N62604.AR.001614
NCBC GULFPORT
5090.3a

PHASE 1 ASSESSMENT OF UNDERGROUND STORAGE TANK AT BUILDING 61 WITH TRANSMITTAL LETTER NCBC GULFPORT MS
3/27/1996
ABB ENVIRONMENTAL

ABB

March 27, 1996

Capt. F.P. DiGeorge
Commanding Officer
Naval Construction Battalion Center
Building 1
Gulfport, Mississippi

Subject: Phase I Assessment, Former UST Building 61 at CBC Gulfport

Dear Captain DiGeorge:

ABB-ES is pleased to submit the Phase I Assessment for the former UST at Building 61 (no UST identification number) at NCBC Gulfport, Mississippi. The Phase I Assessment was requested by the Mississippi State Department of Environmental Quality in October 1995 following excavation work at the site in August 1995. This report includes the delineation of both soil and groundwater contamination and provides recommendations for future actions at the site.

If you have any questions or comments, please contact us at (423) 531-1922.

Sincerely,

Robert R. Fisher
Hydrogeologist

Penny Baxter
Senior Project Manager

[8568.004]

ABB Environmental Services Inc.

1400 Centerpoint Blvd.
Suite 158
Knoxville, TN 37932-1968

Telephone (423) 531-1922
Fax (423) 531-8226

1.0 INTRODUCTION.

1.1 General ABB Environmental Services, Inc. (ABB-ES), was contracted by the Naval Construction Battalion Center (NCBC) Gulfport, Gulfport, Mississippi, in December 1995 to perform a Phase I Assessment at a former underground storage tank (UST) site at Building 61 on the base. This site does not have a facility identification number associated with it. In October 1995, NCBC received a letter from the Mississippi Department of Environmental Quality (MSDEQ) requesting a Phase I Assessment be performed at the above referenced site. On December 20, 1995, ABB-ES received authorization to begin the assessment work. Assessment activities began the following day.

The field activities discussed in this report followed the requirements outlined in the Phase I Assessment Format (MSDEQ, 1992). All activities performed at this site were funded by NCBC Gulfport.

1.2 Scope of Work To delineate the horizontal and vertical extent of soil contamination, a total of 14 soil borings were performed using the Terraprobe℠. Ten samples were sent to an offsite laboratory for total petroleum hydrocarbon (TPH) analysis and diesel hydrocarbons Mississippi Method. Using the screening data and laboratory results, five monitoring wells were installed at the site: one well was upgradient, two were located in the area of contamination, and two were located downgradient of the contaminated area. All five wells were developed and sampled 10 days following development on February 1, 1996.

2.0 BACKGROUND.

2.1 Site Location and Setting Building 61 is located on the south side of 7th Avenue within NCBC Gulfport, Gulfport, Mississippi (Figure 1, attached). The site is located approximately 1.5 miles from the base entrance at Pass Road.

The surrounding area is predominately open field and warehouses used for the storage of Navy equipment. There are no public housing or schools within a half mile radius. However, there are several occupied buildings within a quarter of a mile, although none are directly adjacent to the site.

There are several installation restoration sites located on the base, and two of those sites were used for the disposal of fuel oil and diesel fuel; however, those sites are located more than a half mile away and are not likely sources of contamination at Building 61. Other buildings in the area also have stored fuel oil in USTs as well.

2.2 Description and History The UST at Building 61 was used for the storage of fuel oil for the building. The area of the former UST is a flat grass covered area between two warehouses (Figure 2). The tank was located approximately 60 feet west of Building 61 and 60 feet south of 7th Avenue.

The 5,000-gallon tank was installed in the early 1950s and was removed in 1993. During removal, it was observed that a top valve on the tank was missing, which was the most likely

route for fuel oil releases. The feed line from the tank was located on the east side of the tank and ran directly to the west side of Building 61 (see Figure 2).

3.0 SITE CHARACTERISTICS.

3.1 Site Topography A survey of the site was performed in January 1996. The site topography is nearly flat with a gentle slope to the southeast. The average elevation is approximately 30 feet National Geodetic Vertical Datum. The only remarkable change in topography is the result of a drainage ditch that runs along the south side of the site. The ditch remains dry most of the year except during periods of heavy rain when flow is to the west. The ditch is approximately 80 feet south from the former tank pit and is outside of the zone of contamination.

3.2 Hydrogeological Setting The site is underlain by Holocene alluvium deposits and is a water table aquifer. The deposits of fine gravel, sand, silt, and some clay are lenticular and discontinuous. The depth to water varies from season to season but averages approximately 6 to 8 feet below land surface (bls). Locally, the surficial water table aquifer is not used for potable water because of low pH and high iron content. The shallow contamination encountered during this investigation should not impact the important Miocene Aquifers.

The wells were capable of sustaining 15 to 20 gallons per minute (gpm) of withdrawal for extended periods of time. A short-duration capacity test of GPT-61-3 yielded a specific capacity of 1.25 gpm per foot of drawdown, which is near the total capacity of this well (Figure 3).

3.3 Area Water Wells There are five water supply wells on the base. The three oldest wells are no longer in use and there are plans to cap them off. The two newest wells, installed in 1980, are currently used for the base water supply and have capacities of approximately 1,000 gpm. The supply well at Building 416 is 0.9 mile northwest from the site. The top of screen is 684 feet bls and the bottom of screen is 744 bls. The other supply well is at Building 417 and is approximately 0.5 mile northwest from the site. The top of screen of this well is 649 feet bls and the bottom of screen is at 720 feet bls.

3.4 Visual Inspection A visual inspection of the site did not reveal any oily sheen on the closest ditch or any stressed vegetation — that includes a 25-foot high live oak tree located adjacent to the former tank pit. No noticeable fuel odor was detected while walking the site, and flame ionization detector (FID) readings did not indicate any elevated background readings.

3.5 Field Screening of Utility Openings A Porta-FID was used to screen the opening of a utility manhole onsite. The FID was lowered 1.5 feet into the dry manhole for 20 seconds. No detectable readings were observed. The FID was calibrated that day using 100 parts per million (ppm) methane calibration gas; the FID calibration check read 98 ppm.

4.0 SOIL CONTAMINATION

4.1 Soil Sampling Program A Terraprobe℠ direct-push sampling rig was used to collect soil samples from 2-foot intervals from the surface to up to 19 feet bls. The samples were collected

using a 1.25-inch Shelby tube with Teflon™ sleeve. A total of 14 borings were completed and screened in the field with 10 samples sent to an offsite laboratory on December 20 and 21, 1995. Figure 3 shows the locations of these borings and highlights which borings had samples sent to an offsite laboratory.

Groundwater was encountered at approximately at 7 feet bls, and the borings were extended to 12 feet bls with the exception of GPT-61-14 which was terminated at 19 feet bls. Boring GPT-61-14 was located in the most contaminated area at the site and was extended to determine the vertical extent of contamination. FID readings in GPT-61-14 indicated that contamination did not extend below 17 feet bls.

An oily sheen was observed in sample GPT-61-14, although no free-phase product was observed in holes that were allowed to stay open for 1 to 3 hours. Excavation in the former pit area in August 1995 was performed to the water table and allowed to stay open overnight; no free-phase product was observed then either, although a strong petroleum odor was present.

The soil encountered was a fine-grained sand with some to little silt. The color ranged from brown to black, based on the amount of organic material present. Appendix A contains the boring logs. The following table summarizes the samples collected and the FID readings associated with them. The former tank pit was easily identified based on a slightly yellowed soil and looser compaction (i.e., lower down-hole pressure by the Terraprobe℠).

4.2 Extent of Soil Contamination The horizontal extent of contamination appears to be limited to the immediate area of the former tank pit. Both screening and laboratory samples collected confirm this (see Figure 4). Based on the TPH sample results, the area of contamination extends approximately 30 feet east to west and 60 feet north to south with the center located in the middle of the former tank pit. The samples analyzed for TPH using the Mississippi Method indicated that the area of contamination may be much smaller than that indicated by 418.1 TPH results (see Figure 4).

The soil character at the site included a light brown fine sand with some silt from the surface to approximately 7 feet bls. Below that, an organic rich zone was observed at most locations. Groundwater was observed at approximately 6 feet bls. Figure 5 is a cross-section diagram showing the distribution of these layers.

Vertically, the contamination did not extend beyond 19 feet bls, even in the area of highest contamination in boring 61-14. The extent of contamination has not moved beyond the property of Building 61. In total, 10 samples were sent to an offsite laboratory for TPH (418.1) and diesel hydrocarbons (Mississippi Method) analyses. The laboratory results are summarized in Table 2. The chemical data sheets are contained in Appendix C.

Table 1 Field Screening Data

Sampling Date	Borehole/MW	Shelby Tube Interval (feet)	FID Reading (ppm)
12/21/95	61-01	5-7	3
		7-9	3
		9-11	3
12/21/95	61-02	5-7	25*
		7-9	3
		9-11	1
12/21/95	61-03	5-7	35
		7-9	10
		9-11	2
12/21/95	61-04	4-6	15*
		6-8	0
12/21/95	61-05	4-6	0*
12/21/95	61-06	4-6	0
		6-8	3
		8-10	3*
12/21/95	61-07	4-6	0*
		6-8	0
12/21/95	61-08	4-6	0
		6-8	5
		8-10	3
12/21/95	61-09	4-6	2
		8-10	400
12/21/95	61-10	4-6	0
		8-10	20*
12/21/95	61-11	4-6	0
		8-10	2*
12/21/95	61-12	4-6	2
		8-10	8*
12/21/95	61-13	4-6	1
		8-10	3*
12/21/95	61-14	7-9	2000*
		11-13	2000
		15-17	150
		17-19	20

* Soil sample sent to laboratory.

Notes: MW = monitoring well.
ft = feet.
FID = flame ionization detector.
ppm = parts per million.

Table 2 Laboratory Soil Sample Results

Sample	Date	TPH 418.1 (ppm)	Miss. Method (ppm)
610205	12/21/96	85	ND
610406	12/21/96	49	ND
610506	12/21/96	ND	ND
610610	12/21/96	< 10	ND
610706	12/21/96	38	ND
611010	12/21/96	< 10	ND
611110	12/21/96	39	ND
611210	12/21/96	34	ND
611308	12/21/96	87	ND
611407	12/21/96	991	137.7

Notes: TPH = parts per million.
ppm = parts per million.
ND = not detected.
< = less than.

An estimated 220 cubic yards of soil are above 100 ppm TPH, based on the screening results and sample results from borings 61-3, 61-9, and 61-14, which consist of an area of 20 feet by 20 feet and 15 feet deep.

5.0 GROUNDWATER CONTAMINATION.

5.1 Monitoring Well Installation and Development Five monitoring wells were installed on January 17 and 18, 1996. The wells were constructed of 4-inch-diameter schedule 40 polyvinyl chloride. The well depths for each are approximately 20 feet bls and are completed with flush-mounted vaults. Each well has a 15-foot screened interval with the remaining well section constructed of 4-inch blank riser. The well construction logs are included in Appendix B. The locations of the monitoring wells are shown on Figure 3. As shown, GPT-61-1 was located to the southeast of the former tank pit. This well was included as an upgradient well. The groundwater flow direction in this area was projected using data from nearby installation restoration sites. The locations for GPT-61-2 and GPT-61-3 were selected to characterize the groundwater contamination in and around the former tank pit. Farther to the north and northwest, GPT-61-4 and GPT-61-5 were installed to delineate the extent of groundwater contamination.

The wells were developed on January 19, 1996. Typically, 100 to 200 gallons were removed from each well. Water chemistry parameters such as pH, temperature, specific conductivity, and turbidity were observed throughout the development process. The monitoring wells were considered developed when the parameters of each well stabilized to within 10 percent and significant reductions in turbidity were achieved. None of the wells purged dry even with flow

rates as high as 15 gpm. The groundwater intersects the screened interval for each of the wells. Water chemistry data collected during development are contained in Appendix D.

The wells were surveyed on January 31, 1996, using the datum established at a nearby site. A new datum was established across the street from the site (see Figure 2). The monitoring well and survey data are summarized in Table 3.

Table 3 Monitoring Well and Survey Data

Date	Well Number	Top of Casing Elev. (ft)	Screened Interval	Depth to Water (ft)	Depth to Product (ft)	Water Table Elev. (ft)
1/31/96	GPT-61-1	29.40	9.40-24.40	5.39	---	24.01
1/31/96	GPT-61-2	29.65	9.65-24.65	5.83	---	23.82
1/31/96	GPT-61-3	30.12	10.12-25.12	6.36	---	23.76
1/31/96	GPT-61-4	29.91	9.91-24.91	6.11	---	23.80
1/31/96	GPT-61-5	30.42	10.42-25.42	6.79	---	23.63

Notes: ft = feet.
--- = product not observed.

The wells were purged of three well volumes and sampled on February 1, 1996. Samples were collected from all five wells and sent to Micro-Methods Laboratory, Inc., in Ocean Springs, Mississippi. The analyses included TPH 418.1 and TPH MS Method.

Free product was not encountered in any of the wells during development, water elevations surveys, or sampling. Figure 6 shows the direction of groundwater flow to the northwest, as predicted. The change in water level elevation across the site is approximately 0.4 of a foot. The gradient across i_1 (Figure 6) is 0.004 foot per foot (ft/ft).

5.2 Extent of Groundwater Contamination The depth to groundwater at the site ranges from 5.39 to 6.79 feet bls. From the limited number of wells at the site, the potentiometric surface appears planar, and groundwater flow is indicated to the northwest. The gradient calculated across i_1 is a rather shallow 0.004 ft/ft. No free-phase product was encountered at any time during the investigation.

Area wells should not be impacted by the relatively shallow contamination associated with this site. During the soil investigation, contamination did not extend below 19 feet. The screened intervals of the nearby supply wells are over 600 feet bls, and several confining layers exist between the two.

Table 4 summarizes the groundwater sample results collected on February 1, 1996. The results ranged from a high of 21 parts per billion (ppb) (GPT-61-3) in the vicinity of the tank pit to a low of 5.1 ppb (GPT-61-5) using the results from the MS Method. The TPH 418.1 method did not result in any detections, although it must be noted that the detection limits of the two methods are different. Figure 7 presents the sample results and detection limits in association with the monitoring well samples for both methods. Sample results on Figure 7 clearly indicate

that the highest levels of contamination are located around the former tank pit and that the contamination has not migrated significantly in the years since it was introduced into the subsurface.

