained. Wet at 11 ft.

Notes: All depths, lengths, heights, and elevations are measured in feet. All boreholes are 4 inches in diameter. All well casings and screens are 2-inch-diameter; well screen slot sizes are .010 inches. No annular material (i.e. filter pack, seal or grout) was used in well installation. Unless otherwise noted, all sand grains are quartz.

NA = not applicable	BLS = below land surface
SSA = solid stem auger	TOC = top of casing
HA = hand auger	BTOC = below top of casing
NR = No Reading	

SOIL BORING/TEMPORARY MONITORING WELL INFORMATION

- 1) Site no.: 07
- 2) Boring no./Well no. : P07B005/P07TW005
- 3) Drilling firm: Meister and Assoc.
- 4) Drilling method: SSA
- 5) Date drilled/installed: 07/09/91
- 6) Geologist: JEFF LUNCEFORD
- 7) Depth of boring (BLS): 14
- 8) Depth to water in borehole (BLS): 9
- 9) Highest open-borehole OVA/HNu reading (ppm): 160
- 10) Depth of well (BLS): 12.55
- 11) Length of well screen: 5
- 12) Length of casing (BLS): 10.00
- 13) Approx. height of casing above land surface: 2.35
- 14) Depth to water in well (BTOC): 11.00
- 15) Elevation of TOC: 31.52
- 16) Water level elevation: 20.52
- 17) Date groundwater sampled: 07/11/91
- 18) pH (units): 6.1
- 19) Temperature (degrees C): 24
- 20) Specific conductance (umhos/cm): 290
- 21) Borehole/Well abandonment method: Backfilled with cuttings.
- 22) Comments:

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BOREHOLE LITHOLOGIC LOG

Sample Depth (BLS)	Sample Description
0- 1.0	Dark brown silty sandy soil, fine grained.
1.0- 5.0	Tan to medium brown sand, fine to medium grained.
5.0- 7.0	Medium brown sand, fine to medium grained.
7.0- 10.0	Light brown sand, fine to medium grained. Wet at 9 ft.
10.0- 14.0	Light brown sand, medium to coarse grained.

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Notes: All depths lengths, heights, and elevations are measured in feet. All boreholes are 4 inches in diameter. All well casings and screens are 2-inch-diameter; well screen slot sizes are .010 inches. No annular material (i.e. filter pack, seal or grout) was used in well installation. Unless otherwise noted, all sand grains are quartz.

NA = not applicable	BLS = below land surface
SSA = solid stem auger	TOC = top of casing
HA = hand auger	BTOC = below top of casing
NR = No Reading	

SOIL BORING/TEMPORARY MONITORING WELL INFORMATION

- 1) Site no.: 07
- 2) Boring no./Well no.: P07B006
- 3) Drilling firm: Heister and Assoc.
- 4) Drilling method: SSA
- 5) Date drilled/installed: 07/11/91
- 6) Geologist: JEFF LUNCEFORD
- 7) Depth of boring (BLS): 11.5
- 8) Depth to water in borehole (BLS): 11
- 9) Highest open-borehole OVA/HNu reading (ppm) : 25
- 10) Depth of well (BLS): NA
- 11) Length of well screen: NA
- 12) Length of casing (BLS): NA
- 13) Approx. height of casing above land surface: NA
- 14) Depth to water in well (BTOC): NA
- 15) Elevation of TOC: NA
- 16) Water level elevation: NA
- 17) Date groundwater sampled:
- 18) pH (units): NA
- 19) Temperature (degrees C): NA
- 20) Specific conductance (umhos/cm): NA
- 21) Borehole/Well abandonment method: Backfilled with cuttings.
- 22) Comments :

---

BOREHOLE LITHOLOGIC LOG

Sample Depth (BLS)	Sample Description
0- 0.9	Dark grey to brown silty soil, fine grained.
0.9- 5.0	Medium brown to tan sand, fine to medium grained.
5.0- 7.0	Medium brown to tan sand, fine to medium grained.
7.0- 10.0	Light tan sand, fine to medium grained.
10.0- 11.5	Light tan to buff white sand, fine to medium grained.

Notes: All depths, lengths, heights, and elevations are measured in feet. All boreholes are 4 inches in diameter. All well casings and screens are 2-inch-diameter; well screen slot sizes are .010 inches. No annular material (i.e. filter pack, seal or grout) was used in well installation. Unless otherwise noted, all sand grains are quartz.

NA = not applicable  
 SSA = solid stem auger  
 HA = hand auger  
 NR = No Reading

BLS = below land surface  
 TOC = top of casing  
 BTOC = below top of casing

SOIL BORING/TEMPORARY MONITORING WELL INFORMATION

- 1) Site no.: 07
- 2) Boring no./Well no.: P07B007/P07TW007
- 3) Drilling firm: Meister and Assoc.
- 4) Drilling method: SSA
- 5) Date drilled/installed: 07/10/91
- 6) Geologist: JEFF LUNCEFORD
- 7) Depth of boring (BLS): 14
- 8) Depth to water in borehole (BLS): 9
- 9) Highest open-borehole OVA/HNu reading (ppm): 70
- 10) Depth of well (BLS): 12.45
- 11) Length of well screen: 5
- 12) Length of casing (BLS): 7.45
- 13) Approx. height of casing above land surface: 2.55
- 14) Depth to water in well (BTOC): 10.70
- 15) Elevation of TOC: 31.78
- 16) Water level elevation: 21.08
- 17) Date groundwater sampled: 07/11/91
- 18) pH (units): 6.1
- 19) Temperature (degrees C): 24
- 20) Specific conductance (umhos/cm): 250
- 21) Borehole/Well abandonment method: Backfilled with cuttings.
- 22) Comments: Slight petroleum odor present in water.

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BOREHOLE LITHOLOGIC LOG

Sample Depth (BLS)	Sample Description
0- 1.0	Dark brown silty soil, fine grained.
1.0- 2.0	Dark to medium brown sand, fine to medium grained.
2.0- 5.0	Medium brown to tan sand, fine to medium grained.
5.0- 7.0	Tan sand, fine to medium grained.
7.0- 10.0	Light tan sand, fine to medium grained. Wet at 9 ft.
10.0- 12.0	Light tan to buff white sand, fine to medium grained.
12.0-14.0	Light grey sand, fine to medium grained.

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Notes: All depths, lengths, heights, and elevations are measured in feet. All boreholes are 4 inches in diameter. All well casings and screens are 2-inch-diameter; well screen slot sizes are .010 inches. No annular material (i.e. filter pack, seal or grout) was used in well installation. Unless otherwise noted, all sand grains are quartz.

NA = not applicable  
 SSA = solid stem auger  
 HA = hand auger  
 NR = No Reading

BLS = below land surface  
 TOC = top of casing  
 BTOC = below top of casing

10,900

SOIL BORING/TEMPORARY MONITORING WELL INFORMATION

- 1) Site no.: 07
- 2) Boring no./Well no.: P07B008/P07TW008
- 3) Drilling firm: Meister and Assoc.
- 4) Drilling method: SSA
- 5) Date drilled/installed: 07/09/91
- 6) Geologist: JEFF LUNCEFORD
- 7) Depth of boring (BLS): 14
- 8) Depth to water in borehole (BLS): 9
- 9) Highest open-borehole OVA/HNu reading (ppm): 6
- 10) Depth of well (BLS): 12.40
- 11) Length of well screen: 5
- 12) Length of casing (BLS): 7.40
- 13) Approx. height of casing above land surface: 2.60
- 14) Depth to water in well (BTOC): 10.58
- 15) Elevation of TOC: 31.26
- 16) Water level elevation: 20.68
- 17) Date groundwater sampled: 07/11/91
- 18) pH (units): 6.1
- 19) Temperature (degrees C): 23
- 20) Specific conductance (umhos/cm): 324
- 21) Borehole/Well abandonment method: Backfilled with cuttings.
- 22) Comments :

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BOREHOLE LITHOLOGIC LOG

Sample Depth (BLS)	Sample Description
0- 8.0	Medium brown sand, fine to medium grained.
8.0- 9.0	Light tan sand, fine to medium grained. Wet at 9 ft.
9.0- 14.0	Medium brown sand, medium grained.

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Notes: All depths, lengths, heights, and elevations are measured in feet. All boreholes are 4 inches in diameter. All well casings and screens are 2-inch-diameter; well screen slot sizes are .010 inches. No annular material (i.e. filter pack, seal or grout) was used in well installation. Unless otherwise noted, all sand grains are quartz.

NA = not applicable  
 SSA = solid stem auger  
 HA = hand auger  
 NR = No Reading

BLS = below land surface  
 TOC = top of casing  
 BTOC = below top of casing

SOIL BORING/TEMPORARY MONITORING WELL INFORMATION

- 1) Site no.: 07
- 2) Boring no./Well no.: P07B009
- 3) Drilling firm: Meister and Assoc.
- 4) Drilling method: SSA
- 5) Date drilled/installed: 07/11/91
- 6) Geologist: JEFF LUNCEFORD
- 7) Depth of boring (BLS): 10
- 8) Depth to water in borehole (BLS): 9.5
- 9) Highest open-borehole OVA/HNu reading (ppm): 2
- 10) Depth of well (BLS): NA
- 11) Length of well screen: NA
- 12) Length of casing (BLS): NA
- 13) Approx. height of casing above land surface: NA
- 14) Depth to water in well (BTOC): NA
- 15) Elevation of TOC: NA
- 16) Water level elevation: NA
- 17) Date groundwater sampled:
- 18) pH (units): NA
- 19) Temperature (degrees C): NA
- 20) Specific conductance (umhos/cm): NA
- 21) Borehole/Well abandonment method: Backfilled with cuttings.
- 22) Comments:

---

BOREHOLE LITHOLOGIC LOG

Sample Depth (BLS)	Sample Description
0- 1.0	Dark brown silty soil, fine grained.
1.0- 2.0	Medium brown to tan sand, fine to medium grained.
2.0- 5.0	Tan to light tan sand, fine to medium grained.
5.0- 8.0	Light tan sand, fine to medium grained.
8.0- 10.0	Light tan to buff white sand, fine to medium grained. Wet at 9.5 ft.

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Notes: All depths lengths, heights, and elevations are measured in feet. All boreholes are 4 inches in diameter. All well casings and screens are 2-inch-diameter; well screen slot sizes are .010 inches. No annular material (i.e. filter pack, seal or grout) was used in well installation. Unless otherwise noted, all sand grains are quartz.

NA = not applicable  
 SSA = solid stem auger  
 HA = hand auger  
 NR = No Reading

BLS = below land surface  
 TOC = top of casing  
 BTOC = below top of casing

SOIL BORING/TEMPORARY MONITORING WELL INFORMATION

- 1) Site no.: 07
- 2) Boring no./Well no.: P07B010
- 3) Drilling firm: Meister and Assoc.
- 4) Drilling method: SSA
- 5) Date drilled/installed: 07/10/91
- 6) Geologist: JEFF LUNCEFORD
- 7) Depth of boring (BLS): 10
- 8) Depth to water in borehole (BLS): 9.5
- 9) Highest open-borehole OVA/HNu reading (ppm): 70
- 10) Depth of well (BLS): NA
- 11) Length of well screen: NA
- 12) Length of casing (BLS): NA
- 13) Approx. height of casing above land surface: NA
- 14) Depth to water in well (BTOC): NA
- 15) Elevation of TOC: NA
- 16) Water level elevation: NA
- 17) Date groundwater sampled:
- 18) pH (units): NA
- 19) Temperature (degrees C): NA
- 20) Specific conductance (umhos/cm): NA
- 21) Borehole/Well abandonment method: Backfilled with cuttings.
- 22) Comments:

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BOREHOLE LITHOLOGIC LOG

Sample Depth (BLS)	Sample Description
0- 1.0	Dark grey to brown silty sandy soil, fine grained.
1.0- 5.0	Medium brown to tan sand, fine to medium grained.
5.0- 10.0	Tan sand, fine to medium grained. Wet at 9.5 ft.

Notes: All depths lengths, heights, and elevations are measured in feet. All boreholes are 4 inches in diameter. All well casings and screens are 2-inch-diameter; well screen slot sizes are .010 inches. No annular material (i.e. filter pack, seal or grout) was used in well installation. Unless otherwise noted, all sand grains are quartz.

NA = not applicable  
 SSA = solid stem auger  
 HA = hand auger  
 NR = No Reading

BLS = below land surface  
 TOC = top of casing  
 BTOC = below top of casing

SOIL BORING/TEMPORARY MONITORING WELL INFORMATION

- 1) Site no.: 07
- 2) Boring no./Well no.: P07B011
- 3) Drilling firm: Meister and Assoc.
- 4) Drilling method: SSA
- 5) Date drilled/installed: 07/10/91
- 6) Geologist: JEFF LUNCEFORD
- 7) Depth of boring (BLS): 12
- 8) Depth to water in borehole (BLS): 11
- 9) Highest open-borehole OVA/HNu reading (ppm): 50
- 10) Depth of well (BLS): NA
- 11) Length of well screen: NA
- 12) Length of casing (BLS): NA
- 13) Approx. height of casing above land surface: NA
- 14) Depth to water in well (BTOC): NA
- 15) Elevation of TOC: NA
- 16) Water level elevation: NA
- 17) Date groundwater sampled:
- 18) pH (units): NA
- 19) Temperature (degrees C): NA
- 20) Specific conductance (umhos/cm): NA
- 21) Borehole/Well abandonment method: Backfilled with cuttings.
- 22) Comments :

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BOREHOLE LITHOLOGIC LOG

Sample Depth (BLS)	Sample Description
0- 0.7	Dark grey to brown silty soil, fine grained.
0.7- 4.0	Medium brown to tan sand, medium to fine grained.
4.0- 7.0	Tan sand, fine to medium grained.
7.0- 12.0	Light tan sand, fine to medium grained. Wet at 11 ft.

Notes: All depths, lengths, heights, and elevations are measured in feet. All boreholes are 4 inches in diameter. All well casings and screens are 2-inch-diameter; well screen slot sizes are .010 inches. No annular material (i.e. filter pack, seal or grout) was used in well installation. Unless otherwise noted, all sand grains are quartz.

NA = not applicable  
 SSA = solid stem auger  
 HA = hand auger  
 NR = No Reading

BLS = below land surface  
 TOC = top of casing  
 BTOC = below top of casing

SOIL BORING/TEMPORARY MONITORING WELL INFORMATION

- 1) Site no.: 07
- 2) Boring no./Well no.: P07B012
- 3) Drilling firm: Meister and Assoc.
- 4) Drilling method: SSA
- 5) Date drilled/installed: 07/11/91
- 6) Geologist: JEFF LUNCEFORD
- 7) Depth of boring (BLS): 10
- 8) Depth to water in borehole (BLS): 9
- 9) Highest open-borehole OVA/HNu reading (ppm): 5
- 10) Depth of well (BLS): NA
- 11) Length of well screen: NA
- 12) Length of casing (BLS): NA
- 13) Approx. height of casing above land surface: NA
- 14) Depth to water in well (BTOC): NA
- 15) Elevation of TOC: NA
- 16) Water level elevation: NA
- 17) Date groundwater sampled:
- 18) pH (units): NA
- 19) Temperature (degrees C): NA
- 20) Specific conductance (umhos/cm): NA
- 21) Borehole/Well abandonment method: Backfilled with cuttings.
- 22) Comments:

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BOREHOLE LITHOLOGIC LOG

Sample Depth (BLS)	Sample Description
0- 0.9	Dark grey to brown silty soil, fine grained.
0.9- 5.0	Medium brown to tan sand, fine to medium grained.
5.0- 7.0	Tan sand, fine to medium grained.
7.0- 10.0	Light tan sand, fine to medium grained. Vet at 9 ft. BLS.

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Notes: All depths, lengths, heights, and elevations are measured in feet. All boreholes are 4 inches in diameter. All well casings and screens are 2-inch-diameter; well screen slot sizes are .010 inches. No annular material (i.e. filter pack, seal or grout) was used in well installation. Unless otherwise noted, all sand grains are quartz.

