

WATER-QUALITY ASSESSMENT PROGRAM  
AT THE WASTEWATER TREATMENT PLANT,  
NAS PENSACOLA, FLORIDA  
(PHASE II)

Prepared for

DEPARTMENT OF THE NAVY  
SOUTHERN DIVISION, NAVAL FACILITIES ENGINEERING COMMAND  
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INTRODUCTION

In May 1984, Geraghty & Miller, Inc., (G&M) was retained by the Naval Facilities Engineering Command, Southern Division (Navy) to provide hydrogeologic consulting services at the industrial wastewater-treatment facility at the Naval Air Station (NAS) in Pensacola, Florida.

The domestic/industrial wastewater treatment plant at NAS Pensacola is located on a small peninsula bounded by Pensacola Bay on the east and an arm of Bayou Grande on the west (Figure 1). The plant includes three surface impoundments: a surge pond, an intermediate pond, and a polishing pond. The surge pond is designated as a RCRA (Resource Conservation and Recovery Act) hazardous-waste surface impoundment, because it receives untreated wastewater from metal plating activities.

Prior to G&M's involvement, seven shallow ground-water monitor wells (UG-1, DG-1 through DG-6) were installed around the surge pond, in accordance with State and Federal regulations. Five of those wells (UG-1, DG-1, DG-4 through DG-6) were designated as RCRA detection monitor wells. After four years of sampling and analyzing these wells for EPA-indicator parameters, a statistical analysis of the results indicated a significant difference in the ground-water quality between the upgradient and downgradient wells. As a result of this, a study was initiated by G&M with the objective of determining the extent and

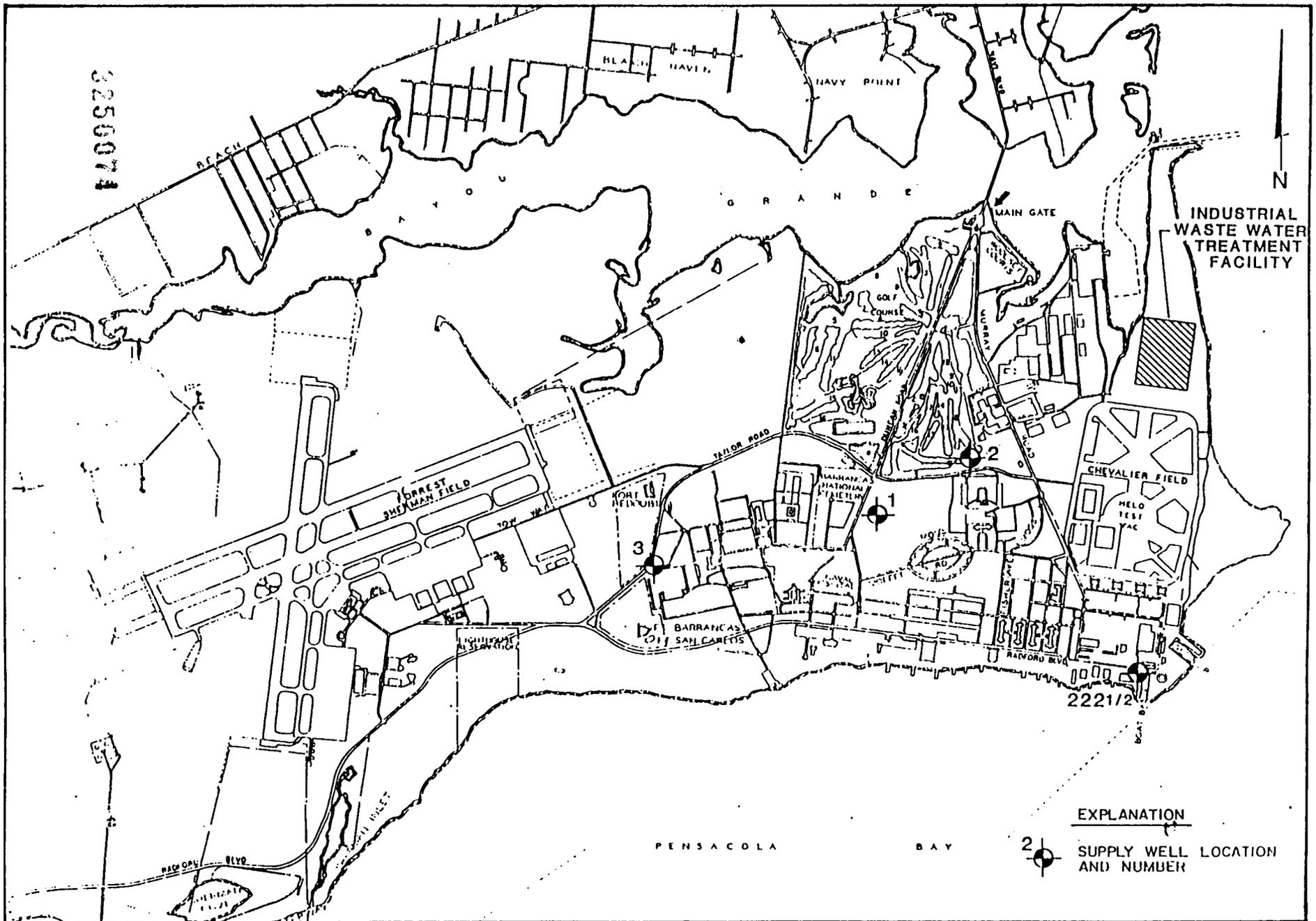


Figure 1. Map Showing the Location of the NAS Pensacola Industrial Wastewater-Treatment Facility.

concentrations of contaminants in the ground water and their rates of horizontal and vertical movement.

Prior to initiating this study, a Proposed Plan of Work (Geraghty & Miller, Inc., May 1984) was submitted to and approved by the FDER (Florida Department of Environmental Regulation). This plan of study proposed a two-phased approach to achieve the objectives of this study. The first phase investigated the water quality in the uppermost part of the shallow ground-water system (at a depth of 12 feet or less). The results of the Phase I investigation were presented in a report entitled, Water Quality Assessment Program at the Wastewater-Treatment Plant, NAS Pensacola, Florida (Phase I), (Geraghty & Miller, Inc., dated January 1985). This report also included discussions on the treatment processes that occur in different portions of the plant and conceptual alternatives for plant modifications to bring the plant into compliance with RCRA regulations.

Based on the results of the Phase I study, a follow-up Phase II study was recommended to determine in more detail the extent (both horizontally and vertically) of contaminated **ground** water at the site. Presented in this report is a summary of the work performed to date (including pertinent data from the Phase I report) and the results of the Phase II investigation, which discusses the presence, distribution, and movement of contaminants in the ground-water system at the wastewater treatment facility. **Also** presented in this

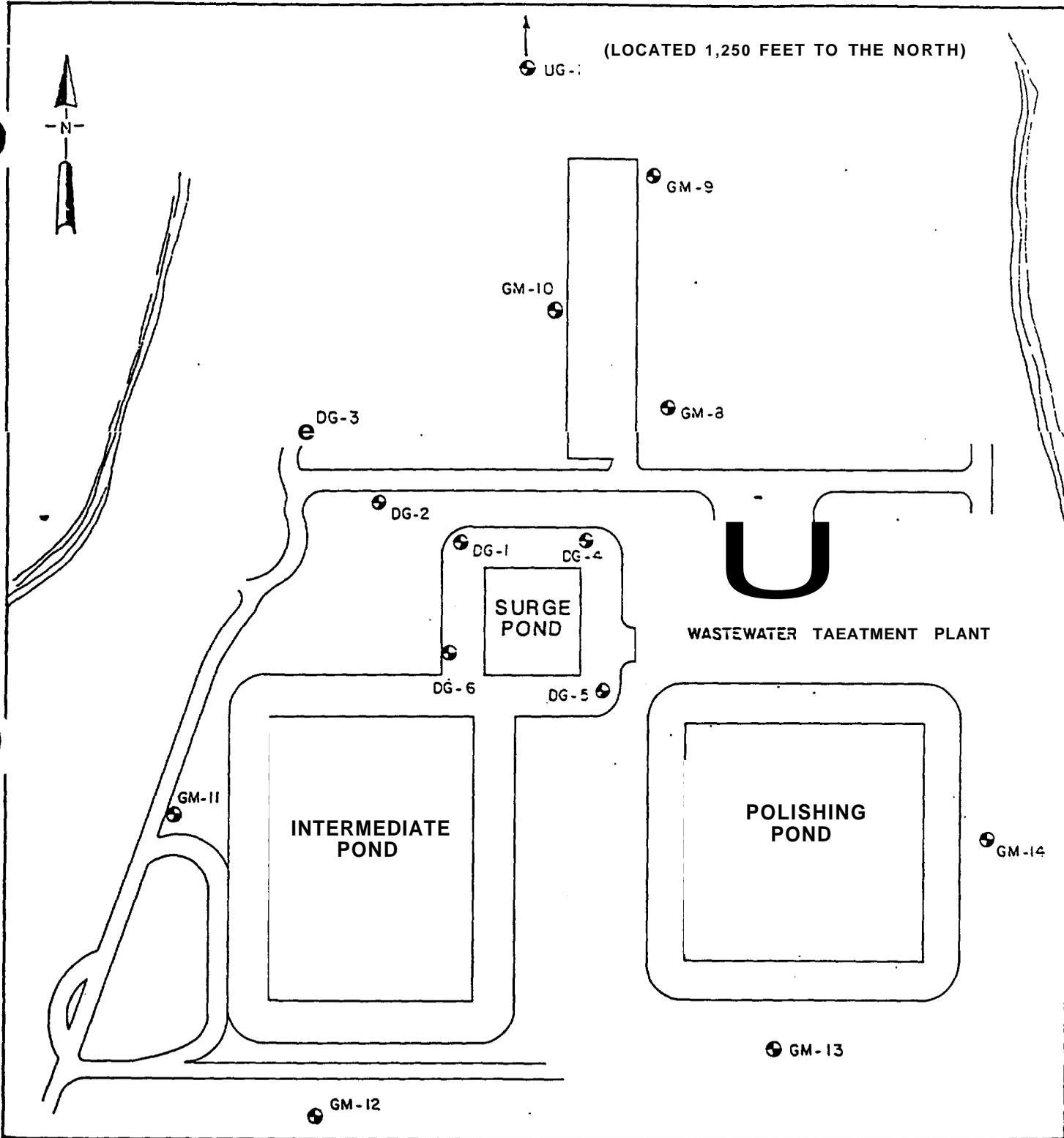
report is a conceptual design of a corrective-action program to recover and treat the contaminated ground water in accordance with 40 CFR 264.100.

Phase I Summary

During the Phase I investigation, water-quality samples were collected from twelve shallow monitor wells in the vicinity of the surge pond (hazardous-waste surface impoundment). Five of these wells were previously installed at the surge pond as part of the RCRA program (UG-1, DG-1, and DG-4 through DG-6) and the other seven wells (GM-8 through GM-14) were installed near the intermediate and polishing ponds and the inactive industrial sludge drying beds by G&M to comply with Chapters 17-3 and 17-4 FXC (Florida Administrative Code). The locations of these monitor wells are shown in Figure 2. Although only the surge pond is considered to be a hazardous-waste surface impoundment, analyses from the other monitor wells were also performed since these wells are located in the vicinity of the surge pond.

The preliminary findings of the first phase of the investigation indicated the following results:

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(LOCATED 1,250 FEET TO THE NORTH)

UG-1

GM-9

GM-10

GM-8

DG-3

DG-2

DG-1

DG-4

SURGE POND

WASTEWATER TREATMENT PLANT

DG-6

DG-5

GM-11

INTERMEDIATE POND

POLISHING POND

GM-14

GM-13

GM-12

EXPLANATION

GM-12 MONITOR WELL AND NUMBER

0 200  
SCALE IN FEET

Figure.2. Locations of Phase I Monitor Wells at the NAS Wastewater-Treatment Plant.

- o The shallow ground water west, north, and east of the surge pond has been affected by uncontrolled discharges from the industrial wastewater-treatment facility, in particular, the surge pond and the inactive industrial sludge drying beds.
- o The identified contaminants consist primarily of organic compounds including volatile organic compounds (VOCs) and acid and base-neutral extractable compounds.
- o Dissolved metal concentrations were below drinking-water standards except for dissolved lead found in well DG-6. Iron and manganese (secondary drinking-water constituents) levels exceeded the standards in several of the wells; however, this is believed to be due to their natural presence in the soils of the area. Presented in Appendix A are tables summarizing the water-quality analyses performed during Phase I.
- o Ground-water flow from underneath the surge pond has the potential to move northwest, north, and east.

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BASIC HYDROGEOLOGIC FRAMEWORK

The geologic sequence of sediments underlying NAS Pensacola is illustrated in Figure 3, which is a composite geologic column constructed from published data and logs of borings and wells in the area. The sediments extending to a depth of up to 400 ft (feet) comprise the so-called "sand and gravel aquifer." The sand and gravel aquifer includes the upper Miocene coarse clastics, the Citronelle formation, and marine terrace deposits; three units which have similar hydraulic properties and sometimes are indistinguishable. Underlying this aquifer is the relatively impermeable Pensacola clay, below which lies the Floridan aquifer consisting of thick layers of limestone and shale extending to a depth of about 1700 ft.

Of particular interest to this investigation are the uppermost sediments of this sand and gravel aquifer extending to a depth of about 65 ft, which lie beneath the wastewater treatment plant. Based on an old soil-test boring, it was determined that these sediments are comprised of a fine to medium grain sand to a depth of approximately 40 ft. Below **this lies** a 15 ft thick clay deposit which is underlain **by** fine to medium grain sand. This understanding of the hydrogeology **at** the site was the basis of the formulation of the **Phase II** investigation. In order **to** assess the horizontal extent of contamination in the shallow ground-water flow system, additional shallow monitor wells

**EXPLANATION**

CLAY  
 SAND  
 LIMESTONE

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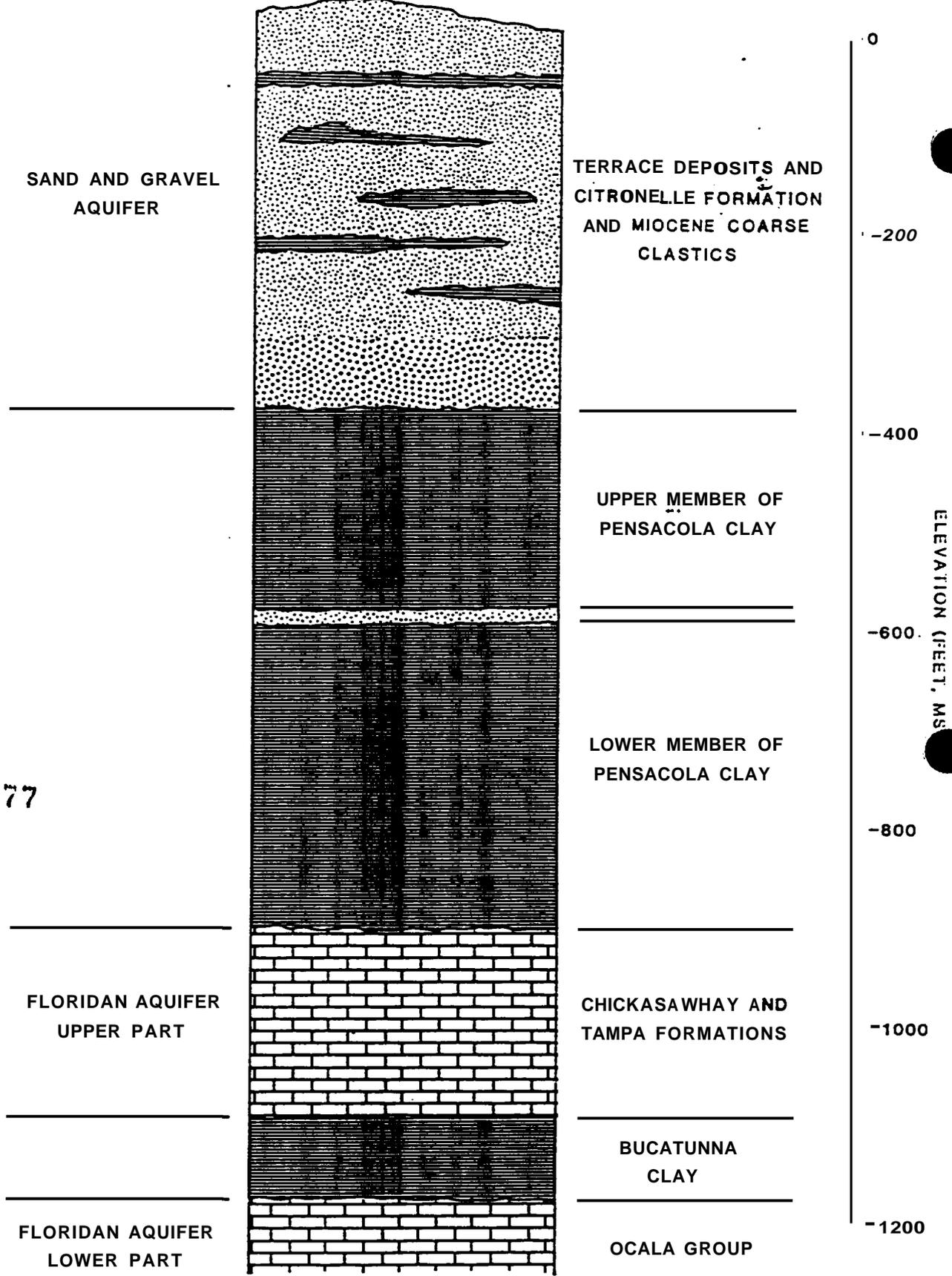


Figure 3. Generalized Geologic Column for the NAS Pensacola Area.

were located downgradient of the surface impoundments. **Also,** at four of these locations, a pair of deeper wells (designated **as** intermediate and deep wells) were proposed to assess potential downward migration of contaminants in the water-bearing sands, both above (intermediate wells) and below (**deep wells**) the clay layer which occurs in the interval from +40 to ± 60 ft.

PHASE II WORK PERFORMED

Monitor-Well Installation

From August 27 to ~~September 8, 1985~~, fourteen additional shallow monitor wells were installed in the vicinity of and north of the wastewater-treatment facility surface impoundments. These wells were installed to depths from 12 to 15 ft. At four of the shallow monitor-well locations, two additional monitor wells were installed, an intermediate well (40 ft), and a deep well (65 ft), screened above and below the uppermost clay layer which occurred from about 40 to 55 ft. The locations of all monitor wells are shown in Figure 4 and construction details are listed in Table 1. Wells GM-62 through GM-83 are designated Phase II monitor wells.

A schematic diagram of a typical monitor well is shown in Figure 5. The method employed to install the monitor wells was either by mud-rotary drilling using a 6-inch-diameter bit or by 6-inch-diameter hollow stem auger. The wells were constructed with 2-inch-diameter Schedule 40 PVC pipe and screen, which were joined by threaded fittings to preclude the use of PVC bonding cement. Each well was outfitted with a 4-inch-diameter steel security cap with locking hinged cover.

Upon completion, each well was developed a sufficient amount of time by the surge-block and air-lift method to

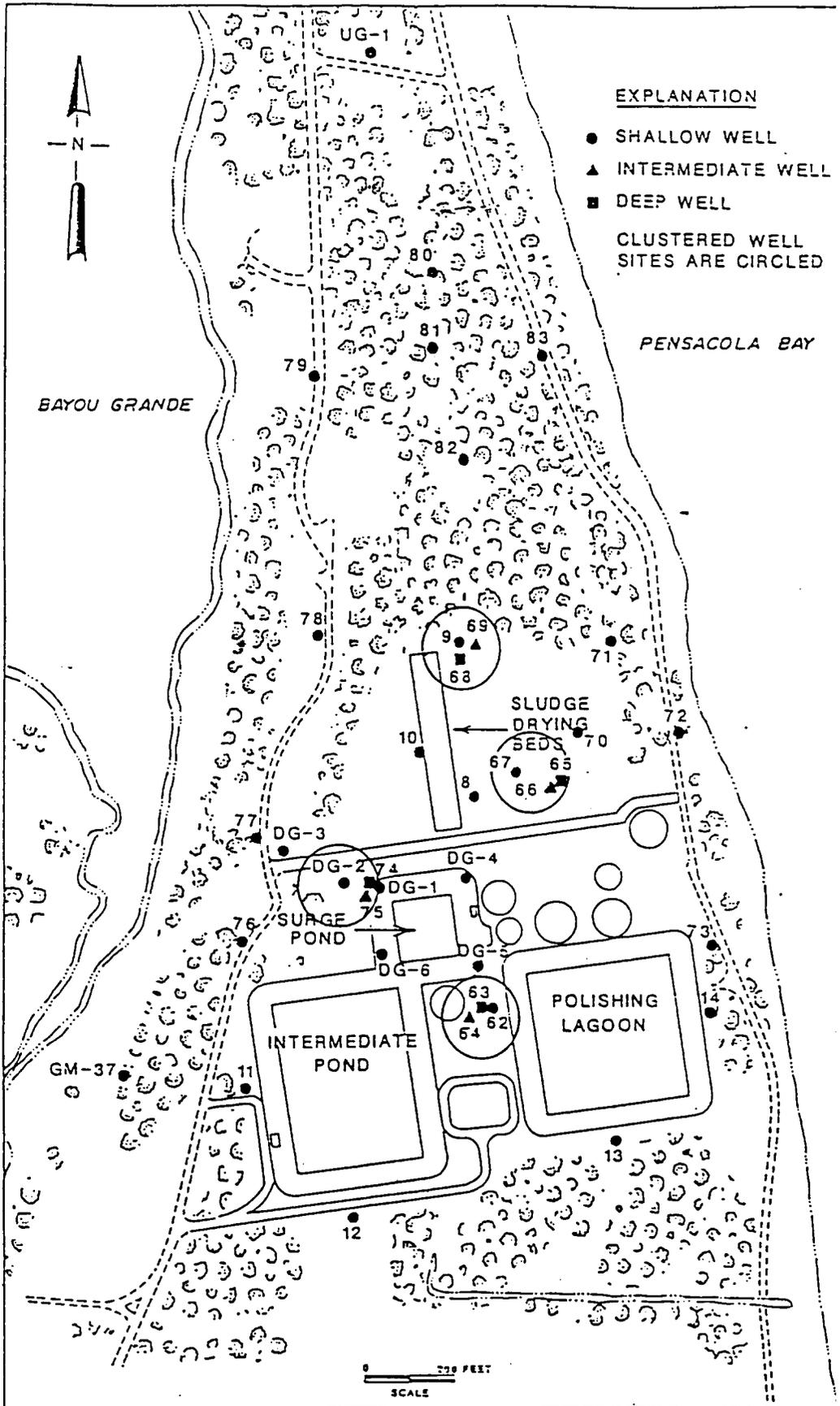


Figure 4. Locations of Shallow, Intermediate, Deep, and Clustered Well Sites.