Table 4 Groundwater Sample Results

Sampling Date	Monitoring Well	TPH 418.1 (ppm)	Miss. Method (ppb)
2/1/96	GPT-61-1	5U	5.3
2/1/96	GPT-61-2	5U	10.5
2/1/96	GPT-61-3	5U	21
2/1/96	GPT-61-4	5U	5.4
2/1/96	GPT-61-5	5U	5.1

U indicates undetected. Associated number is the detection limit.

Notes: ppm = parts per million.
ppb = parts per billion.
TPH = total petroleum hydrocarbons.

The groundwater sample results are much lower than the comparable soil samples. This may indicate that much of the petroleum contamination has adhered to the soil particles and is not mobile in the groundwater. That, in combination with the low groundwater gradient, may indicate why there has been so little migration of the contamination.

These results indicate that all of the groundwater is below MSDEQ action level of 18 ppm TPH.

6.0 CONCLUSIONS AND RECOMMENDATIONS.

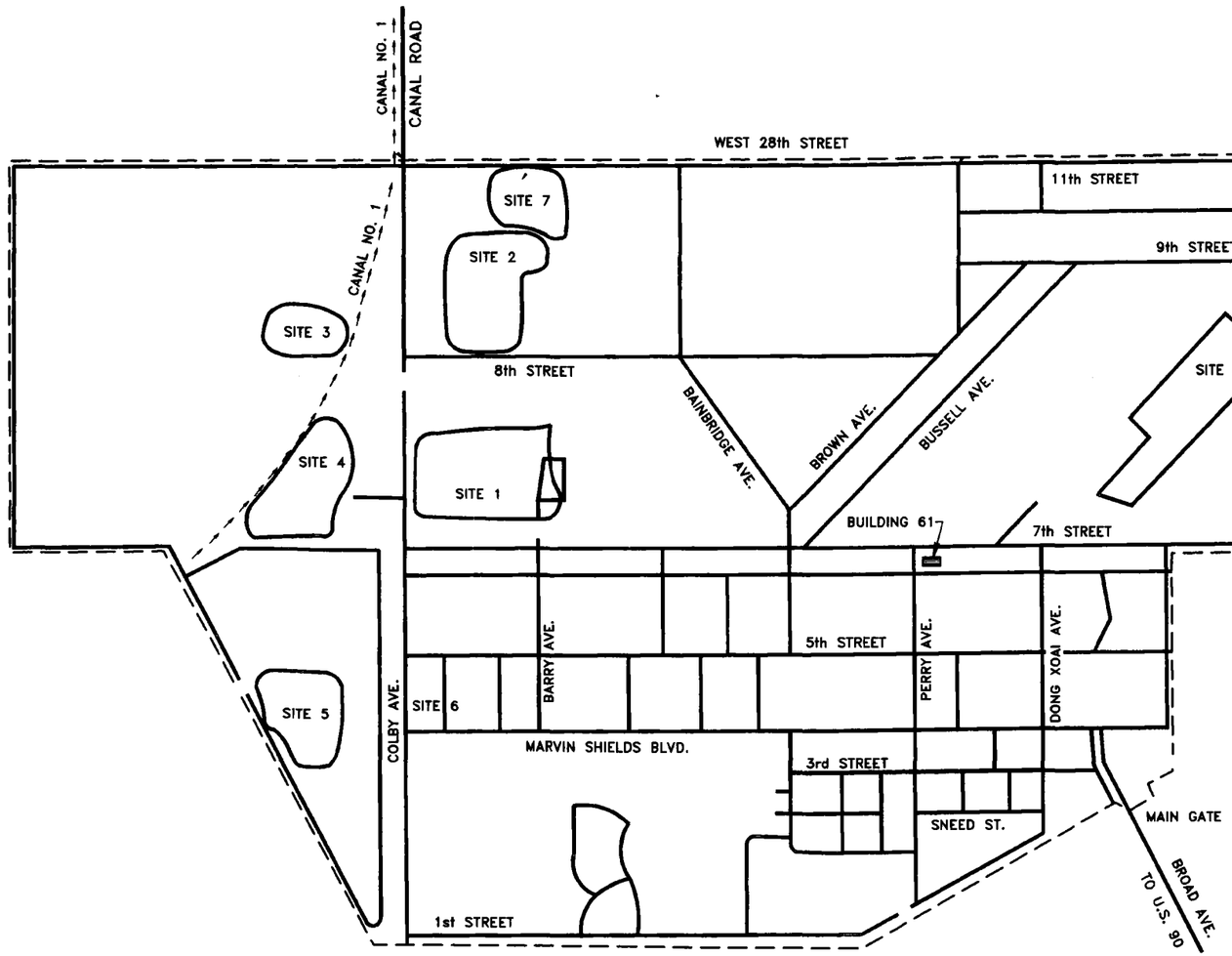
The extent of the soil contamination was investigated by collecting samples using the Terra-probe℠ unit. Fourteen direct-push locations were sampled and screened using an FID. Samples from 10 of those locations were sent to an offsite laboratory for analysis (TPH 418.1 and MS Method). These results (displayed on Figure 4) show that the area of soil contamination is restricted to the area around the former UST pit. Approximately 220 cubic yards of soil are contaminated at more than 100 ppm TPH. Only sample 611407 was above 100 ppm (991 ppm), and this area of elevated concentrations appears limited to the eastern portion of the former tank pit. In general, there was good correlation between the field screening and offsite laboratory results.

Five monitoring wells were installed in an array that included one upgradient, two within the highest area of contamination, and two downgradient of the former tank pit. The potentiometric surface was nearly planar and indicated that flow across the site was to the northwest. Samples were collected from all five wells and sent to Micro-Methods of Ocean Springs, Mississippi, for TPH (418.1 and MS Method) analysis. The maximum concentration reported was 21 ppb TPH, well below the action level of 18 ppm TPH.

Based on the groundwater sample results, the soil contamination at this site is not acting as a major secondary source for groundwater contamination. Additionally, the minor contamination that has occurred is either not migrating with groundwater flow or is naturally attenuating faster than it can migrate. Given these site conditions, degradation and attenuation of the TPH contamination should occur naturally without aid of a treatment system. Excavation of the contaminated soils is impractical because the contaminated soils are up to 13 feet below the water table. The relatively high yield of the surficial aquifer in this area would require a large dewatering effort to remove the contaminated soil.

The next phase of work should include one round of groundwater sampling during the next 12 months to prove that the site is not contributing to groundwater contamination as a secondary source. Groundwater samples should be collected from all five wells and analyzed for both TPH 418.1 and MS Method hydrocarbons. Following receipt of laboratory data, a brief report would be submitted that would include a figure with sample locations, a new potentiometric map, and laboratory data sheets. If the groundwater samples remain at the low levels observed here, a no further action proposal would be requested after the second round.

FIGURES



LEGEND

BASE BOUNDARY

SITE 3 SITE LOCATIONS

FIGURE 1

NCBC FACILITY LAYOUT

BUILDING 61
CONTAMINATION ASSESSMENT
REPORT

NCBC GULFPORT
GULFPORT, MISSISSIPPI

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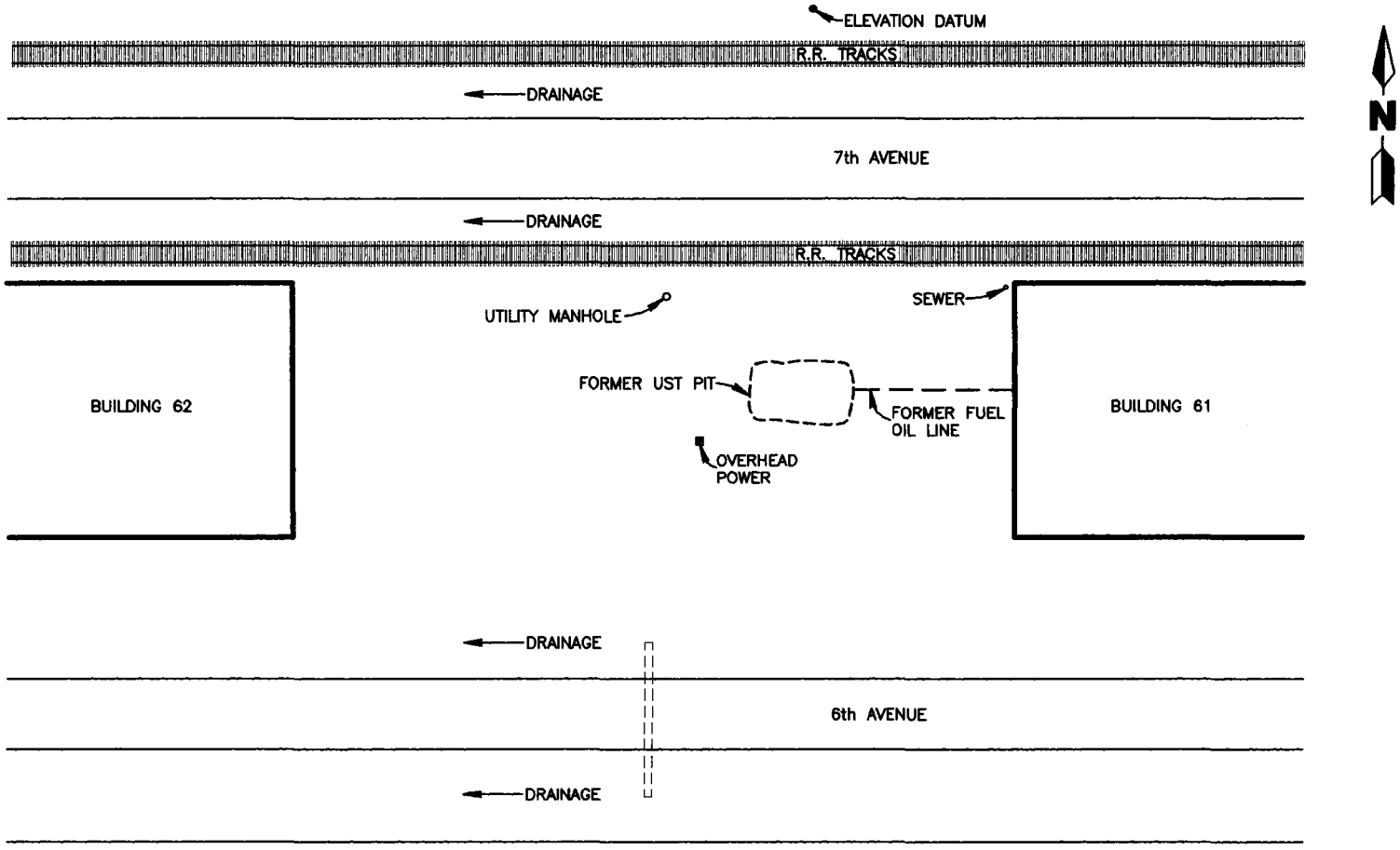

0 25 50
SCALE: 1" = 50'

