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SITE ASSESSMENT REPORT SITE 2406 NAVAL EDUCATION AND TRAINING PROFESSIONAL DEVELOPMENT AND TECHNICAL CENTER (NETPDTC) NAS SAUFLEY FIELD FL
3/1/1998
NAVFAC SOUTHERN

SF030

SITE ASSESSMENT REPORT
FDEP REGISTERED NUMBER 178628753

SAUFLEY FIELD, SITE 2406
NAVAL EDUCATION AND TRAINING PROFESSIONAL DEVELOPMENT AND TECHNICAL CENTER (NETPDTC) PENSACOLA, FLORIDA

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1.0 INTRODUCTION

1.1 PURPOSE

The Navy Public Works Center, Naval Air Station, Pensacola, Florida, was retained by Southern Division Navy Facilities Engineering Command (SOUTHNAVFACENGCOM) to conduct a Site Assessment and Remediation Plan (if warranted) at Saufley Field, Naval Education & Training Professional Development & Technical Center (NETPDTC), Site 2406, Pensacola Naval Air Station, Pensacola, Florida.

The Navy Public Works Center, Naval Air Station, Pensacola, Florida received a Warning Letter from the Department of Environmental Protection (DEP) on July 7, 1994. The Warning Letter stated that on May 24, 1994 public drinking water results from Southern Analytical Laboratories, Inc. documented contamination due to a discharge of petroleum or petroleum product at the US Navy-Supply Department Saufley Field (DEP #1786-28753). The DEP directed action be taken to further define the nature and extent of the contamination. The DEP directed PWC to initiate a Contamination Assessment (CA) within 30 days of discovery of contamination and that within six months after the CA initiation, two copies of the Contamination Assessment Report (CAR) be filed with the Federal Facilities Coordinator.

The findings and conclusions of the field investigation for the Site Assessment for Saufley Field, Site 2406 are presented herein.

1.2 SITE LOCATION AND AREA OF INVESTIGATION

Site 2406 is located within the confines of Saufley Field, Naval Educational and Training Professional Development and Technical Center (NETPDTC). Saufley Field is located in northwest Florida, and more specifically, Escambia County. The base is between Highway 10 and Perdido Bay approximately five miles northwest of Pensacola (Figure 1-1). Saufley Field consists of four airstrips, two of which are active. The base also has a small number of support buildings and a Federal Prison which are located south of the airfield (Figure 1-2). Saufley Field covers 866 acres of land, the majority of which is covered by the airstrips and wooded areas.

Escambia County is Florida's westernmost county and lies between the State of Alabama to the west and Santa Rosa County. The State of Alabama also forms the northern boundaries of both counties, and is approximately 50 miles north of their southern limits at the Gulf of Mexico shoreline. Pensacola is the county seat of Escambia County and is the largest city in both land area and population as well as the leading industrial center for eastern Florida.

The immediate area surrounding Saufley Field is characterized by sparsely populated residential structures. Estimated population within five miles of Saufley Field is 60,970, with an average density of 776 persons per square mile.

Specifically, Site 2406 is located at latitude 30^0 27' 49", longitude 87^0 20' 35". The site is located at the former location of potable water well #4 which was located at the southwest corner

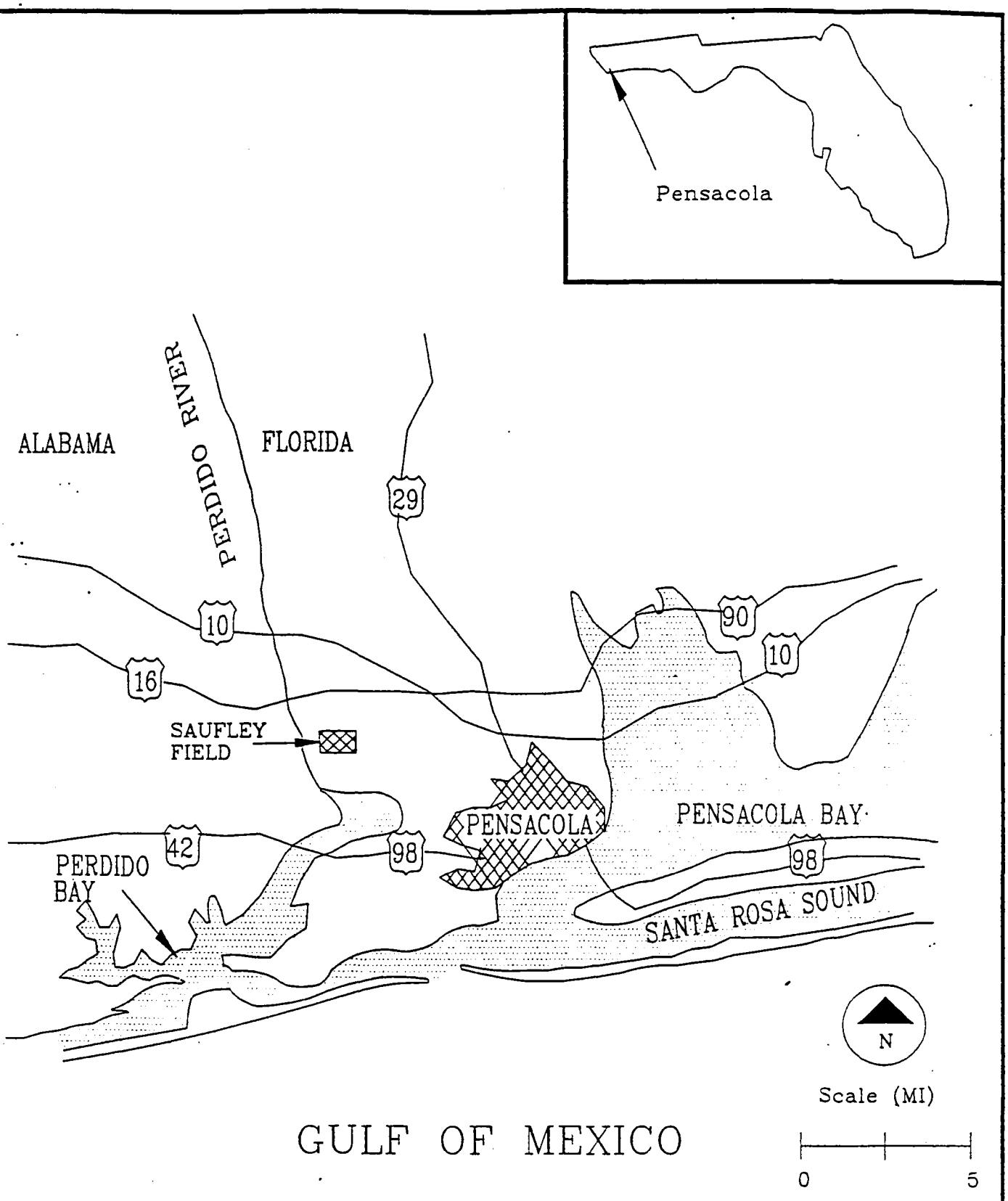
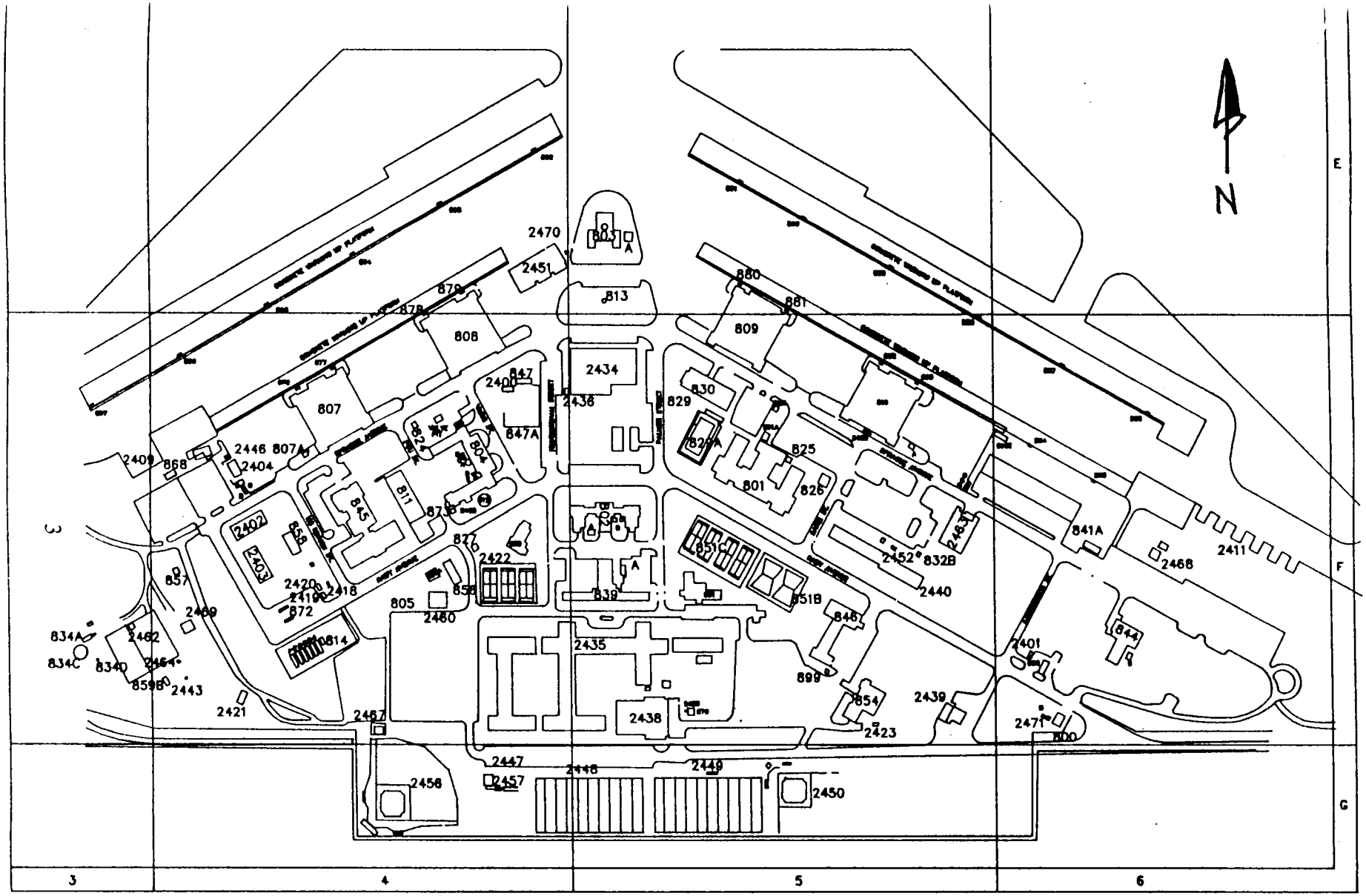


FIGURE 1-1
NETPDTC SAUFLEY FIELD
VICINITY MAP

Key:

HIGHWAY

WATER WAYS



LEGEND

BUILDINGS & STRUCTURES	
ROADS, WALKS & PAVED AREAS	
AIRFIELD PAVEMENT	
NAVY PROPERTY BOUNDARY WITHOUT FENCE	
NAVY PROPERTY BOUNDARY WITH FENCE	X
FENCE	X Y
MAIN STATION ENTRANCE	
FL	FENCE LINE

FIGURE 1-2

SAUFLEY FIELD BASE MAP

SCALE 1"=400'-0"

NO.	REVISION DESCRIPTION	PREP'D BY	DATE	APPROVED
	UPDATED	A. CUMMINS	3-10-98	

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
NAVY PUBLIC WORKS CENTER, PENSACOLA FL.

NETPDTC SAUFLEY FIELD

GENERAL DEVELOPMENT MAP, EXISTING CONDITIONS

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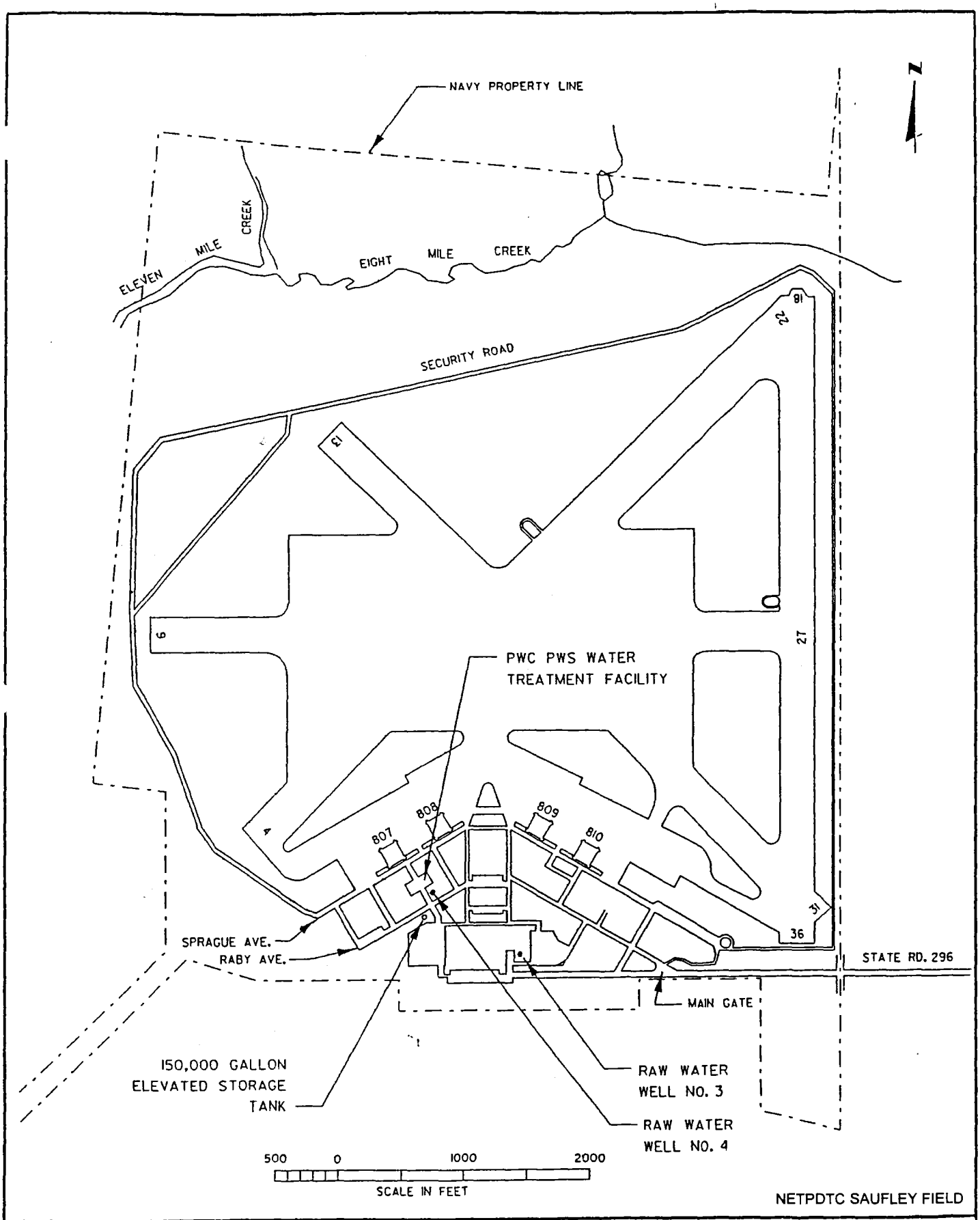


FIGURE 1-3
LOCATION MAP OF PWC
RAW WATER WELL NO. 3 &
RAW WATER WELL NO. 4

NETPDTC SAUFLEY FIELD

LOCATION MAP

of Building 2406. A site location map is included in Figure 1-3 to show locations of buildings and facility boundaries.

1.3 SITE HISTORY AND OPERATIONS

The U.S. Government purchased 866 acres of farmland in 1939 to develop the airfield which was named after Richard C. Saufley, a pioneer in naval aviation. The Air Field opened in 1940 as Naval Auxiliary Air Station (NAAS) Saufley. NAAS Saufley was used to train U.S. and allied pilots during World War II and the Korean Conflict. In 1957, the mission at Saufley Field was changed to basic training for naval aviators. Figure 1-2 shows a general map of the base.

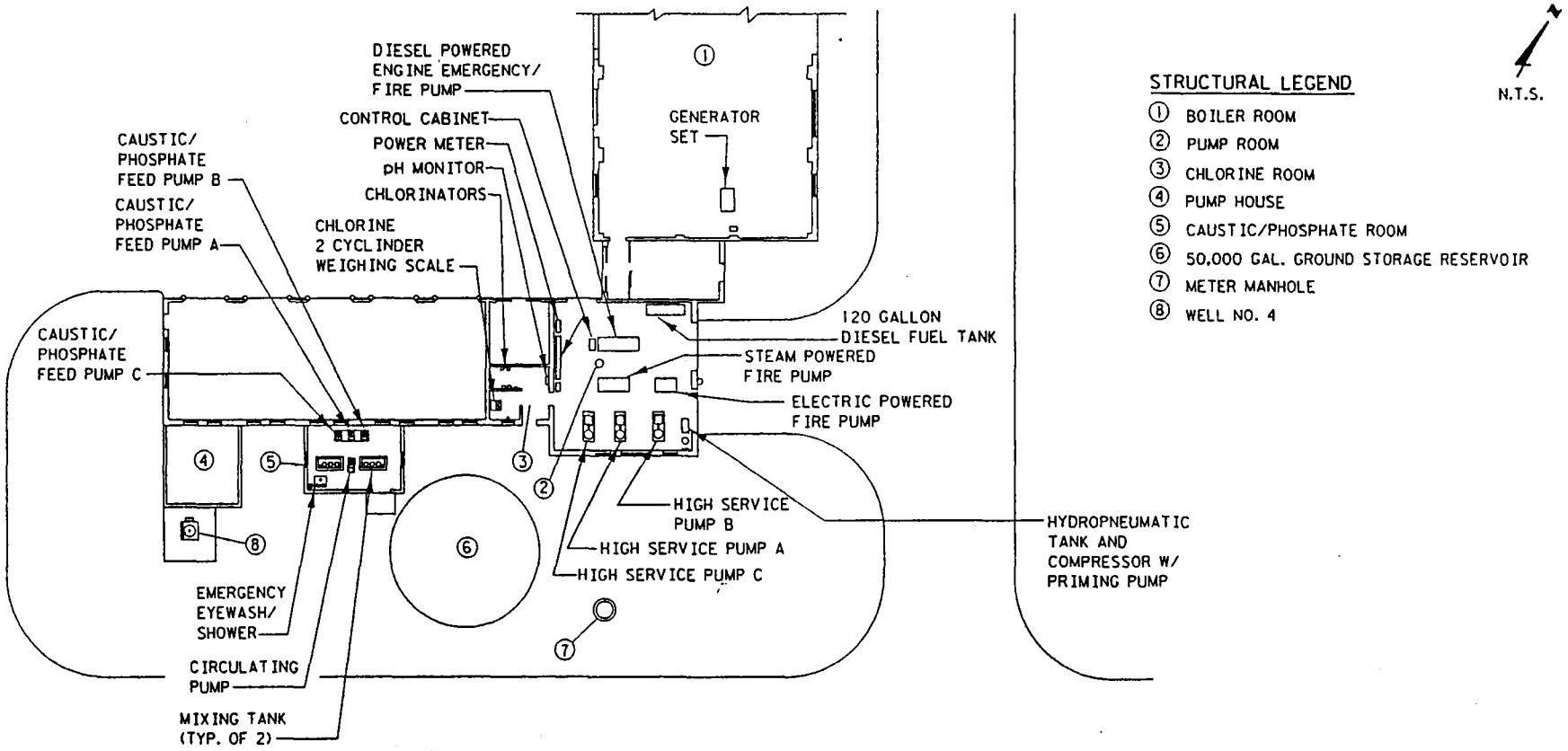
NAAS Saufley was redesignated as a Naval Air Station (NAS) in 1968 and retained that status until 1976 when NAS Saufley was disestablished and placed in caretaker status. Between 1976 and 1979 Saufley Field was used as an Outlying Landing Field (OLF) for NAS Whiting Field. In 1979 Saufley Field was reactivated as Naval Educational and Training Program Management Support Activity (NETPMSA). Saufley Field was renamed the Naval Education and Training Professional Development and Technical Center (NETPDTC) in 1996.

Saufley Field is now used primarily to train and educate Naval personnel and to house federal prisoners. NAS Whiting Field pilots use two of the airstrips for touch and go landing exercises.

On August 24, 1993, the Public Works Center potable water treatment system at Saufley Field consisted of two (2) active raw water wells. Potable water well #3 had an operating capacity of 641 GPM @ 14 psi and potable water well #4 had an operating capacity of 506 GPM @ 22 psi. The distribution system consisted of four (4) to twelve (12) inch diameter water mains. The storage tank/reservoir consisted of one (1) one hundred fifty thousand (150,000) gallon elevated storage tank (Structure No 805) and one (1) fifty thousand (50,000) gallon ground storage reservoir (Structure No. 812). The chemical treatment systems contain a caustic feed system, phosphate feed system, and a chlorine feed system. The pump house at Building 804 included three (3) high service pumps (HSP), two (2) at 300 GPM and one (1) at 600 GPM; one (1) electric powered fire pump; one (1) steam powered fire pump; one (1) diesel engine powered emergency/fire pump; and one (1) 150 KW generator set. The water treatment facility layout is presented in Figure 1-4.

On May 9, 1994, water samples from potable water well #3 and potable water well #4 effluent indicated benzene contamination levels of 0.032 mg/l in potable water well #4 which exceeded the DEP enforceable drinking water standard for benzene of 0.001 mg/l. No benzene contamination was detected in potable water well #3 effluent. Potable water well #4 was taken off line and only potable water well #3 remained in production. Potable water well #4 remained on quarterly sampling for one year for observation and corrective action to remove the contamination. Potable water wells #3 and #4 were abandoned in-place on April 1996.

Mr. J. B. Hollingshead, Environmental Specialist II, HRS, performed a field investigation of potable water well #4 on June 1, 1994. Mr. Hollingshead's Inter Office Memorandum dated June 8, 1994 reported that he found potable water well #4 shut down. He also found two (2) 20,000



NETPDTC SAUFLEY FIELD

PWC NETPDTC SAUFLEY FIELD PWS WATER TREATMENT FACILITY LAYOUT

FIGURE 1-4

gallon vertical tanks inside the dike at the back lot behind the water plant and four (4) old USTs under the slab for the dike which were abandoned in place. The tank sizes were noted as 7,800 gallons each and were filled in place in November 1988. They were used to store fuel oil. The tanks were bare steel tanks installed in 1945. Next to the well inside the dike, he found a 300-gallon diesel tank with a small copper fuel line going inside the generator room. The line was not in contact with the soil. The old USTs were upgradient from the well (groundwater flow is southeast) and approximately 300' northeast of the well. It was noted during the Environmental Audit there were six (6) 20,000 gallon tanks providing the landing field with AV gas or Jet fuel. There was a 10" product line north of potable water well #3 which distributed fuel to the landing area tanks. The 10" line was more than two (2) miles long and there is a question about whether or not the line was purged prior to abandonment.

Mr. J. B. Hollingshead noted two possible sources of contamination in his Inter Office Memorandum:

(1) Four abandoned USTs [804C-F]
(2) The 10" product line suppling the old refueling pits (Figure 1-5)

1.4 INITIAL REMEDIAL ACTION

No remedial action was performed at the site.

1.5 RESULTS OF PREVIOUS INVESTIGATIONS

Laboratory analysis performed at the Saufley Field Water Treatment Plant for benzene on December 30, 1992 indicated no benzene contamination. A composite water analysis performed by Public Works Center at the Saufley Field Water Treatment Plant on March 25, 1994 indicated benzene contamination levels of 2.9 ppb. Laboratory analysis on drinking water collected from Building 804 (building nearest to potable water well #4) by Navy Public Works Center Environmental Laboratory on April 26, 1994 indicated potable water well #4 had benzene contamination levels of 2.6 ppb (Inside Tap) and 2.5 ppb (Outside Tap). A raw water analysis performed on potable water well #3 and potable water well #4 at Saufley Field by Law Environmental National Labs on May 9, 1994 indicated potable water well #4 had benzene contamination levels of 3.4 ppb which exceeds the FDEP regulatory limits of 1.0 ppb. No benzene contamination was detected in potable water well #3. Public Works Center took potable water well #4 off line on May 10, 1994 after reviewing the laboratory reports of the raw water analysis performed May 9, 1994.

A follow-up analysis on potable water well #4 on May 18, 1994 indicated benzene contamination levels of 3.6 ppb. The May 18, 1994 analysis substantiated the March 25, April 26, and May 9, 1994 laboratory analyses which detected benzene levels in potable water well #4 above the FDEP regulatory limits of 1 ppb.

Public Works Center performed additional water sampling on potable water well #4 on June 30, 1994 which revealed benzene contamination levels of 4.0 ppb. Table 1-1 is a summary of benzene analyses performed at the Saufley Field Waste Water Treatment Plant and potable water

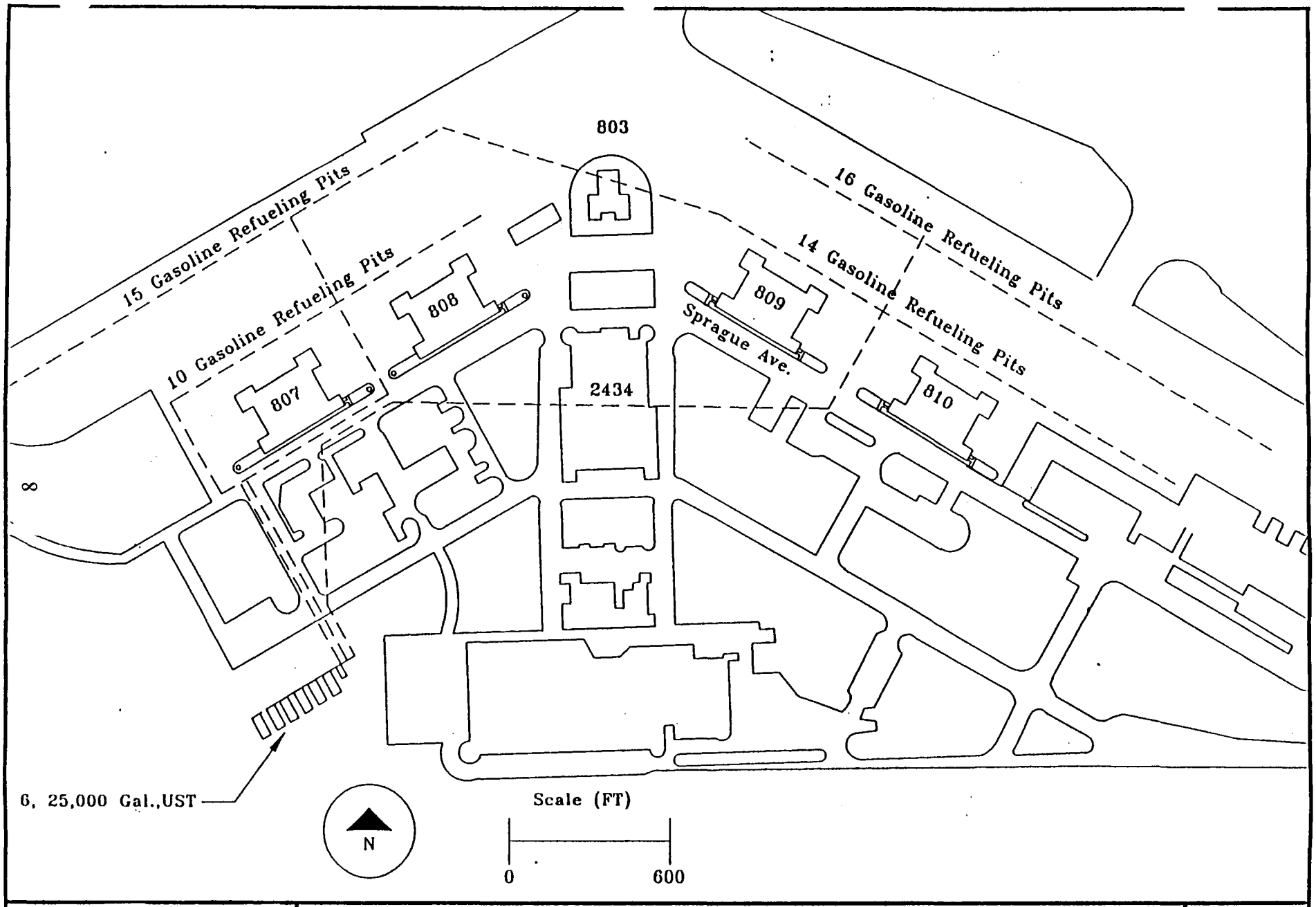


FIGURE 1-5
NETPDTC SAUFLEY FIELD

Gasoline Refueling Lines

Gasoline Refueling Lines - - - - - - -

TABLE 1-1
SUMMARY OF BENZENE CONTAMINATION
ANALYTICAL RESULTS FOR RAW WATER SAMPLES
COLLECTED FROM S/F WTP AND POTABLE WATER WELL #3
& POTABLE WATER WELL #4
SAUFLEY FIELD, FL
SITE 2406

BENZENE ANALYSES				
DATE	**S/F WTP**	**POTABLE WATER WELL NUMBER**		
		MW-3	**MW-4**	
3/25/94	2.9 ppb	NS	NS	
4/26/94	NS	NS	**B-804 InsideTap** 2.6 ppb	**B-804 Outside Tap** 2.5 ppb
5/9/94	NS	BDL	3.4 ppb	
5/18/94	NS	NS	3.6 ppb	
6/7/94	NS	BDL	BDL	
6/30/94	NS	NS	4 ppb	
10/7/94	BDL	NS	NS	

NOTES: BDL = Below detection limits
NS = Not sampled
All results reported in parts per billion (ppb) unless otherwise noted.

well #3 and potable water well #4 from March 25, 1994 to October 7, 1994. Laboratory reports are included in Appendix D.

1.6 REGIONAL GEOLOGY AND HYDROGEOLOGY

NETPDTC Saufley Field resides in the Coastal Lowland topographic division of the Coastal Plain physiographic division of the United States. The Coastal Lowlands consist of relatively undissected nearly level plains lying less than 100 feet above sea level.

Topography of NETPDTC Saufley Field ranges in elevation from 80 to 85 feet along the eastern central portion of the property to less than 5 feet along the northwestern portion of the property (Figure 1-6). With a few exceptions to the northern boundary of the property, topography is level to gently sloping (less than 8% slope).

For most of the property, runoff is toward the southwest through a network of culverts that leads to Perdido Bay approximately one mile away. In the northern portion of the property, runoff is toward Eight Mile Creek and Eleven Mile Creek, which also drain toward Perdido Bay. Small ponds (less than 300 square meters in surface area) have been observed in pits located just east of Saufley Field property line.

The drainage basin of concern consists of a well-developed network of waterways which drains Escambia and Santa Rose Counties (Figure 1-7). The Perdido River forms the Florida-Alabama border along the west margin of the Panhandle and flows southward into Perdido Bay. The Perdido River Basin consists of 925 square miles (236 in Escambia and Santa Rosa counties) (Musgrove et. al., 1965). Average flow from the basin is 1,120 million gallons per day (284 mgd from Escambia and Santa Rosa counties). Escambia River, the largest stream in the area, flows southward from Alabama on the north, dividing Escambia County from Santa Rosa County, and empties into Escambia Bay approximately 10 miles from NETPDTC Saufley Field. The Escambia River Basin consists of 4,233 square miles (410 in Escambia and Santa Rosa counties) of area (Musgrove et. al., 1965). Average flow from the basin is 4540 mgd (556 mgd from Escambia and Santa Rosa counties). Streams on the east side of the Escambia River (north of Molino) are relatively short with a random dendritic pattern. The streams on the west side (where Saufley Field is located) are many times longer and have fairly straight, parallel channels that trend southeastward, reminiscent of trellis drainage. Hundreds of small ponds dot Escambia and Santa Rosa counties. These ponds are apparently accumulation of rainwater held up by underlying clay or iron-cemented sandstone ("hardpan").

Approximate average annual runoff, in inches, from areas within Escambia and Santa Rosa counties is presented in Figure 1-8. Saufley Field is affected by two 100-year flood plains which follow Eight Mile Creek and Eleven Mile Creek. The flood plains do not encroach upon the developed areas of the facility. These flood prone areas are illustrated in Figure 1-9 (Southern Division 1988).

The surface waters of Escambia and Santa Rosa counties are of excellent quality, except in the coastal reaches where tides bring salt water up the streams. The Escambia River coming out of

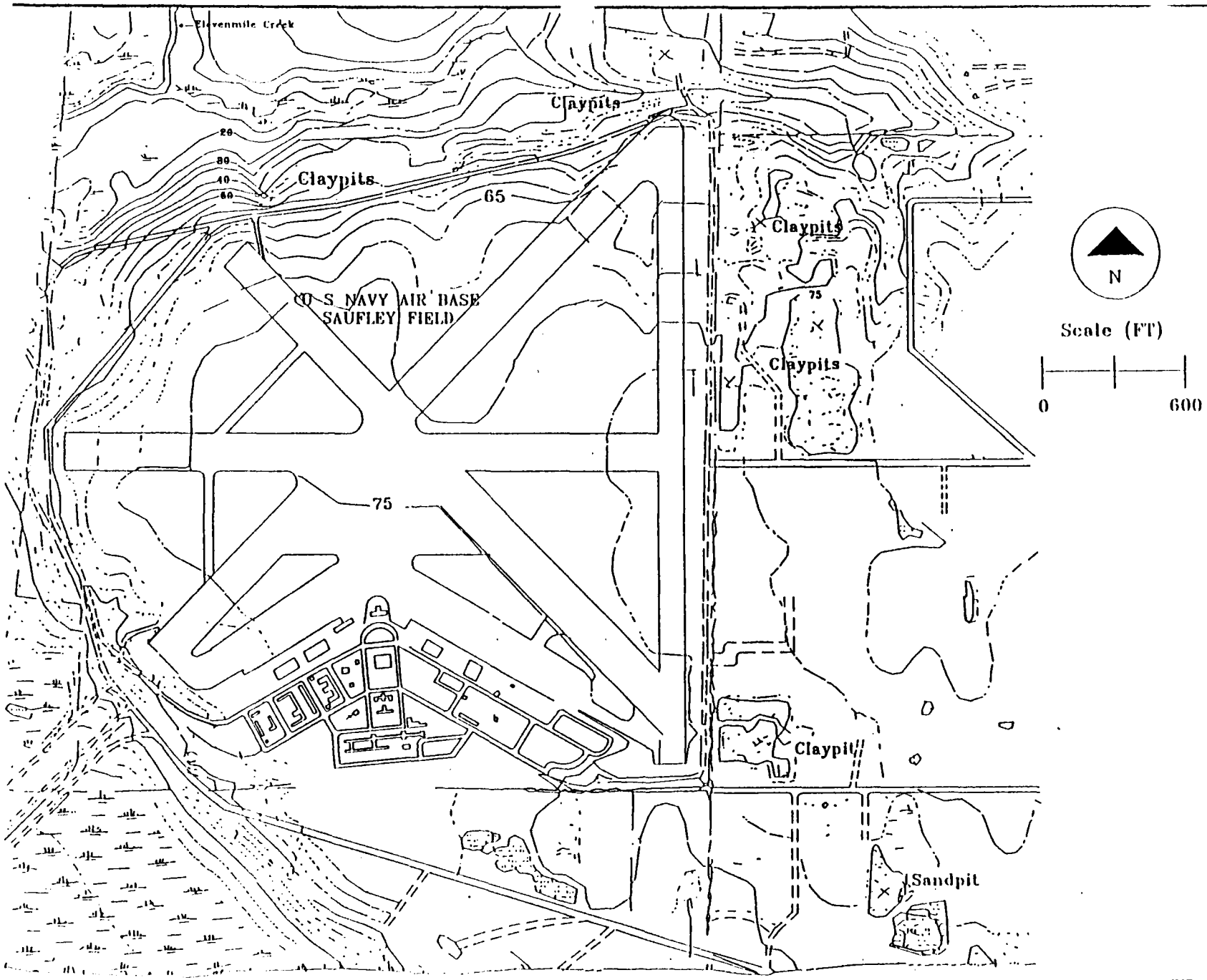


FIGURE 1-6
NETPDTC SAUFLEY FIELD

Topographic Map
(Modified After U.S. Geological Survey)

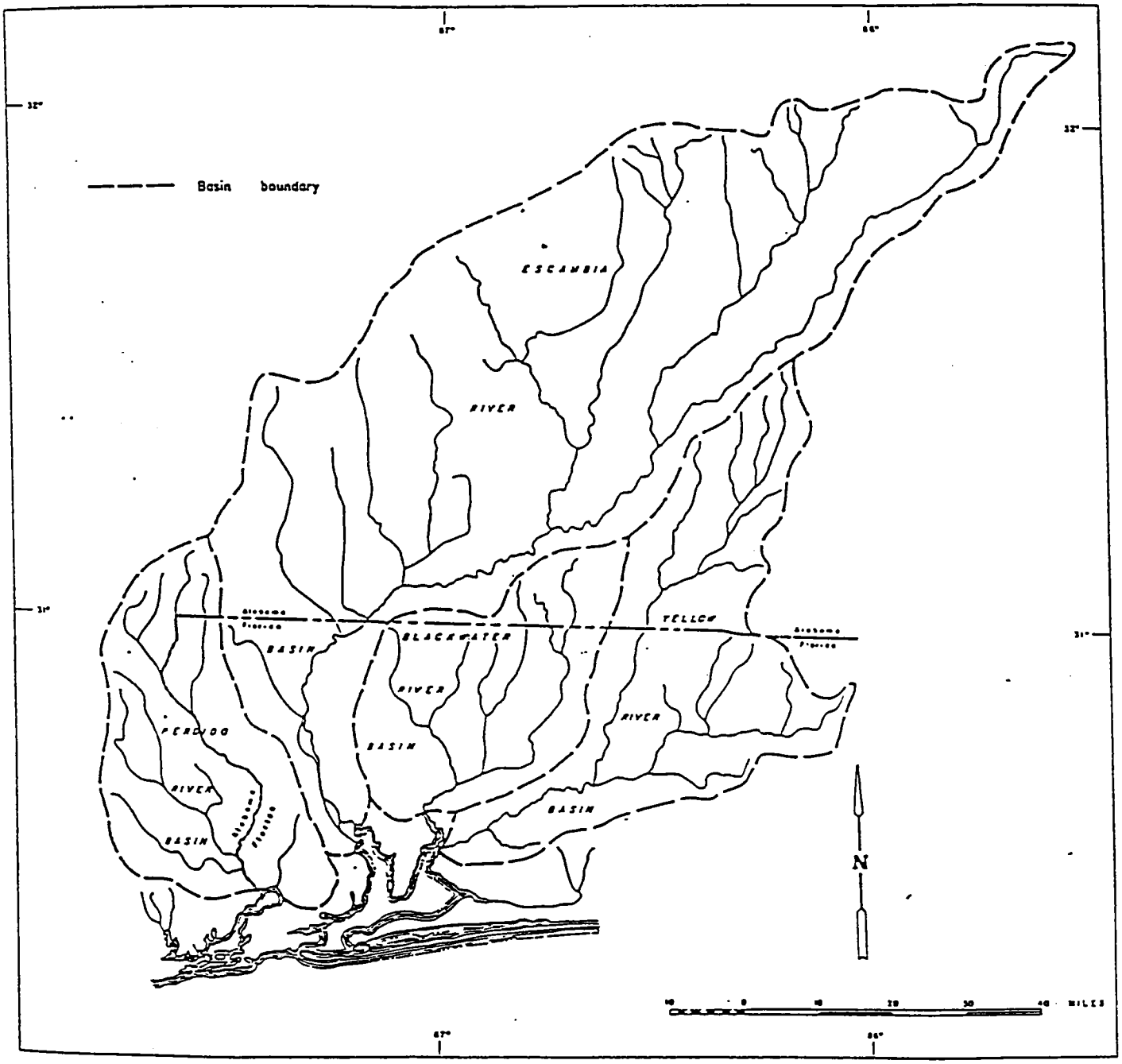


FIGURE 1-7
NETPDTC SAUFLEY FIELD

Key: Basin Map of Perdido, Escambia, Blackwater, and Yellow Rivers(Modified After Musgrove ET. AL., 1965).

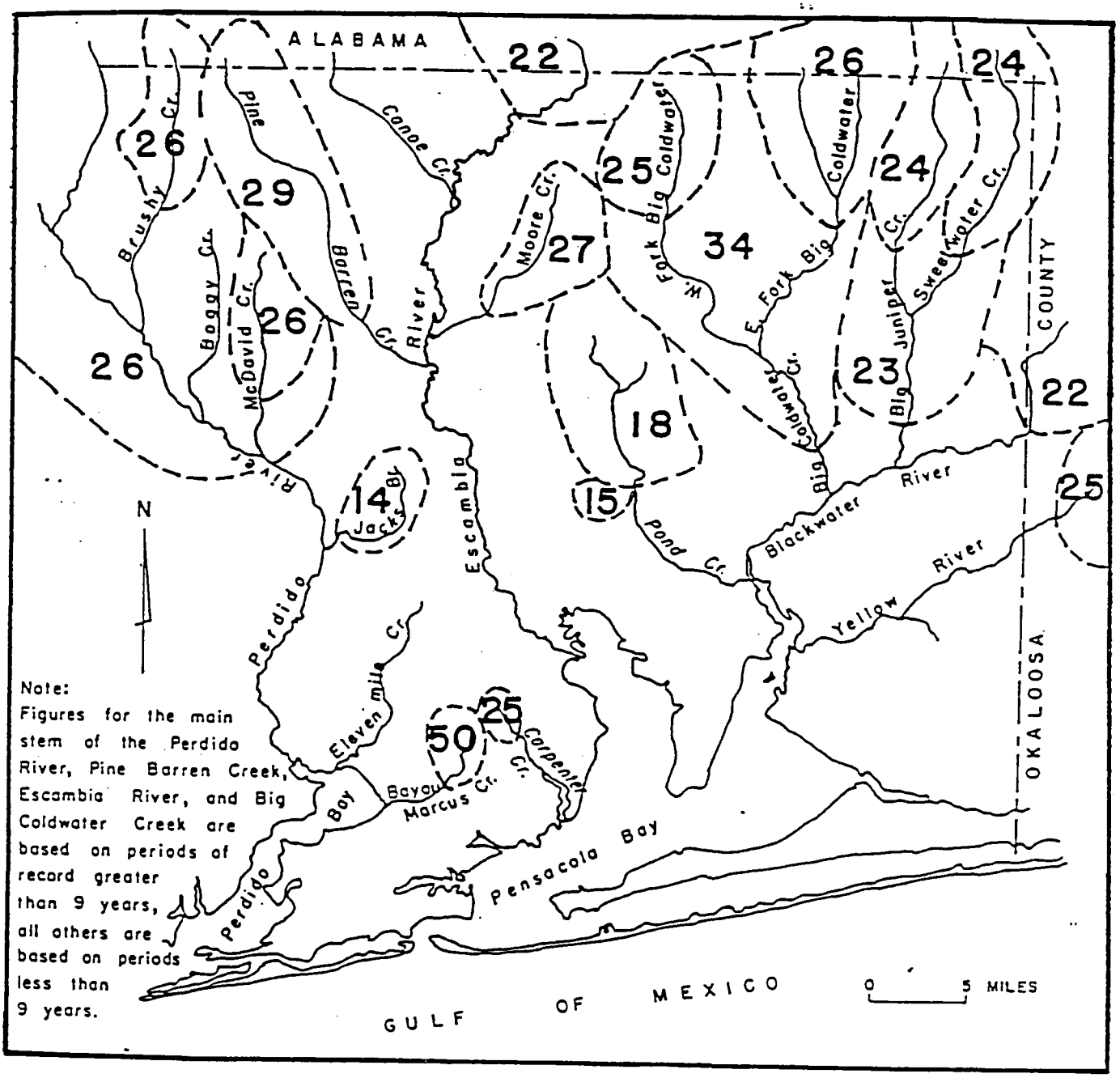


FIGURE 1-8
NETPDTC SAUFLEY FIELD

Key: Approximate Average Annual Runoff (Inches) From Areas Within Escambia & Santa Rosa Counties (Modified After Musgrove 1965).

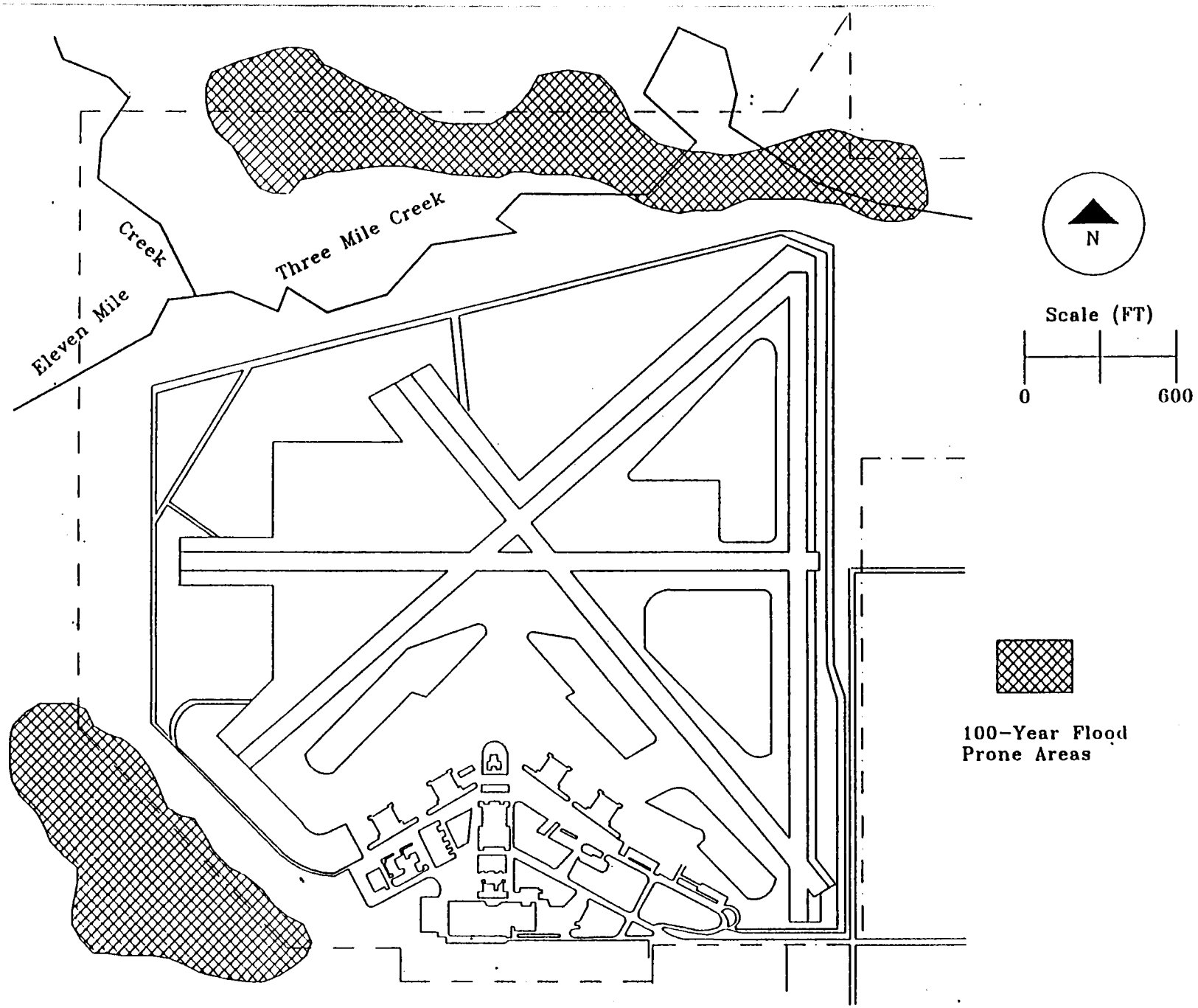


FIGURE 1-9
NETPDTC SAUFLEY FIELD

Flood Prone Areas
(Modified After Southern Division 1988)

Alabama brings water of higher mineral content (approximately 100 ppm). However, this mineralization is diluted somewhat by the lower minerals-content waters of the Florida tributaries (Musgrove et. al., 1965).

Only a small part of the surface water of the Escambia and Santa Rosa County areas are presently being used. Most uses of surface water are within the southern half of the area. Principal among these are recreation and shipping. Eleven Mile Creek (which straddles the northeast corner of Saufley Field) has been used for disposal of industrial wastes (Musgrove et. al., 1965). No known drinking water uses of surface water have been identified.