Table 1. Construction Details of Monitor Wells  
Installed by Geraghty & Miller, Inc., at NAS Pensacola.

Well Designation	Surface Elevation (ft msl)*	Top of Casing Elevation (ft msl)*	Total Depth Drilled (ft)**	Screened Interval (ft)**	Depth to Filter Pack (ft)**
<u>Existing (Phase I)</u>					
GM-8	5.7	6.30	12.0	9.5 - 12.0	5.5
GIY-9	5.0	5.83	12.0	9.3 - 11.8	5.3
GM-10	5.4	6.01	12.0	9.5 - 12.0	5.5
GM-11	5.5	6.18	12.0	9.3 - 11.8	5.5
GM-12	4.8	5.91	12.0	8.8 - 11.3	4.8
GM-13	4.7	5.27	12.0	9.5 - 12.0	5.5
GN-14	3.5	4.74	12.0	8.9 - 11.4	5.0
<u>Mew (Phase 11)</u>					
GH-62	5.0	7.48	15.0	12.5 - 15.0	4.0
GM-63	4.7	7.20	65.0	62.5 - 65.0	56.0
GH-64	4.6	6.63	40.0	37.5 - 40.0	35.0
GM-65	4.7	7.23	65.0	62.5 - 65.0	58.0
GN-66	5.5	8.04	40.0	37.5 - 40.0	31.0
GM-67	4.5	6.93	15.0	12.5 - 15.0	8.0
GIY-68	4.9	7.38	65.0	62.5 - 65.0	56.0
GM-69	5.3	8.25	40.0	37.5 - 40.0	32.0
GN-70	5.1	7.55	15.0	12.5 - 15.0	7.0
GM-71	4.6	7.14	12.5	10.0 - 12.5	7.0
GH-72	5.3	7.79	12.5	10.0 - 12.5	7.0
GM-73	10.1	12.57	15.0	12.5 - 15.0	7.0
GH-74	3.9	6.91	65.0	62.5 - 65.0	57.0
GH-75	3.5	6.54	40.0	37.5 - 40.0	33.0
GH-76	7.1	8.12.	13.5	11.0 - 13.5	6.0
GM-77	4.2	5.27	13.5	11.0 - 13.5	5.0
GN-78	5.5	7.55	13.0	10.5 - 13.0	8.0
GH-79	2.7	5.24	12.5	10.0 - 12.5	7.0
GM-80	4.2	5.21	13.5	11.0 - 13.5	8.0
GM-81	2.4	4.88	12.5	10.0 - 12.5	8.0
GM-82	2.4	4.91	12.5	10.0 - 12.5	7.0
GN-83	2.9	5.44	12.5	10.0 - 12.5	8.0

\* - feet, referenced to mean sea level

\*\* - feet, below land surface  
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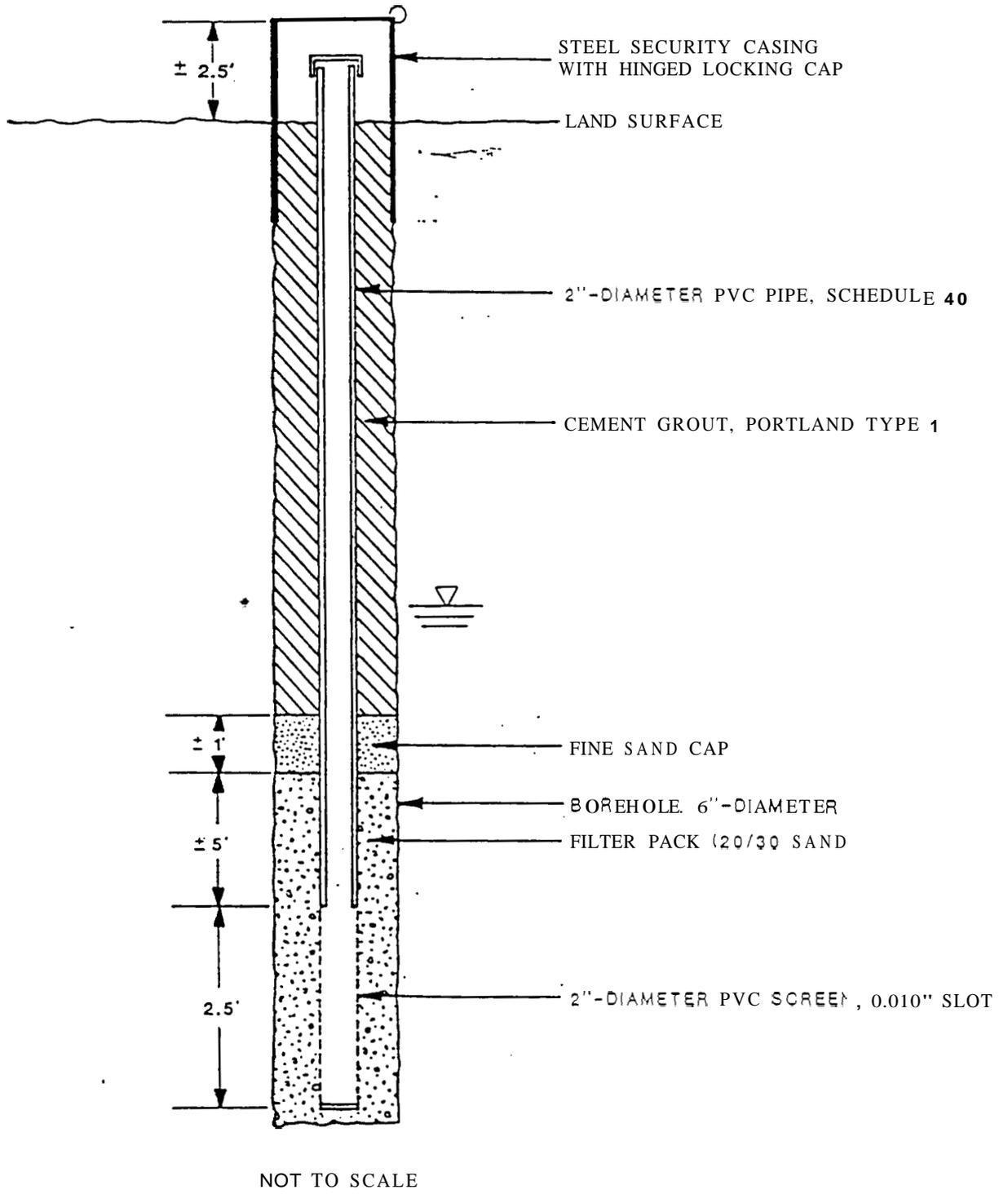


Figure 5. Schematic Diagram Showing Typical Construction Details of the Monitor Wells.

ensure clear, sediment-free water. Afterwards, the tops of the wells were surveyed for elevations and referenced to the same datum as the Phase I monitor wells.

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Soil-Test Borings

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During the drilling of the deep monitor wells, soil samples were collected by using a split-spoon or Shelby tube sampler at 5-foot intervals or at changes in lithology. During the drilling of the shallow and intermediate wells, the sediments encountered were examined for the selection of the screen settings. The mineral and physical characteristics of the sediment samples were described and the lithologic logs are presented in Appendix B.

Hydraulic Testing

Laboratory grain-size analyses were performed on selected sand samples and vertical hydraulic conductivity tests were performed on samples of the clay interval from 40 to 65 ft. In addition to the above-described testing, short-term pumping tests were performed in most of the monitor wells to obtain specific capacity values for use in estimating the hydraulic properties of the sediments tapped by the wells.

Water-level measurements in all wells were obtained on at least two different occasions in order to determine both the horizontal and vertical ground-water flow directions and gradients. Water-level measurements, grain-size analysis

data, and laboratory hydraulic conductivity data are presented in Appendix C.

Ground-Water Sampling and Analysis

On September 11 and 12, 1985, thirty-one ground-water samples were collected from both Phase I and Phase II monitor wells. All Phase II monitor wells and wells DG-2 and DG-3 were analyzed for organic compounds including VOCs and acid and base-neutral extractable compounds according to EPA Methods 624 and 625. In addition, the existing Phase I monitor wells GM-8 through GM-14 were analyzed for acid and base-neutral extractable compounds.

Prior to sampling with a teflon bailer, the wells were pumped using a peristaltic pump to remove three well casing volumes. Samples were collected in accordance with EPA standard operating and quality assurance procedures. Field measurements of temperature, pH and specific conductance were obtained at the time of sample collection. Samples were preserved on ice until delivery to Pioneer Laboratory, Inc., Pensacola, Florida, for analysis.

DISCUSSION OF FINDINGSGround-Water System

Based on the soil samples ~~collected~~, two water-bearing sand units occur within the depth of 65 ft. Figure 6 illustrates schematically the sediments comprising the shallow ground-water system at the site. The uppermost sediments, to a depth of about 40 ft, consist of fine to medium sand. Although hydraulic variations certainly occur throughout these uppermost sands, the hydraulic conductivity is estimated to range from  $1.9 \times 10^{-2}$  to  $2.6 \times 10^{-2}$  cm/sec (centimeters per second) (415 to 557 gpd/ft<sup>2</sup>). Based on the four deep borings drilled at the site, it appears that the clay layer is continuous.

Underlying the clay is a second sand unit of undetermined thickness, which exhibits similar physical and hydraulic properties as the overlying sand unit.

Ground-Water Movement

Horizontal movement of ground water in the surficial sand is generally from topographic highs to areas of discharge such as Pensacola Bay and Bayou Grande. A contour map of the water table using water-level measurements in the shallow and intermediate depth monitor wells is shown in Figure 7. This illustrates that a ground-water divide extends along the axis of the peninsula and that ground-water underneath the surge pond has the potential to move east,

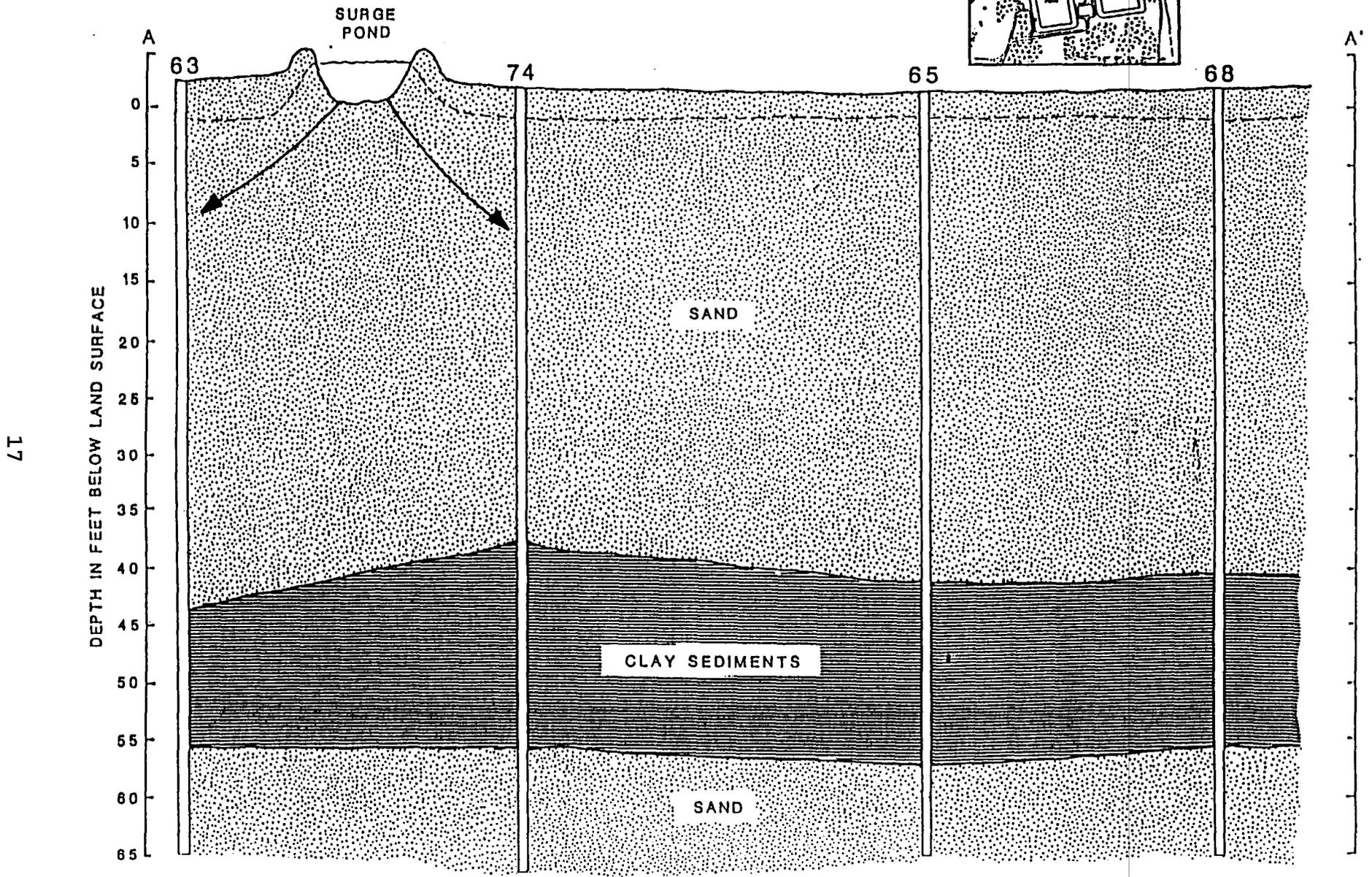


Figure 6. Generalized Geologic Cross-Section A-A'.

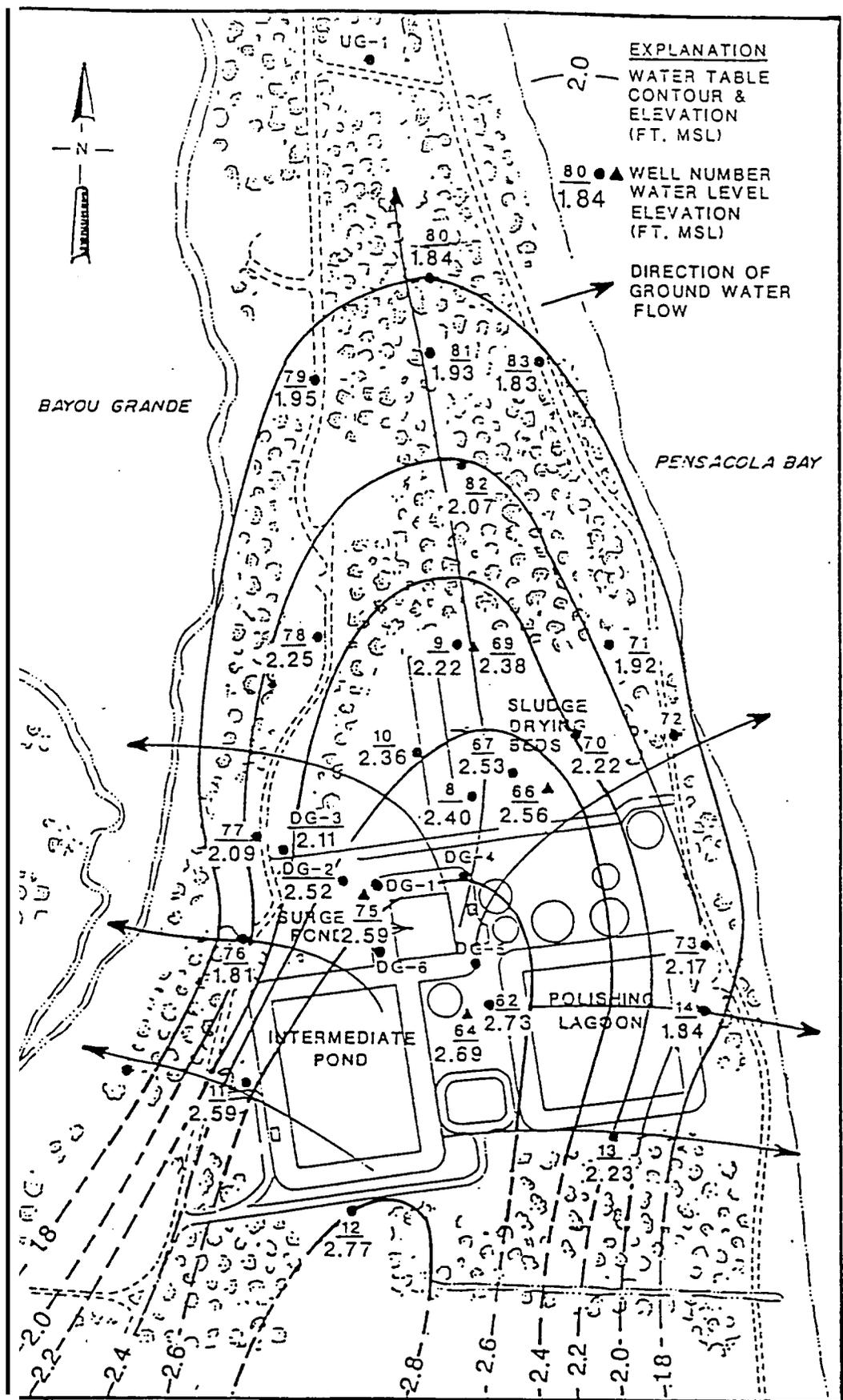


Figure 7. Shallow and Intermediate Well Water-Level Elevations in Feet, msl, and Inferred Direction of Ground-Water Flow.

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west, and north of the surge pond. This northerly movement prevents seepage from the surge pond to migrate toward areas south of the intermediate and polishing ponds.

The rate of lateral ground-water flow in the upper sand zone was calculated based upon measurements obtained from the water table contour map (Figure 7), and from the hydraulic conductivity determined from soil samples. The effective porosity was assumed to be 0.2, and the range of the hydraulic gradient was calculated to be from 0.0005 to 0.0019. Using a hydraulic conductivity of  $2.6 \times 10^{-2}$  cm/sec, the range of seepage velocities for the shallow ground-water at this site was calculated to be approximately 68 ft/yr (feet per year) in a northerly direction to a value of 260 ft/yr in an east/west direction.

Insufficient data was available for developing a water-table contour map for the deep monitor wells; however, the data suggest that the horizontal gradient is very low. The potential for vertical ground-water flow across the clay layer is low due to the low permeability of the clay and the slight differences (tenths of feet or less) in water-level elevations between the intermediate and deep monitor wells. The water levels measured in September and November 1985 indicate there is a slight downward gradient between the upper and lower sand units at monitor well locations GM-63 and GM-74; at the other two clustered well sites (GM-65 and GM-68), upward gradients have been observed.

WATER QUALITY

All laboratory results of the organic compound analyses and field measurements of pH and specific conductance performed on ground-water samples for the Phase II investigation are presented in Appendix D. Overall, except in a few wells, pH measurements did not vary among the three zones that were monitored. Specific conductance values [used as an indicator of total dissolved solids (TDS) concentrations] were higher in the intermediate depth wells than the shallow or deeper wells installed at the site. This indicates that the ground water is somewhat fresher in the uppermost part of the shallow ground water, and that the intermediate zone might be influenced by brackish water from Pensacola Bay.

Tables 2 and 3 summarize only those organic compounds that were detected in the analyses. Except for three wells, all contaminants identified in the analyses were primarily VOCs or base-neutral extractable organics (primarily isomers of dichlorobenzene). Furthermore, except for relatively low concentrations of VOCs (less than 16 ug/l of total VOCs), in the four deep wells, the occurrence of the organics were limited to the upper 40 ft of saturated sands. For ease of discussion, the following text is divided into the findings from the water-quality analyses of the "Upper Sand Unit" and the "Lower Sand Unit".