FIGURE 2

VICINITY MAP

BUILDING 61
CONTAMINATION ASSESSMENT REPORT

NCBC GULFPORT
GULFPORT, MISSISSIPPI

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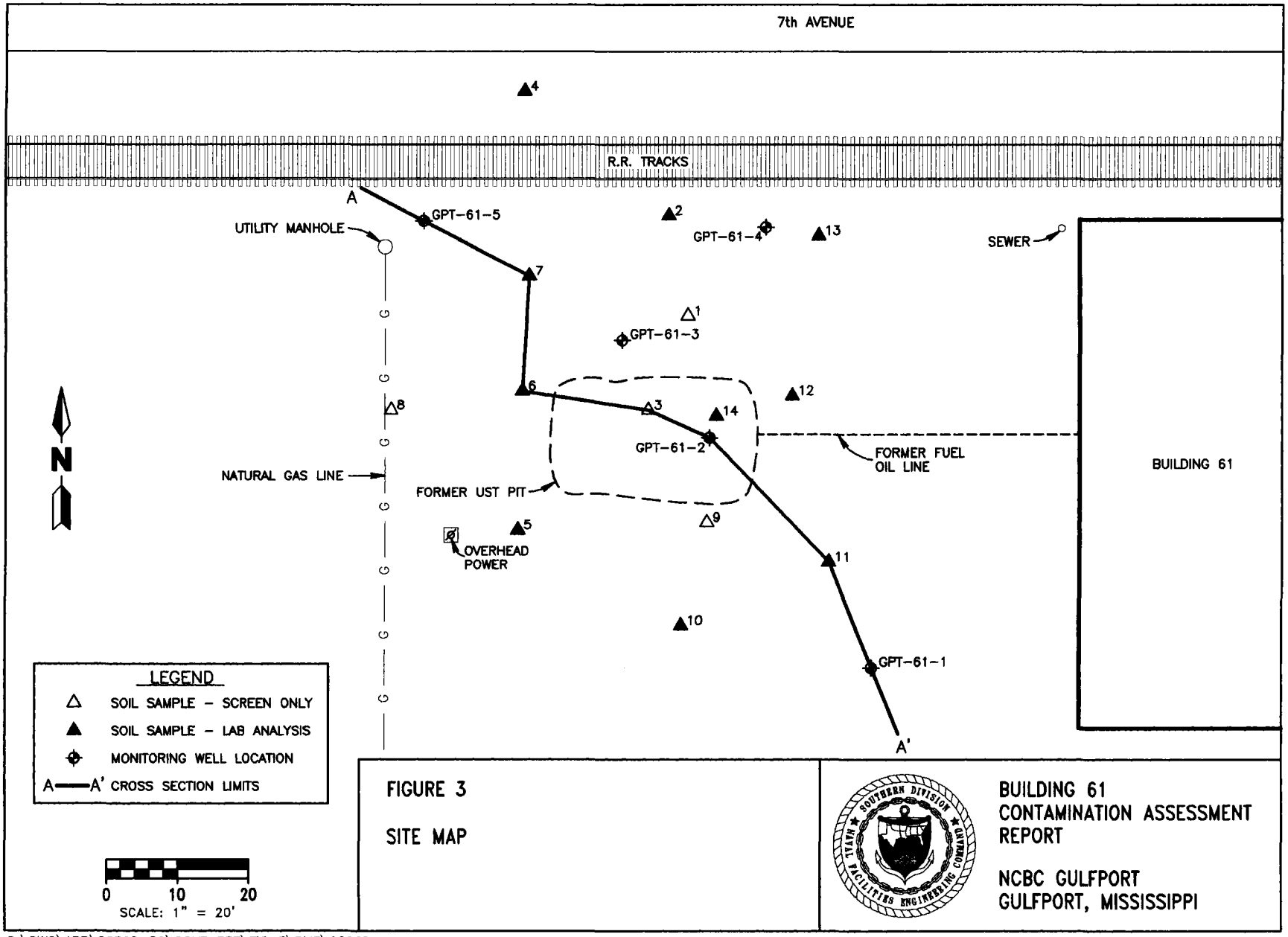
7th AVENUE
R.R. TRACKS
A
GPT-61-5
UTILITY MANHOLE
GPT-61-4
SEWER
GPT-61-3
GPT-61-2
FORMER FUEL OIL LINE
BUILDING 61
NATURAL GAS LINE
FORMER UST PIT
OVERHEAD POWER
GPT-61-1
A'
N
LEGEND
SOIL SAMPLE - SCREEN ONLY
SOIL SAMPLE - LAB ANALYSIS
MONITORING WELL LOCATION
A—A' CROSS SECTION LIMITS
0 10 20
SCALE: 1" = 20'
FIGURE 3
SITE MAP
BUILDING 61
CONTAMINATION ASSESSMENT
REPORT
NCBC GULFPORT
GULFPORT, MISSISSIPPI
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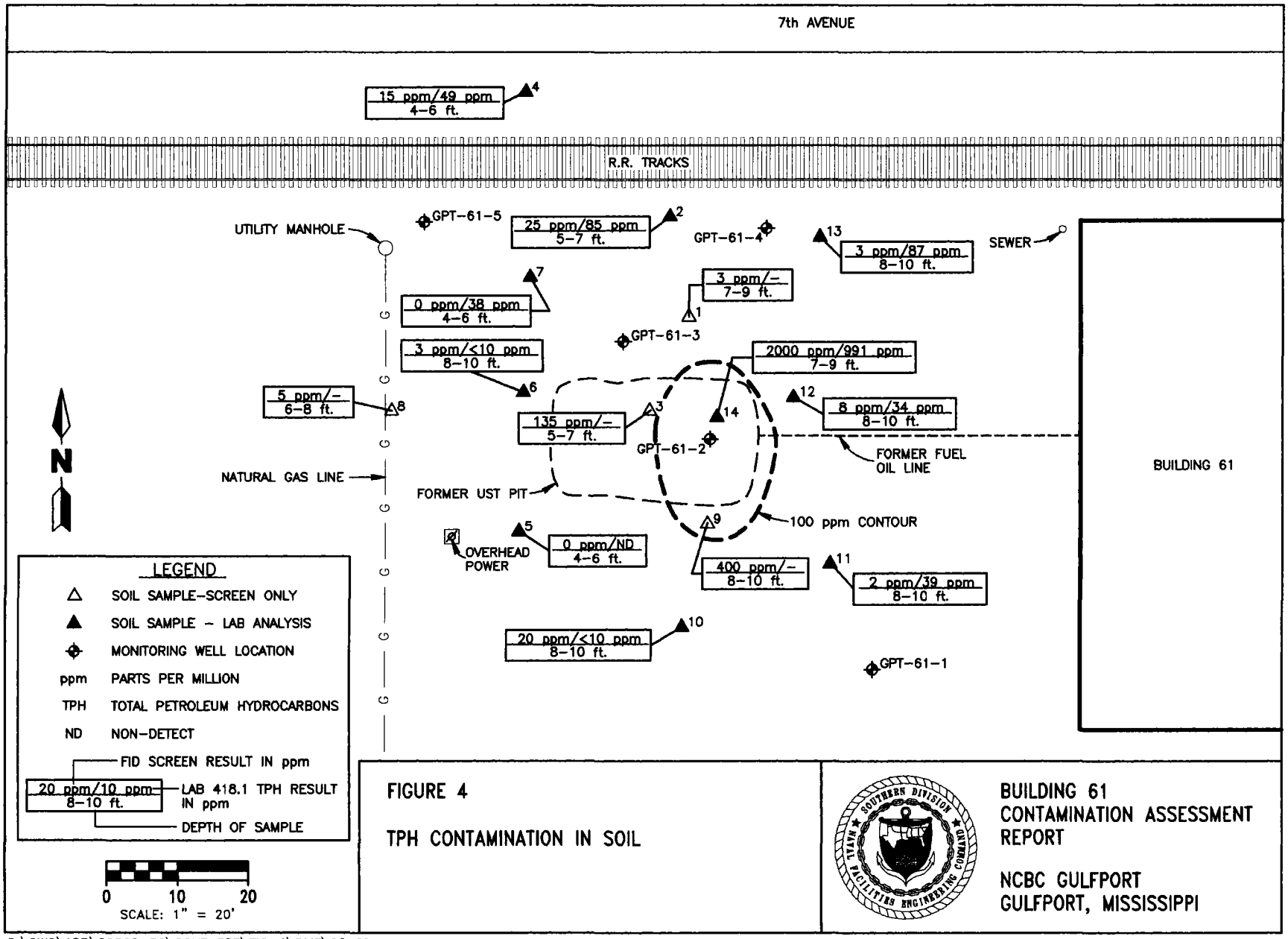

FIGURE 4

TPH CONTAMINATION IN SOIL

BUILDING 61
CONTAMINATION ASSESSMENT
REPORT

NCBC GULFPORT
GULFPORT, MISSISSIPPI

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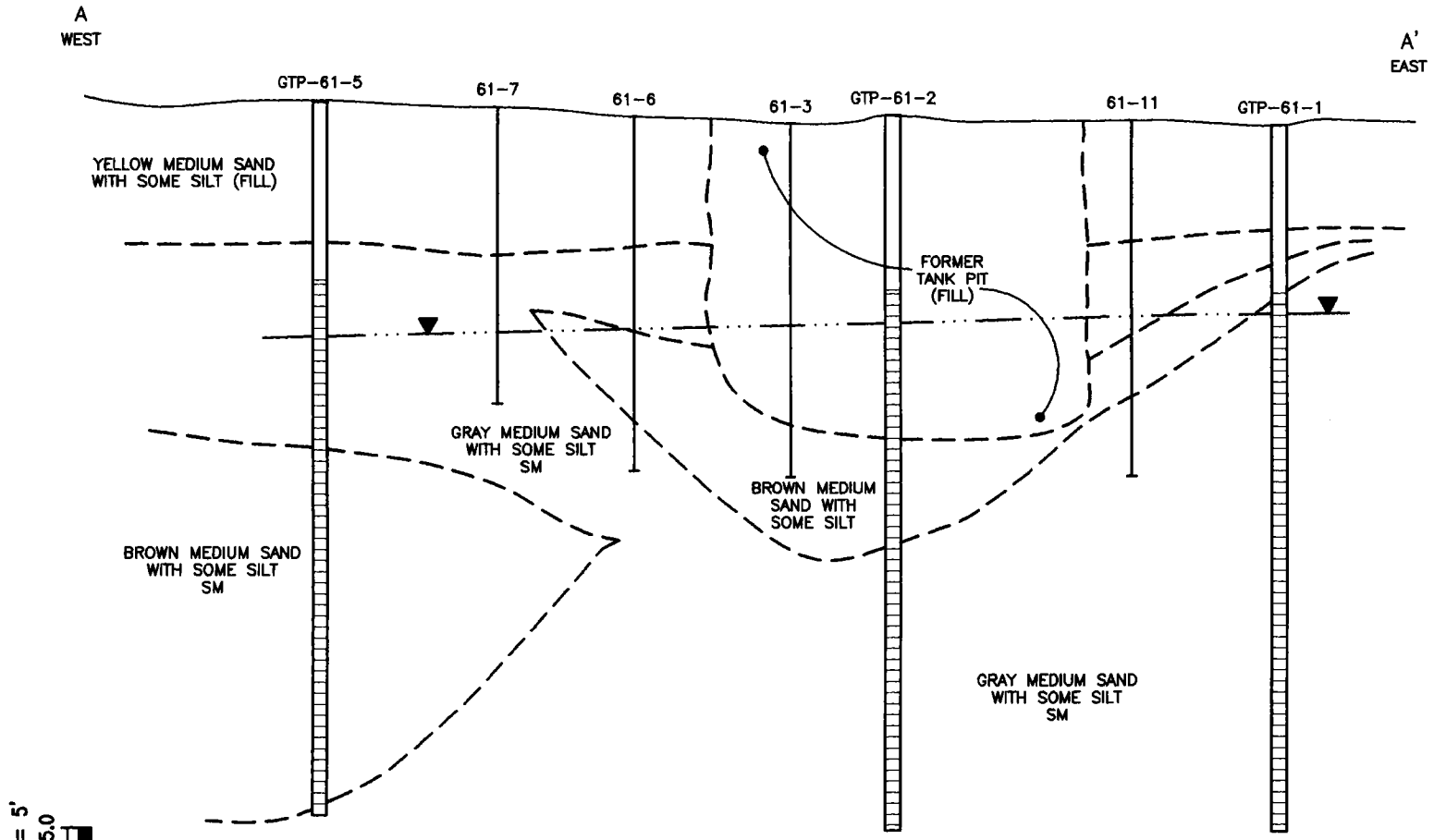

FIGURE 5

GEOLOGIC CROSS SECTION

BUILDING 61
CONTAMINATION ASSESSMENT
REPORT

NCBC GULFPORT
GULFPORT, MISSISSIPPI

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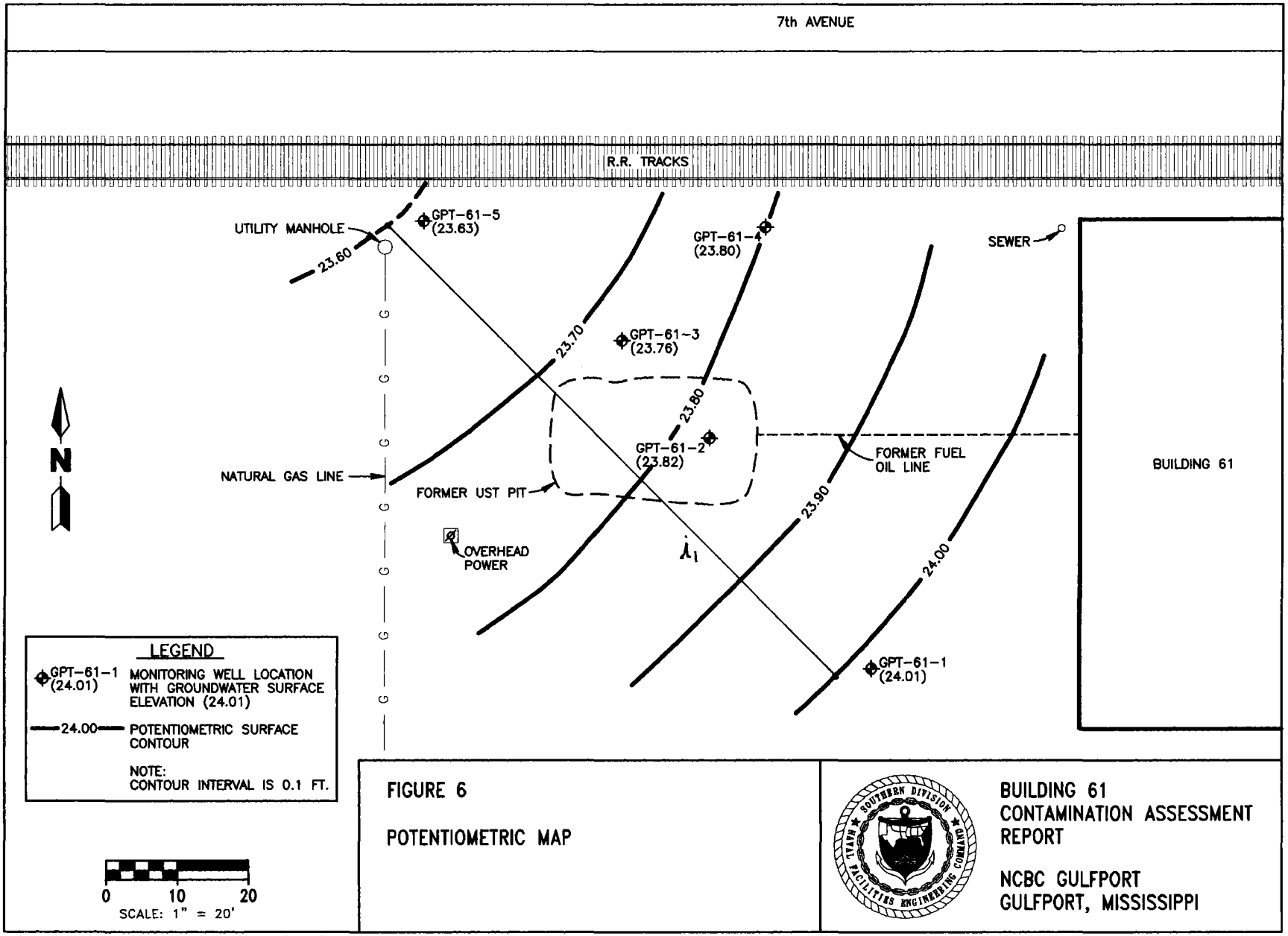