NA = not applicable  
 SSA = solid stem auger  
 HA = hand auger  
 NR = No Reading

BLS = below land surface  
 TOC = top of casing  
 BTOC = below top of casing

SOIL BORING/TEMPORARY MONITORING WELL INFORMATION

- 1) Site no.: 07
- 2) Boring no./Well no.: P07B013
- 3) Drilling firm: Meister and Assoc.
- 4) Drilling method: SSA
- 5) Date drilled/installed: 07/11/91
- 6) Geologist: JEFF LUNCEFORD
- 7) Depth of boring (BLS): 10
- 8) Depth to water in borehole (BLS): 9
- 9) Highest open-borehole OVA/HNu reading (ppm): 35
- 10) Depth of well (BLS): NA
- 11) Length of well screen: NA
- 12) Length of casing (BLS): NA
- 13) Approx. height of casing above land surface: NA
- 14) Depth to water in well (BTOC): NA
- 15) Elevation of TOC: NA
- 16) Water level elevation: NA
- 17) Date groundwater sampled:
- 18) pH (units): NA
- 19) Temperature (degrees C): NA
- 20) Specific conductance (umhos/cm): NA
- 21) Borehole/Well abandonment method: Backfilled with cuttings.
- 22) Comments :

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BOREHOLE LITHOLOGIC LOG

Sample Depth (BLS)	Sample Description
0- 0.5	Dark grey silty soil, fine grained.
0.5- 3.0	Medium brown to tan sand, fine to medium grained.
3.0- 5.0	Tan to light tan sand, fine to medium grained.
5.0- 8.0	Light tan sand, fine to medium grained.
8.0- 10.0	Light tan to buff white sand, fine to medium grained. Wet at 9 ft.

---

Notes: All depths lengths, heights, and elevations are measured in feet. All boreholes are 4 inches in diameter. All well casings and screens are 2-inch-diameter; well screen slot sizes are .010 inches. No annular material (i.e. filter pack, seal or grout) was used in well installation. Unless otherwise noted, all sand grains are quartz.

NA = not applicable  
 SSA = solid stem auger  
 HA = hand auger  
 NR = No Reading

BLS = below land surface  
 TOC = top of casing  
 BTOC = below top of casing

SOIL BORING/TEMPORARY MONITORING V E U INFORMATION

- 1) Site no.: 21
- 2) Boring no./Well no.: P21B001
- 3) Drilling firm: Meister and Assoc.
- 4) Drilling method: HA
- 5) Date drilled/installed: 07/15/91
- 6) Geologist: JEFF LUNCEFORD
- 7) Depth of boring (BLS): 5
- 8) Depth to water in borehole (BLS): 5
- 9) Highest open-borehole OVA/HNu reading (ppa): 0
- 10) Depth of well (BLS): NA
- 11) Length of well screen: NA
- 12) Length of casing (BLS): NA
- 13) Approx. height of casing above land surface: NA
- 14) Depth to water in well (BTOC): NA
- 15) Elevation of TOC: NA
- 16) Water level elevation: NA
- 17) Date groundwater sampled:
- 18) pH (units): NA
- 19) Teaperature (degrees C): NA
- 20) Specific conductance (umhos/cm): NA
- 21) Borehole/Well abandonment method: Backfilled with cuttings.
- 22) Comments:

BOREHOLE LITHOLOGIC LOG

Sample Depth (BLS)	Sample Description
0- 0.5	Dark brown silty soil, fine grained.
0.5- 0.8	Red clay fill material.
0.8- 1.1	Light grey sand, fine to medium grained.
1.1- 5.0	Buff white sand, fine to medium grained. Wet at 5 ft.

Notes: All depths lengths, heights, and elevations are measured in feet. All boreholes are 4 inches in diameter. All well casings and screens are 2-inch-diameter; well screen slot sizes are .010 inches. No annular material (i.e. filter pack, seal or grout) was used in well installation. Unless otherwise noted, all sand grains are quartz.

NA = not applicable  
 SSA = solid stem auger  
 HA = hand auger  
 NR = No Reading

BLS = below land surface  
 TOC = top of casing  
 BTOC = below top of casing

**F**

APPENDIX F

SOIL SAMPLING  
ANALYTICAL SCREENING RESULTS

MEMORANDUM

TO : John Barksdale  
FROM: Gary Hahn *Gary Hahn*  
DATE : July 17, 1991  
SUBJECT: UH-8000 Pensacola Report  
RE : 9101.640  
CC: Lab File

Attached is the laboratory report of the analysis conducted on fourteen samples received at the Analytical Services Center on July 10, 1991. Analysis was performed according to the screening procedures set forth in "Generic Quality Assurance Project Plan, Contamination Assessments and Remedial Activities, Naval Air Station Pensacola, Pensacola, Florida," July 1990.

All samples on which this report is based will be retained by E & E for a period of 30 days from the date of this report unless otherwise instructed by the client. If additional storage of samples is requested by the client, a storage fee of \$1.00 per sample container per month will be charged for each sample, with such charges accruing until destruction of the samples is authorized by the client.

GH/kr  
Enclosure

MEMORANDUM

TO : John Barksdale  
FROM : Gary Hahn *Gary Hahn*  
DATE : July 24, 1991  
SUBJECT: UH-8000 Pensacola Report  
RE : 9101.646  
CC : Lab File

Attached is the laboratory report of the analysis conducted on ten samples received at the Analytical Services Center on July 11, 1991. Analysis was performed according to the screening procedures set forth in "Generic Quality Assurance Project Plan, Contamination Assessments and Remedial Activities, Naval Air Station Pensacola, Pensacola, Florida," July 1990.

All samples on which this report is based will be retained by E & E for a period of 30 days from the date of this report unless otherwise instructed by the client. If additional storage of samples is requested by the client, a storage fee of \$1.00 per sample container per month will be charged for each sample, with such charges accruing until destruction of the samples is authorized by the client.

GH/kr  
Enclosure

0000473

MEMORANDUM

TO: John Barksdale  
FROM: Gary Hahn *ghahn*  
DATE: July 24, 1991  
SUBJECT: UH-8000 Pensacola Report  
RE: 9101.658  
CC: Lab File

Attached is the laboratory report of the analysis conducted on fourteen samples received at the Analytical Services Center on July 12, 1991. Analysis was performed according to the screening procedures set forth in "Generic Quality Assurance Project Plan, Contamination Assessments and Remedial Activities, Naval Air Station Pensacola, Pensacola, Florida," July 1990.

All samples on which this report is based will be retained by E & E for a period of 30 days from the date of this report unless otherwise instructed by the client. If additional storage of samples is requested by the client, a storage fee of \$1.00 per sample container per month will be charged for each sample, with such charges accruing until destruction of the samples is authorized by the client.

GH/kr  
Enclosure



1526

Size according to specific QAPP  
 See Jack Miller  
 (All Parameters)

40 Volatiles, Pesticides, PCBs, TRPHs, Metals, PAHs

CHAIN-OF-CUSTODY RECORD

Project No.: UH8040		Project Name: NAS PENSACOLA PHASE I BATCH II			Project Manager: John Barsudala		REMARKS																
Samplers: (Signatures) <i>John Barsudala</i>		Field Team Leader: Jeff Lutzford																					
STATION NUMBER	DATE	TIME	SAMPLE TYPE			SAMPLE INFORMATION	STATION LOCATION	NUMBER OF CONTAINERS															
			COMP	GRAB	AIR				EXPECTED COMPOUNDS (Concentration)*														
75007A	7/10	0945	X			Low	Site 7 Soil Boring 007A	3	X	X											All samples ICED to 4°C		
75007B	7/10	0950	X			Low	Site 7 soil Boring 007B	3	X	X													
75008A	7/10	1045	X			Low	Site 7 soil Boring 010A	3	X	X													
75008B	7/10	1050	X			Low	Site 7 soil Boring 010B	3	X	X													
75011A	7/10	1115	X			Low	Site 7 soil Boring 011A	3	X	X												VOAs: B004, B007, B010, B011	
75011B	7/10	1120	X			Low	Site 7 soil Boring 011B	3	X	X												Lot # 1123045	
75011C	7/10	1125	X			Low	Site 7 soil Boring 011C	3	X	X												QC # 10354C	
75004A	7/10	1430	X			Low	Site 7 soil Boring 004A	3	X	X													
75004B	7/10	1435	X			Low	Site 7 soil Boring 004B	3	X	X													See Invs: B004, B007, B010, B011
75004C	7/10	1440	X			Low	Site 7 soil Boring 004C	3	X	X													Lot # X0331013 QC # X0942C
Relinquished By: (Signature) <i>JMB</i>		Date/Time: 7-10-91 1600		Received By: (Signature)		Relinquished By: (Signature)		Date/Time:		Received By: (Signature)		Ship Via: Federal Express											
Relinquished By: (Signature)		Date/Time:		Received By: (Signature)		Relinquished By: (Signature)		Date/Time:		Received By: (Signature)		BL/Airbill Number: 0776546385											
Relinquished By: (Signature) Federal Express		Date/Time: 7/11/91/0930		Received For Laboratory By: (Signature) <i>M.D. Lutzford</i>		Relinquished By: (Signature)		Date/Time:		Received For Laboratory By: (Signature)		Date: 7-10-91											

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files  
 \*See CONCENTRATION RANGE on back of form.

X NOVA Included In cooler For Temperature Measurement, Labeled "Temp"

\* 8°C \*  
 JMD

0000475

**Ecology and environment, inc.**  
 288 PLEASANTVIEW DRIVE, LANCASTER, NEW YORK 14086, TEL 716/684 8080  
 in the Environment

Analyze All Parameters  
 According to Site Specific QAPP  
 See Jack Miller

## CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Project No.:		Project Name:		Project Manager:		Field Team Leader:		REMARKS			
UH 8040		NASP Phase I Batch II		John Bareschule		Jeff Lunenburg		REMARKS All Samples Filled to 4°C Bottle In Fo: VOA's - 8006, 8009, 8012, 8013 Lot # 1123043 QC # 10354C R02 Jar's - 6004, 6009, 8012, 8013 Lot # X0331013 QC # X0942C			
Samplers: (Signatures)				Field Team Leader:							
Jeff Lunenburg				Jeff Lunenburg							
STATION NUMBER	DATE	TIME	SAMPLE TYPE	SAMPLE INFORMATION	STATION LOCATION	NUMBER OF CONTAINERS					
			COOL GRAB AIR	EXPECTED COMPOUNDS (Concentration)*							
P07	8006A	7/11	7:11	X	Low	P07 BORTING 006A	3			X	X
P07	8006B	7/11	0905	Y	Low	P07 Soil Boring 006B	3			X	X
P07	8006C	7/11	0915	Y	Low	" " 006C	3			X	X
P07	8006A Dup	7/11	0900	Y	Low	" " 006A Dup	3			X	X
P07	8009A	7/11	1000	X	Low	" " 009A	3			X	X
P07	8009B	7/11	1010	X	Low	" " 009B	3	X	X		
P07	8013A	7/11	1045	X	"	" " 8013A	3	X	X		
P07	8013B	7/11	1100	X	"	" " 8013B	3	X	X		
P07	8012A	7/11	1135	X	"	" " 8012A	3	X	X		
P07	8012B	7/11	1145	X	"	" " 8012B	3	X	X		
Relinquished By: (Signature)		Date/Time		Received By: (Signature)		Date/Time		Received By: (Signature)		Ship Via:	
Jeff Lunenburg		7-11-91 1600								Federal Express	
Relinquished By: (Signature)		Date/Time		Received By: (Signature)		Date/Time		Received By: (Signature)		BL/Airbill Number:	
Fed. Express		7-12-91/10354		Kathleen H. Lawrence						0776546396	
Relinquished By: (Signature)		Date/Time		Received For Laboratory By: (Signature)		Date/Time		Received For Laboratory By: (Signature)		Date:	
										7-11-91	

Distribution: Original Accompanies Shipment; Copy to Coordinator; Field Files  
 \*See CONCENTRATION RANGE on back of form

Note: ① VOA Included in Cooler for Temperature Measurement  
 1. shd "Temp"

Temp on Receipt 8°C  
 2.11.91

234088

Ecology and Environment, Inc.  
SAMPLE TRACKING REPORT

LAB SAMPLE ID	CLIENT SAMPLE ID	TEST CODE	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED
15411.01	P07-S001A	SPNPRG1	07/09/91		07/10/91
15411.02	P07-S001A	SPNTPH1	07/09/91		07/10/91
15411.03	P07-S001A	SPNMET1	07/09/91		07/11/91
		SPNP&P1	07/09/91		07/11/91
		SPNPAH1	07/09/91		07/11/91
		SPNPHL1	07/09/91		07/11/91
15412.01	P07-S001B	SPNPRG1	07/09/91		07/10/91
15412.02	P07-S001B	SPNTPH1	07/09/91		07/10/91
15412.03	P07-S001B	SPNMET1	07/09/91		07/11/91
		SPNP&P1	07/09/91		07/11/91
		SPNPAH1	07/09/91		07/11/91
		SPNPHL1	07/09/91		07/11/91
15413.01	P07-S001C	SPNPRG1	07/09/91		07/10/91
15413.02	P07-S001C	SPNTPH1	07/09/91		07/10/91
15413.03	P07-S001C	SPNMET1	07/09/91		07/11/91
		SPNP&P1	07/09/91		07/11/91
		SPNPAH1	07/09/91		07/11/91
		SPNPHL1	07/09/91		07/11/91
15414.01	P07-S002A	SPNPRG1	07/09/91		07/10/91
15414.02	P07-S002A	SPNTPH1	07/09/91		07/10/91
15414.03	P07-S002A	SPNMET1	07/09/91		07/11/91
		SPNP&P1	07/09/91		07/11/91
		SPNPAH1	07/09/91		07/11/91
		SPNPHL1	07/09/91		07/11/91
15415.01	P07-S002B	SPNPRG1	07/09/91		07/10/91
15415.02	P07-S002B	SPNTPH1	07/09/91		07/10/91
15415.03	P07-S002B	SPNMET1	07/09/91		07/11/91
		SPNP&P1	07/09/91		07/11/91
		SPNPAH1	07/09/91		07/11/91
		SPNPHL1	07/09/91		07/11/91
15416.01	P07-S002B-DUP	SPNPRG1	07/09/91		07/10/91
15416.02	P07-S002B-DUP	SPNTPH1	07/09/91		07/10/91
15416.03	P07-S002B-DUP	SPNMET1	07/09/91		07/11/91
		SPNP&P1	07/09/91		07/11/91
		SPNPAH1	07/09/91		07/11/91
		SPNPHL1	07/09/91		07/11/91
15417.01	P07-S002C	SPNPRG1	07/09/91		07/10/91
15417.02	P07-S002C	SPNTPH1	07/09/91		07/10/91
15417.03	P07-S002C	SPNMET1	07/09/91		07/11/91
		SPNP&P1	07/09/91		07/11/91
		SPNPAH1	07/09/91		07/11/91
		SPNPHL1	07/09/91		07/11/91
15418.01	P07-S003A	SPNPRG1	07/09/91		07/11/91
15418.02	P07-S003A	SPNTPH1	07/09/91		07/10/91
15418.03	P07-S003A	SPNMET1	07/09/91		07/11/91
		SPNP&P1	07/09/91		07/11/91
		SPNPAH1	07/09/91		07/11/91

Ecology and Environment, Inc.  
SAMPLE TRACKING REPORT

LAB SAMPLE ID	CLIENT SAMPLE ID	TEST CODE	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED
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15418.03	P07-S003A	SPNPELL	07/09/91		07/11/91
15419.01	P07-S003B	SPNPRG1	07/09/91		07/11/91
15419.02	P07-S003B	SPNTPH1	07/09/91		07/10/91
15419.03	P07-S003B	SPNMET1	07/09/91		07/11/91
		SPNP&P1	07/09/91		07/11/91
		SPNPAH1	07/09/91		07/11/91
		SPNPELL	07/09/91		07/11/91
15420.01	P07-S003C	SPNPRG1	07/09/91		07/11/91
15420.02	P07-S003C	SPNTPH1	07/09/91		07/10/91
15420.03	P07-S003C	SPNMET1	07/09/91		07/11/91
		SPNP&P1	07/09/91		07/11/91
		SPNPAH1	07/09/91		07/11/91
		SPNPELL	07/09/91		07/11/91
15421.01	P07-S005A	SPNPRG1	07/09/91		07/11/91
15421.02	P07-S005A	SPNTPH1	07/09/91		07/10/91
15421.03	P07-S005A	SPNMET1	07/09/91		07/11/91
		SPNP&P1	07/09/91		07/11/91
		SPNPAH1	07/09/91		07/11/91
		SPNPHL1	07/09/91		07/11/91
15422.01	P07-S005B	SPNPRG1	07/09/91		07/11/91
15422.02	P07-S005B	SPNTPH1	07/09/91		07/10/91
15422.03	P07-S005B	SPNMET1	07/09/91		07/11/91
		SPNP&P1	07/09/91		07/11/91
		SPNPAH1	07/09/91		07/11/91
		SPNPHL1	07/09/91		07/11/91
15423.01	P07-S008A	SPNPRG1	07/09/91		07/11/91
15423.02	P07-S008A	SPNTPH1	07/09/91		07/10/91
15423.03	P07-S008A	SPNMET1	07/09/91		07/11/91
		SPNP&P1	07/09/91		07/11/91
		SPNPAH1	07/09/91		07/11/91
		SPNPELL	07/09/91		07/12/91
15424.01	P07-S008B	SPNPRG1	07/09/91		07/15/91
15424.02	P07-S008B	SPNTPH1	07/09/91		07/10/91
15424.03	P07-S008B	SPNMET1	07/09/91		07/11/91
		SPNP&P1	07/09/91		07/11/91
		SPNPAH1	07/09/91		07/11/91
		SPNPHL1	07/09/91		07/12/91