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Table 2. Results of Organic Compounds Detected in the Shallow Wells  
(concentrations in ug/l)

Compound	DG-2	DG-3	G1-8	G1-9	G1-10	01-62	G1-67	G1-70	G1-71	G1-72	04-76	G1-77	G1-78	G1-79	G1-80	at-at	G1-82	(2)
<b>Acid Extractables</b>																		
2,4-dimethylphenol	760	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-
2,4-dichlorophenol	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p-chloro-m-cresol	-	-	-	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Base-Neutral Extractables</b>																		
1,2-dichlorobenzene	330	-	14	3200	75	-	160	-	-	-	-	-	-	-	-	-	-	-
1,3-dichlorobenzene	330	-	13	2250	75	-	150	-	-	-	-	-	-	-	-	-	-	-
1,4-dichlorobenzene	170	-	30	4000	120	-	200	-	-	-	-	11	-	-	-	-	-	14
Di-n-butyl-phthalate	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Di-n-octyl-phthalate	-	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Volatile Organics</b>																		
Chlorobenzene	6	2	-	-	-	-	12	3	10	1	-	15	4	-	-	-	-	10
Chloroethane	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-dichloroethane	240	-	-	-	-	-	7	-	12	-	11	1	-	-	-	-	-	-
Ethylbenzene	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride	88	33	-	-	-	21	-	-	-	-	-	-	-	-	-	260	120	-
1,1,2,2-tetrachloroethane	27	16	-	-	-	23	-	-	-	-	-	-	-	-	-	-	130	30
Tetrachloroethylene	17	10	-	-	-	6	-	-	-	-	-	-	-	-	-	-	78	19
Toluene	81	3	-	-	-	2	-	1	-	-	-	-	-	1	1	2	1	-
Trichloroethylene	6	-	-	-	-	-	50	7	1	-	-	-	-	-	-	-	-	-
Vinyl Chloride	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-trans-dichloroethylene	-	-	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-
<b>TOTAL ORGANICS</b>	<b>2124</b>	<b>09</b>	<b>57</b>	<b>9520</b>	<b>270</b>	<b>52</b>	<b>535</b>	<b>11</b>	<b>23</b>	<b>1</b>	<b>11</b>	<b>27</b>	<b>a</b>	<b>1</b>	<b>1</b>	<b>476</b>	<b>194</b>	

- = None Detected  
(206/30)

Table 3. Results of Organic Compounds Detected in the Intermediate and Deep Wells  
(concentrations in ug/l)

Compound	Intermediate				Deep			
	GM-64	04-66	04-69	GM-75	GM-63	04-65	GM-68	01-74
<u>Acid Extractables</u>								
Phenol	-	-	-	-	-	-	-	10
<u>Base Neutral Extractables</u>								
Di-n-butylphthalate	610	-	-	-	-	-	-	-
1,2-dichlorobenzene	-	-	620	-	-	-	-	-
1,3-dichlorobenzene	-	-	1400	-	-	-	-	-
1,4-dichlorobenzene	-	-	1350	-	-	-	-	-
Naphthalene	-	-	11	-	-	-	-	-
<u>Volatile Organics</u>								
1,1,2,2-tetrachloroethane	14	8	-	-	8	-	-	-
Tetrachloroethylene	9	5	-	-	6	-	-	-
Chlorobenzene	-	16	-	55	-	-	-	-
1,1-dichloroethane	-	14	47	1	-	-	-	-
1,1-dichloroethylene	-	160	-	-	-	-	-	-
Toluene	-	5	8	-	2	-	-	1
1,2-trans-dichloroethylene	-	882	-	-	-	-	-	-
Trichloroethylene	-	2600	3	-	-	4	10	-
Vinyl chloride	-	27	3	1	-	-	-	-
Benzene	-	-	3	-	-	-	-	-
Bis(chloromethyl) ether	-	-	-	1	-	-	-	-
<b>TOTAL ORGANICS</b>	<b>633</b>	<b>3717</b>	<b>3445</b>	<b>58</b>	<b>16</b>	<b>4</b>	<b>10</b>	<b>11</b>

- = none detected

(206/31)

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2 Z

Upper Sand Unit

The greatest concentrations of base-neutral extractable compounds occur in shallow wells DG-2, GM-8, GM-9, GM-10, GM-67 and intermediate well GM-69 located in the vicinity of the inactive sludge drying beds; The analyses also indicate wells containing the highest concentrations of VOCs to be shallow wells GM-81, GM-82, GM-83 and intermediate well GM-66.

Figure 8 shows the areal distribution of total organic concentrations in the shallow ground-water aquifer at the site. The area which delineates the contaminant plume is consistent with the probable source of contamination (the surge pond) and the predominant direction of ground-water flow (northerly).

Lower Sand Unit

Concentrations of organics in monitor wells (Table 3) tapping the lower water-bearing sand unit indicate relatively low concentrations of organics, primarily VOCs. only well GM-74, located adjacent to the northwest corner of the surge pond detected an acid extractable, and this concentration was only 10 ug/l. Figure 9 illustrates the summation of organic compound concentrations in the deep monitor wells at the site. Comparison of the water-quality analyses of shallow, intermediate and deep wells at the cluster sites show some similarities in the compounds identified at the three depths;

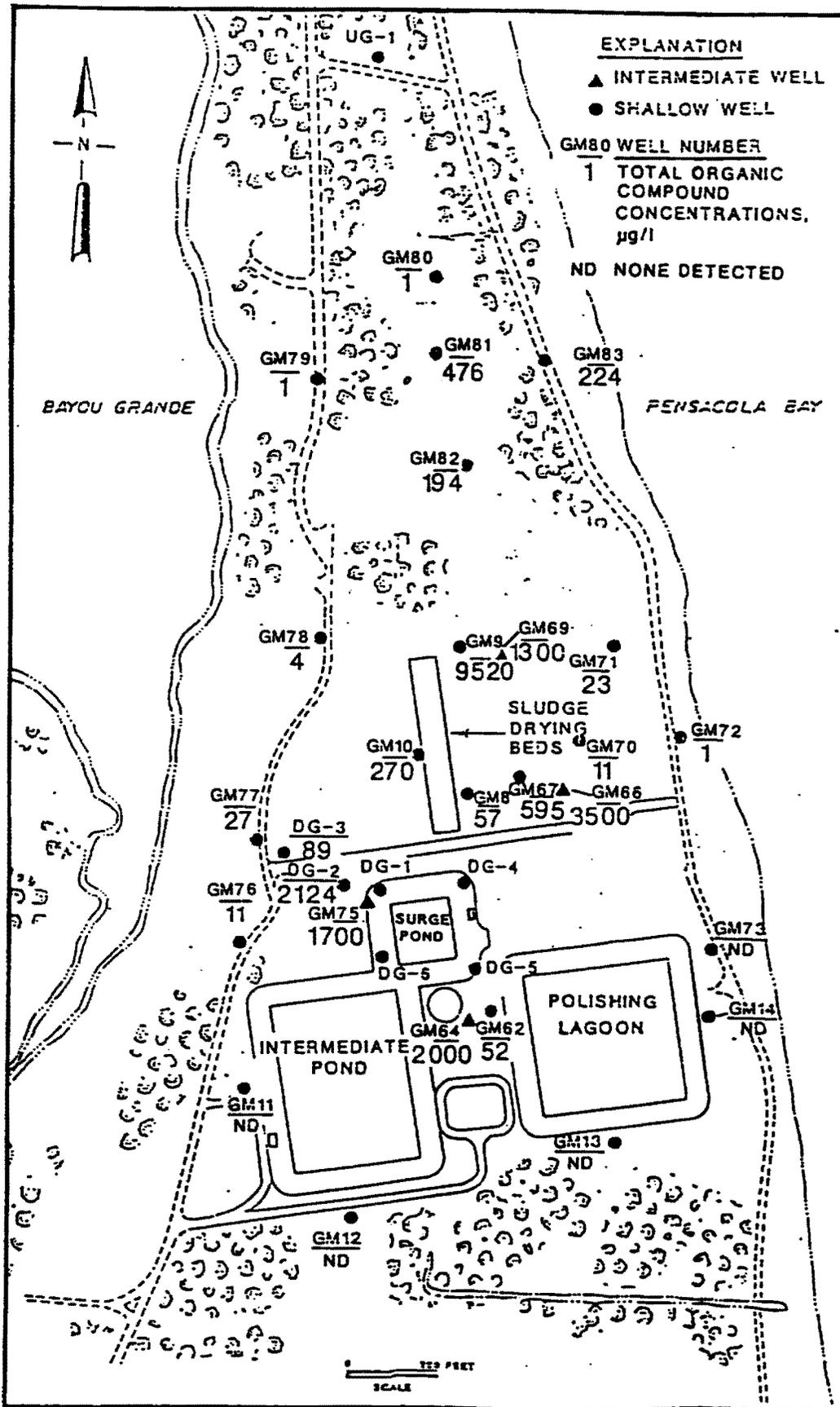


Figure 8. Summation of Total Organic Compound Concentrations in the Shallow Ground Water of the Upper Sand Unit.

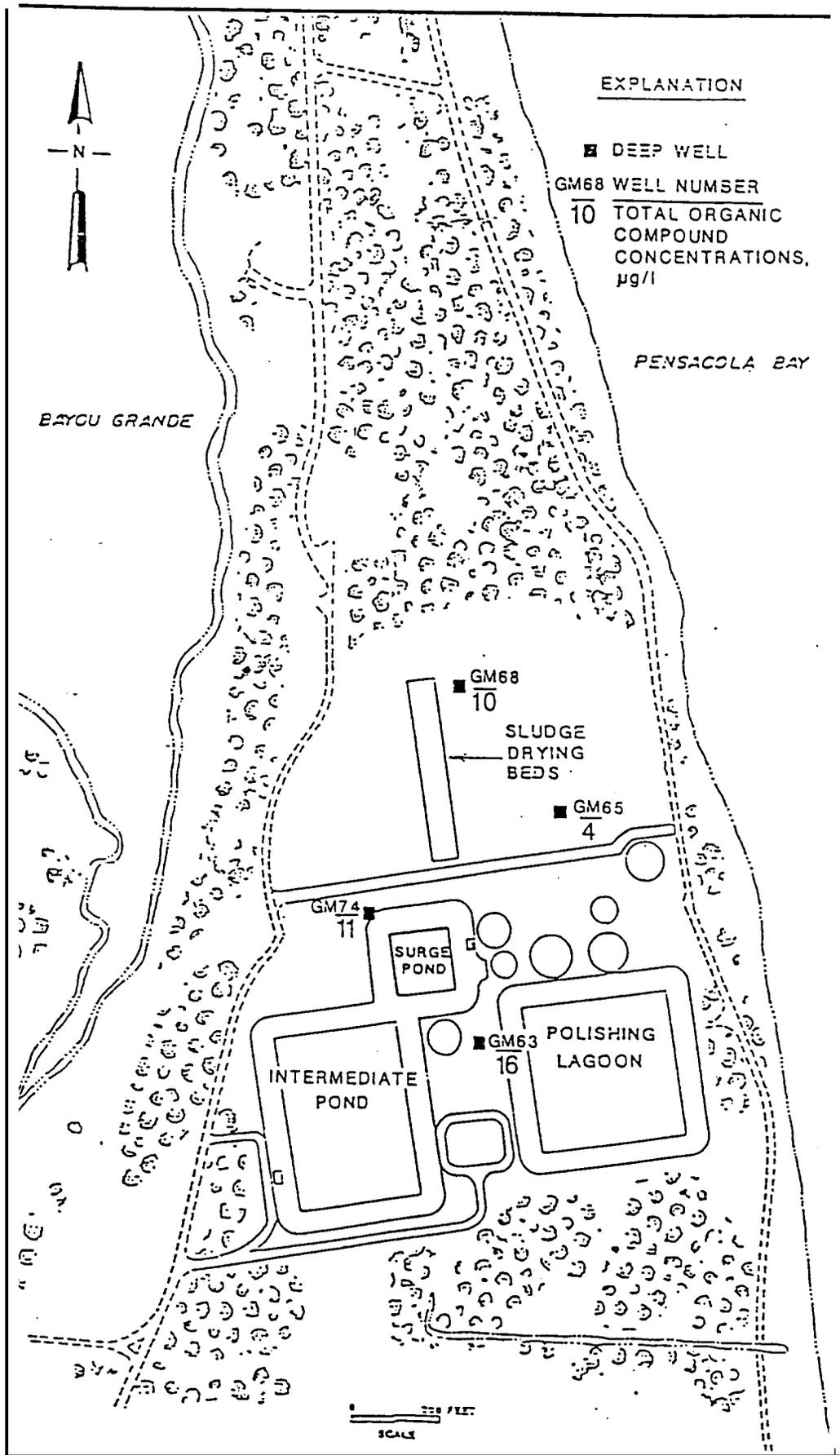


Figure 9. Summation of Total Organic Compound Concentrations in the Ground Water of the Lower Sand Unit.

this in turn would indicate that some downward leakage,  
although minor, has occurred with time through the clay  
layer.

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3250006

CORRECTIVE-ACTION PLAN

A corrective-action plan to clean up the constituents found in the lower sands is not needed since the levels of constituents detected were very low. However, a corrective-action program is recommended to recover and treat ground water in the upper sand unit (to a depth of about 40 ft). To accomplish this, G&M recommends installing and operating a recovery-well system and treating the recovered water in the existing wastewater-treatment plant.

Conceptual Recovery-Well Design

A recovery-well system is the most cost-effective remedial technique to "capture" the contaminated ground water. By pumping the recovery wells simultaneously, a composite cone of depression will be created in the water table which will intercept and recover the contaminated ground water to convey it to the treatment plant.

Figure 10 illustrates the proposed locations of six recovery wells downgradient from the surge pond and within the plume of contaminated ground water. This arrangement has been designed in such a manner that the shallow ground-water system will be stressed sufficiently to create an effective cone of depression within the plume but will minimize inducement of brackish ground water or salt-water intrusion from the surrounding bay. Water with a high TDS would be harmful to the biological treatment processes that occur

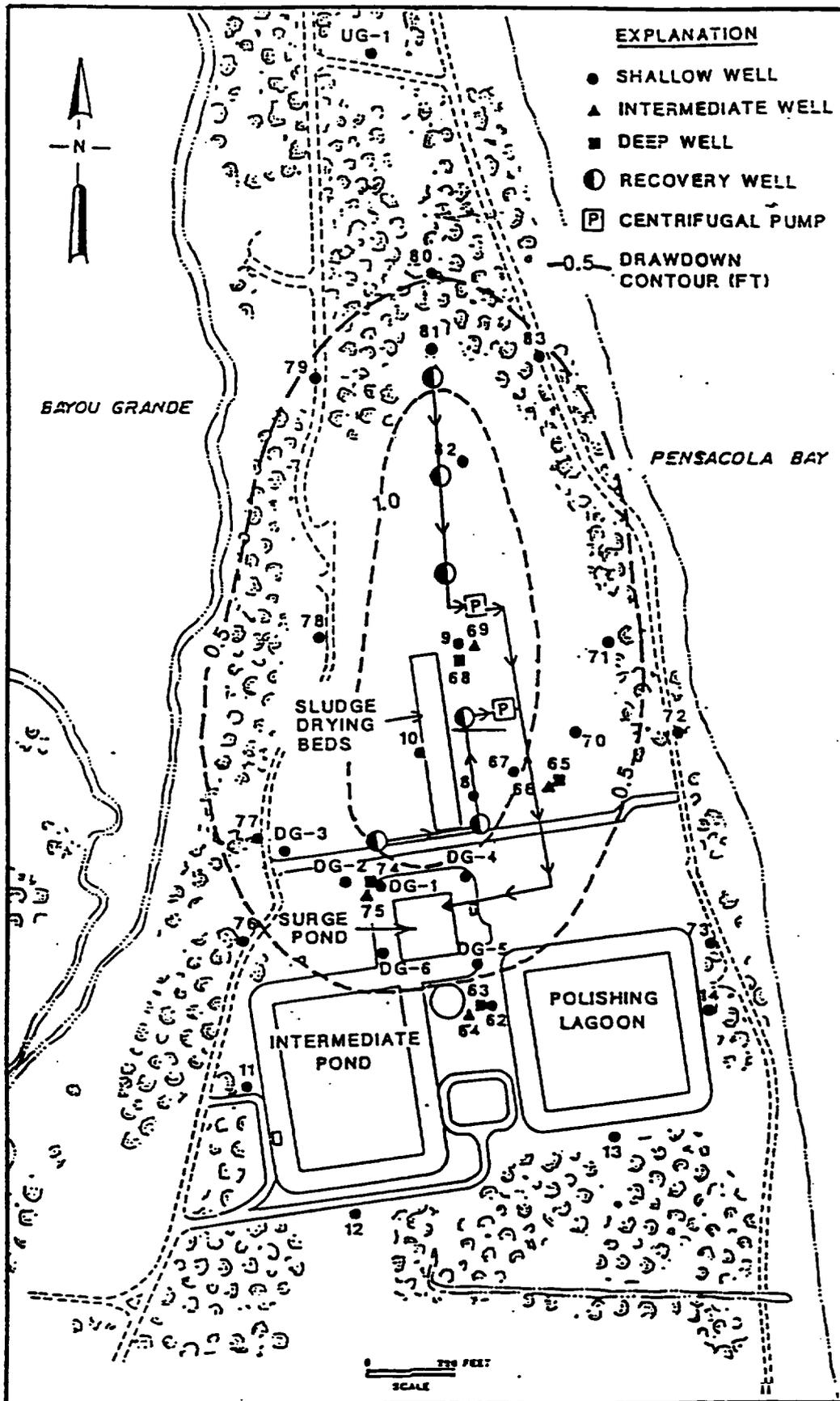


Figure 10. Proposed Recovery-Well System and Simulated Drawdown.

3250087

within the wastewater-treatment plant. The simulated water-table drawdowns shown in Figure 10 were computed using a ground-water model with the following variables: transmissivity = 10,000 gpd/ft; storativity = 0.2, discharge from each well at 10 gpm, and a pumping period of 30 days. The recovery-well network will **also** be designed **so** that recovery wells, particularly the northernmost ones, could be shut down as the aquifer in that area is gradually purged of contaminants.

The following work plan is presented describing the steps necessary for implementing the recovery well/treatment system. The plan covers all of the basic work which needs to be performed including: (1) installation of the recovery well system, (2) a pilot program for the start-up, and (3) monitoring of the system.

#### **Task 1: Installation of Recovery Well System**

Six recovery wells will be installed to depths of about **40** feet at the approximate locations shown in Figure 10. These wells will be constructed **as shown** in Figure 11 by inserting 2-inch-diameter PVC pipe and a 15-foot long PVC well screen into a 6-inch-diameter borehole. An appropriately sized filter pack will be **emplaced** surrounding the screened part of the well to obtain maximum efficiency and yield from the well. The pumping/discharge system will consist of **drop** pipes in each well which will be connected to a common suction header pipe, pumped by one or more

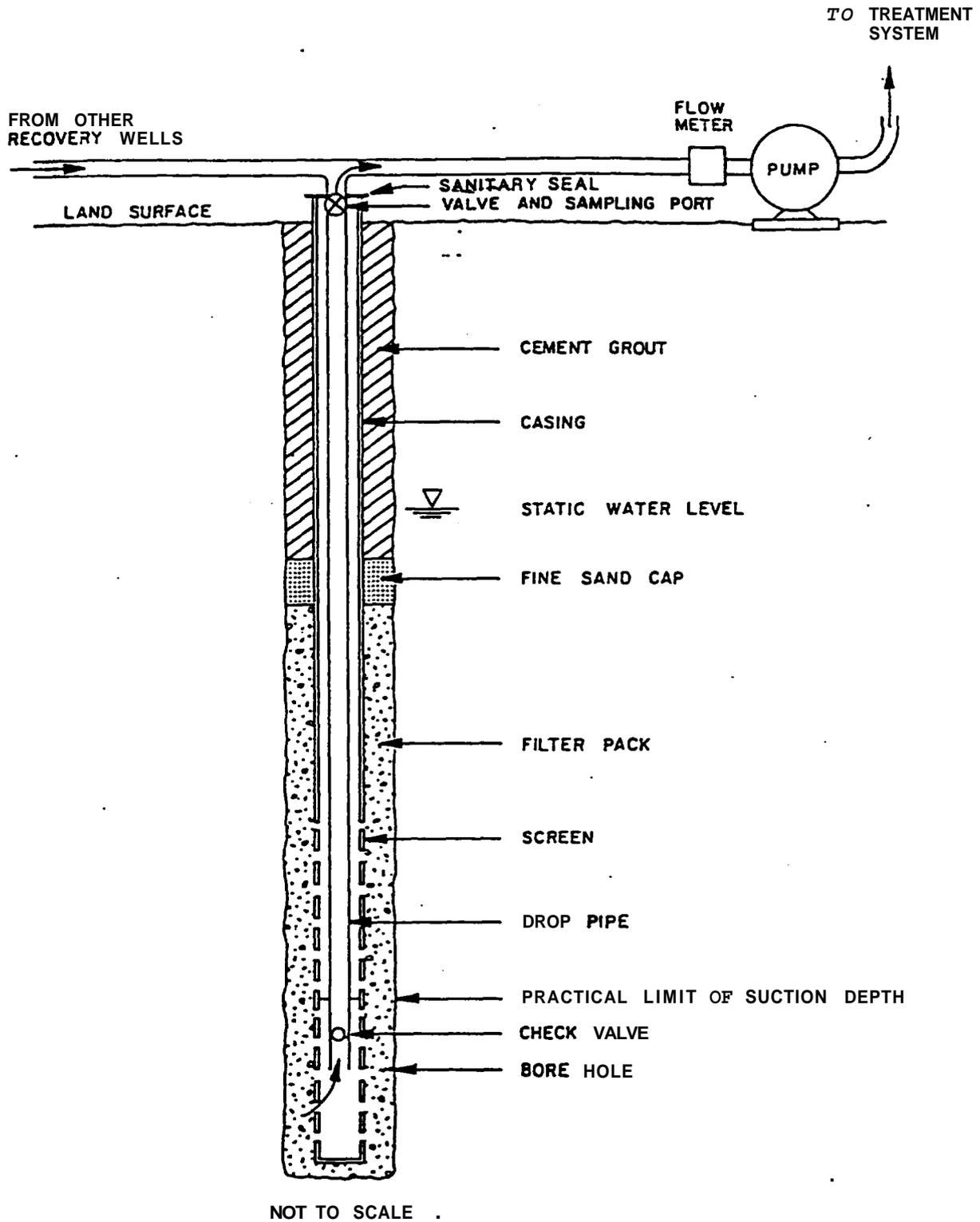


Figure 11. Schematic Diagram Showing the Typical Construction Details of the Proposed Recovery Wells..

centrifugal pumps; It is envisioned that at least two centrifugal pumps, each connected to three (3) wells, will be used to ensure an efficient pumping system.