FIGURE 6

POTENTIOMETRIC MAP

BUILDING 61
CONTAMINATION ASSESSMENT
REPORT

NCBC GULFPORT
GULFPORT, MISSISSIPPI

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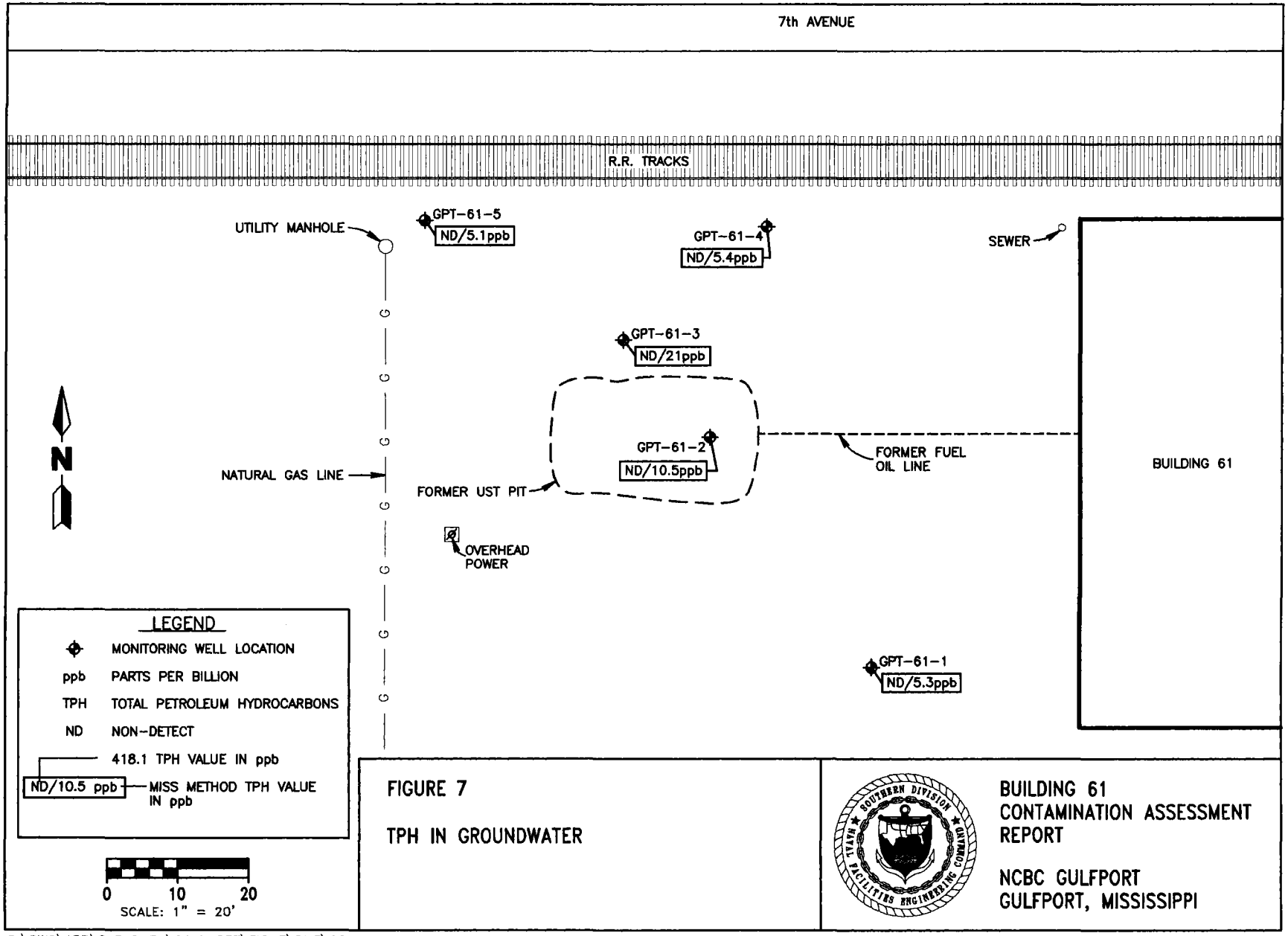


D:\DWG\ABB\08568-30\CONT_RPT\FIG_7\DMF\960322

APPENDIX A. BORING LOGS

TERRA-PROBE BORING LOGS

ABB ENVIRONMENTAL SERVICES, INC. BORING LOG	Boring No. B-61-1	Page 1 OF 1

Installation/Facility:	Site:
NCBC GULFPORT	BUILDING 61

Project No.	Client/Project:
8568.3	NAVY

Geologist: R. FISHER	Drilling Contractor: ABB-TERRAPROBE

Drilling Method: TERRAPROBE	Rig Type DIRECT-PUSH	Operator: SCAVONE
Date: 35053	Start:	Finish:	Boring Dia.: 1.25"
Ground Elev. N/A	Total Dept 11'	Logged By: FISHER
Protection L Level D	Boring Grouted: Y / N Initials RF	Checked By:

ROP = Rate of Penetration = Indicates Water Table

Depth in Feet	Lab Sample No.	FID Reading (ppm)	ROP or Resistance	USCS Lithologic Description/Remarks	USCS Graphic Log
		----	PUSH	Light brown silty sand (FIll)	SM
5		3	PUSH	Light brown silty sand. Fill	SM
		3	PUSH	Brown silty sand, wet, slight odor.	SM
10		3	PUSH	Brown silty sand, wet, slight odor.	SM
				End of boring at 11 feet bls.	
15					
20					

ABB ENVIRONMENTAL SERVICES, INC. BORING LOG	Boring No. B-61-2	Page 1 OF 1

Installation/Facility:	Site:
NCBC GULFPORT	BUILDING 61

Project No.	Client/Project:
8568.3	NAVY

Geologist: R. FISHER	Drilling Contractor: ABB-TERRAPROBE

Drilling Method: TERRAPROBE	Rig Type DIRECT-PUSH	Operator: SCAVONE
Date: 35053	Start:	Finish:	Boring Dia.: 1.25"
Ground Elev. N/A	Total Dept 11'	Logged By: FISHER
Protection L Level D	Boring Grouted: Y / N Initials RF	Checked By:

ROP = Rate of Penetration = Indicates Water Table

Depth in Feet	Lab Sample No.	FID Reading (ppm)	ROP or Resistance	USCS Lithologic Description/Remarks	USCS Graphic Log
		----	PUSH	Light brown silty sand (FIII)	SM
5		25	PUSH	Gray silty sand, wet at 5.5'. Slight stain at water table Slight odor	SM
		3	PUSH	Brown silty sand, wet, slight odor.	SM
10		1	PUSH	Brown silty sand, wet, slight odor.	SM
				End of boring at 11 feet bls.	
15					
20					

ABB ENVIRONMENTAL SERVICES, INC. BORING LOG	Boring No. B-61-3	Page 1 OF 1

Installation/Facility:	Site:
NCBC GULFPORT	BUILDING 61

Project No.	Client/Project:
8568.3	NAVY

Geologist: R. FISHER	Drilling Contractor: ABB-TERRAPROBE

Drilling Method: TERRAPROBE	Rig Type DIRECT-PUSH	Operator: SCAVONE
Date: 35053	Start:	Finish:	Boring Dia.: 1.25"
Ground Elev. N/A	Total Dept 11'	Logged By: FISHER
Protection L Level D	Boring Grouted: Y / N Initials RF	Checked By:

ROP = Rate of Penetration = Indicates Water Table

Depth in Feet	Lab Sample No.	FID Reading (ppm)	ROP or Resistance	USCS Lithologic Description/Remarks	USCS Graphic Log
		----	PUSH	Light brown silty sand (FIII)	SM
5		35	PUSH	Light brown silty sand. Fill	SM
		10	PUSH	Yellow-tan silty sand. Fill	SM
10		2	PUSH	Brown silty sand, wet, slight odor.	SM
15				End of boring at 11 feet bls.	
20					

ABB ENVIRONMENTAL SERVICES, INC. BORING LOG	Boring No. B-61-4	Page 1 OF 1

Installation/Facility:	Site:
NCBC GULFPORT	BUILDING 61

Project No.	Client/Project:
8568.3	NAVY

Geologist: R. FISHER	Drilling Contractor: ABB-TERRAPROBE

Drilling Method: TERRAPROBE	Rig Type DIRECT-PUSH	Operator: SCAVONE
Date: 35053	Start:	Finish:	Boring Dia.: 1.25"
Ground Elev. N/A	Total Dept 11'	Logged By: FISHER
Protection L Level D	Boring Grouted: Y / N Initials RF	Checked By:

ROP = Rate of Penetration = Indicates Water Table

Depth in Feet	Lab Sample No.	FID Reading (ppm)	ROP or Resistance	USCS Lithologic Description/Remarks	USCS Graphic Log
		----	PUSH	Light brown silty sand (FIll)	SM
5	610404	15	PUSH	Gray silty sand, wet at 5.0'.	SM
		0	PUSH	Gray medium sand with some silt.	SM
10					
15					
20					

ABB ENVIRONMENTAL SERVICES, INC. BORING LOG	Boring No. B-61-5	Page 1 OF 1

Installation/Facility:	Site:
NCBC GULFPORT	BUILDING 61

Project No.	Client/Project:
8568.3	NAVY

Geologist: R. FISHER	Drilling Contractor: ABB-TERRAPROBE

Drilling Method: TERRAPROBE	Rig Type DIRECT-PUSH	Operator: SCAVONE
Date: 35053	Start:	Finish:	Boring Dia.: 1.25"
Ground Elev. N/A	Total Dept 11'	Logged By: FISHER
Protection L Level D	Boring Grouted: Y / N Initials RF	Checked By:

ROP = Rate of Penetration = Indicates Water Table

Depth in Feet	Lab Sample No.	FID Reading (ppm)	ROP or Resistance	USCS Lithologic Description/Remarks	USCS Graphic Log
		----	PUSH	Light brown silty sand (FIII)	SM
5		0	PUSH	Light brown silty sand, fine, wet at 5.0.	SM
10					
15					
20					

ABB ENVIRONMENTAL SERVICES, INC. BORING LOG	Boring No. B-61-6	Page 1 OF 1

Installation/Facility:	Site:
NCBC GULFPORT	BUILDING 61

Project No.	Client/Project:
8568.3	NAVY

Geologist: R. FISHER	Drilling Contractor: ABB-TERRAPROBE

Drilling Method: TERRAPROBE	Rig Type DIRECT-PUSH	Operator: SCAVONE
Date: 35053	Start:	Finish:	Boring Dia.: 1.25"
Ground Elev. N/A	Total Dept 11'	Logged By: FISHER
Protection L Level D	Boring Grouted: Y / N Initials RF	Checked By:

ROP = Rate of Penetration = Indicates Water Table

Depth in Feet	Lab Sample No.	FID Reading (ppm)	ROP or Resistance	USCS Lithologic Description/Remarks	USCS Graphic Log
		----	PUSH	Light brown silty sand (FIII)	SM
5		0	PUSH	Light brown silty sand, fine, wet at 5.0.	SM
		----	PUSH		
		3	PUSH	Brown silty fine sand, organic rich.	SM
10					
15					
20					

ABB ENVIRONMENTAL SERVICES, INC. BORING LOG	Boring No. B-61-7	Page 1 OF 1

Installation/Facility:	Site:
NCBC GULFPORT	BUILDING 61

Project No.	Client/Project:
8568.3	NAVY

Geologist: R. FISHER	Drilling Contractor: ABB-TERRAPROBE

Drilling Method: TERRAPROBE	Rig Type DIRECT-PUSH	Operator: SCAVONE
Date: 35053	Start:	Finish:	Boring Dia.: 1.25"
Ground Elev. N/A	Total Dept 8'	Logged By: FISHER
Protection L Level D	Boring Grouted: Y / N Initials RF	Checked By:

ROP = Rate of Penetration = Indicates Water Table

Depth in Feet	Lab Sample No.	FID Reading (ppm)	ROP or Resistance	USCS Lithologic Description/Remarks	USCS Graphic Log
		----	PUSH	Light brown silty sand (Fill)	SM
5		0	PUSH	Light brown silty sand, fine, wet at 5.0.	SM
		0	PUSH	Gray silty fine sand, wet.	SM
10					
15					
20					

ABB ENVIRONMENTAL SERVICES, INC. BORING LOG	Boring No. B-61-8	Page 1 OF 1

Installation/Facility:	Site:
NCBC GULFPORT	BUILDING 61

Project No.	Client/Project:
8568.3	NAVY

Geologist: R. FISHER	Drilling Contractor: ABB-TERRAPROBE

Drilling Method: TERRAPROBE	Rig Type DIRECT-PUSH	Operator: SCAVONE

Date: 35053	Start:	Finish:	Boring Dia.: 1.25"

Ground Elev. N/A	Total Dept 10	Logged By: FISHER

Protection L Level D	Boring Grouted: Y / N Initials RF	Checked By:

ROP = Rate of Penetration = Indicates Water Table

Depth in Feet	Lab Sample No.	FID Reading (ppm)	ROP or Resistance	USCS Lithologic Description/Remarks	USCS Graphic Log
-		----	PUSH	Light brown silty sand (FIII)	SM
- 5		0	PUSH	Light tan silty sand. Wet at 5.5'	SM
-		5	PUSH	Light tan silty sand.	SM
-		3	PUSG	Brown silty sand. Organic rich.	SM
- 10					
- 15					
- 20					

ABB ENVIRONMENTAL SERVICES, INC. BORING LOG	Boring No. B-61-9	Page 1 OF 1

Installation/Facility:	Site:
NCBC GULFPORT	BUILDING 61

Project No.	Client/Project:
8568.3	NAVY

Geologist: R. FISHER	Drilling Contractor: ABB-TERRAPROBE

Drilling Method: TERRAPROBE	Rig Type DIRECT-PUSH	Operator: SCAVONE

Date: 35053	Start:	Finish:	Boring Dia.: 1.25"

Ground Elev. N/A	Total Dept 10	Logged By: FISHER

Protection L Level D	Boring Grouted: Y / N Initials RF	Checked By:

ROP = Rate of Penetration = Indicates Water Table

Depth in Feet	Lab Sample No.	FID Reading (ppm)	ROP or Resistance	USCS Lithologic Description/Remarks	USCS Graphic Log
		----	PUSH	Light brown silty sand (Fill)	SM
5		2	PUSH	Light tan silty sand. Wet at 5.5'	SM
		----	PUSH	Light tan silty sand.	SM
		400	PUSG	Gray silty sand. Strong odor.	SM
10					
15					
20					