Ecology and Environment, Inc.  
SAMPLE TRACKING REPORT

LAB SAMPLE ID	CLIENT SAMPLE ID	TEST CODE	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED
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15475.01	P07-S004A	SPNPRG1	07/10/91		07/11/91
15475.02	P07-S004A	SPNTPH1	07/10/91		07/12/91
15475.03	P07-S004A	SPNMET1	07/10/91		07/12/91
		SPNP&P1	07/10/91		07/12/91
		SPNPAH1	07/10/91		07/12/91
		SPNPHL1	07/10/91		07/12/91
15476.01	P07-S004B	SPNPRG1	07/10/91		07/11/91
15476.02	P07-S004B	SPNTPH1	07/10/91		07/12/91
15476.03	P07-S004B	SPNMET1	07/10/91		07/12/91
		SPNP&P1	07/10/91		07/12/91
		SPNPAH1	07/10/91		07/12/91
		SPNPHL1	07/10/91		07/12/91
15477.01	P07-S004C	SPNPRG1	07/10/91		07/11/91
15477.02	P07-S004C	SPNTPH1	07/10/91		07/18/91
15477.03	P07-S004C	SPNMET1	07/10/91		07/12/91
		SPNP&P1	07/10/91		07/12/91
		SPNPAH1	07/10/91		07/12/91
		SPNPHL1	07/10/91		07/12/91
15478.01	P07-S007A	SPNPRG1	07/10/91		07/11/91
15478.02	P07-S007A	SPNTPH1	07/10/91		07/18/91
15478.03	P07-S007A	SPNMET1	07/10/91		07/12/91
		SPNP&P1	07/10/91		07/12/91
		SPNPAH1	07/10/91		07/12/91
		SPNPHL1	07/10/91		07/13/91
15479.01	P07-S007B	SPNPRG1	07/10/91		07/12/91
15479.02	P07-S007B	SPNTPH1	07/10/91		07/18/91
15479.03	P07-S007B	SPNMET1	07/10/91		07/12/91
		SPNP&P1	07/10/91		07/12/91
		SPNPAH1	07/10/91		07/12/91
		SPNPHL1	07/10/91		07/13/91
15480.01	P07-S010A	SPNPRG1	07/10/91		07/12/91
15480.02	P07-S010A	SPNTPH1	07/10/91		07/18/91
15480.03	P07-S010A	SPNMET1	07/10/91		07/12/91
		SPNP&P1	07/10/91		07/12/91
		SPNPAH1	07/10/91		07/12/91
		SPNPHL1	07/10/91		07/13/91
15481.01	P07-S010B	SPNPRG1	07/10/91		07/12/91
15481.02	P07-S010B	SPNTPH1	07/10/91		07/18/91
15481.03	P07-S010B	SPNMET1	07/10/91		07/12/91
		SPNP&P1	07/10/91		07/12/91
		SPNPAH1	07/10/91		07/12/91
		SPNPHL1	07/10/91		07/13/91
15482.01	P07-S011A	SPNPRG1	07/10/91		07/12/91
15482.02	P07-S011A	SPNTPH1	07/10/91		07/18/91
15482.03	P07-S011A	SPNMET1	07/10/91		07/12/91
		SPNP&P1	07/10/91		07/12/91
		SPNPAH1	07/10/91		07/12/91

Ecology and Environment, Inc.  
 SAMPLE TRACKING REPORT

LAB SAMPLE ID	CLIENT SAMPLE ID	TEST CODE	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED
-----	-----	-----	-----	-----	-----
15482.03	P07-S011A	SPNPHL1	07/10/91		07/13/91
15483.01	P07-S011B	SPNPRG1	07/10/91		07/12/91
15483.02	P07-S011B	SPNTPH1	07/10/91		07/18/91
15483.03	P07-S011B	SPNMET1	07/10/91		07/12/91
		SPNP&P1	07/10/91		07/12/91
		SPNPAH1	07/10/91		07/12/91
		SPNPHL1	07/10/91		07/13/91
15484.01	P07-S011C	SPNPRG1	07/10/91		07/12/91
15484.02	P07-S011C	SPNTPH1	07/10/91		07/18/91
15484.03	P07-S011C	SPNMET1	07/10/91		07/12/91
		SPNP&P1	07/10/91		07/12/91
		SPNPAH1	07/10/91		07/12/91
		SPNPHL1	07/10/91		07/13/91

Ecology and Environment, Inc.  
SAMPLE TRACKING REPORT

LAB SAMPLE ID	CLIENT SAMPLE. ID	TEST CODE	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED
-----	-----	-----	-----	-----	-----
15565.01	P07-GW005	WPNPRG1	07/11/91		07/13/91
15565.03	P07-GW005	WPNP&P1	07/11/91		07/16/91
		WPNPAH1	07/11/91		07/16/91
		WPNPHL1	07/11/91		07/15/91
15565.04	P07-GW005	WPNTPH1	07/11/91		07/19/91
15565.05	P07-GW005	WPNMET1	07/11/91		07/16/91
15566.01	P07-GW005D	WPNPRG1	07/11/91		07/13/91
15566.03	P07-GW005D	WPNP&P1	07/11/91		07/16/91
		WPNPAH1	07/11/91		07/16/91
		WPNPHL1	07/11/91		07/15/91
15566.04	P07-GW005D	WPNTPH1	07/11/91		07/19/91
15566.05	P07-GW005D	WPNMET1	07/11/91		07/16/91
15567.01	P07-GW007	WPNPRG1	07/11/91		07/13/91
15567.03	P07-GW007	WPNP&P1	07/11/91		07/16/91
		WPNPAH1	07/11/91		07/16/91
		WPNPHL1	07/11/91		07/15/91
15567.04	P07-GW007	WPNTPH1	07/11/91		07/19/91
15567.05	P07-GW007	WPNMET1	07/11/91		07/16/91
15568.01	P07-GW008	WPNPRG1	07/11/91		07/13/91
15568.03	P07-GW008	WPNP&P1	07/11/91		07/16/91
		WPNPAH1	07/11/91		07/16/91
		WPNPHL1	07/11/91		07/15/91
15568.04	P07-GW008	WPNTPH1	07/11/91		07/19/91
15568.05	P07-GW008	WPNMET1	07/11/91		07/16/91
15569.01	P07-S006A	SPNPRG1	07/11/91		07/15/91
15569.02	P07-S006A	SPNTPH1	07/11/91		07/17/91
15569.03	P07-S006A	SPNMET1	07/11/91		07/16/91
		SPNP&P1	07/11/91		07/17/91
		SPNPAH1	07/11/91		07/16/91
		SPNPHL1	07/11/91		07/17/91
15570.01	P07-S006A-DUP	SPNPRG1	07/11/91		07/15/91
15570.02	P07-S006A-DUP	SPNTPH1	07/11/91		07/17/91
15570.03	P07-S006A-DUP	SPNMET1	07/11/91		07/16/91
		SPNP&P1	07/11/91		07/17/91
		SPNPAH1	07/11/91		07/16/91
		SPNPHL1	07/11/91		07/17/91
15571.01	P07-S006B	SPNPRG1	07/11/91		07/15/91
15571.02	P07-S006B	SPNTPH1	07/11/91		07/17/91
15571.03	P07-S006B	SPNMET1	07/11/91		07/16/91
		SPNP&P1	07/11/91		07/17/91
		SPNPAH1	07/11/91		07/16/91
		SPNPHL1	07/11/91		07/17/91
15572.01	P07-S006C	SPNPRG1	07/11/91		07/15/91
15572.02	P07-S006C	SPNTPH1	07/11/91		07/17/91
15572.03	P07-S006C	SPNMET1	07/11/91		07/16/91
		SPNP&P1	07/11/91		07/17/91
		SPNPAH1	07/11/91		07/16/91

Ecology and Environment, Inc.  
 SAMPLE TRACKING REPORT

LAB SAMPLE ID	CLIENT SAMPLE ID	TEST CODE	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED
15572.03	P07-S006C	SPNPHL1	07/11/91		07/17/91
15573.01	P07-S009A	SPNPRG1	07/11/91		07/16/91
15573.02	P07-S009A	SPNTPH1	07/11/91		07/17/91
15573.03	P07-S009A	SPNMET1	07/11/91		07/16/91
		SPNPQP1	07/11/91		07/17/91
		SPNPAH1	07/11/91		07/16/91
		SPNPHL1	07/11/91		07/17/91
15574.01	P07-S009B	SPNPRG1	07/11/91		07/16/91
15574.02	P07-S009B	SPNTPH1	07/11/91		07/18/91
15574.03	P07-S009B	SPNMET1	07/11/91		07/16/91
		SPNP&P1	07/11/91		07/17/91
		SPNPAH1	07/11/91		07/16/91
		SPNPHL1	07/11/91		07/17/91
15575.01	P07-S012A	SPNPRG1	07/11/91		07/16/91
15575.02	P07-S012A	SPNTPH1	07/11/91		07/18/91
15575.03	P07-S012A	SPNMET1	07/11/91		07/16/91
		SPNP&P1	07/11/91		07/17/91
		SPNPAH1	07/11/91		07/16/91
		SPNPHL1	07/11/91		07/17/91
15576.01	P07-S012B	SPNPRG1	07/11/91		07/16/91
15576.02	P07-S012B	SPNTPH1	07/11/91		07/18/91
15576.03	P07-S012B	SPNMET1	07/11/91		07/16/91
		SPNP&P1	07/11/91		07/17/91
		SPNPAH1	07/11/91		07/16/91
		SPNPHL1	07/11/91		07/17/91
15577.01	P07-S013A	SPNPRG1	07/11/91		07/16/91
15577.02	P07-S013A	SPNTPH1	07/11/91		07/18/91
15577.03	P07-S013A	SPNMET1	07/11/91		07/16/91
		SPNP&P1	07/11/91		07/17/91
		SPNPAH1	07/11/91		07/16/91
		SPNPHL1	07/11/91		07/17/91
15578.01	P07-S013B	SPNPRG1	07/11/91		07/16/91
15578.02	P07-S013B	SPNTPH1	07/11/91		07/18/91
15578.03	P07-S013B	SPNMET1	07/11/91		07/16/91
		SPNP&P1	07/11/91		07/17/91
		SPNPAH1	07/11/91		07/16/91
		SPNPHL1	07/11/91		07/17/91

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : **UH-8000** NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15411

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S001A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT.</u>	<u>LIMIT</u>	<u>UNITS</u>
Arsenic	ND			6.0	MG/KG
Chromium	ND			1.0	MG/KG
Zinc	ND			2.0	MG/KG
Lead	ND			4.0	MG/KG
Cadmium	ND			0.50	MG/KG
Nickel	ND			4.0	MG/KG
Coppe'r	ND			2.5	MG/KG
Silver	ND			1.0	MG/KG

.....  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15412

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S001B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
Arsenic	ND		6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	2.7		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

.....  
 QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
               J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIMIT  
               NA = NOT APPLICABLE

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15413

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S001C

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT.</u>	<u>LIMIT</u>	<u>UNITS</u>
Arsenic	ND			6.0	MG/KG
Chromium	ND			1.0	MG/KG
Zinc	ND			2.0	MG/KG
Lead	ND			4.0	MG/KG
Cadmium	ND			0.50	MG/KG
Nickel	ND			4.0	MG/KG
Copper	ND			2.5	MG/KG
Silver	ND			1.0	MG/KG

.....  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UE-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15414

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S002A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
Arsenic	ND	-	6.0	MG/KG
Chromium	ND	-	1.0	MG/KG
Zinc	ND	-	2.0	MG/KG
Lead	ND	-	4.0	MG/KG
Cadmium	ND	-	0.50	MG/KG
Nickel	ND	-	4.0	MG/KG
Copper	ND	-	2.5	MG/KG
Silver	ND	-	1.0	MG/KG

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

0000480

**Ecology** and Environment, Inc.  
Analytical Services Center

**CLIENT** : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15415

MATRIX: SOLID

SAMPLE ID CLIENT: **P07-S002B**

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT.</u>	<u>LIMIT</u>	<u>UNITS</u>
Arsenic	ND			6.0	MG/KG
Chromium	1.5			1.0	MG/KG
Zinc	ND			2.0	MG/KG
Lead	<b>8.9</b>			4.0	MG/KG
Cadmium	ND			0.50	MG/KG
Nickel	ND			4.0	MG/KG
Copper	ND			2.5	MG/KG
Silver	ND			1.0	MG/KG

.....

QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
 J = ESTIMATED VALUE                      B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT  
 NA = NOT APPLICABLE

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15416

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S002B-DUP

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
Arsenic	ND		6.0	MG/KG
Chromium	1.4		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

.....  
 QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
               J = ESTIHATED VALUE        B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIMIT  
               NA = NOT APPLICABLE

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15417

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S002C

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
Arsenic	ND		6.0	MG/KG
Chromium	1.1		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

Ecology and Environment, Inc.  
 Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCE 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15418

MATRIX: SOLID

SAHPLE ID CLIENT: P07-S003A

PARAMETER	RESULTS	Q	QNT. LIHIT	UNITS
Arsenic	ND		6.0	MG/KG
Chromium	1.5		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

-----  
 QUALIFIERS: C = COHENT                      ND = NOT DETECTED  
               J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIMIT  
               NA = NOT APPLICABLE

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15419

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S0038

<u>PARAXETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
-		-		
Arsenic	ND		6.0	MG/KG
Chromium	1.1		1.0	MG/KG
Zinc	3.3		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

.....  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

Bcology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2  
RESULTS IN WET WEIGHT  
SAMPLE ID LAB : EE-91-15420 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S003C

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
Arsenic	ND	-	6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
SAMPLE ID LAB :EE-91-15416 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S002B-DUP

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
TRPH	5.6	-	5.0	MG/KG

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
SAHPLE ID LAB :EE-91-15417 MATRIX: SOLID  
SAHPLE ID CLIENT: P07-S002C

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
TRPH	7.9	-	5.0	MG/KG

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIHATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

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JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
SAMPLE ID LAB :EE-91-15414 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S002A

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	8.9	-	5.0	MG/KG

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2  
SAMPLE ID LAB : EE-91-15415 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S002B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
TRPH	11	-	5.0	MG/KG

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
SAHPLE ID LAB :EE-91-15412 MATRIX: SOLID  
SAHPLE ID CLIENT: P07-S001B

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	7.0	-	5.0	MG/KG

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2  
SAMPLE ID LAB : EE-91-15413 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S001C

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
TRPH	13	-	5.0	MG/KG

.....  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

0000485

QUALITY CONTROL FOR PRECISION  
RESULTS OF ANALYSIS OF REPLICATE  
ANALYSES OF SOLID SAMPLES

9101.658

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(mg/kg)

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Parameter	E & E Laboratory No. 91- 15575	Original Analysis	Replicate Analysis	Relative Percent Difference (RPD)
Arsenic		12	13	12
Chromium		1.1	ND	NC
Zinc		2.4	4.1	52
Lead		11	11	1.3
Cadmium		ND	ND	NC
Nickel		ND	ND	NC
Copper		ND	ND	NC
Silver		ND	ND	NC

---

ND = NOT DETECTED

NC = NOT CALCULABLE

NOTE: ALTHOUGH RESULTS ARE REPORTED AS ROUNDED VALUES, RPD'S ARE  
CALCULATED DIRECTLY FROM THE RAW DATA.

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2  
SAMPLE ID LAB :EE-91-15411 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S001A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
TRPH	5.2	-	5.0	MG/KG

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
          J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
          L = PRESENT BELOW STATED DETECTION LIMIT  
          NA = NOT APPLICABLE

0000486

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : METHOD BLANK

MATRIX: SOLID

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
Arsenic	ND		6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

.....

QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
 J = ESTIMATED VALUE                      B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT  
 NA = NOT APPLICABLE

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
FOR SPIKED SOLID SAMPLES

9101.658

(mg/kg)

Parameter	E & E Laboratory No. 91- 15575	Original Value	Amount Added	Amount Determined	Percent Recovery
Arsenic		12	200	200	92
Chromium		1.1	20	24	113
Zinc		2.4	50	51	98
Lead		11	50	51	79
Cadmium		ND	5.0	4.7	94
Nickel		ND	50	49	98
Copper		ND	25	23	92
Silver		ND	5.0	4.7	94

ND = NOT DETECTED

\*\* = RECOVERY NOT DETERMINED BECAUSE SAMPLE AMOUNT IS FOUR OR MORE  
TIMES GREATER THAN SPIKE AMOUNT.

NOTE: ALTHOUGH RESULTS ARE REPORTED AS ROUNDED VALUES, PERCENT  
RECOVERIES ARE CALCULATED DIRECTLY FROM THE RAW DATA.

0000487

QUALITY CONTROL FOR PRECISION  
RESULTS OF ANALYSIS OF REPLICATE  
ANALYSES OF SOLID SAMPLES

9101.646

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(mg/kg)

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Parameter	E & E Laboratory No. <b>91-</b> <b>15484</b>	Original Analysis	Replicate Analysis	Relative Percent Difference <b>(RPD)</b>
Arsenic		ND	ND	NC
Chromium		ND	ND	NC
Zinc		ND	ND	NC
Lead		ND	ND	NC
Cadmium		ND	ND	NC
Nickel		ND	ND	NC
Copper		<b>ND</b>	ND	NC
Silver		ND	ND	NC

---

ND = NOT DETECTED

NC = NOT CALCULABLE

NOTE: ALTHOUGH RESULTS ARE REPORTED AS ROUNDED VALUES, RPD'S ARE  
CALCULATED DIRECTLY FROM THE **RAW** DATA.

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
FOR SPIKED SOLID SAMPLES

9101.646

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(mg/kg)

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Parameter	E & E Laboratory No. 91- 15484	Original Value	Amount Added	Amount Determined	Percent Recovery
Arsenic		ND	200	180	92
Chromium		ND	20	20	98
Zinc		ND	50	51	102
Lead		ND	50	54	109
Cadmium		ND	5.0	4.3	86
Nickel		ND	50	48	96
Copper		ND	25	23	94
Silver		ND	5.0	5.0	100

---

ND = NOT DETECTED

\*\* = RECOVERY NOT DETERMINED BECAUSE SAMPLE AMOUNT IS FOUR OR MORE  
TIMES GREATER THAN SPIKE AMOUNT.

NOTE: ALTHOUGH RESULTS ARE REPORTED AS ROUNDED VALUES, PERCENT  
RECOVERIES ARE CALCULATED DIRECTLY FROM THE RAW DATA.

0000488

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
FOR SPIKED SOLID SAMPLES

9101.640

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(mg/kg)

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Parameter	<b>E &amp; E</b> Laboratory No. <b>91-</b> <b>15420</b>	Original Value	Amount Added	Amount Determined	Percent Recovery
Arsenic		ND	200	190	96
Chromium		ND	20	21	105
Zinc		ND	50	48	95
Lead		ND	50	54	108
Cadmium		ND	5.0	5.1	103
Nickel		ND	50	48	96
Copper		ND	25	24	95
Silver		ND	5.0	4.8	96

---

ND = NOT DETECTED

\*\* RECOVERY NOT DETERMINED BECAUSE SAMPLE AMOUNT IS FOUR OR MORE  
TIMES GREATER THAN SPIKE AMOUNT.

NOTE: ALTHOUGH RESULTS **ARE** REPORTED AS ROUNDED VALUES, PERCENT  
RECOVERIES **ARE** CALCULATED DIRECTLY FROM THE RAW DATA.

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : METHOD BLANK

MATRIX: SOLID

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
Arsenic	ND		6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

-----  
QUALIFIERS: C : COMMENT                    ND : NOT DETECTED  
              J : ESTIMATED VALUE        B : ALSO PRESENT IN BLANK  
              L : PRESENT BELOW STATED DETECTION LIMIT  
              NA : NOT APPLICABLE

0000489

JOB NUMBER :9101.640

**Ecology and Environment, Inc.**  
**Analytical Services Center**

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
SAHPLE ID LAB :EE-91-15418 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S003A

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	ND	-	5.0	MG/KG

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIHATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2  
SAMPLE ID LAB :EE-91-15419 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S003B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
TRPH	ND	-	5.0	MG/KG

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
          J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
          L = PRESENT BELOW STATED DETECTION LIMIT  
          NA = NOT APPLICABLE

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JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UA-8000 NASP - PHASE I BATCH 2  
SAMPLE ID LAB :EE-91-15420 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S003C

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	ND	-	5.0	MG/KG

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
SAXPLE ID LAB :EE-91-15475 MATRIX: SOLID  
SAXPLE ID CLIENT: P07-S004A

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	5.2	-	5.0	MG/KG

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIXIT  
NA = NOT APPLICABLE

0000491

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UA-8000 NASP - PHASE I BATCH 2  
SAMPLE ID LAB :EE-91-15476 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S004B

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	19	-	5.0	MG/KG

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
SAMPLE ID LAB :EE-91-15477 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S004C

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
TRPH	54	-	5.0	MG/KG

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
          J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
          L = PRESENT BELOW STATED DETECTION LIMIT  
          NA = NOT APPLICABLE

0000492

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
SAMPLE ID LAB :EE-91-15421 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S005A

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	ND		5.0	MG/KG

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCE 2  
SAMPLE ID LAB :EE-91-15422 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S005B

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	ND	-	5.0	MG/KG

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIHATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOU STATED DETECTION LIMIT  
NA = NOT APPLICABLE

0000493

Ecology and Environment, Inc.  
 Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
 SAMPLE ID LAB : EE-91-15569 MATRIX: SOLID  
 SAMPLE ID CLIENT: P07-S006A

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	77	-	5.0	MG/KG

-----  
 QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
               J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIMIT  
               NA = NOT APPLICABLE

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
SAMPLE ID LAB :EE-91-15570 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S006A-DUP

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
TRPH	85	-	5.0	MG/KG

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

0000494

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
SAMPLE ID LAB :EE-91-15571 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S006B

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	57	-	5.0	MG/KG

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

Ecology and Environment, Inc.  
 Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2  
 SAMPLE ID LAB :EE-91-15572 MATRIX: SOLID  
 SMPLE ID CLIENT: P07-S006C

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	62	-	5.0	MG/KG

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT  
 NA = NOT APPLICABLE

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
SAMPLE ID LAB :EE-91-15478 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S007A

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	ND	-	5.0	MG/KG

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2  
SAMPLE ID LAB :EE-91-15479 MATRIX: SOLID  
SAHPLE ID CLIENT: P07-S007B

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	ND	-	5.0	MG/KG

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

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JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
SAMPLE ID LAB :EE-91-15423 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S008A

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	5.0	-	5.0	MG/KG

-----  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCE 2  
SAMPLE ID LAB : EE-91-15424 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S008B

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	ND	-	5.0	MG/KG

-----  
QUALIFIERS: C = COMMENT NO = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

0000497

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
SAHPLE ID LAB : EE-91-15573 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S009A

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
-----	-----	-	-----	-----
TRPH	120		5.0	MG/KG

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
 SAMPLE ID LAB :EE-91-15574 MATRIX: SOLID  
 SAMPLE ID CLIENT: P07-S009B

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	87	-	5.0	MG/KG

.....  
 QUALIFIERS: C = COMMENT NO = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIHIT  
 NA = NOT APPLICABLE

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
SAMPLE ID LAB : EE-91-15480 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S010A

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	22	-	5.0	MG/KG

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2  
SAMPLE ID LAB :EE-91-15481 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S010B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
TRPH	19	-	5.0	MG/KG

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

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JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
SAMPLE ID LAB :EE-91-15482 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S011A

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	21	-	5.0	MG/KG

.....  
QUALIFIERS: C = COHENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCU 2  
SAMPLE ID LAB :EE-91-15483 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S011B

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
-----	-----	-	-----	-----
TRPH	9.5		5.0	MG/KG

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

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JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
SAMPLE ID LAB :EE-91-15484 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S011C

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
TRPH	5.2	-	5.0	MG/KG

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2  
SAMPLE ID LAB :EE-91-15575 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S012A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
TRPH	ND	-	5.0	MG/KG

.....  
QUALIFIERS: C = COMMENT                      NO = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : METHOD BLANK

MATRIX: SOLID

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT.</u>	<u>LIMIT</u>	<u>UNITS</u>
Arsenic	ND			6.0	MG/KG
Chromium	ND			1.0	MG/KG
Zinc	ND			2.0	MG/KG
Lead	ND			4.0	MG/KG
Cadmium	ND			0.50	MG/KG
Nickel	ND			4.0	MG/KG
Copper	ND			2.5	MG/KG
Silver	ND			1.0	MG/KG

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

QUALITY CONTROL FOR PRECISION  
RESULTS OF ANALYSIS OF REPLICATE  
ANALYSES OF SOLID SAMPLES

9101.640

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(mg/kg)

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Parameter	€ & E Laboratory No. 91- 15420	Original Analysis	Replicate Analysis	Relative Percent Difference (RPD)
Arsenic		ND	ND	NC
Chromium		ND	ND	NC
Zinc		ND	ND	NC
Lead		ND	ND	NC
Cadmium		ND	ND	NC
Nickel		ND	ND	NC
Copper		ND	ND	NC
Silver		ND	ND	NC

---

ND = NOT DETECTED

NC = NOT CALCULABLE

NOTE: ALTHOUGH RESULTS ARE REPORTED AS ROUNDED VALUES. RPD'S ARE  
CALCULATED DIRECTLY FROM THE RAW DATA.

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Ecology and Environment, Inc.  
 Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
 RESULTS IN WET WEIGHT  
 SAMPLE ID LAB : EE-91-15577 MATRIX: SOLID  
 SAMPLE ID CLIENT: P07-S013A

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
Arsenic	ND		6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

.....  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT  
 NA = NOT APPLICABLE

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCE 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15578

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S0138

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIHIT</u>	<u>UNITS</u>
Arsenic	ND		6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

.....

QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
 J = ESTIMATED VALUE                      B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT  
 NA = NOT APPLICABLE

Ecology and Environment, Inc.  
 Analytical Services Center

CLIENT : UH-8000 NASP - PRASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15575

MATRIX: SOLID

SAHPLE ID CLIENT: P07-S012A

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
Arsenic	12		6.0	MG/KG
Chromium	1.1		1.0	MG/KG
Zinc	2.4		2.0	MG/KG
Lead	11		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

.....  
 QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
               J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIMIT  
               NA = NOT APPLICABLE

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2  
RESULTS IN WET WEIGHT  
SAMPLE ID LAB : EE-91-15576 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S012B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
Arsenic	ND	-	6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

.....  
 QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
               J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIMIT  
               NA = NOT APPLICABLE

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15483

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S011B

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
Arsenic	ND		6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

.....  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15484

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S011C

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
Arsenic	ND	-	6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

-----  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

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JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15481

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S010B

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
-----	-----	-	-----	-----
Arsenic	ND		6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

.....  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

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JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15482

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S011A

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
Arsenic	ND	-	6.0	MG/KG
Chromium	1.6		1.0	MG/KG
Zinc	3.4		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		25	MG/KG
Silver	ND		1.0	MG/KG

.....  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

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Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UA-8000 NASP - PEASE I BATCR 2  
RESULTS IN WET WEIGHT  
SAMPLE ID LAB : EE-91-15574 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S009B

PARAMETER	RESULTS	Q	QNT. LIHIT	UNITS
-----	-----	-	-----	-----
Arsenic	ND		6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	2.7		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

.....  
 QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
               J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIMIT  
               NA = NOT APPLICABLE

JOB NUHBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15480

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S010A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
Arsenic	ND		6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

-----  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

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JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15424

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S0088

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
Arsenic	ND		6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	3.6		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

-----  
QUALIFIERS: C : COMMENT                   ND = NOT DETECTED  
          J : ESTIMATED VALUE        B : ALSO PRESENT IN BLANK  
          L : PRESENT BELOW STATED DETECTION LIMIT  
          NA : NOT APPLICABLE

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAHPLE ID LAB : EE-91-15573

MATRIX: SOLID

SAHPLE ID CLIENT: P07-S009A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
Arsenic	ND		6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	2.8		2.0	MG/KG
Lead	14		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

-----  
**QUALIFIERS:** C = COMMENT                      ND = NOT DETECTED  
                   J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
                   L = PRESENT BELOW STATED DETECTION LIMIT  
                   NA = NOT APPLICABLE

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN **WET** WEIGHT

SAMPLE ID LAB : EE-91-15479

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S007B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
Arsenic	ND		<b>6.0</b>	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	<b>ND</b>		<b>2.0</b>	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		<b>0.50</b>	MG/KG
Nickel	ND		<b>4.0</b>	MG/KG
Copper	<b>ND</b>		<b>2.5</b>	MG/KG
Silver	<b>ND</b>		1.0	MG/KG

.....  
 QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
               J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIMIT  
               NA = NOT APPLICABLE

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15423

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S008A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
Arsenic	ND		6.0	MG/KG
Chromium	1.6		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

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Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : E€-91-15572

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S006C

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
Arsenic	ND	-	6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

.....  
 QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
               J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIMIT  
               NA = NOT APPLICABLE

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15478

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S007A

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
Arsenic	ND		6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	2.4		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOV STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

0000510

Ecology and Environment, Inc.  
 Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15570

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S006A-DUP

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
-----	-----	-	-----	-----
Arsenic	ND		6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

.....  
 QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
               J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIMIT  
               NA = NOT APPLICABLE

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15571

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S006B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
Arsenic	ND		6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

0000511

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15475  
SAMPLE ID CLIENT: P07-S004A

MATRIX: SOLID

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
Arsenic	ND		6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

.....  
QUALIFIERS: C : COMMENT                    ND : NOT DETECTED  
              J : ESTIMATED VALUE        B : ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA : NOT APPLICABLE

JOB NUMBER : 9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : 08-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15476

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S004B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
Arsenic	ND		6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

-----  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

0000512

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UA-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15477

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S004C

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
Arsenic	ND		6.0	MG/KG
Chromium	ND		1.0	MG/KG
<b>Zinc</b>	4.8		2.0	MG/KG
Lead	ND		4.0	MG/KG
<b>Cadmium</b>	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

.....  
 QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
               J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIMIT  
               NA = NOT APPLICABLE

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCE 2

RESULTS IN WET WEIGHT

SAMPLE ID LAB : EE-91-15421

MATRIX: SOLID

SAMPLE ID CLIENT: P07-S005A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
Arsenic	ND		6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	6.8		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIHATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

0000513

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

SAHPLE ID LAB : EE-91-15422

MATRIX: SOLID

SAHPLE ID CLIENT: P07-S005B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
Arsenic	ND		6.0	MG/KG
Chromium	ND		1.0	MG/KG
Zinc	ND		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

.....  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCE 2

RESULTS IN WET WEIGHT

SAHPLE ID LAB : EE-91-15569

MATRIX: SOLID

SAHPLE ID CLIENT: P07-S006A

PARAMETER -----	RESULTS -----	Q -	QNT. LIMIT -----	UNITS -----
Arsenic	ND		6.0	MG/KG
Chromium	1.0		1.0	MG/KG
Zinc	2.3		2.0	MG/KG
Lead	ND		4.0	MG/KG
Cadmium	ND		0.50	MG/KG
Nickel	ND		4.0	MG/KG
Copper	ND		2.5	MG/KG
Silver	ND		1.0	MG/KG

.....  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIHT  
              NA = NOT APPLICABLE

0000514

TEST CODE :SPNPRG1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET FIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : METHOD BLANK

MATRIX : SOLID

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

QUALITY CONTROL FOR ACCURACY AND PRECISION:  
 PERCENT RECOVERY AND RELATIVE PERCENT DIFFERENCE (RPD)  
 OF SOIL MATRIX SPIKE (HS) AND MATRIX SPIKE DUPLICATE (HSD)  
 (Sample # 15423)

9101.640

Parameter	Original Value	(ug/kg)						
		Amount Added		Amount Determined		Percent Recovery		
		MS	HSD	MS	MSD	HS	HSD	RPD
Benzene	ND	2500	2500	2200	2200	88	88	0
Toluene	ND	2500	2500	2300	2400	92	96	4.3
Ethyl Benzene	ND	2500	2500	1900	2200	76	88	15
1,2-Dichlorobenzene	ND	2500	2500	1800	2100	72	84	15
1,3-Dichlorobenzene	ND	2500	2500	1800	2200	72	88	20
1,4-Dichlorobenzene	ND	2500	2500	1800	2200	72	88	20
1,1-Dichloroethene	ND	2500	2500	1100	1200	44	48	8.7
Methylene Chloride	ND	2500	2500	2500	2600	100	104	3.9
Trans-1,2-Dichloroethene	ND	2500	2500	2500	2600	100	104	3.9
1,1-Dichloroethane	ND	2500	2500	2500	2600	100	100	0
1,1,1-Trichloroethane	ND	2500	2500	2400	2300	96	92	4.3
1,2-Dichloroethane	ND	2500	2500	2300	2400	92	96	4.3
Trichloroethene	ND	2500	2500	2400	3100	96	120	22
Tetrachloroethene	ND	2500	2500	2100	1200	84	48	54

These recoveries and RPDs are within E 6 E, Inc. limits.