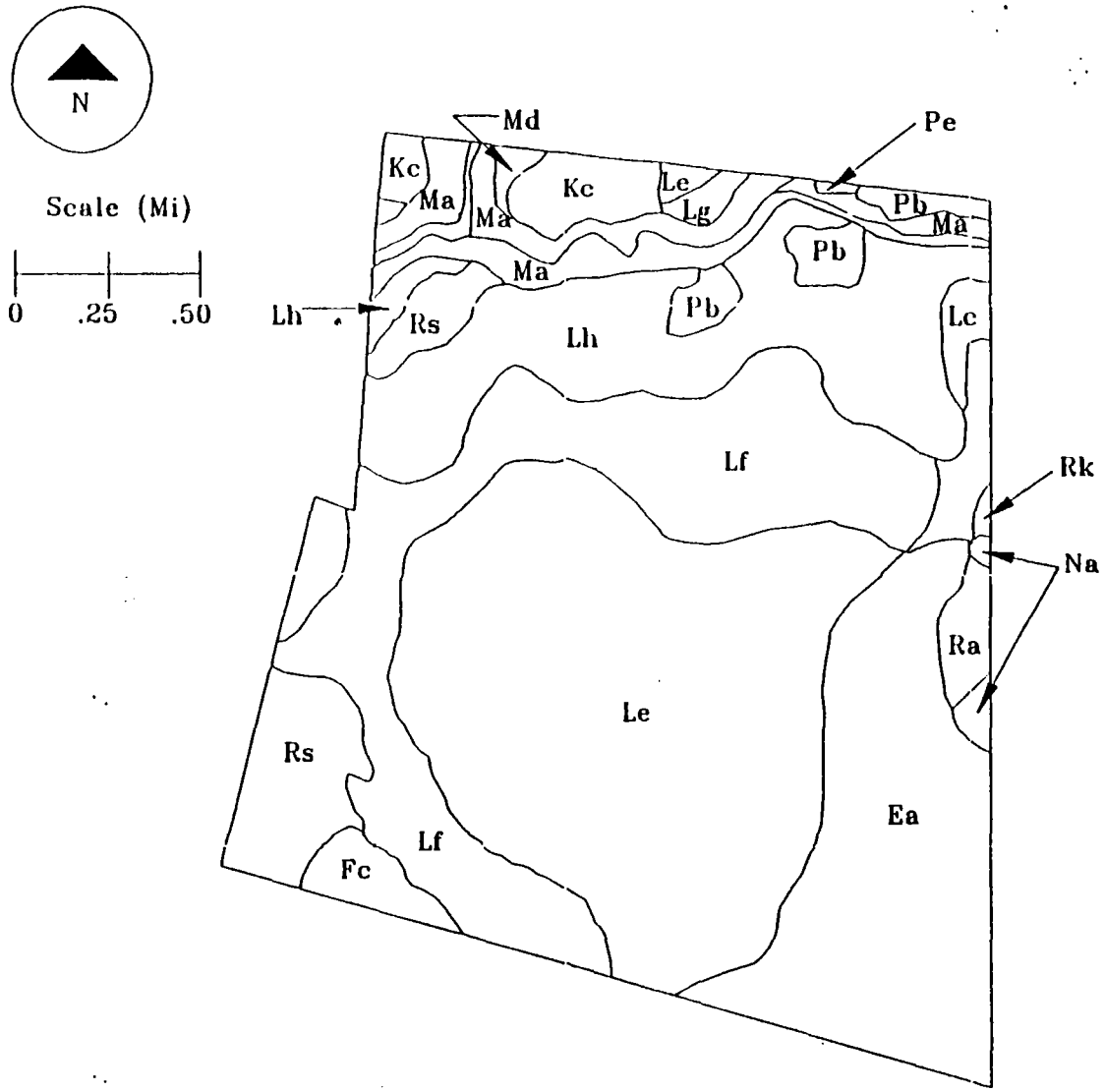
Surface sediments in the Saufley Field area are classified with the Eustis; Fresh Water Swamp; Klej; Lakeland: Mixed Alluvial Land; Myatt; Norfolk: pits, Dumps and Made Land; Plummer; Red Bay; and Rutlege associations (Figure 1-10).

NETPDTC Saufley Field resides along the western edge of the Florida Panhandle with the Coastal Plain Province. The Coastal Plain, a major physiographic division of the United States, extends eastward from Texas and northward as far as New York. It consists of Cretaceous to recent age beds of sand, silt, limestone and clay that dip gently seaward. Most of these sediments were deposited during higher stands of the sea as the Mississippi River system transported eroded debris southward. The Gulf Coast region of the United States is the landward side of the most active geosyncline in North America. The formations which make up the landward side of the geosyncline are all wedge-shaped, thickening rapidly from the outcrop gulfward to the south.

More precisely, Saufley Field resides with the Coastal Lowland topographic subdivision of the Coastal Plain which consists of relatively undissected, nearly level plains lying less than 100 feet above sea level (Marsh, 1966). It is situated along the north flank of the Mississippi Embayment, which accounts for the characteristic southwestward dip of Cretaceous and younger strata (Figure 1-11 thru Figure 1-14).

Figure 1-15 describes the geologic sequence by a representative log of an oil test well near Pensacola, For the region of study, a tick sequence of sand, gravel, and clay extends from the surface to as much as 1,000 feet deep. Nearly all wells in this area tap permeable sediments within this sequence, collectively referred to as the Sand and Gravel Aquifer (Musgrove et. al., 1965). In the northern half of Escambia County, the Sand and Gravel Aquifer lies on the upper limestone of the Floridan Aquifer, but in the southern part (where Saufley Field resides), the two aquifers are separated by a thick clay unit of Miocene Age, which serves to confine the water that is present in the upper limestone of the Floridan Aquifer (Figure 1-16). An extensive clay bed, the Bucatunna clay Member of the Byram Formation, underlies the upper limestone of the Floridan Aquifer and forms an aquiclude throughout the area. The lower limestone of the Floridan Aquifer underlies the Bucatunna and rests upon relatively impermeable clay and shale. Within the area, no freshwater aquifers occur below the lower limestone of the Floridan Aquifer.

More than 99 percent of groundwater utilized for drinking and industrial purposes in the region is obtained from the Sand and Gravel Aquifer and it is separated from the Floridan Aquifer by a relatively impermeable clay. Parts of the Sand and Gravel Aquifer have a rather high average



Ea–Eustis Loamy Sand, Level Phase
Fc–Fresh Water Swamp
Kc–Klej Loamy Sand, Level Phase
Lc–Lakeland Loamy Fine Sand, Gently Sloping Phase
Le–Lakeland Loamy Sand, Level Phase
Lf–Lakeland Loamy Sand, Very Gently Sloping Phase
Lg–Lakeland Loamy Sand, Gently Sloping Phase
Lh–Lakeland Loamy Sand, Sloping Phase
Ma–Mixed Alluvial Land, Poorly Drained
Md–Myatt Very Fine Sandy Loam, Level Phase
Na–Norfolk Fine Sandy Loam, Level Phase
Pb–Pits, Dumps and Made Land
PE–Plummer Loamy Sand, Very Gently Sloping Phase
Ra–Red Bay Fine Sandy Loam, Level Phase
Rs–Rutlege Sand

FIGURE 1-10
NETPDTC SAUFLEY FIELD

Soil Map
(Modified After U.S.D.A. 1960)

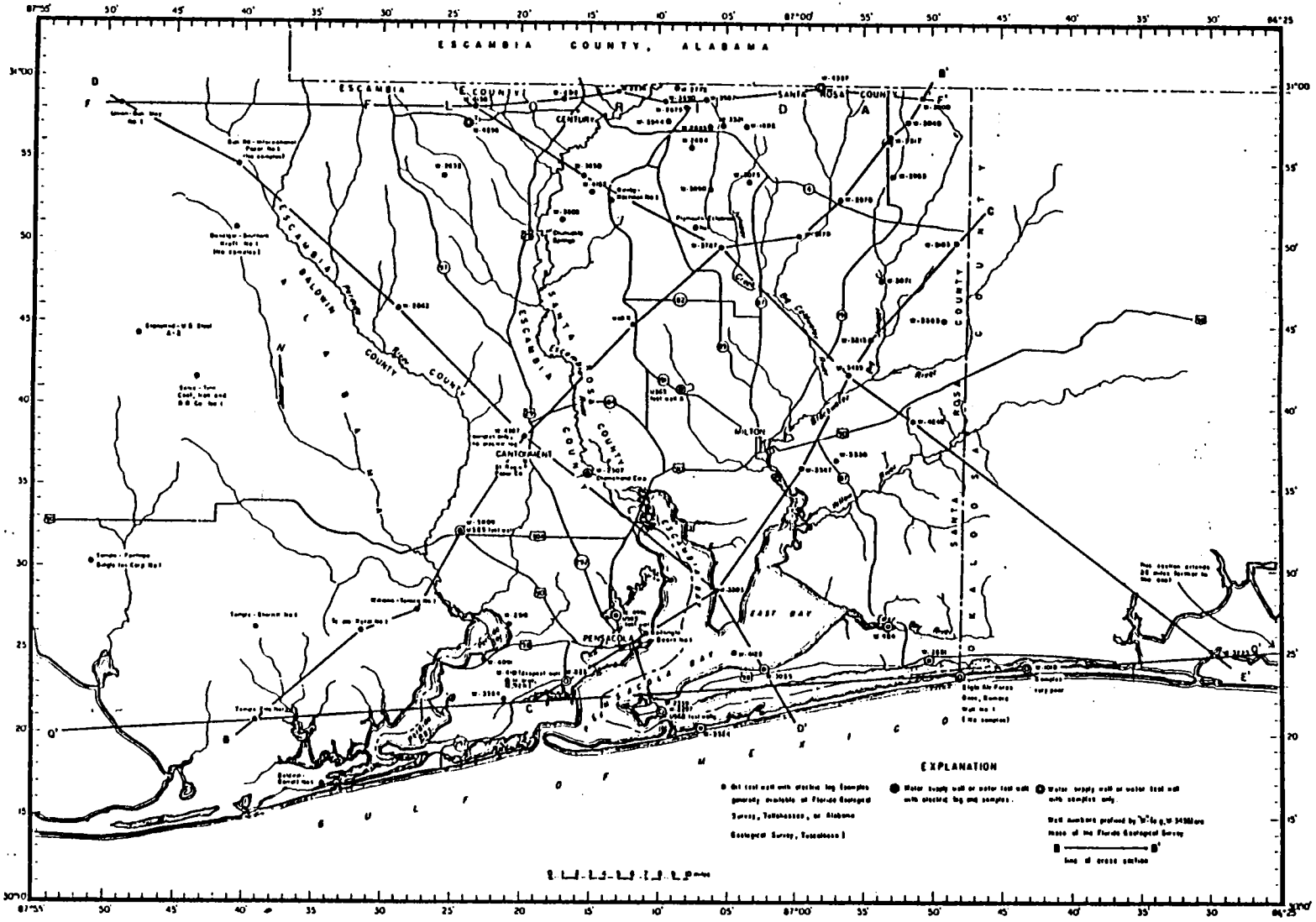


FIGURE 1-11
NETPDTC SAUFLEY FIELD

Key: Map of Westermost Florida & Southwestern Alabama Showing Locations of Cross Sections & Wells Used in This Report (Modified After Marsh, 1966).

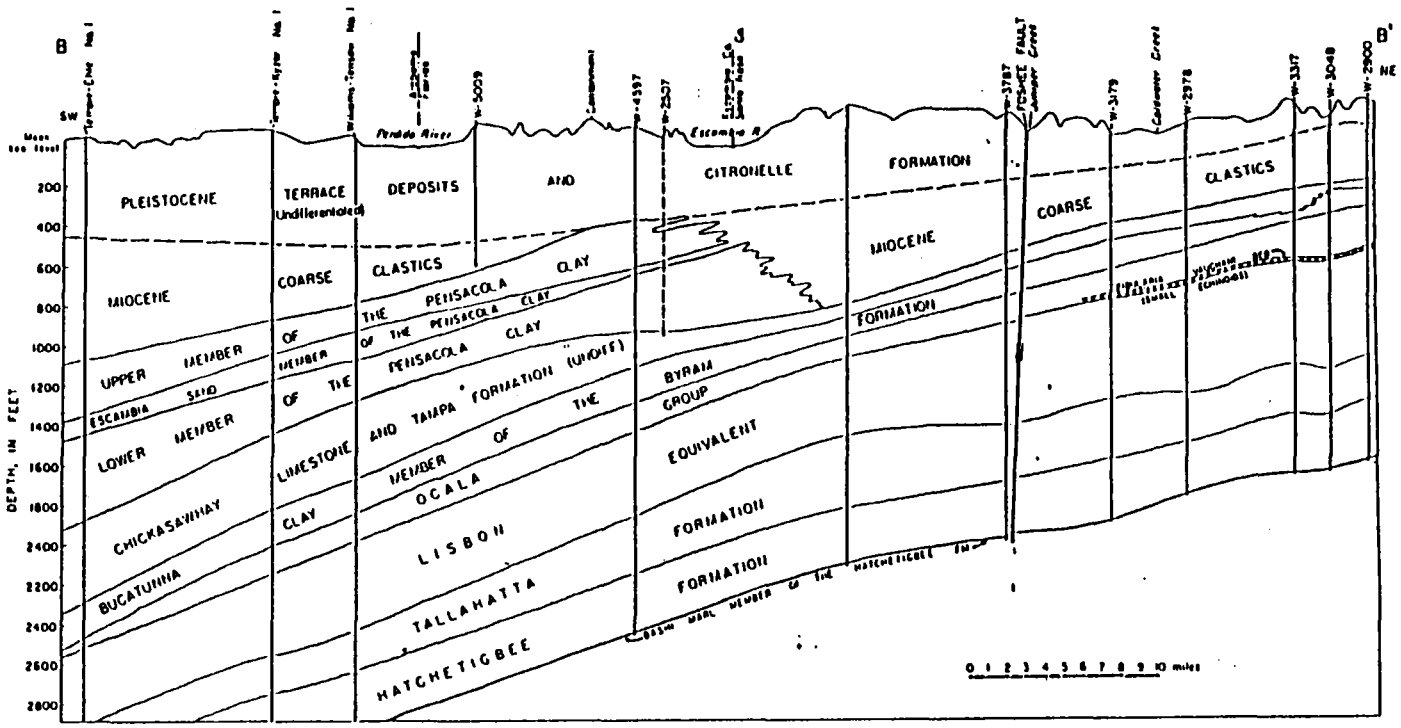


FIGURE 1-12
NETPDTC SAUFLEY FIELD

Key: Geologic Cross Section B–B' Across Escambia and Santa Rosa Counties (Modified After Marsh 1966). Section Parallels the Regional Dip.

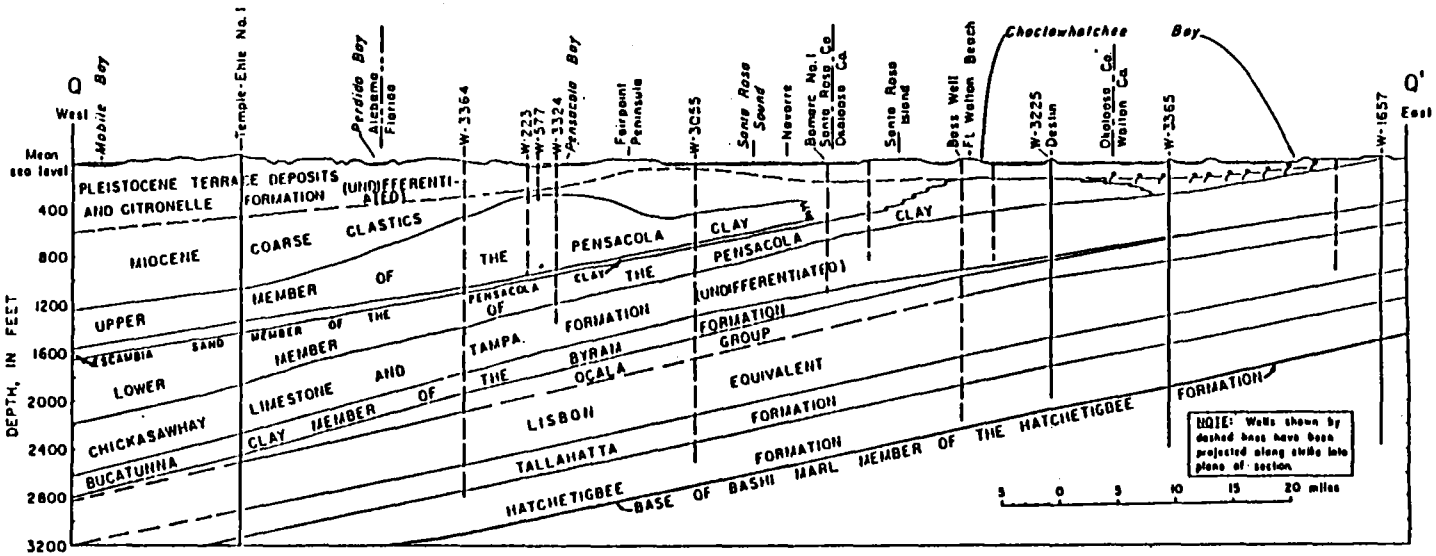


FIGURE 1-13
NETPDTC SAUFLEY FIELD

Key: Geologic Section Q–Q' From moble Bay to the Choctawhatchee River (115 Miles) Showing Formations Along the Gulf Coast of Western Florida (Modified After Marsh, 1966).

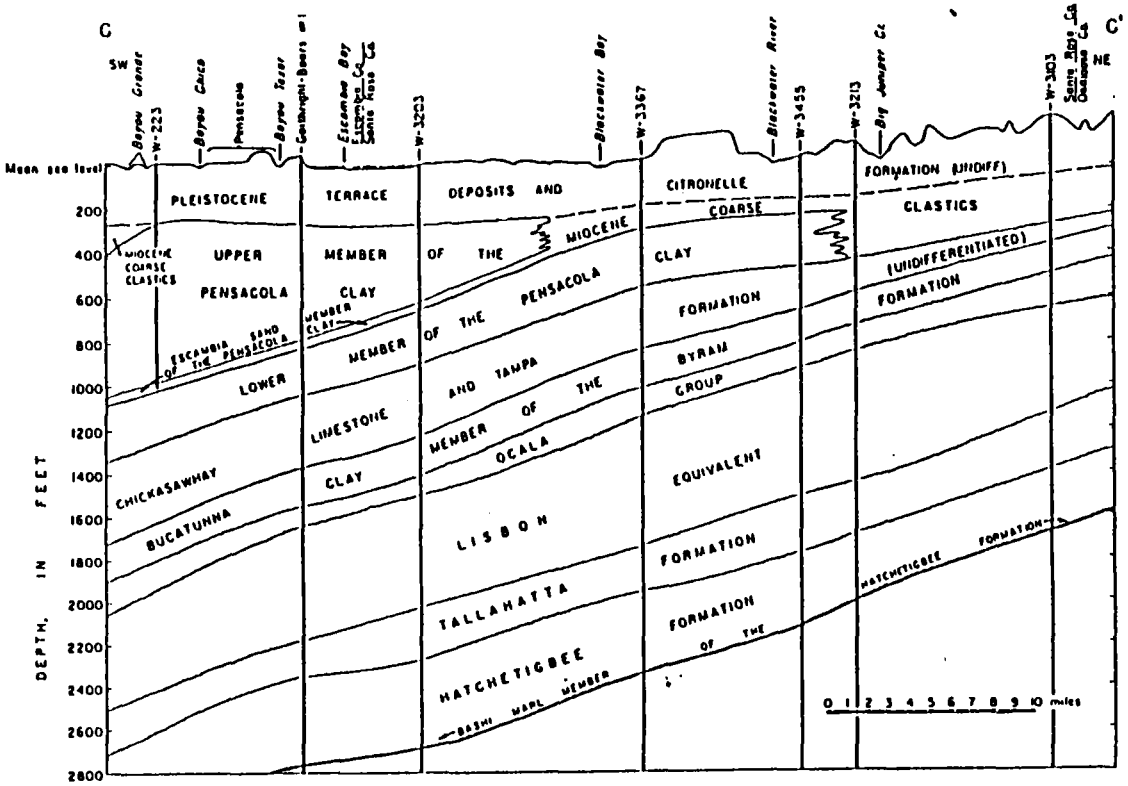


FIGURE 1-14
NETPDTC SAUFLEY FIELD

Key: Geologic Section C–C' Across Escambia and Santa Rosa Counties (Modified After Marsh, 1966). Section is Parallel to Regional Dip.

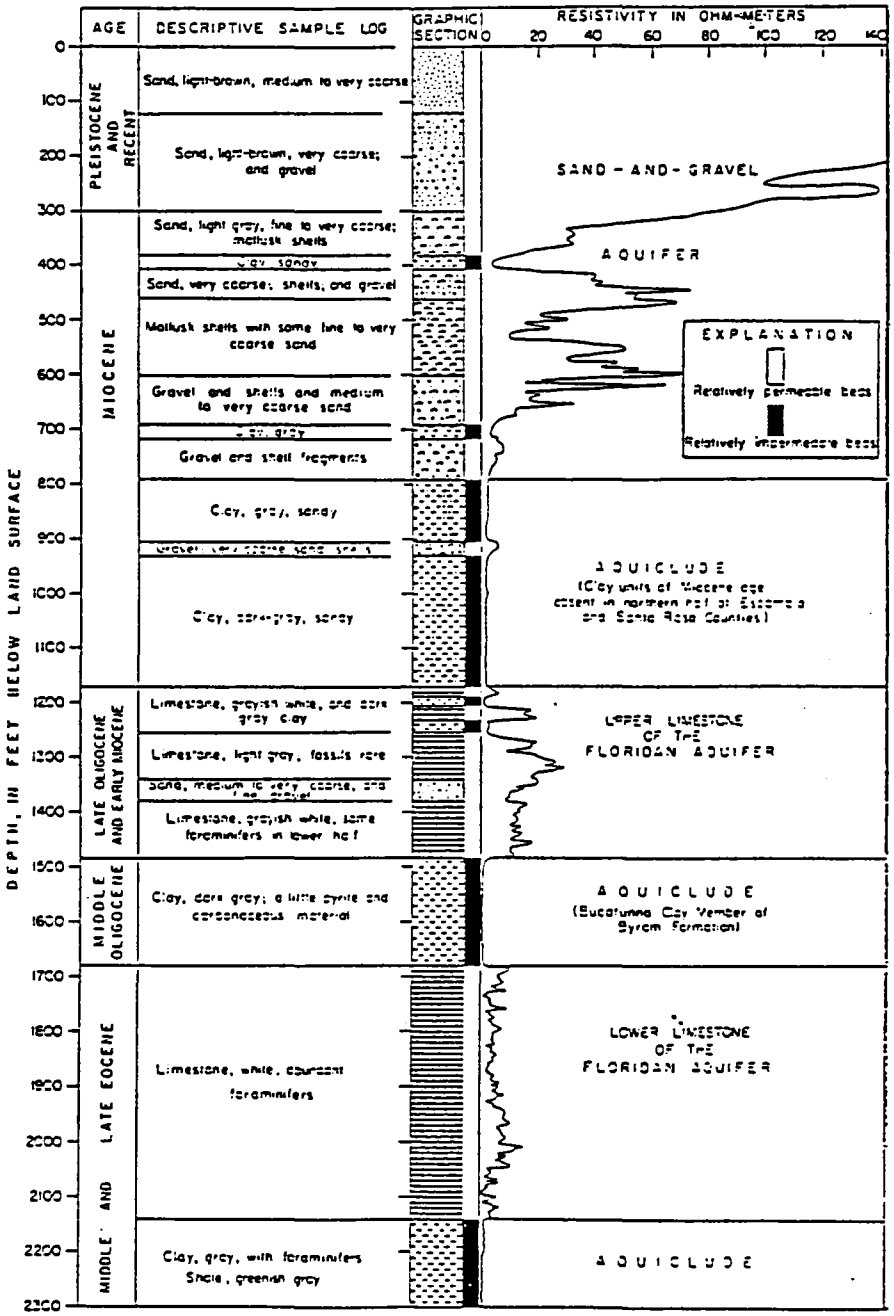


FIGURE 1-15
NETPDTC SAUFLEY FIELD

Key: Representative Geologic Sequence Based on Log of Oil Test Well Located Near Pensacola (Modifed After Marsh, 1966).

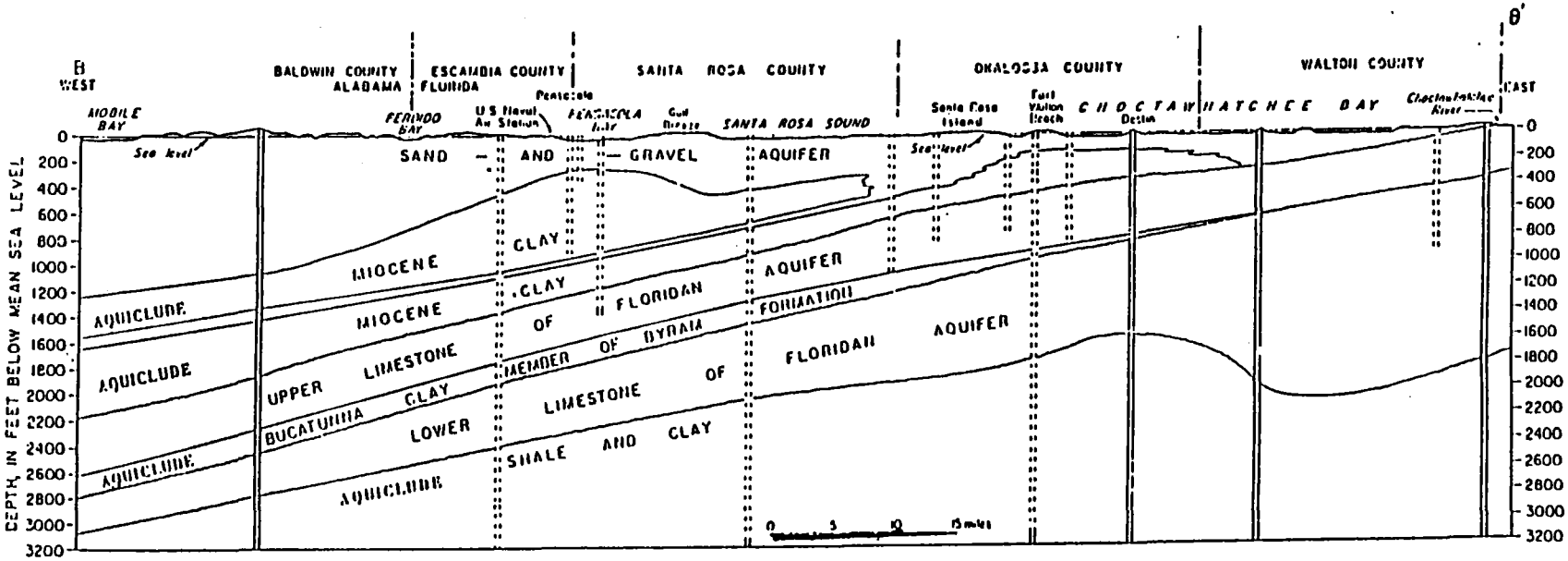


FIGURE 1-16
NETPDTC SAUFLEY FIELD

Key: Geologic Section Across Escambia and Santa Rosa Counites Showing Aquifers & Aquicludes Along Section B–B' in figure 8 (Modified After Musgrove ET. AL., 1965).

porosity and permeability and are thus excellent reservoirs for ground water. The aquifer primarily consists of relatively insoluble quartz grains which accounts for the low mineral content and softness of this water. The ground water conditions are complicated by great lithologic variability due to facies changes during deposition. Ground water is under artesian pressure where lenses and layers of clay, sandy clay, or hardpan overlie a saturated permeable bed. Ground water is under non-artesian conditions where such clays or hardpan are absent or where the porous media is not completely saturated. It is common for a well to tap both artesian and non-artesian sources. Ground water in the Sand and Gravel Aquifer is derived almost entirely from rain falling in the area. Recharge is greatest where land is relatively flat. The aquifer is discharged by pumping, evapotranspiration, and seepage into streams, swaps, bays, and the Gulf of Mexico (Trapp, 1972).

The gradient along the piezometric surface in the shallow beds of the Sand and Gravel Aquifer generally indicates movement of ground water toward nearby streams.

The artesian pressure head of water in the lower permeable beds of the Sand and Gravel Aquifer does not conform to the topography of the land as much as the water table. The artesian pressure head of water from the lower beds indicates a general movement of water to the south (Musgrove et. al., 1965).

Pumping tests on nearby wells screened within the Sand and Gravel Aquifer indicate specific capacity values that range from 30 to 80 gallons per minute per foot of drawdown (Musgrove et. al. 1965). Aquifer tests performed on wells penetrating the Sand and Gravel Aquifer owned by the City of Pensacola, the U.S. Navy (at Corry Field), and Newport Industries indicate transmissivities ranging from 58,800 to 94,000 gallons per day per foot. Using an average transmissivity of 75,000 gpd/ft, a thickness of 120 feet of water-bearing material, a porosity of 0.30, and the natural hydraulic gradient, Jacob and Cooper estimate the ground water velocity at Corry Station (approximately 10 miles from Saufley Field) to be 77 feet per year (Oak Ridge National Laboratory, 1989). This value does not consider higher hydraulic gradients induced by pumping.

With few exceptions, the sum of the mineral constituents in the ground water of the Sand and Gravel Aquifer is very low, ranging from 12 to 36 ppm (Barraclough and Marsh, 1962). Water in this aquifer is exceptionally soft, generally containing 4 to 30 ppm of calcium and magnesium carbonates. The fluoride content of this water is usually less than 0.2 ppm. Iron content of water from this aquifer ranges from 0.06 ppm to 4.9 ppm, although it is generally less than 0.25 ppm. Copious amounts of carbon dioxide render much of the water acidic. Some even contains hydrogen sulfide in solution. Carbon dioxide measurements in waters beneath NAS Pensacola have been as high as 100 pg/l (Trapp, 1972). However, elsewhere in the area, carbon dioxide concentrations are generally less than 30 mg/l. In Saufley Field ground water reserves, chloride is the major anion and is generally accompanied by a predominant sodium cation (Musgrove etc. al., 1965).

Permeability tests and aquifer tests were performed at the Pioneer Sand site, 400 yards to the east of Saufley Field. Pioneer Sand core permeability tests based on grain size distribution

TABLE 1-2
CONSTRUCTION DETAILS FOR POTABLE WATER WELL #1 AND POTABLE WATER WELL #2

WELL NUMBER	NO. 3	NO. 4
Year Drilled	1953	1957
Depth Drilled	214 ft.	200 ft.
Length of Outside Casing	110 ft.	100 ft.
Diameter of Outside Casing	8 in.	8 in.
Material of Outside Casing	Steel	Steel
Depth of Static Water Level	48 ft.	48 ft.
Normal Suction Lift (working level)	78 ft.	88 ft.
Test Yield at Open Discharge	777 GPM	762 GPM
Test Yield at Operating Point	641 GPM at 14 psi	506 GPM at 22 psi
Type of Grout	Cement	Cement
Drilling Method	Rotary	Rotary
Type of Strainer	Stainless Steel	Stainless Steel
Depth to Top of Strainer	118 ft.	130 ft.
Protection from Surface Water	Yes	Yes
Is Inundation of Well Possible	No	No
Salt Intrusion Noted in Past	No	No
Has the Well Ever Been Contaminated	No	No
Pump Manufacturer's Name	Layne & Bowler	Layne & Bowler
Model Number	12 RLKMC	12 RLKMC
Design Capacity	750 GPM	750 GPM
Check Valve Present in Line	Yes	Yes
Date of Last Servicing	Monthly Maintenance Program	
Maintenance Schedule	Daily	Daily

	LATITUDE	LONGITUDE
Well No. 3	30° 27' 14"	87° 20' 27"
Well No. 4	30° 27' 49"	87° 20' 35"

measurements for a sample retrieved 80 to 82 feet below land surface indicate an average permeability of 3 x 10 (-7) cm/sec (FDER, 1985). Slug injection tests performed on the two production zones in question (one shallow and one deep) indicate transmissivities of 12,075 gpd/ft for the shallow zone (0 to 80 feet deep) and 3,570 gpd/ft for the deeper zone (greater than 85 feet deep). Calculations using Darcy's equation suggest that the velocity in the shallow producing zone is 1.69 ft/day to the south and 0.42 ft/day toward the west in the deeper producing zone.

Two distinct hydrogeologic units limit the leakage between the shallow and deep aquifer units (FDER, 1985). The first unit, immediately underlying the shallow aquifer, is described as a fine to medium grained clayey sand grading downward to a fine sand clay ranging in thickness from 14 to 20 feet across the Pioneer Sand site. Immediately underlying this unit is a stiff plastic kaolinitic clay ranging in thickness from nearly nonexistent to 8 feet.

1.7 WELL SURVEY

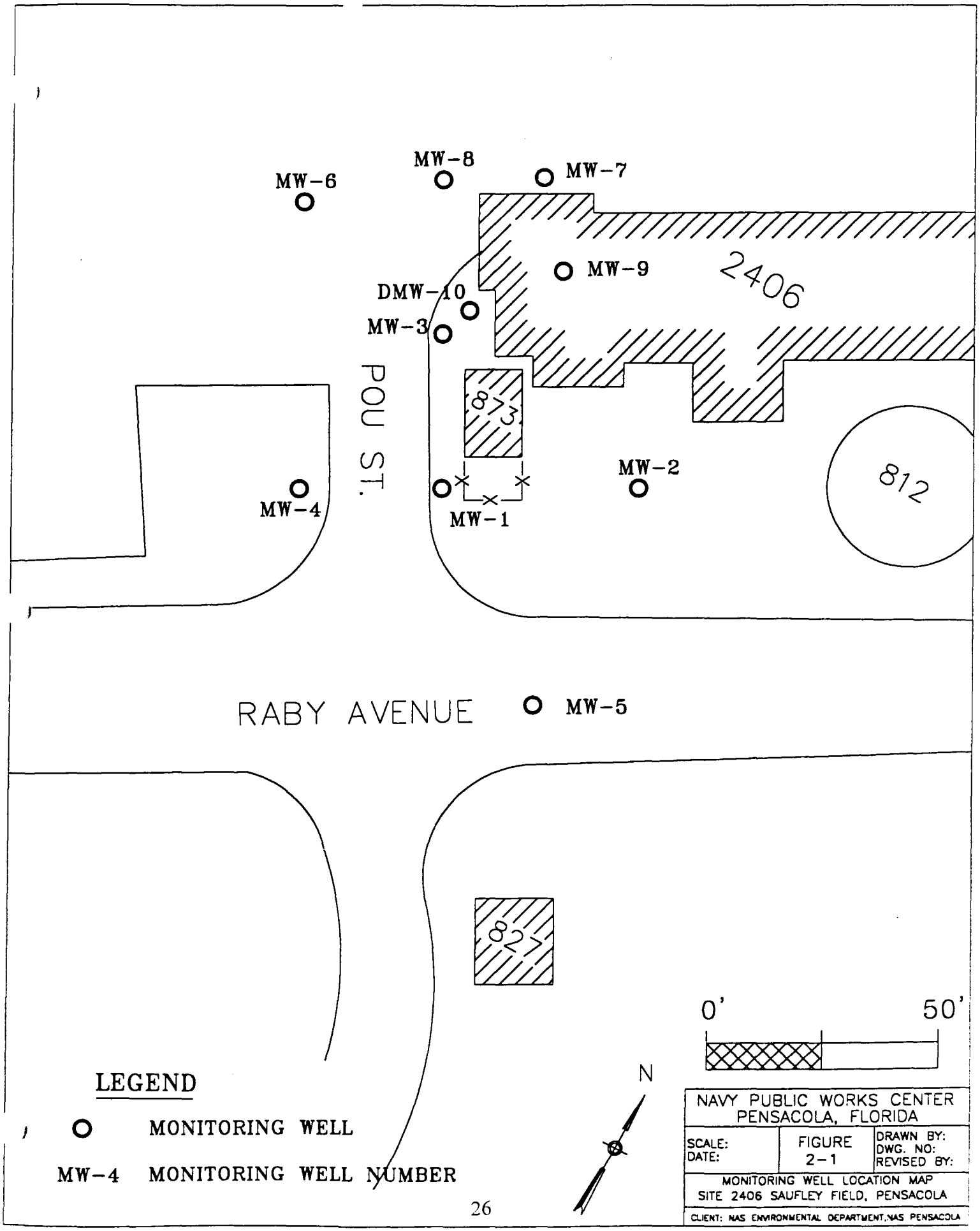
Public Works Center, Naval Air Station, Pensacola, Florida operated two drinking water wells, potable water well #3 and potable water well #4, at Saufley Field, Pensacola, Florida until May 1994. Construction details of potable water well #3 and potable water well #4 is included in Table 1-2. In May 1994, potable water well #4 was closed because raw water samples collected from potable water well #4 indicated benzene contamination levels of 3.2 ppb which exceeded the FDEP regulatory limits of 1 ppb for benzene. Monthly analysis performed on potable water well #4 continued to indicated benzene levels above the FDEP regulatory limits. The decision was made to have ECUA provide Saufley Field with potable water and on November 10, 1994 ECUA began supplying potable water to Saufley Field. Potable water wells #3 and #4 were officially abandoned in-place on April 1996.

2.0 SITE ASSESSMENT

2.1 SOIL BORING AND MONITORING WELL CONSTRUCTION DETAILS

Shallow monitoring wells MW-1 thru MW-5 were installed at Site 2406 by W.E.S., Inc. on April 29 and 30, 1996. Shallow monitoring wells MW-6 thru MW-8 were installed at the site on May 13 and 14, 1996 and MW-9 was installed May 27, 1997. Vertical extent monitoring well DMW-10 was completed at the site on May 27, 1996. Soil samples were collected from each of the boreholes during the installation of groundwater monitoring wells at 1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, and 39 feet BLS. Each soil sample collected was analyzed for volatile organic vapors using an organic vapor analyzer (OVA) with a flame ionization detector. Monitoring well locations are shown in Figure 2-1. Construction diagrams for monitoring wells MW-1 thru DMW-10 are shown in Appendix A. Lithological Logs for monitoring wells MW-1 thru DMW-10 are shown in Appendix C.

The shallow monitoring wells consist of a 2-inch diameter by 10.0 feet of 0.010-inch slotted schedule 40 PVC pipe, threaded to 37 feet of solid PVC riser. The wells were completed in approximately 8-inch diameter boreholes approximately 47 feet using the hollow stem auger


MW-6
MW-8
MW-7
MW-9
2406
DMW-10
MW-3
POU ST.
813
MW-2
812
MW-4
MW-1
RABY AVENUE
MW-5
827
0'
50'
N
LEGEND
MONITORING WELL
MW-4 MONITORING WELL NUMBER
NAVY PUBLIC WORKS CENTER
PENSACOLA, FLORIDA
SCALE:
DATE:
FIGURE
2-1
DRAWN BY:
DWG. NO:
REVISED BY:
MONITORING WELL LOCATION MAP
SITE 2406 SAUFLEY FIELD, PENSACOLA
CLIENT: NAS ENVIRONMENTAL DEPARTMENT,NAS PENSACOLA

drilling method. A sand pack consisted of course silica sand (sand pack mesh size 20-30) and extended approximately one foot above the top of the well screen. A one foot bentonite seal was placed above the sand pack. The annular space above the bentonite seal was backfilled with clean native sand to approximately one foot BLS and the remaining annular space was filled with neat cement grout. The PVC casing was brought up to 0.2' below ground level. A flush-mounted steel manhole cover was placed in borehole around the PVC riser and set with neat cement. An 8-inch diameter steel manhole cover was placed over the manhole. A 2 foot by 2 foot concrete pad was installed around the outside of the manhole cover at the top of the land surface.

Vertical extent monitoring well, designated DMW-10, was completed by W.E.S., Inc., on May 27, 1996. The monitoring well was set at 67 feet BLS with 5 feet of 2-inch diameter 0.010-inch slotted schedule 40 PVC screen, threaded to 62 feet of solid schedule 40 PVC riser casing. The PVC casing was extended to 0.2 feet below ground level. A steel manhole casing (8-inches diameter x 4-inches deep) was placed in the borehole around the PVC riser and set with neat cement grout. An 8-inch diameter steel manhole cover was placed over the manhole. A 6-inch thick concrete encasement (4,000 psi) was installed around the outside of the manhole and flush to the land surface. A sand pack consisting of course silica sand (sand pack mesh size 20-30) was filled from the bottom to one foot above the screen, followed by a one foot fine sand seal above the sand filter pack, followed by neat cement grout from the top of the fine sand seal to the surface.

2.2 GROUNDWATER FLOW DIRECTION

The top of casing (TOC) elevations for shallow monitoring wells MW-1 thru DMW-10 were surveyed by Charlotte Engineering and Surveying, Inc. on June 3, 1997. The benchmark is assumed at an elevation of 30.00 ft., at the NW Flange Hex-Nut on Fire Hydrant ID'd as C4-5, located approximately 75' NW'ly from the intersection of Raby Ave. & Pou Street.

Groundwater elevations for the groundwater level measurements taken on monitoring wells MW-1 thru DMW-10 on September 16, 1997 are shown in Table 2-1. A groundwater flow direction map for the groundwater level measurements taken on September 16, 1997 is shown in Figure 2-2. The groundwater flow direction map indicates the groundwater flow at the site is to the south toward Perdido Bay.

2.3 GROUNDWATER FLOW RATE

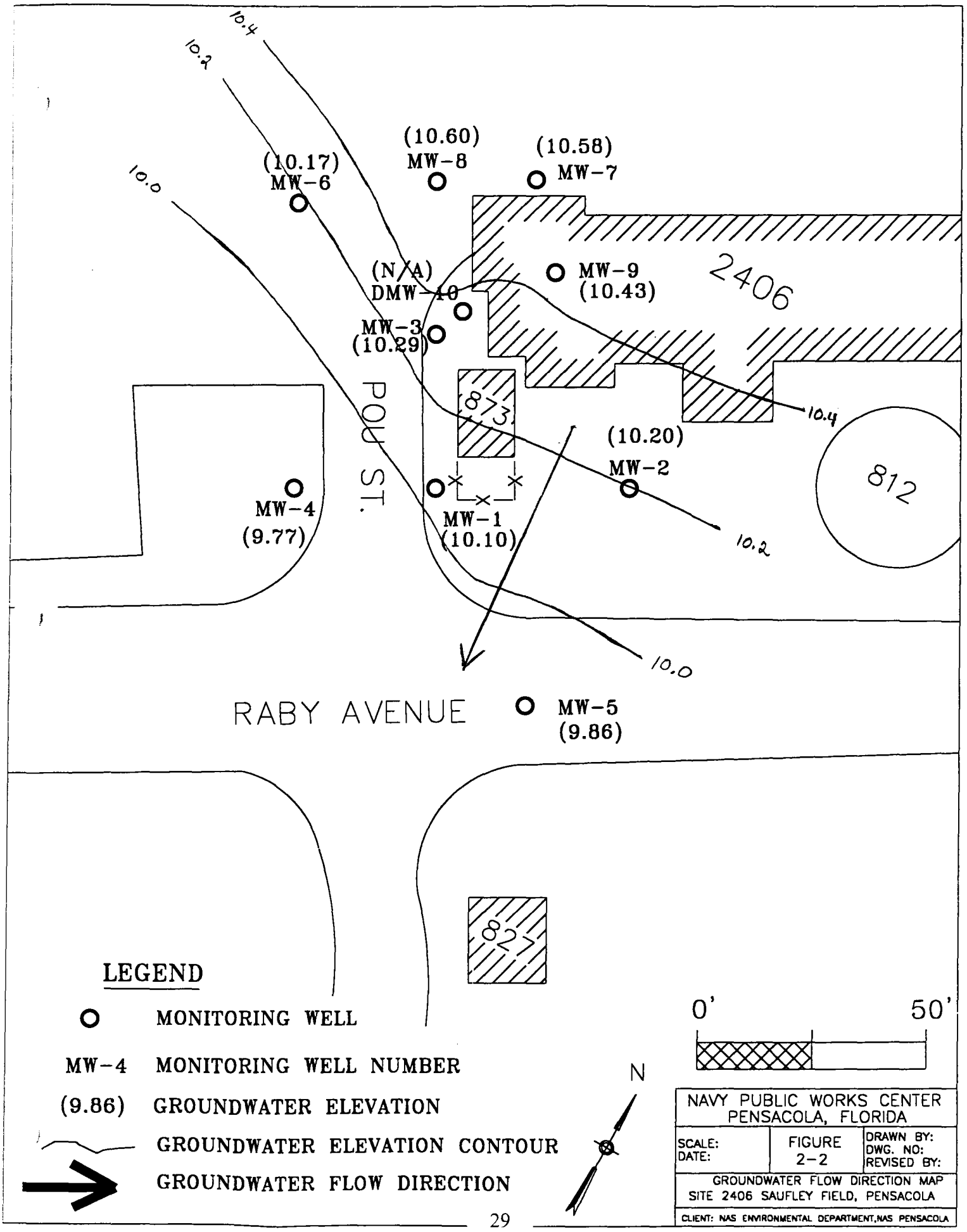
The horizontal groundwater flow velocity was calculated using the equation V=Ki/n. The horizontal hydraulic conductivity was calculated by taking the average of the hydraulic conductivities determined from slug tests performed during the preparation of three previous CARs performed at NAS Pensacola. The average horizontal conductivity of the three sites at NAS Pensacola was determined to be 48.3 feet/day (Campbell, 1995). A hydraulic gradient was calculated from the groundwater elevation data collected from groundwater monitoring wells MW-3 and MW-4 on September 16, 1997 which are parallel to the groundwater flow direction. The hydraulic gradient was determined to be 0.01160 ft/ft. The effective pore velocity of the site

TABLE 2-1
TOP OF CASING AND GROUNDWATER ELEVATIONS
SAUFLEY FIELD, FL
SITE 2406

WELL NUMBER	TOC FT. M.S.L.	DTW (FT) 9/16/97	GROUNDWATER ELEVATION 9/16/97
MW1	27.71	37.81	10.10
MW-2	28.54	38.74	10.20
MW-3	28.45	38.74	10.29
MW-4	27.94	37.71	9.77
MW-5	27.69	37.55	9.86
MW-6	28.68	38.85	10.17
MW-7	28.67	39.25	10.58
MW-8	28.12	38.72	10.60
MW-9	28.79	39.22	10.43
DMW-10	28.54	N/A	N/A

NOTES: TOC = Top of Casing
DTW = Depth to Water

* Benchmark is assumed at an elevation of 30.00 ft., at the NW Flange Hex-Nut on Fire Hydrant ID'd as C4-5, located approximately 75' NW'ly from the intersection of Raby Ave. & Pou St.


10.4
10.2
10.0
(10.60)
MW-8
(10.58)
MW-7
(10.17)
MW-6
(N/A)
DMW-10
MW-9
(10.43)
2406
MW-3
(10.29)
POD ST.
873
10.4
(10.20)
MW-2
812
MW-4
(9.77)
MW-1
(10.10)
10.2
10.0
RABY AVENUE
MW-5
(9.86)
882
LEGEND
MONITORING WELL
MW-4 MONITORING WELL NUMBER
(9.86) GROUNDWATER ELEVATION
GROUNDWATER ELEVATION CONTOUR
GROUNDWATER FLOW DIRECTION
0'
50'
N
NAVY PUBLIC WORKS CENTER
PENSACOLA, FLORIDA
SCALE:
DATE:
FIGURE
2-2
DRAWN BY:
DWG. NO:
REVISED BY:
GROUNDWATER FLOW DIRECTION MAP
SITE 2406 SAUFLEY FIELD, PENSACOLA
CLIENT: NAS ENVIRONMENTAL DEPARTMENT,NAS PENSACOLA

was assumed to be 25%. The average linear groundwater flow velocity at the site was determined to be 2.241 ft/day. The groundwater flow velocity assumptions and calculations are shown in Appendix B.

2.4 SOIL ASSESSMENT

The extent of soil contamination at the site was determined by OVA screening. Soil samples were collected from the boreholes during the installation of monitoring wells MW-1 thru DMW-10 at 1', 4', 7', 10', 13', 16', 19', 22', 25', 28', 31', 34', 37', and 39' intervals BLS and analyzed with an OVA with a flame ionization detector for volatile organic vapors (see Figure 2-1 for locations). The soil boring designations and their respective OVA screening results are shown in Table 2-2 and a Soil Contamination Distribution Map is included as Figure 2-3. The groundwater table at the site was generally encountered at 40 feet BLS. No VOCs were detected in the soil samples collected from monitoring wells MW-1, MW-2, MW-5, MW-6, MW-7, MW-8, or MW-9. However, VOCs were detected in soil samples collected from MW-3 @ 22', 25', 28', 31', 34', 37', and 39' in excess of 1,000 ppm; from MW-4 @ 25' (3 ppm), 28' (2 ppm), 31' (4 ppm), 34' (1 ppm), and 39' (6ppm); and from DMW-10 @ 22', 25', 28', 31', 34', 37', and 39' in excess of 1,000 ppm. VOCs detected in MW-3 (@ 22', 25', 28', 31', 34', 37', and 39') and DMW-10 (@ 22', 25', 28', 31', 34', 37', and 39') exceeded the 50 ppm level for soil considered to be excessively contaminated from the kerosene analytical group.

2.5 SITE SPECIFIC GEOLOGY AND HYDROGEOLOGY

The principal aquifer of concern at the site is the surficial zone of the Sand-and-Gravel Aquifer. The surficial zone was penetrated to a depth of 67 feet during this investigation. The lithology at monitoring wells MW-1 thru DMW-10 was generally composed of: (1) dark brown, silty, fine sand w/humus (exception MW-5 thru MW-8 pavement, road bed & MW-9 with 6" concrete and 6" sub-base), from 0 to 1 foot BLS; (2) reddish brown, silty fine sand w/trace of clay, from 1 to 13 feet BLS; (3) orange brown, silty fine sand, greater % clay, from 13 to 31 feet BLS; (4) tan brown, silty fine to medium, clayey sand, from 31 to 39 feet BLS; (4) light tan, brown fine to medium clayey sand, from 39 to 53 feet BLS; (5) lense of sandy clay cohesive, differential, 70% clay, from 53 to 58 feet BLS; and (6) reddish brown, medium to coarse, clayey sand, from 58 to 67 feet BLS. The groundwater table at the site was encountered at approximately 40 feet BLS. Lithological logs describing the soils encountered at various depth, the approximate groundwater level, and OVA screening results for the soil borings installed during the monitoring well installation are shown in Appendix C.

2.6 SURFACE WATER ASSESSMENT

No surface water was observed at the site and therefore no surface water assessment was performed for this report. There are two surface water bodies, Eight Mile Creek and Eleven Mile Creek, which run along the southern border of Saufley Field and empty into Perdido Bay which is located approximately one mile northeast of Saufley Field.

TABLE 2-2

VOLATILE ORGANIC VAPOR CONCENTRATIONS IN SOIL (OVA HEADSPACE ANALYSIS) FOR SOIL BORINGS MW-1 THRU DMW-10 SAUFLEY FIELD, SITE 2406

Boring Designation	Depth (Feet BLS)	VOCs Concentration (ppm)[1]
MW-1	1	0
	4	0
	7	0
	10	0
	13	0
	16	0
	19	0
	22	0
	25	0
	28	0
	31	0
	34	0
	37	0
	39	0
MW-2	1	0
	4	0
	7	0
	10	0
	13	0
	16	0
	19	0
	22	0
	25	0
	28	0
	31	0
	34	0
	37	0
	39	0

[1] VOCs concentration assessed by organic vapor analyzer headspace techniques. Results are total VOCs less methane.

Notes: BLS = below land surface NS = not sampled ppm = parts per million

Soil samples analyzed and VOC results reported by NPWC, Pensacola, FL

TABLE 2-2 (Cont.)		
Boring Designation	**Depth (Feet BLS)**	**VOCs Concentration (ppm)[1]**
MW-3	1	0
	4	0
	7	0
	10	0
	13	0
	16	0
	19	0
	22	>1000
	25	>1000
	28	>1000
	31	>1000
	34	>1000
	37	>1000
	39	>1000
MW-4	1	0
	4	0
	7	0
	10	0
	13	0
	16	0
	19	0
	22	0
	25	3
	28	2
	31	4
	34	1
	37	0
	39	6

[1] VOCs concentration assessed by organic vapor analyzer headspace techniques. Results are total VOCs less methane.

Notes: BLS = below land surface
NS = not sampled
ppm = parts per million
Soil samples analyzed and VOC results reported by NPWC, Pensacola, FL

TABLE 2-2 (Cont.)		
Boring Designation	**Depth (Feet BLS)**	**VOCs Concentration (ppm)[1]**
MW-5	1	0
	4	0
	7	0
	10	0
	13	0
	16	0
	19	0
	22	0
	25	0
	28	0
	31	0
	34	0
	37	0
	39	0
MW-6	1	0
	4	0
	7	0
	10	0
	13	0
	16	0
	19	0
	22	0
	25	0
	28	0
	31	0
	34	0
	37	0
	39	0

[1] VOCs concentration assessed by organic vapor analyzer headspace techniques. Results are total VOCs less methane.

Notes: BLS = below land surface
NS = not sampled
ppm = parts per million
Soil samples analyzed and VOC results reported by NPWC, Pensacola, FL

TABLE 2-2 (Cont.)		
Boring Designation	**Depth (Feet BLS)**	**VOCs Concentration (ppm)[1]**
MW-7	1	0
	4	0
	7	0
	10	0
	13	0
	16	0
	19	0
	22	0
	25	0
	28	0
	31	0
	34	0
	37	0
	39	0
MW-8	1	0
	4	0
	7	0
	10	0
	13	0
	16	0
	19	0
	22	0
	25	0
	28	0
	31	0
	34	0
	37	0
	39	0

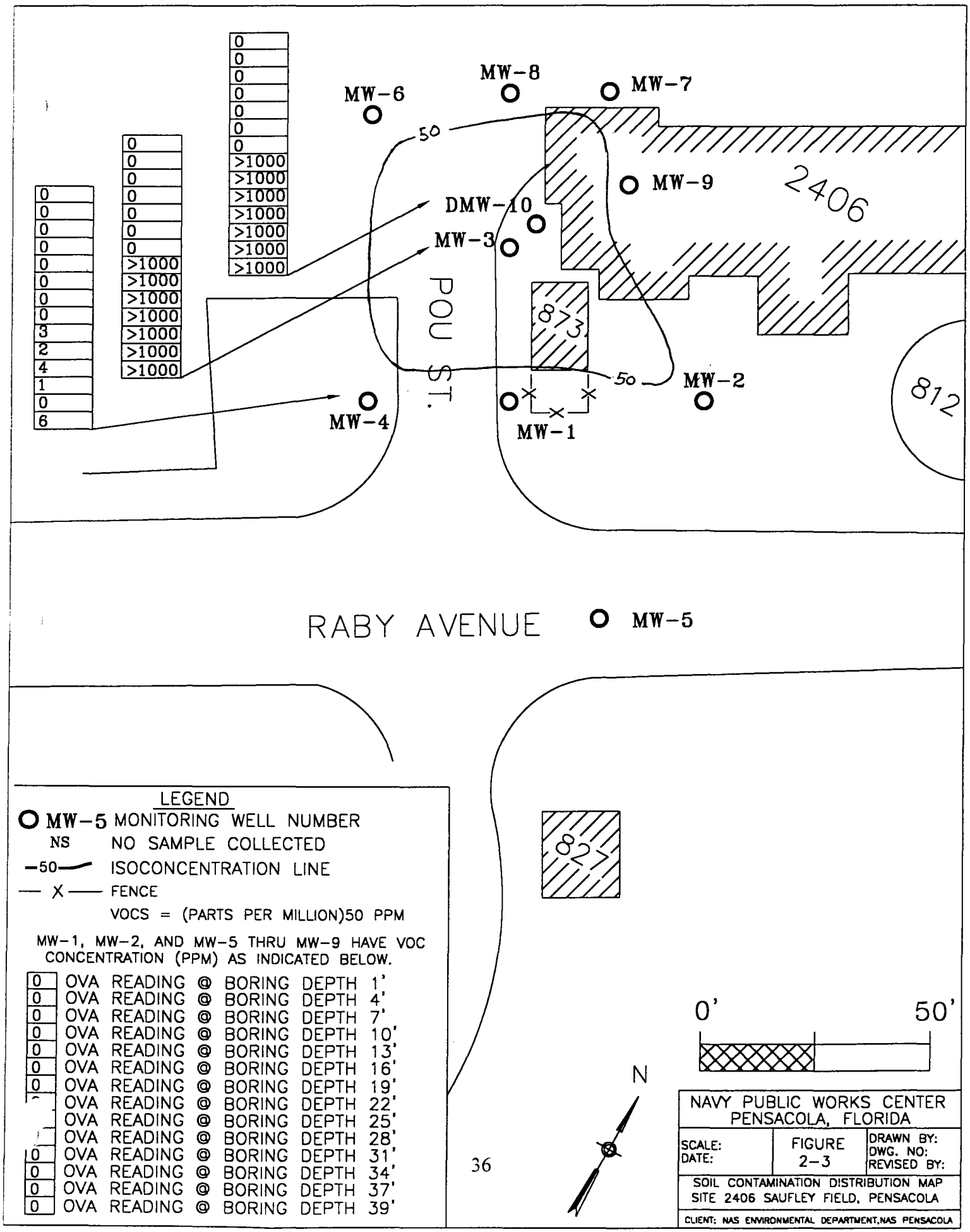
[1] VOCs concentration assessed by organic vapor analyzer headspace techniques. Results are total VOCs less methane.

Notes: BLS = below land surface
NS = not sampled
ppm = parts per million
Soil samples analyzed and VOC results reported by NPWC, Pensacola, FL

TABLE 2-2 (Cont.)		
Boring Designation	**Depth (Feet BLS)**	**VOCs Concentration (ppm)[1]**
MW-9	1	0
	4	0
	7	0
	10	0
	13	0
	16	0
	19	0
	22	0
	25	0
	28	0
	31	0
	34	0
	37	0
	39	0
DMW-10	1	0
	4	0
	7	0
	10	0
	13	0
	16	0
	19	0
	22	>1000
	25	>1000
	28	>1000
	31	>1000
	34	>1000
	37	>1000
	39	>1000

[1] VOCs concentration assessed by organic vapor analyzer headspace techniques. Results are total VOCs less methane.

Notes: BLS = below land surface
NS = not sampled
ppm = parts per million
Soil samples analyzed and VOC results reported by NPWC, Pensacola, FL


MW-6
MW-8
MW-7
MW-9
DMW-10
MW-3
MW-2
MW-4
MW-1
MW-5
50
2406
812
POU ST.
RABY AVENUE
0 0 0 0 0 0 0 >1000 >1000 >1000 >1000 >1000 >1000 >1000
0 0 0 0 0 0 0 >1000 >1000 >1000 >1000 >1000 >1000 >1000
0 0 0 0 0 0 0 0 0 0 0 3 2 4 1 0 6
LEGEND
MW-5 MONITORING WELL NUMBER
NS NO SAMPLE COLLECTED
50 ISOCONCENTRATION LINE
X FENCE
VOCS = (PARTS PER MILLION)50 PPM
MW-1, MW-2, AND MW-5 THRU MW-9 HAVE VOC CONCENTRATION (PPM) AS INDICATED BELOW.
0 OVA READING @ BORING DEPTH 1'
0 OVA READING @ BORING DEPTH 4'
0 OVA READING @ BORING DEPTH 7'
0 OVA READING @ BORING DEPTH 10'
0 OVA READING @ BORING DEPTH 13'
0 OVA READING @ BORING DEPTH 16'
0 OVA READING @ BORING DEPTH 19'
OVA READING @ BORING DEPTH 22'
OVA READING @ BORING DEPTH 25'
OVA READING @ BORING DEPTH 28'
0 OVA READING @ BORING DEPTH 31'
0 OVA READING @ BORING DEPTH 34'
0 OVA READING @ BORING DEPTH 37'
0 OVA READING @ BORING DEPTH 39'
0' 50'
N
NAVY PUBLIC WORKS CENTER
PENSACOLA, FLORIDA
SCALE:
DATE:
FIGURE 2-3
DRAWN BY:
DWG. NO:
REVISED BY:
SOIL CONTAMINATION DISTRIBUTION MAP
SITE 2406 SAUFLEY FIELD, PENSACOLA
CLIENT: NAS ENVIRONMENTAL DEPARTMENT,NAS PENSACOLA

2.7 GROUNDWATER QUALITY ASSESSMENT

Groundwater samples were extracted from shallow groundwater monitoring wells MW-1 thru MW-9 and vertical extent monitoring well DMW-10 by W.E.S., Inc. using the methods and procedures outlined in W.E.S., Inc. Comprehensive Quality Assurance Plan No. 900465G. Monitoring wells MW-1 thru MW-5 were sampled on May 1, 1997; MW-6 thru MW-8 were sampled on May 20, 1997; and MW-9 and DMW-10 were sampled May 19, 1997. All monitoring wells were analyzed for the kerosene analytical group (with the exception of lead) outlined in FDEP Rule 62-770. The kerosene analytical group included analysis of groundwater samples for volatile organic aromatics (VOAs), polynuclear aromatic hydrocarbons (PAHs), ethylene dibromide (EDB), and total petroleum hydrocarbons (TPHs) utilizing EPA Methods 8260, 8270A, 504, and FLPRO, respectively. Analytical results for groundwater samples collected from monitoring wells MW-1 thru DMW-10 are included in Appendix D.

Groundwater samples were collected from each monitoring well using the quiescent sampling technique by Navy Public Works Center (PWC) Pensacola laboratory personnel on September 25 and 26, 1997. The groundwater sampling was conducted in accordance with the methods and procedures outlined in PWC's Comprehensive Quality Assurance Plan (CompQAP No. 920121G). The groundwater samples were analyzed for total lead using EPA method 239.2. A copy of the laboratory analysis is provided in Appendix D.

No kerosene analytical group parameters were detected in the groundwater samples collected from monitoring wells MW-1 thru MW-2 or MW-4 thru DMW-10.

Ethylbenzene (32 ppb), toluene (63 ppb), and xylenes (1900 ppb) were detected in the groundwater sample collected from monitoring well MW-3. Levels of ethylbenzene, toluene, and total xylenes in MW-3 exceeded the FDEP target level for ethylbenzene, toluene, and total xylenes of 30 ppb, 40 ppb, and 20 ppb, respectfully. No VOAs were detected in the groundwater samples collected from the other shallow monitoring wells or the deep vertical extent monitoring well located at Site 2406. A summary of the analytical results is included in Table 2-3.

Naphthalene (180 ppb), 1-methylnaphthalene (81 ppb), and 2-methylnaphthalene (130 ppb) were detected in the groundwater sample collected from monitoring well MW-3 on May 1, 1996. The level of naphthalene in MW-3 exceeds the FDEP groundwater cleanup target level of 20 ppb for naphthalene. No PAHs were detected in groundwater samples collected from the other shallow monitoring wells or the deep vertical extent monitoring well located at Site 2406. A summary of the analytical results is included in Table 2-4.

Total petroleum hydrocarbons (TPHs) at a concentration level of 13000 ppb were detected in the groundwater sample collected from monitoring well MW-3 on May 1, 1997. The level of TPHs in MW-3 exceeds the FDEP allowable limits of 5000 ppb for TPH. Total lead at a concentration level of 155 ppb was detected in the groundwater sample collected from monitoring well MW-3 using the quiescent sampling method on September 25 and 26, 1997. The level of total lead in MW-3 exceeds the FDEP groundwater cleanup target level of 15 ppb for total lead. EDB was detected in the groundwater samples collected from monitoring well MW-3 on May 1, 1997 at a

TABLE 2-3
SUMMARY OF VOLATILE ORGANIC COMPOUNDS ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED FROM MONITORING WELLS MW-1 THRU MW-10
SAUFLEY FIELD, FL
SITE 2406

PARAMETER	MONITORING WELL NUMBER									
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	DMW-10
Benzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Ethylbenzene	BDL	BDL	32	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Toluene	BDL	BDL	63	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Xylenes (Total)	BDL	BDL	1900	BDL	BDL	BDL	BDL	BDL	BDL	BDL

NOTES:
Groundwater samples MW-1 thru MW-5 were collected May 1, 1997.
Groundwater samples MW-6 thru MW-8 were collected May 20, 1997.
Groundwater samples MW-9 and DMW-10 were collected May 19, 1997.
BDL = Below detection limits
All results reported in parts per billion (ppb) unless otherwise noted.

TABLE 2-4
SUMMARY OF PAH
ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES
COLLECTED FROM MONITORING WELLS MW-1 THRU DMW-10
SAUFLEY FIELD, FL
SITE 2406

PARAMETER	MONITORING WELL NUMBER									
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	DMW-10
Naphthalene	BDL	BDL	180	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1-Methylnaphthalene	BDL	BDL	81	BDL	BDL	BDL	BDL	BDL	BDL	BDL
2-Methylnaphthalene	BDL	BDL	130	BDL	BDL	BDL	BDL	BDL	BDL	BDL

NOTES: Groundwater samples MW-1 thru MW-5 were collected May 1, 1997.
Groundwater samples MW-6 thru MW-8 were collected May 20, 1997.
Groundwater samples MW-9 and DMW-10 were collected May 19, 1997.
BDL = Below detection limits
All results reported in parts per billion (ppb) unless otherwise noted.

concentration level of 2.6 ppb which exceeds the FDEP regulatory limits of 0.02 ppb for EDBs. No TPHs, Total Lead, or EDBs were detected in the groundwater samples collected from the other shallow monitoring wells or the deep vertical extent monitoring well at Site 2406. A summary of the analytical results is included in Table 2-5.

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 CONCLUSIONS

- The source and quantity of the discharge are unknown.

- OVA screenings were performed on 10 soil borings, at varying depths in order to delineate the extent of contaminated soils. Soil samples collected from the soil borings were analyzed for volatile organic vapors using an OVA. Soil samples from monitoring well MW-3 (22', 25', 28', 31', 34', 37', and 39' BLS) and DMW-10 (22', 25', 28', 31', 34', 37', and 39' BLS) were found to be above the FDEP excessively contaminated soil level of 50 ppm for the kerosene analytical group.

- Nine shallow groundwater monitoring wells (MW-1 thru MW-9) and one deep vertical extent groundwater monitoring well (DMW-10) were installed at the site and groundwater samples were collected from each well and analyzed for the kerosene analytical group listed in FDEP Rule 62-770.600(8)(b).

- No free-phase petroleum hydrocarbons were detected in any of the monitoring wells.

- Groundwater depths measured in monitoring wells MW-1 thru MW-9 on September 16, 1997 indicates the groundwater flows toward the south.

- Monitoring well MW-3 was the only well at Site 2406 which detected and exceeded FDEP groundwater cleanup target levels for ethylbenzene, toluene, total xylenes, naphthalene, TPH, Lead, and EDB. However, the contaminated levels are not exceptionally high.

- The average estimated horizontal hydraulic conductivity at the site is 48.3 ft/day.

- The average estimated linear velocity at the site is 2.241ft/day.

- The areal extent of the soil and groundwater contamination at the site appears to be limited to a small area and the levels of contamination are somewhat significant.

TABLE 2-5
SUMMARY OF TPH, LEAD, AND EDB ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES COLLECTED FROM MONITORING WELLS MW-1 THRU DMW-10
SAUFLEY FIELD, FL
SITE 2406

PARAMETER	MONITORING WELL NUMBER									
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	DMW-10
TPH	BDL	BDL	13000	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Lead 9/25,26, 1997	BDL	BDL	155	BDL	BDL	BDL	BDL	BDL	BDL	BDL
EDB	BDL	BDL	2.6	BDL	BDL	BDL	BDL	BDL	BDL	BDL

NOTES:
Groundwater samples MW-1 thru MW-5 were collected May 1, 1997.
Groundwater samples MW-6 thru MW-8 were collected May 20, 1997.
Groundwater samples MW-9 and DMW-10 were collected May 19, 1997.
All results reported in parts per billion (ppb) unless otherwise noted.
BDL = Below detection limits
EDB = 1,2 Dibromoethane
TPH = Total Recoverable Petroleum Hydrocarbons

3.2 RECOMMENDATIONS

PWC Pensacola recommends, based upon the findings and conclusions contained in this report, that a "Remedial Action Plan" be prepared for the soil contamination and a "Monitoring Only Plan" be implemented for the groundwater at Site 2406 located at Saufley Field, NETPDTC, Pensacola, Florida. PWC Pensacola recommends the "Monitoring Only Plan" (MOP) be implemented as follows:

(1) Groundwater samples be collected from MW-3, MW-4, and MW-7 semiannually for two years and analyzed for VOAs and PAHs using EPA methods 8260 and 8270A, respectfully. Monitoring well MW-3 shall be considered the "source" monitoring well and monitoring wells MW-4 and MW-7 the downgradient and upgradient monitoring wells, respectfully.

4.0 PROFESSIONAL REVIEW CERTIFICATION

The Site Assessment contained in this report was prepared using sound, hydrogeologic principles and judgement. This assessment is based on the geologic investigation and associated information detailed in the text and appended to this report. If conditions are determined to exist that differ from those described, the undersigned engineer should be notified to evaluate the effects of any additional information on the assessment described in this report. This Site Assessment Report was developed for Saufley Field, Naval Education & Training Professional Development & Technical Center (NETPDTC), Site 2406, Pensacola, Florida, and should not be construed to apply to any other site.

G. A. Campbell
Professional Engineer
P.E. No. 38572

3/2/98
Date

5.0 REFERENCES

Naval Energy and Environmental Support Activity, Port Hueneme, California, Preliminary Assessment Report of Naval Educational and Training Program Management Support Activity (NETPMSA) Saufley Field, Escambia County, Florida, May 1992.

APPENDICES

APPENDIX A

MONITORING WELL CONSTRUCTION DIAGRAMS

W.E.S., Inc.
Environmental Division

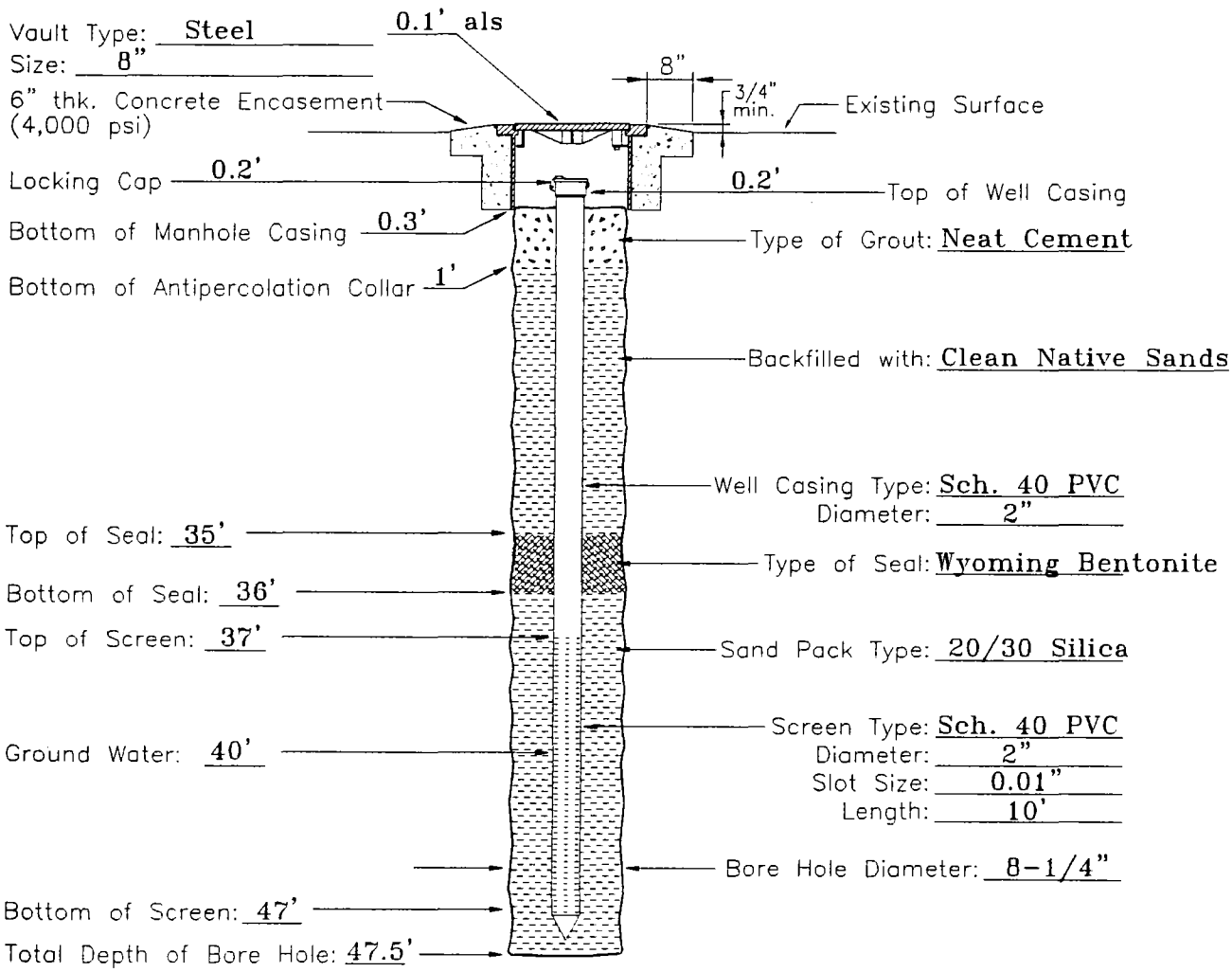
6389 Tower Lane
Sarasota, FL 34240-8810
(941) 371-7617
(941) 378-5218 Fax

MONITOR WELL CONSTRUCTION DETAIL

LOGGED BY: Patrick J. Brown
DRILLING CONTRACTOR: S. FL Test & Dr.
DRILLER'S NAME: Craig Griffey
WELL NUMBER: MW-1

CLIENT: NPWC, ROICC, NAS Pensacola, FL
LOCATION: Site 2406, Saufley Field
JOB NUMBER: N65114-95-D-2126
DATE Start: 04/29/97 Finish: 04/29/97
TIME Start: 1045 Finish: 1205

COMMENTS: (Lost circulation interval, Water level changes, Hole collapse interval, etc.):



NOTE: DEPTHS SHOWN ARE BELOW LAND SURFACE (B.L.S.)

DRAWING ABOVE IS NOT TO SCALE

CAD FILE @STA3> C:\ACADR13\MW-DETL1.DWG STA3-19951128.1143

W.E.S., Inc.
Environmental Division

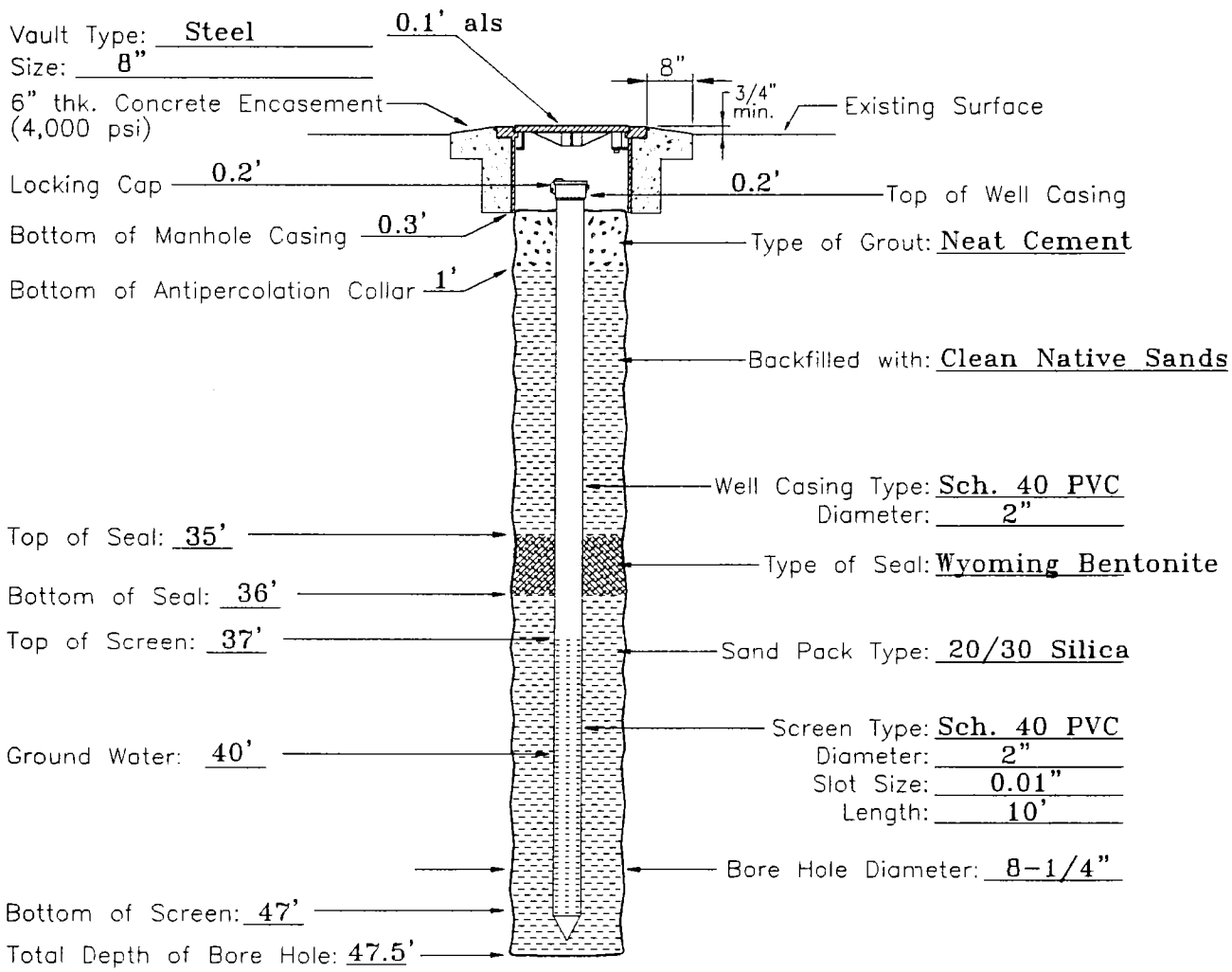
MONITOR WELL CONSTRUCTION DETAIL

6389 Tower Lane
Sarasota, FL 34240-8810
(941) 371-7617
(941) 378-5218 Fax

LOGGED BY: Patrick J. Brown
DRILLING CONTRACTOR: S. FL Test & Dr.
DRILLER'S NAME: Craig Griffey
WELL NUMBER: MW-2

CLIENT: NPWC, ROICC, NAS Pensacola, FL
LOCATION: Site 2406, Saufley Field
JOB NUMBER: N65114-95-D-2126
DATE Start: 04/29/97 Finish: 04/29/97
TIME Start: 1315 Finish: 1420

COMMENTS: (Lost circulation interval, Water level changes, Hole collapse interval, etc.):



NOTE: DEPTHS SHOWN ARE BELOW LAND SURFACE (B.L.S.)

DRAWING ABOVE IS NOT TO SCALE

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W.E.S., Inc.
Environmental Division

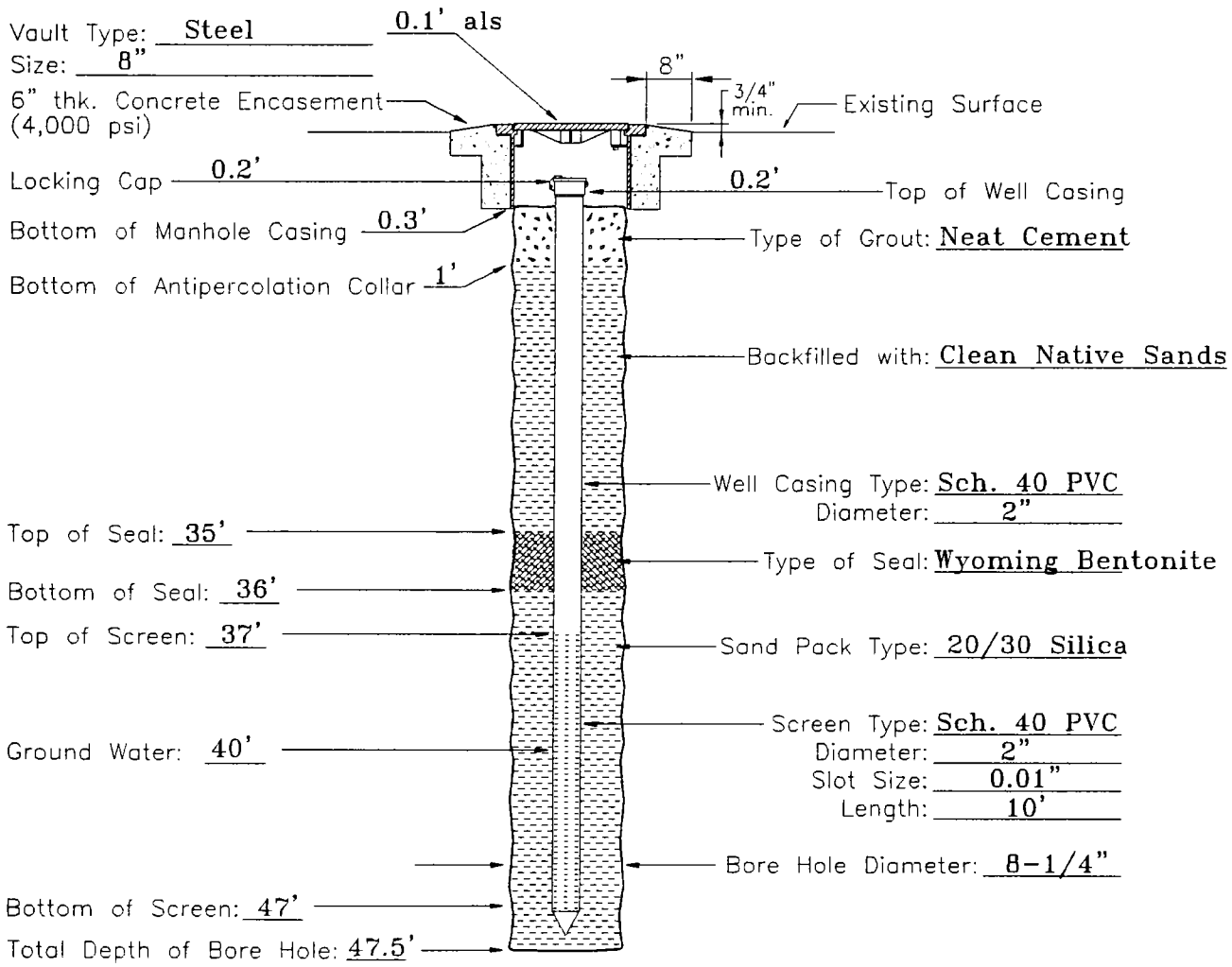
6389 Tower Lane
Sarasota, FL 34240-8810
(941) 371-7617
(941) 378-5218 Fax

MONITOR WELL CONSTRUCTION DETAIL

LOGGED BY: Patrick J. Brown
DRILLING CONTRACTOR: S. FL Test & Dr.
DRILLER'S NAME: Craig Griffey
WELL NUMBER: MW-3

CLIENT: NPWC, ROICC, NAS Pensacola, FL
LOCATION: Site 2406, Saufley Field
JOB NUMBER: N65114-95-D-2126
DATE Start: 04/29/97 Finish: 04/29/97
TIME Start: 1445 Finish: 1600

COMMENTS: (Lost circulation interval, Water level changes, Hole collapse interval, etc.):



NOTE: DEPTHS SHOWN ARE BELOW LAND SURFACE (B.L.S.)

DRAWING ABOVE IS NOT TO SCALE

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W.E.S., Inc.
Environmental Division

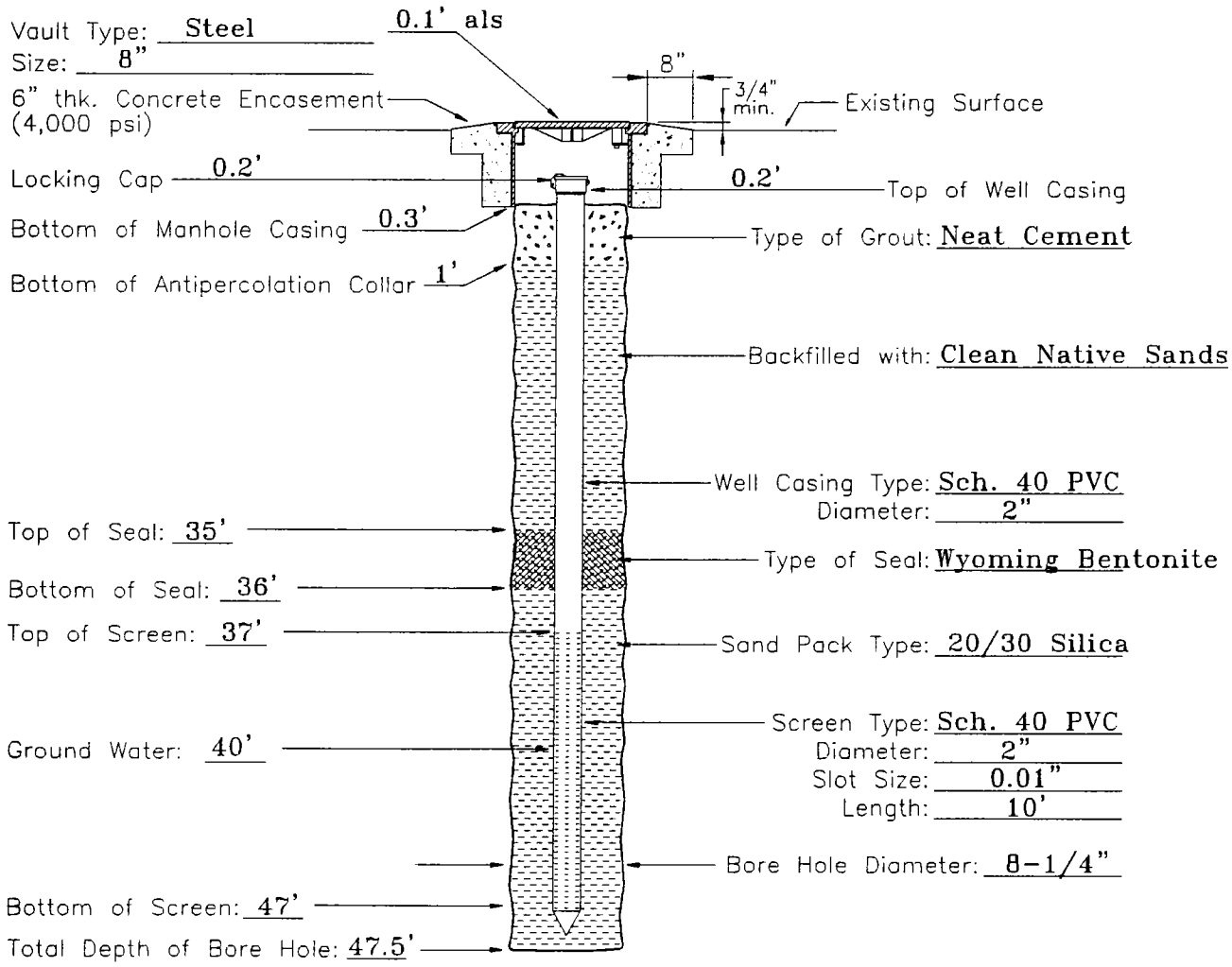
6389 Tower Lane
Sarasota, FL 34240-8810
(941) 371-7617
(941) 378-5218 Fax

MONITOR WELL CONSTRUCTION DETAIL

LOGGED BY: Patrick J. Brown
DRILLING CONTRACTOR: S. FL Test & Dr.
DRILLER'S NAME: Craig Griffey
WELL NUMBER: MW-4

CLIENT: NPWC, ROICC, NAS Pensacola, FL
LOCATION: Site 2406, Saufley Field
JOB NUMBER: N65114-95-D-2126
DATE Start: 04/30/97 Finish: 04/30/97
TIME Start: 0845 Finish: 1000

COMMENTS: (Lost circulation interval, Water level changes, Hole collapse interval, etc.):



NOTE: DEPTHS SHOWN ARE BELOW LAND SURFACE (B.L.S.)

DRAWING ABOVE IS NOT TO SCALE

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W.E.S., Inc.
Environmental Division

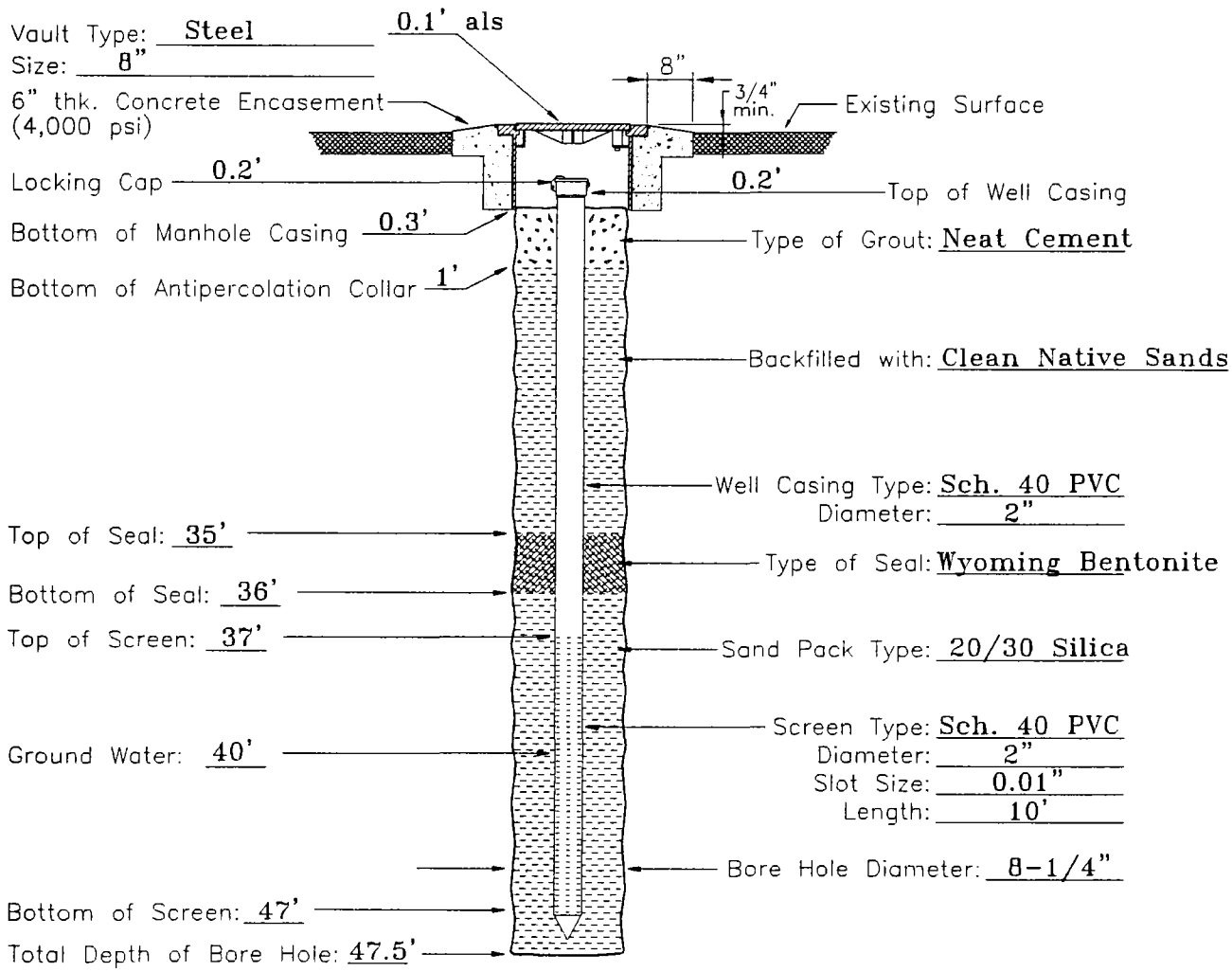
6389 Tower Lane
Sarasota, FL 34240-8810
(941) 371-7617
(941) 378-5218 Fax

MONITOR WELL CONSTRUCTION DETAIL

LOGGED BY: Patrick J. Brown
DRILLING CONTRACTOR: S. FL Test & Dr.
DRILLER'S NAME: Craig Griffey
WELL NUMBER: MW-5

CLIENT: NPWC, ROICC, NAS Pensacola, FL
LOCATION: Site 2406, Saufley Field
JOB NUMBER: N65114-95-D-2126
DATE Start: 04/30/97 Finish: 04/30/97
TIME Start: 1030 Finish: 1200

COMMENTS: (Lost circulation interval, Water level changes, Hole collapse interval, etc.):



NOTE: DEPTHS SHOWN ARE BELOW LAND SURFACE (B.L.S.)

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W.E.S., Inc.
Environmental Division

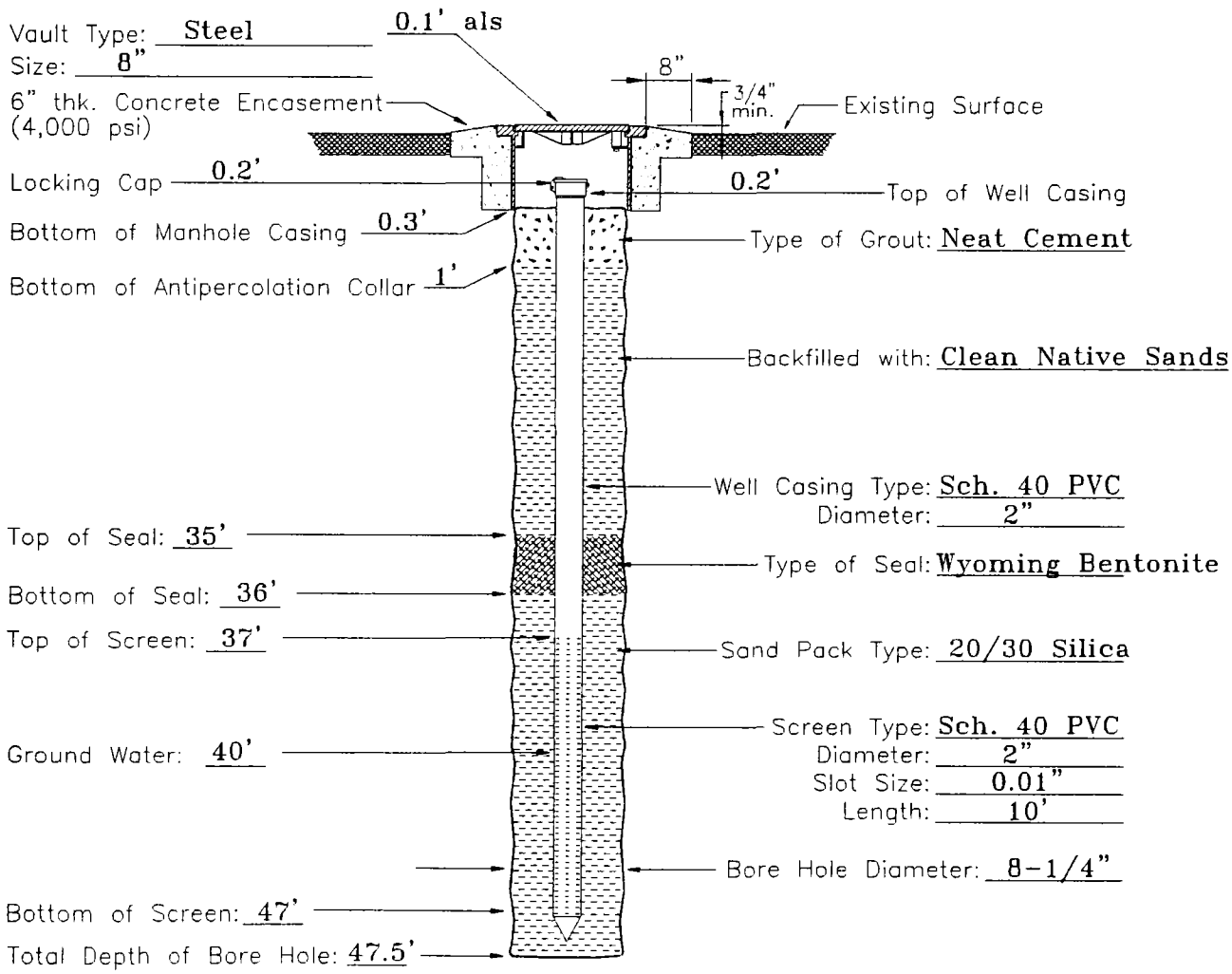
6389 Tower Lane
Sarasota, FL 34240-8810
(941) 371-7617
(941) 378-5218 Fax

MONITOR WELL CONSTRUCTION DETAIL

LOGGED BY: Patrick J. Brown
DRILLING CONTRACTOR: S. FL Test & Dr.
DRILLER'S NAME: Craig Griffey
WELL NUMBER: MW-6

CLIENT: NPWC, ROICC, NAS Pensacola, FL
LOCATION: Site 2406, Saufley Field
JOB NUMBER: N65114-95-D-2126
DATE Start: 05/13/97 Finish: 05/13/97
TIME Start: 1030 Finish: 1200

COMMENTS: (Lost circulation interval, Water level changes, Hole collapse interval, etc.):



NOTE: DEPTHS SHOWN ARE BELOW LAND SURFACE (B.L.S.)

DRAWING ABOVE IS NOT TO SCALE

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W.E.S., Inc.
Environmental Division

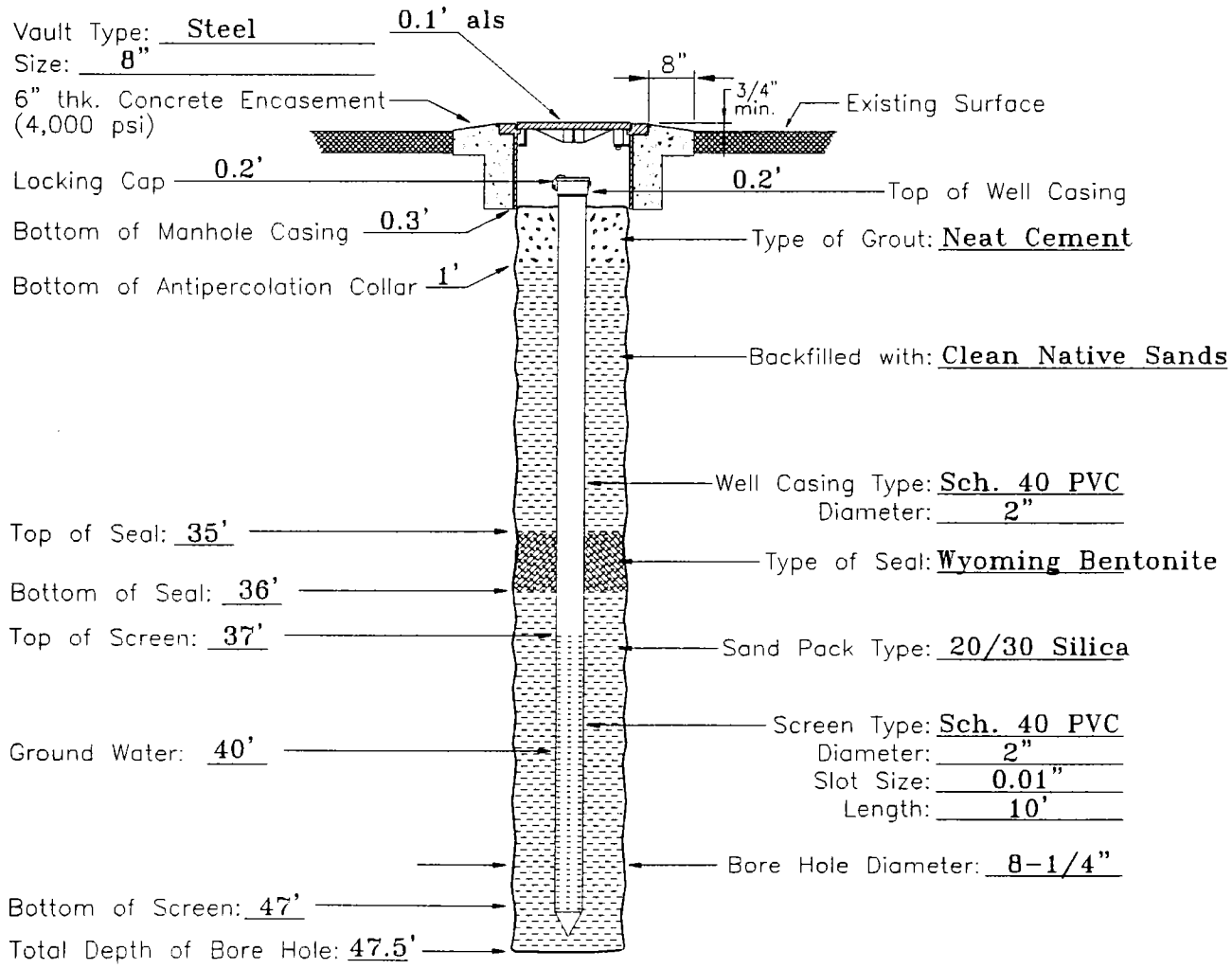
6389 Tower Lane
Sarasota, FL 34240-8810
(941) 371-7617
(941) 378-5218 Fax

MONITOR WELL CONSTRUCTION DETAIL

LOGGED BY: Patrick J. Brown
DRILLING CONTRACTOR: S. FL Test & Dr.
DRILLER'S NAME: Craig Griffey
WELL NUMBER: MW-7

CLIENT: NPWC, ROICC, NAS Pensacola, FL
LOCATION: Site 2406, Saufley Field
JOB NUMBER: N65114-95-D-2126
DATE Start: 05/13/97 Finish: 05/13/97
TIME Start: 1300 Finish: 1500

COMMENTS: (Lost circulation interval, Water level changes, Hole collapse interval, etc.):



NOTE: DEPTHS SHOWN ARE BELOW LAND SURFACE (B.L.S.)

DRAWING ABOVE IS NOT TO SCALE

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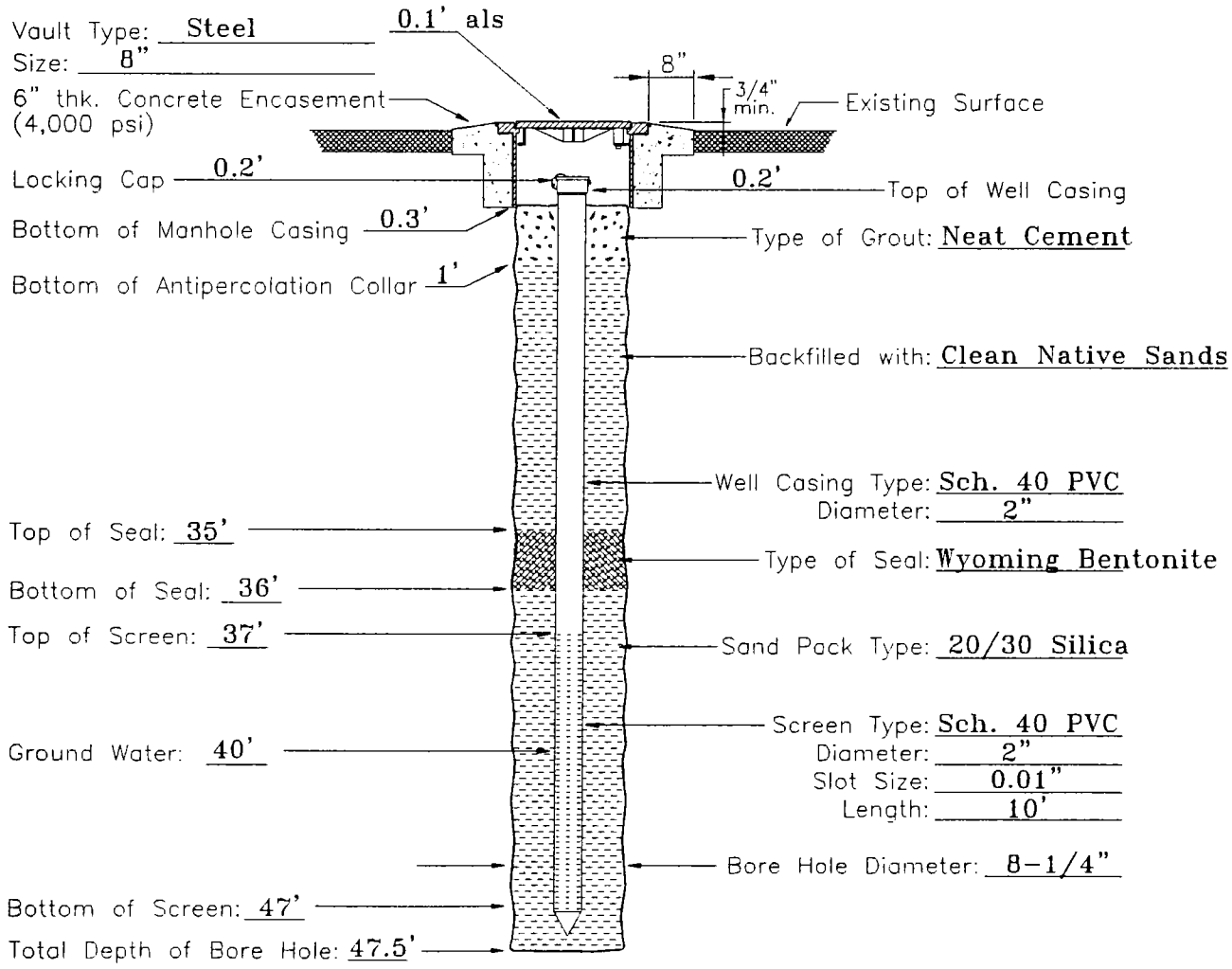
W.E.S., Inc.
Environmental Division
6389 Tower Lane
Sarasota, FL 34240-8810
(941) 371-7617
(941) 378-5218 Fax

MONITOR WELL CONSTRUCTION DETAIL

LOGGED BY: Patrick J. Brown
DRILLING CONTRACTOR: S. FL Test & Dr.
DRILLER'S NAME: Craig Griffey
WELL NUMBER: MW-8

CLIENT: NPWC, ROICC, NAS Pensacola, FL
LOCATION: Site 2406, Saufley Field
JOB NUMBER: N65114-95-D-2126
DATE Start: 05/14/97 Finish: 05/14/97
TIME Start: 1000 Finish: 1200

COMMENTS: (Lost circulation interval, Water level changes, Hole collapse interval, etc.):



NOTE: DEPTHS SHOWN ARE BELOW LAND SURFACE (B.L.S.)

DRAWING ABOVE IS NOT TO SCALE

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W.E.S., Inc.
Environmental Division

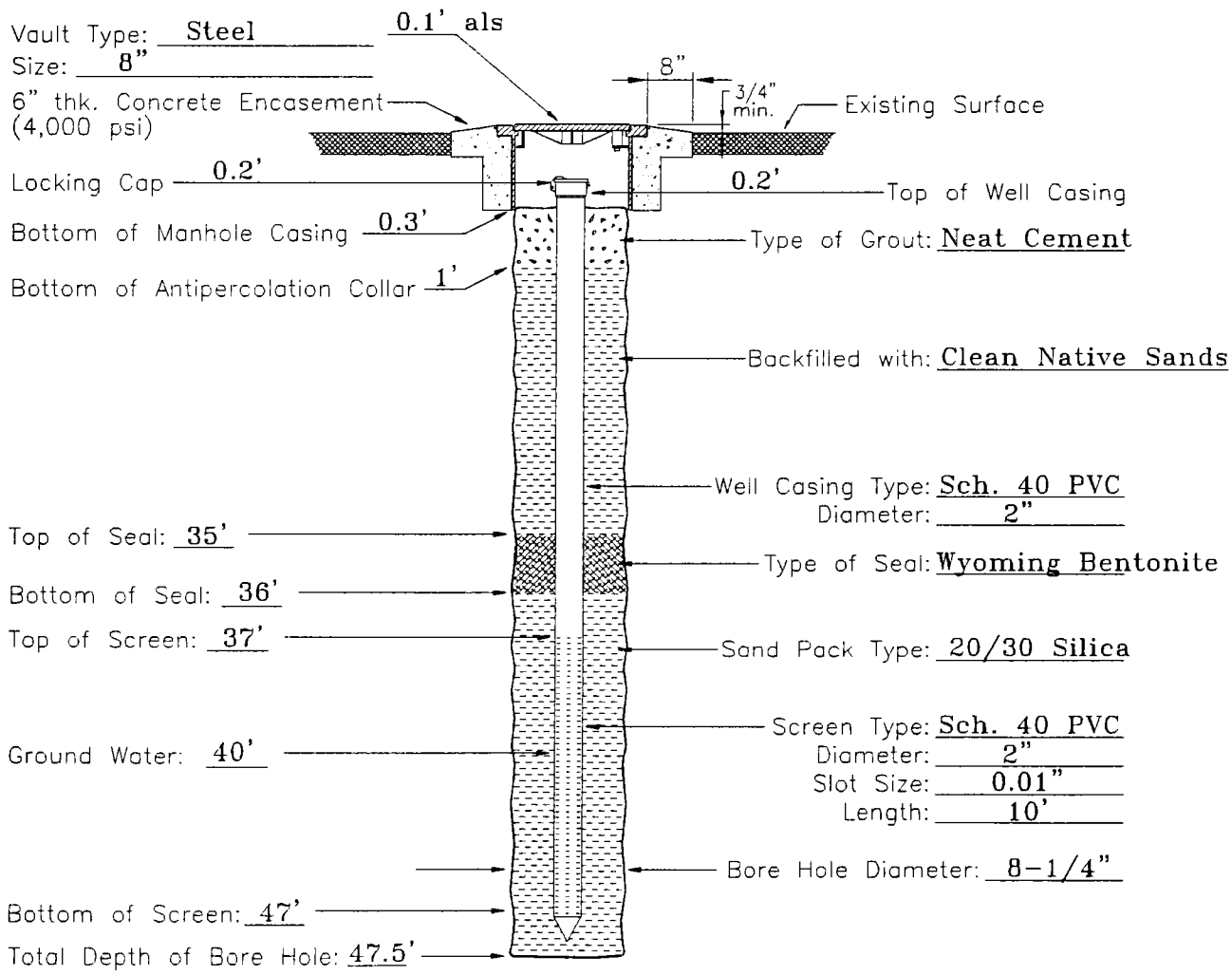
6389 Tower Lane
Sarasota, FL 34240-8810
(941) 371-7617
(941) 378-5218 Fax

MONITOR WELL CONSTRUCTION DETAIL

LOGGED BY: Patrick J. Brown
DRILLING CONTRACTOR: S. FL Test & Dr.
DRILLER'S NAME: Craig Griffey
WELL NUMBER: MW-9

CLIENT: NPWC, ROICC, NAS Pensacola, FL
LOCATION: Site 2406, Saufley Field
JOB NUMBER: N65114-95-D-2126
DATE Start: 05/27/97 Finish: 05/27/97
TIME Start: 1000 Finish: 1300

COMMENTS: (Lost circulation interval, Water level changes, Hole collapse interval, etc.):



NOTE: DEPTHS SHOWN ARE BELOW LAND SURFACE (B.L.S.)

DRAWING ABOVE IS NOT TO SCALE

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W.E.S., Inc.
Environmental Division

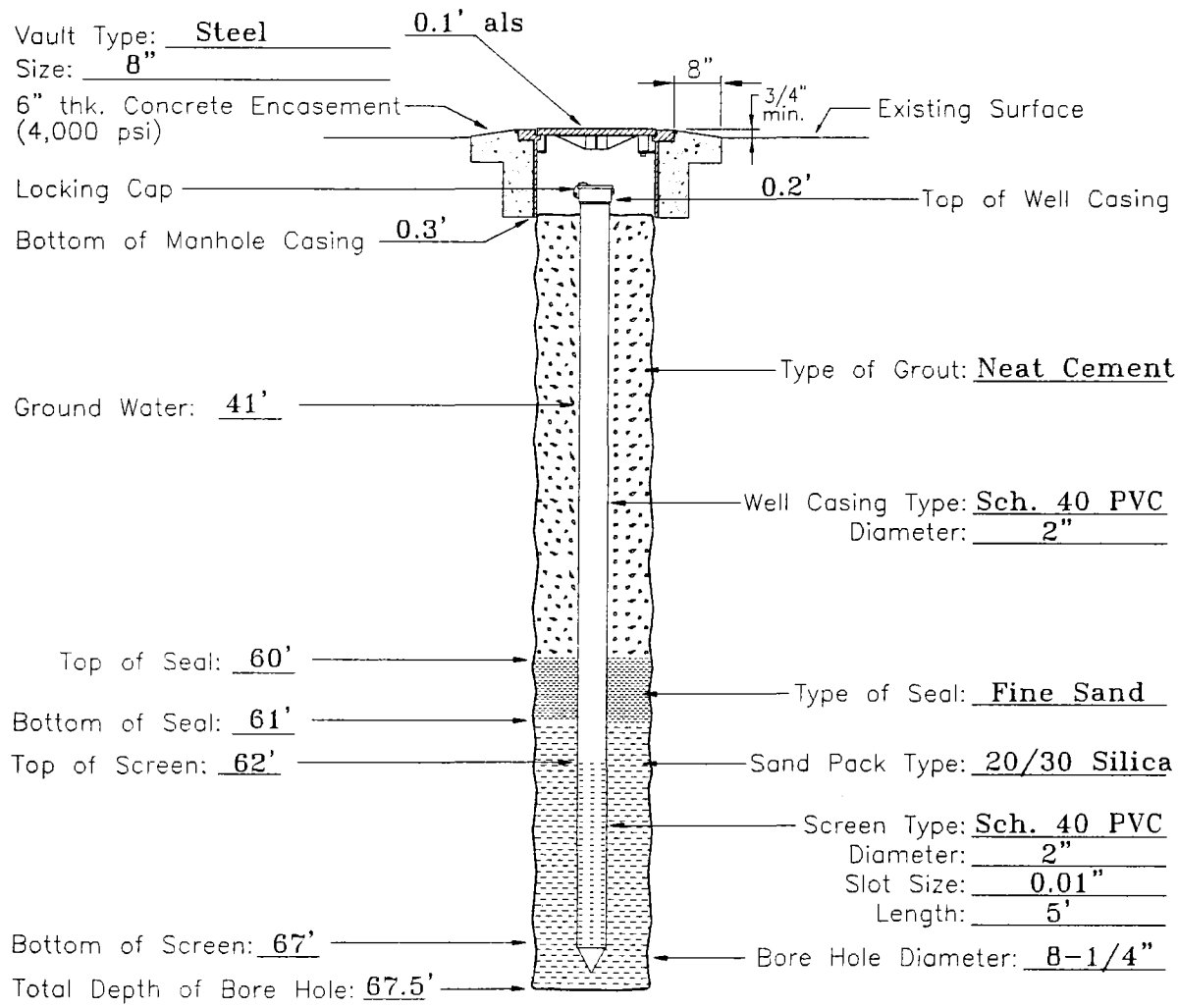
6389 Tower Lane
Sarasota, FL 34240-8810
(941) 371-7617
(941) 378-5218 Fax

VERTICAL EXTENT
MONITOR WELL CONSTRUCTION DETAIL

LOGGED BY: Patrick J. Brown
DRILLING CONTRACTOR: S. FL Test & Dr.
DRILLER'S NAME: Craig Griffey
WELL NUMBER: DMW-10

CLIENT: NPWC, ROICC, NAS Pensacola, FL
LOCATION: Site 2406, Saufley Field
JOB NUMBER: N65114-95-D-2126
DATE Start: 05/27/97 Finish: 05/27/97
TIME Start: 1315 Finish: 1630

COMMENTS: (Lost circulation interval, Water level changes, Hole collapse interval, etc.):



NOTE: DEPTHS SHOWN ARE BELOW LAND SURFACE (B.L.S.)

DRAWING ABOVE IS NOT TO SCALE

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APPENDIX B

SLUG TEST DATA, GRAPHS AND CALCULATIONS

GROUNDWATER FLOW VELOCITY CALCULATIONS

$$V = Ki/n$$

Where

V = groundwater flow velocity
K = hydraulic conductivity* (as an average of Geraghty & Miller [1987], Site 3810 N [1992] and Site 3221 SW [1993] = 48.3 ft/day)
i = gradient (elevation/distance between MW-3 and MW-4)
n = porosity, estimated at 25%

August 16, 1997

$$i = \frac{10.29' - 9.77'}{44.82'} = \underline{0.01160} \text{ ft/ft}$$

Hydraulic gradient = i = 0.01160 ft/ft

$$\text{Average Velocity} = V = \frac{48.3 \text{ ft/day} \times 0.01160 \text{ ft/ft}}{0.25} = \underline{2.241} \text{ ft/day}$$

* Geraghty and Miller. January 1987. Evaluation of Hydrocarbons in Shallow Ground Water from Aviation Turbine Fuel (JP-5) Pipeline Leak at the NAS Pensacola, Florida.

Roger Durham. August 1992. Contamination Assessment Report: Site 3801 N Naval Aviation Depot, Naval Air Station, Pensacola, Florida.

Roger Durham and Pamela J. Wagner. February 1993. Contamination Assessment Report: Site 3221 SW, Naval Aviation Depot, Naval Air Station, Pensacola, Florida.

APPENDIX C

LITHOLOGIC LOGS

Site 2406	LOGGED BY: Patrick J. Brown	SHEET 1 OF 1
Saufley Field	Contractor: WES, Inc.	Dr. Method: Hollow Stem Auger
Pensacola, Florida	Driller: South Florida Testing & Drilling	Dr. Rig: Mobile B-61
	Start Date: 04/29/97	Completed: 04/29/97
MONITORING WELL NO.: MW-1	Start Time: 1045	Finish Time: 1205
Delivery Order 0051	Contract No. N65114-95-D-2128	CONTAMINATION DATA

TYPE	NUMB	BLOW	SAMP. INTV. (FT.)	SAMP. RECV. (IN)	DEPTH	DESCRIPTION OF MATERIALS AND CONDITIONS	OVA RESULTS (PPM) CARBON FILTER W/O	WITH	NET	NOTES
POST HOLE HSA HA					1	0' - 1'; Dark Brown, Silty, Fine Sand w/ Humus.	NR	NR	0	
					4		NR	NR	0	
					7		NR	NR	0	
					10	1' - 13'; Reddish Brown, Silty Fine Sand w/ Trace of Clay.	NR	NR	0	
					13		NR	NR	0	
					16		NR	NR	0	
					19		NR	NR	0	
					22		NR	NR	0	
					25	13' - 31'; Orange Brown, Silty Fine Sand, Greater % Clay.	NR	NR	0	
					28		NR	NR	0	
					31		NR	NR	0	
					34	31' - 39'; Tan Brown, Silty Fine to Medium, Clayey Sand.	NR	NR	0	
					37		NR	NR	0	
							NR	NR	0	
			Water Table @ 40' BLS		40					
					43	39' - 47' Light Tan, Brown Fine, Medium Clayey Sand.				
					46					
						End of Boring @ 47' BLS				
					49					

I Certify that this lithological log, including geological and hydrogeological interpretations, has been prepared under my direct supervision and meets the minimal technical requirements as set forth in Chapter 492 of the Florida Statutes.

Reviewed by: Michael J. Walsh, P.G.
Florida Professional Geologist No. 0001181

05/07/97
Date

MICHAEL J. WALSH
PROVISIONAL LICENSE
No. PG0001181
STATE OF FLORIDA
PROFESSIONAL GEOLOGIST

Site 2406	LOGGED BY: Patrick J. Brown	SHEET 1 OF 1
Saufley Field	Contractor: WES, Inc.	Dr. Method: Hollow Stem Auger
Pensacola, Florida	Driller: South Florida Testing & Drilling	Dr. Rig: Mobile B-61
	Start Date: 04/29/97	Completed: 04/29/97
MONITORING WELL NO.: MW-2	Start Time: 1315	Finish Time: 1420
Delivery Order 0051	Contract No. N65114-95-D-2126	CONTAMINATION DATA

TYPE	NUMB	BLOW	SAMP. INTV. (FT.)	SAMP. RECV. (IN)	DEPTH	DESCRIPTION OF MATERIALS AND CONDITIONS	OVA RESULTS (PPM) CARBON FILTER W/O	WITH	NOTES NET
POST HOLE HSA HA					1	0' - 1'; Dark Brown, Silty, Fine Sand w/ Humus.	NR	NR	0
					4		NR	NR	0
					7		NR	NR	0
					10	1' - 13'; Reddish Brown, Silty Fine Sand w/ Trace of Clay.	NR	NR	0
					13		NR	NR	0
					16		NR	NR	0
					19		NR	NR	0
					22		NR	NR	0
					25	13' - 31'; Orange Brown, Silty Fine Sand, Greater % Clay.	NR	NR	0
					28		NR	NR	0
					31		NR	NR	0
					34	31' - 39'; Tan, Brown, Silty Fine, Clayey Sand.	NR	NR	0
					37		NR	NR	0
							NR	NR	0
			Water Table @ 40' BLS		40				
					43	39' - 47' Light Tan, Brown Fine to Medium, Clayey Sand.			
					46				
						End of Boring @ 47' BLS			
					49				

I Certify that this lithological log, including geological and hydrogeological interpretations, has been prepared under my direct supervision and meets the minimal technical requirements as set forth in Chapter 492 of the Florida Statutes.

Reviewed by: Michael J. Walsh, P.G.
Florida Professional Geologist No. 0001181

05/07/97
Date

MICHAEL J. WALSH
PROFESSIONAL LICENSE
No. PG0001181
STATE OF FLORIDA
PROFESSIONAL GEOLOGIST

Site 2406	LOGGED BY: Patrick J. Brown	SHEET 1 OF 1	
Saufley Field	Contractor: WES, Inc.	Dr. Method: Hollow Stem Auger	
Pensacola, Florida	Driller: South Florida Testing & Drilling	Dr. Rig: Mobile B-61	
	Start Date: 04/29/97	Completed: 04/29/97	
MONITORING WELL NO.: MW-3	Start Time: 1445	Finish Time: 1600	
Delivery Order 0051	Contract No. N65114-95-D-2126	CONTAMINATION DATA	

TYPE	NUMB	BLOW	SAMP. INTV. (FT.)	SAMP. RECV. (IN)	DEPTH	DESCRIPTION OF MATERIALS AND CONDITIONS	OVA RESULTS (PPM) CARBON FILTER W/O	WITH	NOTES NET
POST HOLE HSA HA					1	0' - 1'; Dark Brown, Silty, Fine Sand w/ Humus.	NR	NR	0
					4		NR	NR	0
					7		NR	NR	0
					10	1' - 13'; Reddish Brown, Silty Fine Sand w/ Trace of Clay.	NR	NR	0
					13		NR	NR	0
					16		NR	NR	0
					19		NR	NR	0
					22		> 1000	NR	> 1000
					25	13' - 31'; Orange Brown, Silty Fine Sand, Greater % Clay.	> 1000	NR	> 1000
					28		> 1000	NR	> 1000
					31		> 1000	NR	> 1000
					34	31' - 39'; Tan Brown, Silty Fine, Clayey Sand.	> 1000	NR	> 1000
					37		> 1000	NR	> 1000
							> 1000	NR	> 1000
			Water Table @ 40' BLS		40				
					43	39' - 47' Light Tan, Brown Fine to Medium, Clayey Sand.			
					46				
						End of Boring @ 47' BLS			
					49				

I Certify that this lithological log, including geological and hydrogeological interpretations, has been prepared under my direct supervision and meets the minimal technical requirements as set forth in Chapter 492 of the Florida Statutes.

Reviewed by: Michael J. Walsh, P.G.
Florida Professional Geologist No. 0001181

05/07/97
Date

MICHAEL J. WALSH
PROVISIONAL LICENSE
STATE OF FLORIDA
PROFESSIONAL GEOLOGIST

C-3

Site 2406	LOGGED BY: Patrick J. Brown	SHEET 1 OF 1
Saufley Field	Contractor: WES, Inc.	Dr. Method: Hollow Stem Auger
Pensacola, Florida	Driller: South Florida Testing & Drilling	Dr. Rig: Mobile B-61
	Start Date: 04/30/97	Completed: 04/30/97
MONITORING WELL NO.: MW-4	Start Time: 845	Finish Time: 1000
Delivery Order 0051	Contract No. N65114-95-D-2126	CONTAMINATION DATA

TYPE	NUMB	BLOW	SAMP. INTV. (FT.)	SAMP. RECV. (IN)	DEPTH	DESCRIPTION OF MATERIALS AND CONDITIONS	OVA RESULTS (PPM) CARBON FILTER W/O	WITH	NET	NOTES
POST HOLE HSA HA					1	0' - 1'; Dark Brown, Silty, Fine Sand w/ Humus.	NR	NR	0	
					4		NR	NR	0	
					7		NR	NR	0	
					10	1' - 13'; Reddish Brown, Silty Fine Sand w/ Trace of Clay.	NR	NR	0	
					13		NR	NR	0	
					16		NR	NR	0	
					19		NR	NR	0	
					22		NR	NR	0	
					25	13' - 31'; Orange Brown, Silty Fine Sand, Greater % Clay.	3	NR	3	
					28		2	NR	2	
					31		4	NR	4	
					34	31' - 39'; Tan Brown, Silty Fine, Clayey Sand.	1	NR	1	
					37		NR	NR	0	
							6	NR	6	
			Water Table @ 40' BLS		40					
					43	39' - 47' Light Tan, Brown Fine to Medium, Clayey Sand.				
					46					
						End of Boring @ 47' BLS				
					49					

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Florida Professional Geologist No. 0001181

05/07/97
Date

MICHAEL J. WALSH
PROFESSIONAL LICENSE
STATE OF FLORIDA
PROFESSIONAL GEOLOGIST

C-4

Site 2406	LOGGED BY: Patrick J. Brown	SHEET 1 OF 1	
Saufley Field	Contractor: WES, Inc.	Dr. Method: Hollow Stem Auger	
Pensacola, Florida	Driller: South Florida Testing & Drilling	Dr. Rig: Mobile B-61	
	Start Date: 04/30/97	Completed: 04/30/97	
MONITORING WELL NO.: MW-5	Start Time: 1030	Finish Time: 1200	
Delivery Order 0051	Contract No. N65114-95-D-2126	CONTAMINATION DATA	

TYPE	NUMB	BLOW	SAMP. INTV. (FT.)	SAMP. RECV. (IN)	DEPTH	DESCRIPTION OF MATERIALS AND CONDITIONS	OVA RESULTS (PPM) CARBON FILTER W/O	WITH	NOTES NET
POST HOLE HSA HA					1	0' - 1'; Pavement, Road Bed.	NR	NR	0
					4		NR	NR	0
					7		NR	NR	0
					10	1' - 13'; Reddish Brown, Silty Fine Sand w/ Trace of Clay.	NR	NR	0
					13		NR	NR	0
					16		NR	NR	0
					19		NR	NR	0
					22		NR	NR	0
					25	13' - 31'; Orange Brown, Silty Fine Sand, Small Clay %.	NR	NR	0
					28		NR	NR	0
					31		NR	NR	0
					34	31' - 39'; Tan Brown, Silty Fine, Clayey Sand.	NR	NR	0
					37		NR	NR	0
							NR	NR	0
			Water Table @ 40' BLS		40				
					43	39' - 47' Light Tan, Brown Fine to Medium, Clayey Sand.			
					46				
						End of Boring @ 47' BLS			
					49				

I Certify that this lithological log, including geological and hydrogeological interpretations, has been prepared under my direct supervision and meets the minimal technical requirements as set forth in Chapter 492 of the Florida Statutes.

Reviewed by: Michael T. Walsh, P.G.
Florida Professional Geologist No. 0001181

05/07/97
Date

MICHAEL T. WALSH
PROVISIONAL LICENSE
STATE OF FLORIDA
PROFESSIONAL GEOLOGIST

Site 2406	LOGGED BY: Patrick J. Brown	SHEET 1 OF 1
Saufley Field	Contractor: WES, Inc.	Dr. Method: Hollow Stem Auger
Pensacola, Florida	Driller: South Florida Testing & Drilling	Dr. Rig: Mobile B-61
	Start Date: 05/13/97	Completed: 05/13/97
MONITORING WELL NO.: MW-6	Start Time: 1030	Finish Time: 1200
Delivery Order 0053	Contract No. N65114-95-D-2126	CONTAMINATION DATA

TYPE	NUMB	BLOW	SAMP. INTV. (FT.)	SAMP. RECV. (IN)	DEPTH	DESCRIPTION OF MATERIALS AND CONDITIONS	OVA RESULTS (PPM) CARBON FILTER W/O	WITH	NOTES NET
POST HOLE HSA HA					1	0' - 1'; Pavement, Road Bed.	NR	NR	0
					4		NR	NR	0
					7		NR	NR	0
					10	1' - 13'; Reddish Brown, Silty Fine Sand w/ Trace of Clay.	NR	NR	0
					13		NR	NR	0
					16		NR	NR	0
					19		NR	NR	0
					22		NR	NR	0
					25	13' - 31'; Orange Brown, Silty Fine Sand, > Clay %.	NR	NR	0
					28		NR	NR	0
					31		NR	NR	0
					34	31' - 39'; Tan Brown, Silty Fine, Clayey Sand.	NR	NR	0
					37		NR	NR	0
							NR	NR	0
			Water Table @ 40' BLS		40				
					43	39' - 47' Light Tan, Brown Fine to Medium, Clayey Sand.			
					46	End of Boring @ 47' BLS			
					49				

I Certify that this lithological log, including geological and hydrogeological interpretations, has been prepared under my direct supervision and meets the minimal technical requirements as set forth in Chapter 492 of the Florida Statutes.

Reviewed by: Michael J. Walsh, P.G.
Florida Professional Geologist No. 0001181

05/19/97
Date

MICHAEL J. WALSH
PROVISIONAL LICENSE
No. PG0001181
STATE OF FLORIDA
PROFESSIONAL GEOLOGIST

C-6

Site 2406	LOGGED BY: Patrick J. Brown	SHEET 1 OF 1
Saufley Field	Contractor: WES, Inc.	Dr. Method: Hollow Stem Auger
Pensacola, Florida	Driller: South Florida Testing & Drilling	Dr. Rig: Mobile B-61
	Start Date: 05/13/97	Completed: 05/13/97
MONITORING WELL NO.: MW-7	Start Time: 1300	Finish Time: 1500
Delivery Order 0053	Contract No. N65114-95-D-2126	CONTAMINATION DATA

TYPE	NUMB	BLOW	SAMP. INTV. (FT.)	SAMP. RECV. (IN)	DEPTH	DESCRIPTION OF MATERIALS AND CONDITIONS	OVA RESULTS (PPM) CARBON FILTER W/O	WITH	NET	NOTES
POST HOLE HSA HA					1	0' - 1'; Pavement, Road Bed.	NR	NR	0	
					4		NR	NR	0	
					7		NR	NR	0	
					10	1' - 13'; Reddish Brown, Silty Fine Sand w/ Trace of Clay.	NR	NR	0	
					13		NR	NR	0	
					16		NR	NR	0	
					19		NR	NR	0	
					22		NR	NR	0	
					25	13' - 31'; Orange Brown, Silty Fine Sand, > Clay %.	NR	NR	0	
					28		NR	NR	0	
					31		NR	NR	0	
					34	31' - 39'; Tan Brown, Silty Fine, Clayey Sand.	NR	NR	0	
					37		NR	NR	0	
							NR	NR	0	
			Water Table @ 40' BLS		40					
					43	39' - 47' Light Tan, Brown Fine to Medium, Clayey Sand.				
					46					
						End of Boring @ 47' BLS				
					49					

I Certify that this lithological log, including geological and hydrogeological interpretations, has been prepared under my direct supervision and meets the minimal technical requirements as set forth in Chapter 492 of the Florida Statutes.

Reviewed by: Michael J. Walsh, P.G.
Florida Professional Geologist No. 0001181

MICHAEL J. WALSH
PROVISIONAL LICENSE
STATE OF FLORIDA
PROFESSIONAL GEOLOGIST
PG 0001181

9/9/97
Date

Site 2406	LOGGED BY: Patrick J. Brown	SHEET 1 OF 1
Saufley Field	Contractor: WES, Inc.	Dr. Method: Hollow Stem Auger
Pensacola, Florida	Driller: South Florida Testing & Drilling	Dr. Rig: Mobile B-61
	Start Date: 05/14/97	Completed: 05/14/97
MONITORING WELL NO.: MW-8	Start Time: 1000	Finish Time: 1200
Delivery Order 0053	Contract No. N65114-95-D-2126	CONTAMINATION DATA

TYPE	NUMB	BLOW	SAMP. INTV. (FT.)	SAMP. RECV. (IN)	DEPTH	DESCRIPTION OF MATERIALS AND CONDITIONS	OVA RESULTS (PPM) CARBON FILTER W/O	WITH	NOTES NET
POST HOLE HSA HA					1	0' - 1'; Pavement, Road Bed.	NR	NR	0
					4		NR	NR	0
					7		NR	NR	0
					10	1' - 13'; Reddish Brown, Silty Fine Sand w/ Trace of Clay.	NR	NR	0
					13		NR	NR	0
					16		NR	NR	0
					19		NR	NR	0
					22		NR	NR	0
					25	13' - 31'; Orange Brown, Silty Fine Sand, > Clay %.	NR	NR	0
					28		NR	NR	0
					31		NR	NR	0
					34	31' - 39'; Tan Brown, Silty Fine, Clayey Sand.	NR	NR	0
					37		NR	NR	0
							NR	NR	0
			Water Table @ 40' BLS		40				
					43	39' - 47' Light Tan, Brown Fine to Medium, Clayey Sand.			
					46	End of Boring @ 47' BLS			
					49				

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Reviewed by: Michael J. Walsh, P.G.
Florida Professional Geologist No. 0001181

MICHAEL J. WALSH
PROVISIONAL LICENSE
No. PG0001181
STATE OF FLORIDA
PROFESSIONAL GEOLOGIST

05/19/97
Date

Site 2406	LOGGED BY: Patrick J. Brown	SHEET 1 OF 1
Saufley Field	Contractor: WES, Inc.	Dr. Method: Hollow Stem Auger
Pensacola, Florida	Driller: South Florida Testing & Drilling	Dr. Rig: Mobile B-61
	Start Date: 05/27/97	Completed: 05/27/97
MONITORING WELL NO.: MW-9	Start Time: 1000	Finish Time: 1300
Delivery Order 0053	Contract No. N65114-95-D-2126	CONTAMINATION DATA

TYPE	NUMB	BLOW	SAMP. INTV. (FT.)	SAMP. RECV. (IN)	DEPTH	DESCRIPTION OF MATERIALS AND CONDITIONS	OVA RESULTS (PPM) CARBON FILTER W/O	WITH	NET	NOTES
POST HOLE HSA HA					1	0' - 1'; 6" Conc., 6" Sub-base.	NR	NR	0	
					4		NR	NR	0	
					7	1' - 7'; Reddish Brown, Silty Fine Sand w/ Trace of Clay.	NR	NR	0	
					10		NR	NR	0	
					13	7' - 9'; Void. Type II Const. Debris.	NR	NR	0	
					16		NR	NR	0	
					19	9' - 13'; Reddish Brown, Silty Fine Sand w/ Trace of Clay.	NR	NR	0	
					22		NR	NR	0	
					25	13' - 31'; Orange Brown, Silty Fine Sand, > Clay %.	NR	NR	0	
					28		NR	NR	0	
					31		NR	NR	0	
					34	31' - 39'; Tan Brown, Silty Fine, Clayey Sand.	NR	NR	0	
					37		NR	NR	0	
			Water Table @ 40' BLS		40		NR	NR	0	
					43	39' - 47' Light Tan, Brown Fine to Medium, Clayey Sand.				
					46					
						End of Boring @ 47' BLS				
					49					

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Reviewed by: Michael J. Walsh, P.G.
Florida Professional Geologist No. 0001181

06/03/97
Date

MICHAEL J. WALSH
PROVISIONAL LICENSE
No. PG0001181
STATE OF FLORIDA
PROFESSIONAL GEOLOGIST

Site 2406	LOGGED BY: Patrick J. Brown	SHEET 1 OF 1	
Saufley Field	Contractor: WES, Inc.	Dr. Method: Hollow Stem Auger	
Pensacola, Florida	Driller: South Florida Testing & Drilling	Dr. Rig: Mobile B-61	
	Start Date: 05/27/97	Completed: 05/27/97	
MONITORING WELL NO.: DMW-10	Start Time: 1315	Finish Time: 1630	
Delivery Order 0053	Contract No. N65114-95-D-2126	CONTAMINATION DATA	

TYPE	NUMB	BLOW	SAMP. INTV. (FT.)	SAMP. RECV. (IN)	DEPTH	DESCRIPTION OF MATERIALS AND CONDITIONS	OVA RESULTS (PPM) CARBON FILTER W/O	WITH	NET	NOTES
POST HOLE HSA HA					1	0' - 1'; Dark Brown, Silty Loam w/ Organics (grass).	NR	NR	0	
					4		NR	NR	0	
					7		NR	NR	0	
					10	1' - 13'; Reddish Brown, Silty Fine Sand w/ Trace of Clay.	NR	NR	0	
					13		NR	NR	0	
					16		NR	NR	0	
					19	13' - 31'; Orange Brown, Silty Fine Sand, > Clay %.	NR	NR	0	
					22	Strong Petroleum Odor @ 20'.	>1,000	NR	>1,000	
					25		>1,000	NR	>1,000	
					28		>1,000	NR	>1,000	
					31		>1,000	NR	>1,000	
					34	31' - 39'; Tan Brown, Silty Fine, Clayey Sand.	>1,000	NR	>1,000	
					37		>1,000	NR	>1,000	
			Water Table @ 40' BLS		40		>1,000	NR	>1,000	
					43	39' - 53' Light Tan Brown, Fine to Medium, Clayey Sand.				
					46					
					49					
					52					
					55	53' - 58'; Lense of Sandy Clay. Cohesive, Differentiable. 70% Clay.				
					58					
					61					
					64	58' - 67' ; Reddish Brown, Medium to Coarse, Clayey Sand.				
					67					
					70	End of Boring @ 67'				

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Reviewed by: Michael J. Walsh, P.G.
Florida Professional Geologist No. PG0001181

MICHAEL J. WALSH
PROFESSIONAL LICENSE
No. PG0001181
STATE OF FLORIDA
PROFESSIONAL GEOLOGIST

06/03/98
Date

C-10

APPENDIX D

SOIL AND GROUNDWATER ANALYTICAL RESULTS

SOUTHERN ANALYTICAL LABORATORIES, INC.

110 BAYVIEW BOULEVARD, OLDSMAR, FLORIDA 34677 813-855-1844

lytical Technologies, Inc.
F Olive Road
ucola, FL 32514

Project No. 06570
April 14, 1994

PUBLIC DRINKING WATER ANALYSIS REPORT

LIC WATER SYSTEM INFORMATION (to be completed by system or lab)

tem Name: _____ I.D. #: _____
ress: _____ Phone #: _____
e (check one): ( ) Community ( ) Nontransient Noncommunity ( ) Non-Community

PLE INFORMATION (to be completed by sampler)

ple Date (MMDDYY): 3/25/94 Sample Time: 1121
ple Location (be specific): ATI Lab I.D. 403707 - 644 S/F WTP B-804
pler Name and Phone: Bill Clossey
pler's Signature: Bill Clossey Title: Physical Sci Tech

Type(s): ( ) Distribution ( ) Recheck of MCL ( ) Resample of Lab Invalidated Sample
( ) Clearance ( ) Thm Max Res Time ( ) Plant Tap
( ) Dist. entry pt ( ) Raw ( ) Composite of Multiple Sites--Attach a format for each site

ORATORY CERTIFICATION INFORMATION (to be completed by lab)

Name: Southern Analytical Laboratories, Inc. HRS #: 84269 Expir. Date: 6/30/94
ress: 110 Bayview Blvd., Oldsmar, FL 34677 Phone #: (813) 855-1844

ontracted Lab HRS #: _____ Groups Analyzed: _____
_____ Groups Analyzed: _____

LYSIS INFORMATION (to be completed by lab)

e Sample(s) Received: 3/29/94, 0940 SAL Sample No. 06570-01
(s) Analyzed & Results attached for compliance with 17-550, F.A.C.:

( ) Nitrate	( ) Nitrite	( ) Asbestos	( ) Turbidity
Inorganics-- ( ) All 18 ( ) Partial	Trihalomethanes-- ( ) All 4 ( ) Partial	Volatile Organics-- (X) All 21 ( ) Partial	Secondaries-- ( ) All 14 ( ) Partial
Pesticides & PCBs-- ( ) All 29 ( ) Partial	Group I Unregulated-- ( ) All 13 ( ) Partial	Group II Unregulated-- ( ) All 37 ( ) Partial	Radiochemicals-- ( ) Single Sample ( ) Qtly Composite*

* Provide radiochemical sample dates & locations for each quarter

, Francis I. Daniels, do HEREBY CERTIFY that all attached analytical data are correct.
ignature _____
itle Laboratory Director Date: April 14, 1994

PLIANCE INFORMATION (to be completed by State)

r Collection Satisfactory: _____ Sample Analysis Satisfactory: _____
ample Requested for: _____ Reason: _____
son notified to resample: _____ Date Notified: _____
/ACPHU Reviewing Official: D-1

Southern Analytical
Project No. 06570
April 14, 1994

VOLATILE ORGANIC ANALYSIS
17-550.310(2)(b)
(PWS028)

Parameter ID	NAME	Sample Number	Analysis Results (ug/l)	Analyt. Method	Detection Used (ug/l)	Analysis Date
2378	1,2,4-Trichlorobenzene	06570-01	0.5 U	EPA 502.2	0.5	4/9/94
2380	cis-1,2-Dichloroethene	06570-01	0.2 U	EPA 502.2	0.2	4/9/94
2955	Xylenes (Total)	06570-01	0.5 U	EPA 502.2	0.5	4/9/94
2964	Dichloromethane	06570-01	0.5 U	EPA 502.2	0.5	4/9/94
2968	o-Dichlorobenzene	06570-01	0.5 U	EPA 502.2	0.5	4/9/94
2969	p-Dichlorobenzene	06570-01	0.5 U	EPA 502.2	0.5	4/9/94
2976	Vinyl chloride	06570-01	0.5 U	EPA 502.2	0.5	4/9/94
2977	1,1-Dichloroethene	06570-01	0.5 U	EPA 502.2	0.5	4/9/94
2979	trans-1,2-Dichloroethene	06570-01	0.5 U	EPA 502.2	0.5	4/9/94
2980	1,2-Dichloroethane	06570-01	0.2 U	EPA 502.2	0.2	4/9/94
2981	1,1,1-Trichloroethane	06570-01	0.3 U	EPA 502.2	0.3	4/9/94
2982	Carbon tetrachloride	06570-01	0.3 U	EPA 502.2	0.3	4/9/94
2983	1,2-Dichloropropane	06570-01	0.3 U	EPA 502.2	0.3	4/9/94
2984	Trichloroethene	06570-01	0.2 U	EPA 502.2	0.2	4/9/94
2985	1,1,2-Trichloroethane	06570-01	0.3 U	EPA 502.2	0.3	4/9/94
2987	Tetrachloroethene	06570-01	0.2 U	EPA 502.2	0.2	4/9/94
2989	Monochlorobenzene	06570-01	0.5 U	EPA 502.2	0.5	4/9/94
2990	Benzene	06570-01	2.9	EPA 502.2	0.5	4/9/94
2991	Toluene	06570-01	0.5 U	EPA 502.2	0.5	4/9/94
2992	Ethylbenzene	06570-01	0.5 U	EPA 502.2	0.5	4/9/94
2996	Styrene	06570-01	0.5 U	EPA 502.2	0.5	4/9/94

MCL 1.0

U - Analyte was not detected; indicated concentration is method detection limit.

Navy Public Works Center
Environmental Laboratory

Bldg.3297, Code 920
NAS Pensacola, Fl. 32508-6500
Phone 904-452-3642/4758
Autovon 922-3642

Laboratory Report

Requester: PWC Utilities Dept.
Address: NAS Pensacola, Pensacola, FL 32506
Phone #: 452-6674
Contact: Tom Lee

Lab ID Number: 9405096
Received Date: 26 Apr 94
Sample Site: Saufley Field Bldg 804
Job Order #: 515 2106

Sample ID#	Lab	1- 2308	2- 2309	3-	4-
Sample Name	Requester	Inside Tap	Outside Tap		
Collector Name		Bill Clossey	Bill Clossey		
Date/Time	Comp start				
Collected	Comp stop				
(Military)	Grab	26 Apr 94 @ 0747	26 Apr 94 @0752		
Sample Type	Comp/Grab	Grab	Grab		
Analyst		J.W. Moore	J.W. Moore		
Date of Analysis		29 Apr 94	29 Apr 94		
Sample Matrix		Drinking Water	Drinking Water		
Dilution		Dilution X 1	Dilution X 1	Dilution X 1	Dilution X 1

PARAMETER		ID#		Det.	ID#		Det.	ID#		Det.	ID#		Det.
Volatiles by GCMS (Capillary)	METHOD #	1- 2308	units	Limit	2- 2309	units	Limit	3- 0	units	Limit	4- 0	units	Limit
Benzene	EPA 524.2	2.6	ug/l	0.2	2.5	ug/l	0.2		ug/l	0.2		ug/l	0.2
Bromobenzene	EPA 524.2	BDL	ug/l	0.4	BDL	ug/l	0.4		ug/l	0.4		ug/l	0.4
Bromochloromethane	EPA 524.2	BDL	ug/l	0.3	BDL	ug/l	0.3		ug/l	0.3		ug/l	0.3
Bromodichloromethane	EPA 524.2	BDL	ug/l	0.7	BDL	ug/l	0.7		ug/l	0.7		ug/l	0.7
Bromoform	EPA 524.2	BDL	ug/l	0.8	BDL	ug/l	0.8		ug/l	0.8		ug/l	0.8
Bromomethane	EPA 524.2	BDL	ug/l	1.0	BDL	ug/l	1.0		ug/l	1.0		ug/l	1.0
n-Butylbenzene	EPA 524.2	BDL	ug/l	1.2	BDL	ug/l	1.2		ug/l	1.2		ug/l	1.2
sec-Butylbenzene	EPA 524.2	BDL	ug/l	1.0	BDL	ug/l	1.0		ug/l	1.0		ug/l	1.0
tert-Butylbenzene	EPA 524.2	BDL	ug/l	0.8	BDL	ug/l	0.8		ug/l	0.8		ug/l	0.8
Carbon Tetrachloride	EPA 524.2	BDL	ug/l	0.4	BDL	ug/l	0.4		ug/l	0.4		ug/l	0.4
Chlorobenzene	EPA 524.2	BDL	ug/l	0.4	BDL	ug/l	0.4		ug/l	0.4		ug/l	0.4
Chloroethane	EPA 524.2	BDL	ug/l	0.2	BDL	ug/l	0.2		ug/l	0.2		ug/l	0.2
Chloroform	EPA 524.2	BDL	ug/l	0.2	BDL	ug/l	0.2		ug/l	0.2		ug/l	0.2
Chloromethane	EPA 524.2	BDL	ug/l	0.3	BDL	ug/l	0.3		ug/l	0.3		ug/l	0.3
2-Chlorotoluene	EPA 524.2	BDL	ug/l	0.4	BDL	ug/l	0.4		ug/l	0.4		ug/l	0.4
4-Chlorotoluene	EPA 524.2	BDL	ug/l	0.4	BDL	ug/l	0.4		ug/l	0.4		ug/l	0.4
Dibromochloromethane	EPA 524.2	BDL	ug/l	0.6	BDL	ug/l	0.6		ug/l	0.6		ug/l	0.6
1,2-Dibromo-3-chloropropane	EPA 524.2	BDL	ug/l	0.9	BDL	ug/l	0.9		ug/l	0.9		ug/l	0.9
1,2-Dibromoethane	EPA 524.2	BDL	ug/l	0.7	BDL	ug/l	0.7		ug/l	0.7		ug/l	0.7
Dibromomethane	EPA 524.2	BDL	ug/l	0.5	BDL	ug/l	0.5		ug/l	0.5		ug/l	0.5
1,2-Dichlorobenzene	EPA 524.2	BDL	ug/l	0.7	BDL	ug/l	0.7		ug/l	0.7		ug/l	0.7
1,3-Dichlorobenzene	EPA 524.2	BDL	ug/l	0.5	BDL	ug/l	0.5		ug/l	0.5		ug/l	0.5
1,4-Dichlorobenzene	EPA 524.2	BDL	ug/l	0.5	BDL	ug/l	0.5		ug/l	0.5		ug/l	0.5
Dichlorodifluoromethane	EPA 524.2	BDL	ug/l	0.1	BDL	ug/l	0.1		ug/l	0.1		ug/l	0.1
1,1-Dichloroethane	EPA 524.2	BDL	ug/l	0.1	BDL	ug/l	0.1		ug/l	0.1		ug/l	0.1
1,2-Dichloroethane	EPA 524.2	BDL	ug/l	0.4	BDL	ug/l	0.4		ug/l	0.4		ug/l	0.4
1,1-Dichloroethene	EPA 524.2	BDL	ug/l	0.2	BDL	ug/l	0.2		ug/l	0.2		ug/l	0.2
cis-1,2-Dichloroethene	EPA 524.2	BDL	ug/l	0.2	BDL	ug/l	0.2		ug/l	0.2		ug/l	0.2
trans-1,2-Dichloroethene	EPA 524.2	BDL	ug/l	0.1	BDL	ug/l	0.1		ug/l	0.1		ug/l	0.1
1,2-Dichloropropane	EPA 524.2	BDL	ug/l	0.3	BDL	ug/l	0.3		ug/l	0.3		ug/l	0.3
1,3-Dichloropropane	EPA 524.2	BDL	ug/l	0.5	BDL	ug/l	0.5		ug/l	0.5		ug/l	0.5
2,2-Dichloropropane	EPA 524.2	BDL	ug/l	1.1	BDL	ug/l	1.1		ug/l	1.1		ug/l	1.1
1,1-Dichloropropene	EPA 524.2	BDL	ug/l	0.2	BDL	ug/l	0.2		ug/l	0.2		ug/l	0.2
cis-1,3-Dichloropropene	EPA 524.2	BDL	ug/l	0.3	BDL	ug/l	0.3		ug/l	0.3		ug/l	0.3
trans-1,3-Dichloropropene	EPA 524.2	BDL	ug/l	0.4	BDL	ug/l	0.4		ug/l	0.4		ug/l	0.4
Ethylbenzene	EPA 524.2	BDL	ug/l	0.3	BDL	ug/l	0.3		ug/l	0.3		ug/l	0.3
Hexachlorobutadiene	EPA 524.2	BDL	ug/l	1.6	BDL	ug/l	1.6		ug/l	1.6		ug/l	1.6
Isopropylbenzene	EPA 524.2	BDL	ug/l	0.5	BDL	ug/l	0.5		ug/l	0.5		ug/l	0.5
p-Isopropyltoluene	EPA 524.2	BDL	ug/l	0.9	BDL	ug/l	0.9		ug/l	0.9		ug/l	0.9
Methylene chloride	EPA 524.2	BDL	ug/l	0.2	BDL	ug/l	0.2		ug/l	0.2		ug/l	0.2

P-3

Rec'd 5/23/94
BJ2

PUBLIC DRINKING WATER ANALYSIS REPORTING FORMAT

Public Water System Information (to be completed by system or lab)
System Name: Saufley Field I.D. #: 1170899
Address: 310 John Tower Road; Code 671; NAS Pensacola, FL 32508 Phone: (904) 452-3055

Type (check one): (X) Community ( ) Nontransient Noncommunity ( ) Noncommunity

CALLED SHAPPOINTMENT 5/24/94

SAMPLE INFORMATION (to be completed by sampler)
Sample Date (MMDDYY): 05/09/94 Sample Time: 10:30 am

Sample Location (be specific): AA54281 - Well #4 Raw

Sampler Name and Phone: Cynthia Tucker - (904) 944-9772

Sampler's Signature: Cynthia R. Tucker Title: Sampling Tech.

Check Type(s): ( ) Distribution ( ) Recheck of MCL ( ) Resample of Lab Invalidated Sample
( ) Clearance ( ) Thm Max Res Time (X) Plant Tap
( ) Distrib entry pt (X) Raw ( ) Composite of Multiple Sites--Attach a format for each site

LABORATORY CERTIFICATION INFORMATION (to be completed by lab)
Lab Name: Law Environmental National Labs HRS #: 81393 Expiration Date: 06/30/94
Address: 2400 W. Michigan Ave., Ste. 5; Pensacola, FL 32526 Phone #: (904) 944-9772

Subcontracted Lab HRS #: _____ Groups Analyzed: _____

ANALYSIS INFORMATION (to be completed by lab)
Date Sample(s) Received: 05/09/94 Group(s) Analyzed & Results attached for compliance with 17-550, F.A.C.:

( ) Nitrate ( ) Nitrite ( ) Asbestos ( ) Turbidity

Inorganics--	Trihalomethanes--	Volatile Organics--	Secondaries--
( )All 18 ( )Partial	( )All 4 ( )Partial	(X)All 21 ( )Partial	( )All 14 ( )Partial
Pesticides & PCBs--	**Group I Unregulateds--**	**Group II Unregulateds--**	**Radiochemicals--**
( )All 29 ( )Partial	( )All 13 ( ) Partial	( )All 37 ( )Partial	( )Single Sample ( )Quarterly Composite*

*Provide radionuchemical sample dates & locations for each quarter

I, James M.G. Tucci, do HEREBY CERTIFY that all attached data are correct.

Signature: _____

Title: Laboratory Manager Date: May 18, 1994

COMPLIANCE INFORMATION (to be completed by State)

Sample Collection Satisfactory: _____ Sample Analysis Satisfactory: _____

Resample Requested for: _____ Reason: _____

Person notified to resample: D-4 Date Notified: _____

DER/ACPHU Reviewing Official: _____

Rec'd 6/1/94 BJT

Law Environmental National Labs
May 18, 1994

VOLATILE ORGANIC ANALYSIS
17-550.310(2)(b)
(PWS028)

PARAMETER ID	NAME	SAMPLE NUMBER	ANALYSIS RESULT (ug/l)	ANALYTICAL METHOD	DETECTION LIMIT (ug/l)	ANALYSIS DATE
2378	1,2,4-trichlorobenzene	AA54281	<0.6	524.2	0.6	05/11/94
2380	cis-1,2-dichloroethylene	AA54281	<0.2	524.2	0.2	05/11/94
2955	Xylenes (total)	AA54281	<0.5	524.2	0.5	05/11/94
2964	Dichloromethane	AA54281	<0.5	524.2	0.5	05/11/94
2968	O-dichlorobenzene	AA54281	<0.3	524.2	0.3	05/11/94
2969	Para-dichlorobenzene	AA54281	<0.3	524.2	0.3	05/11/94
2976	Vinyl chloride	AA54281	<0.2	524.2	0.2	05/11/94
2977	1,1-Dichloroethylene	AA54281	<0.4	524.2	0.4	05/11/94
2979	trans-1,2-dichloroethylene	AA54281	<1.0	524.2	1.0	05/11/94
2980	1,2-Dichloroethane	AA54281	<0.4	524.2	0.4	05/11/94
2981	1,1,1-Trichloroethane	AA54281	<0.2	524.2	0.2	05/11/94
2982	Carbon tetrachloride	AA54281	<0.2	524.2	0.2	05/11/94
2983	1,2-Dichloropropane	AA54281	<0.3	524.2	0.3	05/11/94
2984	Trichloroethylene	AA54281	<0.2	524.2	0.2	05/11/94
2985	1,1,2-trichloroethane	AA54281	<0.3	524.2	0.3	05/11/94
2987	Tetrachloroethylene	AA54281	<0.08	524.2	0.08	05/11/94
2989	Monochlorobenzene	AA54281	<0.2	524.2	0.2	05/11/94
2990	Benzene	AA54281	3.4	524.2	0.2	05/11/94
2991	Toluene	AA54281	<0.4	524.2	0.4	05/11/94
2992	Ethylbenzene	AA54281	<0.2	524.2	0.2	05/11/94
2996	Styrene	AA54281	<0.3	524.2	0.3	05/11/94

Well #4 Raw
Law Environmental National Labs HRS #81393

Rec'd 5/23/94 BJ2

PUBLIC DRINKING WATER ANALYSIS REPORTING FORMAT

Public Water System Information (to be completed by system or lab)
System Name: Saufley Field I.D. #: 1170899
Address: 310 John Tower Road; Code 671; NAS Pensacola, FL 32508 Phone: (904) 452-3055

Type (check one): (X) Community ( ) Nontransient Noncommunity ( ) Noncommunity

SAMPLE INFORMATION (to be completed by sampler)
Sample Date (MMDDYY): 05/09/94 Sample Time: 10:50 am

Sample Location (be specific): AA54282 - Well #3 Raw

Sampler Name and Phone: Cynthia Tucker - (904) 944-9772

Sampler's Signature: Cynthia D. Tucker Title: Sampling Tech.

Check Type(s): ( ) Distribution ( ) Recheck of MCL ( ) Resample of Lab Invalidated Sample
( ) Clearance ( ) Thm Max Res Time (X) Plant Tap
( ) Distrib entry pt (X) Raw ( ) Composite of Multiple Sites--Attach a format for each site

LABORATORY CERTIFICATION INFORMATION (to be completed by lab)
Lab Name: Law Environmental National Labs HRS #: 81393 Expiration Date: 06/30/94
Address: 2400 W. Michigan Ave., Ste. 5; Pensacola, FL 32526 Phone #: (904) 944-9772

Subcontracted Lab HRS #: _____ Groups Analyzed: _____

ANALYSIS INFORMATION (to be completed by lab)
Date Sample(s) Received: 05/09/94 Group(s) Analyzed & Results attached for compliance with 17-550, F.A.C.:

( ) Nitrate ( ) Nitrite ( ) Asbestos ( ) Turbidity

Inorganics--	Trihalomethanes--	Volatile Organics--	Secondaries--
( )All 18 ( )Partial	( )All 4 ( )Partial	(X)All 21 ( )Partial	( )All 14 ( )Partial
Pesticides & PCBs--	**Group I Unregulateds--**	**Group II Unregulateds--**	**Radiochemicals--**
( )All 29 ( )Partial	( )All 13 ( ) Partial	( )All 37 ( )Partial	( )Single Sample ( )Quarterly Composite*

*Provide radionuchemical sample dates & locations for each quarter

I, James M.G. Tucci, do HEREBY CERTIFY that all attached data are correct.

Signature: JMG Tucci

Title: Laboratory Manager Date: May 18, 1994

COMPLIANCE INFORMATION (to be completed by State)

Sample Collection Satisfactory: _____ Sample Analysis Satisfactory: _____

Resample Requested for: _____ Reason: _____

Person notified to resample: _____ D-6 Date Notified: _____

DER/ACPHU Reviewing Official: _____

Law Environmental National Labs
May 18, 1994

VOLATILE ORGANIC ANALYSIS
17-550.310(2)(b)
(PWS028)

PARAMETER ID	NAME	SAMPLE NUMBER	ANALYSIS RESULT (ug/l)	ANALYTICAL METHOD	DETECTION LIMIT (ug/l)	ANALYSIS DATE
2378	1,2,4-trichlorobenzene	AA54282	<0.6	524.2	0.6	05/11/94
2380	cis-1,2-dichloroethylene	AA54282	<0.2	524.2	0.2	05/11/94
2955	Xylenes (total)	AA54282	<0.5	524.2	0.5	05/11/94
2964	Dichloromethane	AA54282	<0.5	524.2	0.5	05/11/94
2968	O-dichlorobenzene	AA54282	<0.3	524.2	0.3	05/11/94
2969	Para-dichlorobenzene	AA54282	<0.3	524.2	0.3	05/11/94
2976	Vinyl chloride	AA54282	<0.2	524.2	0.2	05/11/94
2977	1,1-Dichloroethylene	AA54282	<0.4	524.2	0.4	05/11/94
2979	trans-1,2-dichloroethylene	AA54282	<1.0	524.2	1.0	05/11/94
2980	1,2-Dichloroethane	AA54282	<0.4	524.2	0.4	05/11/94
2981	1,1,1-Trichloroethane	AA54282	<0.2	524.2	0.2	05/11/94
2982	Carbon tetrachloride	AA54282	<0.2	524.2	0.2	05/11/94
2983	1,2-Dichloropropane	AA54282	<0.3	524.2	0.3	05/11/94
2984	Trichloroethylene	AA54282	<0.2	524.2	0.2	05/11/94
2985	1,1,2-trichloroethane	AA54282	<0.3	524.2	0.3	05/11/94
2987	Tetrachloroethylene	AA54282	<0.08	524.2	0.08	05/11/94
2989	Monochlorobenzene	AA54282	<0.2	524.2	0.2	05/11/94
2990	Benzene	AA54282	<0.2	524.2	0.2	05/11/94
2991	Toluene	AA54282	<0.4	524.2	0.4	05/11/94
2992	Ethylbenzene	AA54282	<0.2	524.2	0.2	05/11/94
2996	Styrene	AA54282	<0.3	524.2	0.3	05/11/94

Well #3 Raw
Law Environmental National Labs HRS #81393

LAW ENVIRONMENTAL, INC.
NATIONAL LABORATORIES
7215 PINE FOREST ROAD
PENSACOLA, FLORIDA 32526
(904) 944-9772

CHAIN OF C STODY RECORD

10473

SAMPLING INFORMATION
NPDES NUMBER

NAME OF FACILITY: SAMFTLY FIELD
STREET ADDRESS:

PROJECT NAME: SF WELLS
JOB NO.: 5152106
SAMPLERS (SIGNATURE): Cynthia D Zelle
SAMPLING DATE: 5-9-94

TIME	GRAB	COMP	*SOURCE CODE	SAMPLE STATION DESCRIPTION	TOTAL NO. OF CONTAINERS	40 ml G VOA HCl	1 L G - AMBER	8 oz. G. W/M	2 oz. G. W/M	1 L G (H_2SO_4)	500 ml - AMBER	1 L. PL (HNO_3)	1 L. PL (H_2SO_4)	1L. PL (NaOH+Ascorbic Acid)	1 L. PL (Zn Acetate + NaOH)	1 L. PL	4 oz. PL W/M	250 ml PL	1 L. TEFLON	LENL LAB NO
1030	X		DW	Well 4 RAW	3	3												AA54281		~~AA5427~~
1050	X		DW	Well 3 RAW	3	3												AA54282		~~AA54275~~
~	~			TRIP BLANK	2	2												AA54283		~~AA54276~~

RELINQUISHED BY:	DATE / TIME	RECEIVED BY:	DATE / TIME	RELINQUISHED BY:	RECEIVED BY LABORATORY:	DATE / TIME
Cynthia D Zelle (SIGNATURE)	5/9/94 1110	(SIGNATURE)		(SIGNATURE)	Cynthia D Zelle (SIGNATURE)	5/9/94 1110

DISTRIBUTION: ORIGINAL AND YELLOW COPIES ACCOMPANY SAMPLE SHIPMENT TO LABORATORY. PINK COPY RETAINED BY SAMPLERS. YELLOW COPY RETAINED BY LABORATORY.

REMARKS

BRENDA TAYLOR NEEDS RESULTS ASAP.
3-5 DAYS.

***SOURCE CODES**

RECOVERY WELL - RW
RCRA MONITORING WELL - MW
SOIL / SEDIMENT - SO
SLUDGE - SL
NPDES DISCHARGE - ND
DRINKING WATER - DW
HAZARDOUS WASTE - HW
SURFACE WATER - SW

①

Field Sampling Information

Project Name NAS - PWC Date 5-9-94

Project Number 515206 Samplers Signature Cynthia D. Ken

Location D.W. WELLS @ SAUFLEY FIELD COC Number 10473

Sample Station	Description of Sample	Water Level
Well #4 RAW	Potable DW from well. (RAW) Clear and odorless.	Result: ~ Date: ~ Time: ~

Time of Collection 1030

Samples Collected Operator turned HOA's for Well #4 and #3 to the Hand (Manual) position. After 15 minutes, opened the sampling spigot and let the water flow for 1-2 minutes. Then filled 3-40 ml HCl pres. vials with untreated raw water. Made sure no air bubbles in VOA's. Wrapped VOA's in bubble pkg and placed in cooler with ice for transport.

Weather Condition: P-CLDY. 75°F WIND 0-2 MPH

Site Condition: NORMAL. BLDG 873. BRENDA TAYLOR w/ME.

M Well Condition: ~

pH: ~ Conductivity: ~ Temperature: ~

Sample Station	Description of Sample	Water Level
Well 3 RAW	Potable D.W. from well. (RAW) Clear and odorless.	Result: ~ Date: ~ Time: ~

Time of Collection 1050

Samples Collected Since operator had turned switch in Hand (Manual) previously @ 1015 opened sampling spigot and allowed water to flow for 2-3 minutes. Filled 3-40 ml VOAS with untreated, raw water. Made sure no air bubbles in VOAS. Wrapped them in bubble wrap bags and placed in cooler for transport.

Weather Condition: P-CLDY. 75°F WIND 0-2 MPH

Site Condition: NORMAL. BLDG 870. BRENDA TAYLOR w/ME.

M Well Condition: ~

pH: ~ Conductivity: ~ Temperature: ~

(2)

Field Sampling Information

Project Name NAS-PWC Date 5-9-94

Project Number 5152106 Samplers Signature Cynthia Dalton

Location D.W. WELLS @ SHAFFLY FIELD COC Number 10473

Sample Station	Description of Sample	Water Level
Trip Blank	TYPE WATER in 2-40mL VOAS HCL pres. w/ custody seals.	Result: ~ Date: ~ Time: ~
Time of Collection ~	Samples Collected Collected TYPE WATER IN 2-40 mL VOAS HCL PRESERVED. MADE SURE AIR BUBBLES ABSENT. PLACED CUSTODY SEALS OVER CAP AND WRAPPED THEM in a Bubble Bag. PLACED Weather Condition: ~ Site Condition: NORMAL M Well Condition: ~ pH: ~ Conductivity: ~ Temperature: ~	

Sample Station	Description of Sample	Water Level
		Result: Date: Time:
Time of Collection	Samples Collected Weather Condition: Site Condition: M Well Condition: pH: Conductivity: Temperature:	

CDT

LAW EI RONMENTAL NATIONAL LABORA IES
Daily Report of Field Activities

EMPLOYEES	PRINT NAME
Sampler	C Tucker
Helper	
Helper	
Proj. Man.	
Fld. Supr.	

SUPPLIES	NO. USED
Bailers	
Sample Cont.	
Int. Probe	
Cond. Meter	
Pump	

ACCOUNTING FOR DAILY ACTIVITY BY ITEM	
Item	Desc. of Item
1.	Travel
2.	Project Prep.
3.	Set-Up/Field Prep
4.	Water Level
5.	Purging Mon. Well
6.	Sample Collection
7.	Decontamination
8.	Site Clean-Up
9.	Standby with Crew
10.	Meal Break
11.	Purging Well
12.	
13.	
14.	
15.	

FROM		TO	ITEM#
5:00 AM	TO	5:30 AM	
5:30 AM	TO	6:00 AM	
6:00 AM	TO	6:30 AM	
6:30 AM	TO	7:00 AM	
7:00 AM	TO	7:30 AM	
7:30 AM	TO	8:00 AM	
8:00 AM	TO	8:30 AM	
8:30 AM	TO	9:00 AM	
9:00 AM	TO	9:30 AM	
9:30 AM	TO	10:00 AM	1
10:00 AM	TO	10:30 AM	9 11 6
10:30 AM	TO	11:00 AM	11 6
11:00 AM	TO	11:30 AM	
11:30 AM	TO	12:00 PM	
12:00 PM	TO	12:30 PM	
12:30 PM	TO	1:00 PM	
1:00 PM	TO	1:30 PM	
1:30 PM	TO	2:00 PM	
2:00 PM	TO	2:30 PM	
2:30 PM	TO	3:00 PM	
3:00 PM	TO	3:30 PM	
3:30 PM	TO	4:00 PM	
4:00 PM	TO	4:30 PM	
4:30 PM	TO	5:00 PM	
5:00 PM	TO	5:30 PM	
5:30 PM	TO	6:00 PM	
6:00 PM	TO	6:30 PM	
6:30 PM	TO	7:00 PM	
7:00 PM	TO	7:30 PM	
7:30 PM	TO	8:00 PM	
8:00 PM	TO	8:30 PM	
8:30 PM	TO	9:00 PM	
9:00 PM	TO	9:30 PM	
9:30 PM	TO	10:00 PM	
10:00 PM	TO	10:30 PM	
10:30 PM	TO	11:00 PM	
		TOTAL HOURS	

CLIENT: NAS-PNC	DATE: 5-9-94
LOCATION: Southly Field	JOB #: 5152106

CHARGES:	
Supplies	
Fld. Serv. @ $35/Hr	
Miscellaneous	
TOTAL CHARGES:	

ADDITIONAL COMMENTS: Met Brenda Day @ Front Gate. She rode w/ me to Well #4. Operator was not there. Mrs Taylor called to ensure Operator was on the way to the wells. We waited for operator to arrive. Operator turned HOA's to "Hand" for both wells @ 10:

Client's Supervisor:

Law Environmer l, Inc.
Pensacola Branch
7215 Pine Forest Road
Pensacola, Florida 32526

FILE

May 13, 1994

Ms. Brenda Taylor
NAS-PWC
Code 915.2, Building 3691
Pensacola, FL 32508
Client #21458 J.O. #5152106

CAROLYN @ CIVIL 944-9772
1215 on 13 MAY 94

Dear: Ms. Taylor:

Below are the results of analysis of 3 samples received for examination on May 10, 1994:

Sample I.D. AA54281 Location code: NASSF
Purchase order number: 5152106 Project account code: 21458
Location Description: Well #4 Raw
Sample collector: CYNTHIA TUCKER
Sample collection date: 05/09/94 Time: 10:30
Lab submittal date: 05/10/94 Time: 09:27

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Multicomponent analysis: 2322-Drinking W. VOA EPA 524.2			
Benzene	ug/L	3.4	0.2
Bromobenzene	ug/L	Not detected	0.2
Bromodichloromethane	ug/L	Not detected	0.2
Bromoform	ug/L	Not detected	1.2
Bromomethane	ug/L	Not detected	0.5
n-Butylbenzene	ug/L	Not detected	0.1
sec-Butylbenzene	ug/L	Not detected	0.06
tert-Butylbenzene	ug/L	Not detected	0.1
Carbon tetrachloride	ug/L	Not detected	0.2
Chlorobenzene	ug/L	Not detected	0.2
Chloroethane	ug/L	Not detected	0.8
Chloroform	ug/L	Not detected	0.2
Chloromethane	ug/L	Not detected	0.7
2-Chlorotoluene	ug/L	Not detected	0.2
4-Chlorotoluene	ug/L	Not detected	0.3
Dibromochloromethane	ug/L	Not detected	0.3
1,2-Dibromo-3-chloropropane	ug/L	Not detected	0.3
1,2-Dibromoethane	ug/L	Not detected	0.3
Dibromomethane	ug/L	Not detected	0.3
1,2-Dichlorobenzene	ug/L	Not detected	0.3
1,3-Dichlorobenzene	ug/L	Not detected	0.3
1,4-Dichlorobenzene	ug/L	Not detected	0.3
Dichlorodifluoromethane	ug/L	Not detected	0.5
1,1-Dichloroethane	ug/L	Not detected	0.2
1,2-Dichloroethane	ug/L	Not detected	0.4
1,1-Dichloroethene	ug/L	Not detected	0.4

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Multicomponent analysis: 2322-Drinking W. VOA EPA 524.2 (continued)			
cis-1,2-Dichloroethene	ug/L	Not detected	0.2
trans-1,2-Dichloroethene	ug/L	Not detected	1.0
1,2-Dichloropropane	ug/L	Not detected	0.3
1,3-Dichloropropane	ug/L	Not detected	0.2
2,2-Dichloropropane	ug/L	Not detected	0.2
1,1-Dichloropropene	ug/L	Not detected	0.2
cis-1,3-Dichloropropene	ug/L	Not detected	0.2
trans-1,3-Dichloropropene	ug/L	Not detected	0.3
Ethylbenzene	ug/L	Not detected	0.2
Hexachlorobutadiene	ug/L	Not detected	0.2
Isopropylbenzene	ug/L	.36	0.2
p-Isopropyltoluene	ug/L	.24	0.2
Methylene chloride	ug/L	Not detected	2.0
Methyl-tert-butyl-ether	ug/L	Not detected	5.0
Naphthalene	ug/L	Not detected	0.6
n-Propylbenzene	ug/L	Not detected	0.2
Styrene	ug/L	Not detected	0.3
1,1,1,2-Tetrachloroethane	ug/L	Not detected	0.3
1,1,2,2-Tetrachloroethane	ug/L	Not detected	0.3
Tetrachloroethene	ug/L	Not detected	0.08
Toluene	ug/L	Not detected	0.4
1,2,3-Trichlorobenzene	ug/L	Not detected	0.8
1,2,4-Trichlorobenzene	ug/L	Not detected	0.6
1,1,1-Trichloroethane	ug/L	Not detected	0.2
1,1,2-Trichloroethane	ug/L	Not detected	0.3
Trichloroethene	ug/L	Not detected	0.2
Trichlorofluoromethane	ug/L	Not detected	0.9
1,2,3-Trichloropropane	ug/L	Not detected	0.8
1,2,4-Trimethylbenzene	ug/L	1.8	0.3
1,3,5-Trimethylbenzene	ug/L	Not detected	0.2
Vinyl chloride	ug/L	Not detected	0.2
o-Xylene	ug/L	Not detected	0.2
m-Xylene	ug/L	Not detected	0.5
p-Xylene	ug/L	Not detected	0.5
Xylene (total)	ug/L	Not detected	0.5

Sample I.D. AA54282 Location code: NASSF
Purchase order number: 5152106 Project account code: 21458
Location Description: Well #3 Raw
Sample collector: CYNTHIA TUCKER
Sample collection date: 05/09/94 Time: 10:50
Lab submittal date: 05/10/94 Time: 09:27

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Multicomponent analysis: 2322-Drinking W. VOA EPA 524.2			
Benzene	ug/L	Not detected	0.2
Bromobenzene	ug/L	Not detected	0.2
Bromodichloromethane	ug/L	Not detected	0.2
Bromoform	ug/L	Not detected	1.2
Bromomethane	ug/L	Not detected	0.5
n-Butylbenzene	ug/L	Not detected	0.1
sec-Butylbenzene	ug/L	Not detected	0.06
tert-Butylbenzene	ug/L	Not detected	0.1
Carbon tetrachloride	ug/L	Not detected	0.2
Chlorobenzene	ug/L	Not detected	0.2
Chloroethane	ug/L	Not detected	0.8
Chloroform	ug/L	Not detected	0.2
Chloromethane	ug/L	Not detected	0.7
2-Chlorotoluene	ug/L	Not detected	0.2
4-Chlorotoluene	ug/L	Not detected	0.3
Dibromochloromethane	ug/L	Not detected	0.3
1,2-Dibromo-3-chloropropane	ug/L	Not detected	0.3
1,2-Dibromoethane	ug/L	Not detected	0.3
Dibromomethane	ug/L	Not detected	0.3
1,2-Dichlorobenzene	ug/L	Not detected	0.3
1,3-Dichlorobenzene	ug/L	Not detected	0.3
1,4-Dichlorobenzene	ug/L	Not detected	0.3
Dichlorodifluoromethane	ug/L	Not detected	0.5
1,1-Dichloroethane	ug/L	Not detected	0.2
1,2-Dichloroethane	ug/L	Not detected	0.4
1,1-Dichloroethene	ug/L	Not detected	0.4
cis-1,2-Dichloroethene	ug/L	Not detected	0.2
trans-1,2-Dichloroethene	ug/L	Not detected	1.0
1,2-Dichloropropane	ug/L	Not detected	0.3
1,3-Dichloropropane	ug/L	Not detected	0.2
2,2-Dichloropropane	ug/L	Not detected	0.2
1,1-Dichloropropene	ug/L	Not detected	0.2
cis-1,3-Dichloropropene	ug/L	Not detected	0.2
trans-1,3-Dichloropropene	ug/L	Not detected	0.3
Ethylbenzene	ug/L	Not detected	0.2
Hexachlorobutadiene	ug/L	Not detected	0.2
Isopropylbenzene	ug/L	Not detected	0.2
p-Isopropyltoluene	ug/L	Not detected	0.2
Methylene chloride	ug/L	Not detected	2.0
Methyl-tert-butyl-ether	ug/L	Not detected	5.0
Naphthalene	ug/L	Not detected	0.6
n-Propylbenzene	ug/L	Not detected	0.2
Styrene	ug/L	Not detected	0.3
1,1,1,2-Tetrachloroethane	ug/L	Not detected	0.3
1,1,2,2-Tetrachloroethane	ug/L	Not detected	0.3
Tetrachloroethene	ug/L	Not detected	0.08
Toluene	ug/L	Not detected	0.4
1,2,3-Trichlorobenzene	ug/L	Not detected	0.8
1,2,4-Trichlorobenzene	ug/L	Not detected	0.6

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Multicomponent analysis: 2322-Drinking W. VOA EPA 524.2 (continued)			
1,1,1-Trichloroethane	ug/L	Not detected	0.2
1,1,2-Trichloroethane	ug/L	Not detected	0.3
Trichloroethene	ug/L	Not detected	0.2
Trichlorofluoromethane	ug/L	Not detected	0.9
1,2,3-Trichloropropane	ug/L	Not detected	0.8
1,2,4-Trimethylbenzene	ug/L	Not detected	0.3
1,3,5-Trimethylbenzene	ug/L	Not detected	0.2
Vinyl chloride	ug/L	Not detected	0.2
o-Xylene	ug/L	Not detected	0.2
m-Xylene	ug/L	Not detected	0.5
p-Xylene	ug/L	Not detected	0.5
Xylene (total)	ug/L	Not detected	0.5

Sample I.D. AA54283 Location code: NASSF
Purchase order number: 5152106 Project account code: 21458
Location Description: Trip Blank Sample collector: CYNTHIA TUCKER
Sample collection date: 05/09/94
Lab submittal date: 05/10/94 Time: 09:27

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Multicomponent analysis: 2322-Drinking W. VOA EPA 524.2			
Benzene	ug/L	Not detected	0.2
Bromobenzene	ug/L	Not detected	0.2
Bromodichloromethane	ug/L	Not detected	0.2
Bromoform	ug/L	Not detected	1.2
Bromomethane	ug/L	Not detected	0.5
n-Butylbenzene	ug/L	Not detected	0.1
sec-Butylbenzene	ug/L	Not detected	0.06
tert-Butylbenzene	ug/L	Not detected	0.1
Carbon tetrachloride	ug/L	Not detected	0.2
Chlorobenzene	ug/L	Not detected	0.2
Chloroethane	ug/L	Not detected	0.8
Chloroform	ug/L	Not detected	0.2
Chloromethane	ug/L	Not detected	0.7
2-Chlorotoluene	ug/L	Not detected	0.2
4-Chlorotoluene	ug/L	Not detected	0.3
Dibromochloromethane	ug/L	Not detected	0.3
1,2-Dibromo-3-chloropropane	ug/L	Not detected	0.3
1,2-Dibromoethane	ug/L	Not detected	0.3
Dibromomethane	ug/L	Not detected	0.3
1,2-Dichlorobenzene	ug/L	Not detected	0.3
1,3-Dichlorobenzene	ug/L	Not detected	0.3
1,4-Dichlorobenzene	ug/L	Not detected	0.3
Dichlorodifluoromethane	ug/L	Not detected	0.5

TEST PARAMETER	UNITS	TEST RESULT	DETECTI LIMIT
Multicomponent analysis: 2322-Drinking W. VOA EPA 524.2 (continued)			
1,1-Dichloroethane	ug/L	Not detected	0.2
1,2-Dichloroethane	ug/L	Not detected	0.4
1,1-Dichloroethene	ug/L	Not detected	0.4
cis-1,2-Dichloroethene	ug/L	Not detected	0.2
trans-1,2-Dichloroethene	ug/L	Not detected	1.0
1,2-Dichloropropane	ug/L	Not detected	0.3
1,3-Dichloropropane	ug/L	Not detected	0.2
2,2-Dichloropropane	ug/L	Not detected	0.2
1,1-Dichloropropene	ug/L	Not detected	0.2
cis-1,3-Dichloropropene	ug/L	Not detected	0.2
trans-1,3-Dichloropropene	ug/L	Not detected	0.3
Ethylbenzene	ug/L	Not detected	0.2
Hexachlorobutadiene	ug/L	Not detected	0.2
Isopropylbenzene	ug/L	Not detected	0.2
p-Isopropyltoluene	ug/L	Not detected	0.2
Methylene chloride	ug/L	Not detected	2.0
Methyl-tert-butyl-ether	ug/L	Not detected	5.0
Naphthalene	ug/L	Not detected	0.6
n-Propylbenzene	ug/L	Not detected	0.2
Styrene	ug/L	Not detected	0.3
1,1,1,2-Tetrachloroethane	ug/L	Not detected	0.3
1,1,2,2-Tetrachloroethane	ug/L	Not detected	0.3
Tetrachloroethene	ug/L	Not detected	0.08
Toluene	ug/L	Not detected	0.4
1,2,3-Trichlorobenzene	ug/L	Not detected	0.8
1,2,4-Trichlorobenzene	ug/L	Not detected	0.6
1,1,1-Trichloroethane	ug/L	Not detected	0.2
1,1,2-Trichloroethane	ug/L	Not detected	0.3
Trichloroethene	ug/L	Not detected	0.2
Trichlorofluoromethane	ug/L	Not detected	0.9
1,2,3-Trichloropropane	ug/L	Not detected	0.8
1,2,4-Trimethylbenzene	ug/L	Not detected	0.3
1,3,5-Trimethylbenzene	ug/L	Not detected	0.2
Vinyl chloride	ug/L	Not detected	0.2
o-Xylene	ug/L	Not detected	0.2
m-Xylene	ug/L	Not detected	0.5
p-Xylene	ug/L	Not detected	0.5
Xylene (total)	ug/L	Not detected	0.5

Please advise should you have questions concerning these data.

Respectfully submitted,

James M.G. Tucci, Laboratory Manager

Rec'd 6/1/94 BJT

PUBLIC DRINKING WATER ANALYSIS REPORTING FORMAT

Public Water System Information (to be completed by system or lab)
System Name: Saufley Field I.D. #: 1170899
Address: 310 John Tower Road; Code 671; NAS Pensacola, FL 32508 Phone: (904) 452-3055

Type (check one): (X) Community ( ) Nontransient Noncommunity ( ) Noncommunity

SAMPLE INFORMATION (to be completed by sampler)
Sample Date (MMDDYY): 05/18/94 Sample Time: 15:15 am

Sample Location (be specific): AA54707 - Well #4 (Raw)

Sampler Name and Phone: Cynthia Tucker - (904) 944-9772

Sampler's Signature: Cynthia D. Tucker Title: Sampling Tech.

Check Type(s): ( ) Distribution ( ) Recheck of MCL ( ) Resample of Lab Invalidated Sample
( ) Clearance ( ) Thm Max Res Time (X) Plant Tap
( ) Distrib entry pt (X) Raw ( ) Composite of Multiple Sites--Attach a format for each site

LABORATORY CERTIFICATION INFORMATION (to be completed by lab)
Lab Name: Law Environmental National Labs HRS #: 81393 Expiration Date: 06/30/94
Address: 2400 W. Michigan Ave., Ste. 5; Pensacola, FL 32526 Phone #: (904) 944-9772

Subcontracted Lab HRS #: _____ Groups Analyzed: _____

ANALYSIS INFORMATION (to be completed by lab)
Date Sample(s) Received: 05/18/94 Group(s) Analyzed & Results attached for compliance with 17-550, F.A.C.:

( ) Nitrate ( ) Nitrite ( ) Asbestos ( ) Turbidity

Inorganics--	Trihalomethanes--	Volatile Organics--	Secondaries--
( )All 18 ( )Partial	( )All 4 ( )Partial	( )All 21 (X)Partial	( )All 14 ( )Partial
Pesticides & PCBs--	Group I Unregulateds--	Group II Unregulateds--	Radiochemicals--
( )All 29 ( )Partial	( )All 13 ( ) Partial	( )All 37 ( )Partial	( )Single Sample
			( )Quarterly Composite*

*Provide radionuchemical sample dates & locations for each quarter

I, James M.G. Tucci, do HEREBY CERTIFY that all attached data are correct.

Signature: _____

Title: Laboratory Manager Date: May 24, 1994

COMPLIANCE INFORMATION (to be completed by State)

Sample Collection Satisfactory: _____ Sample Analysis Satisfactory: _____

Resample Requested for: _____ Reason: _____

Person notified to resample: _____ D-18 Date Notified: _____

DER/ACPHU Reviewing Official: _____

Law Environmental National Labs
May 24, 1994

VOLATILE ORGANIC ANALYSIS
17-550.310(2)(b)
(PWS028)

PARAMETER ID	NAME	SAMPLE NUMBER	ANALYSIS RESULT (ug/l)	ANALYTICAL METHOD	DETECTION LIMIT (ug/l)	ANALYSIS DATE
2990	Benzene	AA54707	3.6	524.2	0.2	05/20/94

Well #4 (Raw)
Law Environmental National Labs HRS #81393

Rec'd [illegible]

INVOICE

From: Law Environmental, Inc.
Pensacola Branch
7215 Pine Forest Road
Pensacola, Florida 32526

Invoice Number: 236838

Date: May 24, 1994

To: Ms. Brenda Taylor
NAS-PWC Environmental Dept.
Code 915.2, Bldg. 3691
Pensacola, FL 32508
Clt. #21458 Proj. #5152106

CALL #9032
STUB #4136-5382
JOB ORDER #5152106
CONTRACT #N65114-93-A-0465

The following charges are due for the indicated sample which was submitted to this laboratory on 05/18/94:

Lab Sample I.D.: AA54707

Purchase order number: 5152106

Parameter Analyzed	Qty	Unit Price	Total Price
2322-Volatile Analysis	1	$263.00	$263.00
2301-Field Sampling	2/hrs.	$35.00	$70.00

Analysis charges subtotal for this invoice: $333.00

Total amount due on this invoice: $333.00

Remit payment to: Law Environmental, Inc.
P.O. Box 102051
Atlanta, Georgia 30368-0051

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TERMS: Net cash upon receipt of invoice. A late payment charge of 18% per annum of the maximum amount may be added in the event payment is not made within 30 days after invoice date.

LAW ENVIRONMENTAL, INC.
NATIONAL LABORATORIES
7215 PINE FOREST ROAD
PENSACOLA, FLORIDA 32526
(904) 944-9772

CHAIN OF CUSTODY RECORD

1,455

SAMPLING INFORMATION
NPDES NUMBER

NAME OF FACILITY: NAS-PWC SAUFTLY FIELD
STREET ADDRESS: BLDG 3691 NAS PEN, FL 32508

PROJECT NAME: NAS-PWC SAUFLEY FLD
JOB NO.: 5152106
SAMPLERS (SIGNATURE): Cynthia D Tucker
SAMPLING DATE: 5-18-94

TIME	GRAB	COMP.	*SOURCE CODE	SAMPLE STATION DESCRIPTION	TOTAL NO. OF CONTAINERS	40 ml G VOA HCl	1 L G - AMBER	8 oz G. W/M	2 oz. G. W/M	1 L G (H_2SO_4)	500 ml - AMBER	1 L. PL (HNO_3)	1 L. PL (H_2SO_4)	1L. PL (NaOH+Ascorbic Acid)	1 L. PL (Zn Acetate + NaOH)	1 L. PL	4 oz. PL W/M	250 ml PL	1 L. TEFLON					LENL LAB NO
1515	X		DW	Well #4 (RAW)	4	3											1							AA542
~				TRIP BLANK	2	2																		AA54708

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RELINQUISHED BY:	DATE / TIME	RECEIVED BY:	DATE / TIME	RELINQUISHED BY:	RECEIVED BY LABORATORY:	DATE / TIME
Cynthia D Tucker (SIGNATURE)	5/18/94 1550	(SIGNATURE)		(SIGNATURE)	Cynthia D Tucker (SIGNATURE)	5/18/94 155

DISTRIBUTION: ORIGINAL AND YELLOW COPIES ACCOMPANY SAMPLE SHIPMENT TO LABORATORY.
PINK COPY RETAINED BY SAMPLERS. YELLOW COPY RETAINED BY LABORATORY.

REMARKS: (1) DW FOR BENZENE ANALY. VERBAIS IN 3 DAYS, WRITTEN 6 DAYS.
250 ml pl amp for field parameters
[illegible] RHSH

*SOURCE CODES

RECOVERY WELL - RW
RCRA MONITORING WELL - MW
SOIL / SEDIMENT - SO
SLUDGE - SL
NPDES DISCHARGE - ND
DRINKING WATER - DW
HAZARDOUS WASTE - HW
SURFACE WATER - SW

FIELD SAMPLING INFORMATION

Proj Name: NAS-PWC SAWFLY FIELD Proj Number: 5152106 COC Number: 11455

Location: SAWFLY FLD WELL #4 Samplers Signature: Cynthia D Rucker

Sample Station	Description of Sample	Date of Collection: 5-18-94
Well #4 RAW	RAW WATER FROM WELL #4	Time of Collection: 1515

Site Condition: NORMAL. WELL HAD BEEN PUMPING APPROX 50 minutes.
Monitoring Well Condition: N/A
Diameter of Well: N/A inches Depth of Well: N/A feet
Height of Water Column: N/A feet
Water Level: N/A feet Date: N/A Time: N/A
Amount of Water Purged: 17,500 gallons Date: 5-18-94 Time: 1515
Samples Collected and Misc Information:

pH - ~~DI H2O~~ used pH 7 + 4 buffers to calibrate.
Cond - DI H_2O <1 us/cm LCS 1413 = 1397 = 98.8% acc
pH: 5.57 units Conduct: 45.1 micromho's Temp: 26.1° celsius

Sample Station	Description of Sample	Date of Collection: 5-18-94
Trip Blank	PURGED DI WATER TRIP Blank Water	Time of Collection: 1420

Site Condition: NORMAL.
Monitoring Well Condition: N/A
Diameter of Well: N/A inches Depth of Well: N/A feet
Height of Water Column: N/A feet
Water Level: N/A feet Date: N/A Time: N/A
Amount of Water Purged: N/A gallons Date: N/A Time: N/A
Samples Collected and Misc Information: PURGED DI water ~~for~~ on ~~3-4 minutes~~ Then collected water in 2-VOL HCL preserved VIALS. ENSURED AIR BUBBLES ABSENT. PLACED CUSTODY SEALS OVER CAP. PLACED T.B. in cooler with other sample containers.

pH: N/A units Conduct: N/A micromho's Temp: N/A celsius

For more information see Field Service Cover Sheet

ENVIRONMENTAL CHEMISTRY
ANALYSIS REPORT

FLORIDA DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES
OFFICE OF LABORATORY SERVICES
P. O. BOX 210
JACKSONVILLE, FLORIDA 32231

LABORATORY ID 12001

ELBERT C. HARTWIG, JR., SC.D., M.P.H.
LABORATORY SERVICES ADMINISTRATOR
(904) 359-6145
SUNCOM 826-6145

ABBREVIATIONS, TERMS, AND SYMBOLS USED:

(1)	NS	=	ANALYTE NOT SCREENED
(2)	NR	=	ANALYTE SCREENED BUT NOT REPORTED
(3)	EXP	=	ANALYSIS EXPIRED BEFORE COMPLETION
(4)	QNS	=	SAMPLE QUANTITY INSUFFICIENT FOR ANALYSIS
(5)	POS	=	UNCONFIRMED POSITIVE
(6)	TRACE	=	POSITIVE BELOW QUANTITATION LIMIT
(7)	TNTC	=	TOO NUMEROUS TO COUNT
(8)	?	=	ILLEGIBLE INFORMATION ON SUBMISSION FORM
(9)	KG	=	KILOGRAM
(10)	G	=	GRAM
(11)	MG	=	MILLIGRAM
(12)	UG	=	MICROGRAM
(13)	NG	=	NANOGRAM
(14)	L	=	LITER
(15)	DL	=	DECILITER
(16)	ML	=	MILLILITER
(17)	UL	=	MICROLITER
(18)	CU C	=	CUBIC CENTIMETER
(19)	CU M	=	CUBIC METER
(20)	UMHO	=	MICROMHO
(21)	M	=	METER
(22)	CM	=	CENTIMETER
(23)	<	=	LESS THAN
(24)	>	=	GREATER THAN
(25)	%	=	PERCENT
(26)	OTHER VOLATILES	=	NON-LISTED COMPOUNDS DETECTABLE BY GC/MS PURGEABLES ANALYSIS

MAILED
JUN 23 1994
HRS Office of Laboratory Services
ENVIRONMENTAL CHEMISTRY

PLEASE DIRECT QUESTIONS OR COMMENTS TO:

STEPHEN ARMS
(904) 359-6108 SUNCOM 826-6108

RECEIVED
JUN 27 1994
ENVIRONMENTAL HEALTH SERVICES

D-23

HRS OFFICE OF LABORATORY SERVICES / LAB ID 12001

06/15/94 10:17 PAGE 1

STATUS REPORT - SAMPLE NUMBER : 94060394

SAMPLE NUMBER : 94060394
STATUS OF SAMPLE : 06 SAMPLE STATUS HIST : 87510000
DATE-TIME ENTERED : 06/06/94 10:32:34 MODIFIED : 06/15/94 09:37:02
DAYS : 007
PRIORITIZATION : 5
PROJECT CODE : MC502
SUBMITTER : HRS ESCAMBIA CPHU
CHARGE NUMBER :
MATRIX : WATER
DATE-TIME COLLECTED : 06/07/94 00:00:00
DATE RECEIVED : 06/08/94
COLLECTED BY : MERRITT
SAMPLE NAME : TRIP BLANK/HC SUPER
SAMPLE ADDRESS :
CITY :
STATE : FL
ZIP :
COUNTY : ESCAMBIA
HRS DISTRICT :
DER DISTRICT :
LATITUDE :
LONGITUDE :
WATER SYSTEM :
COMP / RECHK / OTHER :
SITE ID :
/ TREATED :
FIELD PH :
FIELD CONDUCTIVITY :
FIELD CHLORINE :
TEMPERATURE :
CODE TYPE :
CODE :
CODE TYPE :
CODE :
COMMENT :
COMMENT :

ANALYSIS	DESCRIPTION
HCSUP	HYDROCARBONS / GC/FID / EPA 602

ANALYSIS : HCSUP

DATE-TIME EXP / EXT : 06/21/94
DATE-TIME EXP / ANL :
DATE-TIME EXTRACTED :
DATE-TIME ANALYZED :

TSID : HC50P

CONDITIONS :

ATBE	UG/L	:	<10.
BENZENE	UG/L	:	<1.0
TOLUENE	UG/L	:	<1.0
CHLOROBENZENE	UG/L	:	<1.0
ETHYLBENZENE	UG/L	:	<1.0
TOTAL XYLENES	UG/L	:	<1.0
CUMENE	UG/L	:	<1.0
PROPYLBENZENE	UG/L	:	<1.0
1,2,4-TRIMETHBENZ	UG/L	:	<1.0
PARA-CYMENE	UG/L	:	<1.0
TRICHLOROETHENE	UG/L	:	<1.0
TETRACHLOROETHENE	UG/L	:	<1.0

DATE-TIME ANALYZED : 06/09/94 16:37:00
ANALYST : : C. SHEPARD

HRS OFFICE OF LABORATORY SERVICES / LAB ID 12001

06/15/94 10:17 PAGE 5

STATUS REPORT - SAMPLE NUMBER : 94060395

```
   PLE NUMBER            : 94060395
STATUS OF SAMPLE         : 06      SAMPLE STATUS HIST : 87510000
DATE-TIME ENTERED        : 06/08/94 10:33:37     MODIFIED : 06/15/94 09:37:02
DAYS                     : 007
PRIORITIZATION           : 5
PROJECT CODE             : HC602
SUBMITTER                : HRS ESCAMBIA CPHU
CHARGE NUMBER            : SUPER
MATRIX                   : WATER
DATE-TIME COLLECTED      : 06/07/94 09:45:00
DATE RECEIVED            : 06/08/94
COLLECTED BY             : MERRITT
SAMPLE NAME              : SAVELEY FIELD NAS WELL #4 SAMP. #1
SAMPLE ADDRESS           : N.P.W.C. BLDG. 3297
CITY                     : PENSACOLA
STATE                    : FL
ZIP                      : 32508
COUNTY                   : ESCAMBIA
HRS DISTRICT             :
DER DISTRICT             :
LATITUDE                 :
LONGITUDE                :
WATER SYSTEM             : 40
COMP / RECHK / OTHER     : 3
SYSTEM ID                :
   / TREATED             : 4
FIELD PH                 :
FIELD CONDUCTIVITY       :
FIELD CHLORINE           :
TEMPERATURE              :
CODE TYPE                :
CODE                     :
CODE TYPE                :
CODE                     :
COMMENT                  :
COMMENT                  :

ANALYSIS                    DESCRIPTION
========                    ===========
HCSUP                       HYDROCARBONS / GC/FID / EPA 602


ANALYSIS                 : HCSUP

DATE-TIME EXP / EXT      : 06/21/94
DATE-TIME EXP / ANL      :
DATE-TIME EXTRACTED      :
DATE-TIME ANALYZED       :
```

ANALYSIS		: HCSUP
CONDITIONS		:
MTBE	UG/L	: <10.
BENZENE	UG/L	: <1.0
TOLUENE	UG/L	: <1.0
CHLOROBENZENE	UG/L	: <1.0
ETHYLBENZENE	UG/L	: <1.0
TOTAL XYLENES	UG/L	: <1.0
CUMENE	UG/L	: <1.0
PROPYLBENZENE	UG/L	: <1.0
1,2,4TRIMETBENZ	UG/L	: <1.0
PARA-CYMENE	UG/L	: <1.0
TRICHLOROETHENE	UG/L	: <1.0
TETRACHLOROETHENE	UG/L	: <1.0
DATE-TIME ANALYZED		: 06/09/94 17:08:00
ANALYST		: : C. SHEPARD

HRS OFFICE OF LABORATORY SERVICES / LAB ID 12001

06/15/94 10:17 PAGE 5

STATUS REPORT - SAMPLE NUMBER : 94060396

SAMPLE NUMBER : 94060396
STATUS OF SAMPLE : 03 SAMPLE STATUS HIST : 87510000
DAT-TIME ENTERED : 06/09/94 10:34:23 MODIFIED : 06/15/94 09:37:02
DAYS : 007
PRIORITIZATION : 5
PROJECT CODE : HC602
SUBMITTER : HRS ESCAMBIA CPHU
CHARGE NUMBER : SUPER
MATRIX : WATER
DATE-TIME COLLECTED : 06/07/94 09:55:00
DATE RECEIVED : 06/09/94
COLLECTED BY : MERRITT
SAMPLE NAME : NAS SAVELEYFIELD BOOSTER ROOM #2
SAMPLE ADDRESS : NPWC BLDG 3297
CITY : PENSACOLA
STATE : FL
ZIP : 32506
COUNTY : ESCAMBIA
HRS DISTRICT :
DER DISTRICT :
LATITUDE :
LONGITUDE :
WATER SYSTEM : 40
COMP / RECHK / OTHER : 3
TEST ID :
RW / TREATED : R
FIELD PH :
FIELD CONDUCTIVITY :
FIELD CHLORINE :
TEMPERATURE :
CODE TYPE :
CODE :
CODE TYPE :
CODE :
COMMENT :
COMMENT :

ANALYSIS	DESCRIPTION
HC602	HYDROCARBONS / GC/FID / EPA 602

ANALYSIS : HC602

DATE-TIME EXP / EXT : 06/21/94
DATE-TIME EXP / ANL :
DATE-TIME EXTRACTED :
DATE-TIME ANALYZED :

ALYSIS		: HCSUP
CONDITIONS		:
ATRE	UG/L	: <10.
BENZENE	UG/L	: <1.0
TOLUENE	UG/L	: <1.0
CHLOROBENZENE	UG/L	: <1.0
ETHYLBENZENE	UG/L	: <1.0
TOTAL XYLENES	UG/L	: <1.0
CUMENE	UG/L	: <1.0
PROPYLBENZENE	UG/L	: <1.0
1,2,4TRIMETHBENZ	UG/L	: <1.0
PARA-CYMENE	UG/L	: <1.0
TRICHLOROETHENE	UG/L	: <1.0
TETRACHL'ETHENE	UG/L	: <1.0
DATE-TIME ANALYZED		: 06/09/94 17:40:00
ANALYST		: : C. SHEPARD

STATUS REPORT - SAMPLE NUMBER : 94060397

SAMPLE NUMBER : 94060397
STATUS OF SAMPLE : 08 SAMPLE STATUS HIST : 87510000
DATE-TIME ENTERED : 06/07/94 10:55:12 MODIFIED : 06/15/94 09:37:02
DAYS : 007
PRIORITIZATION : 5
PROJECT CODE : HC602
SUBMITTER : HRS ESCAMBIA CPHU
CHARGE NUMBER : SUPER
MATRIX : WATER
DATE-TIME COLLECTED : 06/07/94 10:05:00
DATE RECEIVED : 06/08/94
COLLECTED BY : MERRITT
SAMPLE NAME : NAS SAUFLEY FIELD BLDG 2423 #3
SAMPLE ADDRESS : NPWC BLDG 3297
CITY : PENSACOLA
STATE : FL
ZIP : 32508
COUNTY : ESCAMBIA
HRS DISTRICT :
DER DISTRICT :
LATITUDE :
LONGITUDE :
WATER SYSTEM : 40
COMP / RECHK / OTHER : 3
SYSTEM ID :
/ TREATED : R
FIELD PH :
FIELD CONDUCTIVITY :
FIELD CHLORINE :
TEMPERATURE :
CODE TYPE :
CODE :
CODE TYPE :
CODE :
COMMENT :
COMMENT :

ANALYSIS	DESCRIPTION
HCSUP	HYDROCARBONS / GC/FID / EPA 602

ANALYSIS : HCSUP

DATE-TIME EXP / EXT : 06/21/94
DATE-TIME EXP / ANL :
DATE-TIME EXTRACTED :
DATE-TIME ANALYZED :

ANALYSIS : HCSUP

CONDITIONS :

[illegible]	UG/L	:	<10.
BENZENE	UG/L	:	<1.0
TOLUENE	UG/L	:	<1.0
CHLOROBENZENE	UG/L	:	<1.0
ETHYLBENZENE	UG/L	:	<1.0
TOTAL XYLENES	UG/L	:	<1.0
CUMENE	UG/L	:	<1.0
PROPYLBENZENE	UG/L	:	<1.0
1,2,4TRIMETHBENZ	UG/L	:	<1.0
PARA-CYMENE	UG/L	:	<1.0
TRICHLOROETHENE	UG/L	:	<1.0
TETRACHLOROETHENE	UG/L	:	<1.0

DATE-TIME ANALYZED : 06/09/94 18:11:00
ANALYST : : C. SHEPARD

HRS OFFICE OF LABORATORY SERVICES / LAB ID 12001

06/15/94 10:17 PAGE 6

STATUS REPORT - SAMPLE NUMBER : 94060398

SAMPLE NUMBER : 94060398
STATUS OF SAMPLE : 03 SAMPLE STATUS HIST : 87510000
DATE-TIME ENTERED : 06/06/94 10:36:04 MODIFIED : 06/15/94 09:37:02
TAXA : 007
PRIORITIZATION : 5
PROJECT CODE : HC502
SUBMITTER : HRS ESCAMBIA CPPU
CHARGE NUMBER : SUPER
MATRIX : WATER
DATE-TIME COLLECTED : 06/07/94 10:15:00
DATE RECEIVED : 06/08/94
COLLECTED BY : MERRITT
SAMPLE NAME : NAS SAUFLEY FIELD WELL#3 SAMP #4
SAMPLE ADDRESS : NPWC BLDG 3297
CITY : PENSACOLA
STATE : FL
ZIP : 32508
COUNTY : ESCAMBIA
HRS DISTRICT :
DER DISTRICT :
LATITUDE :
LONGITUDE :
WATER SYSTEM : 40
COMP / MECHR / OTHER : 3
SYSTEM ID :
/ TREATED : P
FIELD PH :
FIELD CONDUCTIVITY :
FIELD CHLORINE :
TEMPERATURE :
CODE TYPE :
CODE :
CODE TYPE :
CODE :
COMMENT :
COMMENT :

ANALYSIS	DESCRIPTION
HC502	HYDROCARBONS / GC/FID / EPA 602

ANALYSIS : HC502

DATE-TIME EXP / EXT : 06/21/94
DATE-TIME EXP / FUL :
DATE-TIME EXTRACTED :
DATE-TIME ANALYZED :

[illegible]		: MCSUP
CONDITIONS		:
BTEX	UG/L	: <10.
BENZENE	UG/L	: <1.0
TOLUENE	UG/L	: <1.0
CHLOROBENZENE	UG/L	: <1.0
ETHYLBENZENE	UG/L	: <1.0
TOTAL XYLENES	UG/L	: <1.0
CUMENE	UG/L	: <1.0
PROPYLBENZENE	UG/L	: <1.0
1,2,4TRIMETHBENZ	UG/L	: <1.0
PARA-CYMENE	UG/L	: <1.0
TRICHLOROETHENE	UG/L	: <1.0
TETRACHL'ETHENE	UG/L	: <1.0
DATE-TIME ANALYZED		: 06/09/94 13:42:00
ANALYST		: : C. SHEPARD

Law Environmental, Inc.
Pensacola Branch
7215 Pine Forest Road
Pensacola, Florida 32526

Rec'd 6/17/94
BJ2

June 13, 1994

Ms. Brenda Taylor
NAS-PWC
Code 915.2, Building 3691
Pensacola, FL 32508
Client #21458

CALL #9036
STUB #4158-6678
JOB ORDER #5152106
ITEM #30
CONTRACT #N65114-93-A-0465

Dear: Ms. Taylor:

Below are the results of analysis of 5 samples received for examination on June 8, 1994:

Sample I.D. AA55266 MW-4
Purchase order number: 5152106
Location Description: Well 4
Sample collection date: 06/07/94
Lab submittal date: 06/08/94
COC #: 4854

Location code: NASSF3
Project account code: 21458
Sample collector: BRENDA TAYLOR
Time: 09:36
Time: 10:36

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Multicomponent analysis: 2321-VOA W. by GC EPA 602			
Benzene	ug/L	Not Det	0.17
Chlorobenzene	ug/L	Not Det	0.18
1,2-Dichlorobenzene	ug/L	Not Det	0.13
1,3-Dichlorobenzene	ug/L	Not Det	0.17
1,4-Dichlorobenzene	ug/L	Not Det	0.16
Ethylbenzene	ug/L	Not Det	0.19
Toluene	ug/L	Not Det	0.2
Xylenes (total)	ug/L	Not Det	0.36
Methyl tert-butyl ether	ug/L	Not Det	0.13

Booster Pump

Sample I.D. AA55267
Purchase order number: 5152106
Location Description: Booster Pump
Sample collector: BRENDA TAYLOR
Sample collection date: 06/07/94
Lab submittal date: 06/08/94
COC #: 4854

Location code: NASSF3
Project account code: 21458
Time: 09:46
Time: 10:36

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Multicomponent analysis: 2321-VOA W. by GC EPA 602			
Benzene	ug/L	Not Det	0.17

TEST PARAMETER	UNITS	TEST RESULT	DETECTIO LIMIT
Multicomponent analysis: 2321-VOA W. by GC EPA 602 (continued)			
Chlorobenzene	ug/L	Not Det	0.18
1,2-Dichlorobenzene	ug/L	Not Det	0.13
1,3-Dichlorobenzene	ug/L	Not Det	0.17
1,4-Dichlorobenzene	ug/L	Not Det	0.16
Ethylbenzene	ug/L	Not Det	0.19
Toluene	ug/L	Not Det	0.2
Xylenes (total)	ug/L	Not Det	0.36
Methyl tert-butyl ether	ug/L	Not Det	0.13

B2423

Sample I.D. AA55268
Purchase order number: 5152106
Location Description: Bldg. 2423
Sample collection date: 06/07/94
Lab submittal date: 06/08/94
COC #: 4854

Location code: NASSF3
Project account code: 21458
Sample collector: BRENDA TAYLOR
Time: 10:02
Time: 10:36

TEST PARAMETER	UNITS	TEST RESULT	DETECTIO LIMIT
Multicomponent analysis: 2321-VOA W. by GC EPA 602			
Benzene	ug/L	Not Det	0.17
Chlorobenzene	ug/L	Not Det	0.18
1,2-Dichlorobenzene	ug/L	Not Det	0.13
1,3-Dichlorobenzene	ug/L	Not Det	0.17
1,4-Dichlorobenzene	ug/L	Not Det	0.16
Ethylbenzene	ug/L	Not Det	0.19
Toluene	ug/L	Not Det	0.2
Xylenes (total)	ug/L	Not Det	0.36
Methyl tert-butyl ether	ug/L	Not Det	0.13

MW-3

Sample I.D. AA55269
Purchase order number: 5152106
Location Description: Well 3
Sample collection date: 06/07/94
Lab submittal date: 06/08/94
COC #: 4854

Location code: NASSF3
Project account code: 21458
Sample collector: BRENDA TAYLOR
Time: 10:06
Time: 10:36

TEST PARAMETER	UNITS	TEST RESULT	DETECTIO LIMIT
Multicomponent analysis: 2321-VOA W. by GC EPA 602			
Benzene	ug/L	Not Det	0.17
Chlorobenzene	ug/L	Not Det	0.18

TEST PARAMETER	UNITS	TEST RESULT	DETECTIO LIMIT
Multicomponent analysis: 2321-VOA W. by GC EPA 602 (continued)			
1,2-Dichlorobenzene	ug/L	Not Det	0.13
1,3-Dichlorobenzene	ug/L	Not Det	0.17
1,4-Dichlorobenzene	ug/L	Not Det	0.16
Ethylbenzene	ug/L	Not Det	0.19
Toluene	ug/L	Not Det	0.2
Xylenes (total)	ug/L	Not Det	0.36
Methyl tert-butyl ether	ug/L	Not Det	0.13

Trip Blank

Sample I.D. AA55270 Location code: NASSF3
Purchase order number: 5152106 Project account code: 21458
Location Description: Trip Blank Sample collector: BRENDA TAYLOR
Sample collection date: 06/07/94 Time: 09:00
Lab submittal date: 06/08/94 Time: 10:36
COC #: 4854

TEST PARAMETER	UNITS	TEST RESULT	DETECTIO LIMIT
Multicomponent analysis: 2321-VOA W. by GC EPA 602			
Benzene	ug/L	Not Det	0.17
Chlorobenzene	ug/L	Not Det	0.18
1,2-Dichlorobenzene	ug/L	Not Det	0.13
1,3-Dichlorobenzene	ug/L	Not Det	0.17
1,4-Dichlorobenzene	ug/L	Not Det	0.16
Ethylbenzene	ug/L	Not Det	0.19
Toluene	ug/L	Not Det	0.2
Xylenes (total)	ug/L	Not Det	0.36
Methyl tert-butyl ether	ug/L	Not Det	0.13

Please advise should you have questions concerning these data.

Respectfully submitted,

M.G. 13 JUN 94

James M.G. Tucci, Laboratory Manager

INVOICE

From: Law Environmental, Inc.
Pensacola Branch
7215 Pine Forest Road
Pensacola, Florida 32526

Invoice Number: 236938 Date: June 13, 1994

To: Ms. Brenda Taylor
NAS-PWC
Code 915.2, Building 3691
Pensacola, FL 32508
Client #21458

CALL #9036
STUB #4158-6678
JOB ORDER #5152106
ITEM #30
CONTRACT #N65114-93-A-0465

The following charges are due for the indicated samples which were submitted to this laboratory on 06/08/94:

Lab Sample I.D.: AA55266 AA55267 AA55268 AA55269

Purchase order number: 5152106

Parameter Analyzed	Quantity	Unit Price	Total Price
2321-VOA W. by GC EPA 602	4	$225.00	$900.00
Analysis charges subtotal for this invoice:			$900.00
Total amount due on this invoice:			$900.00

Remit payment to: Law Environmental, Inc.
P.O. Box 102051
Atlanta, Georgia 30368-0051

D-37

TERMS: Net cash upon receipt of invoice. A late payment charge of 18% per annum of the amount may be added in the event payment is not made within 30 days after invoice

4804

LAW ENVIRONMENTAL, INC.
NATIONAL LABORATORIES
7215 PINE FOREST ROAD
PENSACOLA, FLORIDA 32526
(904) 944-9772

CHAIN OF CUSTODY RECORD

SAMPLING INFORMATION
NAME OF FACILITY: SAUFLEY FIELD
STREET ADDRESS: 310 JOHN TOWER ROAD; CODE 671; NAS PENSACOLA, FL 32508
~~NPDES NUMBER~~ PWS ID # 1170899

PROJECT NAME: S.F. HRS SPLIT
JOB NO.: 5152106
SAMPLERS (SIGNATURE): Brenda J. Taylor
SAMPLING DATE: 6/7/94

TIME	GRAB	COMP.	*SOURCE CODE	SAMPLE STATION DESCRIPTION	TOTAL NO. OF CONTAINERS	40 ml G VOA HCl	1 L G - AMBER	8 oz. G, W/M	2 oz. G, W/M	1 L G (H_2SO_4)	500 ml - AMBER	1 L. PL (HNO_3)	1 L. PL (H_2SO_4)	1L. PL (NaOH+Ascorbic Acid)	1 L. PL (Zn Acetate + NaOH)	1 L. PL	4 oz. PL W/M	250 ml PL	1 L. TEFLON	LENL LAB NO.
0936	X		DW	WELL 4	2	X														AA 55266
0946	X		DW	BOOSTER PUMP	2	X														AA55267
1002	X		DW	BLDG. 2423	2	X														AA55268
1006	X		DW	WELL 3	2	X														AA55269
0900	X		DIST. WATER	TRIP BLANK (JOE MOORE)	1	X														AA55270

RELINQUISHED BY:	DATE / TIME	RECEIVED BY:	DATE / TIME	RELINQUISHED BY:	RECEIVED BY LABORATORY:	DATE / TIME
Brenda J. Taylor (SIGNATURE)	6/7/94 1704	(SIGNATURE)		(SIGNATURE)	(SIGNATURE)	6/7/94 1705

DISTRIBUTION: ORIGINAL AND YELLOW COPIES ACCOMPANY SAMPLE SHIPMENT TO LABORATORY. PINK COPY RETAINED BY SAMPLERS. YELLOW COPY RETAINED BY LABORATORY.

REMARKS: CALL # 9036 STUB # 4158-6678
THESE SAMPLES HAVE BEEN SPLIT WITH HRS JAX — EXCEPTION (TRIP BLANK - NOT SPLIT)

RUSH T.A.T.

*SOURCE CODES
RECOVERY WELL - RW
RCRA MONITORING WELL - MW
SOIL / SEDIMENT - SO
SLUDGE - SL
NPDES DISCHARGE - ND
DRINKING WATER - DW
HAZARDOUS WASTE - HW
SURFACE WATER - SW

Law Environmental, Inc.
7215 Pine Forest Road
Pensacola, Florida 32526
904/944-9772

Analytical Request Form

To: LAW ENVIR.

Attn: KELLI

From: NAS PWC ENVIR.
(Branch/Company Name)

LAW ENVIRONMENTAL, INC.
(Dept or Name)

COC Number: 4848

Project Name: S.F. HRS SPLIT

Project Number: 30

Date Shipped: 6/7/94

Date results requested: VERBALS 10 JUNE 1994

Sample ID	Analysis Requested	Detection Limits Req.	Sample Type	Method
WELL 4	602 D.W.		WATER	602
WELL 3	602 DW		WATER	602
BOOSTER PUMP	602 DW		WATER	602
BLDG.	602 DW		WATER	602
TRIP BLANK	602 DW		WATER	602

D-39

omments: SAMPLES SPLIT WITH HRS JAX LAB WITH THE EXCEPTION OF TRIP BLANK—NOT SPLIT.
BOTTLES — SUPERFUND ANALYZED PRODUCTION # 3188013

ML CO

MATERIAL REQUIREMENTS/ISSUE DOCUMENT (MECHANIZED)
NAVFAC 9-11014/8 (REV. 3-67)
S/N 0105-LF-002-7010

NOTE: This is "No Carbon Required" paper. Tear of required number of copies BEFORE filling in.

CALL 9036
STUB 4158-6678

1. JOB SEQUENCE W.C. NO	2. JOB ORDER NO	3. PRIORITY	4. SHOP STORE NO	DATE MAT'L REQUIRED	6. E.S.M. SER. NO
915	5152106	07	IF	4161	

7. W-R NO	8. TYPE ISSUE (Check)	9. SRO NO
	[X] ISSUE [ ] DMI [ ] TURN-IN	

SHEET 1 OF 1

10. DELIVER TO	11. REQUESTOR	12. DATE PREPARED
452-3055/2638 BLDG. 3691 - BRENDA TAYLOR	452-3055/2638 BRENDA J. TAYLOR	4158

13. ITEM	14. COG. SYM.	15. CLASS/STOCK OR PART NUMBER	16. DESCRIPTION OF MATERIAL	17. STATUS	18. UNIT	19. QUANTITY	20. UNIT COST
30			SERVICES TO PERFORM ANALYSIS ON ~~(1) ONE~~ FIVE (5) POTABLE WATER SAMPLE FOR METHOD 602 USING E.P.A. APPROVED METHODS. VERBAL RESULTS WITHIN THREE (3) DAYS OF LAB RECEIPT OF SAMPLES TO: BRENDA TAYLOR 452-3055 or 452-2638. WRITTEN CERTIFIED RESULTS WITHIN ONE WEEK. CONTACT: BRENDA TAYLOR 452-3055 or 452-2638. PROJECT NAME: S.F. HRS SPLIT.	11	LS	1	
			APPROX. COST $900.00 /TOTAL				
			$225.00/EACH				
			NOTE: LABORATORY PERFORMING ANALYSIS MUST HAVE AN APPROVED GENERIC QUALITY ASSURANCE/QUALITY CONTROL PLAN ON FILE + BE STATE CERTIFIED				
			SUGGESTED VENDORS: LAW ENVIRONMENTAL 944-9772				
			ATI 474-1001				
			VOC ANALYTICAL (205)460-0750				

21. AUTHORIZED BY (Signature)	22. RECEIVED BY (Signature)	23. ISSUED (Signature and Date)
Michael [illegible]		

D-40

ENVIRONMENTAL CHEMISTRY
ANALYSIS REPORT

FLORIDA DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES
OFFICE OF LABORATORY SERVICES
P. O. BOX 210
JACKSONVILLE, FLORIDA 32231

LABORATORY ID 12001

ELDERT C. HARTWIG, JR., SC.D., M.P.H.
LABORATORY SERVICES ADMINISTRATOR
(904) 359-6145
SUNCOM 826-6145

ABBREVIATIONS, TERMS, AND SYMBOLS USED:

(1)	NS	=	ANALYTE NOT SCREENED
(2)	NR	=	ANALYTE SCREENED BUT NOT REPORTED
(3)	EXP	=	ANALYSIS EXPIRED BEFORE COMPLETION
(4)	QNS	=	SAMPLE QUANTITY INSUFFICIENT FOR ANALYSIS
(5)	POS	=	UNCONFIRMED POSITIVE
(6)	TRACE	=	POSITIVE BELOW QUANTITATION LIMIT
(7)	TNTC	=	TOO NUMEROUS TO COUNT
(8)	?	=	ILLEGIBLE INFORMATION ON SUBMISSION FORM
(9)	KG	=	KILOGRAM
(10)	G	=	GRAM
(11)	MG	=	MILLIGRAM
(12)	UG	=	MICROGRAM
(13)	NG	=	NANOGRAM
(14)	L	=	LITER
(15)	DL	=	DECILITER
(16)	ML	=	MILLILITER
(17)	UL	=	MICROLITER
(18)	CU C	=	CUBIC CENTIMETER
(19)	CU M	=	CUBIC METER
(20)	UMHO	=	MICROMHO
(21)	M	=	METER
(22)	CM	=	CENTIMETER
(23)	<	=	LESS THAN
(24)	>	=	GREATER THAN
(25)	%	=	PERCENT
(26)	OTHER VOLATILES	=	NON-LISTED COMPOUNDS DETECTABLE BY GC/MS PURGEABLES ANALYSIS

MAILED
JUL 21 1994
HRS Office of Laboratory Services
ENVIRONMENTAL CHEMISTRY

PLEASE DIRECT QUESTIONS OR COMMENTS TO:

STEPHEN ARMS
(904) 359-6108 SUNCOM 826-6108

RECEIVED
JUL 25 1994
ENVIRONMENTAL
HEALTH SERVICES

HRS OFFICE OF LABORATORY SERVICES / LAB ID 12001

07/12/94 15:43 PAGE 1

STATUS REPORT - SAMPLE NUMBER : 94070008

E NUMBER	: 94070008
US OF SAMPLE	: 08 SAMPLE STATUS HIST : 87510000
TE-TIME ENTERED	: 07/01/94 15:37:42 MODIFIED : 07/12/94 15:43:16
YS	: 011
IORITIZATION	: 5
OJECT CODE	: HC602
MITTER	: HRS ESCAMBIA CPHU
ARGE NUMBER	:
TRIX	: WATER
TE-TIME COLLECTED	: 06/30/94 00:00:00
ATE RECEIVED	: 07/01/94
LLECTED BY	: ROBERT T. MERRITT
MPLE NAME	: TRIP BLANK/HC SUPER
MPLE ADDRESS	:
TY	:
TATE	: FL
IP	:
OUNTY	: ESCAMBIA
S DISTRICT	:
R DISTRICT	:
TITUDE	:
NGITUDE	:
TER SYSTEM	:
MP / RECHK / OTHER	:
STEM ID	:
W / TREATED	:
PH	:
ELD CONDUCTIVITY	:
ELD CHLORINE	:
MPERATURE	:
DE TYPE	:
DE	:
DE TYPE	:
DE	:
MMENT	:
MMENT	:

ALYSIS	DESCRIPTION
CSUP	HYDROCARBONS / GC/FID / EPA 602

ALYSIS	: HCSUP
TE-TIME EXP / EXT	: 07/14/94
TE-TIME EXP / ANL	:
TE-TIME EXTRACTED	:
TE-TIME ANALYZED	:

SIS : HCSUP

ATIONS :

THF	UG/L	:	<10.
BENZENE	UG/L	:	<1.0
TOLUENE	UG/L	:	<1.0
CHLOROBENZENE	UG/L	:	<1.0
ETHYLBENZENE	UG/L	:	<1.0
TOTAL XYLENES	UG/L	:	<1.0
CUMENE	UG/L	:	<1.0
N-PROPYLBENZENE	UG/L	:	<1.0
1,2,4TRIMETHBENZ	UG/L	:	<1.0
PARA-CYMENE	UG/L	:	<1.0
TRICHLOROETHENE	UG/L	:	<1.0
TETRACHL'ETHENE	UG/L	:	<1.0
DATE-TIME ANALYZED		:	07/07/94 22:58:00
ANALYST		:	C. SHEPARD

STATUS REPORT - SAMPLE NUMBER : 94070009

SAMPLE NUMBER	: 94070009
CODE OF SAMPLE	: 08 SAMPLE STATUS HIST : 8751CCCO
DATE-TIME ENTERED	: 07/01/94 15:39:06 MODIFIED : 07/12/94 15:43:16
SYS	: 011
PRIORITIZATION	: 5
PROJECT CODE	: HC602
SUBMITTER	: HRS ESCAMBIA CPHU
LABORATORY NUMBER	: SUPER
MATRIX	: WATER
DATE-TIME COLLECTED	: 06/30/94 09:15:00
DATE RECEIVED	: 07/01/94
COLLECTED BY	: ROBERT T. MERRITT
SAMPLE NAME	: NAS SAUFLEY FIELD-WELL #4/SAMPLE #1
SAMPLE ADDRESS	: N.P.W.C. BLDG. 3297
CITY	: PENSACOLA
STATE	: FL
ZIP	: 32508
COUNTY	: ESCAMBIA
HRS DISTRICT	:
EPA DISTRICT	:
LATITUDE	:
LONGITUDE	:
WATER SYSTEM	: 40
SAP / RECHK / OTHER	:
SYSTEM ID	:
RAW / TREATED	: R
FIELD PH	: 5.1
CONDUCTIVITY	:
FIELD CHLORINE	:
TEMPERATURE	:
CODE TYPE	:
CODE	:
CODE TYPE	:
CODE	:
COMMENT	: MCL VIOLATION FOR BENZENE.
COMMENT	: OTHER VOLATILES DETECTED BY PURGEABLES.

ANALYSIS	DESCRIPTION
=======	==========
HCSUP	HYDROCARBONS / GC/FID / EPA 602

ANALYSIS	: HCSUP
DATE-TIME EXP / EXT	: 07/14/94
DATE-TIME EXP / ANL	:
DATE-TIME EXTRACTED	:
DATE-TIME ANALYZED	:

ALYSIS : HCSUP

ATIONS :

E	UG/L	:	<10.
NZENE	UG/L	:	4.0
LUENE	UG/L	:	<1.0
LCROBENZENE	UG/L	:	<1.0
THYLBENZENE	UG/L	:	<1.0
TAL XYLENES	UG/L	:	<1.0
YENE	UG/L	:	TRACE<1.
ROPYLBENZENE	UG/L	:	<1.0
2,4TRIMETBENZ	UG/L	:	TRACE<1.
RA-CYMENE	UG/L	:	TRACE<1.
ICHLOROETHENE	UG/L	:	<1.0
TRACHL'ETHENE	UG/L	:	<1.0
TE-TIME ANALYZED		:	07/07/94 21:55:00
ALYST		: :	C. SHEPARD

Law Environmental National Labs
October 11, 1994

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(b)
(PWS028)

PARAMETER ID	NAME (MCL ug/l)	SAMPLE NUMBER	ANALYSIS RESULT (ug/l)	ANALYTICAL METHOD	DETECTION LIMIT (ug/l)	ANALYSIS DATE
2378	1,2,4-trichlorobenzene (70)	AA62510	<0.13	524.2	0.13	10/07/94
2380	cis-1,2-dichloroethylene (70)	AA62510	<0.12	524.2	0.12	10/07/94
2955	Xylenes (total) (10,000)	AA62510	<0.57	524.2	0.57	10/07/94
2964	Dichloromethane (5)	AA62510	<1.9	524.2	1.9	10/07/94
2968	O-dichlorobenzene (600)	AA62510	<0.11	524.2	0.11	10/07/94
2969	Para-dichlorobenzene (75)	AA62510	<0.12	524.2	0.12	10/07/94
2976	Vinyl chloride (1)	AA62510	<0.22	524.2	0.22	10/07/94
2977	1,1-Dichloroethylene (7)	AA62510	<0.12	524.2	0.12	10/07/94
2979	trans-1,2-dichloroethylene (100)	AA62510	<0.16	524.2	0.16	10/07/94
2980	1,2-Dichloroethane (3)	AA62510	<0.1	524.2	0.1	10/07/94
2981	1,1,1-Trichloroethane (200)	AA62510	<0.08	524.2	0.08	10/07/94
2982	Carbon tetrachloride (3)	AA62510	<0.17	524.2	0.17	10/07/94
2983	1,2-Dichloropropane (3)	AA62510	<0.08	524.2	0.08	10/07/94
2984	Trichloroethylene (3)	AA62510	<0.1	524.2	0.1	10/07/94
2985	1,1,2-trichloroethane (5)	AA62510	<0.1	524.2	0.1	10/07/94
2987	Tetrachloroethylene (3)	AA62510	<0.09	524.2	0.09	10/07/94
2989	Monochlorobenzene (100)	AA62510	<0.07	524.2	0.07	10/07/94
2990	Benzene (1)	AA62510	<0.07	524.2	0.07	10/07/94
2991	Toluene (1,000)	AA62510	<0.11	524.2	0.11	10/07/94
2992	Ethylbenzene (700)	AA62510	<0.15	524.2	0.15	10/07/94
2996	Styrene (100)	AA62510	<0.06	524.2	0.06	10/07/94

S/F WTP Post Treatment (Saufley Field Water Treatment Plant)
Law Environmental National Labs HRS #81393

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

601/602 Volatiles by Method 8260

Lab Report Number: 71908
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- **71908**
Sample Name / Location	SF 2406 Eq. Blank
Collector's Name	CE
Date & Time Collected	05/01/97 @ 1130
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	05/06/97 JM
Date of Analysis	05/06/97
Sample Matrix	DI
Dilution	X 1

Compound Name	1- 71908	units	Det. Limit	Flags
Benzene	BDL	ug/L	1	
Bromodichloromethane	BDL	ug/L	1	
Bromoform	BDL	ug/L	2	
Bromomethane	BDL	ug/L	3	
Carbon Tetrachloride	BDL	ug/L	1	
Chlorobenzene	BDL	ug/L	1	
Chloroethane	BDL	ug/L	1	
2-Chloroethylvinyl ether	BDL	ug/L	1	
Chloroform	BDL	ug/L	1	
Chloromethane	BDL	ug/L	1	
Dibromochloromethane	BDL	ug/L	1	
1,2-Dichlorobenzene	BDL	ug/L	1	
1,3-Dichlorobenzene	BDL	ug/L	1	
1,4-Dichlorobenzene	BDL	ug/L	1	
Dichlorodifluoromethane	BDL	ug/L	1	
1,1-Dichloroethane	BDL	ug/L	1	
1,2-Dichloroethane	BDL	ug/L	1	
1,1-Dichloroethene	BDL	ug/L	1	
trans-1,2-Dichloroethene	BDL	ug/L	1	
1,2-Dichloropropane	BDL	ug/L	1	
cis-1,3-Dichloropropene	BDL	ug/L	1	
trans-1,3-Dichloropropene	BDL	ug/L	1	
Ethylbenzene	BDL	ug/L	1	
Methylene Chloride	BDL	ug/L	1	
Methyl-tert-butyl ether (MTBE) *	BDL	ug/l	1	
1,1,2,2-Tetrachloroethane	BDL	ug/L	1	
Tetrachloroethene	BDL	ug/L	1	
Toluene	BDL	ug/L	1	
1,1,1-Trichloroethane	BDL	ug/L	1	
1,1,2-Trichloroethane	BDL	ug/L	1	
Trichloroethene	BDL	ug/L	1	
Trichlorofluoromethane	BDL	ug/L	1	
Vinyl Chloride	BDL	ug/L	1	
Xylenes (Total)	BDL	ug/L	1	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	99
Toluene-d8	86-119	98
Bromofluorobenzene	85-116	98

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

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Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
610 PAH's by Method 8270

Lab Report Number: 71908
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- 71908
Sample Name / Location	SF 2406 Eq. Blank
Collector's Name	CE
Date & Time Collected	05/01/97 @ 1130
Sample Type (composite or grab)	Grab
Analyst	M. Chambers
Date of Extraction / Initials	05/06/97 JJ
Date of Analysis	05/07/97
Sample Matrix	DI
Dilution	X 1

Compound Name	1- 71908	units	Det. Limit	Flags
Acenaphthene	BDL	ug/L	2	
Acenaphthylene	BDL	ug/L	2	
Anthracene	BDL	ug/L	2	
Benzo(a)anthracene	BDL	ug/L	2	
Benzo(a)pyrene	BDL	ug/L	2	
Benzo(b)fluoranthene	BDL	ug/L	2	
Benzo(g,h,i)perylene	BDL	ug/L	2	
Benzo(k)fluoranthene	BDL	ug/L	3	
Chrysene	BDL	ug/L	2	
Dibenz(a,h)anthracene	BDL	ug/L	2	
Fluoranthene	BDL	ug/L	2	
Fluorene	BDL	ug/L	2	
Indeno(1,2,3-cd)pyrene	BDL	ug/L	2	
1-Methylnaphthalene *	BDL	ug/L	2	
2-Methylnaphthalene	BDL	ug/L	15	
Naphthalene	BDL	ug/L	10	
Phenanthrene	BDL	ug/L	2	
Pyrene	BDL	ug/L	2	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Nitrobenzene- d5	35-114	68
2-Fluorobiphenyl	43-116	77
Terphenyl -d14	33-141	109

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

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End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

Ethylene Dibromide by Method 504

Lab Report Number: 71908
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- 71908			
Sample Name / Location	SF 2406 Eq. Blank			
Collector's Name	CE			
Date & Time Collected	05/01/97 @ 1130			
Sample Type (composite or grab)	Grab			
Analyst	M. Chambers			
Date of Extraction / Initials	05/14/97 MC			
Date of Analysis	05/14/97			
Sample Matrix	DI			
Dilution	X 1			
Compound Name	1- 71908	units	Det. Limit	Flags
Ethylene Dibromide	BDL	ug/L	0.02	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Tetra-Chloro-m-Xylene	54-140	62

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

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End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Analytical Report
Petroleum Range Organics by FLPRO

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Lab Report Number: 71908
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- 71908			
Sample Name / Location	SF 2406 Eq. Blank			
Collector's Name	CE			
Date & Time Collected	05/01/97 @ 1130			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of extraction / Initials	05/06/97 JJ			
Date of Analysis	05/08/97			
Sample Matrix	DI			
Dilution	x 5			
Parameter	**1- 71908**	**units**	**Det. Limit**	**Flags**
Petroleum Range Organics by FLPRO	BDL	mg/L	1.25	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
ortho-Terphenyl	82-142 *	96
Nonatriacontane (C-39)	42-193 *	83

COMMENTS : * = Suggested surrogate recovery limits listed in the method. In-house laboratory limits are in the process of being determined.

BDL = Below Detection Limit. mg/L = milligram per Liter. mg/Kg = milligram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97

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End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

601/602 Volatiles by Method 8260

Lab Report Number: 71909
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- **71909**
Sample Name / Location	SF 2406 Duplicate
Collector's Name	CE
Date & Time Collected	05/01/97 @ N/S
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	05/06/97 JM
Date of Analysis	05/06/97
Sample Matrix	GW
Dilution	X 1

Compound Name	1- 71909	units	Det. Limit	Flags
Benzene	BDL	ug/L	1	
Bromodichloromethane	BDL	ug/L	1	
Bromoform	BDL	ug/L	2	
Bromomethane	BDL	ug/L	3	
Carbon Tetrachloride	BDL	ug/L	1	
Chlorobenzene	BDL	ug/L	1	
Chloroethane	BDL	ug/L	1	
2-Chloroethylvinyl ether	BDL	ug/L	1	
Chloroform	BDL	ug/L	1	
Chloromethane	BDL	ug/L	1	
Dibromochloromethane	BDL	ug/L	1	
1,2-Dichlorobenzene	BDL	ug/L	1	
1,3-Dichlorobenzene	BDL	ug/L	1	
1,4-Dichlorobenzene	BDL	ug/L	1	
Dichlorodifluoromethane	BDL	ug/L	1	
1,1-Dichloroethane	BDL	ug/L	1	
1,2-Dichloroethane	BDL	ug/L	1	
1,1-Dichloroethene	BDL	ug/L	1	
trans-1,2-Dichloroethene	BDL	ug/L	1	
1,2-Dichloropropane	BDL	ug/L	1	
cis-1,3-Dichloropropene	BDL	ug/L	1	
trans-1,3-Dichloropropene	BDL	ug/L	1	
Ethylbenzene	60	ug/L	1	
Methylene Chloride	BDL	ug/L	1	
Methyl-tert-butyl ether (MTBE) *	BDL	ug/l	1	
1,1,2,2-Tetrachloroethane	BDL	ug/L	1	
Tetrachloroethene	BDL	ug/L	1	
Toluene	120	ug/L	1	
1,1,1-Trichloroethane	BDL	ug/L	1	
1,1,2-Trichloroethane	BDL	ug/L	1	
Trichloroethene	BDL	ug/L	1	
Trichlorofluoromethane	BDL	ug/L	1	
Vinyl Chloride	BDL	ug/L	1	
Xylenes (Total)	1800	ug/L	1	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	102
Toluene-d8	86-119	101
Bromofluorobenzene	85-116	99

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/kg = microgram per Kilogram. * = FL HRS certification pending.

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Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

610 PAH's by Method 8270

Lab Report Number: 71909
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- 71909			
Sample Name / Location	SF 2406 Duplicate			
Collector's Name	CE			
Date & Time Collected	05/01/97 @ N/S			
Sample Type (composite or grab)	Grab			
Analyst	M. Chambers			
Date of Extraction / Initials	05/06/97 JJ			
Date of Analysis	05/07/97, 05/08/97			
Sample Matrix	GW			
Dilution	X 1			
Compound Name	1- 71909	units	Det. Limit	Flags
Acenaphthene	BDL	ug/L	2	
Acenaphthylene	BDL	ug/L	2	
Anthracene	BDL	ug/L	2	
Benzo(a)anthracene	BDL	ug/L	2	
Benzo(a)pyrene	BDL	ug/L	2	
Benzo(b)fluoranthene	BDL	ug/L	2	
Benzo(g,h,i)perylene	BDL	ug/L	2	
Benzo(k)fluoranthene	BDL	ug/L	3	
Chrysene	BDL	ug/L	2	
Dibenz(a,h)anthracene	BDL	ug/L	2	
Fluoranthene	BDL	ug/L	2	
Fluorene	BDL	ug/L	2	
Indeno(1,2,3-cd)pyrene	BDL	ug/L	2	
1-Methylnaphthalene *	93	ug/L	2	
2-Methylnaphthalene	178	ug/L	15	
Naphthalene	173	ug/L	10	
Phenanthrene	BDL	ug/L	2	
Pyrene	BDL	ug/L	2	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Nitrobenzene- d5	35-114	78
2-Fluorobiphenyl	43-116	93
Terphenyl -d14	33-141	95

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

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End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

Ethylene Dibromide by Method 504

Lab Report Number: 71909
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- 71909			
Sample Name / Location	SF 2406 Duplicate			
Collector's Name	CE			
Date & Time Collected	05/01/97 @ N/S			
Sample Type (composite or grab)	Grab			
Analyst	M. Chambers			
Date of Extraction / Initials	05/14/97 MC			
Date of Analysis	05/14/97			
Sample Matrix	GW			
Dilution	X 10			
Compound Name	1- 71909	units	Det. Limit	Flags
Ethylene Dibromide	2.7	ug/L	0.2	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Tetra-Chloro-m-Xylene	54-140	71

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by : Jerry Dase, Laboratory Director

Date: 5/19/97
Report Generated

D-53

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
Petroleum Range Organics by FLPRO

Lab Report Number: 71909
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- 71909			
Sample Name / Location	SF 2406 Duplicate			
Collector's Name	CE			
Date & Time Collected	05/01/97 @ N/S			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of extraction / Initials	05/06/97 JJ			
Date of Analysis	05/09/97			
Sample Matrix	GW			
Dilution	x 5			
Parameter	1- 71909	units	Det. Limit	Flags
Petroleum Range Organics by FLPRO	14	mg/L	1.25	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
ortho-Terphenyl	82-142 *	99
Nonatriacontane (C-39)	42-193 *	94

COMMENTS : * = Suggested surrogate recovery limits listed in the method. In-house laboratory limits are in the process of being determined.

BDL = Below Detection Limit. mg/L = milligram per Liter. mg/Kg = milligram per Kilogram.

Approved by : Jerry Deese, Laboratory Director

Date: 5/19/97

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End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
601/602 Volatiles by Method 8260

Lab Report Number: 71910
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- **71910**
Sample Name / Location	SF 2406 MW-1
Collector's Name	CE
Date & Time Collected	05/01/97 @ 1145
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	05/06/97 JM
Date of Analysis	05/06/97
Sample Matrix	GW
Dilution	X 1

Compound Name	1- 71910	units	Det. Limit	Flags
Benzene	BDL	ug/L	1	
Bromodichloromethane	BDL	ug/L	1	
Bromoform	BDL	ug/L	2	
Bromomethane	BDL	ug/L	3	
Carbon Tetrachloride	BDL	ug/L	1	
Chlorobenzene	BDL	ug/L	1	
Chloroethane	BDL	ug/L	1	
2-Chloroethylvinyl ether	BDL	ug/L	1	
Chloroform	BDL	ug/L	1	
Chloromethane	BDL	ug/L	1	
Dibromochloromethane	BDL	ug/L	1	
1,2-Dichlorobenzene	BDL	ug/L	1	
1,3-Dichlorobenzene	BDL	ug/L	1	
1,4-Dichlorobenzene	BDL	ug/L	1	
Dichlorodifluoromethane	BDL	ug/L	1	
1,1-Dichloroethane	BDL	ug/L	1	
1,2-Dichloroethane	BDL	ug/L	1	
1,1-Dichloroethene	BDL	ug/L	1	
trans-1,2-Dichloroethene	BDL	ug/L	1	
1,2-Dichloropropane	BDL	ug/L	1	
cis-1,3-Dichloropropene	BDL	ug/L	1	
trans-1,3-Dichloropropene	BDL	ug/L	1	
Ethylbenzene	BDL	ug/L	1	
Methylene Chloride	BDL	ug/L	1	
Methyl-tert-butyl ether (MTBE) *	BDL	ug/l	1	
1,1,2,2-Tetrachloroethane	BDL	ug/L	1	
Tetrachloroethene	BDL	ug/L	1	
Toluene	BDL	ug/L	1	
1,1,1-Trichloroethane	BDL	ug/L	1	
1,1,2-Trichloroethane	BDL	ug/L	1	
Trichloroethene	BDL	ug/L	1	
Trichlorofluoromethane	BDL	ug/L	1	
Vinyl Chloride	BDL	ug/L	1	
Xylenes (Total)	BDL	ug/L	1	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	93
Toluene-d8	86-119	100
Bromofluorobenzene	85-116	103

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

D-55

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

610 PAH's by Method 8270

Lab Report Number: 71910
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- **71910**
Sample Name / Location	SF 2406 MW-1
Collector's Name	CE
Date & Time Collected	05/01/97 @ 1145
Sample Type (composite or grab)	Grab
Analyst	M. Chambers
Date of Extraction / Initials	05/06/97 JJ
Date of Analysis	05/07/97
Sample Matrix	GW
Dilution	X 1

Compound Name	1- 71910	units	Det. Limit	Flags
Acenaphthene	BDL	ug/L	2	
Acenaphthylene	BDL	ug/L	2	
Anthracene	BDL	ug/L	2	
Benzo(a)anthracene	BDL	ug/L	2	
Benzo(a)pyrene	BDL	ug/L	2	
Benzo(b)fluoranthene	BDL	ug/L	2	
Benzo(g,h,i)perylene	BDL	ug/L	2	
Benzo(k)fluoranthene	BDL	ug/L	3	
Chrysene	BDL	ug/L	2	
Dibenz(a,h)anthracene	BDL	ug/L	2	
Fluoranthene	BDL	ug/L	2	
Fluorene	BDL	ug/L	2	
Indeno(1,2,3-cd)pyrene	BDL	ug/L	2	
1-Methylnaphthalene *	BDL	ug/L	2	
2-Methylnaphthalene	BDL	ug/L	15	
Naphthalene	BDL	ug/L	10	
Phenanthrene	BDL	ug/L	2	
Pyrene	BDL	ug/L	2	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Nitrobenzene- d5	35-114	69
2-Fluorobiphenyl	43-116	84
Terphenyl -d14	33-141	91

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

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End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

Ethylene Dibromide by Method 504

Lab Report Number: 71910
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- 71910			
Sample Name / Location	SF 2406 MW-1			
Collector's Name	CE			
Date & Time Collected	05/01/97 @ 1145			
Sample Type (composite or grab)	Grab			
Analyst	M. Chambers			
Date of Extraction / Initials	05/14/97 MC			
Date of Analysis	05/14/97			
Sample Matrix	GW			
Dilution	X 1			
Compound Name	1- 71910	units	Det. Limit	Flags
Ethylene Dibromide	BDL	ug/L	0.02	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Tetra-Chloro-m-Xylene	54-140	70

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

D-57

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Analytical Report
Petroleum Range Organics by FLPRO

Client:	NPWC Environmental
Address:	Bldg. 3887, Code 910 NAS Pensacola,FL 32508
Phone #:	452-3180
Contact:	Greg Campbell

Lab Report Number:	71910
Sample Date:	05/01/97
Received Date:	05/02/97
Sample Site:	NAS Pensacola, FL
Job Order No.:	130 5001

LAB Sample ID#	1- 71910			
Sample Name / Location	SF 2406 MW-1			
Collector's Name	CE			
Date & Time Collected	05/01/97 @ 1145			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of extraction / Initials	05/06/97 JJ			
Date of Analysis	05/08/97			
Sample Matrix	GW			
Dilution			x 5	
Parameter	1- 71910	units	Det. Limit	Flags
Petroleum Range Organics by FLPRO	BDL	mg/L	1.25	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
ortho-Terphenyl	82-142 *	100
Nonatriacontane (C-39)	42-193 *	106

COMMENTS : * = Suggested surrogate recovery limits listed in the method. In-house laboratory limits are in the process of being determined.

BDL = Below Detection Limit. mg/L = milligram per Liter. mg/Kg = milligram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97

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End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
601/602 Volatiles by Method 8260

Lab Report Number: 71911
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- 71911
Sample Name / Location	SF 2406 MW-2
Collector's Name	CE
Date & Time Collected	05/01/97 @ 1215
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	05/06/97 JM
Date of Analysis	05/06/97
Sample Matrix	GW
Dilution	X 1

Compound Name	1- 71911	units	Det. Limit	Flags
Benzene	BDL	ug/L	1	
Bromodichloromethane	BDL	ug/L	1	
Bromoform	BDL	ug/L	2	
Bromomethane	BDL	ug/L	3	
Carbon Tetrachloride	BDL	ug/L	1	
Chlorobenzene	BDL	ug/L	1	
Chloroethane	BDL	ug/L	1	
2-Chloroethylvinyl ether	BDL	ug/L	1	
Chloroform	BDL	ug/L	1	
Chloromethane	BDL	ug/L	1	
Dibromochloromethane	BDL	ug/L	1	
1,2-Dichlorobenzene	BDL	ug/L	1	
1,3-Dichlorobenzene	BDL	ug/L	1	
1,4-Dichlorobenzene	BDL	ug/L	1	
Dichlorodifluoromethane	BDL	ug/L	1	
1,1-Dichloroethane	BDL	ug/L	1	
1,2-Dichloroethane	BDL	ug/L	1	
1,1-Dichloroethene	BDL	ug/L	1	
trans-1,2-Dichloroethene	BDL	ug/L	1	
1,2-Dichloropropane	BDL	ug/L	1	
cis-1,3-Dichloropropene	BDL	ug/L	1	
trans-1,3-Dichloropropene	BDL	ug/L	1	
Ethylbenzene	BDL	ug/L	1	
Methylene Chloride	BDL	ug/L	1	
Methyl-tert-butyl ether (MTBE) *	BDL	ug/l	1	
1,1,2,2-Tetrachloroethane	BDL	ug/L	1	
Tetrachloroethene	BDL	ug/L	1	
Toluene	BDL	ug/L	1	
1,1,1-Trichloroethane	BDL	ug/L	1	
1,1,2-Trichloroethane	BDL	ug/L	1	
Trichloroethene	BDL	ug/L	1	
Trichlorofluoromethane	BDL	ug/L	1	
Vinyl Chloride	BDL	ug/L	1	
Xylenes (Total)	BDL	ug/L	1	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	93
Toluene-d8	86-119	100
Bromofluorobenzene	85-116	98

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

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Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

610 PAH's by Method 8270

Lab Report Number: 71911
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- **71911**
Sample Name / Location	SF 2406 MW-2
Collector's Name	CE
Date & Time Collected	05/01/97 @ 1215
Sample Type (composite or grab)	Grab
Analyst	M. Chambers
Date of Extraction / Initials	05/06/97 JJ
Date of Analysis	05/09/97
Sample Matrix	GW
Dilution	X 1

Compound Name	1- 71911	units	Det. Limit	Flags
Acenaphthene	BDL	ug/L	2	
Acenaphthylene	BDL	ug/L	2	
Anthracene	BDL	ug/L	2	
Benzo(a)anthracene	BDL	ug/L	2	
Benzo(a)pyrene	BDL	ug/L	2	
Benzo(b)fluoranthene	BDL	ug/L	2	
Benzo(g,h,i)perylene	BDL	ug/L	2	
Benzo(k)fluoranthene	BDL	ug/L	3	
Chrysene	BDL	ug/L	2	
Dibenz(a,h)anthracene	BDL	ug/L	2	
Fluoranthene	BDL	ug/L	2	
Fluorene	BDL	ug/L	2	
Indeno(1,2,3-cd)pyrene	BDL	ug/L	2	
1-Methylnaphthalene *	BDL	ug/L	2	
2-Methylnaphthalene	BDL	ug/L	15	
Naphthalene	BDL	ug/L	10	
Phenanthrene	BDL	ug/L	2	
Pyrene	BDL	ug/L	2	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Nitrobenzene- d5	35-114	81
2-Fluorobiphenyl	43-116	92
Terphenyl -d14	33-141	103

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

D-60

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

Ethylene Dibromide by Method 504

Lab Report Number: 71911
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- 71911			
Sample Name / Location	SF 2406 MW-2			
Collector's Name	CE			
Date & Time Collected	05/01/97 @ 1215			
Sample Type (composite or grab)	Grab			
Analyst	M. Chambers			
Date of Extraction / Initials	05/14/97 MC			
Date of Analysis	05/14/97			
Sample Matrix	GW			
Dilution	X 1			
Compound Name	1- 71911	units	Det. Limit	Flags
Ethylene Dibromide	BDL	ug/L	0.02	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Tetra-Chloro-m-Xylene	54-140	83

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

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End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
Petroleum Range Organics by FLPRO

Lab Report Number: 71911
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- 71911			
Sample Name / Location	SF 2406 MW-2			
Collector's Name	CE			
Date & Time Collected	05/01/97 @ 1215			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of extraction / Initials	05/06/97 JJ			
Date of Analysis	05/08/97			
Sample Matrix	GW			
Dilution	x 5			
Parameter	1- 71911	units	Det. Limit	Flags
Petroleum Range Organics by FLPRO	BDL	mg/L	1.25	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
ortho-Terphenyl	82-142 *	99
Nonatriacontane (C-39)	42-193 *	97

COMMENTS : * = Suggested surrogate recovery limits listed in the method. In-house laboratory limits are in the process of being determined.

BDL = Below Detection Limit. mg/L = millgram per Liter. mg/Kg = milligram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97

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End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
601/602 Volatiles by Method 8260

Lab Report Number: 71912
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- **71912**
Sample Name / Location	SF 2406 MW-3
Collector's Name	CE
Date & Time Collected	05/01/97 @ 1245
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	05/06/97 JM
Date of Analysis	05/06/97
Sample Matrix	GW
Dilution	X 1

Compound Name	1- 71912	units	Det. Limit	Flags
Benzene	BDL	ug/L	1	
Bromodichloromethane	BDL	ug/L	1	
Bromoform	BDL	ug/L	2	
Bromomethane	BDL	ug/L	3	
Carbon Tetrachloride	BDL	ug/L	1	
Chlorobenzene	BDL	ug/L	1	
Chloroethane	BDL	ug/L	1	
2-Chloroethylvinyl ether	BDL	ug/L	1	
Chloroform	BDL	ug/L	1	
Chloromethane	BDL	ug/L	1	
Dibromochloromethane	BDL	ug/L	1	
1,2-Dichlorobenzene	BDL	ug/L	1	
1,3-Dichlorobenzene	BDL	ug/L	1	
1,4-Dichlorobenzene	BDL	ug/L	1	
Dichlorodifluoromethane	BDL	ug/L	1	
1,1-Dichloroethane	BDL	ug/L	1	
1,2-Dichloroethane	BDL	ug/L	1	
1,1-Dichloroethene	BDL	ug/L	1	
trans-1,2-Dichloroethene	BDL	ug/L	1	
1,2-Dichloropropane	BDL	ug/L	1	
cis-1,3-Dichloropropene	BDL	ug/L	1	
trans-1,3-Dichloropropene	BDL	ug/L	1	
Ethylbenzene	32	ug/L	1	
Methylene Chloride	BDL	ug/L	1	
Methyl-tert-butyl ether (MTBE) *	BDL	ug/l	1	
1,1,2,2-Tetrachloroethane	BDL	ug/L	1	
Tetrachloroethene	BDL	ug/L	1	
Toluene	63	ug/L	1	
1,1,1-Trichloroethane	BDL	ug/L	1	
1,1,2-Trichloroethane	BDL	ug/L	1	
Trichloroethene	BDL	ug/L	1	
Trichlorofluoromethane	BDL	ug/L	1	
Vinyl Chloride	BDL	ug/L	1	
Xylenes (Total)	1900	ug/L	10	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	99
Toluene-d8	86-119	99
Bromofluorobenzene	85-116	96

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

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Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
610 PAH's by Method 8270

Lab Report Number: 71912
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- **71912**
Sample Name / Location	SF 2406 MW-3
Collector's Name	CE
Date & Time Collected	05/01/97 @ 1245
Sample Type (composite or grab)	Grab
Analyst	M. Chambers
Date of Extraction / Initials	05/06/97 JJ
Date of Analysis	05/07/97, 05/08/97
Sample Matrix	GW
Dilution	X 1

Compound Name	1- 71912	units	Det. Limit	Flags
Acenaphthene	BDL	ug/L	2	
Acenaphthylene	BDL	ug/L	2	
Anthracene	BDL	ug/L	2	
Benzo(a)anthracene	BDL	ug/L	2	
Benzo(a)pyrene	BDL	ug/L	2	
Benzo(b)fluoranthene	BDL	ug/L	2	
Benzo(g,h,i)perylene	BDL	ug/L	2	
Benzo(k)fluoranthene	BDL	ug/L	3	
Chrysene	BDL	ug/L	2	
Dibenz(a,h)anthracene	BDL	ug/L	2	
Fluoranthene	BDL	ug/L	2	
Fluorene	BDL	ug/L	2	
Indeno(1,2,3-cd)pyrene	BDL	ug/L	2	
1-Methylnaphthalene *	81	ug/L	2	
2-Methylnaphthalene	130	ug/L	3	
Naphthalene	180	ug/L	10	
Phenanthrene	BDL	ug/L	2	
Pyrene	BDL	ug/L	2	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Nitrobenzene- d5	35-114	79
2-Fluorobiphenyl	43-116	90
Terphenyl -d14	33-141	90

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

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End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

Ethylene Dibromide by Method 504

Lab Report Number: 71912
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- 71912			
Sample Name / Location	SF 2406 MW-3			
Collector's Name	CE			
Date & Time Collected	05/01/97 @ 1245			
Sample Type (composite or grab)	Grab			
Analyst	M. Chambers			
Date of Extraction / Initials	05/14/97 MC			
Date of Analysis	05/14/97			
Sample Matrix	GW			
Dilution	X 1			
Compound Name	1- 71912	units	Det. Limit	Flags
Ethylene Dibromide	2.6	ug/L	0.02	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Tetra-Chloro-m-Xylene	54-140	82

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

D-65

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Analytical Report
Petroleum Range Organics by FLPRO

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Lab Report Number: 71912
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- 71912			
Sample Name / Location	SF 2406 MW-3			
Collector's Name	CE			
Date & Time Collected	05/01/97 @ 1245			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of extraction / Initials	05/06/97 JJ			
Date of Analysis	05/09/97			
Sample Matrix	GW			
Dilution	x 5			
Parameter	1- 71912	units	Det. Limit	Flags
Petroleum Range Organics by FLPRO	13	mg/L	1.25	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
ortho-Terphenyl	82-142 *	99
Nonatriacontane (C-39)	42-193 *	89

COMMENTS : * = Suggested surrogate recovery limits listed in the method. In-house laboratory limits are in the process of being determined.

BDL = Below Detection Limit. mg/L = milligram per Liter. mg/Kg = milligram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97

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End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
601/602 Volatiles by Method 8260

Lab Report Number: 71913
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- **71913**
Sample Name / Location	SF 2406 MW-4
Collector's Name	CE
Date & Time Collected	05/01/97 @ 1315
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	05/06/97 JM
Date of Analysis	05/06/97
Sample Matrix	GW
Dilution	X 1

Compound Name	1- 71913	units	Det. Limit	Flags
Benzene	BDL	ug/L	1	
Bromodichloromethane	BDL	ug/L	1	
Bromoform	BDL	ug/L	2	
Bromomethane	BDL	ug/L	3	
Carbon Tetrachloride	BDL	ug/L	1	
Chlorobenzene	BDL	ug/L	1	
Chloroethane	BDL	ug/L	1	
2-Chloroethylvinyl ether	BDL	ug/L	1	
Chloroform	BDL	ug/L	1	
Chloromethane	BDL	ug/L	1	
Dibromochloromethane	BDL	ug/L	1	
1,2-Dichlorobenzene	BDL	ug/L	1	
1,3-Dichlorobenzene	BDL	ug/L	1	
1,4-Dichlorobenzene	BDL	ug/L	1	
Dichlorodifluoromethane	BDL	ug/L	1	
1,1-Dichloroethane	BDL	ug/L	1	
1,2-Dichloroethane	BDL	ug/L	1	
1,1-Dichloroethene	BDL	ug/L	1	
trans-1,2-Dichloroethene	BDL	ug/L	1	
1,2-Dichloropropane	BDL	ug/L	1	
cis-1,3-Dichloropropene	BDL	ug/L	1	
trans-1,3-Dichloropropene	BDL	ug/L	1	
Ethylbenzene	BDL	ug/L	1	
Methylene Chloride	BDL	ug/L	1	
Methyl-tert-butyl ether (MTBE) *	BDL	ug/l	1	
1,1,2,2-Tetrachloroethane	BDL	ug/L	1	
Tetrachloroethene	BDL	ug/L	1	
Toluene	BDL	ug/L	1	
1,1,1-Trichloroethane	BDL	ug/L	1	
1,1,2-Trichloroethane	BDL	ug/L	1	
Trichloroethene	BDL	ug/L	1	
Trichlorofluoromethane	BDL	ug/L	1	
Vinyl Chloride	BDL	ug/L	1	
Xylenes (Total)	BDL	ug/L	1	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	99
Toluene-d8	86-119	101
Bromofluorobenzene	85-116	99

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

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Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

610 PAH's by Method 8270

Lab Report Number: 71913
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- 71913			
Sample Name / Location	SF 2406 MW-4			
Collector's Name	CE			
Date & Time Collected	05/01/97 @ 1315			
Sample Type (composite or grab)	Grab			
Analyst	M. Chambers			
Date of Extraction / Initials	05/06/97 JJ			
Date of Analysis	05/07/97			
Sample Matrix	GW			
Dilution	X 1			
Compound Name	1- 71913	units	Det. Limit	Flags
Acenaphthene	BDL	ug/L	2	
Acenaphthylene	BDL	ug/L	2	
Anthracene	BDL	ug/L	2	
Benzo(a)anthracene	BDL	ug/L	2	
Benzo(a)pyrene	BDL	ug/L	2	
Benzo(b)fluoranthene	BDL	ug/L	2	
Benzo(g,h,i)perylene	BDL	ug/L	2	
Benzo(k)fluoranthene	BDL	ug/L	3	
Chrysene	BDL	ug/L	2	
Dibenz(a,h)anthracene	BDL	ug/L	2	
Fluoranthene	BDL	ug/L	2	
Fluorene	BDL	ug/L	2	
Indeno(1,2,3-cd)pyrene	BDL	ug/L	2	
1-Methylnaphthalene *	BDL	ug/L	2	
2-Methylnaphthalene	BDL	ug/L	3	
Naphthalene	BDL	ug/L	2	
Phenanthrene	BDL	ug/L	2	
Pyrene	BDL	ug/L	2	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Nitrobenzene- d5	35-114	87
2-Fluorobiphenyl	43-116	94
Terphenyl -d14	33-141	94

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

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End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

Ethylene Dibromide by Method 504

Lab Report Number: 71913
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- 71913			
Sample Name / Location	SF 2406 MW-4			
Collector's Name	CE			
Date & Time Collected	05/01/97 @ 1315			
Sample Type (composite or grab)	Grab			
Analyst	M. Chambers			
Date of Extraction / Initials	05/14/97 MC			
Date of Analysis	05/14/97			
Sample Matrix	GW			
Dilution	X 1			
Compound Name	1- 71913	units	Det. Limit	Flags
Ethylene Dibromide	BDL	ug/L	0.02	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Tetra-Chloro-m-Xylene	54-140	88

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

D-69

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
Petroleum Range Organics by FLPRO

Lab Report Number: 71913
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- 71913			
Sample Name / Location	SF 2406 MW-4			
Collector's Name	CE			
Date & Time Collected	05/01/97 @ 1315			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of extraction / Initials	05/06/97 JJ			
Date of Analysis	05/08/97			
Sample Matrix	GW			
Dilution			x 5	
Parameter	1- 71913	units	Det. Limit	Flags
Petroleum Range Organics by FLPRO	BDL	mg/L	1.25	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
ortho-Terphenyl	82-142 *	103
Nonatriacontane (C-39)	42-193 *	101

COMMENTS : * = Suggested surrogate recovery limits listed in the method. In-house laboratory limits are in the process of being determined.

BDL = Below Detection Limit. mg/L = milligram per Liter. mg/Kg = milligram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97

D-70

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
601/602 Volatiles by Method 8260

Lab Report Number: 71914
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- **71914**
Sample Name / Location	SF 2406 MW-5
Collector's Name	CE
Date & Time Collected	05/01/97 @ 1345
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	05/06/97 JM
Date of Analysis	05/06/97
Sample Matrix	GW
Dilution	X 1

Compound Name	1- 71914	units	Det. Limit	Flags
Benzene	BDL	ug/L	1	
Bromodichloromethane	BDL	ug/L	1	
Bromoform	BDL	ug/L	2	
Bromomethane	BDL	ug/L	3	
Carbon Tetrachloride	BDL	ug/L	1	
Chlorobenzene	BDL	ug/L	1	
Chloroethane	BDL	ug/L	1	
2-Chloroethylvinyl ether	BDL	ug/L	1	
Chloroform	BDL	ug/L	1	
Chloromethane	BDL	ug/L	1	
Dibromochloromethane	BDL	ug/L	1	
1,2-Dichlorobenzene	BDL	ug/L	1	
1,3-Dichlorobenzene	BDL	ug/L	1	
1,4-Dichlorobenzene	BDL	ug/L	1	
Dichlorodifluoromethane	BDL	ug/L	1	
1,1-Dichloroethane	BDL	ug/L	1	
1,2-Dichloroethane	BDL	ug/L	1	
1,1-Dichloroethene	BDL	ug/L	1	
trans-1,2-Dichloroethene	BDL	ug/L	1	
1,2-Dichloropropane	BDL	ug/L	1	
cis-1,3-Dichloropropene	BDL	ug/L	1	
trans-1,3-Dichloropropene	BDL	ug/L	1	
Ethylbenzene	BDL	ug/L	1	
Methylene Chloride	BDL	ug/L	1	
Methyl-tert-butyl ether (MTBE) *	BDL	ug/l	1	
1,1,2,2-Tetrachloroethane	BDL	ug/L	1	
Tetrachloroethene	BDL	ug/L	1	
Toluene	BDL	ug/L	1	
1,1,1-Trichloroethane	BDL	ug/L	1	
1,1,2-Trichloroethane	BDL	ug/L	1	
Trichloroethene	BDL	ug/L	1	
Trichlorofluoromethane	BDL	ug/L	1	
Vinyl Chloride	BDL	ug/L	1	
Xylenes (Total)	BDL	ug/L	1	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	99
Toluene-d8	86-119	99
Bromofluorobenzene	85-116	98

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

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Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
610 PAH's by Method 8270

Lab Report Number: 71914
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- 71914			
Sample Name / Location	SF 2406 MW-5			
Collector's Name	CE			
Date & Time Collected	05/01/97 @ 1345			
Sample Type (composite or grab)	Grab			
Analyst	M. Chambers			
Date of Extraction / Initials	05/06/97 JJ			
Date of Analysis	05/07/97			
Sample Matrix	GW			
Dilution	X 1			
Compound Name	1- 71914	units	Det. Limit	Flags
Acenaphthene	BDL	ug/L	2	
Acenaphthylene	BDL	ug/L	2	
Anthracene	BDL	ug/L	2	
Benzo(a)anthracene	BDL	ug/L	2	
Benzo(a)pyrene	BDL	ug/L	2	
Benzo(b)fluoranthene	BDL	ug/L	2	
Benzo(g,h,i)perylene	BDL	ug/L	2	
Benzo(k)fluoranthene	BDL	ug/L	3	
Chrysene	BDL	ug/L	2	
Dibenz(a,h)anthracene	BDL	ug/L	2	
Fluoranthene	BDL	ug/L	2	
Fluorene	BDL	ug/L	2	
Indeno(1,2,3-cd)pyrene	BDL	ug/L	2	
1-Methylnaphthalene *	BDL	ug/L	2	
2-Methylnaphthalene	BDL	ug/L	3	
Naphthalene	BDL	ug/L	2	
Phenanthrene	BDL	ug/L	2	
Pyrene	BDL	ug/L	2	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Nitrobenzene- d5	35-114	83
2-Fluorobiphenyl	43-116	92
Terphenyl -d14	33-141	95

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

D-72

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

Ethylene Dibromide by Method 504

Lab Report Number: 71914
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- 71914			
Sample Name / Location	SF 2406 MW-5			
Collector's Name	CE			
Date & Time Collected	05/01/97 @ 1345			
Sample Type (composite or grab)	Grab			
Analyst	M. Chambers			
Date of Extraction / Initials	05/14/97 MC			
Date of Analysis	05/14/97			
Sample Matrix	GW			
Dilution	X 1			
Compound Name	1- 71914	units	Det. Limit	Flags
Ethylene Dibromide	BDL	ug/L	0.02	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Tetra-Chloro-m-Xylene	54-140	91

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

D-73

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Analytical Report
Petroleum Range Organics by FLPRO

Client:	NPWC Environmental
Address:	Bldg. 3887, Code 910
	NAS Pensacola,FL 32508
Phone #:	452-3180
Contact:	Greg Campbell

Lab Report Number:	71914
Sample Date:	05/01/97
Received Date:	05/02/97
Sample Site:	NAS Pensacola, FL
Job Order No.:	130 5001

LAB Sample ID#	1- 71914			
Sample Name / Location	SF 2406 MW-5			
Collector's Name	CE			
Date & Time Collected	05/01/97 @ 1345			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of extraction / Initials	05/06/97 JJ			
Date of Analysis	05/08/97			
Sample Matrix	GW			
Dilution			x 5	
Parameter	1- 71914	units	Det. Limit	Flags
Petroleum Range Organics by FLPRO	BDL	mg/L	1.25	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
ortho-Terphenyl	82-142 *	107
Nonatriacontane (C-39)	42-193 *	106

COMMENTS : * = Suggested surrogate recovery limits listed in the method. In-house laboratory limits are in the process of being determined.

BDL = Below Detection Limit. mg/L = millgram per Liter. mg/Kg = milligram per Kilogram.

Approved by: Jerry Dees, Laboratory Director

Date: 5/19/97

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End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
601/602 Volatiles by Method 8260

Lab Report Numb 71915
Sample Date: 05/01/97
Received Date: 05/02/97
Sample Site: NAS Pensacola, FL
Job Order No.: 130 5001

LAB Sample ID#	1- **71915**
Sample Name / Location	SF 2406 Trip
Collector's Name	CE
Date & Time Collected	05/01/97 @ 0930
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	05/05/97 JM
Date of Analysis	05/05/97
Sample Matrix	GW
Dilution	X 1

Compound Name	1- 71915	units	Det. Limit	Flags
Benzene	BDL	ug/L	1	
Bromodichloromethane	BDL	ug/L	1	
Bromoform	BDL	ug/L	2	
Bromomethane	BDL	ug/L	3	
Carbon Tetrachloride	BDL	ug/L	1	
Chlorobenzene	BDL	ug/L	1	
Chloroethane	BDL	ug/L	1	
2-Chloroethylvinyl ether	BDL	ug/L	1	
Chloroform	BDL	ug/L	1	
Chloromethane	BDL	ug/L	1	
Dibromochloromethane	BDL	ug/L	1	
1,2-Dichlorobenzene	BDL	ug/L	1	
1,3-Dichlorobenzene	BDL	ug/L	1	
1,4-Dichlorobenzene	BDL	ug/L	1	
Dichlorodifluoromethane	BDL	ug/L	1	
1,1-Dichloroethane	BDL	ug/L	1	
1,2-Dichloroethane	BDL	ug/L	1	
1,1-Dichloroethene	BDL	ug/L	1	
trans-1,2-Dichloroethene	BDL	ug/L	1	
1,2-Dichloropropane	BDL	ug/L	1	
cis-1,3-Dichloropropene	BDL	ug/L	1	
trans-1,3-Dichloropropene	BDL	ug/L	1	
Ethylbenzene	BDL	ug/L	1	
Methylene Chloride	BDL	ug/L	1	
Methyl-tert-butyl ether (MTBE) *	BDL	ug/l	1	
1,1,2,2-Tetrachloroethane	BDL	ug/L	1	
Tetrachloroethene	BDL	ug/L	1	
Toluene	BDL	ug/L	1	
1,1,1-Trichloroethane	BDL	ug/L	1	
1,1,2-Trichloroethane	BDL	ug/L	1	
Trichloroethene	BDL	ug/L	1	
Trichlorofluoromethane	BDL	ug/L	1	
Vinyl Chloride	BDL	ug/L	1	
Xylenes (Total)	BDL	ug/L	1	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	104
Toluene-d8	86-119	101
Bromofluorobenzene	85-116	102

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

D-75

Approved by : Jerry Dees, Laboratory Director

Date: 5/19/97
Report Generated

End of Report

UST CHAIN OF CUSTODY/REQUEST FOR ANALYSIS

Environmental Laboratory
Bldg. Code 920
NAS Pensacola, FL 32508-6500
Phone (904) 452-4728
Autovon-922-4728

Requestor: NPWC Environmental Dept.
Address: Bldg. 3691, Code 910
NAS Pensacola, FL 32508
Phone #: (904) 452-3180
Contact: Greg Campbell
Job Order #: 130500

Report Required? Yes No DEP? Yes No
Lab ID Number:
Sample Date: 5-1-97
Received Date: 5-2-97
Sample Site: SE 2406
Lab Due Date:

Sample ID #	Lab	#1- 71908	#2- 71909	#3- 71910	#4- 71911
Sample Name or Location	----------	EQ BLANK	DUPLICATE	MW-1	MW-2
Sampled by	----------	CE	C.E	C.E	C.E
Composite Date/Time Collected	Begin				
	Frequency				
	End				
Grab Time	----------	1130	—	1145	1215
Sample Matrix	----------	DI	GW	GW	GW

Notes: K.A.G. NO LEAD

PARAMETER by Method Name	METHOD #	X	Bottle ID #'s	X	Bottle ID #'s	X	Bottle ID #'s	X	Bottle ID #'s	Billing Units	Containers Required	Preservative(s) Used
Ethylene Dibromide (EDB)	EPA 504	X	2 EDB	X	2 EDB	X	2 EDB	X	2 EDB	3	120ml A VOA/4 oz.	None/4° C
Purg. Halocarbons/GC	EPA 601									4	40 ml VOA Vial x 2	HCl/4° C
Purg. Aromatics/GC	EPA 602									3	40 ml VOA Vial x 2	HCl/4° C
Purg. Halo. & Aro./GC	EPA 601/602	X	4 VOA	X	4 VOA		4 VOA	X	4 VOA	6	40 ml VOA Vial x 2	HCl/4° C
Polynuclear Aromatics/HPLC	EPA 610									7	1L Amber x 2	4°C
Pesticides/GCMS	EPA 624									8	40 ml VOA Vial x 2	HCl/4° C
Base/Neutrals & Acids/GCMS	EPA 625									15	1L Amber x 2	4° C
Chromatography	EPA SW 8000									5	40mlx2/1Lx2/4 oz.	HCl/4° C/None
Halo. Vol. Org./GC	EPA SW 8010									4	40ml VOAx2/4 oz.	HCl/4° C/None
Non-Halo. Vol. Org./GC	EPA SW 8015(MOD)									4	40mlx2/1Lx2/4 oz.	HCl/4° C/None
Arom. Vol. Org./GC	EPA SW 8020									3	40ml VOAx2/4 oz.	HCl/4° C/None
Halo/Arom. Vol. Org./GC	EPA SW 8010/8020									6	40ml VOAx2/4 oz.	HCl/4° C/None
Polynuclear Aromatics/GC	EPA SW 8100									6	1Lx2/4 oz.	4° C/None
VOC/GCMS	EPA SW 8240A									8	40ml VOAx2/4 oz.	HCl/4° C/None
VOC/GCMS - Cap.	EPA SW 8260									8	40ml VOAx2/4 oz.	HCl/4° C/None
Semivol. Org./GCMS - Cap.	EPA SW 8270A									16	1Lx3/4 oz.	4° C/None
Polynuclear Aromatics (PAH's)	EPA SW 8310	X	2 PAH	X	2 PAH	X	2 PAH	X	3 PAH		1Lx3/4 oz.	4° C/None

PARAMETER by Group Name	METHOD SOURCE	X.	Bottle ID #'s	X	Bottle ID #'s	X	Bottle ID #'s	X	Bottle ID #'s	Billing Units	Containers Required	Preservative(s) Used
Gasoline Analytical Group	EPA SW-846										Consult Lab	Consult Lab
Kerosene Analytical Group	EPA SW-846										Consult Lab	Consult Lab
Mixed Product Analytical Group	EPA SW-846										Consult Lab	Consult Lab
Total Petroleum Hydrocarbons	FL ~~EPA 418.1~~ PRO	X	2 TPH	X	2 TPH	X	2 TPH	X	3 TPH		Consult Lab	Consult Lab
RCRA Metals (8)	EPA Various										Consult Lab	Consult Lab
TCLP Metals (8) w/extraction	EPA SW-846										Consult Lab	Consult Lab
Lead (Pb)	EPA 239.2										250ml/4 oz.	1N HNO_3/None
Other:												

Comments: #2 = QA/QC

Relinquished by: [signature]
Date/Time: 5-2-97 0800

Received by: Kathy Bennett
Date/Time: 5/2/97 0740

WC 951078

UST CHAIN OF CUSTODY/REQUEST FOR ANALYSIS

NPWC Environmental Laboratory
Bldg. Code 820
NAS Pensacola, FL 32508-8500
Phone (904) 452-4728
Autovon 922-4728

Requestor: NPWC Environmental Dept.
Address: Bldg. 3691, Code 910
NAS Pensacola, FL 32508
Phone #: (904) 452-3180
Contact: Greg Campbell
Job Order #: 130500

Report Required? Yes No DEP? Yes No
Lab ID Number:
Sample Date: 5-1-97
Received Date: 5-2-97
Sample Site: SI= 2406
Lab Due Date:

Sample ID #	Lab	#1- 71912	#2- 71913	#3- 71914	#4- 71915
Sample Name or Location	----------	MW-3	MW-4	MW-5	TRIP
Sampled by	----------	C.E	C.E	C.E	C.E
Composite Date/Time Collected	Begin				
	Frequency				
	End				
Grab Time	----------	1245	1315	1345	0930
Sample Matrix	----------				

Notes: LAB. NO LEAD

PARAMETER by Method Name	METHOD #	X	Bottle ID #'s	X	Bottle ID #'s	X	Bottle ID #'s	X	Bottle ID #'s	Billing Units	Containers Required	Preservative(s) Used
Ethylene Dibromide (EDB)	EPA 504	X	2 EDB	X	2 EDB	X	2 EDB			3	120ml A VOA/4 oz.	None/4° C
Purg. Halocarbons/GC	EPA 601									4	40 ml VOA Vial x 2	HCl/4° C
Purg. Aromatics/GC	EPA 602									3	40 ml VOA Vial x 2	HCl/4° C
Purg. Halo. & Aro./GC	EPA 601/602	X	4 VOA	X	4 VOA	X	4 VOA	X	2 VOA	8	40 ml VOA Vial x 2	HCl/4° C
Polynuclear Aromatics/HPLC	EPA 610									7	1L Amber x 2	4° C
Purgeables/GC/MS	EPA 624									8	40 ml VOA Vial x 2	HCl/4° C
Base/Neutrals & Acids/GC/MS	EPA 625									15	1L Amber x 2	4° C
Gas Chromatography	EPA SW 8000									5	40mlx2/1Lx2/4 oz.	HCl/4° C/None
Vol. Org./GC	EPA SW 8010									4	40ml VOAx2/4 oz.	HCl/4° C/None
Non-Halo. Vol. Org./GC	EPA SW 8015(MOD)									4	40mlx2/1Lx2/4 oz.	HCl/4° C/None
Arom. Vol. Org./GC	EPA SW 8020									3	40ml VOAx2/4 oz.	HCl/4° C/None
Halo./Arom. Vol. Org./GC	EPA SW 8010/8020									6	40ml VOAx2/4 oz.	HCl/4° C/None
Polynuclear Aromatics/GC	EPA SW 8100									6	1Lx2/4 oz.	4° C/None
VOC/GC/MS	EPA SW 8240A									8	40ml VOAx2/4 oz.	HCl/4° C/None
VOC/GC/MS - Cap.	EPA SW 8260									8	40ml VOAx2/4 oz.	HCl/4° C/None
Semivol. Org./GC/MS - Cap.	EPA SW 8270A									16	1Lx3/4 oz.	4° C/None
Polynuclear Aromatics (PAH's)	EPA SW 8310	X	2 PAH	X	2 PAH	X	2 PAH				1Lx3/4 oz.	4° C/None

PARAMETER by Group Name	METHOD SOURCE	X.	Bottle ID #'s	X	Bottle ID #'s	X	Bottle ID #'s	X	Bottle ID #'s	Billing Units	Containers Required	Preservative(s) Used
Gasoline Analytical Group	EPA SW-846										Consult Lab	Consult Lab
Kerosene Analytical Group	EPA SW-846										Consult Lab	Consult Lab
Mixed Product Analytical Group	EPA SW-846										Consult Lab	Consult Lab
Total Petroleum Hydrocarbons	EPA 418.1	X	2 TPH	X	2 TPH	X	2 TPH				Consult Lab	Consult Lab
RCRA Metals (8)	EPA Various										Consult Lab	Consult Lab
TCLP Metals (8) w/extraction	EPA SW-846										Consult Lab	Consult Lab
Lead (Pb)	EPA 239.2										250ml/4 oz.	HNO3/None
Other:												

Comments:

Relinquished by: [signature]
Date/Time: 5-1-97 0800

Received by: Kathy Rogers
Date/Time: 5/2/97 0740

WC 251078

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
601/602 Volatiles by Method 8260

Lab Report Number: 72297
Sample Date: 05/20/97
Received Date: 05/21/97
Sample Site: SF Site 2406
Job Order No.: 130 5001

LAB Sample ID#	1- 72297
Sample Name / Location	SF 2406 Eq. Blank
Collector's Name	CE
Date & Time Collected	05/20/97 @ 1300
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	05/23/97 JM
Date of Analysis	05/23/97
Sample Matrix	Deionized water
Dilution	X 1

Compound Name	1- 72297	units	Det. Limit	Flags
Benzene	BDL	ug/L	1	
Bromodichloromethane	BDL	ug/L	1	
Bromoform	BDL	ug/L	2	
Bromomethane	BDL	ug/L	3	
Carbon Tetrachloride	BDL	ug/L	1	
Chlorobenzene	BDL	ug/L	1	
Chloroethane	BDL	ug/L	1	
2-Chloroethylvinyl ether	BDL	ug/L	1	
Chloroform	BDL	ug/L	1	
Chloromethane	BDL	ug/L	1	
Dibromochloromethane	BDL	ug/L	1	
1,2-Dichlorobenzene	BDL	ug/L	1	
1,3-Dichlorobenzene	BDL	ug/L	1	
1,4-Dichlorobenzene	BDL	ug/L	1	
Dichlorodifluoromethane	BDL	ug/L	1	
1,1-Dichloroethane	BDL	ug/L	1	
1,2-Dichloroethane	BDL	ug/L	1	
1,1-Dichloroethene	BDL	ug/L	1	
trans-1,2-Dichloroethene	BDL	ug/L	1	
1,2-Dichloropropane	BDL	ug/L	1	
cis-1,3-Dichloropropene	BDL	ug/L	1	
trans-1,3-Dichloropropene	BDL	ug/L	1	
Ethylbenzene	1	ug/L	1	
Methylene Chloride	BDL	ug/L	1	
Methyl-tert-butyl ether (MTBE) *	BDL	ug/l	1	
1,1,2,2-Tetrachloroethane	BDL	ug/L	1	
Tetrachloroethene	BDL	ug/L	1	
Toluene	2	ug/L	1	
1,1,1-Trichloroethane	BDL	ug/L	1	
1,1,2-Trichloroethane	BDL	ug/L	1	
Trichloroethene	BDL	ug/L	1	
Trichlorofluoromethane	BDL	ug/L	1	
Vinyl Chloride	BDL	ug/L	1	
Xylenes (Total)	1	ug/L	1	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	110
Toluene-d8	86-119	101
Bromofluorobenzene	85-116	102

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

Approved by : Jerry Dees, Laboratory Director

Date: 6/17/97
Report Generated

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

610 PAH's by Method 8270

Lab Report Number: 72297
Sample Date: 05/20/97
Received Date: 05/21/97
Sample Site: SF Site 2406
Job Order No.: 130 5001

LAB Sample ID#	1- **72297**
Sample Name / Location	SF 2406 Eq. Blank
Collector's Name	CE
Date & Time Collected	05/20/97 @ 1300
Sample Type (composite or grab)	Grab
Analyst	M. Chambers
Date of Extraction / Initials	05/22/97 JJ
Date of Analysis	05/23/97
Sample Matrix	Deionized water
Dilution	X 1

Compound Name	1- 72297	units	Det. Limit	Flags
Acenaphthene	BDL	ug/L	2	
Acenaphthylene	BDL	ug/L	2	
Anthracene	BDL	ug/L	2	
Benzo(a)anthracene	BDL	ug/L	2	
Benzo(a)pyrene	BDL	ug/L	2	
Benzo(b)fluoranthene	BDL	ug/L	2	
Benzo(g,h,i)perylene	BDL	ug/L	2	
Benzo(k)fluoranthene	BDL	ug/L	3	
Chrysene	BDL	ug/L	2	
Dibenz(a,h)anthracene	BDL	ug/L	2	
Fluoranthene	BDL	ug/L	2	
Fluorene	BDL	ug/L	2	
Indeno(1,2,3-cd)pyrene	BDL	ug/L	2	
1-Methylnaphthalene *	BDL	ug/L	2	
2-Methylnaphthalene	BDL	ug/L	15	
Naphthalene	BDL	ug/L	10	
Phenanthrene	BDL	ug/L	2	
Pyrene	BDL	ug/L	2	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Nitrobenzene- d5	35-114	85
2-Fluorobiphenyl	43-116	87
Terphenyl -d14	33-141	90

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

Approved by : Jerry Dees, Laboratory Director

Date: 5/27/97
Report Generated

D-79

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

Ethylene Dibromide by Method 504

Lab Report Number: 72297
Sample Date: 05/20/97
Received Date: 05/21/97
Sample Site: SF Site 2406
Job Order No.: 130 5001

LAB Sample ID#	1- 72297			
Sample Name / Location	SF 2406 Eq. Blank			
Collector's Name	CE			
Date & Time Collected	05/20/97 @ 1300			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of Extraction / Initials	05/27/97 JM			
Date of Analysis	05/28/97			
Sample Matrix	Deionized water			
Dilution	X 1			
Compound Name	1- 72297	units	Det. Limit	Flags
Ethylene Dibromide	BDL	ug/L	0.02	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Tetra-Chloro-m-Xylene	54-140	118

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 6/12/97
Report Generated

D-80

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Analytical Report
Petroleum Range Organics by FLPRO

Client:	NPWC Environmental
Address:	Bldg. 3887, Code 910 NAS Pensacola,FL 32508
Phone #:	452-3180
Contact:	Greg Campbell

Lab Report Number:	72297
Sample Date:	05/20/97
Received Date:	05/21/97
Sample Site:	SF Site 2406
Job Order No.:	130 5001

LAB Sample ID#	1- 72297			
Sample Name / Location	SF 2406 Eq. Blank			
Collector's Name	CE			
Date & Time Collected	05/20/97 @ 1300			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of extraction / Initials	05/22/97 JJ			
Date of Analysis	05/24/97			
Sample Matrix	Deionized water			
Dilution	x 1			
Parameter	1- 72297	units	Det. Limit	Flags
Petroleum Range Organics by FLPRO	BDL	mg/L	0.25	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
ortho-Terphenyl	82-142 *	89
Nonatriacontane (C-39)	42-193 *	86

COMMENTS : * = Suggested surrogate recovery limits listed in the method. In-house laboratory limits are in the process of being determined.

BDL = Below Detection Limit. mg/L = milligram per Liter. mg/Kg = milligram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 5/27/97

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End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
601/602 Volatiles by Method 8260

Lab Report Number: 72298
Sample Date: 05/20/97
Received Date: 05/21/97
Sample Site: SF Site 2406
Job Order No.: 130 5001

LAB Sample ID#	1- **72298**
Sample Name / Location	SF 2406 MW-7
Collector's Name	CE
Date & Time Collected	05/20/97 @ 1330
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	05/23/97 JM
Date of Analysis	05/23/97
Sample Matrix	Groundwater
Dilution	X 1

Compound Name	1- 72298	units	Det. Limit	Flags
Benzene	BDL	ug/L	1	
Bromodichloromethane	BDL	ug/L	1	
Bromoform	BDL	ug/L	2	
Bromomethane	BDL	ug/L	3	
Carbon Tetrachloride	BDL	ug/L	1	
Chlorobenzene	BDL	ug/L	1	
Chloroethane	BDL	ug/L	1	
2-Chloroethylvinyl ether	BDL	ug/L	1	
Chloroform	BDL	ug/L	1	
Chloromethane	BDL	ug/L	1	
Dibromochloromethane	BDL	ug/L	1	
1,2-Dichlorobenzene	BDL	ug/L	1	
1,3-Dichlorobenzene	BDL	ug/L	1	
1,4-Dichlorobenzene	BDL	ug/L	1	
Dichlorodifluoromethane	BDL	ug/L	1	
1,1-Dichloroethane	BDL	ug/L	1	
1,2-Dichloroethane	BDL	ug/L	1	
1,1-Dichloroethene	BDL	ug/L	1	
trans-1,2-Dichloroethene	BDL	ug/L	1	
1,2-Dichloropropane	BDL	ug/L	1	
cis-1,3-Dichloropropene	BDL	ug/L	1	
trans-1,3-Dichloropropene	BDL	ug/L	1	
Ethylbenzene	BDL	ug/L	1	
Methylene Chloride	BDL	ug/L	1	
Methyl-tert-butyl ether (MTBE) *	BDL	ug/l	1	
1,1,2,2-Tetrachloroethane	BDL	ug/L	1	
Tetrachloroethene	BDL	ug/L	1	
Toluene	BDL	ug/L	1	
1,1,1-Trichloroethane	BDL	ug/L	1	
1,1,2-Trichloroethane	BDL	ug/L	1	
Trichloroethene	BDL	ug/L	1	
Trichlorofluoromethane	BDL	ug/L	1	
Vinyl Chloride	BDL	ug/L	1	
Xylenes (Total)	BDL	ug/L	1	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	107
Toluene-d8	86-119	100
Bromofluorobenzene	85-116	102

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

D-82

Approved by : Jerry Dees, Laboratory Director

Date: 5/27/97
Report Generated

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
610 PAH's by Method 8270

Lab Report Number: 72298
Sample Date: 05/20/97
Received Date: 05/21/97
Sample Site: SF Site 2406
Job Order No.: 130 5001

LAB Sample ID#	1- **72298**
Sample Name / Location	SF 2406 MW-7
Collector's Name	CE
Date & Time Collected	05/20/97 @ 1330
Sample Type (composite or grab)	Grab
Analyst	M. Chambers
Date of Extraction / Initials	05/22/97 JJ
Date of Analysis	05/23/97
Sample Matrix	Groundwater
Dilution	X 1

Compound Name	1- 72298	units	Det. Limit	Flags
Acenaphthene	BDL	ug/L	2	
Acenaphthylene	BDL	ug/L	2	
Anthracene	BDL	ug/L	2	
Benzo(a)anthracene	BDL	ug/L	2	
Benzo(a)pyrene	BDL	ug/L	2	
Benzo(b)fluoranthene	BDL	ug/L	2	
Benzo(g,h,i)perylene	BDL	ug/L	2	
Benzo(k)fluoranthene	BDL	ug/L	3	
Chrysene	BDL	ug/L	2	
Dibenz(a,h)anthracene	BDL	ug/L	2	
Fluoranthene	BDL	ug/L	2	
Fluorene	BDL	ug/L	2	
Indeno(1,2,3-cd)pyrene	BDL	ug/L	2	
1-Methylnaphthalene *	BDL	ug/L	2	
2-Methylnaphthalene	BDL	ug/L	15	
Naphthalene	BDL	ug/L	10	
Phenanthrene	BDL	ug/L	2	
Pyrene	BDL	ug/L	2	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Nitrobenzene- d5	35-114	81
2-Fluorobiphenyl	43-116	84
Terphenyl -d14	33-141	67

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/kg = microgram per Kilogram. * = FL HRS certification pending.

Approved by : Jerry Dees, Laboratory Director

Date: 5/27/97
Report Generated

D-83

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

Ethylene Dibromide by Method 504

Lab Report Number: 72298
Sample Date: 05/20/97
Received Date: 05/21/97
Sample Site: SF Site 2406
Job Order No.: 130 5001

LAB Sample ID#	1- 72298			
Sample Name / Location	SF 2406 MW -7			
Collector's Name	CE			
Date & Time Collected	05/20/97 @ 1330			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of Extraction / Initials	05/27/97 JM			
Date of Analysis	05/28/97			
Sample Matrix	Groundwater			
Dilution	X 1			
Compound Name	1- 72298	units	Det. Limit	Flags
Ethylene Dibromide	BDL	ug/L	0.02	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Tetra-Chloro-m-Xylene	54-140	100

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 6/12/97
Report Generated

D-84

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
Petroleum Range Organics by FLPRO

Lab Report Number: 72298
Sample Date: 05/20/97
Received Date: 05/21/97
Sample Site: SF Site 2406
Job Order No.: 130 5001

LAB Sample ID#	1- 72298			
Sample Name / Location	SF 2406 MW-7			
Collector's Name	CE			
Date & Time Collected	05/20/97 @ 1330			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of extraction / Initials	05/22/97 JJ			
Date of Analysis	05/24/97			
Sample Matrix	Groundwater			
Dilution	x 1			
Parameter	1- 72298	units	Det. Limit	Flags
Petroleum Range Organics by FLPRO	BDL	mg/L	0.25	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
ortho-Terphenyl	82-142 *	91
Nonatriacontane (C-39)	42-193 *	99

COMMENTS : * = Suggested surrogate recovery limits listed in the method. In-house laboratory limits are in the process of being determined.

BDL = Below Detection Limit. mg/L = milligram per Liter. mg/Kg = milligram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 5/27/97

D-85

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
601/602 Volatiles by Method 8260

Lab Report Number: 72299
Sample Date: 05/20/97
Received Date: 05/21/97
Sample Site: SF Site 2406
Job Order No.: 130 5001

LAB Sample ID#	1- 72299
Sample Name / Location	SF 2406 MW-8
Collector's Name	CE
Date & Time Collected	05/20/97 @ 1400
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	05/23/97 JM
Date of Analysis	05/23/97
Sample Matrix	Groundwater
Dilution	X 1

Compound Name	1- 72299	units	Det. Limit	Flags
Benzene	BDL	ug/L	1	
Bromodichloromethane	BDL	ug/L	1	
Bromoform	BDL	ug/L	2	
Bromomethane	BDL	ug/L	3	
Carbon Tetrachloride	BDL	ug/L	1	
Chlorobenzene	BDL	ug/L	1	
Chloroethane	BDL	ug/L	1	
2-Chloroethylvinyl ether	BDL	ug/L	1	
Chloroform	BDL	ug/L	1	
Chloromethane	BDL	ug/L	1	
Dibromochloromethane	BDL	ug/L	1	
1,2-Dichlorobenzene	BDL	ug/L	1	
1,3-Dichlorobenzene	BDL	ug/L	1	
1,4-Dichlorobenzene	BDL	ug/L	1	
Dichlorodifluoromethane	BDL	ug/L	1	
1,1-Dichloroethane	BDL	ug/L	1	
1,2-Dichloroethane	BDL	ug/L	1	
1,1-Dichloroethene	BDL	ug/L	1	
trans-1,2-Dichloroethene	BDL	ug/L	1	
1,2-Dichloropropane	BDL	ug/L	1	
cis-1,3-Dichloropropene	BDL	ug/L	1	
trans-1,3-Dichloropropene	BDL	ug/L	1	
Ethylbenzene	BDL	ug/L	1	
Methylene Chloride	BDL	ug/L	1	
Methyl-tert-butyl ether (MTBE) *	BDL	ug/l	1	
1,1,2,2-Tetrachloroethane	BDL	ug/L	1	
Tetrachloroethene	BDL	ug/L	1	
Toluene	BDL	ug/L	1	
1,1,1-Trichloroethane	BDL	ug/L	1	
1,1,2-Trichloroethane	BDL	ug/L	1	
Trichloroethene	BDL	ug/L	1	
Trichlorofluoromethane	BDL	ug/L	1	
Vinyl Chloride	BDL	ug/L	1	
Xylenes (Total)	BDL	ug/L	1	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	106
Toluene-d8	86-119	101
Bromofluorobenzene	85-116	105

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

D-86

Approved by : Jerry Deas, Laboratory Director

Date: 5/27/97
Report Generated

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

610 PAH's by Method 8270

Lab Report Number: 72299
Sample Date: 05/20/97
Received Date: 05/21/97
Sample Site: SF Site 2406
Job Order No.: 130 5001

LAB Sample ID#	1- 72299
Sample Name / Location	SF 2406 MW -8
Collector's Name	CE
Date & Time Collected	05/20/97 @ 1400
Sample Type (composite or grab)	Grab
Analyst	M. Chambers
Date of Extraction / Initials	05/22/97 JJ
Date of Analysis	05/23/97
Sample Matrix	Groundwater
Dilution	X 1

Compound Name	1- 72299	units	Det. Limit	Flags
Acenaphthene	BDL	ug/L	2	
Acenaphthylene	BDL	ug/L	2	
Anthracene	BDL	ug/L	2	
Benzo(a)anthracene	BDL	ug/L	2	
Benzo(a)pyrene	BDL	ug/L	2	
Benzo(b)fluoranthene	BDL	ug/L	2	
Benzo(g,h,i)perylene	BDL	ug/L	2	
Benzo(k)fluoranthene	BDL	ug/L	3	
Chrysene	BDL	ug/L	2	
Dibenz(a,h)anthracene	BDL	ug/L	2	
Fluoranthene	BDL	ug/L	2	
Fluorene	BDL	ug/L	2	
Indeno(1,2,3-cd)pyrene	BDL	ug/L	2	
1-Methylnaphthalene *	BDL	ug/L	2	
2-Methylnaphthalene	BDL	ug/L	15	
Naphthalene	BDL	ug/L	10	
Phenanthrene	BDL	ug/L	2	
Pyrene	BDL	ug/L	2	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Nitrobenzene- d5	35-114	79
2-Fluorobiphenyl	43-116	81
Terphenyl -d14	33-141	60

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

Approved by : Jerry Dees, Laboratory Director

Date: 5/27/97
Report Generated

D-87

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

Ethylene Dibromide by Method 504

Lab Report Number: 72299
Sample Date: 05/20/97
Received Date: 05/21/97
Sample Site: SF Site 2406
Job Order No.: 130 5001

LAB Sample ID#	1- 72299			
Sample Name / Location	SF 2406 MW-8			
Collector's Name	CE			
Date & Time Collected	05/20/97 @ 1400			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of Extraction / Initials	05/27/97 JM			
Date of Analysis	05/28/97			
Sample Matrix	Groundwater			
Dilution	X 1			
Compound Name	1- 72299	units	Det. Limit	Flags
Ethylene Dibromide	BDL	ug/L	0.02	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Tetra-Chloro-m-Xylene	54-140	86

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 6/12/97
Report Generated

D-88

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
Petroleum Range Organics by FLPRO

Lab Report Number: 72299
Sample Date: 05/20/97
Received Date: 05/21/97
Sample Site: SF Site 2406
Job Order No.: 130 5001

LAB Sample ID#	1- 72299			
Sample Name / Location	SF 2406 MW -8			
Collector's Name	CE			
Date & Time Collected	05/20/97 @ 1400			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of extraction / Initials	05/22/97 JJ			
Date of Analysis	05/24/97			
Sample Matrix	Groundwater			
Dilution	x 1			
Parameter	1- 72299	units	Det. Limit	Flags
Petroleum Range Organics by FLPRO	BDL	mg/L	0.25	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
ortho-Terphenyl	82-142 *	90
Nonatriacontane (C-39)	42-193 *	87

COMMENTS : * = Suggested surrogate recovery limits listed in the method. In-house laboratory limits are in the process of being determined.

BDL = Below Detection Limit. mg/L = millgram per Liter. mg/Kg = milligram per Kilogram.

Approved by : Jerry Deegs, Laboratory Director

Date: 5/27/97

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End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
601/602 Volatiles by Method 8260

Lab Report Number: 72300
Sample Date: 05/20/97
Received Date: 05/21/97
Sample Site: SF Site 2406
Job Order No.: 130 5001

LAB Sample ID#	1- **72300**
Sample Name / Location	SF 2406 MW-6
Collector's Name	CE
Date & Time Collected	05/20/97 @ 1430
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	05/23/97 JM
Date of Analysis	05/23/97
Sample Matrix	Groundwater
Dilution	X 1

Compound Name	1- 72300	units	Det. Limit	Flags
Benzene	BDL	ug/L	1	
Bromodichloromethane	BDL	ug/L	1	
Bromoform	BDL	ug/L	2	
Bromomethane	BDL	ug/L	3	
Carbon Tetrachloride	BDL	ug/L	1	
Chlorobenzene	BDL	ug/L	1	
Chloroethane	BDL	ug/L	1	
2-Chloroethylvinyl ether	BDL	ug/L	1	
Chloroform	BDL	ug/L	1	
Chloromethane	BDL	ug/L	1	
Dibromochloromethane	BDL	ug/L	1	
1,2-Dichlorobenzene	BDL	ug/L	1	
1,3-Dichlorobenzene	BDL	ug/L	1	
1,4-Dichlorobenzene	BDL	ug/L	1	
Dichlorodifluoromethane	BDL	ug/L	1	
1,1-Dichloroethane	BDL	ug/L	1	
1,2-Dichloroethane	BDL	ug/L	1	
1,1-Dichloroethene	BDL	ug/L	1	
trans-1,2-Dichloroethene	BDL	ug/L	1	
1,2-Dichloropropane	BDL	ug/L	1	
cis-1,3-Dichloropropene	BDL	ug/L	1	
trans-1,3-Dichloropropene	BDL	ug/L	1	
Ethylbenzene	BDL	ug/L	1	
Methylene Chloride	BDL	ug/L	1	
Methyl-tert-butyl ether (MTBE) *	BDL	ug/l	1	
1,1,2,2-Tetrachloroethane	BDL	ug/L	1	
Tetrachloroethene	BDL	ug/L	1	
Toluene	BDL	ug/L	1	
1,1,1-Trichloroethane	BDL	ug/L	1	
1,1,2-Trichloroethane	BDL	ug/L	1	
Trichloroethene	BDL	ug/L	1	
Trichlorofluoromethane	BDL	ug/L	1	
Vinyl Chloride	BDL	ug/L	1	
Xylenes (Total)	BDL	ug/L	1	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	106
Toluene-d8	86-119	102
Bromofluorobenzene	85-116	104

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

D-90

Approved by : Jerry Dees, Laboratory Director

Date: 5/27/97
Report Generated

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
610 PAH's by Method 8270

Lab Report Number: 72300
Sample Date: 05/20/97
Received Date: 05/21/97
Sample Site: SF Site 2406
Job Order No.: 130 5001

LAB Sample ID#	1- **72300**
Sample Name / Location	SF 2406 MW-6
Collector's Name	CE
Date & Time Collected	05/20/97 @ 1430
Sample Type (composite or grab)	Grab
Analyst	M. Chambers
Date of Extraction / Initials	05/22/97 JJ
Date of Analysis	05/23/97
Sample Matrix	Groundwater
Dilution	X 1

Compound Name	1- 72300	units	Det. Limit	Flags
Acenaphthene	BDL	ug/L	2	
Acenaphthylene	BDL	ug/L	2	
Anthracene	BDL	ug/L	2	
Benzo(a)anthracene	BDL	ug/L	2	
Benzo(a)pyrene	BDL	ug/L	2	
Benzo(b)fluoranthene	BDL	ug/L	2	
Benzo(g,h,i)perylene	BDL	ug/L	2	
Benzo(k)fluoranthene	BDL	ug/L	3	
Chrysene	BDL	ug/L	2	
Dibenz(a,h)anthracene	BDL	ug/L	2	
Fluoranthene	BDL	ug/L	2	
Fluorene	BDL	ug/L	2	
Indeno(1,2,3-cd)pyrene	BDL	ug/L	2	
1-Methylnaphthalene *	BDL	ug/L	2	
2-Methylnaphthalene	BDL	ug/L	15	
Naphthalene	BDL	ug/L	10	
Phenanthrene	BDL	ug/L	2	
Pyrene	BDL	ug/L	2	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Nitrobenzene- d5	35-114	78
2-Fluorobiphenyl	43-116	89
Terphenyl -d14	33-141	94

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

Approved by : Jerry Dees, Laboratory Director

Date: 5/27/97
Report Generated

D-91

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

Ethylene Dibromide by Method 504

Lab Report Number: 72300
Sample Date: 05/20/97
Received Date: 05/21/97
Sample Site: SF Site 2406
Job Order No.: 130 5001

LAB Sample ID#	1- 72300			
Sample Name / Location	SF 2406 MW-6			
Collector's Name	CE			
Date & Time Collected	05/20/97 @ 1430			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of Extraction / Initials	05/27/97 JM			
Date of Analysis	05/28/97			
Sample Matrix	Groundwater			
Dilution	X 1			
Compound Name	1- 72300	units	Det. Limit	Flags
Ethylene Dibromide	BDL	ug/L	0.02	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Tetra-Chloro-m-Xylene	54-140	92

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 6/12/97
Report Generated

D-92

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Analytical Report
Petroleum Range Organics by FLPRO

Client:	NPWC Environmental
Address:	Bldg. 3887, Code 910
	NAS Pensacola,FL 32508
Phone #:	452-3180
Contact:	Greg Campbell

Lab Report Number:	72300
Sample Date:	05/20/97
Received Date:	05/21/97
Sample Site:	SF Site 2406
Job Order No.:	130 5001

LAB Sample ID#	1- 72300			
Sample Name / Location	SF 2406 MW-6			
Collector's Name	CE			
Date & Time Collected	05/20/97 @ 1430			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of extraction / Initials	05/22/97 JJ			
Date of Analysis	05/24/97			
Sample Matrix	Groundwater			
Dilution	x 1			
Parameter	1- 72300	units	Det. Limit	Flags
Petroleum Range Organics by FLPRO	BDL	mg/L	0.25	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
ortho-Terphenyl	82-142 *	91
Nonatriacontane (C-39)	42-193 *	88

COMMENTS : * = Suggested surrogate recovery limits listed in the method. In-house laboratory limits are in the process of being determined.

BDL = Below Detection Limit. mg/L = milligram per Liter. mg/Kg = milligram per Kilogram.

Approved by : Jerry Bees, Laboratory Director

Date: 5/27/97

D-93

End of Report

UST CHAIN OF CUSTODY/REQUEST FOR ANALYSIS

NPWC Environmental Laboratory
;3287, Code 820
NAS Pensacola, FL 32508-6500

Ph# - (904) 452-4728
Autovon - 922-4728

Requester: NPWC Environmental Dept.
Address: Bldg. 3691, Code 910
NAS Pensacola, FL 32508
Phone #: (904) 452-3180
Contact: Greg Campbell
Job Order #: 1305001

Report Required? Yes No DEP? Yes No
Lab ID Number:
Sample Date: 5-20-97
Received Date: 5-21-97
Sample Site: SF 2406
Lab Due Date:

Sample ID #	Lab	#1- 72297	#2- 72298	#3- 72299	#4- 72300
Sample Name or Location	----------	EQ Blank	MW-7	MW-8	MW-6
Sampled by	----------	CE	CE	CE	CE
Composite Date/Time Collected	Begin				
	Frequency				
	End				
Grab Time	----------	1300	1330	1400	1430
Sample Matrix	----------	DI	GW	GW / ~~[illegible]~~	~~[illegible]~~ GW

Notes: K.A.G NO LEAD

PARAMETER by Method Name	METHOD #	X	Bottle ID #'s	X	Bottle ID #'s	X	Bottle ID #'s	X	Bottle ID #'s	Billing Units	Containers Required	Preservative(s) Used
Ethylene Dibromide (EDB)	EPA 504	X	2 EDB	X	2 EDB	X	2 EDB	X	2 EDB	3	120ml A VOA/4 oz.	None/4° C
Purg. Halocarbons/GC	EPA 601									4	40 ml VOA Vial x 2	HCV/4° C
Purg. Aromatics/GC	EPA 602									3	40 ml VOA Vial x 2	HCV/4° C
Purg. Halo. & Aro./GC	EPA 601/602	X	4 VOA	X	4 VOA	X	~~VOA~~ (4)	X	4 VOA	8	40 ml VOA Vial x 2	HCV/4° C
Polynuclear Aromatics/HPLC	EPA 610									7	1L Amber x 2	4° C
Purgeables/GC/MS	EPA 624									8	40 ml VOA Vial x 2	HCV/4° C
Base/Neutrals & Acids/GC/MS	EPA 625									15	1L Amber x 2	4° C
Gas Chromatography	EPA SW 8000									5	40mlx2/1Lx2/4 oz.	HCV/4° C/None
Halo. Vol. Org./GC	EPA SW 8010									4	40ml VOAx2/4 oz.	HCV/4° C/None
Non-Halo. Vol. Org./GC	EPA SW 8015(MOD)									4	40mlx2/1Lx2/4 oz.	HCV/4° C/None
Arom. Vol. Org./GC	EPA SW 8020									3	40ml VOAx2/4 oz.	HCV/4° C/None
Halo/Arom. Vol. Org./GC	EPA SW 8010/8020									8	40ml VOAx2/4 oz.	HCV/4° C/None
Polynuclear Aromatics/GC	EPA SW 8100									6	1Lx2/4 oz.	4° C/None
VOC/GC/MS	EPA SW 8240A									8	40ml VOAx2/4 oz.	HCV/4° C/None
VOC/GC/MS - Cap.	EPA SW 8260									8	40ml VOAx2/4 oz.	HCV/4° C/None
Semivol. Org./GC/MS - Cap.	EPA SW 8270A									16	1Lx3/4 oz.	4° C/None
Polynuclear Aromatics (PAH's)	EPA SW 8310	X	2 PAH	X	2 PAH	X	2 PAH	X	2 PAH		1Lx3/4 oz.	4° C/None
PARAMETER by Group Name	**METHOD SOURCE**	**X**	**Bottle ID #'s**	**X**	**Bottle ID #'s**	**X**	**Bottle ID #'s**	**X**	**Bottle ID #'s**	**Billing Units**	**Containers Required**	**Preservative(s) Used**
Gasoline Analytical Group	EPA SW-846										Consult Lab	Consult Lab
Kerosene Analytical Group	EPA SW-846										Consult Lab	Consult Lab
Mixed Product Analytical Group	EPA SW-846										Consult Lab	Consult Lab
Total Petroleum Hydrocarbons	EPA 418.1	X	2 TPH	X	2 TPH	X	2 TPH	X	2 TPH		Consult Lab	Consult Lab
RCRA Metals (8)	EPA Various										Consult Lab	Consult Lab
TCLP Metals (8) w/extraction	EPA SW-846										Consult Lab	Consult Lab
Lead (Pb)	EPA 239.2										250mlV/4 oz.	HNO/None
Other:												

Comments:

Relinquished by: [signature]
Date/Time: 1300 5-21-97

Received by: [signature]
Date/Time: 5/21/97 1300

PWC 7510/8

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
601/602 Volatiles by Method 8260

Lab Report Number: 72502
Sample Date: 05/29/97
Received Date: 05/29/97
Sample Site: Saufley Field, FL
Job Order No.: 130 5002

LAB Sample ID#	1- **72502**
Sample Name / Location	DWM-10
Collector's Name	MH
Date & Time Collected	05/29/97 @ 1100
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	05/30/97 JM
Date of Analysis	05/30/97
Sample Matrix	GW
Dilution	X 1

Compound Name	1- 72502	units	Det. Limit	Flags
Benzene	BDL	ug/L	1	
Bromodichloromethane	BDL	ug/L	1	
Bromoform	BDL	ug/L	2	
Bromomethane	BDL	ug/L	3	
Carbon Tetrachloride	BDL	ug/L	1	
Chlorobenzene	BDL	ug/L	1	
Chloroethane	BDL	ug/L	1	
2-Chloroethylvinyl ether	BDL	ug/L	1	
Chloroform	BDL	ug/L	1	
Chloromethane	BDL	ug/L	1	
Dibromochloromethane	BDL	ug/L	1	
1,2-Dichlorobenzene	BDL	ug/L	1	
1,3-Dichlorobenzene	BDL	ug/L	1	
1,4-Dichlorobenzene	BDL	ug/L	1	
Dichlorodifluoromethane	BDL	ug/L	1	
1,1-Dichloroethane	BDL	ug/L	1	
1,2-Dichloroethane	BDL	ug/L	1	
1,1-Dichloroethene	BDL	ug/L	1	
trans-1,2-Dichloroethene	BDL	ug/L	1	
1,2-Dichloropropane	BDL	ug/L	1	
cis-1,3-Dichloropropene	BDL	ug/L	1	
trans-1,3-Dichloropropene	BDL	ug/L	1	
Ethylbenzene	BDL	ug/L	1	
Methylene Chloride	BDL	ug/L	1	
Methyl-tert-butyl ether (MTBE) *	BDL	ug/l	1	
1,1,2,2-Tetrachloroethane	BDL	ug/L	1	
Tetrachloroethene	BDL	ug/L	1	
Toluene	BDL	ug/L	1	
1,1,1-Trichloroethane	BDL	ug/L	1	
1,1,2-Trichloroethane	BDL	ug/L	1	
Trichloroethene	BDL	ug/L	1	
Trichlorofluoromethane	BDL	ug/L	1	
Vinyl Chloride	BDL	ug/L	1	
Xylenes (Total)	BDL	ug/L	1	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	105
Toluene-d8	86-119	101
Bromofluorobenzene	85-116	102

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

D-95

Approved by : Jerry Dees, Laboratory Director

Date: 6/20/97
Report Generated

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
610 PAH's by Method 8270

Lab Report Number: 72502
Sample Date: 05/29/97
Received Date: 05/29/97
Sample Site: Saufley Field, FL
Job Order No.: 130 5002

LAB Sample ID#	1- **72502**
Sample Name / Location	DWM-10
Collector's Name	MH
Date & Time Collected	05/29/97 @ 1100
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	06/11/97 JJ
Date of Analysis	06/11/97
Sample Matrix	GW
Dilution	X 1

Compound Name	1- 72502	units	Det. Limit	Flags
Acenaphthene	BDL	ug/L	2	
Acenaphthylene	BDL	ug/L	2	
Anthracene	BDL	ug/L	2	
Benzo(a)anthracene	BDL	ug/L	2	
Benzo(a)pyrene	BDL	ug/L	2	
Benzo(b)fluoranthene	BDL	ug/L	2	
Benzo(g,h,i)perylene	BDL	ug/L	2	
Benzo(k)fluoranthene	BDL	ug/L	3	
Chrysene	BDL	ug/L	2	
Dibenz(a,h)anthracene	BDL	ug/L	2	
Fluoranthene	BDL	ug/L	2	
Fluorene	BDL	ug/L	2	
Indeno(1,2,3-cd)pyrene	BDL	ug/L	2	
1-Methylnaphthalene *	BDL	ug/L	2	
2-Methylnaphthalene	BDL	ug/L	3	
Naphthalene	BDL	ug/L	2	
Phenanthrene	BDL	ug/L	2	
Pyrene	BDL	ug/L	2	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Nitrobenzene- d5	35-114	78
2-Fluorobiphenyl	43-116	86
Terphenyl -d14	33-141	95

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

Approved by : Jerry Dees, Laboratory Director

Date: 6/20/97
Report Generated

D-96

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

Ethylene Dibromide by Method 504

Lab Report Number: 72502
Sample Date: 05/29/97
Received Date: 05/29/97
Sample Site: Saufley Field, FL
Job Order No.: 130 5002

LAB Sample ID#	1- 72502			
Sample Name / Location	DWM-10			
Collector's Name	MH			
Date & Time Collected	05/29/97 @ 1100			
Sample Type (composite or grab)	Grab			
Analyst	M. Chambers			
Date of Extraction / Initials	06/06/97 MC			
Date of Analysis	06/06/97			
Sample Matrix	GW			
Dilution	X 1			
Compound Name	1- 72502	units	Det. Limit	Flags
Ethylene Dibromide	BDL	ug/L	0.02	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Tetra-Chloro-m-Xylene	54-140	86

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 6/20/97
Report Generated

D-97

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Analytical Report
Petroleum Range Organics by FLPRO

Client:	NPWC Environmental
Address:	Bldg. 3887, Code 910 NAS Pensacola,FL 32508
Phone #:	452-3180
Contact:	Greg Campbell

Lab Report Number:	72502
Sample Date:	05/29/97
Received Date:	05/29/97
Sample Site:	Saufley Field, FL
Job Order No.:	130 5002

LAB Sample ID#	1- 72502			
Sample Name / Location	DWM-10			
Collector's Name	MH			
Date & Time Collected	05/29/97 @ 1100			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of extraction / Initials	06/16/97 JM			
Date of Analysis	06/16/97			
Sample Matrix	GW			
Dilution		x	1	
Parameter	**1- 72502**	**units**	**Det. Limit**	**Flags**
Petroleum Range Organics by FLPRO	BDL	mg/L	0.25	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
ortho-Terphenyl	82-142 *	73
Nonatriacontane (C-39)	42-193 *	65

COMMENTS : * = Suggested surrogate recovery limits listed in the method. In-house laboratory limits are in the process of being determined.

BDL = Below Detection Limit. mg/L = milligram per Liter. mg/Kg = milligram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 6/20/97

D-98

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
601/602 Volatiles by Method 8260

Lab Report Number: 72503
Sample Date: 05/29/97
Received Date: 05/29/97
Sample Site: Saufley Field, FL
Job Order No.: 130 5002

LAB Sample ID#	1- 72503
Sample Name / Location	Trip Blank
Collector's Name	MH
Date & Time Collected	05/29/97 @ N/S
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	05/30/97 JM
Date of Analysis	05/30/97
Sample Matrix	DI
Dilution	X 1

Compound Name	1- 72503	units	Det. Limit	Flags
Benzene	BDL	ug/L	1	
Bromodichloromethane	BDL	ug/L	1	
Bromoform	BDL	ug/L	2	
Bromomethane	BDL	ug/L	3	
Carbon Tetrachloride	BDL	ug/L	1	
Chlorobenzene	BDL	ug/L	1	
Chloroethane	BDL	ug/L	1	
2-Chloroethylvinyl ether	BDL	ug/L	1	
Chloroform	BDL	ug/L	1	
Chloromethane	BDL	ug/L	1	
Dibromochloromethane	BDL	ug/L	1	
1,2-Dichlorobenzene	BDL	ug/L	1	
1,3-Dichlorobenzene	BDL	ug/L	1	
1,4-Dichlorobenzene	BDL	ug/L	1	
Dichlorodifluoromethane	BDL	ug/L	1	
1,1-Dichloroethane	BDL	ug/L	1	
1,2-Dichloroethane	BDL	ug/L	1	
1,1-Dichloroethene	BDL	ug/L	1	
trans-1,2-Dichloroethene	BDL	ug/L	1	
1,2-Dichloropropane	BDL	ug/L	1	
cis-1,3-Dichloropropene	BDL	ug/L	1	
trans-1,3-Dichloropropene	BDL	ug/L	1	
Ethylbenzene	BDL	ug/L	1	
Methylene Chloride	BDL	ug/L	1	
Methyl-tert-butyl ether (MTBE) *	BDL	ug/l	1	
1,1,2,2-Tetrachloroethane	BDL	ug/L	1	
Tetrachloroethene	BDL	ug/L	1	
Toluene	BDL	ug/L	1	
1,1,1-Trichloroethane	BDL	ug/L	1	
1,1,2-Trichloroethane	BDL	ug/L	1	
Trichloroethene	BDL	ug/L	1	
Trichlorofluoromethane	BDL	ug/L	1	
Vinyl Chloride	BDL	ug/L	1	
Xylenes (Total)	BDL	ug/L	1	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	98
Toluene-d8	86-119	99
Bromofluorobenzene	85-116	101

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

D-99

Approved by : Jerry Dees, Laboratory Director

Date: 6/23/97
Report Generated

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

601/602 Volatiles by Method 8260

Lab Report Number: 72504
Sample Date: 05/29/97
Received Date: 05/29/97
Sample Site: Saufley Field, FL
Job Order No.: 130 5002

LAB Sample ID#	1- **72504**
Sample Name / Location	MW-9
Collector's Name	MH
Date & Time Collected	05/29/97 @ 1200
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	05/30/97 JM
Date of Analysis	05/30/97
Sample Matrix	GW
Dilution	X 1

Compound Name	1- 72504	units	Det. Limit	Flags
Benzene	BDL	ug/L	1	
Bromodichloromethane	BDL	ug/L	1	
Bromoform	BDL	ug/L	2	
Bromomethane	BDL	ug/L	3	
Carbon Tetrachloride	BDL	ug/L	1	
Chlorobenzene	BDL	ug/L	1	
Chloroethane	BDL	ug/L	1	
2-Chloroethylvinyl ether	BDL	ug/L	1	
Chloroform	BDL	ug/L	1	
Chloromethane	BDL	ug/L	1	
Dibromochloromethane	BDL	ug/L	1	
1,2-Dichlorobenzene	BDL	ug/L	1	
1,3-Dichlorobenzene	BDL	ug/L	1	
1,4-Dichlorobenzene	BDL	ug/L	1	
Dichlorodifluoromethane	BDL	ug/L	1	
1,1-Dichloroethane	BDL	ug/L	1	
1,2-Dichloroethane	BDL	ug/L	1	
1,1-Dichloroethene	BDL	ug/L	1	
trans-1,2-Dichloroethene	BDL	ug/L	1	
1,2-Dichloropropane	BDL	ug/L	1	
cis-1,3-Dichloropropene	BDL	ug/L	1	
trans-1,3-Dichloropropene	BDL	ug/L	1	
Ethylbenzene	BDL	ug/L	1	
Methylene Chloride	BDL	ug/L	1	
Methyl-tert-butyl ether (MTBE) *	BDL	ug/l	1	
1,1,2,2-Tetrachloroethane	BDL	ug/L	1	
Tetrachloroethene	BDL	ug/L	1	
Toluene	BDL	ug/L	1	
1,1,1-Trichloroethane	BDL	ug/L	1	
1,1,2-Trichloroethane	BDL	ug/L	1	
Trichloroethene	BDL	ug/L	1	
Trichlorofluoromethane	BDL	ug/L	1	
Vinyl Chloride	BDL	ug/L	1	
Xylenes (Total)	BDL	ug/L	1	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	106
Toluene-d8	86-119	100
Bromofluorobenzene	85-116	101

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

D-100

Approved by : Jerry Dees, Laboratory Director

Date: 6/20/97
Report Generated

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report
610 PAH's by Method 8270

Lab Report Number: 72504
Sample Date: 05/29/97
Received Date: 05/29/97
Sample Site: Saufley Field, FL
Job Order No.: 130 5002

LAB Sample ID#	1- 72504
Sample Name / Location	MW-9
Collector's Name	MH
Date & Time Collected	05/29/97 @ 1200
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	06/11/97 JJ
Date of Analysis	06/11/97
Sample Matrix	GW
Dilution	X 1

Compound Name	1- 72504	units	Det. Limit	Flags
Acenaphthene	BDL	ug/L	2	
Acenaphthylene	BDL	ug/L	2	
Anthracene	BDL	ug/L	2	
Benzo(a)anthracene	BDL	ug/L	2	
Benzo(a)pyrene	BDL	ug/L	2	
Benzo(b)fluoranthene	BDL	ug/L	2	
Benzo(g,h,i)perylene	BDL	ug/L	2	
Benzo(k)fluoranthene	BDL	ug/L	3	
Chrysene	BDL	ug/L	2	
Dibenz(a,h)anthracene	BDL	ug/L	2	
Fluoranthene	BDL	ug/L	2	
Fluorene	BDL	ug/L	2	
Indeno(1,2,3-cd)pyrene	BDL	ug/L	2	
1-Methylnaphthalene *	BDL	ug/L	2	
2-Methylnaphthalene	BDL	ug/L	3	
Naphthalene	BDL	ug/L	2	
Phenanthrene	BDL	ug/L	2	
Pyrene	BDL	ug/L	2	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Nitrobenzene- d5	35-114	88
2-Fluorobiphenyl	43-116	91
Terphenyl -d14	33-141	106

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

Approved by : Jerry Dees, Laboratory Director

Date: 6/20/97
Report Generated

D-101

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: NPWC Environmental
Address: Bldg. 3887, Code 910
NAS Pensacola,FL 32508
Phone #: 452-3180
Contact: Greg Campbell

Analytical Report

Ethylene Dibromide by Method 504

Lab Report Number: 72504
Sample Date: 05/29/97
Received Date: 05/29/97
Sample Site: Saufley Field, FL
Job Order No.: 130 5002

LAB Sample ID#	1- 72504			
Sample Name / Location	MW-9			
Collector's Name	MH			
Date & Time Collected	05/29/97 @ 1200			
Sample Type (composite or grab)	Grab			
Analyst	M. Chambers			
Date of Extraction / Initials	06/06/97 MC			
Date of Analysis	06/06/97			
Sample Matrix	GW			
Dilution	X 1			
Compound Name	1- 72504	units	Det. Limit	Flags
Ethylene Dibromide	BDL	ug/L	0.02	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Tetra-Chloro-m-Xylene	54-140	102

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 6/20/97
Report Generated

D-102

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Analytical Report
Petroleum Range Organics by FLPRO

Client:	NPWC Environmental
Address:	Bldg. 3887, Code 910 NAS Pensacola,FL 32508
Phone #:	452-3180
Contact:	Greg Campbell

Lab Report Number:	72504
Sample Date:	05/29/97
Received Date:	05/29/97
Sample Site:	Saufley Field, FL
Job Order No.:	130 5002

LAB Sample ID#	1- 72504			
Sample Name / Location	MW-9			
Collector's Name	MH			
Date & Time Collected	05/29/97 @ 1200			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of extraction / Initials	06/16/97 JM			
Date of Analysis	06/16/97			
Sample Matrix	GW			
Dilution	x 1			
Parameter	1- 72504	units	Det. Limit	Flags
Petroleum Range Organics by FLPRO	BDL	mg/L	0.25	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
ortho-Terphenyl	82-142 *	72
Nonatriacontane (C-39)	42-193 *	69

COMMENTS : * = Suggested surrogate recovery limits listed in the method. In-house laboratory limits are in the process of being determined.

BDL = Below Detection Limit. mg/L = milligram per Liter. mg/Kg = milligram per Kilogram.

Approved by : Jerry Does, Laboratory Director

Date: 6/20/97

D-103

End of Report

UST CHAIN OF CUSTODY/REQUEST FOR ANALYSIS

NPWC Environmental Laboratory
Bldg. 3287, Code 920
NAS Pensacola, FL 32508-5200
Phone (904) 452-4728
Autovon 922-4728

Requestor: NPWC Environmental Dept.
Address: Bldg. 3691, Code 910
Saufley field ~~NAS Pensacola~~, FL 32508
Phone #: (904) 452-3180
Contact: Greg Campbell
Job Order #: 1305002

Report Required? Yes No DEP? Yes No
Lab ID Number:
Sample Date: 5-29-97
Received Date: 5-29-97
Sample Site: Saufley field
Lab Due Date:

Sample ID #	Lab	#1- 7-2502	#2- 7-2503	#3- 7-2504	#4-
Sample Name or Location	----------	Saufley field DMW-10	Saufley field Trip Blank	Saufley field MW 9	
Sampled by	----------	MH	MH	MH	
Composite Date/Time Collected	Begin				
	Frequency				
	End				
Grab Time	----------	1100	—	1200	
Sample Matrix	----------	GW	DI	GW	

Notes: KAG Less Pb

PARAMETER by Method Name	METHOD #	X	Bottle ID #'s	X	Bottle ID #'s	X	Bottle ID #'s	X	Bottle ID #'s	Billing Units	Containers Required	Preservative(s) Used
Ethylene Dibromide (EDB)	EPA 504	X	2 EDB			X	2 EDB			3	120ml A VOA/4 oz.	None/4° C
Purg. Halocarbons/GC	EPA 601									4	40 ml VOA Vial x 2	HCl/4° C
Purg. Aromatics/GC	EPA 602									3	40 ml VOA Vial x 2	HCl/4° C
Purg. Halo. & Aro./GC	EPA 601/602	X	4 VOA	X	2 VOA	X	4 VOA			8	40 ml VOA Vial x 2	HCl/4° C
Polynuclear Aromatics/HPLC	EPA 610									7	1L Amber x 2	4° C
Purgeables/GC/MS	EPA 624									8	40 ml VOA Vial x 2	HCl/4° C
Base/Neutrals & Acids/GC/MS	EPA 625									15	1L Amber x 2	4° C
Gas Chromatography	EPA SW 8000									5	40mlx2/1Lx2/4 oz.	HCl/4° C/None
Halo. Vol. Org./GC	EPA SW 8010									4	40ml VOAx2/4 oz.	HCl/4° C/None
Non-Halo. Vol. Org./GC	EPA SW 8015(MOD)									4	40mlx2/1Lx2/4 oz.	HCl/4° C/None
...s. Vol. Org./GC	EPA SW 8020									3	40ml VOAx2/4 oz.	HCl/4° C/None
...ols/Arom. Vol. Org./GC	EPA SW 8010/8020									8	40ml VOAx2/4 oz.	HCl/4° C/None
Polynuclear Aromatics/GC	EPA SW 8100									6	1Lx2/4 oz.	4° C/None
VOC/GC/MS	EPA SW 8240A									8	40ml VOAx2/4 oz.	HCl/4° C/None
VOC/GC/MS-Cap.	EPA SW 8260									8	40ml VOAx2/4 oz.	HCl/4° C/None
Semivol. Org./GC/MS-Cap.	EPA SW 8270A									16	1Lx3/4 oz.	4° C/None
Polynuclear Aromatics (PAH's)	EPA SW 8310	X	3 PAH			X	2 PAH				1Lx3/4 oz.	4° C/None

PARAMETER by Group Name	METHOD SOURCE	X	Bottle ID #'s	X	Bottle ID #'s	X	Bottle ID #'s	X	Bottle ID #'s	Billing Units	Containers Required	Preservative(s) Used
Gasoline Analytical Group	EPA SW-846										Consult Lab	Consult Lab
Kerosene Analytical Group	EPA SW-846										Consult Lab	Consult Lab
Mixed Product Analytical Group	EPA SW-846										Consult Lab	Consult Lab
Total Petroleum Hydrocarbons	6L ~~EPA-418.1~~ Pb	X	3 TPH			X	2 TPH				Consult Lab	Consult Lab
RCRA Metals (8)	EPA Various										Consult Lab	Consult Lab
TCLP Metals (8) w/extraction	EPA SW-846										Consult Lab	Consult Lab
Lead (Pb)	EPA 239.2										250ml/4 oz.	1N HNO3/None
Other:												

Comments:

Relinquished by: MARK HARDIN
Date/Time: 5-29-97 1575

Received by: [illegible]
Date/Time: 6/29/97 1575

PWC 251076

D-104

Navy Public Works Center
Environmental Laboratory

Bldg.3887, Code 440
NAS Pensacola, FL 32508
Phone (850) 452-3180/3642
DSN 922-3180/3642

Laboratory Report

Lead in Water by Method 239.2

Requester: NPWC Engineering
Address: Bldg. 458, Code 431
NAS Pensacola, FL 32508
Phone #: 452-4315
Contact: Greg Campbell

Lab ID Number: 9710057 A
Sample Date: 25, 26 Sep 97
Received Date: 26 Sep 97
Sample Site: Saufley Field, Bldg. 873
Job Order #: 130 5001

Sample ID#	Lab	1- 74343	2- 74344	3- 74345	4- 74346	Analyst(s):
Sample Name	Requester	Saufley Fld. MW #4	Saufley Fld. MW #6	Saufley Fld. DMW #10	Saufley Fld. MW #3	Brian Nelson
Collector Name		RH/JT	RH/JT	RH/JT	RH/JT	
Date/Time	Comp start					
Collected	Comp stop					Date(s) of analysis:
(Military)	Grab	25 Sep 97 @ 1045	25 Sep 97 @ 1125	25 Sep 97 @ 1300	25 Sep 97 @ 1330	6 Oct 97
Sample Type	Comp/Grab	Grab	Grab	Grab	Grab	
Sample Matrix		Groundwater	Groundwater	Groundwater	Groundwater	

PARAMETER Metals:	METHOD #	ID# 1- 74343	units	Det. Limit	ID# 2- 74344	units	Det. Limit	ID# 3- 74345	units	Det. Limit	ID# 4- 74346	units	Det. Limit	Preservative(s)
Lead(Pb)	EPA 239.2	X BDL	mg/l	0.003	X BDL	mg/l	0.003	X BDL	mg/l	0.003	X 0.155	mg/l	0.015	None

Sample ID#	Lab	5- 74347	6- 74348	7- 74349	8- 74350	Analyst(s):
Sample Name	Requester	Saufley Fld. MW #8	Saufley Fld. MW #7	Saufley Fld. Dup 1	Saufley Fld. MW #9	Brian Nelson
Collector Name		RH/JT	RH/JT	RH/JT	RH/JT	
Date/Time	Comp start					
Collected	Comp stop					Date(s) of analysis:
(Military)	Grab	25 Sep 97 @ 1400	25 Sep 97 @ 1430	25 Sep 97 @ 1430	26 Sep 97 @ 0645	6 Oct 97
Sample Type	Comp/Grab	Grab	Grab	Grab	Grab	
Sample Matrix		Groundwater	Groundwater	Groundwater	Groundwater	

PARAMETER Metals:	METHOD #	ID# 5- 74347	units	Det. Limit	ID# 6- 74348	units	Det. Limit	ID# 7- 74349	units	Det. Limit	ID# 8- 74350	units	Det. Limit	Preservative(s)
Lead(Pb)	EPA 239.2	X BDL	mg/l	0.003	X BDL	mg/l	0.003	X BDL	mg/l	0.003	X BDL	mg/l	0.003	None

D-105

Comments: mg/l=milligrams per liter. NS=Not Submitted.

Approved by: Jerry Dees, Laboratory Director **Date/Time:** 14-Oct-97 13:45

PWC 5090/14

End of Report

Navy Public Works Center
Environmental Laboratory

Bldg.3887, Code 440
NAS Pensacola, FL 32508
Phone (850) 452-3180/3642
DSN 922-3180/3642

Laboratory Report

Lead in Water by Method 239.2

Requester: NPWC Engineering
Address: Bldg. 458, Code 431
NAS Pensacola, FL 32508
Phone #: 452-4315
Contact: Greg Campbell

Lab ID Number: 9710057 B
Sample Date: 25 Sep 97
Received Date: 26 Sep 97
Sample Site: Saufley Field, Bldg. 873
Job Order #: 130 5001

Sample ID#	Lab	1- 74351	2- 74352	3- 74353	4- 74354	Analyst(s):
Sample Name	Requester	Saufley Fld. MW #1	Saufley Fld. MW #2	Saufley Fld. MW #5	Saufley Fld. Equipment Blank	Brian Nelson
Collector Name		RH/JT	RH/JT	RH/JT	RH/JT	
Date/Time Collected (Military)	Comp start					
	Comp stop					Date(s) of analysis:
	Grab	25 Sep 97 @ 1630	25 Sep 97 @ 1700	25 Sep 97 @ 1730	25 Sep 97 @ 1545	6 Oct 97
Sample Type	Comp/Grab	Grab	Grab	Grab	Grab	
Sample Matrix		Groundwater	Groundwater	Groundwater	Groundwater	

PARAMETER Metals:	METHOD #	ID# 1- 74351	units	Det. Limit	ID# 2- 74352	units	Det. Limit	ID# 3- 74353	units	Det. Limit	ID# 4- 74354	units	Det. Limit	Preservative(s)
Lead(Pb)	EPA 239.2	x BDL	mg/l	0.003	x BDL	mg/l	0.003	x BDL	mg/l	0.003	x BDL	mg/l	0.003	None

D-106

Sample ID#	Lab	5-	6-	7-	8-	Analyst(s):
Sample Name	Requester					Brian Nelson
Collector Name						
Date/Time Collected (Military)	Comp start					
	Comp stop					Date(s) of analysis:
	Grab					6 Oct 97
Sample Type	Comp/Grab					
Sample Matrix						

PARAMETER Metals:	METHOD #	ID# 5-	units	Det. Limit	ID# 6-	units	Det. Limit	ID# 7-	units	Det. Limit	ID# 8-	units	Det. Limit	Preservative(s)
Lead(Pb)	EPA 239.2		mg/l	0.003		mg/l	0.003		mg/l	0.003		mg/l	0.003	None

Comments: mg/l=milligrams per liter. NS=Not Submitted.

Approved by: Jerry Dees, Laboratory Director

Date/Time: 14-Oct-97 13:48

PWC 5090/14

End of Report

American Environmental Network, Inc.
11 East Olive Road • Pensacola, FL 32514 • (904) 474-1001

CHAIN OF CUSTODY

AEN ACCESSION #: _____

PART 1 - Bottle Shipment Information

CLIENT:

CLIENT PROJECT NUMBER:

QUANTITY OF SAMPLE CONTAINERS SHIPPED	PRESERVATIVE							PLASTIC CONTAINERS							GLASS CONTAINERS									NOTES
	H_2SO_4	HNO3	HCL	Zn Acetate	$Na_2S_2O_3$	Unpreserved	NaOH	8 oz.	16 oz.	32 oz.	½ gallon	1 gallon	Whirl-pak	100-ML Cup	120 ml (A)	1 liter (A)	1 liter (C)	40 ml Vial	4 oz. wm	8 oz. wm	16 oz. wm	32 oz. wm	D.I. Trip Blank	

Relinquished By:	Time	Date	Received By:	Time	Date

PART 2 - Sample/Project Information

SAMPLE MATRIX CODES

DW DRINKING WATER — AI AIR — SW SURFACE WATER
WW WASTEWATER — SO SOIL — SL SLUDGE
GW GROUNDWATER — OI OIL — ST STORMWATER

PARAMETERS AND PRESERVATIVES REQUESTED

SAMPLE I.D.	SAMPLE DATE	SAMPLE TIME	MATRIX	PB Total													TOTAL # OF BOTTLES
343 MW-4	9-25-97	1045	GW	✓													1
344 MW-6	↓	1125	↓	✓													1
345 DMW-10		1300		✓													1
MW-3		1330		✓													1
MW-8		1400		✓													1
348 MW-7		1430		✓													1
349 DUP-1	RDH	1430		✓													1
350 MW-9	9-26-97	0645		✓													1
351 MW-1	9-25-97	1630		✓													1
352 MW-2	9-25-97	1700	RDH	✓													1

Total Number of Bottles/Containers: 10

Relinquished By	Date	Time	Received By	Date	Time
[signature]	9-26-97	0745	Jason T. [signature]	9/26/97	0745

Client NAS			Purchase Order Number
Address			Project Number
City	State	Zip	Project Name SAUFLEY FIELD
Phone Number ( )	Fax Number ( )		Project Location BLDG 873
Project Manager JERRY DEES			Sampled By RICK HAGENDORFER / JT

TURNAROUND TIMES	check below	SPECIAL INSTRUCTIONS
Standard - 14-21 days	✓	
RUSH (must be approved in advance)		
8 hours - 2x standard price		
3-7 days - 1.5x standard price		
TCLP - 1 week rush 1.5x standard price		D-107
QC Level none I II III IV (circle one)		Copies of report needed _____

FORM # 12694

WHITE — LAB CANARY — REPORT PINK — CLIENT

American Environmental Network, Inc.
11 East Olive Road • Pensacola, FL 32514 • (904) 474-1001

CHAIN OF CUSTODY

AEN ACCESSION #: _____

PART 1 - Bottle Shipment Information

NT: | CLIENT PROJECT NUMBER:

QUANTITY OF SAMPLE CONTAINERS SHIPPED	PRESERVATIVE							PLASTIC CONTAINERS							GLASS CONTAINERS									NOTES
	H_2SO_4	HNO3	HCL	Zn Acetate	$Na_2S_2O_3$	Unpreserved	NaOH	8 oz.	16 oz.	32 oz.	½ gallon	1 gallon	Whirl-pak	100-ML Cup	120 ml (A)	1 liter (A)	1 liter (C)	40 ml Vial	4 oz. wm	8 oz. wm	16 oz. wm	32 oz. wm	D.I. Trip Blank	

Relinquished By:	Time	Date	Received By:	Time	Date

PART 2 - Sample/Project Information

SAMPLE MATRIX CODES

DW DRINKING WATER — AI AIR — SW SURFACE WATER
WW WASTEWATER — SO SOIL — SL SLUDGE
GW GROUNDWATER — OI OIL — ST STORMWATER

PARAMETERS AND PRESERVATIVES REQUESTED

SAMPLE I.D.	SAMPLE DATE	SAMPLE TIME	MATRIX	PB Total													TOTAL # OF BOTTLES
353 MW-5	9-25-97	1730	GW	✓													1
354 EQUIPMENT BLANK	9-25-97	1545	WATER	✓													1

Total Number of Bottles/Containers: 2

Relinquished By	Date	Time	Received By	Date	Time
Ricky Hagendorfer	9-26-97	0745	Jason T. Jerry	9/26/97	0745

Client NAS			Purchase Order Number
Address			Project Number
City	State	Zip	Project Name SAUFLEY FIELD
Phone Number ( )	Fax Number ( )		Project Location BLDG 873
Project Manager JERRY DEES			Sampled By RICKY HAGENDORFER / JT

TURNAROUND TIMES	check below	SPECIAL INSTRUCTIONS
Standard - 14-21 days	✓	
RUSH (must be approved in advance)		
<- 48 hours - 2x standard price		
ays - 1.5x standard price		
TCLP - 1 week rush 1.5x standard price		D-108
QC Level none I II III IV (circle one)		Copies of report needed _____

FORM # 12694

WHITE — LAB CANARY — REPORT PINK — CLIENT