ABB ENVIRONMENTAL SERVICES, INC. BORING LOG	Boring No. B-61(0	Page 1 OF 1

Installation/Facility:	Site:
NCBC GULFPORT	BUILDING 61

Project No.	Client/Project:
8568.3	NAVY

Geologist: R. FISHER	Drilling Contractor: ABB-TERRAPROBE

Drilling Method: TERRAPROBE	Rig Type DIRECT-PUSH	Operator: SCAVONE
Date: 35053	Start:	Finish:	Boring Dia.: 1.25"
Ground Elev. N/A	Total Dept 10	Logged By: FISHER
Protection L Level D	Boring Grouted: Y / N Initials RF	Checked By:

ROP = Rate of Penetration = Indicates Water Table

Depth in Feet	Lab Sample No.	FID Reading (ppm)	ROP or Resistance	USCS Lithologic Description/Remarks	USCS Graphic Log
		----	PUSH	Light brown silty sand (FIII)	SM
5		2	PUSH	Light tan silty sand. Wet at 5.5'	SM
		----	PUSH	Light tan silty sand.	SM
		20	PUSG	Gray silty sand. Wet.	SM
10					
15					
20					

ABB ENVIRONMENTAL SERVICES, INC. BORING LOG	Boring No. B-61-11	Page 1 OF 1

Installation/Facility: NCBC GULFPORT	Site: BUILDING 61
Project No. 8568.3	Client/Project: NAVY
Geologist: R. FISHER	Drilling Contractor: ABB-TERRAPROBE
Drilling Method: TERRAPROBE	Rig Type DIRECT-PUSH / Operator: SCAVONE
Date: 35053 / Start: / Finish:	Boring Dia.: 1.25"
Ground Elev. N/A / Total Dept 10	Logged By: FISHER
Protection L Level D / Boring Grouted: Y / N Initials RF	Checked By:

ROP = Rate of Penetration = Indicates Water Table

Depth in Feet	Lab Sample No.	FID Reading (ppm)	ROP or Resistance	USCS Lithologic Description/Remarks	USCS Graphic Log
		----	PUSH	Light brown silty sand (FIll)	SM
5		0	PUSH	Tan to gray silty sand.	SM
		----	PUSH	Light tan silty sand.	SM
		2	PUSG	Brown, organic rich silty sand.	SM
10					
15					
20					

ABB ENVIRONMENTAL SERVICES, INC. BORING LOG	Boring No. B-61-12	Page 1 OF 1

Installation/Facility:	Site:
NCBC GULFPORT	BUILDING 61

Project No.	Client/Project:
8568.3	NAVY

Geologist: R. FISHER	Drilling Contractor: ABB-TERRAPROBE

Drilling Method: TERRAPROBE	Rig Type DIRECT-PUSH	Operator: SCAVONE
Date: 35053	Start:	Finish:	Boring Dia.: 1.25"
Ground Elev. N/A	Total Dept 10	Logged By: FISHER
Protection L Level D	Boring Grouted: Y / N Initials RF	Checked By:

ROP = Rate of Penetration = Indicates Water Table

Depth in Feet	Lab Sample No.	FID Reading (ppm)	ROP or Resistance	USCS Lithologic Description/Remarks	USCS Graphic Log
		----	PUSH	Light brown silty sand (FIII)	SM
5		2	PUSH	Tan silty sand. Wet at 5.5'	SM
		----	PUSH	Light tan silty sand.	SM
		8	PUSG	Dark gray silty sand. Wet.	SM
10					
15					
20					

ABB ENVIRONMENTAL SERVICES, INC. BORING LOG	Boring No. B-61-13	Page 1 OF 1

Installation/Facility:	Site:
NCBC GULFPORT	BUILDING 61

Project No.	Client/Project:
8568.3	NAVY

Geologist: R. FISHER	Drilling Contractor: ABB-TERRAPROBE

Drilling Method: TERRAPROBE	Rig Type DIRECT-PUSH	Operator: SCAVONE
Date: 35053	Start:	Finish:	Boring Dia.: 1.25"
Ground Elev. N/A	Total Dept 10	Logged By: FISHER
Protection L Level D	Boring Grouted: Y / N Initials RF	Checked By:

ROP = Rate of Penetration = Indicates Water Table

Depth in Feet	Lab Sample No.	FID Reading (ppm)	ROP or Resistance	USCS Lithologic Description/Remarks	USCS Graphic Log
		----	PUSH	Light brown silty sand (FIII)	SM
5		1	PUSH	Tan silty sand. Wet at 5.5'	SM
		----	PUSH	Light tan silty sand.	SM
		3	PUSG	Brown organic rich silty sand. Wet	SM
10					
15					
20					

ABB ENVIRONMENTAL SERVICES, INC. BORING LOG	Boring No. B-61-14	Page 1 OF 1

Installation/Facility:	Site:
NCBC GULFPORT	BUILDING 61

Project No.	Client/Project:
8568.3	NAVY

Geologist: R. FISHER	Drilling Contractor: ABB-TERRAPROBE

Drilling Method: TERRAPROBE	Rig Type DIRECT-PUSH	Operator: SCAVONE
Date: 35053	Start:	Finish:	Boring Dia.: 1.25"
Ground Elev. N/A	Total Dept 9	Logged By: FISHER
Protection L Level D	Boring Grouted: Y / N Initials RF	Checked By:

ROP = Rate of Penetration = Indicates Water Table

Depth in Feet	Lab Sample No.	FID Reading (ppm)	ROP or Resistance	USCS Lithologic Description/Remarks	USCS Graphic Log
-		----	PUSH	Light brown silty sand (FIll)	SM
-					
-					
-					
- 5					
-					
-		2000	PUSH	Yellow-tan silty sand, wet, strong odor.	SM
-					
- 10					
-		2000	PUSH	Dark gray silty sand. Strong odor	SM
-					
-					
- 15					
-		150	PUSH	Dark gray silty sand.	SM
-		20	PUSH	Dark gray silty sand with some silt.	SM
-					
- 20					

MONITORING WELL BORING LOGS

ABB ENVIRONMENTAL SERVICES, INC. BORING LOG	Boring No. GPT-61-1	Page 1 OF 1

Installation/Facility:	Site:
NCBC GULFPORT	BUILDING 61

Project No.	Client/Project:
8568.3	NAVY

Geologist: R. FISHER	Drilling Contractor: ABB-TERRAPROBE

Drilling Method: Hollow stem auger	Rig Type Auger	Operator: Geotec
Date: Jan 17 96	Start:	Finish:	Boring Dia.: 8.25'
Ground Elev. N/A	Total Dept 20'	Logged By: FISHER
Protection L Level D	Boring Grouted: Y / N Initials RF	Checked By:

ROP = Rate of Penetration = Indicates Water Table

Depth in Feet	Lab Sample No.	FID Reading (ppm)	ROP or Resistance	USCS Lithologic Description/Remarks	USCS Graphic Log
		----	HSA	Hollow stem auger Black organic rich silty sand at 4' bls.	SM
5		0	HSA	Light gray silty	SM
		0	HSA		
10		0	HSA	Gray silty fine sand with trace gravel.	SM
		0	HSA		
15		2	HSA	Gray sand withsome silt and trace fine to medium gravel.	SM
		0	HSA		
20					

ABB ENVIRONMENTAL SERVICES, INC. BORING LOG	Boring No. GPT-61-2	Page 1 OF 1

Installation/Facility:	Site:
NCBC GULFPORT	BUILDING 61

Project No.	Client/Project:
8568.3	NAVY

Geologist: R. FISHER	Drilling Contractor: ABB-TERRAPROBE

Drilling Method: Hollow stem auger	Rig Type Auger	Operator: Geotec
Date: Jan 18 96	Start:	Finish:	Boring Dia.: 8.25"
Ground Elev. N/A	Total Dept 20'	Logged By: FISHER
Protection L Level D	Boring Grouted: Y / N Initials RF	Checked By:

ROP = Rate of Penetration = Indicates Water Table

Depth in Feet	Lab Sample No.	FID Reading (ppm)	ROP or Resistance	USCS Lithologic Description/Remarks	USCS Graphic Log
		----	HSA	Hollow stem auger Yellow-tan medium sand with some silt.	SM
5		10	HSA	Tan medium sand (fill).	SM
		0	HSA	Tan medium sand (fill), wet at 6.	SM
10		30	HSA	Brown medium sand with little silt (organic rich).	SM
		0	HSA		
15		10	HSA	Gray sand withsome silt and trace fine to medium gravel.	SM
		0	HSA		
20					

ABB ENVIRONMENTAL SERVICES, INC. BORING LOG	Boring No. GPT-61-3	Page 1 OF 1

Installation/Facility:	Site:
NCBC GULFPORT	BUILDING 61

Project No.	Client/Project:
8568.3	NAVY

Geologist: R. FISHER	Drilling Contractor: ABB-TERRAPROBE

Drilling Method: Hollow stem auger	Rig Type Auger	Operator: Geotec
Date: Jan 18 96	Start:	Finish:	Boring Dia.: 8.25"
Ground Elev. N/A	Total Dept 20'	Logged By: FISHER
Protection L Level D	Boring Grouted: Y / N Initials RF	Checked By:

ROP = Rate of Penetration = Indicates Water Table

Depth in Feet	Lab Sample No.	FID Reading (ppm)	ROP or Resistance	USCS Lithologic Description/Remarks	USCS Graphic Log
-		----	HSA	Hollow stem auger Yellow-tan medium sand with some silt.	SM
- 5		5	HSA	Black organic rich silty sand	SM
-		15	HSA	Brown silty sand. wet. Slight odor.	SM
- 10		30	HSA	Brown medium sand with little silt (organic rich).	SM
-		0	HSA		
- 15		10	HSA	Gray sand withsome silt and trace fine to medium gravel.	SM
-		0	HSA		
- 20					

ABB ENVIRONMENTAL SERVICES, INC. BORING LOG	Boring No. GPT-61-4	Page 1 OF 1

Installation/Facility:	Site:
NCBC GULFPORT	BUILDING 61

Project No.	Client/Project:
8568.3	NAVY

Geologist: R. FISHER	Drilling Contractor: ABB-TERRAPROBE

Drilling Method: Hollow stem auger	Rig Type Auger Rig	Operator: Geotec
Date: Jan 18 96	Start:	Finish:	Boring Dia.: 8.25"
Ground Elev. N/A	Total Dept 20'	Logged By: FISHER
Protection L Level D	Boring Grouted: Y / N Initials RF	Checked By:

ROP = Rate of Penetration = Indicates Water Table

Depth in Feet	Lab Sample No.	FID Reading (ppm)	ROP or Resistance	USCS Lithologic Description/Remarks	USCS Graphic Log
		----	HSA	Hollow stem auger Yellow-tan medium sand with some silt.	SM
5		0	HSA	Black organic rich silty sand	SM
		10	HSA	Brown silty sand. wet. Slight odor.	SM
10		5	HSA	Brown medium sand with little silt (organic rich).	SM
		5	HSA	Tan medium sand with some silt and trace gravel.	SM
15					
		0	HSA	Gray to tan sand withsome silt and trace fine to medium gra gravel.	SM
		0	HSA		
20					

ABB ENVIRONMENTAL SERVICES, INC. BORING LOG	Boring No. GPT-61-5	Page 1 OF 1

Installation/Facility:	Site:
NCBC GULFPORT	BUILDING 61

Project No.	Client/Project:
8568.3	NAVY

Geologist: R. FISHER	Drilling Contractor: ABB-TERRAPROBE

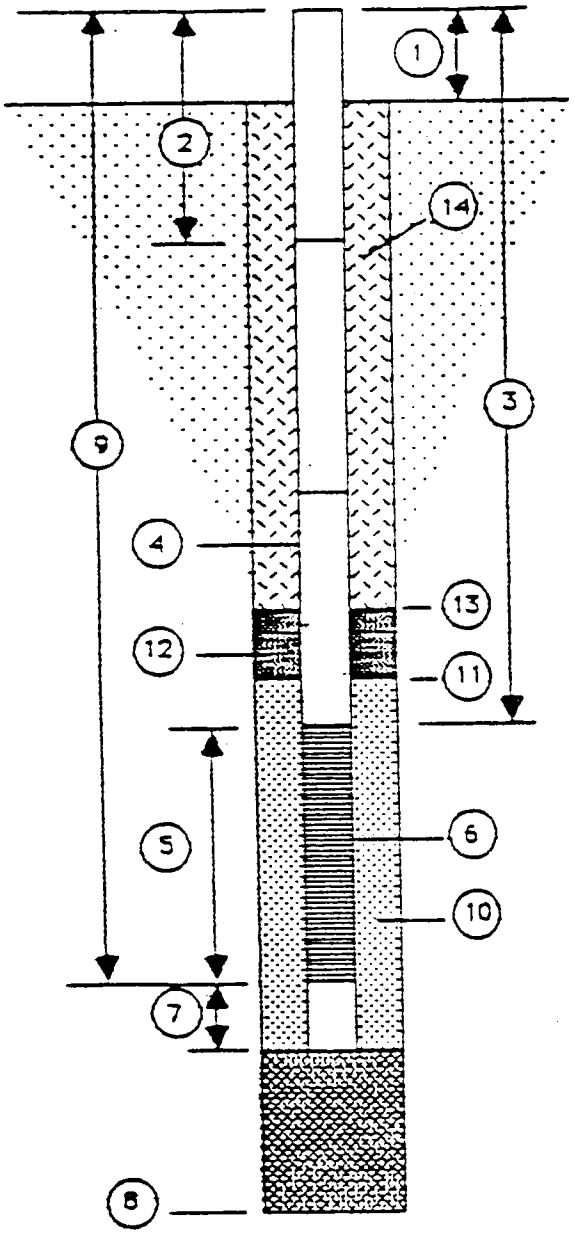
Drilling Method: Hollow stem auger	Rig Type Auger Rig	Operator: Geotec
Date: Jan 18 96	Start:	Finish:	Boring Dia.: 8.25"
Ground Elev. N/A	Total Dept 20'	Logged By: FISHER
Protection L Level D	Boring Grouted: Y / N Initials RF	Checked By:

ROP = Rate of Penetration = Indicates Water Table

Depth in Feet	Lab Sample No.	FID Reading (ppm)	ROP or Resistance	USCS Lithologic Description/Remarks	USCS Graphic Log
		----	HSA	Hollow stem auger Yellow-tan medium sand with some silt.	SM
5		0	HSA	Gray silty sand, no odor, wet at 6'.	SM
10		0	HSA	Brown medium sand with little silt (organic rich).	SM
15		0	HSA	Brown medium sand with little silt (organic rich).	SM
20					