ND = NOT DETECTED

0000515

TEST CODE :SPNPRG1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : **UH-8000** NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC UNITS : UG/KG  
SAMPLE ID LAB : EE-91-15577 MATRIX : SOLID  
SAMPLE ID CLIENT: P07-S013A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPRG1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15578

MATRIX : SOLID

SMPLE ID CLIENT: P07-S013B

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1.1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1.1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
 QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
               J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIMIT

0000516

TEST CODE :SPNPRG1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15575

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S012A

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPRG1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15576

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S012B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIHIT</u>
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
QUALIFIERS: C = COMMENT            ND = NOT DETECTED  
              J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIHIT

0000517

TEST CODE :SPNPRG1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC UNITS : UG/KG  
SAMPLE ID LAB : EE-91-15483 MATRIX : SOLID  
SAMPLE ID CLIENT: P07-S011B

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPRG1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAHPLE ID LAB : EE-91-15484

MATRIX : SOLID

SAHPLE ID CLIENT: P07-S011C

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1.2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000518

TEST CODE :SPNPRG1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC UNITS : UG/KG  
SAMPLE ID LAB : EE-91-15481 MATRIX : SOLID  
SAMPLE ID CLIENT: P07-S010B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPRG1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15482

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S011A

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
QUALIFIERS: C = COMMENT           ND = NOT DETECTED  
              J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000519

TEST CODE :SPNPRG1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15574

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S009B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPRG1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAHPLE ID LAB : EE-91-15480

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S010A

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

-----  
QUALIFIERS: C = COMMENT

ND = NOT DETECTED

J = ESTIMATED VALUE

B = ALSO PRESENT IN BLANK

L = PRESENT BELOW STATED DETECTION LIMIT

0000520

TEST CODE : SPNPRG1

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UA-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15424

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S008B

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPRG1

JOE NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15573

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S009A

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1.2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIHATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000521

TEST CODE :SPNPRG1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15479

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S007B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

-----  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPRG1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAHPLE ID LAB : EE-91-15423

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S008A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene. Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000522

TEST CODE :SPNPRG1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PRASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15572

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S006C

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzene	ND	-	1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPRG1

JOB NUHBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCE 2

RESULTS IN WET WEIGHT

TEST NAHE : PNC PIJRGABLES- GC

UNITS : UG/KG

SAHPLE ID LAB : EE-91-15478

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S007A

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....

QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
 J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

0000523

TEST CODE :SPNPRG1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC UNITS : UG/KG

SAMPLE ID LAB : EE-91-15570 MATRIX : SOLID

SAMPLE ID CLIENT: P07-S006A-DUP

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....

QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPRG1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAHPLE ID LAB : EE-91-15571

MATRIX : SOLID

SAHPLE ID CLIENT: P07-S006B

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
QUALIFIERS: C = COMMENT           ND = NOT DETECTED  
          J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
          L = PRESENT BELOW STATED DETECTION LIMIT

0000524

TEST CODE : SPNPRG1

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC UNITS : UG/KG

SAMPLE ID LAB : EE-91-15422 MATRIX : SOLID

SAMPLE ID CLIENT: P07-S005B

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1.2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPRG1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15569

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S006A

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIHATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPRG1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCE 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15477

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S004C

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

-----  
QUALIFIERS: C = COMMENT            ND = NOT DETECTED  
              J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPRG1

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- CC

UNITS : UG/KG

SMPLE ID LAB : EE-91-15421

MATRIX : SOLID

SMPLE ID CLIENT: P07-S005A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Benzene	ND	-	1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1'2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000526

TEST CODE : SPNPRG1

JOB NUMBER : 9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UEI-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15475

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S004A

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

-----  
QUALIFIERS: C = COMMENT            ND = NOT DETECTED  
              J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPRG1

JOB NUMBER : 9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15476

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S004B

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethcne	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIHT

0000527

TEST CODE :SPNPRG1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15419

MATRIX : SOLID

SAHPLE ID CLIENT: P07-S003B

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPRG1

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAHPLE ID LAB : EE-91-15420

MATRIX : SOLID

SAHPLE ID CLIENT: P07-S003C

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000528

TEST CODE : SPNPRG1

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15417

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S002C

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

-----  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPRG1

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAHPLE ID LAB : EE-91-15418

MATRIX : SOLID

SAHPLE ID CLIENT: P07-S003A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
QUALIFIERS: C = COMMENT            ND = NOT DETECTED  
              J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000520

TEST CODE : SPNPRG1

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC UNITS : UG/KG  
SAMPLE ID LAB : EE-91-15415 MATRIX : SOLID  
SAMPLE ID CLIENT: P07-S002B

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzene	ND	-	1000
Toluene	ND	-	1000
Ethylbenzene	ND	-	1000
Total Xylenes	ND	-	1000
1,2 - Dichlorobenzene	ND	-	1000
1,3 - Dichlorobenzene	ND	-	1000
1,4 - Dichlorobenzene	ND	-	1000
1,1 - dichloroethene	ND	-	1000
Methylene Chloride	ND	-	1000
Trans-1,2, - Dichloroethene	ND	-	1000
1,1 - dichloroethane	ND	-	1000
1,1,1 - Trichloroethane	ND	-	1000
1,2 - Dichloroethane	ND	-	1000
Trichloroethene	ND	-	1000
Tetrachloroethene	ND	-	1000
chlorobenzene	ND	-	1000

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPRG1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15416

MATRIX : SOLID

SAMPLE ID CLIENT: P07-SOOZB-DUP

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000530

TEST CODE :SPNPRG1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15413

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S001C

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Benzene	ND	-	1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPRG1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15414

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S002A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

.....  
QUALIFIERS: C = COHENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000531

TEST CODE :SPNPRG1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15411

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S001A

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

-----  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPRG1

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PURGABLES- GC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15412

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S001B

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzene	ND		1000
Toluene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
1,2 - Dichlorobenzene	ND		1000
1,3 - Dichlorobenzene	ND		1000
1,4 - Dichlorobenzene	ND		1000
1,1 - dichloroethene	ND		1000
Methylene Chloride	ND		1000
Trans-1,2, - Dichloroethene	ND		1000
1,1 - dichloroethane	ND		1000
1,1,1 - Trichloroethane	ND		1000
1,2 - Dichloroethane	ND		1000
Trichloroethene	ND		1000
Tetrachloroethene	ND		1000
chlorobenzene	ND		1000

-----  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000532

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
FOR SPIKED SOLID SAMPLES

9101.646

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(mg/kg)

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Parameter	E & E Laboratory No. 91-	Original Value	Amount Added	Amount Determined	Percent Recovery
T. Recoverable Petroleum Hydrocarbons					
	15476	19	130	120	73.2
	Batch QC	ND	1.3	1.4	105
	Batch QC	13	130	130	90
	Batch QC	ND	130	120	93

---

ND = NOT DETECTED

\*\* = RECOVERY NOT DETERMINED BECAUSE SAMPLE AMOUNT IS FOUR OR MORE  
TIMES GREATER THAN SPIKE AMOUNT.

NOTE: ALTHOUGH RESULTS ARE REPORTED AS ROUNDED VALUES, PERCENT  
RECOVERIES ARE CALCULATED DIRECTLY FROM THE RAW DATA.

9101.646

QUALITY CONTROL FOR PRECISION  
RESULTS OF ANALYSIS OF REPLICATE  
ANALYSES OF SOLID SAMPLES

9101.646

---

(mg/kg)

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Parameter	E & E Laboratory No. 91-	Original Analysis	Replicate Analysis	Relative Percent Difference (RPD)
T. Recoverable Petroleum Hydrocarbons				
	Batch QC	19	23	17.1
	Batch QC	13	ND	NC

---

ND = NOT DETECTED

NC = NOT CALCULABLE

NOTE: ALTHOUGH RESULTS ARE REPORTED AS ROUNDED VALUES, RPD'S ARE  
CALCULATED DIRECTLY FROM THE RAW DATA.

0000533

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2  
SAMPLE ID LAB :EE-91-15576 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S012B

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	ND		5.0	MG/KG

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
 SAMPLE ID LAB :EE-91-15577 MATRIX: SOLID  
 SAMPLE ID CLIENT: P07-S013A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
TRPH	ND	-	5.0	MG/KG

.....  
 QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
               J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIMIT  
               NA = NOT APPLICABLE

0000534

QUALITY CONTROL FOR PRECISION  
RESULTS OF ANALYSIS OF REPLICATE  
ANALYSES OF SOLID SAMPLES

9101.658

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(mg/kg)

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Parameter	E & E Laboratory No. 91-	Original Analysis	Replicate Analysis	Relative Percent Difference (RPD)
T. Recoverable Petroleum Hydrocarbons				
	Batch QC	67	59	12.5
	Batch QC	13	ND	NC

---

ND = NOT DETECTED

NC = NOT CALCULABLE

NOTE: ALTHOUGH RESULTS ARE REPORTED AS ROUNDED VALUES, RPD's ARE  
CALCULATED DIRECTLY FROM THE RAW DATA.

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
FOR SPIKED SOLID SAMPLES

9101.658

(mg/kg)

Parameter	E 6 E Laboratory No. 91-	Original Value	Amount Added	Amount Determined	Percent Recovery
T. Recoverable Petroleum Hydrocarbons					
	15573	120	110	180	58
	Batch QC	ND	1.3	1.9	140
	Batch QC	13	130	130	90
	Batch QC	ND	130	120	93

ND = NOT DETECTED

\*\* = RECOVERY NOT DETERMINED BECAUSE SAMPLE AMOUNT IS FOUR OR MORE  
TIMES GREATER THAN SPIKE AMOUNT.

NOTE: ALTHOUGH RESULTS ARE REPORTED AS ROUNDED VALUES, PERCENT  
RECOVERIES ARE CALCULATED DIRECTLY FROM THE RAW DATA.

0000535

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
SAMPLE ID LAB :EE-91-15578 MATRIX: SOLID  
SAMPLE ID CLIENT: P07-S013B

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	ND	-	5.0	MG/KG

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

QUALITY CONTROL FOR PRECISION  
RESULTS OF ANALYSIS OF REPLICATE  
ANALYSES OF SOLID SAMPLES

9101.640

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(mg/kg)

---

Parameter	E & E Laboratory No. 91-	Original Analysis	Replicate Analysis	Relative Percent Difference (RPD)
T. Recoverable Petroleum Hydrocarbons	15424	ND	ND	NC

---

ND = NOT DETECTED

NC = NOT CALCULABLE

NOTE: ALTHOUGH RESULTS ARE REPORTED AS ROUNDED VALUES, RPD'S ARE  
CALCULATED DIRECTLY FROM THE RAW DATA.

0000536

TEST CODE :SPNPHL1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PHENOL - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15415

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S002B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Trichlorophenol	ND	-	2000

-----  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPHL1

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PHENOL - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15416

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S002B-DUP

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT.. LIMIT</u>
Total as Trichlorophenol	ND	-	2000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIHIT

\$666537

TEST CODE : SPNPBL1

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PHENOL - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15413

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S001C

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Trichlorophenol	ND	-	2000

.....  
QUALIFIERS: C : COMMENT                   ND = NOT DETECTED  
          J : ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
          L : PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPHL1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PHENOL - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15414

MATRIX : SOLID

SAHPLE ID CLIENT: P07-S002A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Trichlorophenol	ND	-	2000

.....  
 QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
 J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIHIT

0000538

TEST CODE :SPNPHL1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PHENOL - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15411

MATRIX : SOLID

SAMPLE ID CLIENT: PO7-S001A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Trichlorophenol	ND	-	2000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPHL1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PHENOL - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15412

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S001B

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Trichlorophenol	ND		2000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
          J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
          L = PRESENT BELOW STATED DETECTION LIMIT

0000539

TEST CODE :SPNPAH1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAMPLE ID LAB : METHOD BLANK #2

MATRIX : SOLID

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Benzo-a-pyrene	ND		1000

-----  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
          J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
          L = PRESENT BELOW STATED DETECTION LIMIT

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
FOR SPIKED SOIL SAMPLES

9101.658

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(ug)

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Parameter	E & E Laboratory No. 91 -	Original Value	Amount Added	Amount Determined	Percent Recovery
Benzo(a)pyrene	15577 MS	ND	50	33	66

---

ND = NOT DETECTED

0000540

TEST CODE : SPNPAH1

JOB NUMBER : 9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC                      UNITS : UG/KG  
SAMPLE ID LAB : METHOD BLANK #3                MATRIX : SOLID

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Benzo-a-pyrene	ND		1000

-----  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPAH1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PRASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAMPLE ID LAB : METHOD BLANK #1

MATRIX : SOLID

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Benzo-a-pyrene	ND		1000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
          J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
          L = PRESENT BELOW STATED DETECTION LIMIT

0000541

TEST CODE : SPNPAH1

JOB NUMBER : 9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAMPLE ID LAB : METHOD BLANK #1

MATRIX : SOLID

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Benzo-a-pyrene	ND	-	1000

.....  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPAH1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
RESULTS IN WET WEIGET

TEST NAME : PNC PAH - LC UNITS : UG/KG  
SAMPLE ID LAB : METHOD BLANK #2 MATRIX : SOLID

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Benzo-a-pyrene	ND	-	1000

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIXATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIXIT

0000542

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
FOR SPIKED SOIL SAMPLES

9101.640

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(ug)

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Parameter	E & E Laboratory No. 91-	Original Value	Amount Added	Amount Determined	Percent Recovery
<b>Benzo(a)pyrene</b>					
	15413 MS	ND	50	35	70
	Batch QC	ND	50	50	100

---

ND = NOT DETECTED

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
FOR SPIKED SOIL SAMPLES

9101.646

---

(ug)

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Parameter	E & E Laboratory No. 91-	Original Value	Amount Added	Amount Determined	Percent Recovery
<b>Benzo(a)pyrene</b>					
	Batch QC	ND	50	46	92

---

ND = NOT DETECTED

0000543

TEST CODE : SPNPAH1

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAMPLE ID LAB : METHOD BLANK #3

MATRIX : SOLID

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Benzo-a-pyrene	ND	-	1000

.....  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPAH1

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAMPLE ID LAB : METHOD BLANK #4

MATRIX : SOLID

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Benzo-a-pyrene	ND	-	1000

.....  
QUALIFIERS: C = COMMENT           ND = NOT DETECTED  
              J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000544

TEST CODE : SPNPA81

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAMPLE ID LAB : METHOD BLANK #1

MATRIX : SOLID

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Benzo-a-pyrene	ND	-	1000

.....  
QUALIFIERS: C \* COHENT ND = NOT DETECTED  
J \* ESTIHATED VALUE B \* ALSO PRESENT IN BLANK  
L \* PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPAH1

JOB NUMBER : 9101.640

**Bcology and Environment, Inc.  
Analytical Services Center**

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAE - LC

UNITS : UG/KG

SAMPLE ID LAB : HETHOD BLANK #2

MATRIX : SOLID

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Benzo-a-pyrene	ND	-	1000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECCED  
              J = ESTIHATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000545

TEST CODE : SPNPAH1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15577

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S013A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total <b>as</b> Benzo-a-pyrene	ND	-	1000

-----  
QUALIFIERS: C = COMMENT            ND = NOT DETECTED  
              J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPAH1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC  
SAHPLE ID LAB : EE-91-15578  
SAHPLE ID CLIENT: P07-S0138

UNITS : UG/KG  
MATRIX : SOLID

PARAMETER	RESULTS	Q	QNT. LIMIT
Total as Benzo-a-pyrene	ND	-	1000

-----  
QUALIFIERS: C = COMMENT            ND = NOT DETECTED  
              J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000546

TEST CODE :SPNPAH1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15575

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S012A

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Benzo-a-pyrene	ND		1000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
          J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
          L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPAH1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGET

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAHPLE ID LAB : EE-91-15576

MATRIX : SOLID

SAHPLE ID CLIENT: P07-S012B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Benzo-a-pyrene	ND	-	1000

.....  
QUALIFIERS: C = COHHEHT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIHIT

0000547

TEST CODE : SPNPAH1

JOB NUMBER : 9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15483

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S011B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
<b>Total as Benzo-a-pyrene</b>	<b>ND</b>	<b>-</b>	<b>1000</b>

-----  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPAH1

JOB NUMBER : 9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAE - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15484

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S011C

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Benzo-a-pyrene	ND		1000

-----  
QUALIFIERS: C = COMMENT           ND = NOT DETECTED  
          J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
          L = PRESENT BELOW STATED DETECTION LIMIT

0000548

TEST CODE :SPNPAH1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15481

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S010B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Benzo-a-pyrene	ND	-	1000

-----  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPAH1

JOB NUMBER : 9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15482

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S011A

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Benzo-a-pyrene	ND		1000

-----  
QUALIFIERS: C = COMMENT           ND = NOT DETECTED  
          J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
          L = PRESENT BELOW STATED DETECTION LIMIT

0000549

TEST CODE :SPNPAH1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15574

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S009B

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Benzo-a-pyrene	ND		1000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPAH1

JOB NUMBER : 9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAE - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15480

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S010A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Benzo-a-pyrene	ND	-	1000

.....  
QUALIFIERS: C \* COMMENT           ND = NOT DETECTED  
          J \* ESTIMATED VALUE    B \* ALSO PRESENT IN BLANK  
          L \* PRESENT BELOW STATED DETECTION LIMIT

0000550

TEST CODE :SPNPAH1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15424

MATRIX : SOLID

SAHPLE ID CLIENT: P07-S008B

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Benzo-a-pyrene	ND		1000

-----  
QUALIFIERS: C = COMMENT           ND = NOT DETECTED  
          J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
          L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPAH1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SMPLE ID LAB : EE-91-15573

MATRIX : SOLID

SMPLE ID CLIENT: P07-S009A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Benzo-a-pyrene	ND	-	1000

.....  
QUALIFIERS: C = COMMENT

ND = NOT DETECTED

J = ESTIHATED VALUE

B = ALSO PRESENT IN BLANK

L = PRESENT BELOW STATED DETECTION LIHIT

0000551

TEST CODE :SPNPAH1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC UNITS : UG/KG  
SAMPLE ID LAB : EE-91-15479 MATRIX : SOLID  
SAMPLE ID CLIENT: P07-S007B

PARAMETER	RESULTS	Q	QNT. LIMIT
Total as Benzo-a-pyrene	ND	-	1000

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPAH1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15423

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S008A

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Benzo-a-pyrene	ND		1000

.....  
QUALIFIERS: C = COMMENT

ND = NOT DETECTED

J = ESTIMATED VALUE

B = ALSO PRESENT IN BLANK

L = PRESENT BELOW STATED DETECTION LIMIT

0000552

TEST CODE : SPNPAH1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAHPLE ID LAB : EE-91-15570

MATRIX : SOLID

SAHPLE ID CLIENT: P07-S006A-DUP

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Benzo-a-pyrene	ND	-	1000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPAH1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15571

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S006B

PARAMETER	RESULTS	Q	QNT. LIMIT
Total as Benzo-a-pyrene	ND	-	1000

-----  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000553

TEST CODE :SPNPAH1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC UNITS : UG/KG

SAMPLE ID LAB : EE-91-15422 MATRIX : SOLID

SAMPLE ID CLIENT: P07-S005B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Benzo-a-pyrene	ND	-	1000

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPAH1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCE 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15569

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S006A

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Benzo-a-pyrene	ND		1000

-----  
QUALIFIERS: C = COMMENT            ND = NOT DETECTED  
              J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000554

TEST CODE : SPNPAH1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15572

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S006C

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Benzo-a-pyrene	ND		1000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPAH1

JOB NUMBER : 9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCE 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAHPLE ID LAB : EE-91-15478

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S007A

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Benzo-a-pyrene	ND		1000

.....  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIHATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000555

TEST CODE :SPNPAH1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC UNITS : UG/KG  
SAMPLE ID LAB : EE-91-15477 MATRIX : SOLID  
SAMPLE ID CLIENT: P07-S004C

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Benzo-a-pyrene	ND		1000

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNPAH1

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCE 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PAH - LC

UNITS : UG/KG

SAHPLE ID LAB : EE-91-15421

MATRIX : SOLID

SAHPLE ID CLIENT: P07-S005A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Benzo-a-pyrene	ND	-	1000

.....  
QUALIFIERS: C = COMMENT           ND = NOT DETECTED  
          J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
          L = PRESENT BELOU STATED DETECTION LIMIT

0000556

TEST CODE : SPNPHL1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PHENOL - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15574

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S009B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Trichlorophenol	ND	-	2000

.....  
QUALIFIERS: C = COMMENT

ND = NOT DETECTED

J = ESTIMATED VALUE

B = ALSO PRESENT IN BLANK

L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPHL1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PHENOL - LC

UNITS : UG/KG

SAHPLE ID LAB : EE-91-15480

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S010A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Trichlorophenol	ND	-	2000

.....  
QUALIFIERS: C = COMMENT

ND = NOT DETECTED

J = ESTIMATED VALUE

B = ALSO PRESENT IN BLANK

L = PRESENT BELOW STATED DETECTION LIHIT

0000557

TEST CODE :SPNPHL1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PHENOL - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15481

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S0108

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Trichlorophenol	ND		2000

-----  
QUALIFIERS: C \* COMMENT           ND \* NOT DETECTED  
          J \* ESTIMATED VALUE       B \* ALSO PRESENT IN BLANK  
          L \* PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPHL1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PHENOL - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15482

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S011A

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Trichlorophenol	ND		2000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIHATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIHIT

0000558

TEST CODE :SPNPHL1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PHENOL - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15483

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S011B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Trichlorophenol	ND	-	2000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPHL1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UA-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PHENOL - LC

UNITS : UG/KG

SAHPLE ID LAB : EE-91-15484

MATRIX : SOLID

SAHPLE ID CLIENT: P07-S011C

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Trichlorophenol	ND		2000

-----  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000559

TEST CODE : SPNPHL1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PHENOL - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15575

MATRIX : SOLID

SAHPLE ID CLIENT: P07-S012A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Trichlorophenol	ND	-	2000

-----  
QUALIFIERS: C = COMMENT

ND = NOT DETECTED

J = ESTIMATED VALUE

B = ALSO PRESENT IN BLANK

L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPHL1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET UEIGXT

TEST NAME : PNC PHENOL - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15576

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S012B

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Trichlorophenol	ND		2000

-----

QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
          J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
          L = PRESENT BELOW STATED DETECTION LIMIT

0000560

TEST CODE : SPNPHL1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UA-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PHENOL - LC

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15577

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S013A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>0</u>	<u>ONT. LIMIT</u>
Total as Trichlorophenol	ND	-	2000

.....  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNPHL1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PHENOL - LC

UNITS : UG/KG

SAHPLE ID LAB : EE-91-15578

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S013B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Trichlorophenol	ND	-	2000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
          J = ESTIHATED VALUE        B = ALSO PRESENT IN BLANK  
          L = PRESENT BELOW STATED DETECTION LIMIT

0000561



QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
FOR SPIKED SOIL SAMPLES

9101.640

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(ug)

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Parameter	E & E Laboratory No. 91- 15422 MS	Original Value	Amount Added	Amount Determined	Percent Recovery
2,4,6-Trichlorophenol		ND	100	67	67

---

ND = NOT DETECTED

0000562

TEST CODE : SPNPHL1

JOB NUMBER : 9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PHENOL - LC

UNITS : UG/KG

SAMPLE ID LAB : METHOD BLANK

MATRIX : SOLID

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Trichlorophenol	ND	-	2000

-----  
**QUALIFIERS:** C = COMMENT                      ND = NOT DETECTED  
                  J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
                  L = PRESENT BELOW STATED DETECTION LIMIT

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
FOR SPIKED SOIL SAMPLES

9101.646

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(ug)

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Parameter	E & E Laboratory No. 91 -	Original Value	Amount Added	Amount Determined	Percent Recovery
<hr/> 2,4,6-Trichlorophenol					
	15484	ND	100	66	66

---

ND = NOT DETECTED

0000563

TEST CODE : SPNPHL1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PHENOL - LC

UNITS : UG/KG

SAMPLE ID LAB : METHOD BLANK

MATRIX : SOLID

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Trichlorophenol	ND	-	2000

.....  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
FOR SPIKED SOIL SAMPLES

9101.658

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(ug)

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Parameter	E & E Laboratory No. 91-	Original Value	Amount Added	Amount Determined	Percent Recovery
2,4,6-Trichlorophenol	15574	ND	100	49	49

---

ND = NOT DETECTED

0000564

QUALITY CONTROL FOR ACCURACY: PERCENT  
RECOVERY OF SURROGATE SPIKES

9101.640

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Compound	E & E Laboratory No. 91-	Percent Recovery	
Trifluorotoluene	15411	a7	
	15412	85	
	15413	83	
	15414	80	
	15415	79	
	15416	77	
	15417	71	
	15418	66	
	15419	69	
	15420	66	
	15421	56	
	15422	95	
	15423	88	
	15424	93	
		Method Blank #1	100
		Method Blank #2	100
1,4-Dichlorobutane	15411	124	
	15412	122	
	15413	114	
	15414	110	
	15415	105	
	15416	100	
	15417	97	
	15418	100	
	15419	96	
	15420	99	
	15421	92	
	15422	95	
	15423	86	
	15424	100	
		Method Blank #1	100
		Method Blank #2	100

---

QUALITY CONTROL FOR ACCURACY: PERCENT  
RECOVERY OF SURROGATE SPIKES

9101.646

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Compound	E & E Laboratory No. 91-	Percent Recovery
Trifluorotoluene	15475	117
	15476	110
	15477	106
	15478	110
	15479	105
	15480	100
	15481	105
	15582	96
	15583	98
	15584	105
	Method Blank	100
1.4-Dichlorobutane	15475	125
	15476	110
	15477	113
	15478	94
	15479	110
	15480	91
	15481	96
	15582	102
	15583	99
	15584	90
	Method Blank	100

---

0000565

QUALITY CONTROL FOR ACCURACY: PERCENT  
RECOVERY OF SURROGATE SPIKES

9101.658

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Compound	E & E Laboratory No. 91-	Percent Recovery
Trifluorotoluene	15569	90
	15570	88
	15571	83
	15572	77
	15573	72
	15574	68
	15575	68
	15576	88
	15577	102
	15578	91
	Method Blank	100
1,4-Dichlorobutane	15569	95
	15570	98
	15571	91
	15572	91
	15573	85
	15574	74
	15575	78
	15576	73
	15577	75
	15578	71
	Method Blank	100

---

QUALITY CONTROL FOR ACCURACY: PERCENT  
RECOVERY OF SURROGATE SPIKES

9101.658

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Compound	E & E Laboratory No. 91-	Percent Recovery
Trifluorotoluene	15565	78
	15666	76
	15667	89
	15668	88
	Method Blank	100
1,4-Dichlorobutane	15565	81
	15566	88
	15567	95
	15568	104
	Method Blank	100

---

0000566

TEST CODE :SPNP&P1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15411

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S001A

PARAMETER	RESULTS	Q	QNT. LIMIT
Heptachlor	ND	-	1000
Lindane	ND	-	1000
Aldrin	ND	-	1000
494 - DDT	ND	-	1000
Dieldrin	ND	-	1000
Endrin	ND	-	1000
Chlordane	ND	-	1000
4,4-DDE	ND	-	1000
Total PCBs	ND	-	5000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNP&P1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15412

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S001B

PARAMETER	RESULTS	Q	QNT. LIXIT
Heptachlor	ND	-	1000
Lindane	ND	-	1000
Aldrin	ND	-	1000
4,4 - DDT	ND	-	1000
Dieldrin	ND	-	1000
Endrin	ND	-	1000
Chlordane	ND	-	1000
4,4-DDE	ND	-	1000
Total PCBs	ND	-	5000

.....  
QUALIFIERS: C = COMMENT            ND = NOT DETECTED  
              J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000567

TEST CODE : SPNP&P1

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB  
SAMPLE ID LAB : EE-91-15413  
SAMPLE ID CLIENT: P07-S001C

UNITS : UG/KG  
MATRIX : SOLID

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	<b>ND</b>		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

.....  
QUALIFIERS: C \* COMMENT           ND = NOT DETECTED  
          J \* ESTIMATED VALUE       B = ALSO PRESENT IN BLANK  
          L \* PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNP&P1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB UNITS : UG/KG  
SAHPLE ID LAB : EE-91-15414 MATRIX : SOLID  
SAHPLE ID CLIENT: P07-S002A

PARAMETER	RESULTS	Q	QNT. LIHIT
-----	-----	-	-----
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIHATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

0000568

TEST CODE : SPNP&P1

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB  
SAMPLE ID LAB : EE-91-15415  
SAMPLE ID CLIENT: P07-S002B

UNITS : UG/KG  
MATRIX : SOLID

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Heptachlor	ND	-	1000
Lindane	ND	-	1000
Aldrin	ND	-	1000
4,4 - DDT	ND	-	1000
Dieldrin	ND	-	1000
Endrin	ND	-	1000
Chlordane	ND	-	1000
<b>4,4-DDE</b>	ND	-	1000
Total PCBs	ND	-	<b>5000</b>

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNP&P1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB UNITS : UG/KG  
SAMPLE ID LAB : EE-91-15416 MATRIX : SOLID  
SAMPLE ID CLIENT: P07-S002B-DUP

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIHATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIHIT

0000569

TEST CODE : SPNP&P1

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15417

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S002C

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
<b>4,4-DDE</b>	ND		1000
Total PCBs	ND		<b>5000</b>

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNP&P1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15418

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S003A

PARAMETER	RESULTS	Q	QNT. LIHIT
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

.....  
QUALIFIERS: C = COHENT                      NO = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000570

TEST CODE : SPN88P1

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UE-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : BE-91-15419

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S003B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Heptachlor	NO		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

.....  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNP&P1

JOB NUMBER :9101.640

Ecology and Environaent, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB UNITS : UG/KG

SAMPLE ID LAB : EE-91-15420 MATRIX : SOLID

SAMPLE ID CLIENT: P07-S003C

PARAMETER	RESULTS	Q	QNT. LIMIT
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIHATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

0000571

TEST CODE :SPNP&P1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB UNITS : UG/KG  
SAMPLE ID LAB : EE-91-15475 MATRIX : SOLID  
SAMPLE ID CLIENT: P07-S004A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Heptachlor	NO		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNP&P1

JOB NUMBER : 9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB  
SAMPLE ID LAB : EE-91-15476  
SAMPLE ID CLIENT: P07-S004B

UNITS : UG/KG  
MATRIX : SOLID

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

-----  
QUALIFIERS: C = COMMENT            ND = NOT DETECTED  
              J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000572

TEST CODE :SPNP&P1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UB-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15477

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S004C

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Heptachlor	ND	-	1000
Lindane	ND	-	1000
Aldrin	ND	-	1000
4,4 - DDT	ND	-	1000
Dieldrin	ND	-	1000
Endrin	ND	-	1000
Chlordane	ND	-	1000
4,4-DDE	ND	-	1000
Total PCBs	ND	-	5000

.....  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNP&P1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15421

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S005A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

.....  
QUALIFIERS: C = COHENT                   ND = NOT DETECTED  
J = ESTIMATED VALUE           B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

0000573

TEST CODE : SPNP&P1

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15422

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S005B

PARAMETER	RESULTS	Q	QNT. LIMIT
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

.....  
QUALIFIERS: C : COMMENT                   ND : NOT DETECTED  
              J : ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L : PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNP&P1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB  
SAMPLE ID LAB : EE-91-15569  
SAHPLE ID CLIENT: P07-S006A

UNITS : UG/KG  
MATRIX : SOLID

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIHIT</u>
Heptachlor	ND	-	1000
Lindane	ND	-	1000
Aldrin	ND	-	1000
4,4 - DDT	ND	-	1000
Dieldrin	ND	-	1000
Endrin	ND	-	1000
Chlordane	ND	-	1000
4,4-DDE	ND	-	1000
Total PCBs	ND	-	5000

-----  
QUALIFIERS: C = COMMENT           ND = NOT DETECTED  
              J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000574

TEST CODE :SPNP&P1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB UNITS : UG/KG