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After installation and proper development of the wells, each well will be test pumped to determine their specific capacities (gallons per minute per foot of drawdown). Preliminary estimates from the Phase II investigation indicates that on an average, each well should be able to produce about 10 gpm (60 gpm combined discharge) and still be capable of being pumped by a centrifugal pump.

**Task 2: Conduct Pilot Program**

Upon installation of all plumbing of the system including the routing of the discharge-line to the wastewater treatment plant and the installation of all necessary fixtures, valves, flowmeters and sampling ports, a pilot program will be conducted. All recovery wells will be test pumped simultaneously for three days. During this time, the composite discharge will be sampled and analyzed, vacuum and discharge pressures will be monitored, and water levels in the existing monitor wells will be measured. This information will be used to select the size and materials to be used in the permanent pumps and to check the accuracy of the drawdown predictions developed in the model. Depending on the results of the pilot program, modifications to the flow rates from individual recovery wells will be made accordingly to ensure that the cone of depression is

sufficiently large to recapture the contaminated ground water while minimizing inducement of brackish water into the shallow sands.

Task 3. Operate and Monitor Recovery and Treatment System

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The overall supervision and monitoring of the system will be paramount to its successful operation. An operation and maintenance manual describing periodic checks of the system should be prepared. Check points of the system will include but is not limited to: (1) vacuum gages and pressure gages on the suction and discharge sides of the pump, respectively, and (2) flow rates of the pump discharge.

In conjunction with the corrective-action plan, the following ground-water monitoring program should be implemented to demonstrate the effectiveness of the recovery-well system. Water quality and hydrologic monitoring of the system for the first year should include the following:

- o Quarterly samples collected from shallow monitor wells **GM-81, GM-82, GM-9, GM-67,** and **DG-3** and intermediate wells **GM-69** and **GM-66**. These samples should be analyzed for VOCs and base-neutral extractable compounds according to **EPA Methods 624** and **625**.
- o Collection and analysis (**EPA Methods 624** and **625**) of monthly samples for the first quarter and then quarterly

thereafter, **of** individual pumping wells and the composite discharge from the recovery well-system.

- o All sample points described above will be measured on a monthly basis for specific conductance and pH to monitor and detect any induced movement of salt water into the shallow ground water due to pumping.
  
- o **Also,** ground-water levels would be measured monthly in all monitor wells.

APPENDIX A

PHASE I

**Monitor Well Water-Quality Analyses**

3250130

(Counter failure - previous page 3250084)

Table A-1, Results of Dissolved Metals in the Monitor Wells, July and October, 1984.

Constituent (mg/l)	Cambridge Analytical (7/19/84)					Pioneer Laboratory (10/31/84)								(EPA Recomm Health Crite. Florida Primary and Secondary Drinking Water Standards)
	UG-1	DG-1	DG-4	DG-5	DG-6	GH-8	GH-9	GH-10	GH-11	GH-12	GH-13	GH-14		
Antimony (Sb)	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	N/S	
Arsenic (As)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	0.009	<0.001	<0.001	0.05 mg/l	
Barium (Ba)	-	-	-	-	-	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1 mg/l	
Beryllium (Be)	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	-	-	-	-	-	N/S	
Cadmium (Cd)	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.004	0.004	0.001	0.002	0.001	0.005	0.01 mg/l	
Chromium (Cr)	<0.025	<0.025	<0.025	<0.025	<0.025	0.006	0.016	0.017	0.001	0.002	0.004	0.000	0.05 mg/l	
Copper (Cu)	0.034	<0.025	<0.025	<0.025	<0.025	0.005	0.006	0.008	-	-	-	-	1.0 mg/l*	
Lead (Pb)	<0.005	0.005	<0.005	<0.005	<0.005	0.03	0.03	0.04	0.02	0.03	0.02	0.03	0.05 mg/l	
Manganese (Mn)	-	-	-	-	-	0.270	0.339	0.200	-	-	-	-	0.05 mg/l*	
Mercury (Hg)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.000	<0.0012	<0.0002	<0.0002	<0.0002	<0.0002	0.002 mg/l	
Nickel (Ni)	<0.05	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	N/S	
Selenium (Se)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.01 mg/l	
Silver (Ag)	<0.01	<0.01	<0.01	<0.01	<0.01	0.002	0.003	0.004	0.001	0.001	<0.001	0.002	0.05 mg/l	
Thallium (Tl)	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	N/S	
Zinc (Zn)	<0.01	<0.01	<0.01	<0.01	0.076	0.025	0.034	0.038	-	-	-	-	5.0 mg/l*	
Cyanide**	0.01	0.024	0.022	0.058	0.022 0.020	-	-	-	-	-	-	-	(0.02 mg/l) N/S	

\* = Duplicate analyses performed.

\* = Secondary standard (Effective July 1, 1985)

\*\* = All samples contained high levels of sulfide which may cause interferences for these analyses.

N/S = No Florida standard established.

A-1

Table A-2. Volatile Organic Compounds Detected in the 17-3 and 17-4 PAC Monitor Wells (Method 601)

Tearghy & Miller, Inc

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A-2

Organic Compound	Cambridge Analytical Associates (7/19/84)							Pioneer Laboratory (10/31/84)							Florida Primary & Secondary Drinking-Water Standards
	GH-8	GH-9	GH-10	GH-11	GH-12	GH-13	GH-14	GH-8	GH-9	GH-10	GH-11	GH-12	GH-13	GH-14	
Chloroform	-	-	-	-	-	-	-	TR	TR	TR	6	6	TR	-	100 ppb
Chloroethane	-	-	-	-	-	-	-	-	5	46	-	-	-	-	N/S
1,1-Dichloroethane	50	6300	1060	ND	ND	ND	ND	5	660	250	TR	-	-	TR	N/S
Methylene chloride	-	-	-	-	-	-	-	-	TR	TR	TR	11	12	TR	N/S
1,1-Dichloroethane	ND	50	ND	ND	ND	ND	ND	-	TR	TR	-	-	-	-	N/S
1,2 Dichloroethane	-	-	-	-	-	-	-	-	TR	TR	-	-	-	-	N/S
1,2-Dichloroethane	0.6	9600	2	ND	ND	ND	ND	-	TR	TR	-	-	-	-	N/S
1,1,2,2 Tetrachloroethane	-	-	-	-	-	-	-	-	6	TR	-	-	TR	TR	N/S
1,1,1-Trichloroethane	ND	11,500	100	ND	ND	ND	ND	-	TR	TR	-	-	-	-	200 ppb
Trichloroethene	ND	60	ND	ND	ND	ND	ND	-	TR	TR	-	-	-	-	3 ppb
Tetrachloroethene	ND	675	ND	ND	ND	ND	ND	-	4	TR	-	-	-	1	3 ppb
Vinyl chloride	-	-	-	-	-	-	-	-	21	7	-	-	-	-	-
Chlorobenzene	ND	47	ND	ND	ND	ND	ND	TR	10	19	TR	-	-	TR	N/S
Dichlorobenzene	-	-	-	-	-	-	-	TR	1000	65	TR	-	-	-	N/S

ND = none detected  
 TR = trace  
 N/S = no standard  
 All amounts in ppb.

Tsble A-3. Volatile Organic Compounds Detecte the RCRA Monitor Wells (Method 624)

Geraghty & Miller, Inc

Compound	Ploncat Lab	Cambridge Analytical (7/19/84)					Pioneer Laboratory 10/31/84					Florida Primary Drinking-Water Standards
	(2/9/84) DG-6	DG-1	DG-1	DG-5	DG-8	DG-1	DG-4	DG-5	DG-6	DG-1		
1,1-Dichloroethane	670	1500	850	37	1500	ND	2750	1025	525	1225	-	N/S
1,1-Dichloroethene	8	ND	ND	ND	ND	ND	800	TR	-	25	-	N/S
1,2-Dichloroethylene	32	ND	ND	ND	ND	ND	-	75	TR	16	-	N/S
Carbon Tetrachloride	-	-	-	-	-	-	425	TR	0	9	TR	N/S
1,1,1-Trichloroethane	130	110	61	26	330	ND	5900	8	-	103	-	N/S
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	800	16	TR	33	TR	N/S
Trichloroethenc	58	ND	ND	ND	TR(20)	ND	20	13	-	32	-	3 ppb
Tetrachloroethenc	6	ND	ND	ND	ND	ND	500	11	TR	38	TR	3 ppb
Chlorobenzene ,	ND	ND	13	ND	ND	ND	160	11	45	7	-	N/S
2-Chloro ethylvinyl ether	-	-	-	-	-	-	-	-	-	-	TR	N/S
Vinyl chloride	ND	10	20	ND	ND	ND	32	16	9	13	-	N/S
Chloroethane	43	180	28	ND	ND	ND	-	-	72	37	-	N/S
Chloroform	-	-	-	-	-	-	250	TR	TR	5	-	100 ppb
Benzene	3.5	ND	ND	ND	ND	ND	TR	2	2	2	TR	1 ppb
Toluene	550	160	210	TR(6)	170	ND	600	14	18	35	TR	N/S
Ethylbenzene	ND	ND	TR(2)	ND	ED	ND	6	9	4	15	-	N/S
Total xylene	ND	ND	43	ND	ND	ND	-	-	-	-	-	N/S
2-Hexanone	ND	160	110	TR(7)	240	ND	-	-	-	-	-	N/S
Methyl ethyl ketone	ND	11,000	ND	540	10,200	ND	-	-	-	-	-	N/S
Acetone	ND	4,700	ND	ND	ND	ND	-	-	-	-	-	N/S
1,2-Dichloro,1,1,2 Tri-fluoroethane	ND	ND	75	110	8,000	ND	-	-	-	-	-	N/S
Methylene chloride	ND	ND	ND	450	ND	ND	TR	TR	TR	TR	TR	N/S

ND = none detected  
 TR = trace  
 NS = no standard

Concentrations in ppb

Note: Table includes only compounds which were detected.

A-3

Table A-4. Base Neutral/Acid Extractable Analysis in the PCRA Monitor Wells (Method 8270 and 625)

Organic Compound	Cambridge Analytical (7/19/84)					Pioneer Laboratory (10/31/84)					EPA Recommended Health Criteria
	DG-1	DG-4	DG-5	DG-6	UG-1	DG-1	DG-4	DG-5	DG-6	UG-1	
<b>Acid Extractables</b>											
Phenol	TR(3)	ND	ND	TR(6)	ND	-	95	-	5	-	34 ppm
2-Chlorophenol	24	ND	ND	30	ND	35	42	15	14	ND	0.3 ppb
2,4-Dimethylphenol	480	ND	ND	80	ND	-	-	-	-	-	No Standard
2,4-Dichlorophenol	TR(3)	ND	ND	TR(2)	ND	-	-	-	-	-	371 ppb
2-Methyl phenol	3,300	ND	ND	3,300	ND	-	-	-	-	-	No Standard
<b>Base-Neutral Extractables</b>											
1,3-Dichlorobenzene	110	ND	TR(3)	56	ND	193	38	80	71	-	230 ppb
1,4-Dichlorobenzene	200	ND	TR(6)	120	ND	337	98	170	182	-	230 ppb
1,2-Dichlorobenzene	530	ND	16	500	ND	1163	194	708	933	-	230 ppb
1,2,4-Trichlorobenzene	TR(3)	ND	ND	TR(4)	ND	-	-	-	-	-	13 ppb
Napthalene	260	ND	ND	22	ND	-	383	250	782	-	143 ppb
Acenaphthone	TR(2)	ND	ND	ND	ND	-	-	-	-	-	20 ppb
Nitrobenzene	-	-	-	-	-	638	-	-	-	-	13.9 ppm
2-Methyl napthalene	50	ND	ND	80	ND	-	-	-	-	-	
Di-n-octyl-phthalate	-	-	-	-	-	8	11	TR	26	-	160 ppm
Hexachloroethane	ND	ND	ND	TR(2)	ND	-	-	-	-	-	4.4 ppb
Di(2 ethylhexyl)phthalate	-	-	-	-	-	-	-	-	-	27.3	10 ppm

ND = none detected  
TR = trace

Concentrations in ppb

Note: Table includes only detected compounds

3250102

A-4

APPENDIX B

PHASE II

Lithologic Logs of Borings

LITHOLOGIC LOG FOR MONITOR WELL GM-63

Description	Depth (ft)		Thickness (ft)
Fine to medium grain white sand.....	0	-	5
Fine to medium grain white sand.....	5	-	10
Fine to medium grain white sand.....	10	-	15
Fine to medium grain white sand.....	15	-	20
Fine to medium grain white sand.....	20	-	25
Fine to medium grain white sand.....	25	-	30
Fine to medium grain white sand.....	30	-	35
Fine to medium grain gray sand.....	35	-	40
Fine to medium grain gray sand.....	40	-	44
Gray Clay.....	44	-	50
Gray Clay, shell material.....	50	-	56
Fine grain white sand, wood fragments	50	-	64

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LITHOLOGIC LOG FOR MONITOR WELL GM-65

<u>Description</u>	<u>Depth (ft)</u>	<u>Thickness (ft)</u>
Fine to medium grain white to buff sand...	0 - 5	5
Fine to medium grain white to buff sand...	5 - 10	5
Fine to medium grain white to buff sand...	10 - 15	5
Fine to medium grain white to buff sand...	15 - 20	5
Fine to medium grain white to buff sand...	20 - 25	5
Fine to medium grain white to buff sand...	25 - 30	5
Fine to medium grain white to buff sand...	30 - 35	5
Fine to medium grain white to buff sand...	35 - 40	5
Fine to medium grain gray sand.. .. .	40 - 42	2
Gray Clay.....	42 - 45	3
Gray Clay.....	45 - 50	5
Gray Clay.....	50 - 55	5
Gray Clay, wood fragments.....	55 - 58	3
Fine to medium grain gray sand.....	58 - 68	10

3250104

LITHOLOGIC LOG FOR MONITOR WELL GM-68

<u>Description</u>	<u>Depth</u> (ft)		<u>Thickness</u> (ft)
Fine to medium grain gray brown sand.....	0	- 5	5
Fine to medium grain buff to white sand...	5	- 10	5
Fine to medium grain buff to white sand...	10	- 15	5
Fine to medium grain buff to white sand...	15	- 20	5
Fine to medium grain buff to white sand...	20	- 25	5
Fine to medium grain buff to white sand...	25	- 30	5
Fine grain white sand.....	30	- 35	5
Fine grain white sand.....	35	- 41	6
Gray clay.....	41	- 45	5
Gray clay, shell material.....	45	- 50	5
Gray clay, shell material.....	50	- 56	6
Fine to medium grain gray sand.....	56	- 66	10

LITHOLOGIC LOG FOR MONITOR WELL GM-74

<u>Description</u>	<u>Depth (ft)</u>	<u>Thickness (ft)</u>
Fine to medium grain white to buff sand...	0 - 5	5
Fine to medium grain white to buff sand...	5 - 10	5
Fine to medium grain white to buff sand...	10 - 15	5
Fine to medium grain white to buff sand...	15 - 20	5
Fine to medium grain white to buff sand...	20 - 25	5
Fine to medium grain white to buff sand...	25 - 30	5
Fine to medium grain white to buff sand...	30 - 38	8
Gray clay, silt and minor fine sand.....	38 - 50	12
Gray clay, silt and minor fine sand.....	50 - 56	6
Fine to medium grain gray sand.....	56 - 65	9

3250105

APPENDIX C

PHASE II - HYDRAULIC DATA.

Water Level Elevations  
Sieve Analyses & Permeability Tests

Table C-1. Water-Level Elevations for Monitor Wells

Well Number	Elevation Top of Casing (ft msl)	Water-Level Elevation (ft msl)	
		9/12/85	11/11/85
GM-9 (sh)	5.83	2.22	2.70
GM-69 (int)	8.25	2.38	2.64
GM-68 (dp)	7.38	2.39	2.77
GM-67 (sh)	6.93	2.53	2.71
GM-66 (int)	8.04	2.56	2.72
GM-65 (dp)	7.23	2.19	3.01
GM-62 (sh)	7.48	2.73	3.01
GM-64 (int)	6.63	2.69	3.47
GM-63 (dp)	7.20	2.01	2.69
DG-2 (sh)	4.89	2.52	2.91
GH-75 (int)	6.54	2.59	2.97
GM-74 (dp)	6.91	2.04	2.65
DG-3 (sh)	5.30	2.11	2.51
GM-8 (sh)	6.30	2.40	2.68
GM-10 (sh)	6.01	2.36	2.86
GM-11 (sh)	6.18	2.59	2.74
GM-12 (sh)	5.91	2.77	3.15
GM-13 (sh)	5.27	2.23	2.23
GM-14 (sh)	4.74	1.84	-
GM-70 (sh)	7.55	2.22	2.25
GM-71 (sh)	7.14	1.92	1.95
GM-72 (sh)	7.79	2.42	1.54
GM-73 (sh)	12.57	2.17	1.22
GH-76 (sh)	8.12	1.81	2.12
GM-77 (sh)	5.27	2.09	2.60
GM-78 (sh)	7.55	2.25	2.75
GM-79 (sh)	5.24	1.95	2.45
GM-80 (sh)	5.21	1.84	2.24
GM-81 (sh)	4.88	1.93	2.46
GM-82 (sh)	4.91	2.07	2.89
GM-83 (sh)	5.44	1.83	1.55

sh = shallow  
int = intermediate  
dp = deep

(206/27)

32501VE

C-1

# ENVIRONMENTAL LABORATORIES, Inc.

P.O. Drawer 2309 / Gulfport, Mississippi 39505 / (601) 863-3036

TYPE OF TEST: Sieve Analysis & Permeability	DATE: 9/16/85
CLIENT: Geraghty & Miller, Inc.	JOB NO: 50-299
PROJECT: Naval Air Station Pensacola, Florida	JOB REQUEST NO: 5004
TYPE MATERIAL TESTED: Listed Below	SAMPLE NO: 6064
LOCATION: Listed Below	Page 1 of 3

<u>SAMPLE NUMBER</u>	<u>TYPE MATERIAL</u>	<u>SIEVE SIZE</u>	<u>PERCENT PASSING</u>	<u>PERMEABILITY</u>
GM - 68 3' - 5'	Tan Sand	--	--	2.627 x 10 <sup>-2</sup>
GM - 68 33' - 35'	Tan Sand	No. 10	100.0	--
		No. 20	100.0	
		No. 40	82.0	
		No. 60	24.3	
		No. 100	4.9	
		No. 200	3.5	
GM - 68 43' - 45'	Dark Gray Clay	No. 10	100.0	2.000 x 10 <sup>-7</sup>
		No. 20	100.0	
		No. 40	99.3	
		No. 60	98.6	
		No. 100	97.2	
		No. 200	97.2	

Copies to:

*Allen D. Randall*

ALLEN D. RANDALL, LAB DIRECTOR  
PHYSICAL DIVISION

# ENVIRONMENTAL LABORATORIES, Inc.

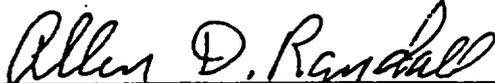
P.O. Drawer 2309 / Gulfport, Mississippi 39505 / (601) 863-3036'

TYPE OF TEST: Sieve Analysis & Permeability      DATE: 9/16/85  
CLIENT: Geraghty & Miller, Inc.      JOB NO: 50-299  
PROJECT: Naval Air Station      JOB REQUEST NO: 5004  
          Pensacola, Florida  
TYPE MATERIAL TESTED: Listed Below      SAMPLE NO: 6064  
LOCATION: Listed Below      Page 2 of 3

<u>SAMPLE NUMBER</u>	<u>TYPE MATERIAL</u>	<u>SIEVE SIZE</u>	<u>PERCENT PASSING</u>	<u>PERMEABILITY</u>
GM - 68 53' - 55'	Tan Silty Sand	No. 10	100.0	--
		No. 20	98.2	
		No. 40	86.1	
		No. 60	56.1	
		No. 100	40.9	
		No. 200	21.6	
GM - 68 58' - 60'	Tan Sand	No. 10	100.0	--
		No. 20	97.5	
		No. 40	79.4	
		No. 60	26.7	
		No. 100	7.8	
		No. 200	4.4	