APPENDIX B. WELL CONSTRUCTION LOGS

DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
2155 EAGLE DRIVE, P. O. Box 190010
NORTH CHARLESTON, S.C. 29419-9010



WELL CONSTRUCTION DETAILS

WELL NUMBER GPT-61-1

DATE OF INSTALLATION 1-17-96

1. **Height of Casing Above Ground** FLUSH
2. **Depth to first Coupling** 5'

   Coupling Interval Depths _____
3. **Total Length of Blank Pipe** 5'
4. **Type of Blank Pipe** 4"dia SCH 40 PVC
5. **Length of Screen** 15'
6. **Type of Screen** 4" dia SCH 40 PVC-20 SLOT
7. **Length of Sump** 0
8. **Total Depth of Boring** 20' **Hole Diameter** 8"
9. **Depth to Bottom of Screen** 20'
10. **Type of Screen Filter** 20/30

    Quantity Used 8.5 BAGS **Size** 80 bls **U/C** _____
11. **Depth to Top of Filter** 4'
12. **Type of Seal** BENTONITE PELLETS

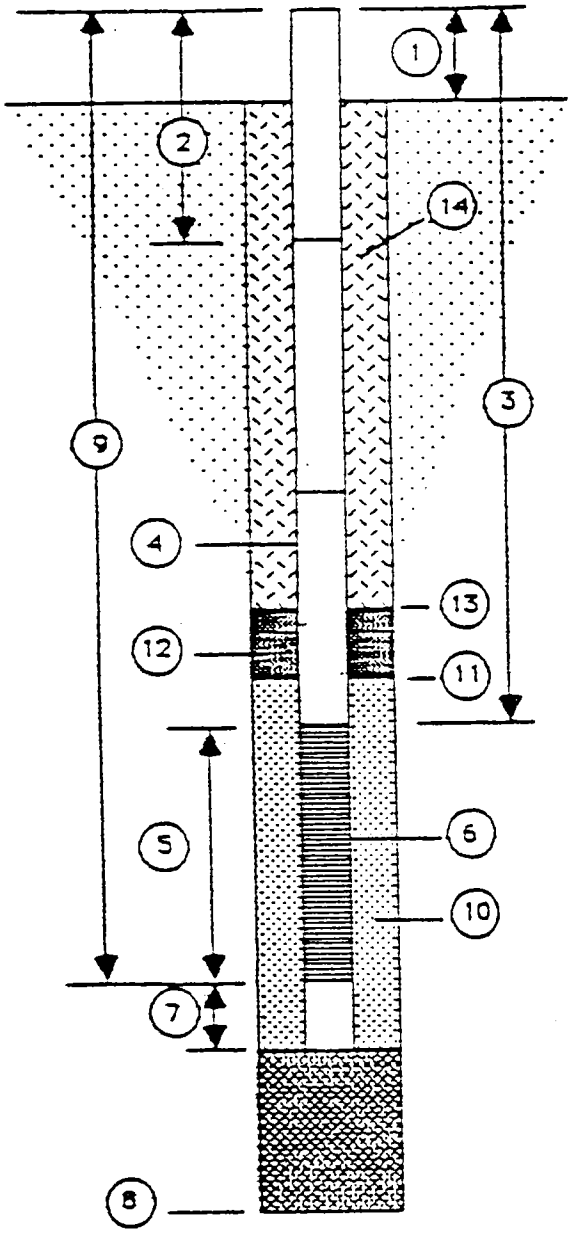
    Quantity Used 10 GALLON CONTAINER
13. **Depth to Top of Seal** 3'
14. **Type of Grout** PORTLAND

    Grout Mixture 5% BENTONITE

    Method of Placement POUR

COMMENTS ON INSTALLATION:

DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
2155 EAGLE DRIVE, P. O. Box 190010
NORTH CHARLESTON, S.C. 29419-9010



WELL CONSTRUCTION DETAILS

WELL NUMBER GPT-61-2

DATE OF INSTALLATION 1-17-96

1. **Height of Casing Above Ground** FLUSH
2. **Depth to first Coupling** 5'

   Coupling Interval Depths _____
3. **Total Length of Blank Pipe** 5'
4. **Type of Blank Pipe** 4"dia SCH 40 PVC
5. **Length of Screen** 15'
6. **Type of Screen** 4" dia SCH 40 PVC-20 SLOT
7. **Length of Sump** 0
8. **Total Depth of Boring** 20' **Hole Diameter** 8"
9. **Depth to Bottom of Screen** 20'
10. **Type of Screen Filter** 20/30

    Quantity Used 9.0 BAGS **Size** 80 bls **U/C** _____
11. **Depth to Top of Filter** 4'
12. **Type of Seal** BENTONITE PELLETS

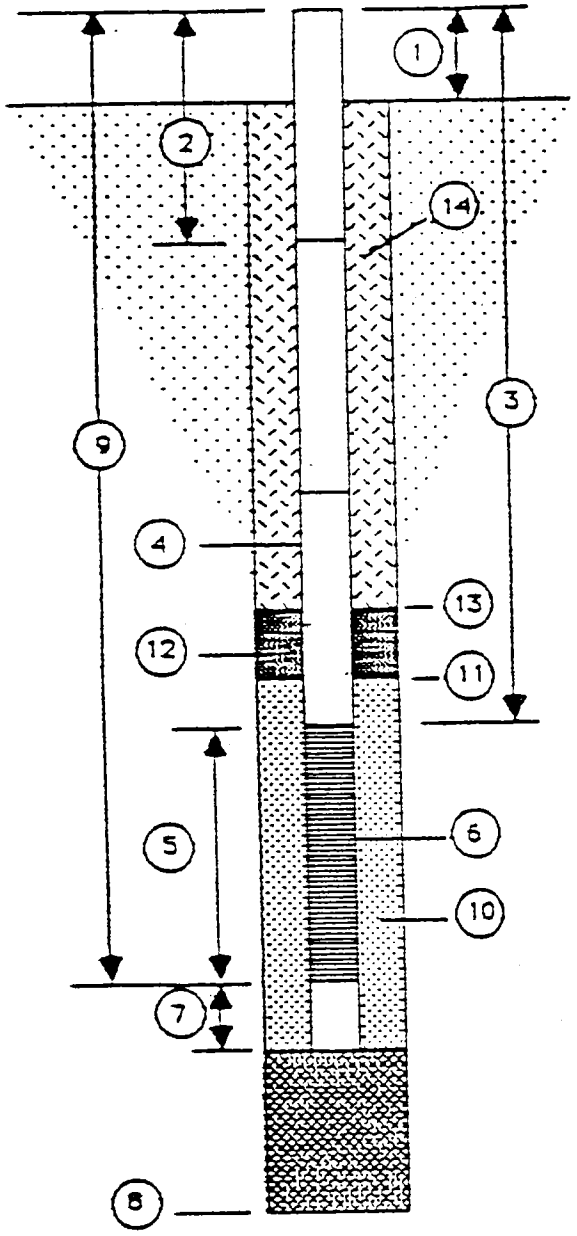
    Quantity Used 10 GALLON CONTAINER
13. **Depth to Top of Seal** 3'
14. **Type of Grout** PORTLAND

    Grout Mixture 5% BENTONITE

    Method of Placement POUR

COMMENTS ON INSTALLATION:

DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
2155 EAGLE DRIVE, P. O. Box 190010
NORTH CHARLESTON, S.C. 29419-9010



WELL CONSTRUCTION DETAILS

WELL NUMBER GPT-61-3

DATE OF INSTALLATION 1-17-96

1. **Height of Casing Above Ground** FLUSH
2. **Depth to first Coupling** 5'

   Coupling Interval Depths _____
3. **Total Length of Blank Pipe** 5'
4. **Type of Blank Pipe** 4"dia SCH 40 PVC
5. **Length of Screen** 15'
6. **Type of Screen** 4" dia SCH 40 PVC-20 SLOT
7. **Length of Sump** 0
8. **Total Depth of Boring** 20' **Hole Diameter** 8"
9. **Depth to Bottom of Screen** 20'
10. **Type of Screen Filter** 20/30

    Quantity Used 9.0 BAGS **Size** 80 bls **U/C** _____
11. **Depth to Top of Filter** 4'
12. **Type of Seal** BENTONITE PELLETS

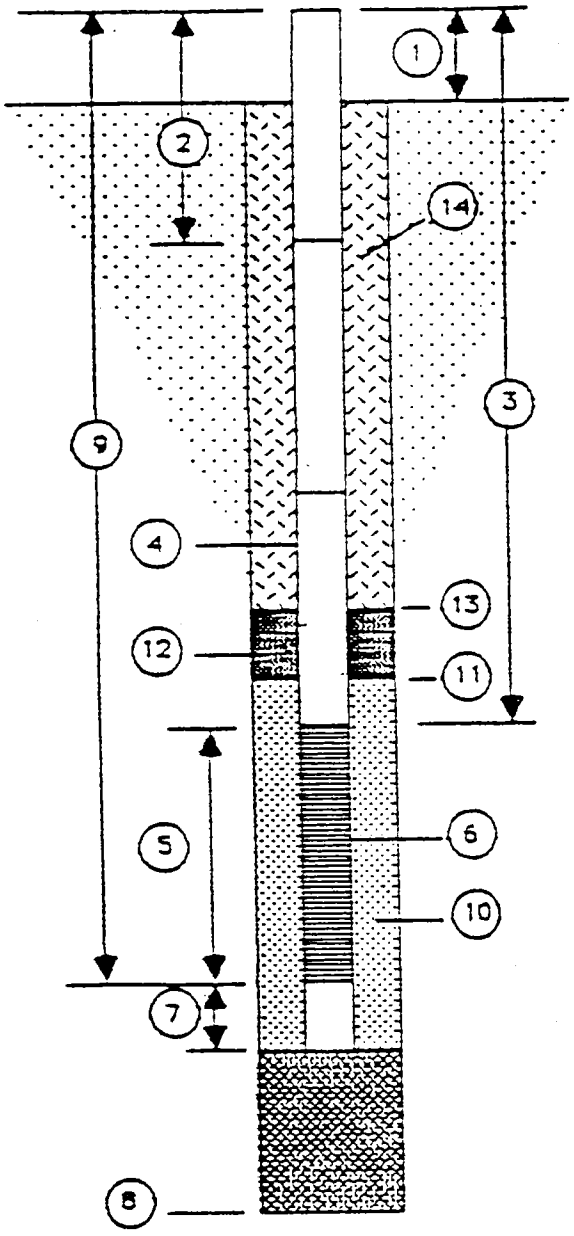
    Quantity Used 10 GALLON CONTAINER
13. **Depth to Top of Seal** 3'
14. **Type of Grout** PORTLAND

    Grout Mixture 5% BENTONITE

    Method of Placement POUR

COMMENTS ON INSTALLATION:

DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
2155 EAGLE DRIVE, P. O. Box 190010
NORTH CHARLESTON, S.C. 29419-9010



WELL CONSTRUCTION DETAILS

WELL NUMBER GPT-61-4

DATE OF INSTALLATION 1-17-96

1. **Height of Casing Above Ground** FLUSH
2. **Depth to first Coupling** 5'

   Coupling Interval Depths _____
3. **Total Length of Blank Pipe** 5'
4. **Type of Blank Pipe** 4"dia SCH 40 PVC
5. **Length of Screen** 15'
6. **Type of Screen** 4" dia SCH 40 PVC-20 SLOT
7. **Length of Sump** 0
8. **Total Depth of Boring** 20' **Hole Diameter** 8"
9. **Depth to Bottom of Screen** 20'
10. **Type of Screen Filter** 20/30

    Quantity Used 9.0 BAGS **Size** 80 bls **U/C** _____
11. **Depth to Top of Filter** 4'
12. **Type of Seal** BENTONITE PELLETS

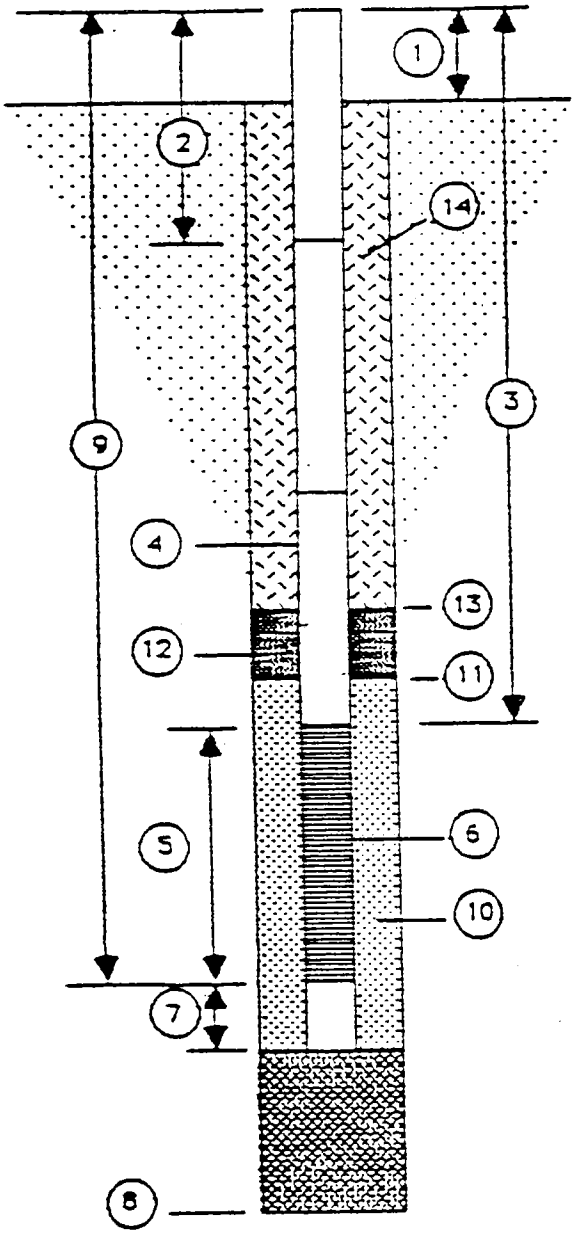
    Quantity Used 10 GALLON CONTAINER
13. **Depth to Top of Seal** 3'
14. **Type of Grout** PORTLAND

    Grout Mixture 5% BENTONITE

    Method of Placement POUR

COMMENTS ON INSTALLATION:

DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
2155 EAGLE DRIVE, P. O. Box 190010
NORTH CHARLESTON, S.C. 29419-9010



WELL CONSTRUCTION DETAILS

WELL NUMBER GPT-61-5

DATE OF INSTALLATION 1-17-96

1. **Height of Casing Above Ground** FLUSH
2. **Depth to first Coupling** 5'

   Coupling Interval Depths _____
3. **Total Length of Blank Pipe** 5'
4. **Type of Blank Pipe** 4"dia SCH 40 PVC
5. **Length of Screen** 15'
6. **Type of Screen** 4" dia SCH 40 PVC-20 SLOT
7. **Length of Sump** 0
8. **Total Depth of Boring** 20' **Hole Diameter** 8"
9. **Depth to Bottom of Screen** 20'
10. **Type of Screen Filter** 20/30

    Quantity Used 10.0 BAGS **Size** 80 bls **U/C** _____
11. **Depth to Top of Filter** 4'
12. **Type of Seal** BENTONITE PELLETS

    Quantity Used 10 GALLON CONTAINER
13. **Depth to Top of Seal** 3'
14. **Type of Grout** PORTLAND

    Grout Mixture 5% BENTONITE

    Method of Placement POUR

COMMENTS ON INSTALLATION:

APPENDIX C. LABORATORY SAMPLE RESULTS

SOIL LABORATORY DATA

MICRO-METHODS, INC.
6500 Sunplex Drive
Ocean Springs, MS 39564
(601) 875-6420

Inorganics/Organics Analysis Data Sheet

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 610205

GENERAL INFORMATION	COLLECTION DATA	REMARKS
Received: 12/22/95 **Container:** gls cont **Tef.Top :** Yes **Preserved:** No **Completed:** 1/02/96	**Date:** 12/21/95 **Time:** **By:** Client	

Index	Parameter	Units	Value 1	Value 2
Inorganics:Inorganic				
1-07-08-0335	Total Petroleum Hydrocarbon	ppm	85	

MICRO-METHODS, INC.
6500 Sunplex Drive
Ocean Springs, MS 39564
(601) 875-6420

Organics GC - MS Analysis Data Sheet
Semi-Volatile Total
Method: MS Method

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 610205

GENERAL INFORMATION	COLLECTION DATA	EXTRACTION DATA	ANALYSIS DATA
Received: 12/22/95	**Date:** 12/21/95	**Date:** 12/26/95	**Date:**12/29/95 at 16:13
Container: gls cont	**Time:**	**Ref.:** 3550	**By:** WRD
Tef.Top : Yes	**By:** Client	**By:** VS	**Inst. ID:** FID-1
Preserved: No		**Volume:** 30.0000 g	**Blank Ref:**
Matrix: Soil		**%Moisture:** 21.000	**Conc/Dil Fact:**

Index No.	Compound	Value mg/kg	Lower Detect. Limit Sample mg/kg
2-01-02-0558	TPH, MS Method	ND	.3

Surrogate	% Recovery
o-Terphenyl	78

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Inorganics/Organics Analysis Data Sheet

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 610406

GENERAL INFORMATION	COLLECTION DATA	REMARKS
Received: 12/22/95 **Container:** gls cont **Tef.Top :** Yes **Preserved:** No **Completed:** 1/02/96	**Date:** 12/21/95 **Time:** **By:** Client	

Index	Parameter	Units	Value 1	Value 2
Inorganics:Inorganic				
1-07-08-0335	Total Petroleum Hydrocarbon	ppm	49	

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Organics GC - MS Analysis Data Sheet
Semi-Volatile Total
Method: MS Method

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 610406

GENERAL INFORMATION	COLLECTION DATA	EXTRACTION DATA	ANALYSIS DATA
Received: 12/22/95	**Date:** 12/21/95	**Date:** 12/26/95	**Date:**12/29/95 at 17:01
Container: gls cont	**Time:**	**Ref.:** 3550	**By:** WRD
Tef.Top : Yes	**By:** Client	**By:** VS	**Inst. ID:** FID-1
Preserved: No		**Volume:** 30.0000 g	**Blank Ref:**
Matrix: Soil		**%Moisture:** 13.000	**Conc/Dil Fact:**

Index No.	Compound	Value mg/kg	Lower Detect. Limit Sample mg/kg
2-01-02-0558	TPH, MS Method	ND	.3

Surrogate	% Recovery
o-Terphenyl	80

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Inorganics/Organics Analysis Data Sheet

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 610506

GENERAL INFORMATION	COLLECTION DATA	REMARKS
Received: 12/22/95 **Container:** gls cont **Tef.Top :** Yes **Preserved:** No **Completed:** 1/02/96	**Date:** 12/21/95 **Time:** **By:** Client	

Index	Parameter	Units	Value 1	Value 2
Inorganics:Inorganic				
1-07-08-0335	Total Petroleum Hydrocarbon	ppm	< 10	

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Organics GC - MS Analysis Data Sheet
Semi-Volatile Total
Method: MS Method

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 610506

GENERAL INFORMATION	COLLECTION DATA	EXTRACTION DATA	ANALYSIS DATA
Received: 12/22/95	**Date:** 12/21/95	**Date:** 12/26/95	**Date:**12/29/96 at 17:40
Container: gls cont	**Time:**	**Ref.:** 3550	**By:** WRD
Tef.Top : Yes	**By:** Client	**By:** VS	**Inst. ID:** FID-1
Preserved: No		**Volume:** 30.0000 g	**Blank Ref:**
Matrix: Soil		**%Moisture:** 12.000	**Conc/Dil Fact:**

Index No.	Compound	Value mg/kg	Lower Detect. Limit Sample mg/kg
2-01-02-0558	TPH, MS Method	ND	.3

Surrogate	% Recovery
o-Terphenyl	90

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Inorganics/Organics Analysis Data Sheet

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 610610

GENERAL INFORMATION	COLLECTION DATA	REMARKS
Received: 12/22/95 **Container:** gls cont **Tef.Top :** Yes **Preserved:** No **Completed:** 1/02/96	**Date:** 12/21/95 **Time:** **By:** Client	

Index	Parameter	Units	Value 1	Value 2
Inorganics:Inorganic				
1-07-08-0335	Total Petroleum Hydrocarbon	ppm	< 10	

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Organics GC - MS Analysis Data Sheet
Semi-Volatile Total
Method: MS Method

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 610610

GENERAL INFORMATION	COLLECTION DATA	EXTRACTION DATA	ANALYSIS DATA
Received: 12/22/95	**Date:** 12/21/95	**Date:** 12/26/95	**Date:** 12/29/95 at 18:36
Container: gls cont	**Time:**	**Ref.:** 3550	**By:** WRD
Tef.Top : Yes	**By:** Client	**By:** VS	**Inst. ID:** FID-1
Preserved: No		**Volume:** 30.0000 g	**Blank Ref:**
Matrix: Soil		**%Moisture:** 17.000	**Conc/Dil Fact:**

Index No.	Compound	Value mg/kg	Lower Detect. Limit Sample mg/kg
2-01-02-0558	TPH, MS Method	ND	.3

Surrogate	% Recovery
o-Terphenyl	82

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Inorganics/Organics Analysis Data Sheet

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 610706

GENERAL INFORMATION	COLLECTION DATA	REMARKS
Received: 12/22/95 **Container:** gls cont **Tef.Top :** No **Preserved:** No **Completed:** 1/02/96	**Date:** 12/21/95 **Time:** **By:** Client	

Index	Parameter	Units	Value 1	Value 2
Inorganics:Inorganic				
1-07-08-0335	Total Petroleum Hydrocarbon	ppm	38	

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Organics GC - MS Analysis Data Sheet
Semi-Volatile Total
Method: MS Method

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 610706

GENERAL INFORMATION	COLLECTION DATA	EXTRACTION DATA	ANALYSIS DATA
Received: 12/22/95	**Date:** 12/21/95	**Date:** 12/26/95	**Date:** 12/29/95 at 19:24
Container: gls cont	**Time:**	**Ref.:** 3550	**By:** WRD
Tef.Top : No	**By:** Client	**By:** VS	**Inst. ID:** FID-1
Preserved: No		**Volume:** 30.0000 g	**Blank Ref:**
Matrix: Soil		**%Moisture:** 13.000	**Conc/Dil Fact:**

Index No.	Compound	Value mg/kg	Lower Detect. Limit Sample mg/kg
2-01-02-0558	TPH, MS Method	ND	.3

Surrogate	% Recovery
o-Terphenyl	112

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Inorganics/Organics Analysis Data Sheet

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 611010

GENERAL INFORMATION	COLLECTION DATA	REMARKS
Received: 12/22/95 **Container:** gls cont **Tef.Top :** Yes **Preserved:** No **Completed:** 1/02/96	**Date:** 12/21/95 **Time:** **By:** Client	

Index	Parameter	Units	Value 1	Value 2
Inorganics:Inorganic				
1-07-08-0335	Total Petroleum Hydrocarbon	ppm	< 10	

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Organics GC - MS Analysis Data Sheet
Semi-Volatile Total
Method: MS Method

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 611010

GENERAL INFORMATION	COLLECTION DATA	EXTRACTION DATA	ANALYSIS DATA
Received: 12/22/95	**Date:** 12/21/95	**Date:** 12/26/95	**Date:**12/29/95 at 20:11
Container: gls cont	**Time:**	**Ref.:** 3550	**By:** WRD
Tef.Top : Yes	**By:** Client	**By:** VS	**Inst. ID:** FID-1
Preserved: No		**Volume:** 30.0000 g	**Blank Ref:**
Matrix: Soil		**%Moisture:**	**Conc/Dil Fact:** 16.00

Index No.	Compound	Value mg/kg	Lower Detect. Limit Sample mg/kg
2-01-02-0558	TPH, MS Method	ND	.3

Surrogate	% Recovery
o-Terphenyl	76

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Inorganics/Organics Analysis Data Sheet

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 611110

GENERAL INFORMATION	COLLECTION DATA	REMARKS
Received: 12/22/95 **Container:** gls cont **Tef.Top :** Yes **Preserved:** No **Completed:** 1/02/96	**Date:** 12/21/95 **Time:** **By:** Client	

Index	Parameter	Units	Value 1	Value 2
Inorganics:Inorganic				
1-07-08-0335	Total Petroleum Hydrocarbon	ppm	39	

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Organics GC - MS Analysis Data Sheet
Semi-Volatile Total
Method: MS Method

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 611110

GENERAL INFORMATION	COLLECTION DATA	EXTRACTION DATA	ANALYSIS DATA
Received: 12/22/95	**Date:** 12/21/95	**Date:** 12/26/95	**Date:**12/29/95 at 20:59
Container: gls cont	**Time:**	**Ref.:** 3550	**By:** WRD
Tef.Top : Yes	**By:** Client	**By:** VS	**Inst. ID:** FID-1
Preserved: No		**Volume:** 30.0000 g	**Blank Ref:** 17
Matrix: Soil		**%Moisture:** 17.000	**Conc/Dil Fact:**

Index No.	Compound	Value mg/kg	Lower Detect. Limit Sample mg/kg
2-01-02-0558	TPH, MS Method	ND	.3

Surrogate	% Recovery
o-Terphenyl	66

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Inorganics/Organics Analysis Data Sheet

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 611210

GENERAL INFORMATION	COLLECTION DATA	REMARKS
Received: 12/22/95 **Container:** gls cont **Tef.Top :** Yes **Preserved:** No **Completed:** 1/02/96	**Date:** 12/21/95 **Time:** **By:** Client	

Index	Parameter	Units	Value 1	Value 2
Inorganics:Inorganic				
1-07-08-0335	Total Petroleum Hydrocarbon	ppm	34	

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Organics GC - MS Analysis Data Sheet
Semi-Volatile Total
Method: MS Method

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 611210

GENERAL INFORMATION	COLLECTION DATA	EXTRACTION DATA	ANALYSIS DATA
Received: 12/22/95	**Date:** 12/21/95	**Date:** 12/26/95	**Date:**12/29/95 at 21:47
Container: gls cont	**Time:**	**Ref.:** 3550	**By:** WRD
Tef.Top : Yes	**By:** Client	**By:** VS	**Inst. ID:** FID-1
Preserved: No		**Volume:** 30.0000 g	**Blank Ref:**
Matrix: Soil		**%Moisture:** 22.000	**Conc/Dil Fact:**

Index No.	Compound	Value mg/kg	Lower Detect. Limit Sample mg/kg
2-01-02-0558	TPH, MS Method	ND	.3

Surrogate	% Recovery
o-Terphenyl	74

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Inorganics/Organics Analysis Data Sheet

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 611308

GENERAL INFORMATION	COLLECTION DATA	REMARKS
Received: 12/22/95 **Container:** gls cont **Tef.Top :** Yes **Preserved:** No **Completed:** 1/02/96	**Date:** 12/21/95 **Time:** **By:** Client	

Index	Parameter	Units	Value 1	Value 2
Inorganics:Inorganic				
1-07-08-0335	Total Petroleum Hydrocarbon	ppm	87	

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Organics GC - MS Analysis Data Sheet
Semi-Volatile Total
Method: MS Method

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 611308

GENERAL INFORMATION	COLLECTION DATA	EXTRACTION DATA	ANALYSIS DATA
Received: 12/22/95	**Date:** 12/21/95	**Date:** 12/26/95	**Date:** 12/29/95 at 22:34
Container: gls cont	**Time:**	**Ref.:** 3550	**By:** WRD
Tef.Top : Yes	**By:** Client	**By:** VS	**Inst. ID:** FID-1
Preserved: No		**Volume:** 30.0000 g	**Blank Ref:**
Matrix: Soil		**%Moisture:** 21.000	**Conc/Dil Fact:**

Index No.	Compound	Value mg/kg	Lower Detect. Limit Sample mg/kg
2-01-02-0558	TPH, MS Method	ND	.3

Surrogate	% Recovery
o-Terphenyl	94

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Inorganics/Organics Analysis Data Sheet

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 611407

GENERAL INFORMATION	COLLECTION DATA	REMARKS
Received: 12/22/95 **Container:** gls cont **Tef.Top :** Yes **Preserved:** No **Completed:** 1/02/96	**Date:** 12/21/95 **Time:** **By:** Client	

Index	Parameter	Units	Value 1	Value 2
Inorganics:Inorganic				
1-07-08-0335	Total Petroleum Hydrocarbon	ppm	991	

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Organics GC - MS Analysis Data Sheet
Semi-Volatile Total
Method: MS Method

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** 611407

GENERAL INFORMATION	COLLECTION DATA	EXTRACTION DATA	ANALYSIS DATA
Received: 12/22/95	**Date:** 12/21/95	**Date:** 12/26/95	**Date:**12/29/95 at 23:22
Container: gls cont	**Time:**	**Ref.:** 3550	**By:** WRD
Tef.Top : Yes	**By:** Client	**By:** VS	**Inst. ID:** FID-1
Preserved: No		**Volume:** 30.0000 g	**Blank Ref:**
Matrix: Soil		**%Moisture:** 23.000	**Conc/Dil Fact:**

Index No.	Compound	Value mg/kg	Lower Detect. Limit Sample mg/kg
2-01-02-0558	TPH, MS Method	137.7	.3

Surrogate	% Recovery
o-Terphenyl	322

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Organics GC - MS Analysis Data Sheet
Semi-Volatile Total
Method: MS Method

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** LAB BLANK MM# 42183-92

GENERAL INFORMATION	COLLECTION DATA	EXTRACTION DATA	ANALYSIS DATA
Received: **Container:** **Tef.Top :** **Preserved:** **Matrix:**	**Date:** **Time:** **By:**	**Date:** **Ref.:** **By:** **Volume:** **%Moisture:**	**Date:**12/30/95 at 00:13 **By:** WRD **Inst. ID:** FID-1 **Blank Ref:** 527 **Conc/Dil Fact:**

Index No.	Compound	Value mg/kg	Lower Detect. Limit Sample mg/kg
2-01-02-0558	TPH, MS Method	ND	.3

Surrogate	% Recovery
o-Terphenyl	90

MICRO - METHODS
1/02/96 Sample Information Report Time: 2:10 pm

Micro-Methods Inc.
P.O. Box 849
6500 Sunplex Dr.
Ocean Springs, MS 39564

TEL: (601) 875-6420
FAX: (601) 875-6423
BBS: Call

****

M-M Lab#:
Client: Naval Const. Batallion Ctr. (NCBC)
Contact: Gary Broome Tel.: (601)871-2026 Ext.:
Sample ID: Matrix: Soil
Sample Date: 12/21/95 Time: Date Received: 12/22/95
Current Status: Comp Analysis Completion Date: 1/02/96 Time: 14:12

Sample Taken By: Client Preserved: No
Sample Iced: Yes Ambient Temp.:

Container Correctly Received: Yes Supplied By: Client
Container Size-Type: gls cont Teflon Top: Yes

Extraction Procedure: Extraction Date: By:
Sample Volume Extracted: Units:
Conc./Dilution Factor:

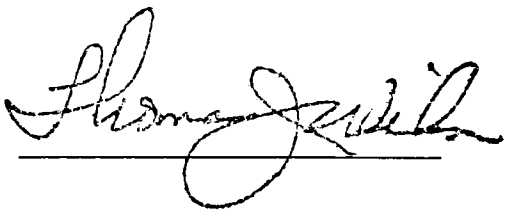
****

MICRO - METHODS
1/02/96 Wet Lab Sample Info. Report For M-M Lab #: Page 1

Client Sample Description:

	Init	Date	Time	Method
Inorganics/Organics				
Inorganics : Inorganic				
Total Petroleum Hydrocarbon				
1-07-08-0335	LN	12/26/95	15:00	EPA 418.1

Client Sample Description:

Completed By: 

GROUNDWATER LABORATORY DATA

2/26/96
5:06 pm

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Lab File#: 003-NC-02-96
MM#: 42862

Inorganics/Organics Analysis Data Sheet

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** GPT611

GENERAL INFORMATION	COLLECTION DATA	REMARKS
Received: 2/01/96 Container: 2 qt amb Tef.Top : Yes Preserved: No Completed: 2/26/96	Date: 2/01/96 Time: 10:00 By: Client	

Index	Parameter	Units	Value 1	Value 2
Inorganics:Inorganic				
1-07-08-0335	Total Petroleum Hydrocarbon	mg/l	< 5	

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Organics GC - MS Analysis Data Sheet
Volatile Total
Method: MS Method

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** GPT611

GENERAL INFORMATION	COLLECTION DATA	EXTRACTION DATA	ANALYSIS DATA
Received: 2/01/96 Container: 2 qt amb Tef.Top : Yes Preserved: No Matrix: Water	Date: 2/01/96 Time: 10:00 By: Client	Date: 2/05/96 Ref.: 3520 By: HM Volume: 1000.0000 mls %Moisture:	Date: 2/26/96 at 10:50 By: WRD Inst. ID: FID-1 Blank Ref: Conc/Dil Fact:

Index No.	Compound	Value µg/l	Lower Detect. Limit Sample µg/l
2-01-01-0558	TPH, MS Method	5.3	5

Surrogate	% Recovery
o-Terphenyl	35

2/26/96
5:08 pm

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Lab File#: 003-NC-02-96
MM#: 42863

Inorganics/Organics Analysis Data Sheet

Client: Naval Const. Batallion Ctr. (NCBC)

Sample ID: GPT612

GENERAL INFORMATION	COLLECTION DATA	REMARKS
Received: 2/01/96 Container: 2 qt amb Tef.Top : Yes Preserved: No Completed: 2/26/96	Date: 2/01/96 Time: 11:40 By: Client	

Index	Parameter	Units	Value 1	Value 2
Inorganics: Inorganic				
1-07-08-0335	Total Petroleum Hydrocarbon	mg/l	< 5	

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Lab File#: 003-NC-02-96
MM#: 42863

Organics GC - MS Analysis Data Sheet
Volatile Total
Method: MS Method

Client: Naval Const. Batallion Ctr. (NCBC)

Sample ID: GPT612

GENERAL INFORMATION	COLLECTION DATA	EXTRACTION DATA	ANALYSIS DATA
Received: 2/01/96 Container: 2 qt amb Tef.Top : Yes Preserved: No Matrix: Water	Date: 2/01/96 Time: 11:40 By: Client	Date: 2/05/96 Ref.: 3520 By: HM Volume: %Moisture:	Date: 2/26/96 at 11:33 By: WRD Inst. ID: FID-1 Blank Ref: Conc/Dil Fact:

Index No.	Compound	Value µg/l	Lower Detect. Limit Sample µg/l
2-01-01-0558	TPH, MS Method	10.5	5

Surrogate	% Recovery
o-Terphenyl	56

2/26/96
5:09 pm

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Lab File#: 003-NC-02-96
MM#: 42864

Inorganics/Organics Analysis Data Sheet

Client: Naval Const. Batallion Ctr. (NCBC)

Sample ID: GPT613

GENERAL INFORMATION	COLLECTION DATA	REMARKS
Received: 2/01/96 **Container:** 2 qt amb **Tef.Top :** Yes **Preserved:** No **Completed:** 2/26/96	**Date:** 2/01/96 **Time:** 11:15 **By:** Client	

Index	Parameter	Units	Value 1	Value 2
Inorganics:Inorganic				
1-07-08-0335	Total Petroleum Hydrocarbon	mg/l	< 5	

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Organics GC - MS Analysis Data Sheet
Volatile Total
Method: MS Method

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** GPT613

GENERAL INFORMATION	COLLECTION DATA	EXTRACTION DATA	ANALYSIS DATA
Received: 2/01/96 Container: 2 qt amb Tef.Top : Yes Preserved: No Matrix: Water	Date: 2/01/96 Time: 11:15 By: Client	Date: 2/05/96 Ref.: 3520 By: HM Volume: %Moisture:	Date: 2/26/96 at 12:17 By: WRD Inst. ID: FID-1 Blank Ref: Conc/Dil Fact:

Index No.	Compound	Value µg/l	Lower Detect. Limit Sample µg/l
2-01-01-0558	TPH, MS Method	21	5

Surrogate	% Recovery
o-Terphenyl	72

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Lab File#: 003-NC-02-9
MM#: 42865

Inorganics/Organics Analysis Data Sheet

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** GPT614

GENERAL INFORMATION	COLLECTION DATA	REMARKS
Received: 2/01/96 **Container:** 2 qt amb **Tef.Top :** Yes **Preserved:** No **Completed:** 2/26/96	**Date:** 2/01/96 **Time:** 11:00 **By:** Client	

Index	Parameter	Units	Value 1	Value 2
Inorganics:Inorganic				
1-07-08-0335	Total Petroleum Hydrocarbon	mg/l	< 5	

2/26/96
5:11 pm

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Lab File#: 003-NC-02-9
MM#: 42865

Page:

Organics GC - MS Analysis Data Sheet
Volatile Total
Method: MS Method

Client: Naval Const. Batallion Ctr. (NCBC)

Sample ID: GPT614

GENERAL INFORMATION	COLLECTION DATA	EXTRACTION DATA	ANALYSIS DATA
Received: 2/01/96	Date: 2/01/96	Date: 2/05/96	Date: 2/26/96 at 13:01
Container: 2 qt amb	Time: 11:00	Ref.: 3520	By: WRD
Tef.Top : Yes	By: Client	By: HM	Inst. ID: FID-1
Preserved: No		Volume:	Blank Ref:
Matrix: Water		%Moisture:	Conc/Dil Fact:

Index No.	Compound	Value µg/l	Lower Detect. Limit Sample µg/l
2-01-01-0558	TPH, MS Method	5.4	5

Surrogate	% Recovery
o-Terphenyl	62

2/26/96
5:12 pm

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Lab File#: 003-NC-02-9(
MM#: 42866

Inorganics/Organics Analysis Data Sheet

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** GPT615

GENERAL INFORMATION	COLLECTION DATA	REMARKS
Received: 2/01/96 **Container:** 2 qt amb **Tef.Top :** Yes **Preserved:** No **Completed:** 2/26/96	**Date:** 2/01/96 **Time:** 10:40 **By:** Client	

Index	Parameter	Units	Value 1	Value 2
Inorganics:Inorganic				
1-07-08-0335	Total Petroleum Hydrocarbon	mg/l	< 5	

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Organics GC - MS Analysis Data Sheet
Volatile Total
Method: MS Method

Client: Naval Const. Batallion Ctr. (NCBC) **Sample ID:** GPT615

GENERAL INFORMATION	COLLECTION DATA	EXTRACTION DATA	ANALYSIS DATA
Received: 2/01/96	Date: 2/01/96	Date: 2/05/96	Date: 2/26/96 at 13:45
Container: 2 qt amb	Time: 10:40	Ref.: 3520	By: WRD
Tef.Top : Yes	By: Client	By: HM	Inst. ID: FID-1
Preserved: No		Volume:	Blank Ref:
Matrix: Water		%Moisture:	Conc/Dil Fact:

Index No.	Compound	Value µg/l	Lower Detect. Limit Sample µg/l
2-01-01-0558	TPH, MS Method	5.1	5

Surrogate	% Recovery
o-Terphenyl	27

APPENDIX D. FIELD WATER CHEMISTRY/WATER LEVEL DATA

WATER CHEMISTRY DATA DURING MONITORING WELL DEVELOPMENT

Monitoring Well GPT-61-1

Depth to Water	VOLUME (GALLONS)	TEMP ('C)	pH	SP. COND. (UMOHS)	TURB.
6.12	INITIAL	18	6.54	100	CLDY
8.5	50	20	6.09	95	CLDY
9.0	100	20	6.19	95	SL CLDY

Monitoring Well GPT-61-2

Depth to Water	VOLUME (GALLONS)	TEMP ('C)	pH	SP. COND. (UMOHS)	TURB.
6.0	INITIAL	17.4	6.51	190	CLDY
12	20	17.5	7.07	140	CLDY
7.5	55	19	6.88	130	SL CLDY
12.5	100	19	6.76	130	SL CLDY
12.5	200	20	6.90	130	SL CLDY

Monitoring Well GPT-61-3

Depth to Water	VOLUME (GALLONS)	TEMP ('C)	pH	SP. COND. (UMOHS)	TURB.
6.0	INITIAL	18	6.12	130	V CLDY
11.7	100	20	6.13	130	CLDY
10.6	150	19	5.89	130	SL CLDY
9.8	200	19	6.19	120	SL CLDY

Monitoring Well GPT-61-4

Depth to Water	VOLUME (GALLONS)	TEMP ('C)	pH	SP. COND. (UMOHS)	TURB.
6.84	INITIAL	19	6.73	100	V CLDY
10.1	50	19	6.85	95	CLDY
11.3	100	19	6.78	85	CLDY
12.3	150	19	6.80	80	SL CLDY

Monitoring Well GPT-61-5

Depth to Water	VOLUME (GALLONS)	TEMP ('C)	pH	SP. COND. (UMOHS)	TURB.
7.51	INITIAL	13.5	5.85	145	CLDY
	50	16.4	6.54	130	CLDY
	100	18	6.52	140	CLDY
	150	18	6.53	130	SL CLDY

Water Levels-Jan 31, 1996

Well	Depth to Water (feet)	Depth to Product	Product Thickness	Water Elelvation (ft)
GPT-61-1	5.39	----	----	24.01
GPT-61-2	5.83	----	----	23.82
GPT-61-3	6.36	----	----	23.76
GPT-61-4	6.11	----	----	23.80
GPT-61-5	6.79	----	----	23.63

Please prepare Fed Ex labels for the following.
08568.40 RPT

These are ~~standard~~

1. Gordon Crane
   601/871-2485
   Code 17.1
   Environmental Coordinator
   NCBC
   Safety Office
   5200 CBC 2nd Street, Building 164
   Gulfport, MS 39501-5001

2. Nick Ugolini
   Code 5596
   Commanding Officer
   SOUTHNAVENGFACECOM
   2155 Eagle Drive
   North Charleston, SC 29418