SAMPLE ID LAB : EE-91-15570 MATRIX : SOLID

SAMPLE ID CLIENT: P07-S006A-DUP

PARAMETER	RESULTS	Q	QNT. LIMIT
Heptachlor	ND	-	1000
Lindane	ND	-	1000
Aldrin	ND	-	1000
4,4 - DDT	ND	-	1000
Dieldrin	ND	-	1000
Endrin	ND	-	1000
Chlordane	ND	-	1000
4,4-DDE	ND	-	1000
Total PCBs	ND	-	5000

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNP&P1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : OH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15571

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S006B

PARAMETER	RESULTS	Q	QNT. LIHIT
Heptachlor	ND	-	1000
Lindane	ND	-	1000
Aldrin	ND	-	1000
4,4 - DDT	ND	-	1000
Dieldrin	ND	-	1000
Endrin	ND	-	1000
Chlordane	ND	-	1000
4,4-DDE	ND	-	1000
Total PCBs	ND	-	5000

.....  
QUALIFIERS: C = COMMENT           ND = NOT DETECTED  
          J = ESTIHATED VALUE    B = ALSO **PRESENT** IN BLANK  
          L = PRESENT BELOU STATED DETECTION LIHIT

0000575

TEST CODE :SPNP&P1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15572

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S006C

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNP&P1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15478

HATRIX : SOLID

SAMPLE ID CLIENT: P07-S007A

PARAMETER	RESULTS	Q	QNT. LIMIT
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

-----  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIHATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000576

TEST CODE :SPNP&P1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15479

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S007B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

.....  
QUALIFIERS: C = COMMENT           ND = NOT DETECTED  
              J = ESTIMATED VALUE   B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNP&P1

JOB NUMBER :9101.640

Bcology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCX 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB  
SAMPLE ID LAB : EE-91-15423  
SAMPLE ID CLIENT: P07-S008A

UNITS : UG/KG  
MATRIX : SOLID

PARAMETER	RESULTS	Q	QNT. LIMIT
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
494 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIHIT

0000577

TEST CODE : SPNP&P1

JOB NUMBER : 9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB  
SAMPLE ID LAB : EE-91-15424  
SAMPLE ID CLIENT: P07-S008B

UNITS : UG/KG  
MATRIX : SOLID

PARAMETER	RESULTS	Q	QNT. LIMIT
Iicptachlor	ND	-	1000
Lindane	ND	-	1000
Aldrin	ND	-	1000
4,4 - DDT	ND	-	1000
Dieldrin	ND	-	1000
Endrin	ND	-	1000
Chlordane	ND	-	1000
4,4-DDE	ND	-	1000
Total PCBs	ND	-	5000

-----  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNP&P1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB  
SAMPLE ID LAB : EE-91-15573  
SAMPLE ID CLIENT: P07-S009A

UNITS : UG/KG  
MATRIX : SOLID

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIHIT

0000578

TEST CODE :SPNP&P1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15574

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S009B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
-	-	-	-
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
494 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

.....  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
          J ± ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
          L ± PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNP&P1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15480

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S010A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

-----  
QUALIFIERS: C = COMMENT

ND = NOT DETECTED

J = ESTIMATED VALUE

B = ALSO PRESENT IN BLANK

L = PRESENT BELOW STATED DETECTION LIMIT

0000373

TEST CODE :SPNP&P1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB  
SAMPLE ID LAB : EE-91-15481  
SAMPLE ID CLIENT: P07-S010B

UNITS : UG/KG  
MATRIX : SOLID

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

.....  
QUALIFIERS: C = COMMENT           ND = NOT DETECTED  
              J = ESTIMATED VALUE   B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNP&P1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15482

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S011A

PARAMETER	RESULTS	Q	QNT. LIMIT
Heptachlor	ND	-	1000
Lindane	ND	-	1000
Aldrin	ND	-	1000
4,4 - DDT	ND	-	1000
Dieldrin	ND	-	1000
Endrin	ND	-	1000
Chlordane	ND	-	1000
4,4-DDE	ND	-	1000
Total PCBs	ND	-	5000

-----  
QUALIFIERS: C = COMMENT            ND = NOT DETECTED  
              J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

0000580

TEST CODE : SPNP&P1

JOB NUMBER : 9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15483

MATRIX : SOLID

**SAMPLE ID CLIENT: P07-S011B**

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	<b>ND</b>		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

.....  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPNP&P1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAHPLE ID LAB : EE-91-15484

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S011C

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

.....  
QUALIFIERS: C = COMMENT           ND = NOT DETECTED  
          J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
          L = PRESENT BELOW STATED DETECTION LIMIT

0000581

TEST CODE : SPNP&P1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15575

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S012A

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		<b>5000</b>

.....  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNP&P1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAHPLE ID LAB : EE-91-15576

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S012B

<u>PARAHETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>ONT. LIHIT</u>
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

.....  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIHIT

0000582

TEST CODE :SPNP&P1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15577

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S013A

PARAMETER -----	RESULTS	Q	QNT. LIMIT -----
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

.....  
QUALIFIERS: C = COMMENT           ND = NOT DETECTED  
          J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
          L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPNP&P1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UR-8000 NASP - PEASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : EE-91-15578

MATRIX : SOLID

SAMPLE ID CLIENT: P07-S013B

<u>PARAMETER</u>	<u>RESULTS</u>	<u>0</u>	<u>ONT. LIMIT</u>
Heptachlor	ND	-	1000
Lindane	ND	-	1000
Aldrin	ND	-	1000
4,4 - DDT	ND	-	1000
Dieldrin	ND	-	1000
Endrin	ND	-	1000
Chlordane	ND	-	1000
4,4-DDE	ND	-	1000
Total PCBs	ND	-	5000

.....  
QUALIFIERS: C : COMMENT                   ND : NOT DETECTED  
              J : ESTIMATED VALUE        B : ALSO PRESENT IN BLANK  
              L : PRESENT BELOW STATED DETECTION LIMIT

0000581

TEST CODE :SPNP&P1

JOB NUMBER :9101.640

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : METHOD BLANK

MATRIX : SOLID

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Heptachlor	ND	-	1000
Lindane	<b>ND</b>	-	1000
Aldrin	ND	-	1000
4,4 - DDT	ND	-	1000
Dieldrin	ND	-	1000
Endrin	ND	-	1000
Chlordane	ND	-	1000
4,4-DDE	ND	-	1000
Total PCBs	ND	-	5000

.....  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

QUALITY CONTROL FOR ACCURACY:  
PERCENT RECOVERY OF SOIL MATRIX SPIKE  
(Sample # 15416)

9101.640

Compound	Original Result	Amount Added	Amount Determined	Percent Recovery
(ug/kg)				
Heptachlor	ND	400	406	102
Lindane	ND	400	402	100
Aldrin	ND	400	396	99
4,4'-DDT	ND	1000	1058	106
Dieldrin	ND	1000	1134	113
Endrin	ND	1000	1169	117
PCB-1254	ND	5000	5230	106

ND = NOT DETECTED

0000984

TEST CODE :SPNP&P1

JOB NUMBER :9101.646

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : METHOD BLANK

MATRIX : SOLID

PARAMETER	RESULTS	Q	QNT. LIMIT
Heptachlor	ND	-	1000
Lindane	ND	-	1000
Aldrin	ND	-	1000
4,4 - DDT	ND	-	1000
Dieldrin	ND	-	1000
Endrin	ND	-	1000
Chlordane	ND	-	1000
4,4-DDE	ND	-	1000
Total PCBs	ND	-	5000

-----  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

QUALITY CONTROL FOR ACCURACY AND PRECISION:  
PERCENT RECOVERY OF SOIL MATRIX SPIKE (MS)  
(Sample # 15480)

9101.646

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Compound	Original Result	Amount Added	Amount Determined	Percent Recovery
(ug/kg)				
Heptachlor	ND	400	480	120
Lindane	ND	400	424	106
Aldrin	ND	400	475	119
4,4'-DDT	ND	1000	1275	128
Dieldrin	ND	1000	1228	123
Endrin	ND	1000	1268	127
PCB-1254	ND	5000	6128	123

---

ND = NOT DETECTED

0000585

TEST CODE :SPNP&P1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

RESULTS IN WET WEIGHT

TEST NAME : PNC PEST./PCB

UNITS : UG/KG

SAMPLE ID LAB : MEIHOD BLANK

MATRIX : SOLID

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Heptachlor	ND		1000
Lindane	ND		1000
Aldrin	ND		1000
4,4 - DDT	ND		1000
Dieldrin	ND		1000
Endrin	ND		1000
Chlordane	ND		1000
4,4-DDE	ND		1000
Total PCBs	ND		5000

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

QUALITY CONTROL FOR ACCURACY:  
PERCENT RECOVERY OF SOIL MATRIX SPIKE  
(Sample # 15571)

9101.658

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Compound	Original Result	Amount Added	Amount Determined	Percent Recovery
(ug/kg)				
Heptachlor	ND	400	408	102
Lindane	ND	400	403	101
Aldrin	ND	400	474	118
4,4'-DDT	ND	1000	1149	115
Dieldrin	ND	1000	1214	121
Endrin	ND	1000	1218	122
PCB-1254	ND	5000	6670	133

---

ND = NOT DETECTED

0000586

**G**

APPENDIX G

**TEMPORARY MONITORING WELL**  
**GROUNDWATER SAMPLING**  
**ANALYTICAL SCREENING RESULTS**

MEMORANDUM

TO : John Barksdale  
FROM : Gary Hahn *by chh/kr*  
DATE : July 24, 1991  
SUBJECT: UH-800 Pensacola Report  
RE : 9101.658  
CC : Lab File

Attached is the laboratory report of the analysis conducted on fourteen samples received at the Analytical Services Center on July 12, 1991. Analysis was performed according to the screening procedures set forth in "Generic Quality Assurance Project Plan, Contamination Assessments and Remedial Activities, Naval Air Station Pensacola, Pensacola, Florida," July 1990.

All samples on which this report is based will be retained by E & E for a period of 30 days from the date of this report unless otherwise instructed by the client. If additional storage of samples is requested by the client, a storage fee of \$1.00 per sample container per month will be charged for each sample, with such charges accruing until destruction of the samples is authorized by the client.

GH/kr  
Enclosure

0000589

**Ecology and environment, inc.**  
 300 PLEASANTVIEW DRIVE, LANCASTER, NEW YORK 14086, TEL 716/684  
 International Specialists in the Environment

ANALYZE ALL PARAMETERS  
 ACCORDING TO SITE SPECIFIC QAPP  
 SEG JACK MILLER

CHAIN-OF-CUSTODY RECORD

Project No: <b>UH8040</b>		Project Name: <b>NASPENSACOLA PHASE 1 BATCH 2</b>			Project Manager: <b>JOHN BARKSDALE</b>		SCREENING VOL'S SCREENING METALS SCREENING PAH'S SCREENING PHENOLS SCREENING PESTICIDES PCB SCREENING TRPH						REMARKS				
Samples: (Signatures) <i>Scott Donelick</i>				Field Team Leader: <b>SCOTT DONELICK</b>													
STATION NUMBER	DATE	TIME	SAMPLE TYPE			SAMPLE INFORMATION EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS									
			COOL	GRAB	AIR												
P07	GW007	7-11	0930	X		Low	SITE 7 TW007	5	X	X	X	X	X	X	X	1/2 gal amber	Lot # 1071061
P07	GW008	7-11	1024	X		Low	SITE 7 TW008	5	X	X	X	X	X	X	X		QC # 10180C
P07	GW005	7-11	1050	X		Low	SITE 7 TW005	5	X	X	X	X	X	X	X	1 liter poly	Lot # 1148011
P07	GW005D	7-11	1050	X		Low	SITE 7 TW 005DUP	5	X	X	X	X	X	X	X		QC # 10384C
																1 liter amber	Lot # 1038022
																	QC # 10092C
																VOA's	Lot # B0222023
																	QC # B1289C
Relinquished By (Signature) <i>Scott Donelick</i>		Date/Time 7-11-91 1600		Received By (Signature)		Relinquished By (Signature)		Date/Time		Received By (Signature)		Ship Via: <b>FEDERAL EXPRESS</b>					
Relinquished By (Signature)		Date/Time		Received By (Signature)		Relinquished By (Signature)		Date/Time		Received By (Signature)		BL/Airbill Number:					
Relinquished By (Signature) <i>Fred Egan</i>		Date/Time 7-12-91 1033K		Received For Laboratory By (Signature) <i>Scott Donelick</i>		Relinquished By (Signature)		Date/Time		Received For Laboratory By (Signature)		Date: 7-11-91					

Distribution: Original Accompanies Shipment. Copy to Coordinator Field Files  
 \*See CONCENTRATION RANGE on back of form

NOTE: VOA INCLUDED IN COOLER FOR TEMPERATURE MEASUREMENT

Temp on Receipt 15°C

Ecology and Environment, Inc.  
SAMPLE TRACKING REPORT

LAB SAMPLE ID	CLIENT SAMPLE ID	TEST CODE	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED
-----	-----	-----	-----	-----	-----
15565.01	P07-GW005	WPNPRG1	07/11/91		07/13/91
15565.03	P07-GW005	WPNP&P1	07/11/91		07/16/91
		WPNPAH1	07/11/91		07/16/91
		WPNPHL1	07/11/91		07/15/91
15565.04	P07-GW005	WPNTPH1	07/11/91		07/19/91
15565.05	P07-GW005	WPNMET1	07/11/91		07/16/91
15566.01	P07-GW005D	WPNPRG1	07/11/91		07/13/91
15566.03	P07-GW005D	WPNP&P1	07/11/91		07/16/91
		WPNPAH1	07/11/91		07/16/91
		WPNPHL1	07/11/91		07/15/91
15566.04	P07-GW005D	WPNTPH1	07/11/91		07/19/91
15566.05	P07-GW005D	WPNMET1	07/11/91		07/16/91
15567.01	P07-GW007	WPNPRG1	07/11/91		07/13/91
15567.03	P07-GW007	WPNP&P1	07/11/91		07/16/91
		WPNPAH1	07/11/91		07/16/91
		WPNPHL1	07/11/91		07/15/91
15567.04	P07-GW007	WPNTPH1	07/11/91		07/19/91
15567.05	P07-GW007	WPNMET1	07/11/91		07/16/91
15568.01	P07-GW008	UPNPRG1	07/11/91		07/13/91
15568.03	P07-GW008	WPNP&P1	07/11/91		07/16/91
		WPNPAH1	07/11/91		07/16/91
		WPNPHL1	07/11/91		07/15/91
15568.04	P07-GW008	WPNTPH1	07/11/91		07/19/91
15568.05	P07-GW008	WPNMET1	07/11/91		07/16/91
15569.01	P07-S006A	SPNPRG1	07/11/91		07/15/91
15569.02	P07-S006A	SPNTPH1	07/11/91		07/17/91
15569.03	P07-S006A	SPNMET1	07/11/91		07/16/91
		SPNP&P1	07/11/91		07/17/91
		SPNPAH1	07/11/91		07/16/91
		SPNPHL1	07/11/91		07/17/91
15570.01	P07-S006A-DUP	SPNPRG1	07/11/91		07/15/91
15570.02	P07-S006A-DUP	SPNTPH1	07/11/91		07/17/91
15570.03	P07-S006A-DUP	SPNMET1	07/11/91		07/16/91
		SPNP&P1	07/11/91		07/17/91
		SPNPAH1	07/11/91		07/16/91
		SPNPHL1	07/11/91		07/17/91
15571.01	P07-S006B	SPNPRG1	07/11/91		07/15/91
15571.02	P07-S006B	SPNTPH1	07/11/91		07/17/91
15571.03	P07-S006B	SPNMET1	07/11/91		07/16/91
		SPNP&P1	07/11/91		07/17/91
		SPNPAH1	07/11/91		07/16/91
		SPNPHL1	07/11/91		07/17/91
15572.01	P07-S006C	SPNPRG1	07/11/91		07/15/91
15572.02	P07-S006C	SPNTPH1	07/11/91		07/17/91
15572.03	P07-S006C	SPNMET1	07/11/91		07/16/91
		SPNP&P1	07/11/91		07/17/91
		SPNPAH1	07/11/91		07/16/91

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
 SAMPLE ID LAB :EE-91-15565 MATRIX: WATER  
 SAMPLE ID CLIENT: P07-GW005

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
Arsenic	ND		60	UG/L
Chromium	85		10	UG/L
Zinc	660		20	UG/L
Lead	130		40	UG/L
Cadmium	ND		5.0	UG/L
Nickel	ND		40	UG/L
Copper	53		25	UG/L
Silver	ND		10	UG/L

-----  
 QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
               J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIHIT  
               NA = NOT APPLICABLE