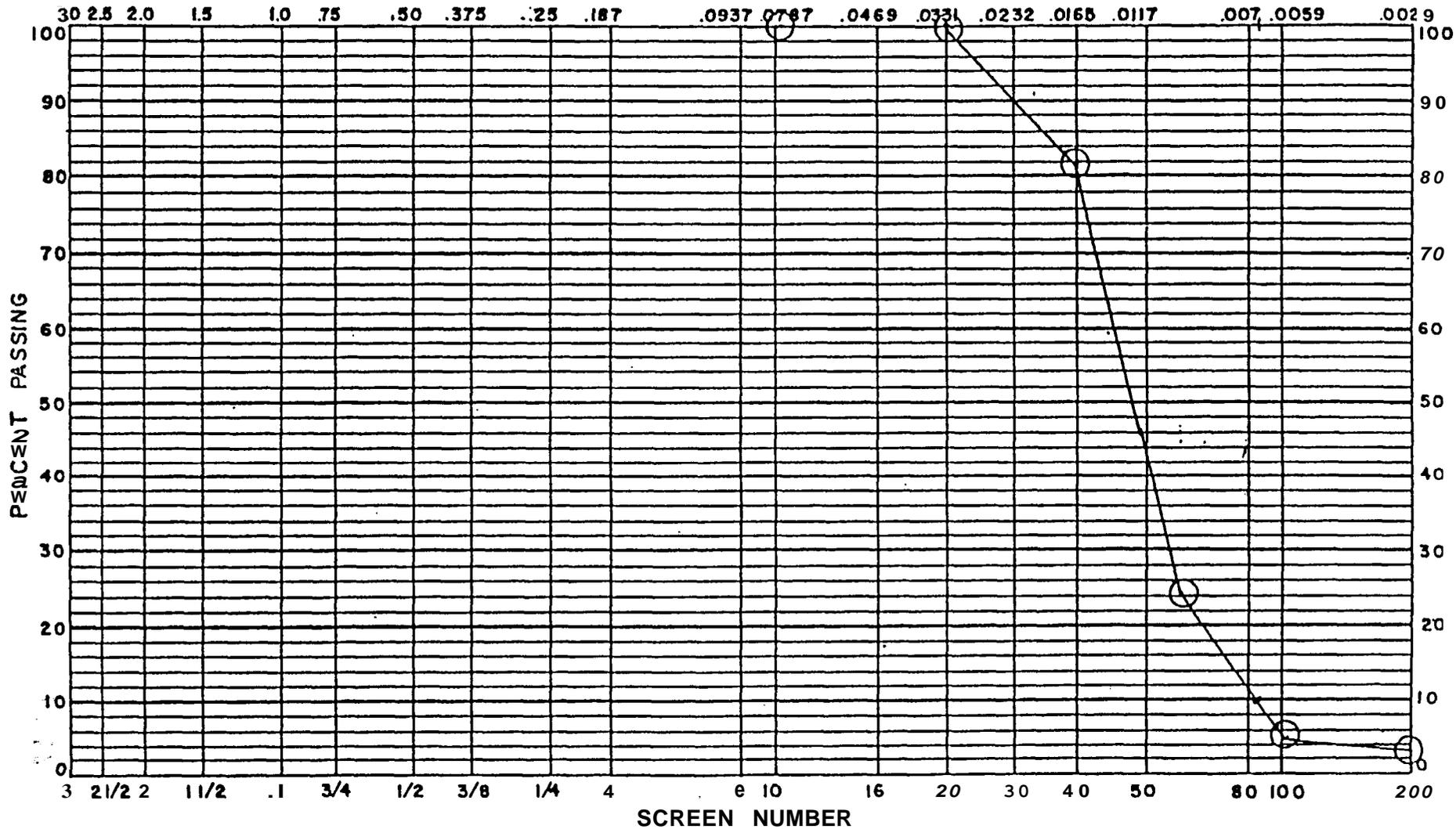
Copies to:

3250137

  
ALLEN D. RANDALL, LAB DIRECTOR  
PHYSICAL DIVISION

### AGGREGATE GRADING CHART

SCREEN OPENING IN INCHES



C-4

Job No. 50-299

Sample No. 6064

SAMPLE IDENTIFICATION  
CM 68 33 35'

Job Request No. 5004

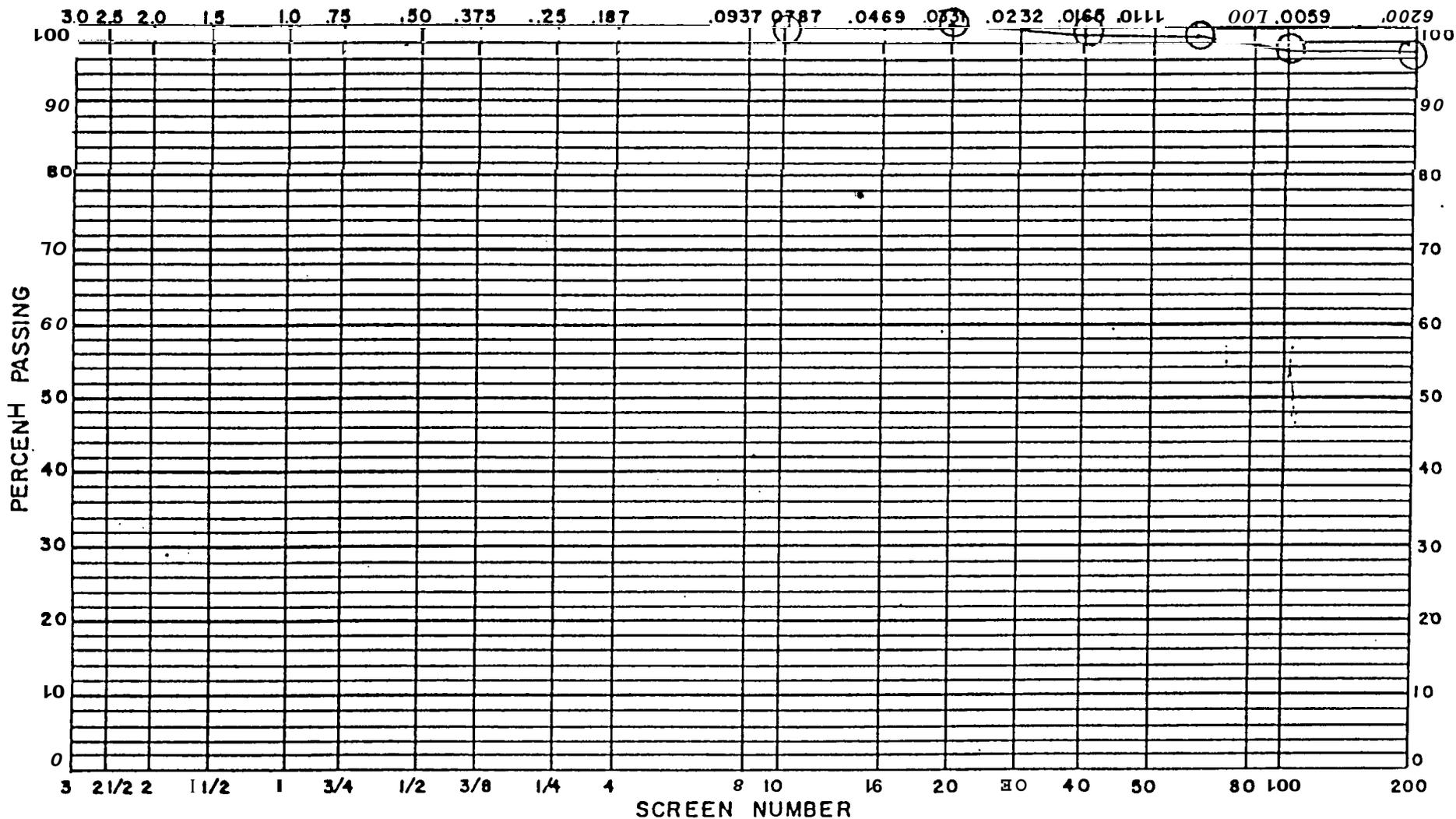
BY Allen D. Randall  
LAB DIRECTOR Allen D. Randall

8010928



## AGGREGATE GRADING CHART

SCREEN OPENING IN INCHES



Job No. 50-299

Sample No. 6064

SAMPLE IDENTIFICATION  
GM 68 43' - 45'

Job Request No. 5004

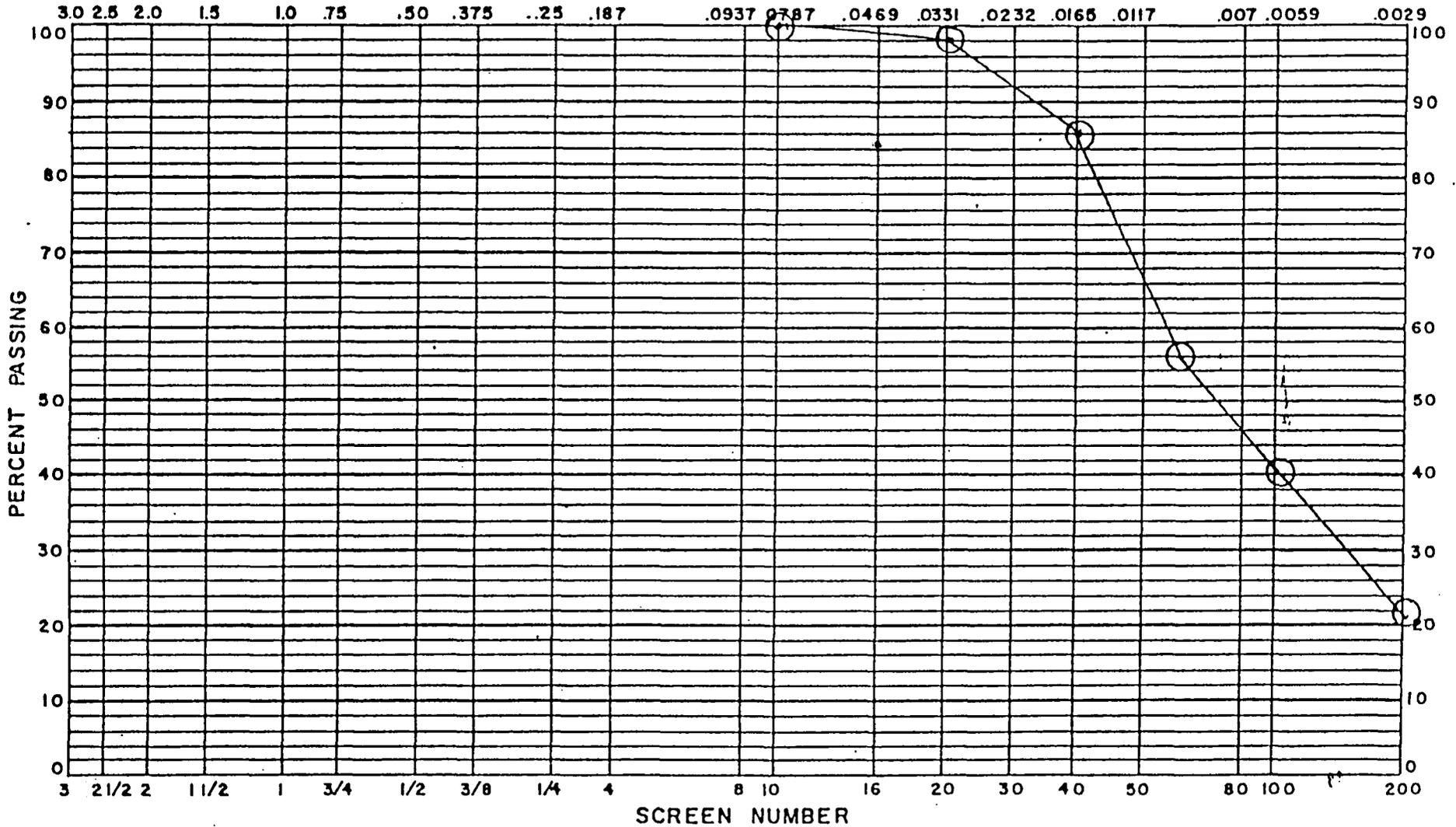
BY Allen D. Randa

Table 2 (cont.), Sieve Analysis, Well GM



### AGGREGATE GRADING CHART

SCREEN OPENING IN INCHES



Job No. 50-299

Sample No. 6064

**SAMPLE IDENTIFICATION**

GM 68 53' - 55'

Job Request No. 5004

BY

*Allen D. Randall*

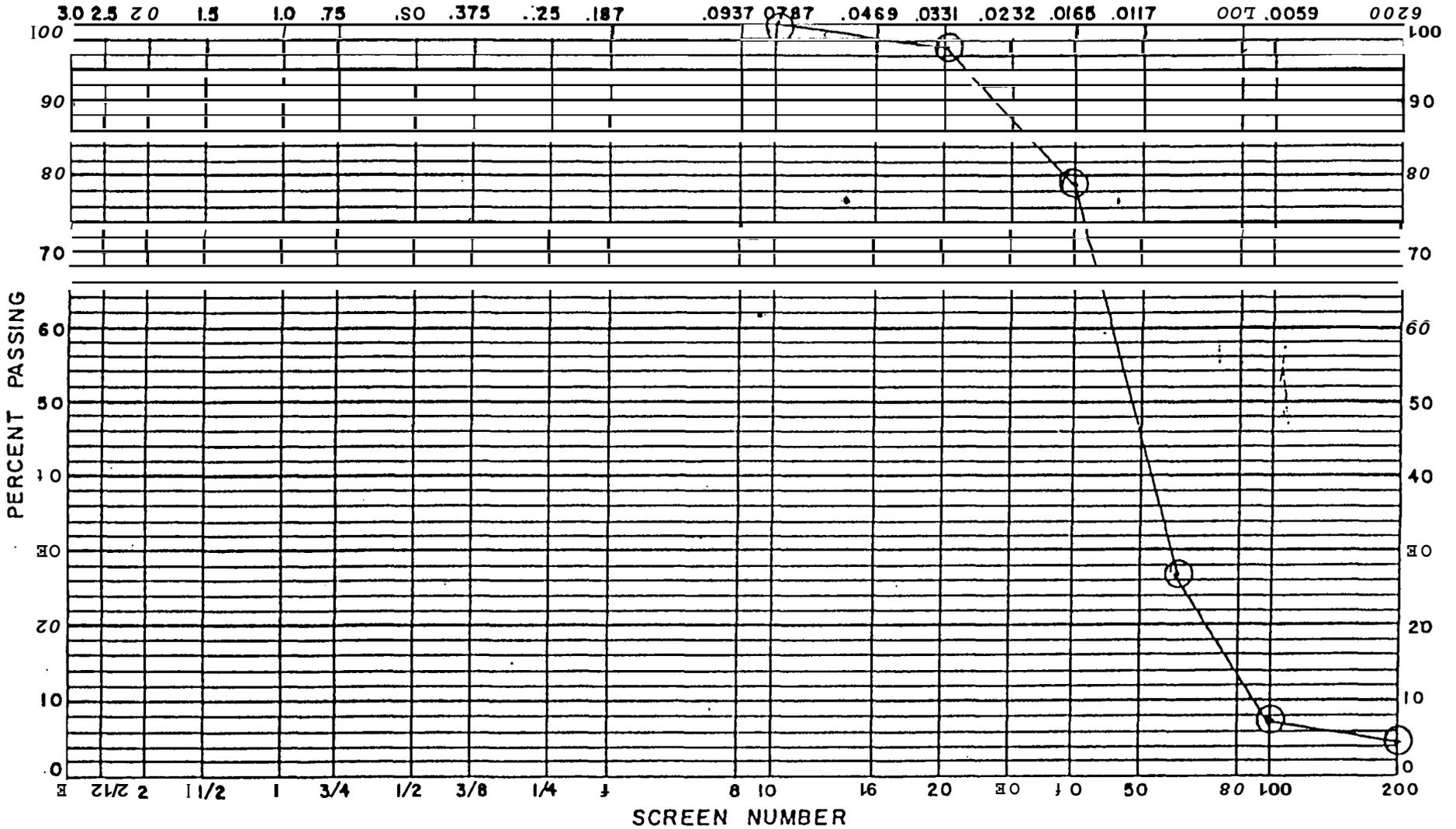
C-3



3250139

### AGGREGATE GRADING CHART

SCREEN OPENING IN INCHES



Job No. 50-299

Sample No. 6064

**SAMPLE IDENTIFICATION**  
GM 68 58' - 60'

Job Request No. 5004

BY Allen D. R. Hall

C-7

# ENVIRONMENTAL LABORATORIES, Inc.

P.O. Drawer 2309 / Gulfport, Mississippi 39405 / (601) 467-3333

TYPE OF TEST: Sieve Analysis & Permeability      DATE: 9/16/85  
 CLIENT: Geraghty & Miller, Inc.      JOB NO: 50-299  
 PROJECT: Naval Air Station      JOB REQUEST NO: 5004  
           Pensacola, Florida  
 TYPE MATERIAL TESTED: Listed Below      SAMPLE NO: 6064  
 LOCATION: Listed Below      Page 3 of 3

<u>SAMPLE NUMBER</u>	<u>TYPE MATERIAL</u>	<u>SIEVE SIZE</u>	<u>PERCENT PASSING</u>	<u>PERMEABILITY</u>
GM - 74 - 23' - 25'	Tan & White Sand	No. 10	100.0	--
		No. 20	100.0	
		No. 40	85.1	
		No. 60	21.3	
		No. 100	4.2	
		No. 200	2.9	
- 74 50'	Blueish Gray Clay with Micro Shell	No. 10	99.2	1.000 x 10 <sup>-6</sup>
		No. 20	96.6	
		No. 40	96.3	
		No. 60	92.7	
		No. 100	81.2	
		No. 200	72.0	

Copies to:

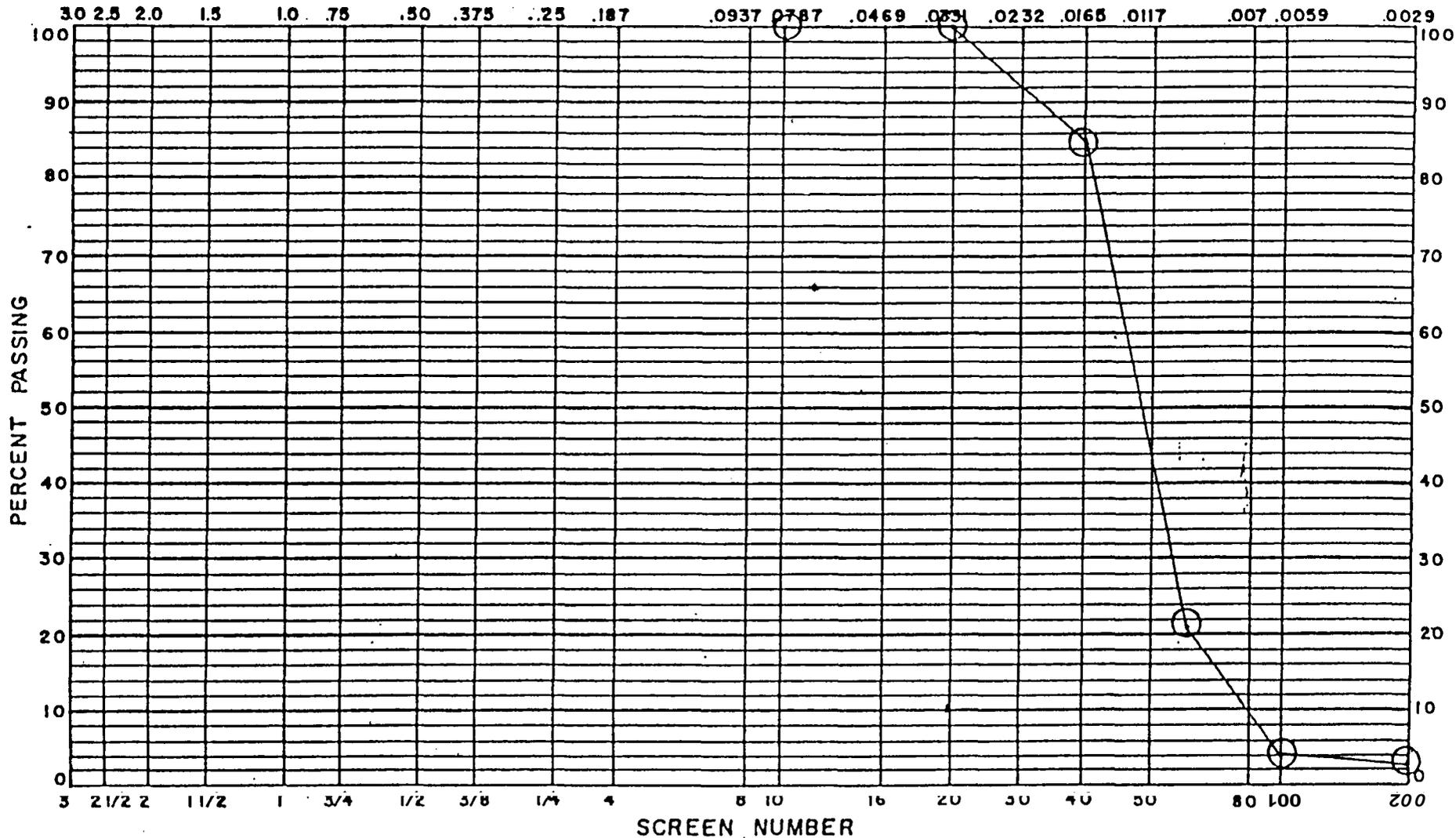
*Allen D. Randall*  
 ALLEN D. RANDALL, LAB DIRECTOR  
 PHYSICAL DIVISION

# AGGREGATE GRADING CHART

SCREEN OPENING IN INCHES

5250200

6-C



Job No. 50-299

Sample No. 6064

**SAMPLE IDENTIFICATION**

GM 74 23' - 25'

Job Request. 5004

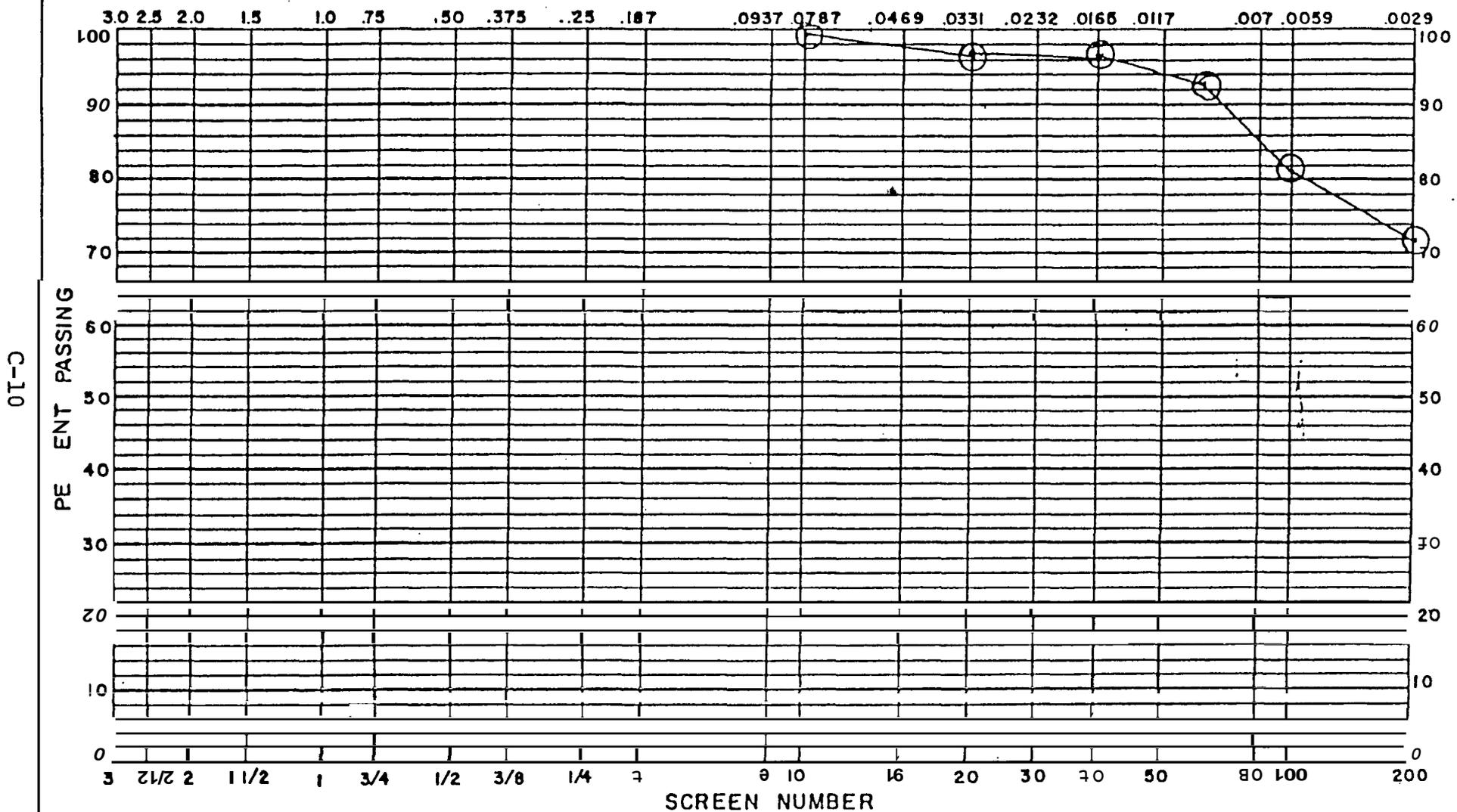
BY *Allen D. Randall*

LAB DIRECTOR Allen D. Randall



### AGGREGATE GRADING CHART

SCREEN OPENING IN INCHES



Job NO. 50-299                      Sample No. 6064

**SAMPLE IDENTIFICATION**  
GM 74      48' - 50'

Job Request No 5004

BY Allen D. Randall  
LAB DIRECTOR      Allen D. Randall

APPENDIX D

PHASE II - WATER QUALITY

Field. Data  
Laboratory Data

3250201

Table D-1. Field Data - Specific Conductance, pH and Temperature Measurements

Well Number	pH	Specific Conductance (umhos/cm)	Temperature (°C)
<u>Shallow Wells</u>			
DG-2	6.78	675	28
DG-3	7.80	200	26
GM-8	7.32	320	27
GM-9	6.88	1000	26
GM-10	7.09	675	26
GM-11	6.98	470	26
GM-12	7.82	115	26
GM-13	8.50	145	26
GM-14	8.10	650	25
GM-62	7.67	380	28
GM-67	7.11	320	26
GM-70	6.98	440	26
GM-71	6.78	405	26
GM-72	7.86	355	25
GM-73	7.57	725	25
GM-76	6.09	900	26
GM-77	7.65	375	26
GM-78	7.90	140	25
GM-79	7.85	295	25
GM-80	8.65	120	24
GM-81	8.45	90	24
GM-82	7.98	270	24
GM-83	8.35	118	26
<u>Intermediate Wells</u>			
GM-64	7.82	2000	26
GM-66	4.25	3500	24
GM-69	7.88	1300	26
GM-75	7.66	1700	28
<u>Deep Wells</u>			
GM-63	6.38	1600	26
GM-65	7.56	560	26
GM-68	7.22	460	23
GM-74	9.29	650	28

(206/29)



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 185-2569-16  
Sample Site: DG2  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	760	5
4A 4,6-Dinitro-o-Cresol	BDL	50
5A 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	20	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3350000



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway --  
Tampa, Florida 33618

Lab I.D. 85-2569-16  
Sample I.D. DG2

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported in ppb	Detection Limit ppb		Reported in ppb	De- Lim. pp.
1B Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
23 Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
33 Anthracene	BDL	10	26B Di-n-Butyl Phthalate	11	10
4B Benzidine	BDL	10	27B <b>2,4-Dinitrotoluene</b>	BDL	10
5B Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
6B Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
7B <b>3,4-Benzofluoranthene</b>	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
8 Benzo (ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
9B Benzo (k)fluoranthene	BDL	10	32B Fluorene	BDL	10
10 Bis (2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
11 Bis (2-chloroethyl) ether	BDL	10	34B Hexachlorobutadiene	BDL	10
12B <b>Bis (2-chloroisopropyl) ether</b>	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
13B Bis (2-ethylhexyl) phthalate	BDL	10	36B Hexachloroethane	BDL	10
14B 4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno(1,2,3-cd)pyrene	BDL	10
15B Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
16B 2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
17B 4-Chlorophenyl Phenyl Ether	BDL	10	40B Nitrobenzene	BDL	10
18B Chrysene	BDL	10	41B <b>N-Nitrosodimethylamine</b>	BDL	10
19B Dibenzo (a,h)anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
20B 1,2-Dichlorobenzene	330	10	43B N-Nitrosodiphenylamine	BDL	10
21B <b>1,3-Dichlorobenzene</b>	330	10	44B Phenanthrene	BDL	10
22B 1,4-Dichlorobenzene	170	10	45B Pyrene	BDL	10
23B 3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 3251A

TO: Geraghty & Miller, Inc. Lab I.D. #85-2569-16  
13902 North Malbry Highway Sample Site: DG 2  
Tampa, Florida 33618 Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*  
VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3V Benzene	BDL	1
4V Bis (chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	6	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	28	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	240	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	9	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	88	5
23V 1,1,2,2-Tetrachloroethane	27	5
24V Tetrachloroethylene	17	3
25V Toluene	81	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	6	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	1	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250203



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-17  
Sample Site: DG3  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
5A 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD PHONE (904) 474-1001  
PENSACOLA, FLORIDA 325 14

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 85-2569-17  
Sample I.D. DG3

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported in ppb	Detection Limit ppb		Reported in ppb	Det Limit ppb
3 Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
3 Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
3 Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
3 Benzidine	BDL	10	27B <b>2,4-Dinitrotoluene</b>	BDL	10
3 Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
3 Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	<b>25</b>	10
3 3,4-Benzofluoranthene	BDL	10	30B <b>1,2-Diphenylhydrazine</b>	BDL	
Benzo(ghi)perylene	BDL	10	31B Fluoranthene	BDL	
3 Benzo (k)fluoranthene	BDL	10	32B Fluorene	BDL	10
B Bis (2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
B Bis (2-chloroethyl) ether	BDL	10	34B Hexachlorobutadiene	BDL	10
B <b>Bis (2-chloroisopropyl) ether</b>	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
B Bis (2-ethylhexyl) phthalate	BDL	10	36B Hexachloroethane	BDL	10
B 4-Bromophenyl Phenyl Ether	BDL	10	37B <b>Indeno (1,2,3-cd) pyrene</b>	BDL	10
B Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
B 2-Chloronaphthalene	BDL	10	39B Naphthalene	<b>BDL</b>	10
B 4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
B Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
B Dibenz (a,h)anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
a 1,2-Dichlorobenzene	<b>BDL</b>	10	43B N-Nitrosodiphenylamine	BDL	10
B 1,3-Dichlorobenzene	<b>BDL</b>	10	44B Phenanthrene	BDL	10
B 1,4-Dichlorobenzene	<b>BDL</b>	10	45B Pyrene	BDL	10
B <b>3,3-Dichlorobenzidine</b>	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit

3259204



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA FLORIDA 3251A

TO: Geraghty & Miller, Inc.  
13902 North Malbry Highway  
Tampa, Florida 33618

Lab ID. 885-2569-17  
Sample Site: DG3  
Date Collected: September 12, 1985

**PRIORITY POLLUTANT ANALYSIS\***  
VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3V Benzene	BDL	1
4V Bis(chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	2	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	BDL	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	33	5
23V 1,1,2,2-Tetrachloroethane	16	5
24V Tetrachloroethylene	10	3
25V Toluene	3	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	BDL	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 185-2569-10  
Sample Site: GM8  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
SA 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250205



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 85-2569-10  
Sample I.D. GM 8

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

3B Benzo(ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
1F Benzo(k)fluoranthene	BDL	10	32B Fluorene	BDL	10
3B Bis(2-ethylhexyl)phthalate	BDL	10	36B Hexachloroethane	BDL	10
4B 4-Bromophenyl Phenyl Ether	BDL	10	37B <b>Indeno(1,2,3-cd)pyrene</b>	BDL	10
5B Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
6B 2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
73 4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
83 Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
9B Dibenzo(a,h)anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
0B 1,2-Dichlorobenzene	14	10	43B N-Nitrosodiphenylamine	BDL	10
1B 1,3-Dichlorobenzene	13	10	44B Phenanthrene	BDL	10
2B 1,4-Dichlorobenzene	30	10	45B Pyrene	BDL	10
3B 3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10



11 EAST OLIVE ROAD

PHONE (804) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-11  
Sample Site: GM9  
Date Collected: September 12, 1985

## PRIORITY POLLUTANT ANALYSIS.

## ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	20	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
5A 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	<b>50</b>	<b>25</b>
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250206



11 EAST OLIVE ROAD

PHONE: (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 85-2569-11  
Sample I.D. GM 9

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported	Detection		Reported	Det
	<u>in ppb</u>	<u>Limit</u>		<u>in ppb</u>	<u>Limit</u>
		<u>ppb</u>			<u>ppb</u>
Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
Benzidine	BDL	10	27B <b>2,4-Dinitrotoluene</b>	BDL	10
Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
Benzo (b)fluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
Benzo (ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
Benzo (k)fluoranthene	BDL	10	32B Fluorene	BDL	10
Bis (2-chloroethoxy) methane	BDL	10	33B Hexachlorobenzene	BDL	10
Bis (2-chloroethyl) ether	BDL	10	34B Hexachlorobutadiene	BDL	10
Bis (2-chloroisopropyl) ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
Bis (2-ethylhexyl) phthalate	BDL	10	36B Hexachloroethane	BDL	10
4-Bromophenyl Phenyl Ether	BDL	10	37B <b>Indeno (1,2,3-cd) pyrene</b>	BDL	10
Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	170
4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
Dibenzo (a,h) anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
1,2-Dichlorobenzene	3200	10	43B N-Nitrosodiphenylamine	BDL	10
1,3-Dichlorobenzene	2250	10	44B Phenanthrene	BDL	10
1,4-Dichlorobenzene	4000	10	45B Pyrene	BDL	10
3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	20

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-12  
Sample Site: GM10  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
5A 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-COO 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250207



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 85-2569-12  
Sample I.D. GM 10

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported in ppb	Detection Limit ppb		Reported in ppb	Detection Limit ppb
1B Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
2B Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
33 Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
45 Benzidine	BDL	10	27B <b>2,4-Dinitrotoluene</b>	BDL	10
5B Benzo(a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
6B Benzo(a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
7B 3,4-Benzofluoranthene	BDL	10	30B <b>1,2-Diphenylhydrazine</b>	BDL	10
8 Benzo(ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
9 Benzo(k)fluoranthene	BDL	10	32B Fluorene	BDL	10
10 Bis(2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
11 Bis(2-chloroethyl)ether	BDL	10	34B Hexachlorobutadiene	BDL	10
12B Bis(2-chloroisopropyl)ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
13B Bis(2-ethylhexyl)phthalate	BDL	10	36B Hexachloroethane	BDL	10
14B 4-Bromophenyl Phenyl Ether	BDL	10	37B <b>Indeno(1,2,3-cd)pyrene</b>	BDL	10
15B Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
16B 2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
17B 4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
18B Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
19B Dibenzo(a,h)anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
20B <b>1,2-Dichlorobenzene</b>	75	10	43B N-Nitrosodiphenylamine	BDL	10
21B 1,3-Dichlorobenzene	75	10	44B Phenanthrene	BDL	10
22B 1,4-Dichlorobenzene	120	10	45B Pyrene	BDL	10
23B 3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Hiller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-13  
Sample Site: GM11  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS"

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
5A 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250208



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
 13902 North Dale Mabry Highway  
 Tampa, Florida 33618

Lab I.D. 85-2569-13  
 Sample I.D. GM 11

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection</u> <u>Limit</u> <u>ppb</u>		<u>Reported</u> <u>in pub</u>	<u>Det</u> <u>Limi</u> <u>ppb</u>
Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
Benzidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
Benzo (a) anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
Benzo (a) pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
Benzo (b) fluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
Benzo (ghi) perylene	BDL	10	31B Fluoranthene	BDL	10
Benzo (k) fluoranthene	BDL	10	32B Fluorene	BDL	10
Bis (2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
Bis (2-chloroethyl) ether	BDL	10	34B Hexachlorobutadiene	BDL	10
Bis (2-chloroisopropyl) ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
Bis (2-ethylhexyl) phthalate	BDL	10	36B Hexachloroethane	BDL	10
4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno (1,2,3-cd) pyrene	BDL	10
Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
Dibenzo (a,h) anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
1,4-Dichlorobenzene	BDL	10	45B Byrene	BDL	10
3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb = parts per billion  
 BDL = Below Detection Limit



11 EAST OLIVE ROAD

PHONE (804) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-14  
Sample Site: GM12  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	.50
SA 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250209



11 EAST OLIVE ROAD PHONE (904) 47C1001  
PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 85-2569-14  
Sample I.D. GM 12

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported	Detection		Reported	Det.
	<u>in ppb</u>	<u>Limit</u>		<u>in ppb</u>	<u>Limit</u>
		<u>ppb</u>			<u>ppb</u>
3 Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
3 Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
3 Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
3 Benzidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
3 Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
3 Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
3 7,8-Dibenzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
3 Benzo (ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
3 Benzo (k)fluoranthene	BDL	10	32B Fluorene	BDL	10
3 Bis (2-chloroethoxy) methane	BDL	10	33B Hexachlorobenzene	BDL	10
3 Bis (2-chloroethyl) ether	BDL	10	34B Hexachlorobutadiene	BDL	10
3 Bis (2-chloroisopropyl) ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
3 Bis (2-ethylhexyl) phthalate	BDL	10	36B Hexachloroethane	BDL	10
3 4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno (1,2,3-cd) pyrene	BDL	10
3 Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
3 2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
3 4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
3 Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
3 Dibenzo (a,h) anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
3 1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
3 1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
3 1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
3 3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-15  
Sample Site: GM13  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
5A 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-LOO 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250310



11 EAST OLIVE ROAD  
PENSACOLA, FLORIDA 32514

MONE (904) 474-1001

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 85-2569-15  
Sample I.D. GN 13

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported in ppb	Detection Limit ppb		Reported in ppb	De Lim ppb
Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
Benzidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
Benzo (b)fluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
Benzo (ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
Benzo (k)fluoranthene	BDL	10	32B Fluorene	BDL	10
Bis (2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
Bis (2-chloroethyl)ether	BDL	10	34B Hexachlorobutadiene	BDL	10
Bis (2-chloroisopropyl) ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
Bis (2-ethylhexyl)phthalate	BDL	10	36B Hexachloroethane	BDL	10
4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno (1,2,3-cd)pyrene	BDL	10
Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
Dibenzo (a,h)anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit



11 EAST OUVÉ ROAD PHONE (904) 474-1001  
PENSACOLA, FLORIDA 32514

TO: Ceraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-31  
Sample Site: GM14 M.W.  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
5A 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty 6 Hiller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 85-2569-31  
Sample I.D. GM 14

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL **EXTRACTABLES**

	Reported <u>in ppb</u>	Detection Limit <u>ppb</u>		Reported <u>in ppb</u>	Det Limi <u>ppb</u>
Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
Benzidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
Benzo(a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
3,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
Benzo(ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
Benzo(k)fluoranthene	BDL	10	32B Fluorene	BDL	10
Bis(2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
Bis(2-chloroethyl)ether	BDL	10	34B Hexachlorobutadiene	BDL	10
Bis(2-chloroisopropyl) ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
Bis(2-ethylhexyl)phthalate	BDL	10	36B Hexachloroethane	BDL	10
4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno(1,2,3-cd)pyrene	BDL	10
Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
Dibenzo (a,h)anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of..  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit

1000000



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
 13902 North Dale Mabry Highway  
 Tampa, Florida 33618

Lab I.D. #85-2569-18  
 Sample Site: GM62  
 Date Collected: September 12, 1985

## PRIORITY POLLUTANT ANALYSIS\*

## ACID EXTRACTABLES

	<u>Reported</u> in ppb	<u>Detection Limit</u> in ppb
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
SA 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
 of Municipal and Industrial Wastewater,  
 EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
 BDL - Below Detection Limits



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 85-2569-18  
Sample I.D. GM 62

## PRIORITY POLLUTANT ANALYSIS\*

## BASE NEUTRAL EXTRACTABLES

	Reported	Detection		Reported	De:
	<u>in ppb</u>	<u>Limit</u>		<u>in ppb</u>	<u>Limit</u>
		<u>ppb</u>			<u>ppb</u>
Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
Benzidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	
Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	
Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
3,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
Benzo (ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
Benzo (k)fluoranthene	BDL	10	32B Fluorene	BDL	10
B Bis (2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
B Bis (2-chloroethyl)ether	BDL	10	34B Hexachlorobutadiene	BDL	10
B Bis (2-chloroisopropyl)ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
B Bis (2-ethylhexyl)phthalate	BDL	10	36B Hexachloroethane	BDL	10
B 4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno (1,2,3-cd)pyrene	BDL	10
B Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
B 2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
B 4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
B Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
3 Dibenzo (a,h)anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
3 1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
3 1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
3 1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
3 3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit

3750313

TO: Geraghty & Miller, Inc.  
13902 North Malbry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-18  
Sample Site: GM 62  
Date Collected: September 12, 1985

**PRIORITY POLLUTANT ANALYSIS\***  
**VOLATILES**

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3V Benzene	BDL	1
4V Bis(chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	BDL	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	BDL	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	21	5
23V 1,1,2,2-Tetrachloroethane	23	5
24V Tetrachloroethylene	6	3
25V Toluene	2	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	BDL	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD PHONE (904) 474-1001  
PENSACOLA, FLORIDA 32514

TO: Geraghty & Hiller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 185-2569-19  
Sample Site: GM63  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
SA 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
0A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250314



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab ID. 85-2569-19  
Sample ID. GM 63

## PRIORITY POLLUTANT ANALYSIS\*

## BASE NEUTRAL EXTRACTABLES

	Reported	Detection		Reported	De
	* <u>in ppb</u>	Limit		<u>in ppb</u>	Lim.
		<u>ppb</u>			<u>ppb</u>
1B Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
2B Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
3B Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
4B Benzimidazole	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
5B Benzo(a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
6B Benzo(a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
7B 3,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
8B Benzo(ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
9B Benzo(k)fluoranthene	BDL	10	32B Fluorene	BDL	10
10B Bis(2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
11B Bis(2-chloroethyl)ether	BDL	10	34B Hexachlorobutadiene	BDL	10
12B Bis(2-chloroisopropyl)ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
13B Bis(2-ethylhexyl)phthalate	BDL	10	36B Hexachloroethane	BDL	10
14B 4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno(1,2,3-cd)pyrene	BDL	10
15B Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
16B 2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
17B 4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
18B Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
19B Dibenzo(a,h)anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
20B 1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
21B 1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
22B 1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
23B 3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Malbry Highway  
Tampa, Florida 33618

Lab I.D. 185-2569-19  
Sample Site: GM 63  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*  
VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3v Benzene	BDL	1
4V Bis (chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	BDL	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	BDL	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20v Methyl Bromide	BDL	5
21v Methyl Chloride	BDL	5
22V Methylene Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	8	5
24V Tetrachloroethylene	6	3
25V Toluene	2	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	BDL	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OUVRE ROAD PHONE (904) 474-1001  
 PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
 13902 North Dale Mabry Highway  
 Tampa, Florida 33618

Lab ID. #85-2569-20  
 Sample Site: GM64  
 Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
SA 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
 BDL - Below Detection Limits



11 EAST OUVL ROAD

MONL (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 85-2569-20  
Sample I.D. GM 64

## PRIORITY POLLUTANT ANALYSIS\*

## BASE NEUTRAL EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection</u> <u>Limit</u> <u>ppb</u>		<u>Reported</u> <u>in ppb</u>	<u>Det</u> <u>Limi</u> <u>ppb</u>
Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
Anthracene	BDL	10	26B Di-n-Butyl Phthalate	610	•
Benzidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	
Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
3,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
Benzo(ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
Benzo(k)fluoranthene	BDL	10	32B Fluorene	BDL	10
3 Bis (2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
3 Bis (2-chloroethyl)ether	BDL	10	34B Hexachlorobutadiene	BDL	10
3 Bis (2-chloroisopropyl)ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
3 Bis (2-ethylhexyl)phthalate	BDL	10	36B Hexachloroethane	BDL	10
3 4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno (1,2,3-cd) pyrene	BDL	10
3 Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
3 2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
3 4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
3 Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
3 Dibenzo (a,h) anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
3 1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
3 1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
3 1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
3 3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb = parts per billion  
BDL = Below Detection Limit

3250316



11 EAST OUVÉ ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Malbry Highway  
Tampa, Florida 33618

Lab ID. f85-2569-20  
Sample Site: GM 64  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*  
VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100.
3V Benzene	BDL	1
4V Bis (chloromethyl)ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3.
7V Chlorobenzene	BDL	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	BDL	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	14	5
24V Tetrachloroethylene	9	3
25V Toluene	BDL	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	BDL	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
 13902 North Dale Mabry Highway  
 Tampa, Florida 33618

Lab I.D. #85-2569-21  
 Sample Site: GM65  
 Date Collected: September 12, 1985

## PRIORITY POLLUTANT ANALYSIS\*

## ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
5A 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-rn-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
 of Municipal and Industrial Wastewater,  
 EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
 BDL - Below Detection Limits

0250317



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 85-2569-21  
Sample I.D. GM 65

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported in ppb	Detection Limit ppb		Reported in ppb	De- Lim: ppb
1B Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
2B Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
3B Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
4B Benzimidazole	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
53 Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
5B Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
73 3,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
39 Benzo(ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
9B Benzo(k)fluoranthene	BDL	10	32B Fluorene	BDL	10
10B Bis (2-chloroethoxy) methane	BDL	10	33B Hexachlorobenzene	BDL	10
11B Bis (2-chloroethyl) ether	BDL	10	34B Hexachlorobutadiene	BDL	10
12B Bis (2-chloroisopropyl) ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
133 Bis (2-ethylhexyl) phthalate	BDL	10	36B Hexachloroethane	BDL	10
14B 4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno (1,2,3-cd) pyrene	BDL	10
15B Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
16B 2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
17B 4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
18B Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
19B Dibenzo (a,h) anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
20B 1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
21B 1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
22B 1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
23B 3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Malbry Highway  
Tampa, Florida 33618

Lab I.D. -185-2569-21  
Sample Site: GM 65  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*  
VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100.
3V Benzene	BDL	1
4V Bis(chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	BDL	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	BDL	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	BDL	5
24V Tetrachloroethylene	BDL	3
25V Toluene	BDL	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	4	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb = parts per billion  
BDL = Below Detection Limits

22503.18



11 EAST OWE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-22  
Sample Site: GM66  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
5A 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Hiller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 85-2569-22  
Sample ID. GM 66

## PRIORITY POLLUTANT ANALYSIS\*

## BASE NEUTRAL EXTRACTABLES

	Reported <u>in ppb</u>	Detection Limit <u>ppb</u>		Reported <u>in ppb</u>	Det Limi <u>ppb</u>
Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
Benzidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	
Benzo(a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	
Benzo(a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
3,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
Benzo(ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
Benzo(k)fluoranthene	BDL	10	32B Fluorene	BDL	10
Bis(2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
Bis(2-chloroethyl)ether	BDL	10	34B Hexachlorobutadiene	BDL	10
Bis(2-chloroisopropyl)ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
Bis(2-ethylhexyl)phthalate	BDL	10	36B Hexachloroethane	BDL	10
4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno(1,2,3-cd)pyrene	BDL	10
Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
Dibenzo(a,h)anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit



11 EAST OLIVER ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Malbry Highway  
Tampa, Florida 33618

Lab ID. #85-2569-22  
Sample Site: GM 66  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*  
VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3v Benzene	BDL	1
4v Bis(chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7v Chlorobenzene	16	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12v Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	14	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	160	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22v Methylene Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	8	5
24V Tetrachloroethylene	5	3
25V Toluene	5	1
26V 1,2-trans-Dichloroethylene	882	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	2600	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	27	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD

PHONE (804) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Hiller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-23  
Sample Site: GM67  
Date Collected: September 12, 1985

## PRIORITY POLLUTANT ANALYSIS\*

## ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	1s
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
5A 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250420

(prev # 3256319)



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
 13902 North Dale Mabry Highway  
 Tampa, Florida 33618

Lab I.D. 85-2569-23  
 Sample ID. GM 67

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported	Detection		Reported	Det
	in ppb	Limit		in ppb	Limit
	<u>in ppb</u>	<u>ppb</u>		<u>in ppb</u>	<u>ppb</u>
Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
Benidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
3,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
Benzo(ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
Benzo(k)fluoranthene	BDL	10	32B Fluorene	BDL	10
Bis (2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
Bis (2-chloroethyl) ether	BDL	10	34B Hexachlorobutadiene	BDL	10
Bis(2-chloroisopropyl) ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
Bis(2-ethylhexyl) phthalate	BDL	10	36B Hexachloroethane	BDL	10
4-Broaophenyl Phenyl Ether	BDL	10	37B fndeno(1,2,3-cd)pyrene	BDL	10
Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
Dibenzo (a,h) anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
1,2-Dichlorobenzene	160	10	43B N-Nitrosodiphenylamine	BDL	10
1,3-Dichlorobenzene	150	10	44B Phenanthrene	BDL	10
1,4-Dichlorobenzene	200	10	45B Pyrene	BDL	10
3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
 BDL - Below Detection Limit



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Malbry Highway  
Tampa, Florida 33618

Lab I.D. 785-2569-23  
Sample Site: GM 67  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*  
VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3V Benzene	BDL	1
4V Bis (chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	12	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	7	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene-Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	BDL	5
24V Tetrachloroethylene	BDL	3
25V Toluene	BDL	1
26V 1,2-trans-Dichloroethylene	16	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	50	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250421



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-24  
Sample Site: GM68  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	1s
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
SA 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 85-2569-24  
Sample I.D. GM 68

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported <u>in ppb</u>	Detection Limit <u>ppb</u>		Reported <u>in ppb</u>	Det Limi <u>ppb</u>
Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
Benzydine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
Benzo (a)anthracene	BDL	10	28B 2,6-Dintrotoluene	BDL	1
Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	1
3,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
Benzo(ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
Benzo(k)fluoranthane	BDL	10	32B Fluorene	BDL	10
Bis(2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
Bis(2-chloroethyl)ether	BDL	10	34B Hexachlorobutadiene	BDL	10
Bis(2-chloroisopropyl)ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
Bis(2-ethylhexyl)phthalate	BDL	10	36B Hexachloroethane	BDL	10
4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno(1,2,3-cd)pyrene	BDL	10
Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
Dibenzo (a,h) anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit

3250422



11 EAST OUVÉ ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Malbry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-24  
Sample Site: GM 68  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*  
VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3V Benzene	BDL	1
4V Bis (chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3'
7V Chlorobenzene	BDL	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	BDL	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	BDL	5
24V Tetrachloroethylene	BDL	3
25V Toluene	BDL	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	10	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits .



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-25  
Sample Site: GM69  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
5A 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250423



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618 \*

Lab I.D. 85-2569-25  
Sample I.D. GM 69

## PRIORITY POLLUTANT ANALYSIS\*

## BASE NEUTRAL EXTRACTABLES

	Reported in ppb	Detection Limit ppb		Reported in ppb	Det Limit ppb
3 Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
3 Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
B Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
Benzidazine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
a Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
B 3,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
a Benzo (ghi) perylene	BDL	10	31B Fluoranthene	BDL	10
B Benzo (k) fluoranthene	BDL	10	32B Fluorene	BDL	10
33 Bis (2-chloroethoxy) methane	BDL	10	33B Hexachlorobenzene	BDL	10
13 Bis (2-chloroethyl) ether	BDL	10	34B Hexachlorobutadiene	BDL	10
2B Bis (2-chloroisopropyl) ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
33 Bis (2-ethylhexyl) phthalate	BDL	10	36B Hexachloroethane	BDL	10
4B 4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno (1,2,3-cd) pyrene	BDL	10
5B Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
63 2-Chloronaphthalene	BDL	10	39B Naphthalene	11	10
7B 4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
8B Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
9B Dibenzo (a,h) anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
OB 1,2-Dichlorobenzene	620	10	43B N-Nitrosodiphenylamine	BDL	10
1B 1,3-Dichlorobenzene	1400	10	44B Phenanthrene	BDL	10
2B 1,4-Dichlorobenzene	1350	10	45B Pyrene	BDL	10
3B 3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit



11 EAST OLIVE ROAD PHONE (904) 474-1001  
PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Malbry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-25  
Sample Site: GM 69  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*  
VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100.
3V Benzene	3	1
4V Bis (chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	BDL	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	47	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	BDL	5
24V Tetrachloroethylene	BDL	3
25V Toluene	8	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	3	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	3	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250424



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab'I.D. #85-2569-26  
Sample Site: GM70  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
5A 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD PHONE (904) 474-1001  
PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 85-2569-26  
Sample I.D. GM 70

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported	Detection		Reported	Det
	Limit	Limit		Limit	Limit
	in ppb	ppb		in ppb	ppb
Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
Benzidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
3,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	3DL	10
Benzo (ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
Benzo (k)fluoranthene	BDL	10	32B Fluorene	BDL	10
Bis (2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
Bis (2-chloroethyl)ether	BDL	10	34B Hexachlorobutadiene	BDL	10
Bis (2-chloroisopropyl)ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
Bis (2-ethylhexyl)phthalate	BDL	10	36B Hexachloroethane	BDL	10
4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno(1,2,3-cd)pyrene	BDL	10
Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
Dibenzo (a,h)anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit

3250425



11 EAST OLIVE ROAD

PHONE (904) 474.1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Malbry Highway  
Tampa, Florida 33618

Lab ID. #85-2569-26  
Sample Site: GM 70  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*  
VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3V Benzene	BDL	1
4V Bis (chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	3	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	BDL	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	BDL	5
24V Tetrachloroethylene	BDL	3
25V Toluene	1	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	7	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD PHONE (904) 474-1001  
PENSACOLA, FLORIDA 32514

TO: Geraghty & Hiller, Inc.  
13902 North Dale Habry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-27  
Sample Site: GM71  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS+

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
5A 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250426



11 W T OUV E ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida '33618

Lab I.D. 85-2569-27  
Sample I.D. GM 71

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported	Detection		Reported	De
	in ppb	Limit		in ppb	Lim
	<u>in ppb</u>	<u>ppb</u>		<u>in ppb</u>	<u>pp</u>
1B Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
2B Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
3B Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
4B Benzidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
5B Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
5F Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
1,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
3B Benzo(ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
9I Benzo(k)fluoranthene	BDL	10	32B Fluorene	BDL	10
10b Bis(2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
13 Bis(2-chloroethyl)ether	BDL	10	34B Hexachlorobutadiene	BDL	10
12B Bis(2-chloroisopropyl)ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
13B Bis(2-ethylhexyl)phthalate	BDL	10	36B Hexachloroethane	BDL	10
4B 4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno(1,2,3-cd)pyrene	BDL	10
5B Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
63 2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
7B 4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
8B Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
9B Dibenzo(a,h)anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
10B 1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
11B 1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
12B 1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
13B 3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit



11 EAST OLIVE ROAD  
PENSACOLA, FLORIDA 32514

PHONE (904) 474-1001

TO: Geraghty & Miller, Inc.  
13902 North Malbry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-27  
Sample Site: GM 71  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS  
VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3V Benzene	BDL	1
4V Bis (chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	10	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	12	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	BDL	5
24V Tetrachloroethylene	BDL	3
25V Toluene	BDL	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	1	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

0250427



11 EASTOLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-28  
Sample Site: GM72  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
SA 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Hiller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 85-2569-28  
Sample I.D. GM 72

## PRIORITY POLLUTANT ANALYSIS\*

## BASE NEUTRAL EXTRACTABLES

	Reported <u>in ppb</u>	Detection Limit <u>ppb</u>		Reported <u>in ppb</u>	Det Lim: <u>ppt</u>
Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
Benzidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	
Benzo(a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	
3,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	<sup>a</sup>
Benzo(ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
Benzo(k)fluoranthene	BDL	10	32B Fluorene	BDL	IC
Bis (2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
Bis (2-chloroethyl)ether	BDL	10	34B Hexachlorobutadiene	BDL	10
Bis (2-chloroisopropyl) ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
Bis (2-ethylhexyl) phthalate	BDL	10	36B Hexachloroethane	BDL	10
4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno (1,2,3-cd) pyrene	BDL	10
Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
Dibenzo (a, h) anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit

3250428



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Malbry Highway  
Tampa, Florida 33618

Lab I.D. 185-2569-28  
Sample Site: GM 72  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*  
VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3V Benzene	BDL	1
4V Bis (chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	1	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	BDL	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	BDL	5
24V Tetrachloroethylene	BDL	3
25V Toluene	BDL	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	BDL	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

\*EPA Method 624 - Reference: Method for Organic-Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057; July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab ID. #85-2569-29  
Sample Site: GM73  
Date Collected: September 12, 1985

## PRIORITY POLLUTANT ANALYSIS\*

## ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
SA 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: **Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600 4-82-057, July 1982.**

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250429



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618.

Lab I.D. 85-2569-29  
Sample I.D. GM 73

## PRIORITY POLLUTANT ANALYSIS\*

## BASE NEUTRAL EXTRACTABLES

	Reported	Detection		Reported	De:
	in ppb	Limit		in ppb	Limit
	<u>in ppb</u>	<u>ppb</u>		<u>in ppb</u>	<u>ppb</u>
B Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
B Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
B Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
B Benzidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
a Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
a Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
B 3,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
B Benzo (ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
B Benzo (k)fluoranthene	BDL	10	32B Fluorene	BDL	10
OB Bis (2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
1B Bis (2-chloroethyl) ether	BDL	10	34B Hexachlorobutadiene	BDL	10
2B Bis (2-chloroisopropyl) ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
3B Bis (2-ethylhexyl) phthalate	BDL	10	36B Hexachloroethane	BDL	10
4B 4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno (1,2,3-cd) pyrene	BDL	10
5B Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
6B 2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
73 4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
8B Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
9B Dibenzo (a,h)anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
OB 1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
1B 1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
2B 1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
3B 3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb = parts per billion  
BDL = Below Detection Limit



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

To: Geraghty & Miller, Inc.  
13902 North Malbry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-29  
Sample Site: -GM 73  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*  
VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3V Benzene	BDL	1
4V Bis (chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	BDL	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	BDL	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	BDL	5
24V Tetrachloroethylene	BDL	3
25V Toluene	BDL	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	BDL	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis..of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250430



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab ID. 185-2569-30  
Sample Site: GM74  
Date Collected: September 12, 1985

## PRIORITY POLLUTANT ANALYSIS\*

## ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	_____
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
SA 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	10	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Hiller  
13902 North Dale Mabry Highway  
Tampa, Florida 3.3618

Lab I.D. 85-2569-30  
Sample ID. GM 74

PRIORITY POLLUTANT ANALYSIS'

BASE NEUTRAL EXTRACTABLES

	Reported <u>in ppb</u>	Detection Limit <u>ppb</u>		Reported <u>in ppb</u>	Det Limi <u>ppb</u>
Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
Benzidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
Benzo (a) anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
Benzo(a) pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
3,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
Benzo(ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
Benzo(k)fluoranthene	BDL	10	32B Fluorene	BDL	10
Bis (2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
Bis (2-chloroethyl) ether	BDL	10	34B Hexachlorobutadiene	BDL	10
Bis (2-chloroisopropyl) ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
Bis (2-ethylhexyl)phthalate	BDL	10	36B Hexachloroethane	BDL	10
4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno(1,2,3-cd)pyrene	BDL	10
Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
Dibenzo (a,h) anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit

3253431



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
 13902 North Malbry Highway  
 Tampa, Florida 33618

Lab ID. \$85-2569-30  
 Sample Site: GM 74  
 Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*  
 VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3V Benzene	BDL	1
4V Bis(chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	BDL	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	BDL	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	BDL	5
24V Tetrachloroethylene	BDL	3
25V Toluene	1	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	BDL	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
 Municipal and Industrial Wastewater,  
 EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
 BDL - Below Detection Limits



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Habry Highway  
Tampa, Florida 33618

Lab I.D.: 85-2569-1  
Sample ID. GM 75

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported in ppb</u>	<u>Detection Limit (ppb)</u>
1A	2-Chlorophenol	BDL 15
2A	2,4-Dichlorophenol	BDL 10
3A	2,4-Dimethylphenol	BDL 5
4A	4,6-Dinitro-o-Cresol	BDL 50
5A	2,4-Dinitrophenol	BDL 30
6A	2-Nitrophenol	BDL 10
7A	4-Nitrophenol	BDL 20
8A	p-Chloro-m-Cresol	BDL 25
9A	Pentachlorophenol	BDL 30
10A	Phenol	BDL 5
11A	2,4,6-Trichlorophenol	BDL 20

\*EPA Method 604 - Reference: **Method** for Organic Chemical Analysis of **Municipal** and Industrial Wastewater, EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250432



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Fla. 33618

Lab ID. 85-2569-1  
Sample ID. GM 75

**PRIORITY POLLUTANT ANALYSIS\***

**BASE NEUTRAL EXTRACTABLES**

	Reported in ppb	Detection Limit ppb		Reported in ppb	Det Limi ppb
B Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
B Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
B Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
B Benzidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
B Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
B Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
B 4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
B Benzo(ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
B Benzo(k)fluoranthene	BDL	10	32B Fluorene	BDL	10
B Bis (2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
B Bis (2-chloroethyl)ether	BDL	10	34B Hexachlorobutadiene	BDL	10
B Bis (2-chloroisopropyl)ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
B Bis (2-ethylhexyl)phthalate	BDL	10	36B Hexachloroethane	BDL	10
B 4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno(1,2,3-cd)pyrene	BDL	10
B Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
B 2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
B 4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
B Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
B Dibenzo (a,h)anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
B 1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
B 1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
B 1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
B 3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit



11 W T OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
 13902 North Dale Mabry Highway  
 Tampa, Fla. 33618

Lab I.D. 85-2569-1  
 Sample I.D. GM 75

## PRIORITY POLLUTANT ANALYSIS\*

## VOLATILES

	<u>Reported in ppb</u>	<u>Detection Limit</u> (ppb)
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3V Benzene	BDL	1
4V Bis (chlorpmethyl) ether	1	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	55	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	1	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	BDL	5
24V Tetrachloroethylene	BDL	3
25V Toluene	BDL	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	BDL	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	1	1

EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
 Municipal and Industrial Wastewater, EPA-600/  
 4-82-057, July 1982.

Notes: ppb = parts per billion  
 BDL = Below Detection Limits

3250433



11 EAST OLIVE ROAD  
PENSACOLA, FLORIDA 325 14

PHONE (904) 474-1001

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D.: 85-2569-2  
Sample I.D. GM 76

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported in ppb.</u>	<u>Detection Limit</u> (ppb)
1A	2-Chlorophenol	BDL 15
2A	2,4-Dichlorophenol	BDL 10
3A	2,4-Dimethylphenol	BDL 5
4A	4,6-Dinitro-o-Cresol	BDL 50
5A	2,4-Dinitrophenol	BDL 30
6A	2-Nitrophenol	BDL 10
7A	4-Nitrophenol	BDL 20
8A	p-Chloro-m-Cresol	BDL 25
9A	Pentachlorophenol	BDL 30
10A	Phenol	BDL 5
11A	2,4,6-Trichlorophenol	BDL 20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD PHONE (904) 474-1001  
PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Fla. 33618

Lab I.D. 85-2569-2  
Sample I.D. GM 76

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported in ppb	Detection Limit ppb		Reported in ppb	Det Limit ppb
Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
Benzidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
Benzo (a)pyreane	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
3,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
Benzo (ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
Benzo (k)fluoranthene	BDL	10	32B Fluorene	BDL	10
Bis (2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
Bis (2-chloroethyl) ether	BDL	10	34B Hexachlorobutadiene	BDL	10
Bis (2-chloroisopropyl) ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
Bis (2-ethylhexyl) phthalate	BDL	10	36B Hexachloroethane	BDL	10
4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno (1,2,3-cd) pyrene	BDL	10
Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
Dibenzo (a,h)anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit

3250434



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Fla. 33618

Lab I.D. 85-2569-2  
Sample ID. GM 76

## PRIORITY POLLUTANT ANALYSIS\*

## VOLATILES

	<u>Reported in ppb</u>	<u>Detection Limit (ppb)</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3V Benzene	BDL	1
4V Bis (chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	BDL	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	11	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	BDL	5
24V Tetrachloroethylene	BDL	3
25V Toluene	BDL	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	BDL	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

Method 624 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater, EPA-600/  
4-82-057, July 1982.

Notes: ppb - parts per billion D-66  
BDL - Below Detection Limits



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Hiller  
 13902 North Dale Habry Highway  
 Tampa, Florida 33618

Lab I.D.: 85-2569-3  
 Sample I.D. GH 77

## PRIORITY POLLUTANT ANALYSIS\*

## ACID EXTRACTABLES

	<u>Reported in ppb</u>	<u>Detection Limit (ppb)</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
5A 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: **Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600 4-82-057, July 1982.**

Notes: ppb - parts per billion  
 BDL - Below Detection Limits

3250405



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
 13902 North Dale Mabry Highway  
 Tampa, Fla. 3361.8

Lab ID. 85-2569-3  
 Sample I.D. GM 77

PRIOFUTY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported in ppb	Detection Limit ppb		Reported in ppb	Det Limi ppb
	BDL	10	24B Diethylphthalate	BDL	10
	BDL	10	25B Dimethylphthalate	BDL	10
	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
	BDL	10	31B Fluoranthene	BDL	10
	BDL	10	32B Fluorene	BDL	10
	BDL	10	33B Hexachlorobenzene	BDL	10
	BDL	10	34B Hexachlorobutadiene	BDL	10
	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
	BDL	10	36B Hexachloroethane	BDL	10
	BDL	10	37B Indeno(1,2,3-cd) pyrene	BDL	10
	BDL	10	38B Isophorone	BDL	10
3	BDL	10	39B Naphthalene	BDL	10
3	BDL	10	40B Nitrobenzene	BDL	10
3	BDL	10	41B N-Nitrosodimethylamine	BDL	10
3	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
3	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
B	BDL	10	44B Phenanthrene	BDL	10
3	11	10	45B Pyrene	BDL	10
B	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
 BDL - Below Detection Limit



11 EAST OLIVE ROAD

PHONE (904) 476-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Fla. 33618

Lab I.D. 85-2569-3  
Sample I.D. GM 77

## PRIORITY POLLUTANT ANALYSIS\*

## VOLATILES

	<u>Reported in ppb</u>	<u>Detection Limit (ppb)</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3V Benzene	BDL	1
4V Bis (chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	15	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	1	5
15V <b>1,2-Dichloroethane</b>	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	BDL	5
24V Tetrachloroethylene	BDL	3
25V Toluene	BDL	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	BDL	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater, EPA-600/  
4-82-057, July 1982.

Notes: ppb • parts per billion  
BDL • Below Detection Limits

D-69

5250436



11 EAST OUVÉ ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D.: 85-2569-4  
Sample I-D. GM 78

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported in ppb</u>	<u>Detection Limit</u> (ppb)	
1A	2-Chlorophenol	BDL	15
2A	2,4-Dichlorophenol	BDL	10
3A	2,4-Dimethylphenol	BDL	5
4A	4,6-Dinitro-o-Cresol	BDL	50
5A	2,4-Dinitrophenol	BDL	30
6A	2-Nitrophenol	BDL	10
7A	4-Nitrophenol	BDL	20
8A	p-Chloro-rn-Cresol	BDL	25
9A	Pentachlorophenol	BDL	30
10A	Phenol	BDL	5
11A	2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Fla. 33618

Lab ID. 85-2569-4  
Sample I.D. GM 78

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported in ppb	Detection Limit ppb		Reported in ppb	Det. Limit ppb
Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
Benizidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
3,8,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
Benzo (ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
Benzo (k)fluoranthene	BDL	10	32B Fluorene	BDL	10
Bis (2-chloroethoxy) methane	BDL	10	33B Hexachlorobenzene	BDL	10
Bis (2-chloroethyl) ether	BDL	10	34B Hexachlorobutadiene	BDL	10
Bis (2-chloroisopropyl) ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
Bis (2-ethylhexyl) phthalate	BDL	10	36B Hexachloroethane	BDL	10
4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno (1,2,3-cd) pyrene	BDL	10
Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
Dibenzo (a,h)anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
1,2,3,4-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb = parts per billion  
BDL = Below Detection Limit



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Fla. 33618

Lab I.D. 85-2569-4  
Sample I.D. GM 78

## PRIORITY POLLUTANT ANALYSIS\*

## VOLATILES

	<u>Reported in ppb</u>	<u>Detection Limit</u> (ppb)
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3V Benzene	BDL	1'
4V Bis (chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	4	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	BDL	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	BDL	5
24V Tetrachloroethylene	BDL	3
25V Toluene	BDL	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	BDL	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

Method 624 - Reference: **Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater, EPA-600/  
4-82-057, July 1982.**

Notes: ppb - parts per billion D-72  
BDL - Below Detection Limits



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D.: 85-2569-5  
Sample I.D. GM 79

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported in ppb</u>	<u>Detection Limit</u> (ppb)	
1A	2-Chlorophenol	BDL	15
2A	2,4-Dichlorophenol	BDL	10
3A	2,4-Dimethylphenol	BDL	5
4A	4,6-Dinitro-o-Cresol	BDL	50
5A	2,4-Dinitrophenol	BDL	30
6A	2-Nitrophenol	BDL	10
7A	4-Nitrophenol	BDL	20
8A	p-Chloro-m-Cresol	BDL	25
9A	Pentachlorophenol	BDL	30
10A	Phenol	BDL	5
11A	2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250438



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
 13902 North Dale Mabry Highway  
 Tampa, Fla. 33618

Lab ID. 85-2569-5  
 Sample I.D. GM 79

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported in ppb	Detection Limit ppb		Reported in ppb	Det. Limit ppb
Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
Benzidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
Benzo(a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
Benzo(a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
Benzo(b)fluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
Benzo(ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
Benzo(k)fluoranthene	BDL	10	32B Fluorene	BDL	10
Bis(2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
Bis(2-chloroethyl)ether	BDL	10	34B Hexachlorobutadiene	BDL	10
Bis(2-chloroisopropyl)ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
Bis(2-ethylhexyl)phthalate	BDL	10	36B Hexachloroethane	BDL	10
4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno(1,2,3-cd)pyrene	BDL	10
Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
Dibenzo(a,h)anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
 BDL - Below Detection Limit



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Fla. 33618

Lab I.D. 85-2569-5  
Sample I.D. GM 79

PRIORITY POLLUTANT ANALYSIS\*

VOLATILES

	Reported in ppb	Detection Limit (ppb)
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3v Benzene	BDL	1
4v Bis (chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7v Chlorobenzene	BDL	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	BDL	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	BDL	5
24V Tetrachloroethylene	BDL	3
25V Toluene	1	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	BDL	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

Method 624 - Reference: Method for Organic-Chemical Analysis of  
Municipal and Industrial Wastewater, EPA-600/  
4-82-057, July 1982.

3250439

es: ppb - parts per billion  
BDL - Below Detection Limits

D-75



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-6  
Sample Site: GM80  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
SA 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 85-2569-6  
Sample I.D. GM 80

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported in <u>ppb</u>	Detection Limit <u>ppb</u>		Reported in <u>ppb</u>	Det Limi <u>ppb</u>
Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
Benzidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
3,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
Benzo(ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
Benzo(k)fluoranthene	BDL	10	32B Fluorene	BDL	10
Bis (2-chloroethoxy) methane	BDL	10	33B Hexachlorobenzene	BDL	10
Bis (2-chloroethyl) ether	BDL	10	34B Hexachlorobutadiene	BDL	10
Bis (2-chloroisopropyl) ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
Bis (2-ethylhexyl) phthalate	BDL	10	36B Hexachloroethane	BDL	10
4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno (1,2,3-cd) pyrene	BDL	10
Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
Dibenzo (a,h) anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit

3250440



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Malbry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-6  
Sample Site: GM 80  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*  
VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Li</u> <u>in</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3V Benzene	BDL	1
4V Bis (chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	BDL	1.
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	BDL	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	BDL	5
24V Tetrachloroethylene	BDL	3
25V Toluene	1	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	BDL	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-7  
Sample Site: GM81  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
SA 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	2s
9A Pentachlorophenol	BDL	30
10A Phenol	6	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250441

TO: Ceraghty & Miller  
 13902 North Dale Mabry Highway  
 Tampa, Florida 33618

Lab I.D. 85-2569-7  
 Sample I.D. GM 81

## PRIORITY POLLUTANT ANALYSIS\*

## BASE NEUTRAL EXTRACTABLES

	Reported	Detection		Reported	D.
	in ppb	Limit		in ppb	Li:
	<u>in ppb</u>	<u>ppb</u>		<u>in ppb</u>	<u>E</u>
1B Acenaphthene	BDL	10	24B Diethylphthalate	BDL	1
2B Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	1
33 Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	1
4B Benzidine	BDL	10	2fB 2,4-Dinitrotoluene	BDL	1
5B Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	1
63 Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	1
7B 3,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	1
OF Benzo(ghi)perylene	BDL	10	31B Fluoranthene	BDL	1
Benzo(k)fluoranthene	BDL	10	32B Fluorene	BDL	1
11B Bis(2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	1
11B Bis(2-chloroethyl)ether	BDL	10	34B Hexachlorobutadiene	BDL	1
13 Bis(2-chloroisopropyl)ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	1
13B Bis(2-ethylhexyl)phthalate	BDL	10	36B Hexachloroethane	BDL	1
14B 4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno(1,2,3-cd)pyrene	BDL	1
15B Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	1
16B 2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	1
17B 4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	1
18B Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	1
19B Dibenzo (a,h)anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	1
20B 1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	1
21B 1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	1
22B 1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	1
23B 3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	1

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of  
 Municipal and Industrial Wastewater,  
 EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
 BDL - Below Detection Limit



11 EAST OLIVE ROAD PHONE (904) 474-1001  
PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Malbry Highway  
Tampa, Florida 33618

Lab I.D. 785-2569-7  
Sample Site: GM 81  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*  
VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100.
3V Benzene	BDL	1
4V Bis (chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	BDL	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	BDL	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	260	5
23V 1,1,2,2-Tetrachloroethane	130	5
24V Tetrachloroethylene	78	3
25V Toluene	2	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	BDL	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250442



11 EAST OLIVER ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-8  
Sample Site: GM82  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
5A 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 85-2569-8  
Sample I.D. GM 82

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported	Detection		Reported	Det.
	<u>in ppb</u>	<u>Limit</u>		<u>in ppb</u>	<u>Limit</u>
		<u>ppb</u>			<u>ppb</u>
Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
Benzidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
3,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
Benzo (ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
Benzo(k)fluoranthene	BDL	10	32B Fluorene	BDL	10
Bis (2-chloroethoxy) methane	BDL	10	33B Hexachlorobenzene	BDL	10
Bis (2-chloroethyl) ether	BDL	10	34B Hexachlorobutadiene	BDL	10
Bis (2-chloroisopropyl) ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
Bis (2-ethylhexyl) phthalate	BDL	10	36B Hexachloroethane	BDL	10
4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno(1,2,3-cd)pyrene	BDL	10
Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
Dibenzo (a,h)anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
1,4-Dichlorobenzene	14	10	45B Pyrene	BDL	10
3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit

3250443



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PWSACOU FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Malbry Highway  
Tampa, Florida 33618

Lab ID. #85-2569-8  
Sample Site: GM 82  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*  
VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3V Benzene	BDL	1
4V Bis (chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	10	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	BDL	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	120	5
23V 1,1,2,2-Tetrachloroethane	30	5
24V Tetrachloroethylene	19	3
25V Toluene	1	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	BDL	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 185-2569-9  
Sample Site: GM83  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
SA 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	2s
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250444



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 85-2569-9  
Sample I.D. GM 83

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported in ppb	Detection Limit ppb		Reported in ppb	Det Limit ppb
B Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
9 Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
3 Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
3 Benzidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
3 Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
3 Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
2 3,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
3 Benzo (ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
3 Benzo (k)fluoranthene	BDL	10	32B Fluorene	BDL	10
3P Bis (2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
3 Bis (2-chloroethyl)ether	BDL	10	34B Hexachlorobutadiene	BDL	10
3B Bis (2-chloroisopropyl)ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
3B Bis (2-ethylhexyl)phthalate	BDL	10	36B Hexachloroethane	BDL	10
3B 4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno(1,2,3-cd)pyrene	BDL	10
3B Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
3B 2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
3B 4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
B Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
B Dibenzo (a,h)anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
B 1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
B 1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
B 1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
B 3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty 6 Miller, Inc.  
13902 North Malbry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-9  
Sample Site: CM 83  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS  
VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3V Benzene	BDL	1
4V Bis (chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	BDL	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	BDL	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	159	5
23V 1,1,2,2-Tetrachloroethane	38	5
24V Tetrachloroethylene	25	3
25V Toluene	2	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	BDL	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

TO: Ceraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab ID. #85-2569-32  
Sample Site: GM84/GM 78  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
5A 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol'	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 85-2569-32  
Sample I.D. GM 84/GM 78

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported <u>in ppb</u>	Detection Limit <u>ppb</u>		Reported <u>in ppb</u>	Det Limit <u>ppb</u>
Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
Benidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
3,4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
Benzo(ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
Benzo (k)fluoranthene	BDL	10	32B Fluorene	BDL	10
Bis (2-chloroethoxy) methane	BDL	10	33B Hexachlorobenzene	BDL	10
Bis (2-chloroethyl) ether	BDL	10	34B Hexachlorobutadiene	BDL	10
Bis (2-chloroisopropyl) ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
Bis (2-ethylhexyl) phthalate	BDL	10	36B Hexachloroethane	BDL	10
4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno(1,2,3-cd)pyrene	BDL	10
Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
2-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
Dibenzo (a,h) anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
1,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

EPA Method 625 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit



11 EAST OLIVE ROAD

PHONE (904) 474-1001

PENSACOLA, FLORIDA 325 14

TO: Geraghty & Miller, Inc.  
13902 North Malbry Highway  
Tampa, Florida 33618

Lab ID. #85-2569-32  
Sample Site: GM 84/GM 78  
Date Collected: September 12, 1985

PRIORITY POLLUTANT ANALYSIS\*  
VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3V Benzene	BDL	1
4V Bis (chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7V Chlorobenzene	2	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	BDL	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Methyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	BDL	5
24V Tetrachloroethylene	BDL	3
25V Toluene	BDL	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	BDL	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits



11 EAST OLIVE ROAD PHONE (904) 474-1001  
PENSACOLA, FLORIDA 32514

TO: Geraghty & Miller, Inc.  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. #85-2569-33 BLANK  
Sample Site: TRIP BLANK  
Date Collected: September 11, 1985

PRIORITY POLLUTANT ANALYSIS\*

ACID EXTRACTABLES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1A 2-Chlorophenol	BDL	15
2A 2,4-Dichlorophenol	BDL	10
3A 2,4-Dimethylphenol	BDL	5
4A 4,6-Dinitro-o-Cresol	BDL	50
5A 2,4-Dinitrophenol	BDL	30
6A 2-Nitrophenol	BDL	10
7A 4-Nitrophenol	BDL	20
8A p-Chloro-m-Cresol	BDL	25
9A Pentachlorophenol	BDL	30
10A Phenol	BDL	5
11A 2,4,6-Trichlorophenol	BDL	20

\*EPA Method 604 - Reference: Method for Organic Chemical Analysis  
of Municipal and Industrial Wastewater,  
EPA-600 4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limits

3250447

TO: Geraghty & Miller  
13902 North Dale Mabry Highway  
Tampa, Florida 33618

Lab I.D. 85-2569-33  
Sample I.D. Blank

PRIORITY POLLUTANT ANALYSIS\*

BASE NEUTRAL EXTRACTABLES

	Reported in ppb	Detection Limit ppb		Reported in ppb	De- Lim: ppb
B Acenaphthene	BDL	10	24B Diethylphthalate	BDL	10
B Acenaphthylene	BDL	10	25B Dimethylphthalate	BDL	10
B Anthracene	BDL	10	26B Di-n-Butyl Phthalate	BDL	10
B Benzidine	BDL	10	27B 2,4-Dinitrotoluene	BDL	10
B Benzo (a)anthracene	BDL	10	28B 2,6-Dinitrotoluene	BDL	10
B Benzo (a)pyrene	BDL	10	29B Di-n-Octyl-Phthalate	BDL	10
4-Benzofluoranthene	BDL	10	30B 1,2-Diphenylhydrazine	BDL	10
2,4z(ghi)perylene	BDL	10	31B Fluoranthene	BDL	10
Benzo(k)fluoranthene	BDL	10	32B Fluorene	BDL	10
B Bis (2-chloroethoxy)methane	BDL	10	33B Hexachlorobenzene	BDL	10
1-Bis (2-chloroethyl) ether	BDL	10	34B Hexachlorobutadiene	BDL	10
2B Bis (2-chloroisopropyl) ether	BDL	10	35B Hexachlorocyclopentadiene	BDL	10
3B Bis (2-ethylhexyl) phthalate	BDL	10	36B Hexachloroethane	BDL	10
4B 4-Bromophenyl Phenyl Ether	BDL	10	37B Indeno (1,2,3-cd) pyrene	BDL	10
5B Butylbenzyl Phthalate	BDL	10	38B Isophorone	BDL	10
5B 2-Chloronaphthalene	BDL	10	39B Naphthalene	BDL	10
7B 4-Chlorophenyl Phenyl Other	BDL	10	40B Nitrobenzene	BDL	10
8B Chrysene	BDL	10	41B N-Nitrosodimethylamine	BDL	10
9B Dibenzo (a,h) anthracene	BDL	25	42B N-Nitrosodi-n-propylamine	BDL	10
10B 1,2-Dichlorobenzene	BDL	10	43B N-Nitrosodiphenylamine	BDL	10
11B 1,3-Dichlorobenzene	BDL	10	44B Phenanthrene	BDL	10
12B 1,4-Dichlorobenzene	BDL	10	45B Pyrene	BDL	10
13B 3,3-Dichlorobenzidine	BDL	10	46B 1,2,4-Trichlorobenzene	BDL	10

\*EPA Method 625 - Reference: Method for Organic Chemical Analysis of  
Municipal and Industrial Wastewater,  
EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
BDL - Below Detection Limit

TO: Geraghty & Miller, Inc.  
 13902 North Malbry Highway  
 Tampa, Florida 33618

Lab ID: #85-2569-33  
 Sample Site: %lank  
 Date Collected: September 12, 1988

PRIORITY POLLUTANT ANALYSIS\*  
 VOLATILES

	<u>Reported</u> <u>in ppb</u>	<u>Detection Limit</u> <u>in ppb</u>
1V Acrolein	BDL	100
2V Acrylonitrile	BDL	100
3V Benzene	BDL	1
4v Bis (chloromethyl) ether	BDL	5
5V Bromoform	BDL	5
6V Carbon Tetrachloride	BDL	3
7v Chlorobenzene	BDL	1
8V Chlorodibromomethane	BDL	5
9V Chloroethane	BDL	5
10V 2-Chloroethylvinyl Ether	BDL	5
11V Chloroform	BDL	5
12V Dichlorobromomethane	BDL	5
13V Dichlorodifluoromethane	BDL	5
14V 1,1-Dichloroethane	BDL	5
15V 1,2-Dichloroethane	BDL	3
16V 1,1-Dichloroethylene	BDL	5
17V 1,2-Dichloropropane	BDL	5
18V 1,2-Dichloropropylene	BDL	5
19V Ethylbenzene	BDL	1
20V Ethyl Bromide	BDL	5
21V Methyl Chloride	BDL	5
22V Methylene Chloride	BDL	5
23V 1,1,2,2-Tetrachloroethane	BDL	5
24V Tetrachloroethylene	BDL	3
25V Toluene	BDL	1
26V 1,2-trans-Dichloroethylene	BDL	5
27V 1,1,1-Trichloroethane	BDL	5
28V 1,1,2-Trichloroethane	BDL	5
29V Trichloroethylene	BDL	1
30V Trichlorofluoromethane	BDL	5
31V Vinyl Chloride	BDL	1

\*EPA Method 624 - Reference: Method for Organic Chemical Analysis of  
 Municipal and Industrial Wastewater,  
 EPA-600/4-82-057, July 1982.

Notes: ppb - parts per billion  
 BDL - Below Detection Limits

D-93

3250448