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
 SAMPLE ID LAB : EE-91-15566 MATRIX: WATER  
 SAMPLE ID CLIENT: P07-GW005D

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
Arsenic	ND		60	UG/L
Chromium	65		10	UG/L
Zinc	650		20	UG/L
Lead	ND		40	UG/L
Cadmium	ND		5.0	UG/L
Nickel	ND		40	UG/L
Copper	42		25	UG/L
Silver	ND		10	UG/L

.....  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT  
 NA = NOT APPLICABLE

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UA-8000 NASP - PHASE I BATCH 2  
SAMPLE ID LAB :EE-91-15567 MATRIX: WATER  
SAMPLE ID CLIENT: P07-GW007

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
Arsenic	ND	-	60	UG/L
Chromium	ND	-	10	UG/L
Zinc	260	-	20	UG/L
Lead	ND	-	40	UG/L
Cadmium	10	-	5.0	UG/L
Nickel	ND	-	40	UG/L
Copper	ND	-	25	UG/L
Silver	ND	-	10	UG/L

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

0000591

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UB-8000 NASP - PHASE I BATCH 2  
 SAMPLE ID LAB : EE-91-15568 MATRIX : WATER  
 SAMPLE ID CLIENT: P07-GW008

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
-----	-----	-	-----	-----
Arsenic	ND		60	UG/L
Chromium	40		10	UG/L
Zinc	610		20	UG/L
Lead	ND		40	UG/L
Cadmium	ND		5.0	UG/L
Nickel	ND		40	UG/L
Copper	33		25	UG/L
Silver	ND		10	UG/L

.....  
 QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
               J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIMIT  
               NA = NOT APPLICABLE

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2  
SAMPLE ID LAB : METHOD BLANK MATRIX: WATER

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
Arsenic	ND		60	UG/L
Chromium	ND		10	UG/L
Zinc	ND		20	UG/L
Lead	ND		40	UG/L
Cadmium	ND		5.0	UG/L
Nickel	ND		40	UG/L
Copper	ND		25	UG/L
Silver	ND		10	UG/L

.....  
 QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
               J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIMIT  
               NA = NOT APPLICABLE

Ecology and Environment, Inc.  
 Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
 SAMPLE ID LAB : EE-91-15565 MATRIX: WATER  
 SAMPLE ID CLIENT: P07-GW005

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	ND	-	1.0	MG/L

-----  
 QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
               J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIMIT  
               NA = NOT APPLICABLE

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2  
SAMPLE ID LAB : EE-91-15566 MATRIX: WATER  
SAMPLE ID CLIENT: P07-GW005D

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
TRPH	ND	-	1.0	MG/L

-----  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT  
              NA = NOT APPLICABLE

0000593

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
SAMPLE ID LAB :EE-91-15567 MATRIX: WATER  
SAMPLE ID CLIENT: P07-GW007

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	ND	-	1.0	MG/L

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT  
NA = NOT APPLICABLE

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
SAMPLE ID LAB :EE-91-15568 MATRIX: WATER  
SAMPLE ID CLIENT: P07-GW008

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>	<u>UNITS</u>
TRPH	ND	-	1.0	MG/L

-----  
QUALIFIERS: C = COMMENT ID = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOU STATED DETECTION LIMIT  
NA = NOT APPLICABLE

0000594

Ecology and Environment, Inc.  
 Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
 SAMPLE ID LAB : HETHOD BLANK MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
TRPH	ND	-	1.0	MG/L

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT  
 NA = NOT APPLICABLE

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
FOR SPIKED WATER SAMPLES

9101.658

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(mg/L)

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Parameter	E & E Laboratory No. 91-	Original Value	Amount Added	Amount Determined	Percent Recovery
T. Recoverable Petroleum Hydrocarbons	Batch QC	ND	2.7	3.0	112

---

ND = NOT DETECTED

\*\* = RECOVERY NOT DETERMINED BECAUSE SAMPLE AMOUNT IS FOUR OR MORE  
TIMES GREATER THAN SPIKE AMOUNT.

NOTE: ALTHOUGH RESULTS ARE REPORTED AS ROUNDED VALUES, PERCENT  
RECOVERIES ARE CALCULATED DIRECTLY FROM THE RAW DATA.

0000595

TEST CODE :WPNPRG1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UA-8000 NASP - PHASE I BATCH 2  
TEST NAME : PNC PURGABLES- GC UNITS : UG/L  
SAMPLE ID LAB : EE-91-15565 MATRIX: WATER  
SAMPLE ID CLIENT: P07-GW005

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Benzene	ND		10
Toluene	ND		10
Ethylbenzene	ND		10
Total Xylenes	ND		10
1,2 - Dichlorobenzene	ND		10
1,3 - Dichlorobenzene	ND		10
1,4 - Dichlorobenzene	ND		10
1,1 - Dichloroethene	ND		10
Methylene Chloride	ND		10
Trans - 1,2 - Dichloroethene	ND		10
1,1 - Dichloroethane	ND		10
1,1,1 - Trichloroethane	ND		10
1,2 - Dichloroethane	ND		10
Trichloroethene	ND		10
Tetrachloroethene	ND		10
Chlorobenzene	ND		10

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : WPNPRG1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

TEST NAME : PNC PURGABLES- GC

UNITS : UG/L

SAHPLE ID LAB : EE-91-15566

MATRIX : WATER

SAMPLE ID CLIENT: P07-GW005D

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Benzene	ND		10
Toluene	ND		10
Ethylbenzene	ND		10
Total Xylenes	ND		10
1,2 - Dichlorobenzene	ND		10
1,3 - Dichlorobenzene	ND		10
1,4 - Dichlorobenzene	ND		10
1,1 - Dichloroethcne	ND		10
Methylene Chloride	ND		10
Trans - 1,2 - Dichloroethene	ND		10
1,1 - Dichloroethane	ND		10
1,1,1 - Trichloroethane	ND		10
1,2 - Dichloroethane	ND		10
Trichloroethene	ND		10
Tetrachloroethene	ND		10
Chlorobenzene	ND		10

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOV STATED DETECTION LIMIT

0000596

TEST CODE :WPNPRG1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
TEST NAME : PNC PURGABLES- GC UNITS : UG/L  
SAMPLE ID LAB : EE-91-15567 MATRIX: WATER  
SAMPLE ID CLIENT: P07-GW007

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Benzene	ND		10
Toluene	ND		10
Ethylbenzene	ND		10
Total Xylenes	ND		10
1,2 - Dichlorobenzene	ND		10
1,3 - Dichlorobenzene	ND		10
1,4 - Dichlorobenzene	ND		10
1,1 - Dichloroethene	ND		10
Methylene Chloride	ND		10
Trans - 1,2 - Dichloroethene	ND		10
1,1 - Dichloroethane	ND		10
1,1,1 - Trichloroethane	ND		10
1,2 - Dichloroethane	ND		10
Trichloroethene	ND		10
Tetrachloroethene	ND		10
Chlorobenzene	ND		10

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WPNPRG1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2  
TBST NAME : PNC PURGABLES- GC UNITS : UG/L  
SAMPLE ID LAB : EE-91-15568 MATRIX: WATER  
SAMPLE ID CLIENT: P07-GW008

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzene	ND	-	10
Toluene	ND	-	10
Ethylbenzene	ND	-	10
Total Xylenes	ND	-	10
1,2 - Dichlorobenzene	ND	-	10
1,3 - Dichlorobenzene	ND	-	10
1,4 - Dichlorobenzene	ND	-	10
1,1 - Dichloroethene	ND	-	10
Methylene Chloride	ND	-	10
Trans - 1,2 - Dichloroethene	ND	-	10
1,1 - Dichloroethane	ND	-	10
1,1,1 - Trichloroethane	ND	-	10
1,2 - Dichloroethane	ND	-	10
Trichloroethene	ND	-	10
Tetrachloroethene	ND	-	10
Chlorobenzene	ND	-	10

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

0000597

TEST CODE :WPNPRG1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2

TEST NAME : PNC PURGABLES- GC UNITS : UG/L

SAMPLE ID LAB : METHOD BLANK MATRIX : WATER

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Benzene	ND		10
Toluene	ND		10
Ethylbenzene	ND		10
Total Xylenes	ND		10
1,2 - Dichlorobenzene	ND		10
1,3 - Dichlorobenzene	ND		10
1,4 - Dichlorobenzene	ND		10
1,1 - Dichloroethene	ND		10
Methylene Chloride	ND		10
Trans - 1,2 - Dichloroethene	ND		10
1,1 - Dichloroethane	ND		10
1,1,1 - Trichloroethane	ND		10
1,2 - Dichloroethane	ND		10
Trichloroethene	ND		10
Tetrachloroethene	ND		10
Chlorobenzene	ND		10

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

QUALITY CONTROL FOR ACCURACY AND PRECISION:  
PERCENT RECOVERY OF WATER MATRIX SPIKE (MS)  
(Sample # Blank Spike)

9101.658

(ug/L)

Parameter	E & E Laboratory No. 91-	Original Value	Amount Added	Amount Determined	Percent Recovery
Benzene		ND	20	21	105
Toluene		ND	20	20	100
Ethyl Benzene		ND	20	20	100
1,2-Dichlorobenzene		ND	20	18	90
1,3-Dichlorobenzene		ND	20	18	90
1,4-Dichlorobenzene		ND	20	18	90
1,1-Dichloroethene		ND	20	14	70
Methylene Chloride		ND	20	18	90
Trans-1,2-Dichloroethene		ND	20	18	90
1,1-Dichloroethane		ND	20	18	90
1,1,1-Trichloroethane		ND	20	22	110
1,2-Dichloroethane		ND	20	25	125
Trichloroethene		ND	20	23	115
Tetrachloroethene		ND	20	24	120

ND = NOT DETECTED

0000538

TEST CODE :WPNPAH1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
TEST NAME : PNC PAH - LC UNITS : UG/L  
SAMPLE ID LAB : EE-91-15565 MATRIX: WATER  
SAMPLE ID CLIENT: P07-GW005

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Benzo-a-pyrene	ND	-	100

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WPNPAH1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PEASE I BATCH 2  
TEST NAME : PNC PAH - LC UNITS : UG/L  
SAMPLE ID LAB : EE-91-15566 MATRIX: WATER  
SMPLE ID CLIENT: P07-GW005D

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Benzo-a-pyrene	ND	-	100

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIHIT

0000599

TEST CODE :WPNPAH1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
TEST NAME : PNC PAH - LC UNITS : UG/L  
SAMPLE ID LAB : EE-91-15567 MATRIX: WATER  
SAMPLE ID CLIENT: P07-GW007

PARAMETER	RESULTS	Q	QNT. LIMIT
Total as Benzo-a-pyrene	190	-	100

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : WPNPAH1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCE 2  
TEST NAME : PNC PAE - LC UNITS : UG/L  
SAMPLE ID LAB : EE-91-15568 MATRIX: WATER  
SAHPLE ID CLIENT: P07-GW008

PARAMETER	RESULTS	Q	QNT. LIMIT
Total as Benzo-a-pyrene	ND	-	100

-----  
QUALIFIERS: C = COMMENT NO = NOT DETECTED  
J = ESTIHATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIHIT

0000600

TEST CODE :WPNPAH1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
TEST NAME : PNC PAH - LC UNITS : UG/L  
SAMPLE ID LAB : METHOD BLANK MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Total as Benzo-a-pyrene	ND	-	100

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
FOR SPIKED WATER SAMPLES

9101.658

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(ug)

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Parameter	E & E Laboratory No. 91-	Original Value	Amount Added	Amount Determined	Percent Recovery
<hr/> <b>Benzo(a)pyrene</b>					
	Batch QC	ND	50	44	88

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ND = NOT DETECTED

0000601

TEST CODE : WPNPHL1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
TEST NAME : PNC PHENOL - LC UNITS : UG/L  
SAMPLE ID LAB : EE-91-15565 MATRIX: WATER  
SAMPLE ID CLIENT: P07-GW005

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Trichlorophenol	ND	-	100

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : WPNPHL1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
TEST NAME : PNC PHENOL - LC UNITS : UG/L  
SAMPLE ID LAB : EE-91-15566 MATRIX: WATER  
SAMPLE ID CLIENT: P07-GW005D

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Trichlorophenol	ND		100

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

0000602

TEST CODE :WPNPHL1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
TEST NAME : PNC PHENOL - LC UNITS : UG/L  
SAMPLE ID LAB : EE-91-15567 MATRIX : WATER  
SAMPLE ID CLIENT: P07-GW007

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Total as Trichlorophenol	PRESENT	L	100

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : WPNPHL1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
TEST NAME : PNC PHENOL - LC UNITS : UG/L  
SAMPLE ID LAB : EE-91-15568 MATRIX: WATER  
SAMPLE ID CLIENT: P07-GW008

<u>PARAMETER</u>	<u>RESULTS</u>	<u>Q</u>	<u>QNT. LIMIT</u>
Total as Trichlorophenol	PRESENT	L	100

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

0000603

TEST CODE : WPNPHL1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
TEST NAME : PNC PHENOL - LC UNITS : UG/L  
SAMPLE ID LAB : METHOD BLANK MATRIX : WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Total as Trichlorophenol	ND	-	100

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
FOR SPIKED WATER SAMPLES

9101.658

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(ug)

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Parameter	E & E Laboratory No. 91-	Original Value	Amount Added	Amount Determined	Percent Recovery
<hr/>					
2,4,6-Trichlorophenol					
	Batch QC	ND	100	60	60

---

ND = NOT DETECTED

0000604

TEST CODE :WPNP&P1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
TEST NAME : PNC PEST./PCB UNITS : UG/L  
SAMPLE ID LAB : EE-91-15565 MATRIX: WATER  
SAMPLE ID CLIENT: P07-GW005

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Heptachlor	ND		5.0
Lindane	ND		5.0
Aldrin	ND		5.0
4,4 - DDT	ND		5.0
Dieldrin	ND		5.0
Endrin	ND		5.0
Chlordane	ND		5.0
4,4-DDE	ND		5.0
Total PCBs	ND		10

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WPNP&P1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
TEST NAME : PNC PEST./PCB UNITS : UG/L  
SAMPLE ID LAB : EE-91-15566 MATRIX: WATER  
SAMPLE ID CLIENT: P07-GW005D

PARAMETER	RESULTS	Q	QNT. LIMIT
Heptachlor	ND	-	5.0
Lindane	ND	-	5.0
Aldrin	ND	-	5.0
4,4 - DDT	ND	-	5.0
Dieldrin	ND	-	5.0
Endrin	ND	-	5.0
Chlordane	ND	-	5.0
4,4-DDE	ND	-	5.0
Total PCBs	ND	-	10

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

0000605

TEST CODE : WPNP&P1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
TEST NAME : PNC PEST./PCB UNITS : UG/L  
SAMPLE ID LAB : EE-91-15567 MATRIX: WATER  
SAMPLE ID CLIENT: P07-GW007

PARAMETER	RESULTS	Q	QNT. LIMIT
Heptachlor	ND	-	5.0
Lindane	ND	-	5.0
Aldrin	ND	-	5.0
4,4 - DDT	ND	-	5.0
Dieldrin	ND	-	5.0
Endrin	ND	-	5.0
Chlordane	ND	-	5.0
4,4-DDE	ND	-	5.0
Total PCBs	ND	-	10

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WPNP&P1

JOB NUMBER :9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UH-8000 NASP - PHASE I BATCH 2  
TEST NAME : PNC PEST./PCB UNITS : UG/L  
SAMPLE ID LAB : EE-91-15568 MATRIX: WATER  
SAMPLE ID CLIENT: P07-GW008

PARAMETER	RESULTS	Q	QNT. LIMIT
Heptachlor	ND	-	5.0
Lindane	ND	-	5.0
Aldrin	ND	-	5.0
4,4 - DDT	ND	-	5.0
Dieldrin	ND	-	5.0
Endrin	ND	-	5.0
Chlordane	ND	-	5.0
4,4-DDE	ND	-	5.0
Total PCBs	ND	-	10

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

0000606

TEST CODE : WPNP&P1

JOB NUMBER : 9101.658

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : UE-8000 NASP - PEASE I BATCH 2  
TEST NAME : PNC PEST./PCB UNITS : UG/L  
SAMPLE ID LAB : METHOD BLANK MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Heptachlor	ND	-	5.0
Lindane	ND	-	5.0
Aldrin	ND	-	5.0
4,4 - DDT	ND	-	5.0
Dieldrin	ND	-	5.0
Endrin	ND	-	5.0
Chlordane	ND	-	5.0
4,4-DDE	ND	-	5.0
Total PCBs	ND	-	10

.....  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT