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SITE ASSESSMENT REPORT REVISED TACAN FACILITY BUILDING 1917 NAS PENSACOLA FL

11/14/2006

AEROSTAR ENVIRONMENTAL SERVICES, INC.

SITE ASSESSMENT REPORT (Revised)
TACAN FACILITY, BUILDING 1917
NAVAL AIR STATION PENSACOLA
PENSACOLA, FLORIDA

Contract No. N62467-03-M-3726

PREPARED FOR:

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November 2006

LaShea Croom for — 11-14-06
Tiffany H. Whitson, Senior Project Manager — Date

Carrie L. Kruchell — 11/14/06
Carrie L. Kruchell, P.G., Senior Project Geologist — Date

your copy

DEPARTMENT OF THE NAVY
COMMANDING OFFICER
NAS PENSACOLA
190 RADFORD BLVD
PENSACOLA, FLORIDA 32508-5217

IN REPLY REFER TO
5090
Ser 00600/0584
27 Nov '06

Mrs. Tracie Bolanos
Remedial Project Manager-Technical Review Section
2600 Blaire Stone Road
Office #471f
Mail Station 4535
Tallahassee, Florida 32301

Re: REVISED SITE ASSESSMENT REPORT (SAR) - TACAN FACILITY BUILDING (1917) - NAVAL AIR STATION PENSACOLA

Dear Mrs. Bolanos:

Enclosed are two hard copies of the subject report for the diesel fuel leak at the Tacan Facility (Building 1917) located at Naval Air Station, Pensacola, Florida. If you have any questions, please contact William H, Taylor, Jr., at (850) 452-4611 (ext. 3100) or Greg Campbell, P.E., of my staff at 452-4611 (ext. 3103).

Sincerely,

William H. Taylor Jr

WILLIAM H. TAYLOR, JR.
Environmental Officer
By direction
the Commanding Officer

Enclosure
Cc: William Hill (Southdiv)

CERTIFICATION

PROFESSIONAL GEOLOGIST LICENSED IN THE STATE OF FLORIDA

This is to certify that the **Site Assessment Report (Including Supplemental Site Assessment Data) for the TACAN Facility, Building 1917, Naval Air Station Pensacola, Florida**, has been prepared under the direct supervision of the undersigned.

Signed: Carrie L. Kruchell

Carrie L. Kruchell, P.G.
State of Florida Professional Geologist No. PG2289
Date Signed: 11/14/06

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1.0 SITE DESCRIPTION & SITE HISTORY

Aerostar Environmental Services, Inc. (AEROSTAR), on behalf of Naval Air Station Pensacola (NASP) Environmental Department, is submitting this revised Site Assessment Report (SAR) documenting the findings of the initial site assessment (ISA) and supplemental site assessment (SSA) activities performed at the Tacan Facility (Building 1917). The ISA and SSA activities were performed due to the discovery of a release of diesel fuel on October 29, 2002, at the Tacan Facility. Reportedly, the day tank that was used to supply fuel to the emergency generator overflowed. The amount of diesel product released is unknown.

1.1 SITE DESCRIPTION

The Tacan Facility (Building 1917) is located next to the Forrest Sherman Field airfield at NASP, which is located on the western side of Pensacola Bay, approximately two miles south of Pensacola, Escambia County, Florida **(Figure 1-1)**. The Tacan Facility (Building 1917), herein referred to as the subject site, is located adjacent to and northeast of the runway at the Forrest Sherman Field airfield as shown on the Fort Barrancas, Florida, U.S. Geological Survey 7.5-minute Series topographic quadrangle map **(Figure 1-2)**. A vicinity site location map is provided as **Figure 1-3**.

The subject site consists of a single two-room building of masonry block construction. One room houses radar navigation electronics, and the other room houses an emergency generator necessary for power outages. There is a 560-gallon aboveground storage tank (AST) in secondary containment located adjacent to the northeast corner of the building. This AST contains diesel fuel used to supply fuel to the emergency generator. An electrical transformer and underground electrical substation manhole is located adjacent to the east side of the building for supplying electrical power to the building. A 30-foot tall Tacan radar tower is located adjacent to the west side of the building. An air conditioning unit is located adjacent to the northwest corner of the building. An asphalt easement/driveway is located on the south side of the building. The building compound is surrounded by a security fence and locking gate. A Site Plan map depicting the features of the subject site is provided as **Figure 1-4**.

1.2 SITE HISTORY

Building 1917 was constructed in 1957. Original drawings indicate that an AST reportedly used to contain diesel product, was installed on the southeast corner of the building in 1957. Drawings indicate that the original AST was removed sometime between November 18, 1986, and July 22, 1987, and replaced with the AST presently

at the site. The emergency generator, located in the easternmost room of the building, also has a day tank, which receives fuel from the AST and then supplies fuel to the emergency generator. Diesel fuel was found inside the generator room and outside the building to the south-southeast during a routine maintenance inspection of the generator on October 29, 2002. Due to excessive rainfall, the groundwater table in the vicinity of the generator is suspected to have risen to land surface, thus allowing diesel fuel to seep through cracks in the concrete slab floor and then flow outside the building. The actual date, cause, and quantity of diesel fuel released into the groundwater are unknown. The suspected cause of the spill was likely due to an overflow of diesel fuel from the day tank supplying the fuel to the emergency generator located inside the building. However, no witnesses were present during the release to confirm this actually occurred.

The release was reported to the Florida Department of Environmental Protection (FDEP) on October 29, 2002. A copy of the discharge reporting form (DRF) is provided in **Appendix A**. According to historical file review information, BARCOR Enterprises, Inc. (BARCOR) excavated approximately 38.21 tons of diesel-contaminated soil at the site between February 10 and 11, 2003. A source removal report was submitted to FDEP in Tallahassee, Florida, on March 3, 2003, detailing the contaminated soil removal activities. An organic vapor analyzer with flame ionization detector (OVA-FID) was utilized to monitor the soil vapors during excavation activities. Soils which produced vapor readings on the OVA-FID at levels greater than ten (10) parts per million (ppm) were removed, according to historical reports. A copy of the source removal report prepared by BARCOR is provided in **Appendix B**.

2.0 INITIAL SITE ASSESSMENT METHODOLOGY

NASP Environmental Department contracted AEROSTAR in September 2003 to provide soil and groundwater site assessment activities for the subject site. ISA activities included the installation of soil borings and groundwater monitoring and recovery wells, as well as the collection of soil samples for vapor screening, and soil and groundwater samples for laboratory analysis. All fieldwork was to be conducted under the guidelines of Chapter 62-770, Petroleum Contamination Site Cleanup Criteria, of the Florida Administrative Code (F.A.C.). Analytical results for soil and groundwater samples collected were compared to the *Soil Cleanup Target Levels* (SCTLs) and *Groundwater Cleanup Target Levels* (GCTLs) in accordance with Chapter 62-777, F.A.C. Prior to the commencement of field activities, AEROSTAR prepared a site-specific health and safety plan (HASP), a copy of which is provided as **Appendix C**.

On September 17, 2003, AEROSTAR mobilized to the site to perform soil boring installations in order to conduct soil vapor "headspace" analysis and to collect soil samples for confirmatory laboratory analysis. An AEROSTAR geologist, under the direction of Mr. Greg Campbell, P.E., NASP, led the AEROSTAR field personnel performing the contract work for the Navy. Thirty-three soil borings (SB-1 through SB-33) were installed across the site to a maximum depth of three (3) feet below land surface (ft-bls), in order to assess soils above the surficial water table.

Upon completion of soil boring activities, groundwater monitoring and recovery wells were installed during September 17-19, 2003. Ten shallow monitoring wells (MW-1 through MW-10) were installed in pre-determined locations to a total depth approximating twelve (12) ft-bls. Three recovery wells (RW-1 through RW-3) were also installed during this period to a total depth approximating seven (7) ft-bls.

Upon completion of monitoring well installations, aquifer "slug" tests were performed in order to gather characteristic data specific to the underlying surficial aquifer. Depth-to-water (DTW), and total well depth measurements were also collected. Top-of-casing (TOC) elevations were surveyed for all wells installed at the site. Sampling was conducted in adherence with FDEP-approved soil and groundwater sampling guidelines.

Aerostar was subsequently contracted in August 2005 to assist in the report preparation documenting the field activities performed in 2003 for submittal to FDEP.

2.1 QUALITY ASSURANCE

Site assessment activities were conducted in accordance with FDEP-approved Standard Operating Procedures (SOP). All equipment used to advance soil borings, install monitoring and recovery wells, and to collect samples, was decontaminated prior to and following each use. Investigative derived wastes (IDW) generated during well installation and development activities was containerized in 55-gallon drums, labeled, and staged for proper disposal. Soil and groundwater samples were collected in pre-prepared laboratory vials and jars, some having preservative, and sent under chain-of-custody (COC) to Severn Trent Laboratories, Inc. (STL), in Pensacola, Florida, for analysis. All fieldwork conducted as part of this site assessment, was documented in field books for later transfer to FDEP-approved logs.

2.2 SOIL ASSESSMENT & SAMPLING ACTIVITIES

Thirty-three soil borings (SB-1 through SB-33) were installed across the site to a maximum depth of three (3) feet below land surface (ft-bls), in order to assess soils above the surficial water table. Soil boring locations can be referenced in **Figure 2-1**. Soil borings were installed by both *direct push technology* (DPT) using a DPT rig, and by hand, using a stainless steel hand auger. Soils in each location were collected from above the water table for screening of petroleum-related hydrocarbons using a Health Tech, Inc., Porta-Flame OVA-FID. "Headspace analysis", in accordance with Chapter 62-770, F.A.C. protocol, was utilized for screening soils for petroleum vapor content. The soil samples were collected by filling two 16-ounce glass jars ½-way with soil, leaving sufficient room in each jar for vapors to accumulate, and sealing each jar with aluminum foil. Jars were allowed to equilibrate for a period of not less than 15 minutes. The OVA-FID probe was inserted into the first jar; if the first split sample resulted in a "positive" response (>10 ppm), a carbon-filtered probe was used to measure naturally-occurring methane vapors in the second jar. Filtered concentrations were then subtracted from the total vapor concentration to determine each sample's net petroleum-related vapor content.

In addition, continuous borings were advanced using a hollow stem auger (H.S.A.) attachment to the DPT drill rig for monitoring and recovery wells. Well boreholes were advanced from land surface to the depth of the well in order to describe lithology. Soil type, color, moisture content and OVA-FID results (for intervals above the surficial water table) were recorded for each borehole. Soil boring logs are provided for reference in **Appendix D**.

Three soil samples were collected from the subject site on September 19, 2003 for confirmatory laboratory analysis representative of the "low, medium, and high" OVA-FID in accordance with Chapter 62-770, F.A.C. guidance. One representative "high" soil

sample was collected from soil boring SB-2 at 1-2 ft-bls (SB-2 2/2'); one representative "medium" soil sample was collected from SB-4 at 1-2 ft-bls (SB-4/2'); and, one representative "low" soil sample was collected from SB-21 at 1 ft-bls (SB-21/1'). All soil samples were sent to STL for analysis by Environmental Protection Agency (EPA) Method 8021B for *volatile organic aromatics* (VOA), and EPA Method 8270C for *polynuclear aromatic hydrocarbons* (PAH), and by the Florida Pro (FL-PRO) Method for *total recoverable petroleum hydrocarbons* (TRPH).

2.3 GROUNDWATER ASSESSMENT & SAMPLING ACTIVITIES

Following the soil boring activities, ten (10) shallow groundwater monitoring wells (MW-1 through MW-10) and three (3) groundwater recovery wells (RW-1 through RW-3) were installed at the site on September 18 and 19, 2003. The monitoring wells were installed in order to assess the groundwater quality, collect hydrogeological data, and define the horizontal extent of the groundwater contaminant plume resident in the surficial aquifer beneath the subject site. Recovery wells were installed in close proximity to the suspect "source" area in order to conduct a variety of remedial techniques geared to remove "free product" from groundwater. Historical release data and current soil screening data obtained during the soil boring investigation were used to determine the optimum number and location of the groundwater wells. Monitoring and recovery well locations can be referenced in **Figure 2-2**.

The monitoring well borings were advanced by a truck-mounted DPT rig utilizing a 4.25-inch inside diameter (ID) H.S.A. The resultant borehole diameter was approximately 8.25-inches. Each monitoring well was constructed of 2-inch ID flush-threaded, Schedule 40 *polyvinyl chloride* (PVC) riser and 2-inch 0.010-inch slotted PVC well screen with a 6-inch point PVC cap. The shallow wells were installed as "stick-up" wells, having approximately 3-ft of PVC riser casing above land surface, and approximately 2-ft of PVC riser casing between land surface and the top of the well screen, culminating with 10-ft of 0.010-inch slotted PVC well screen to a depth of approximately 12 ft-bls in each borehole. The annulus around each well was filled from bottom to approximately one foot above the top of the screen with U.S. Standard Sieve size 20/30 silica sand, followed by 0.5-ft of bentonite seal. The remainder of the annulus was grouted to the surface with neat cement. Each well was secured with a locking watertight cap. Site-specific shallow well construction details are illustrated in **Figure 2-3**. Monitoring well construction details are summarized in **Table 2-1**. All IDW generated during monitoring well installation were collected into 55-gallon drums for later transportation and disposal (T&D) to a licensed, permitted facility based on OVA-FID screening and laboratory analytical results.

The recovery well borings were advanced by a truck-mounted DPT rig utilizing a 4.25-inch inside diameter (ID) H.S.A. The resultant borehole diameter was approximately 8.25-inches. Each well was constructed with 4-inch ID flush-threaded, Schedule 40 PVC riser and 0.010-inch slotted PVC well screen with a 6-inch point cap. The recovery wells were installed to a total depth of approximately 7 ft-bls, having approximately 2-ft of riser casing following by 5-ft of well screen in order to bracket the water table. The annulus around each well was filled approximately from the bottom of the borehole to approximately one foot above the top of the screen with U.S. Standard Sieve size 20/30 silica sand, followed by a 0.5-ft bentonite seal. The remainder of the annulus was grouted to the surface with neat cement. Each well was secured with a locking 4-inch watertight cap. A typical recovery well construction diagram is illustrated in **Figure 2-4**. Recovery well construction details are summarized in **Table 2-1**. All IDW generated during recovery well installation were collected into 55-gallon drums for later transportation and disposal (T&D) to a licensed, permitted facility based on OVA-FID screening and laboratory analytical results.

After the grout had been allowed to cure, a centrifugal pump was utilized to develop the monitoring and recovery wells. Groundwater physical parameters were monitored during development. Each monitoring and recovery well had excellent transmissivity and water was extracted from the wells until clear water was observed. All development water was collected into 55-gallon drums for T&D to a licensed, permitted facility based on laboratory analytical results.

On September 23, 2003, groundwater samples were collected from the ten newly-installed monitoring wells (MW-1 through MW-10) to evaluate groundwater quality in the surficial aquifer beneath the subject site. Groundwater samples were collected in accordance with FDEP's groundwater sampling SOP protocol. Prior to sample collection, wells were purged of approximately three well volumes of groundwater using a peristaltic pump and dedicated Teflon™ tubing. Temperature, pH, specific conductance, dissolved oxygen concentration, turbidity, color and odor were monitored as the wells were purged. Samples were submitted to STL for analysis by EPA Methods 8260B for VOA/VOH, 8270C for *polynuclear aromatic hydrocarbons* (PAH), 6010B for lead, 8011 for *ethylene dibromide* (EDB), and by the FL-PRO Method. FDEP groundwater sampling logs are provided in **Appendix E**.

2.4 AQUIFER CHARACTERIZATION ACTIVITIES

Groundwater data was collected during the site investigation to evaluate the physical characteristics of the surficial aquifer beneath the subject site in order to make informed predictions about contaminant fate and transport. Groundwater elevations were determined from static water level measurements and a well TOC elevation survey. Hydraulic conductivity (K-values) for the shallow surficial aquifer was calculated from measurements made during the performance of "slug" tests in selected monitoring wells at the site.

The site and TOC survey was performed by Empire Land Surveying, Inc. on October 17, 2003 (order #348-03). Initially, a reference point was marked along the north side of the top of each monitoring well casing. The elevations of the reference points were surveyed to the nearest 0.01 foot, relative to the elevation above a referenced benchmark set at an assumed elevation of 100 feet above mean sea level (amsl). The referenced benchmark is the north top of casing of recovery well RW-1.

DTW and depth-to-product measurements were taken from monitoring wells and recovery wells, respectively, on September 23, 2003. Measurements were taken from the north sides of the TOCs using an electronic water level indicator and oil/water interface probe, respectively. Static water level measurements were made to the nearest 0.01 foot. Groundwater elevations (GWE) were calculated by subtracting the DTW measurements from the TOC elevations at each well. **Figure 2-5** illustrates the estimated direction of groundwater flow of the surficial aquifer beneath the subject site on September 23, 2003, based on GWE calculations. Average DTW for September 2003 was approximately 2.64 ft-bls. **Table 2-2** provides TOC, DTW and GWE data collected on September 23, 2003.

"Slug" tests were conducted in order to characterize the site-specific hydraulic conductivity (K) of the surficial aquifer beneath the subject site. Three shallow monitoring wells (MW-4, MW-7 and MW-8) were chosen as slug-test wells based on their triangular spacing and location outside of the suspect source area. Prior to conducting the tests, all monitoring wells were opened and allowed to equilibrate to ambient pressure conditions. Upon water level stabilization across the site, the static water levels and total well depths were recorded and used to calculate the height of the water column in each well. A pressure transducer and a solid slug were then inserted into the well being tested, and the water level and temperature were allowed to re-stabilize. The pressure transducer was connected to a laptop computer to record water levels in the well. At the beginning of the test, the slug was slowly and steadily pulled out of the well (slug-out, or rising head test) and the laptop computer was started. All wells were tested using this method. The rising head method is commonly used for well screens that straddle the water table. The cascading effect within the filter pack is thus minimized. The laptop computer recorded the recovery of water level in the well back to the static level. The recovery data was then analyzed following the Bouwer and Rice (1976) method for unconfined aquifers using a computer program. The program was used to calculate the hydraulic conductivity (K) of the shallow aquifer. Results are reported below. These values for K should be considered to be approximations of the hydraulic conductivity since the tests reflect localized conditions only.

3.0 GEOLOGY AND HYDROGEOLOGY

Data collected during the site assessment was used to evaluate geologic and hydrogeologic conditions at the site that may influence the fate and transport of hydrocarbons released to the environment. Lithology and stratigraphy were described for the vadose zone, smear zone and shallow surficial aquifer at the site. Aquifer properties evaluated as part of the site assessment included DTW, GWE, groundwater flow direction, gradient (i), and hydraulic conductivity (K), and transmissivity of the shallow water-bearing zone. Potable water supply wells and surface water bodies in the vicinity of the site were located as potential groundwater exposure paths.

3.1 GEOLOGY

Interpretation of site lithology and stratigraphy was based on visual examination of soil cores collected from soil boring and monitoring well installation activities. The typical lithology at the site appears to be dark brown to reddish-brown (orange), fine-to-medium-grained sand, some silty-sand, from land surface to 2.5 ft-bls; and dark brown to brown, silty-to-medium-grained sand from 2.5 ft-bls to approximately 12 ft-bls. No potential confining or semi-confining layers were encountered during the site assessment.

Regionally, the surface lithology is consistent with correlation to the Pleistocene Terrace deposits and Citronelle Formation (Undifferentiated). This stratigraphic unit is described as sand with lenses of clay and gravel. The sand is light-yellowish brown to reddish brown color, very fine to very coarse and poorly sorted. Logs and carbonaceous zones are present in places. Fossils are extremely rare except near the coast (Marsh, 1966). These formations, together with the underlying Miocene Coarse Clastics, make up the surficial Sand and Gravel Aquifer. The Pensacola Clay Aquiclude, underlying the Miocene Coarse Clastics, would be the lower-confining unit for the area. These Miocene clays are interpreted to be encountered approximately 400 to 600 feet below sea level in the vicinity of the NASP (Marsh, 1966).

3.2 HYDROGEOLOGY

Hydrogeologic data was collected during the site assessment to evaluate movement of groundwater in the shallow surficial aquifer at the site. DTW and GWE measurements were used to determine the groundwater flow direction and water table gradient (i) at the site. Hydraulic conductivity (K-values) for the shallow surficial aquifer were calculated from data collected during the slug tests. Groundwater flow velocity at the site was estimated from the K-values and i-values.

Depth-to-product was measured in recovery wells RW-1 through RW-3 in September 2003. Measurements were taken from the reference points marked along the north sides of the tops of well casings using an oil/water interface probe. The thickness of the free product above the static water table was measured to the nearest 0.01 foot.

DTW measurements were taken from monitoring wells from the reference points marked along the north sides of the tops of well casings using an electronic water level indicator. Static water level measurements were made to the nearest 0.01 foot. DTW for September 2003 was approximately 2.64 ft-bls.

Groundwater elevations (GWE) were calculated by subtracting the DTW measurements from the TOC elevations at each well. GWE calculations were used to draw groundwater elevation contours. Flow arrows were drawn perpendicular to contours and in the direction of lowest "head" or elevation. The estimated direction of groundwater flow for the subject site was toward the east-southeast during September 2003.

An average water table gradient (i) was calculated from using the difference in water table elevation data (in feet) from one well to the other, from higher to lower elevation, and dividing it by the distance (in linear feet) from one well to the other. Monitoring wells MW-4, MW-5 and MW-1 were chosen due to their positions at the subject site along an imaginary line parallel to the calculated flow direction. The calculations used to derive the average water table gradient are as follows:

$$\mathbf{i_1 = \frac{dh\ (MW\text{-}4 - MW\text{-}1)}{dl\ (MW\text{-}4\ to\ MW\text{-}1)}}$$

and

$$\mathbf{i_2 = \frac{dh\ (MW\text{-}5 - MW\text{-}1)}{dl\ (MW\text{-}5\ to\ MW\text{-}1)}}$$

(i_1 = 0.0013) + (i_2 = 0.0023), divided by 2 = ***[i_{Avg} = 0.0018 (ft/ft)]***

Where:
i = hydraulic gradient
dh = delta h = change in height (ft) of the water table from Well 1 to Well 2
and,
dl = change in length or distance (ft) between Well 1 and Well 2 on the map
(Note: Results are absolute values)

Hydraulic conductivity (K) values for the site were calculated from the October 6, 2003 slug test data from monitoring wells MW-4, MW-7 and MW-8. Slug test data are summarized below and contained in **Appendix F**.

During the slug tests, recovery data was recorded until conditions of approximately 90 percent of the initial water level were achieved. The recovery data was then analyzed following the Bouwer and Rice (1976) method for unconfined aquifers using computer program. The program was used to calculate the hydraulic conductivity (K) of the shallow aquifer.

The slug test results for the three shallow monitoring wells show K ranges between 13.16736 ft/day for MW-4, to 7.41748 ft/day for MW-7, to 13.83264 ft/day for MW-8. The arithmatic mean of K for the three shallow wells at the site is 11.472 ft/day.

Site specific transmissivity values were calculated from the hydraulic conductivity by using the following equation.

$$T=Kb$$

Where:

T = transmissivity

K = hydraulic conductivity

b = affected aquifer thickness

The shallow surficial aquifer was estimated to have a saturated thickness of 90 feet. Using a hydraulic conductivity of 11.472 ft/day, the arithmatic mean for the three shallow wells, and 90 feet for the affected aquifer thickness, the Transmissivity value calculated is approximately 1,032.5 square feet per day (ft^2/day).

Potential movement of groundwater at the site may be described in terms of transportation by natural flow in the saturated zone while assuming groundwater flow follows Darcy's Law. Darcy's Law may be expressed as:

$$V = (Ki)/n$$

Where:

V = average seepage velocity

K = hydraulic conductivity

n = effective porosity

i_{Avg} ***= average hydraulic gradient***

Data from soil borings advanced during the soil investigation indicate that fine to medium coarse grain sands are the typical lithologies at the site. Review of standard literature suggests that a representative effective porosity for this lithology is approximately 30%.

Using an average hydraulic conductivity of 11.472 ft/day, and average hydraulic gradient of 0.0018 ft/ft, an effective porosity value of 30%, and Darcy's Equation, the estimated groundwater seepage velocity averaged across the site was calculated at 0.0688 ft/day.

Three water wells at NASP provide an emergency backup potable water supply to NAS. These wells have typically been used as fire fighting water supply sources. One of the potable water supply wells (designated as well No. 3) has been abandoned. The remaining two potable water supply wells located at NASP, designated as Wells No. 1 and No. 2, are indicated on **Table 3-1** and are two miles or more from the Tacan Facility. The two wells are not currently used for potable water supplies but instead used for fire fighting water supply sources. Both wells at NASP are screened in the main producing zone of the sand-and-gravel aquifer at depths ranging from 105 to 160 ft-bls. The main source of water for NASP is a Navy-owned well field located at the

Naval Technical Training Center (NTTC), Corry Station. The water from this well field is pumped from the sand-and-gravel aquifer.

The nearest naturally-occurring surface water body in the vicinity of the site is Bayou Grande located approximately 3,300 feet (0.625 miles) north of the site. Pensacola Bay is located approximately 6,500 feet, or 1.23 miles south-southeast of the subject site.

4.0 INITIAL SITE ASSESSMENT RESULTS

4.1 Soil Assessment Results

Thirty-three soil borings (SB-1 through SB-33) were advanced in the vicinity of the subject site during the initial site assessment phase. Soil samples were collected at 1-to-1.5 foot intervals from land surface to a maximum depth of 3 ft-bls at each soil boring location for headspace screening (**Table 4-1**). The surficial water table was visually observed at a depth of 2-to-3 ft-bls during the investigation. **Figure 4-1** depicts soil boring locations and their respective net headspace screening results at the 0-to-1 ft-bls interval. **Figure 4-2** depicts soil boring locations and their respective net headspace screening results at the 1-3 ft-bls interval.

Soil samples from 13 of the soil borings (SB-1 through SB-5, SB-10, SB-13, SB-14, SB-17, SB-20, SB-21, SB-30) had net headspace screening results greater than 50 ppm. Soil samples were collected from soil borings: SB-2 (1-2 ft-bls), SB-4 (1-2 ft-bls), and SB-21 (0-1 ft-bls) for laboratory analysis. Of the three soil samples collected for analysis, only soil boring SB-2 (1-2 ft-bls) yielded exceedances of FDEP SCTLs, according to Chapter 62-777, F.A.C., for benzene, ethylbenzene, total xylenes and TRPH. **Figure 4-3** illustrates the soil laboratory analytical results for VOAs in the soil samples collected for confirmatory analysis. **Figure 4-4** illustrates the laboratory analytical results for PAHs, and **Figure 4-5** illustrates the laboratory analytical results for TRPHs in the soil samples collected for analysis. **Table 4-2** lists the soil laboratory analytical results, and **Appendix G** provides a copy of the soil laboratory analytical report and chain-of-custody (COC) from STL.

4.2 Groundwater Analytical Results

Laboratory analytical results of the groundwater sample collected from monitoring well MW-2 yielded benzene, ethylbenzene, total xylenes and TRPHs in concentrations above their respective GCTLs, according to Chapter 62-777, F.A.C. Benzene was reported at a concentration of 3.4 ug/L, ethylbenzene at a concentration of 37 ug/L, and total xylenes were reported at a concentration of 250 ug/L. Total TRPH constituents were reported at a concentration of 5,500 ug/L; diesel range organics (DRO) were reported a level of 4,900 ug/L, and gasoline range organics (GRO) were reported a level of 600 ug/L. No other constituents yielded concentrations above their respective GCTLs, according to the laboratory analytical report from STL. **Figure 4-6** illustrates total BTEX and TRPH concentrations in the groundwater. **Table 4-3** lists the laboratory analytical results for the groundwater samples, and **Appendix H** provides a copy of the groundwater laboratory analytical report and COC from STL.

5.0 INITIAL SITE ASSESSMENT SUMMARY AND RECOMMENDATIONS

On behalf of NASP Environmental Department, AEROSTAR conducted an ISA in order to assess soil and groundwater at the Tacan Facility (Building 1917) related to a reported release of diesel product in 2002.

Based on laboratory analytical results, soils in the vicinity of soil boring SB-2 yielded exceedances of SCTLs, and groundwater in the vicinity of monitoring well MW-2 yielded contaminant concentrations above their respective GCTLs.

AEROSTAR recommended SSA activities in order to delineate the soil and groundwater surrounding impacted monitoring well MW-2. AEROSTAR recommended installing three additional shallow monitoring wells and one deep, double-cased monitoring well in predetermined locations (**Figure 4-7 – Proposed Monitoring Well Location Map**) in order to collect soil and groundwater samples for confirmatory laboratory analysis.

The results of the SSA are presented in the following sections.

6.0 SUPPLEMENTAL SITE ASSESSMENT METHODOLOGY

NASP Environmental Department contracted AEROSTAR in May 2006 under Amendment/Modification No. P00003 of Contract Order No. N62467-03-M-3728, to provide SSA activities for the subject site upon approval of the SAR by FDEP. SSA activities included the installation of groundwater monitoring wells and the collection of groundwater samples for confirmatory laboratory analysis. All fieldwork was conducted under the guidelines of Chapter 62-770, Petroleum Contamination Site Cleanup Criteria, of the F.A.C. Analytical results for groundwater samples collected were compared to the GCTLs in accordance with Chapter 62-777, F.A.C. Prior to the commencement of field activities, AEROSTAR prepared an Excavation Permit and conducted a utility locate as specified under Permit No. 06-405 JY8FL. A copy of the excavation permit is provided as **Appendix I**.

On September 5-6, 2006, AEROSTAR mobilized to the site to perform monitoring well installations. Ms. Carrie Kruchell, P.G., and Mr. Keith Dasinger, Staff Scientist, AEROSTAR, performed oversight for field personnel performing the contract work for the Navy. Three shallow wells (MW-11, MW-12 and MW-13) and one deep, double-cased well (DW-1) were installed in predetermined locations across the site by Singley Environmental and Remediation Services, Inc., under the guidance of AEROSTAR. Shallow wells were constructed as 2-inch in diameter wells to an average depth of 11 ft-bls, with 10-ft of 0.010 slotted screen, and 3-ft of aboveground smooth riser casing. Deep well DW-1 was installed to a depth of approximately 25-ft, with 5-ft of screen and 3-ft of aboveground riser casing; the 6-inch in diameter outer casing was installed from land surface to a depth of 20 ft-bls. The annulus around each well was filled from bottom to approximately one foot above the top of the screen with U.S. Standard Sieve size 20/30 silica sand, followed by 0.5-ft of bentonite seal. The remainder of the annulus was grouted to the surface with neat cement. Each well was secured with a locking watertight cap. Site-specific shallow well construction details are illustrated in Figure 2-3. Monitoring well construction details are summarized in **Table 2-1**. All wells were completed at surface level within 2-ft x 2-ft concrete pads and protected inside of 3' H x 4" W rectangular metal boxes. The boxes were later coated with yellow spray paint. Upon completion of monitoring well installation activities, sampling was conducted in adherence with FDEP-approved groundwater sampling guidelines.

6.1 QUALITY ASSURANCE

SSA activities were conducted in accordance with FDEP-approved SOP. All equipment used to install monitoring wells, and to collect samples, was decontaminated prior to and following each use. No IDW was generated during well installation activities. Groundwater samples were collected in pre-prepared laboratory vials and jars, some having preservative, and sent under COC to GCAL Laboratory, in Baton Rouge,

Louisiana, for analysis. All fieldwork conducted as part of this site assessment, was documented in a site-specific field book.

6.2 SSA GROUNDWATER SAMPLING ACTIVITIES

Monitoring wells MW-11 through MW-13 and DW-1 were installed at the site on September 5-6, 2006. The monitoring wells were installed to complete the horizontal and vertical delineation of the groundwater contaminant plume resident in the surficial aquifer beneath the subject site. Monitoring well MW-11 was installed approximately 20-ft due north of monitoring well MW-2; monitoring well MW-12 was installed close to the fence along the northwestern portion of the property, and approximately 50-ft west of MW-11; monitoring well MW-13 was installed slightly north of the metal grate and 16-ft to the west of MW-1. The locations of the new wells were recommended by AEROSTAR and approved by FDEP in their SAR approval letter sent via email dated April 13, 2006. **Figure 6-1** presents the locations of the four newly-installed wells and the previously existing wells at the subject site.

On September 19, 2006, groundwater samples were collected from the four newly-installed monitoring wells (MW-11 through MW-13 and DW-1). Groundwater samples were collected in accordance with FDEP's groundwater sampling SOP protocol. Prior to sample collection, wells were purged of approximately three well volumes of groundwater using a peristaltic pump and dedicated Teflon™ tubing. Temperature, pH, specific conductance, dissolved oxygen concentration, turbidity, color, odor, and depth-to-water were monitored as the wells were purged. Samples were submitted to GCAL for analysis by EPA Methods 8021B for VOA, 8270C for PAH, 6010B for lead, and by the FL-PRO Method. **Table 2-1** provides updated well construction data. **Table 2-2** provides updated groundwater elevation data. FDEP groundwater sampling logs are provided in **Appendix J**.

6.3 SSA Groundwater Analytical Results

Laboratory analytical results of the groundwater samples collected from monitoring wells MW-11, MW-12, MW-13 and DW-1 yielded contaminant concentrations that were below reporting detection limit (RDL) levels for all constituents analyzed for under EPA Methods 8021 and 8270.

However, total lead (EPA Method 6010) and TRPH (FL-PRO Method) concentrations were reported in the new wells at levels above their respective RDL and method detection limits (MDL), but below the State's GCTL. Monitoring well MW-11 yielded total lead and TRPH at concentrations of 2.4 I and 107 ug/L, respectively. Monitoring well MW-12 yielded total lead and TRPH at concentrations of 1.4 I and 78 I ug/L,

respectively. Monitoring well MW-13 yielded total lead and TRPH at concentrations of 1.5 I and 158 ug/L, respectively. Monitoring well DW-1 yielded total lead and TRPH at concentrations of 1.6 I and 274 ug/L, respectively.

No other constituents yielded concentrations above their respective MDLs, according to the laboratory analytical report from GCAL. **Figure 6-2** has been updated to incorporate the analytical data from the pre-existing and newly-installed wells. Current and historical laboratory analytical results for the groundwater samples collected from the subject site during the initial and supplemental site assessments are provided in **Table 4-3. Appendix H** provides a copy of the groundwater laboratory analytical reports and COCs. **Figure 6-3** illustrates the estimated horizontal extent of the benzene contaminant plume surrounding monitoring well MW-2. **Figure 6-4** illustrates the estimated horizontal extent of the ethylbenzene contaminant plume surrounding monitoring well MW-2. **Figure 6-5** illustrates the estimated horizontal extent of the total xylenes contaminant plume surrounding monitoring well MW-2, and **Figure 6-6** illustrates the estimated horizontal extent of the TRPH contaminant plume surrounding monitoring wells MW-2.

Monitoring well MW-2 continues to be the only well that yields hydrocarbon constituents in concentrations above the State of Florida's GCTLs (Ch. 62-770, F.A.C.). Although benzene, ethylbenzene, total xylenes and TRPH constituents were reported at concentrations above their respective GCTL, xylenes were the only constituent to also exceed the State's Natural Attenuation Default Concentration (NADC) level of 200 ug/L.

7.0 SUPPLEMENTAL SITE ASSESSMENT SUMMARY AND RECOMMENDATIONS

On behalf of NASP Environmental Department, AEROSTAR conducted SSA activities in order to complete the assessment of the horizontal and vertical groundwater plume beneath the subject site related to a reported release of diesel product in 2002.

A total of thirteen shallow wells (MW-1 through MW-13), one deep monitoring well (DW-1), three recovery wells (RW-1 through RW-3), and 33 soil borings (SB-1 through SB-33) have been installed across the subject site to date, in order to collect groundwater and soil data necessary to complete assessment activities.

Although monitoring wells MW-3, MW-9, MW-11, MW-12, MW-13 and DW-1 yielded minor concentrations of contaminant constituents, monitoring well MW-2 continues to be the only well that yielded benzene, ethylbenzene, total xylenes and TRPH constituents in concentrations above the State of Florida's GCTLs. Total xylenes concentrations reported for monitoring well MW-2 also exceed the State's NADC level (200 ug/L).

The average depth-to-water across the subject site was approximately 2.5 ft-bls during the installation and sampling of the new wells in September 2006. Although the new wells have not been surveyed in, it is likely that the groundwater flow direction beneath the subject site has not changed since the previous event. Flow is estimated to be toward the east-southeast.

Soils were collected from monitoring well boreholes for field screening by the OVA-FID prior to installation of wells MW-11 through MW-13 and DW-1. No positive hydrocarbon concentrations were registered by the OVA-FID. Therefore, Aerostar believes that the only impacted soils are likely located near soil boring SB-2, which was installed due east of the Tacan building and south of the diesel AST.

AEROSTAR has completed the site assessment of the subject site in accordance with Chapter 62-770, F.A.C. Based on field and laboratory findings, AEROSTAR recommends approval of the SAR by FDEP, and preparation of a limited scope remedial action plan (LSRAP) as the next phase of work for this site. The LSRAP will outline various options for the remediation of the impacted soil and groundwater at the subject site.

FIGURES

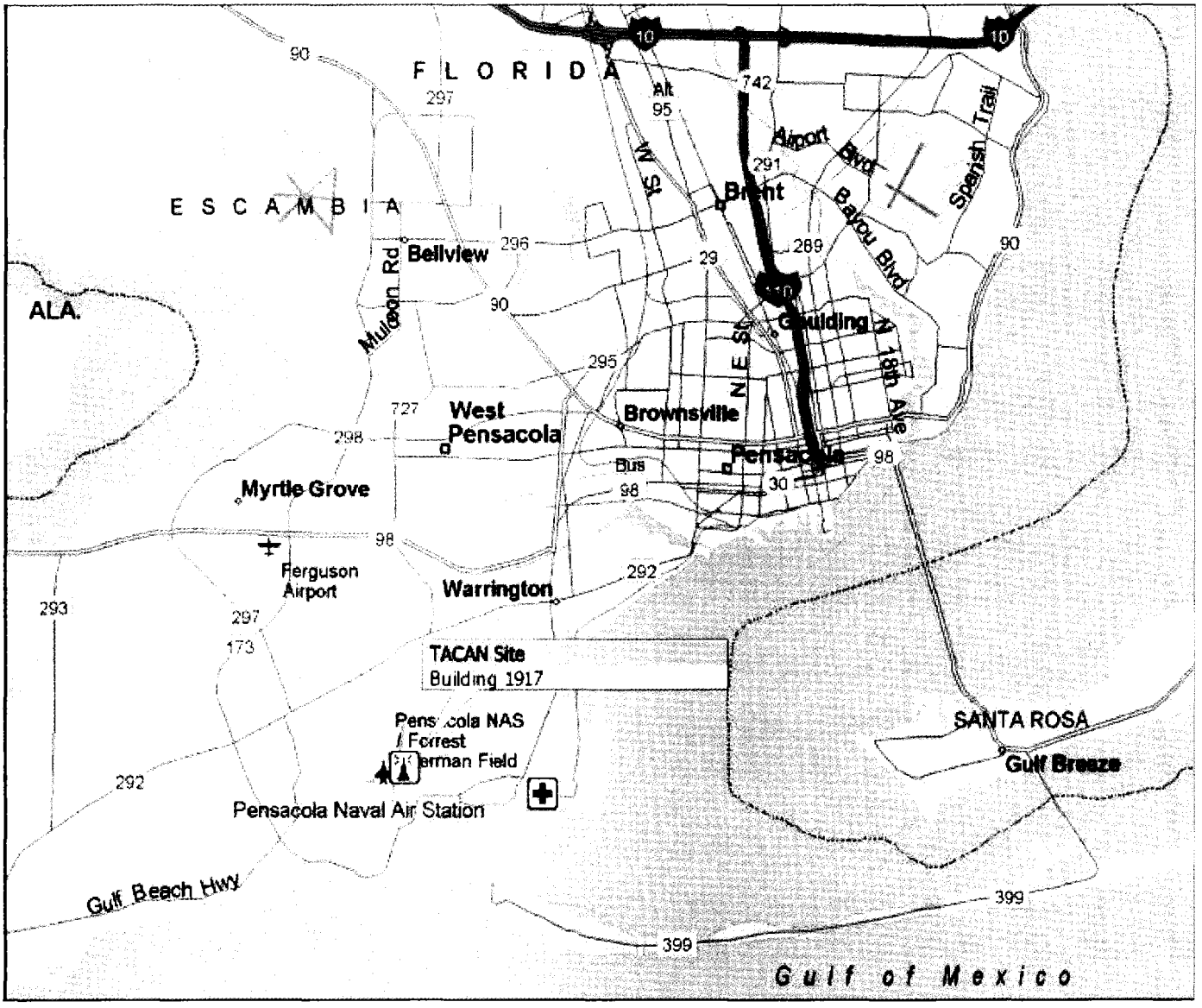


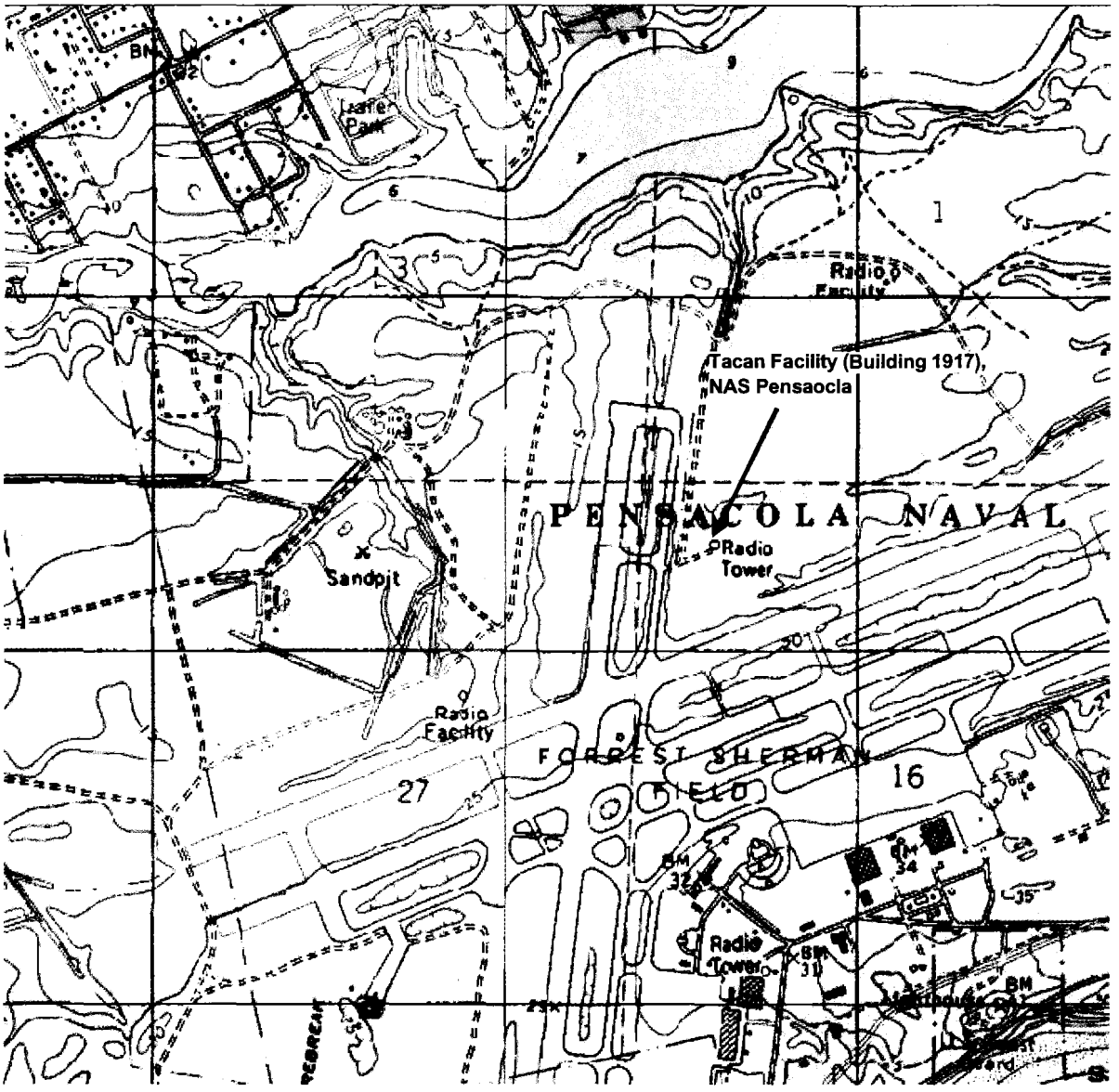
FIGURE 1-1 REGIONAL MAP

AEROSTAR ENVIRONMENTAL SERVICES, INC.

TACAN FACILITY (BUILDING 1917)
NAS PENSACOLA, ESCAMBIA COUNTY, FLORIDA

DRAWN BY: SAD

REFERENCE: MAP OF PENSACOLA, FLORIDA PREPARED BY: THE MICROSOFT CORP.



FORT BARRANCAS, FLORIDA QUADRANGLE

7.5 MINUTE SERIES (TOPOGRAPHIC)

CONTOUR INTERVAL 10 FEET

ISSUED 1992

SCALE: 1:50,000

QUADRANGLE LOCATION

FIGURE 1-2 TOPOGRAPHIC SITE LOCATION MAP

AEROSTAR ENVIRONMENTAL SERVICES, INC.

TACAN FACILITY (BUILDING 1917)
NAS PENSACOLA, ESCAMBIA COUNTY, FLORIDA

DRAWN BY: PRF

REFERENCE: MAP OF NAS PENSACOLA, FLORIDA PREPARED BY: U. S. GEOLOGICAL SURVEY

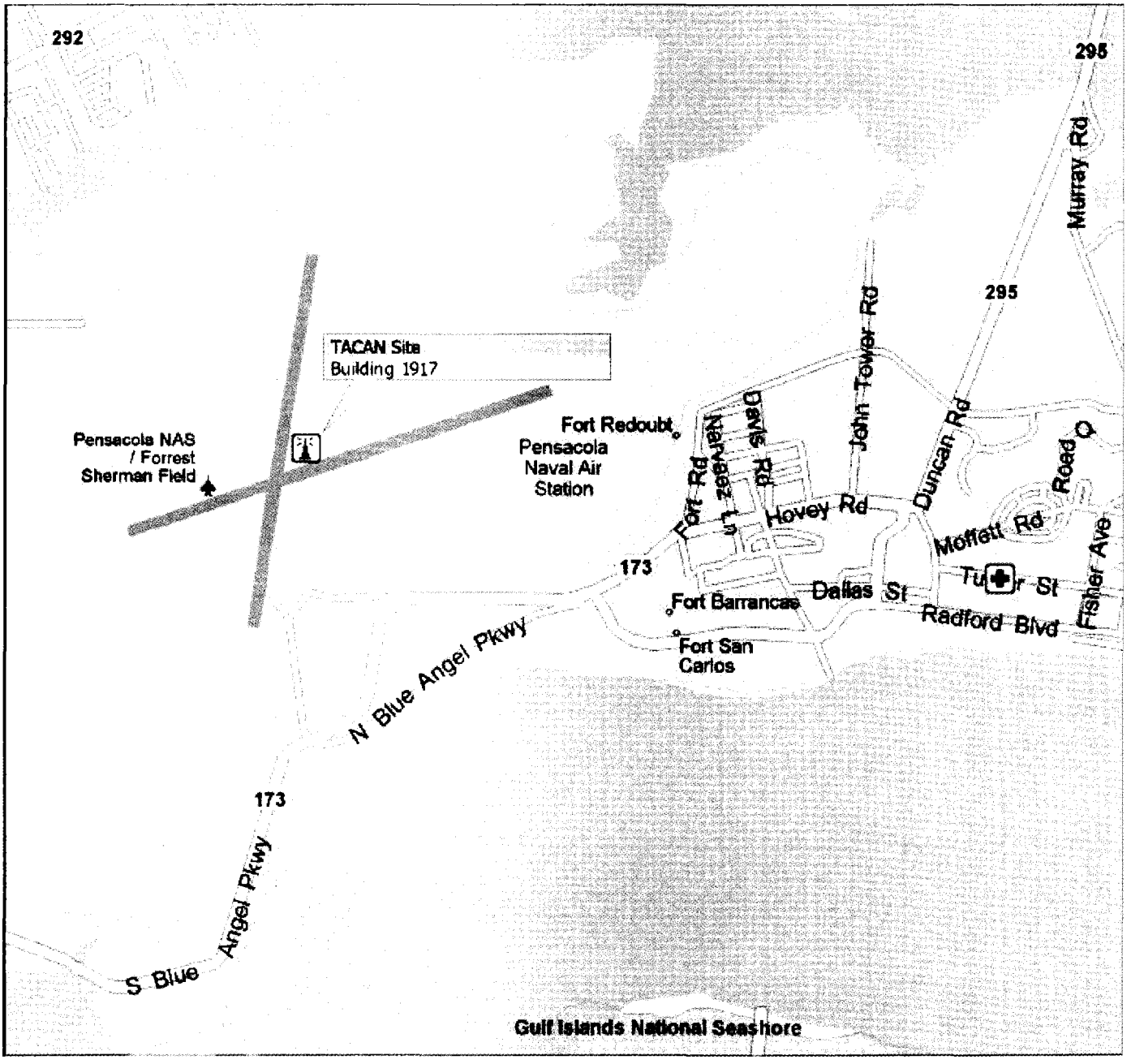
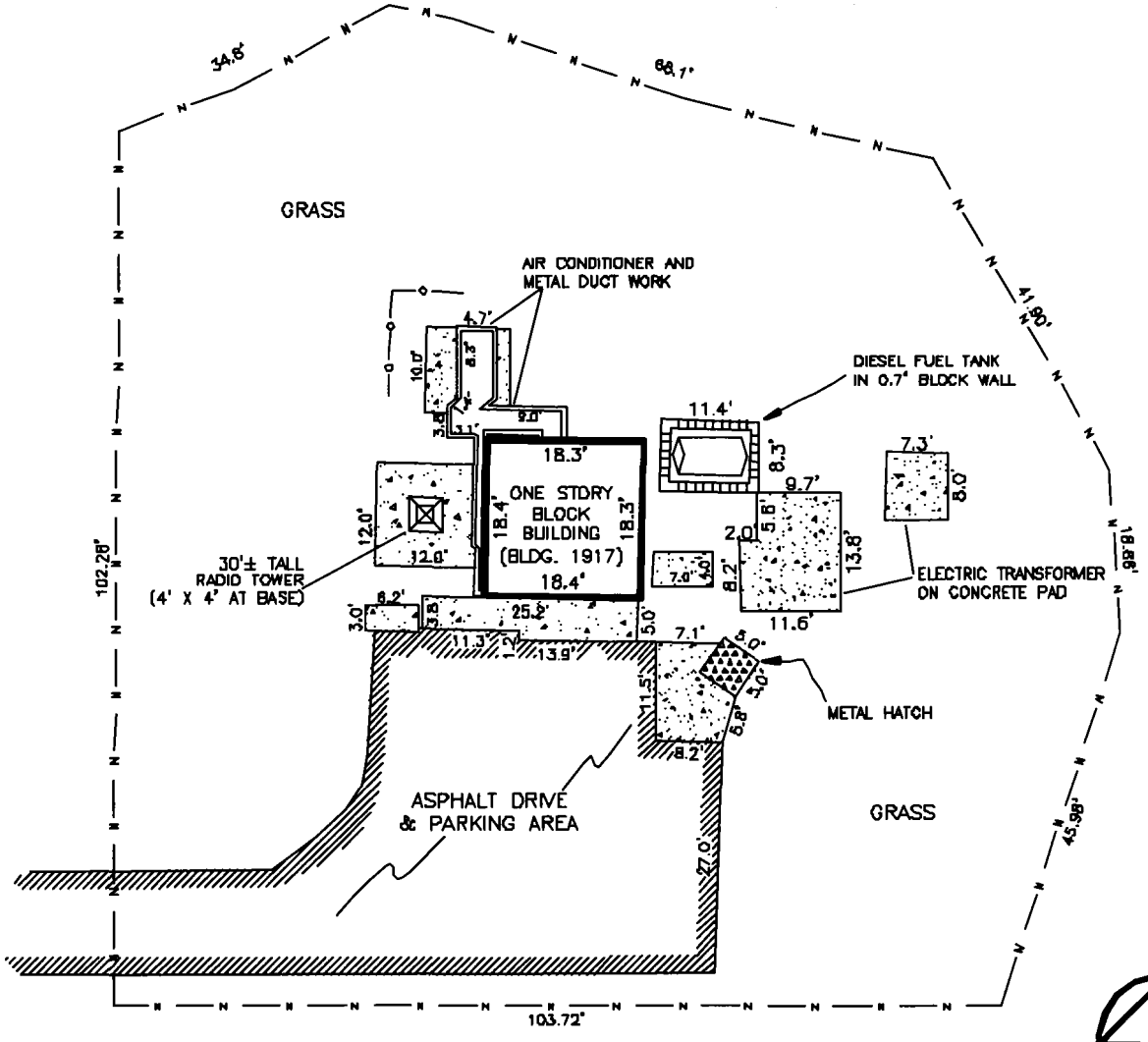


FIGURE 1-3 VICINITY SITE LOCATION MAP

AEROSTAR ENVIRONMENTAL SERVICES, INC.	TACAN FACILITY (BUILDING 1917) NAS PENSACOLA, ESCAMBIA COUNTY, FLORIDA	DRAWN BY: SAD REFERENCE: MAP OF PENSACOLA, FLORIDA PREPARED BY: THE MICROSOFT CORP.

LEGEND

- A.P.O. — A PORTION OF....
- N — 8' CHAIN LINK SECURITY FENCE
- 6' WOODEN PRIVACY FENCE
- CONCRETE
- MONITOR WELL NW##
- RECOVERY WELL RW##



JOB #: 0403-374-05

FIGURE 1-4 SITE PLAN

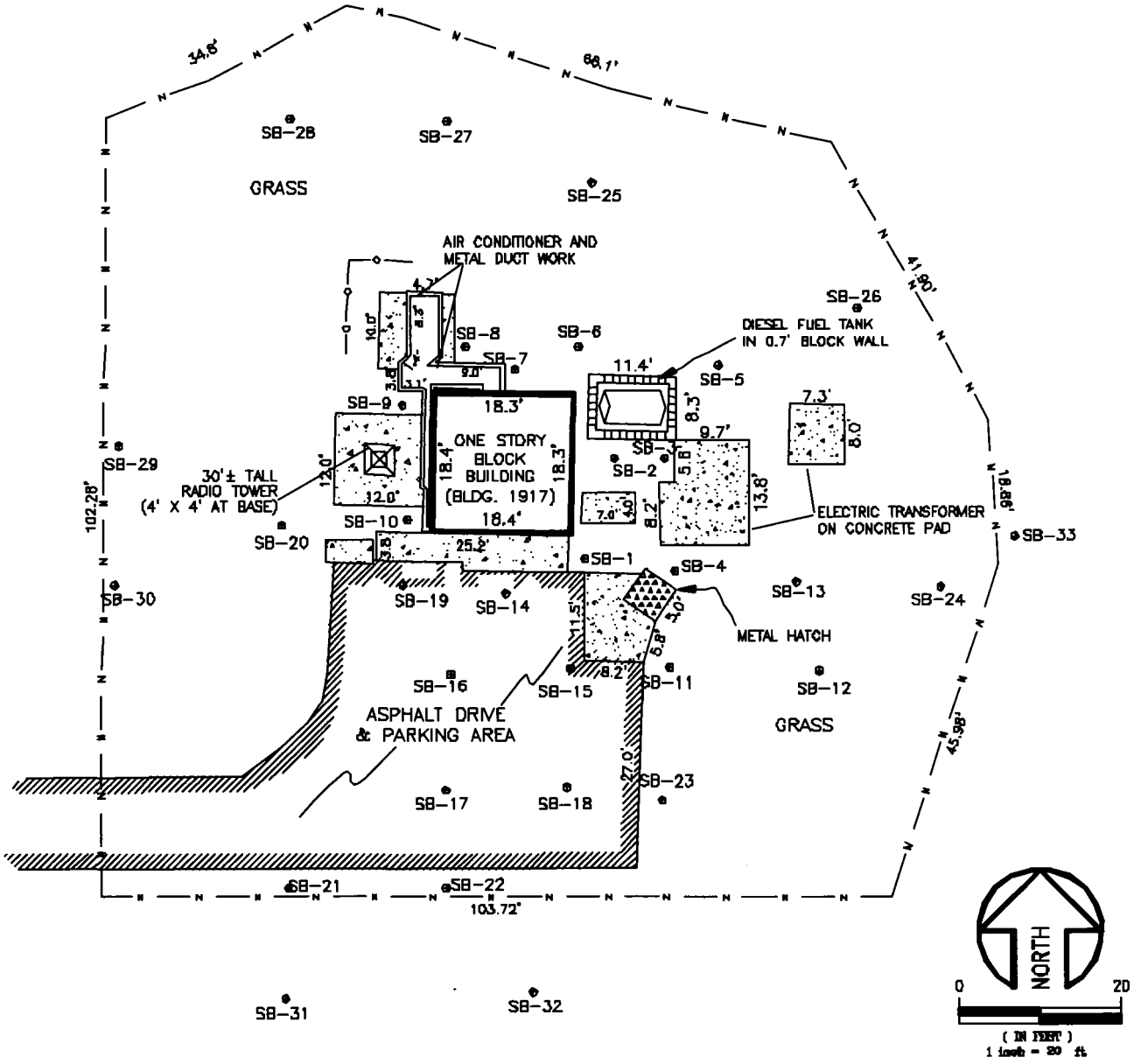
AEROSTAR ENVIRONMENTAL SERVICES, INC.

TACAN FACILITY (BLDG. 1917)
PENSACOLA NAVAL AIR STATION

SCALE: 1" = 20'-0"
DATE: JULY 17, 2005
DRAWN BY: AD

LEGEND

ARO.	A PORTION OF...
——N——	8' CHAIN LINK SECURITY FENCE
—o—o—o—	6' WOODEN PRIVACY FENCE
	CONCRETE
SB-12	SOIL BORING



JOB #: 0403-374-05

FIGURE 2-1 – SOIL BORING LOCATIONS

AEROSTAR ENVIRONMENTAL SERVICES, INC.

TACAN FACILITY (BLDG. 1917)
PENSACOLA NAVAL AIR STATION

SCALE: 1" = 20'-0"
DATE: JANUARY 3, 2005
DRAWN BY: EE

LEGEND

A.P.O. A PORTION OF....

8' CHAIN LINK SECURITY FENCE

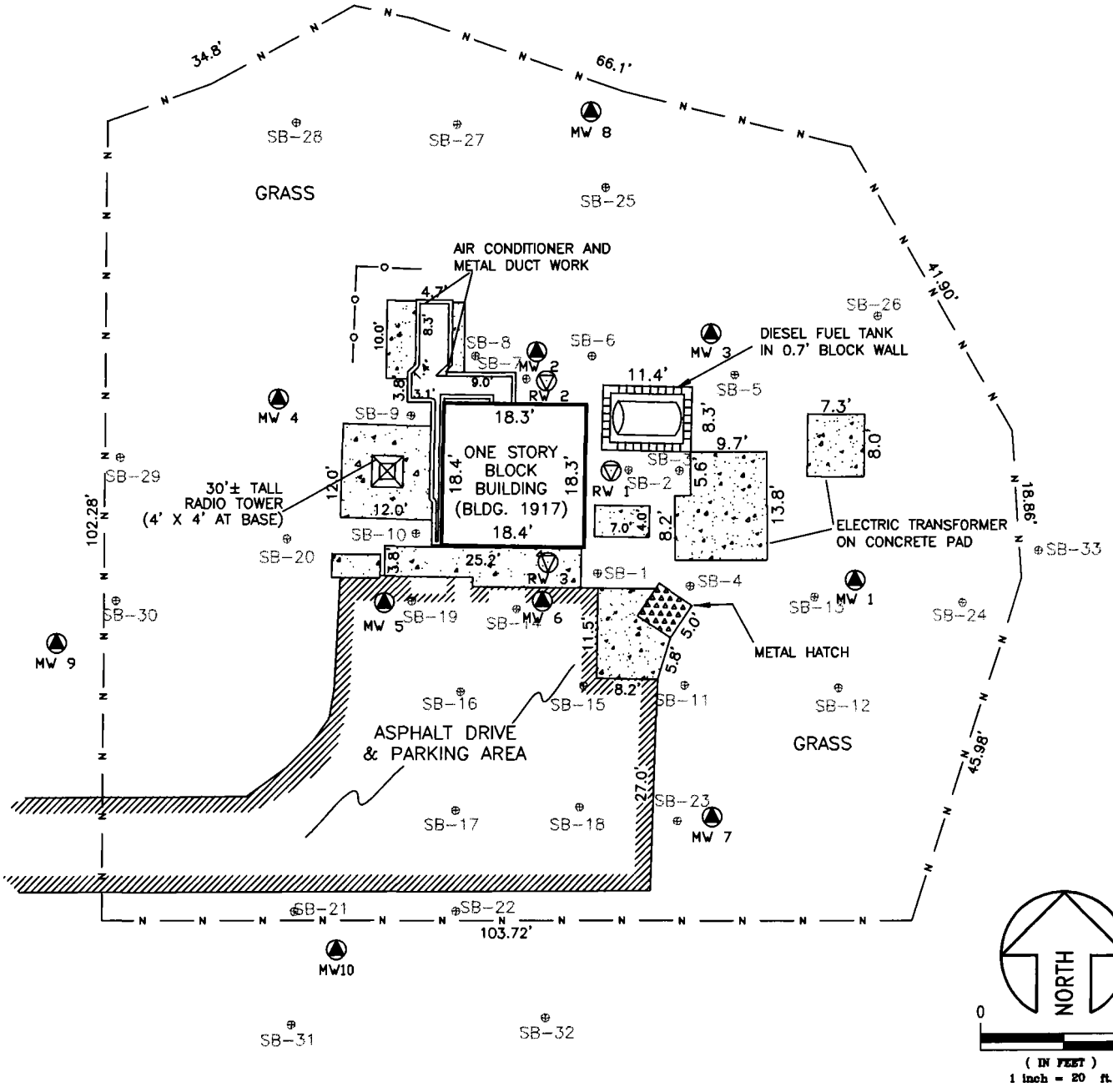
6' WOODEN PRIVACY FENCE

CONCRETE

MW## MONITOR WELL

RW## RECOVERY WELL

SB-12 SOIL BORING



JOB #: 0403-374-05

FIGURE 2-2 - MONITORING AND RECOVERY WELL LOCATIONS

AEROSTAR ENVIRONMENTAL SERVICES, INC.

TACAN FACILITY (BLDG. 1917)
PENSACOLA NAVAL AIR STATION

SCALE: 1" = 20'-0"

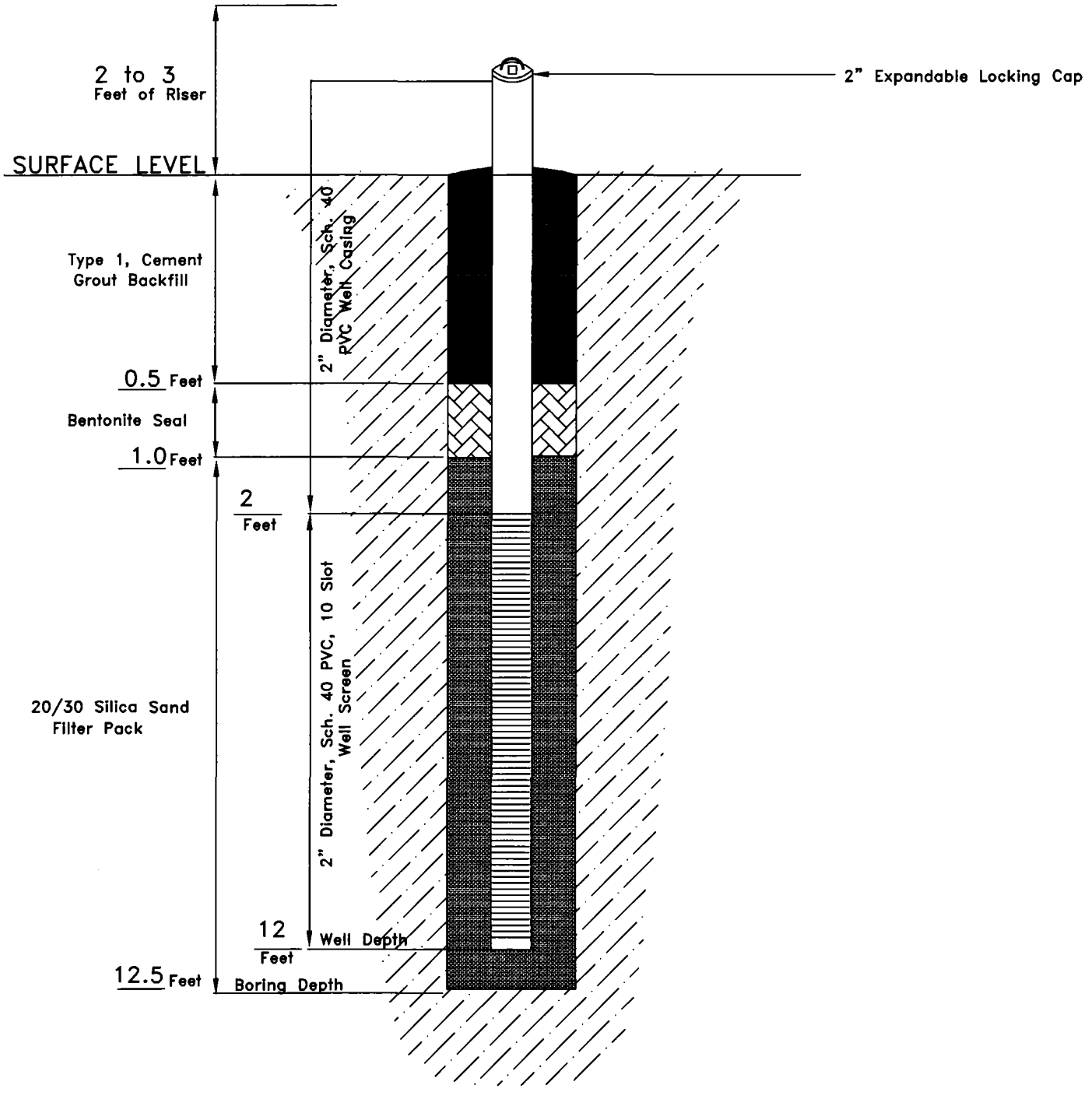
DATE: JANUARY 3, 2005

DRAWN BY: EE

AEROSTAR
ENVIRONMENTAL SERVICES, INC.

Project No.	0403-374-05
Project	NAS Pensacola Tacan Facility (Bldg. 1917)
Location	NAS Pensacola
Date	9/18/03

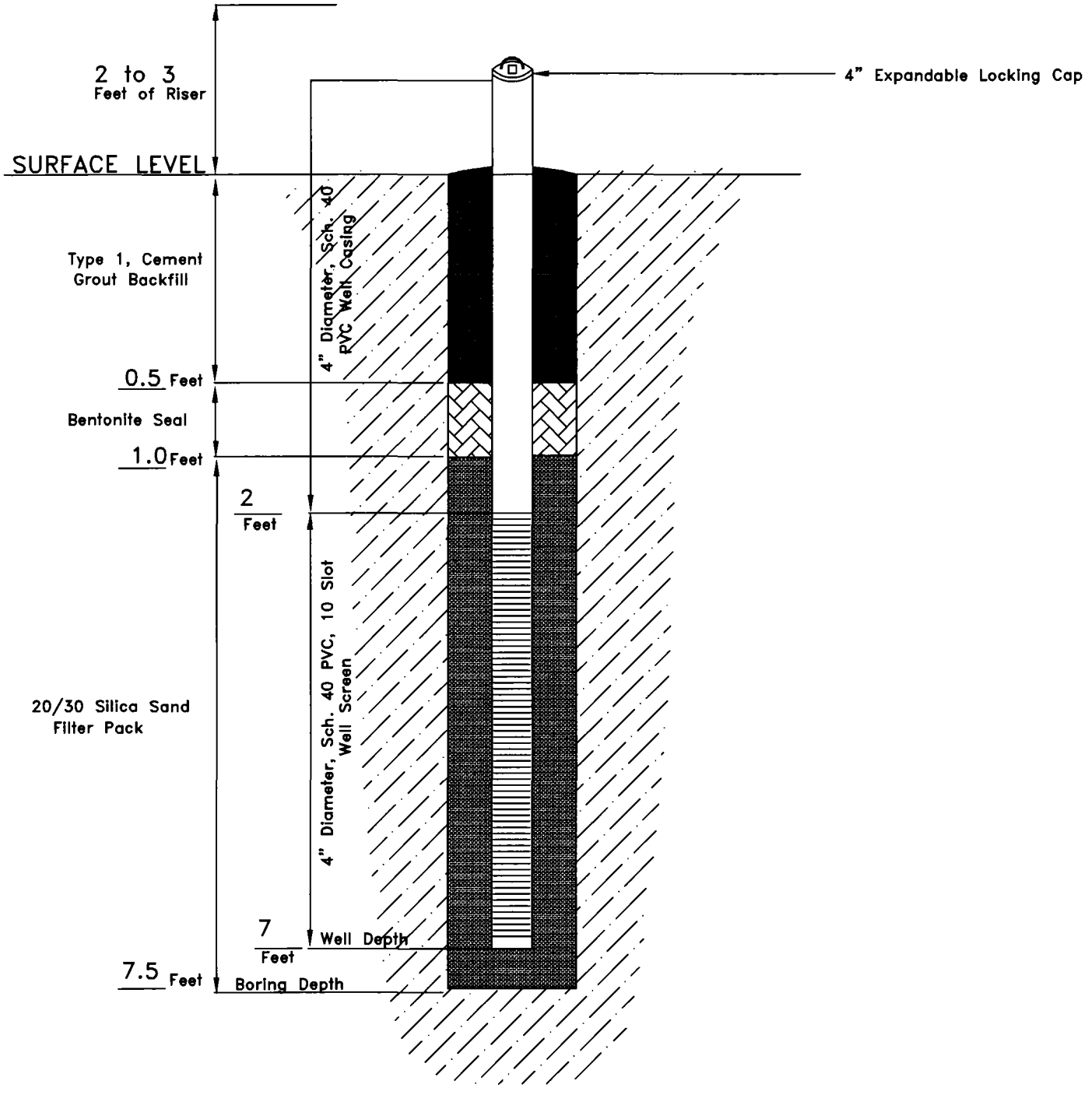
FIGURE 2-3 TYPICAL MONITORING WELL CONSTRUCTION

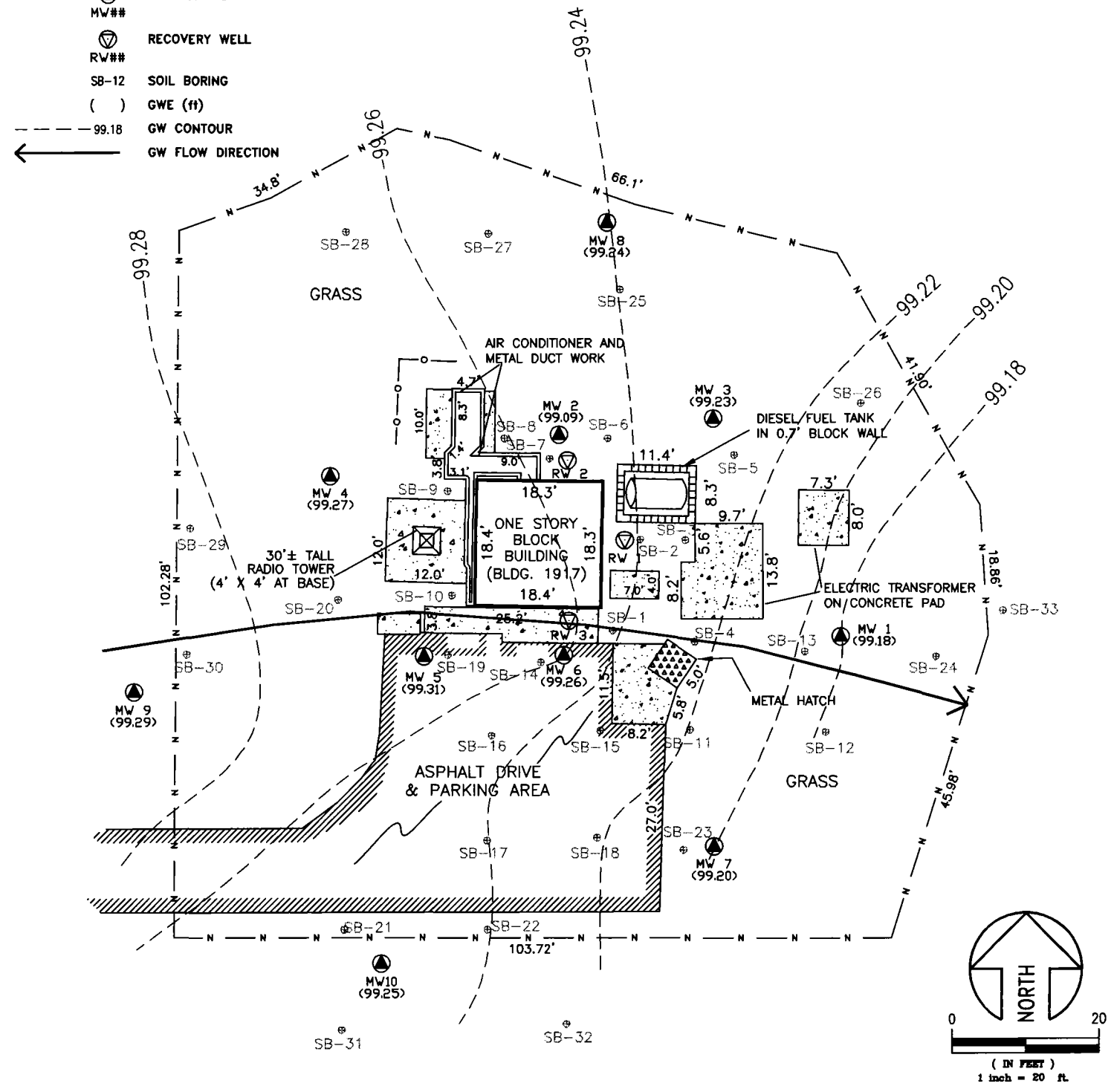


AEROSTAR
ENVIRONMENTAL SERVICES, INC.

Project No.	0403-374-05
Project	NAS Pensacola Tacan Facility (Bldg. 1917)
Location	NAS Pensacola
Date	9/18/03

FIGURE 2-4 TYPICAL RECOVERY WELL CONSTRUCTION





NOTE: RWs AND MW-2 AND MW-5 WERE NOT USED FOR CONTOURING.

JOB #: 0403-374-05

FIGURE 2-5 - GROUNDWATER FLOW DIRECTION/POTENTIOMETRIC SURFACE MAP

AEROSTAR ENVIRONMENTAL SERVICES, INC.

TACAN FACILITY (BLDG. 1917)
PENSACOLA NAVAL AIR STATION
SEPTEMBER 23, 2003

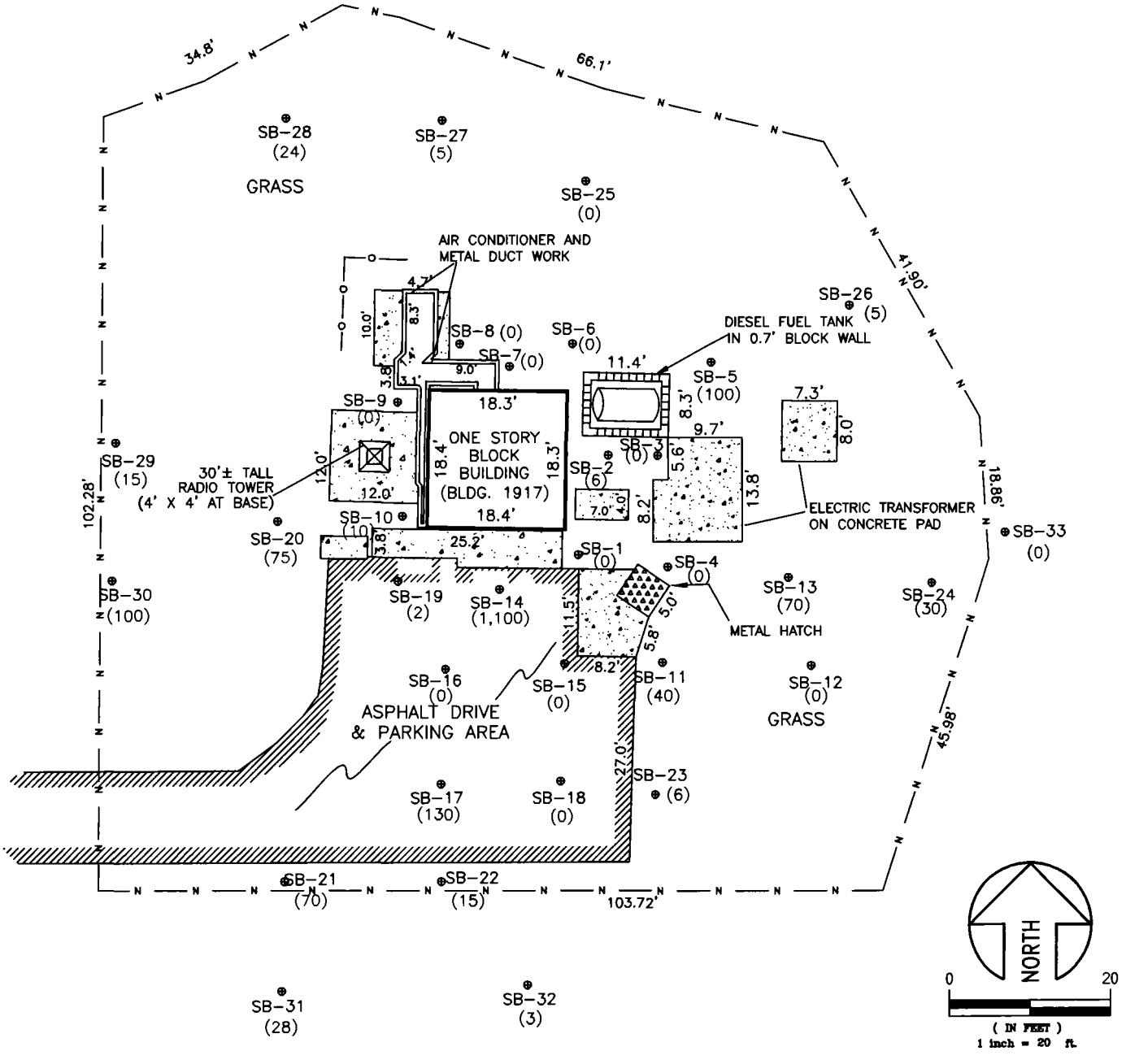
SCALE: 1" = 20'-0"

DATE: JULY 17, 2005

DRAWN BY: EE

LEGEND

A.P.O.	A PORTION OF....
——— N ———	8' CHAIN LINK SECURITY FENCE
—o—o—o—	6' WOODEN PRIVACY FENCE
▭	CONCRETE
SB-12	SOIL BORING
SB-1 (0)	SOIL BORING NET OVA RESULTS (0-1')



JOB #: 0403-374-05

FIGURE 4-1 - SOIL BORING NET OVA (0-1')

AEROSTAR ENVIRONMENTAL SERVICES, INC.

TACAN FACILITY (BLDG. 1917)
PENSACOLA NAVAL AIR STATION

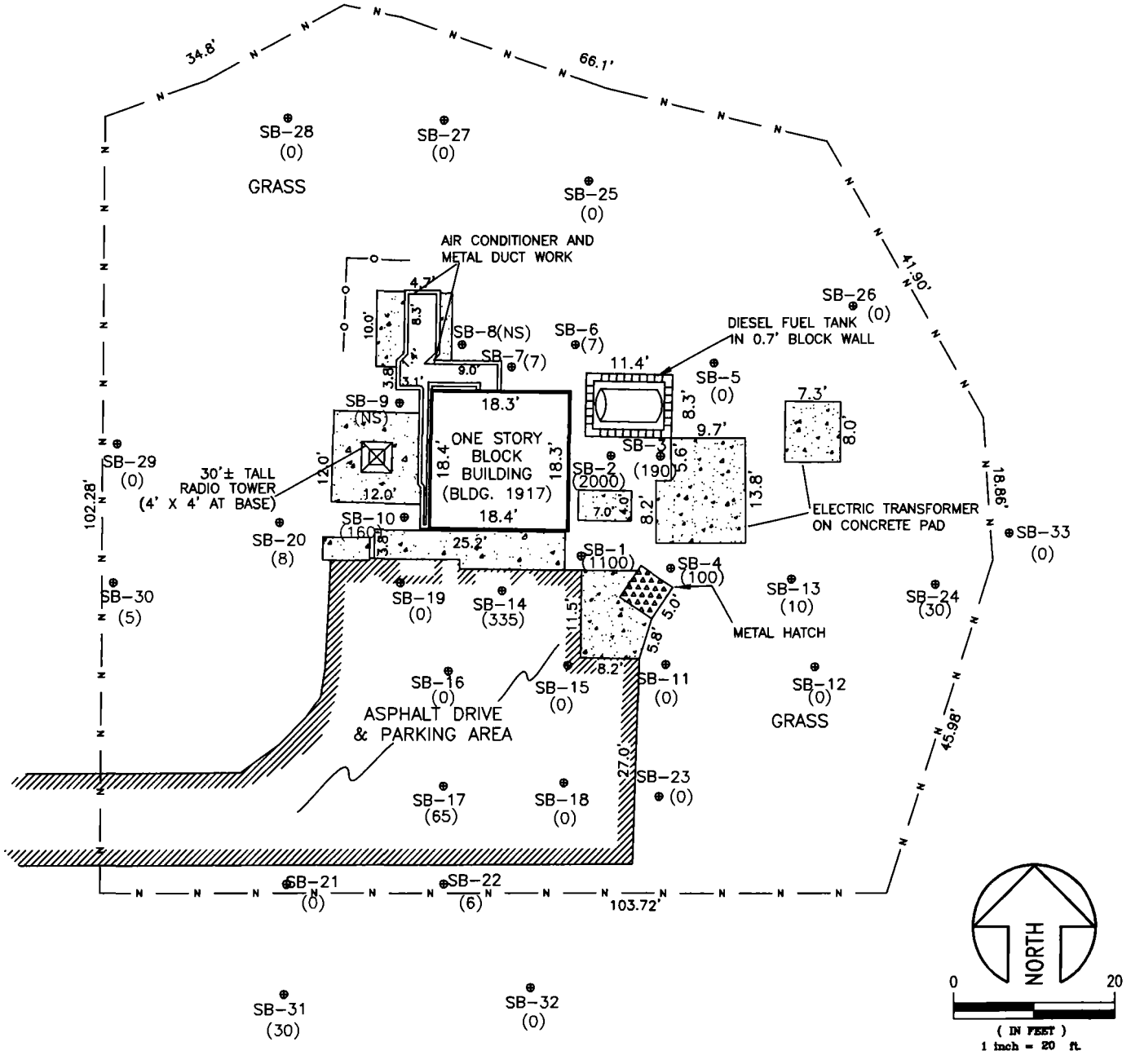
SCALE: 1" = 20'-0"

DATE: JANUARY 3, 2005

DRAWN BY: EE

LEGEND

A.P.O.	A PORTION OF....
N	8' CHAIN LINK SECURITY FENCE
O O	6' WOODEN PRIVACY FENCE
	CONCRETE
SB-12	SOIL BORING
SB-1 (1100)	SOIL BORING NET OVA RESULTS (1-3')
NS	No Sample Collected



JOB #: 0403-374-05

FIGURE 4-2 - SOIL BORING NET OVA (1-3')

AEROSTAR ENVIRONMENTAL SERVICES, INC.

TACAN FACILITY (BLDG. 1917)
PENSACOLA NAVAL AIR STATION

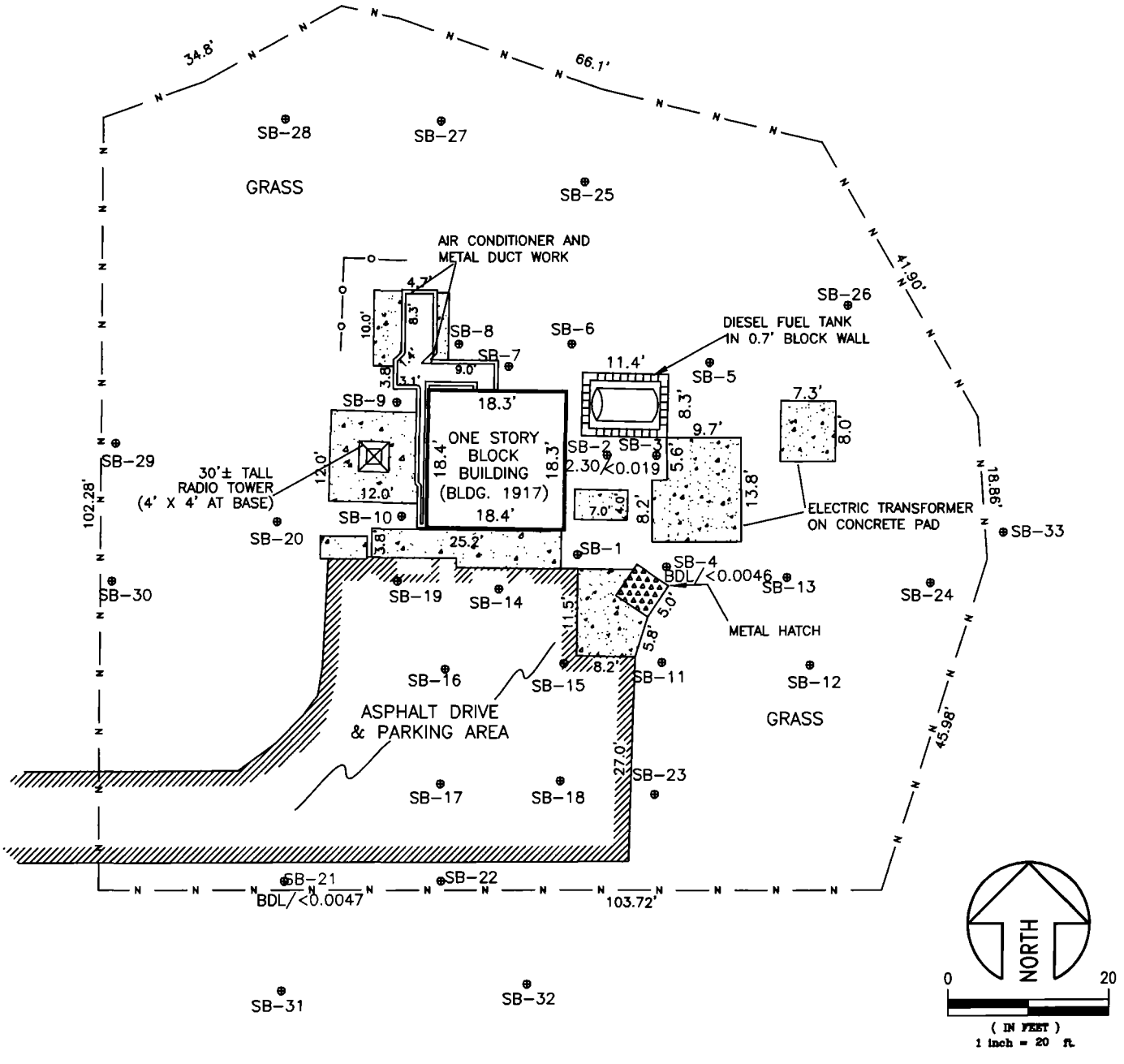
SCALE: 1" = 20'-0"

DATE: JANUARY 3, 2005

DRAWN BY: EE

LEGEND

A.P.O.	A PORTION OF....
N	8' CHAIN LINK SECURITY FENCE
O O O	6' WOODEN PRIVACY FENCE
	CONCRETE
SB-12	SOIL BORING
BDL/<0.0047	TOTAL BTEX/MTBE CONCENTRATIONS IN SOIL (mg/kg)



JOB #: 0403-374-05

FIGURE 4-3 - TOTAL VOLATILE ORGANIC AROMATICS IN SOIL

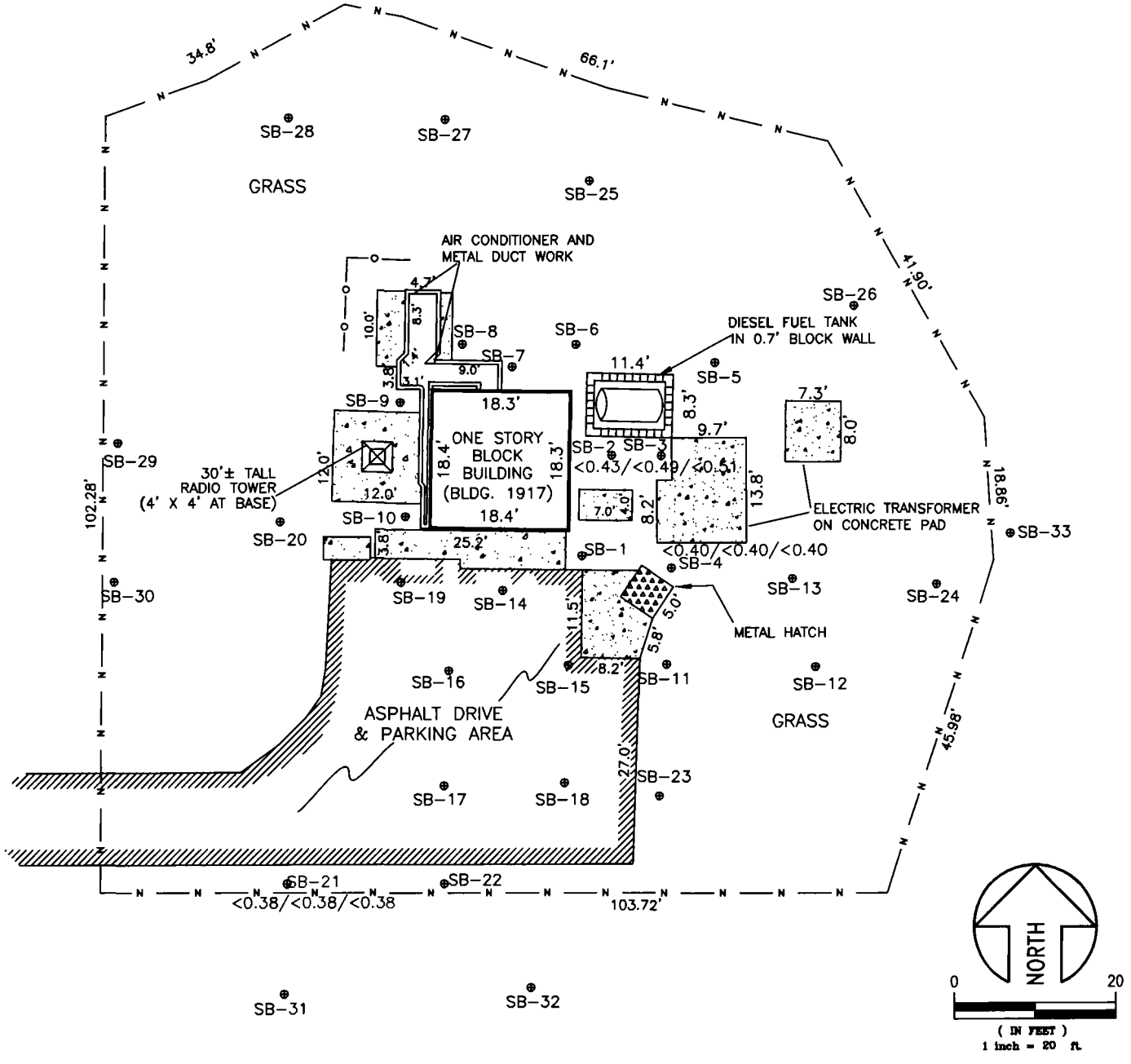
AEROSTAR ENVIRONMENTAL SERVICES, INC.

TACAN FACILITY (BLDG. 1917)
PENSACOLA NAVAL AIR STATION

SCALE: 1" = 20'-0"
DATE: JANUARY 3, 2005
DRAWN BY: EE

LEGEND

A.P.O.	A PORTION OF....
N	8' CHAIN LINK SECURITY FENCE
O O O	6' WOODEN PRIVACY FENCE
	CONCRETE
SB-12	SOIL BORING
<0.43/<0.49/<0.51	NAPHTHALENE/1-METHYLNAPHTHALENE/2-METHYLNAPHTHALENE CONCENTRATIONS IN SOIL (mg/kg)



JOB #: 0403-374-05

FIGURE 4-4 - POLYNUCLEAR AROMATIC HYDROCARBONS IN SOIL

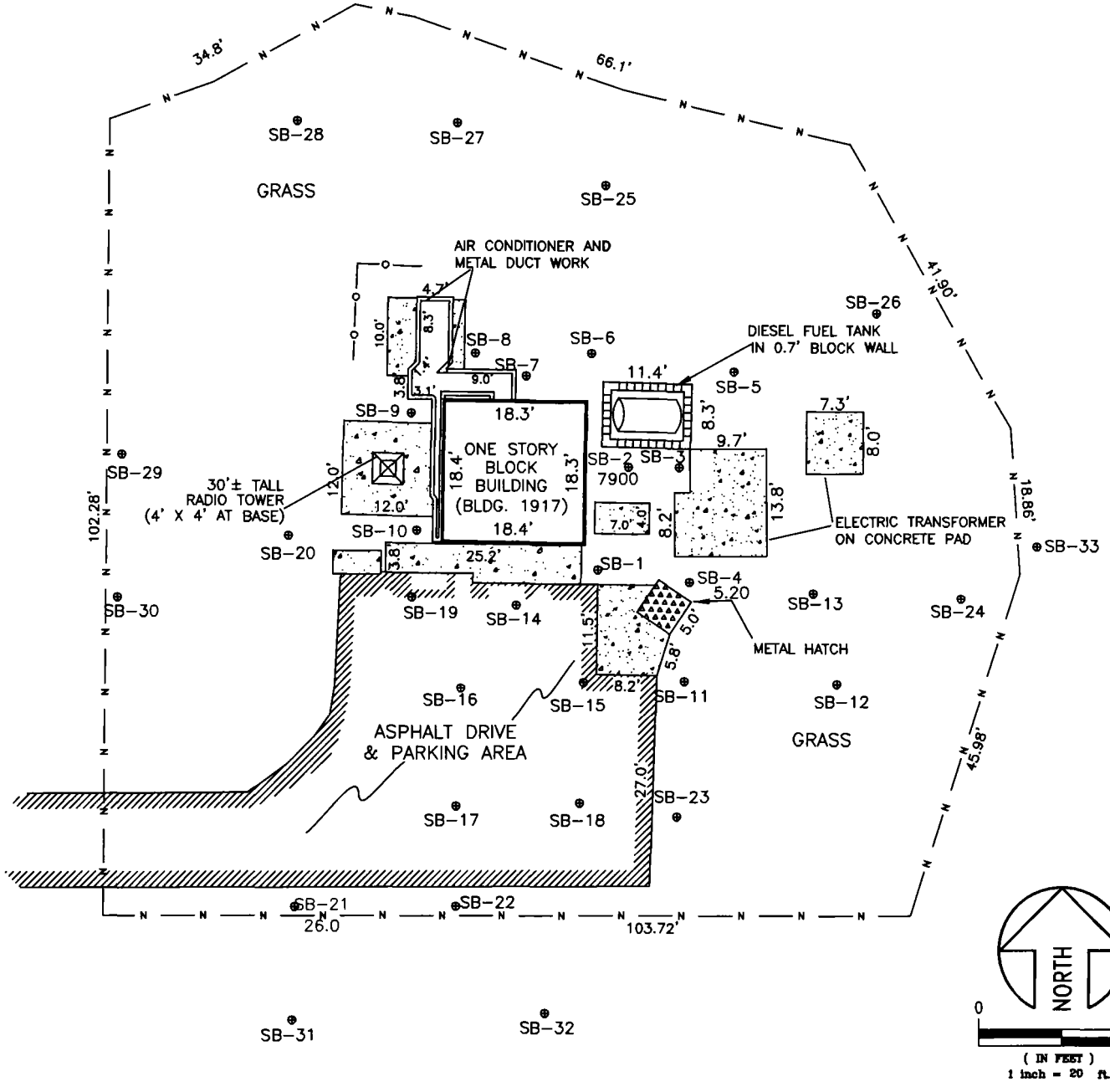
AEROSTAR ENVIRONMENTAL SERVICES, INC.

TACAN FACILITY (BLDG. 1917)
PENSACOLA NAVAL AIR STATION

SCALE: 1" = 20'-0"
DATE: JANUARY 3, 2005
DRAWN BY: EE

LEGEND

A.P.O.	A PORTION OF....
——N——	8' CHAIN LINK SECURITY FENCE
—o—o—o—	6' WOODEN PRIVACY FENCE
	CONCRETE
SB-12	SOIL BORING
7900	TOTAL PRO (C8-C40) CONCENTRATIONS IN SOIL (mg/kg)



JOB #: 0403-374-05

FIGURE 4-5 - TRPH CONCENTRATIONS IN SOIL

AEROSTAR ENVIRONMENTAL SERVICES, INC.

TACAN FACILITY (BLDG. 1917)
PENSACOLA NAVAL AIR STATION

SCALE: 1" = 20'-0"

DATE: JANUARY 3, 2005

DRAWN BY: EE

LEGEND

A.P.O. — A PORTION OF....

8' CHAIN LINK SECURITY FENCE

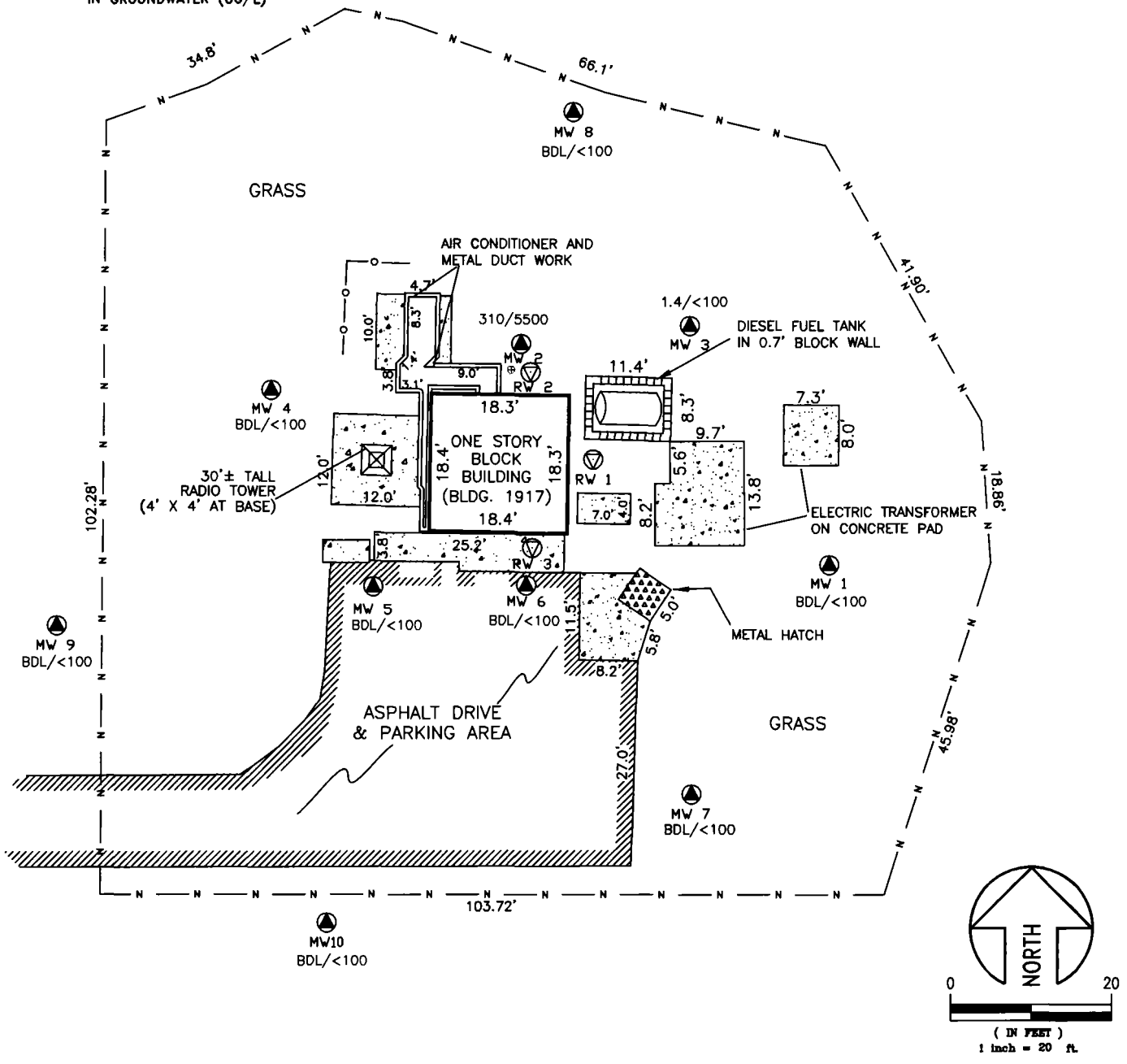
6' WOODEN PRIVACY FENCE

CONCRETE

MW## — MONITOR WELL

RW## — RECOVERY WELL

BDL/<100 — TOTAL BTEX/TRPH CONCENTRATIONS IN GROUNDWATER (UG/L)



JOB #: 0403-374-05

FIGURE 4-6 – TOTAL BTEX & TRPH IN GROUNDWATER

AEROSTAR ENVIRONMENTAL SERVICES, INC.

TACAN FACILITY (BLDG. 1917)
PENSACOLA NAVAL AIR STATION

SCALE: 1" = 20'-0"

DATE: JANUARY 3, 2005

DRAWN BY: EE

LEGEND

A.P.O. — A PORTION OF....

N — 8' CHAIN LINK SECURITY FENCE

6' WOODEN PRIVACY FENCE

CONCRETE

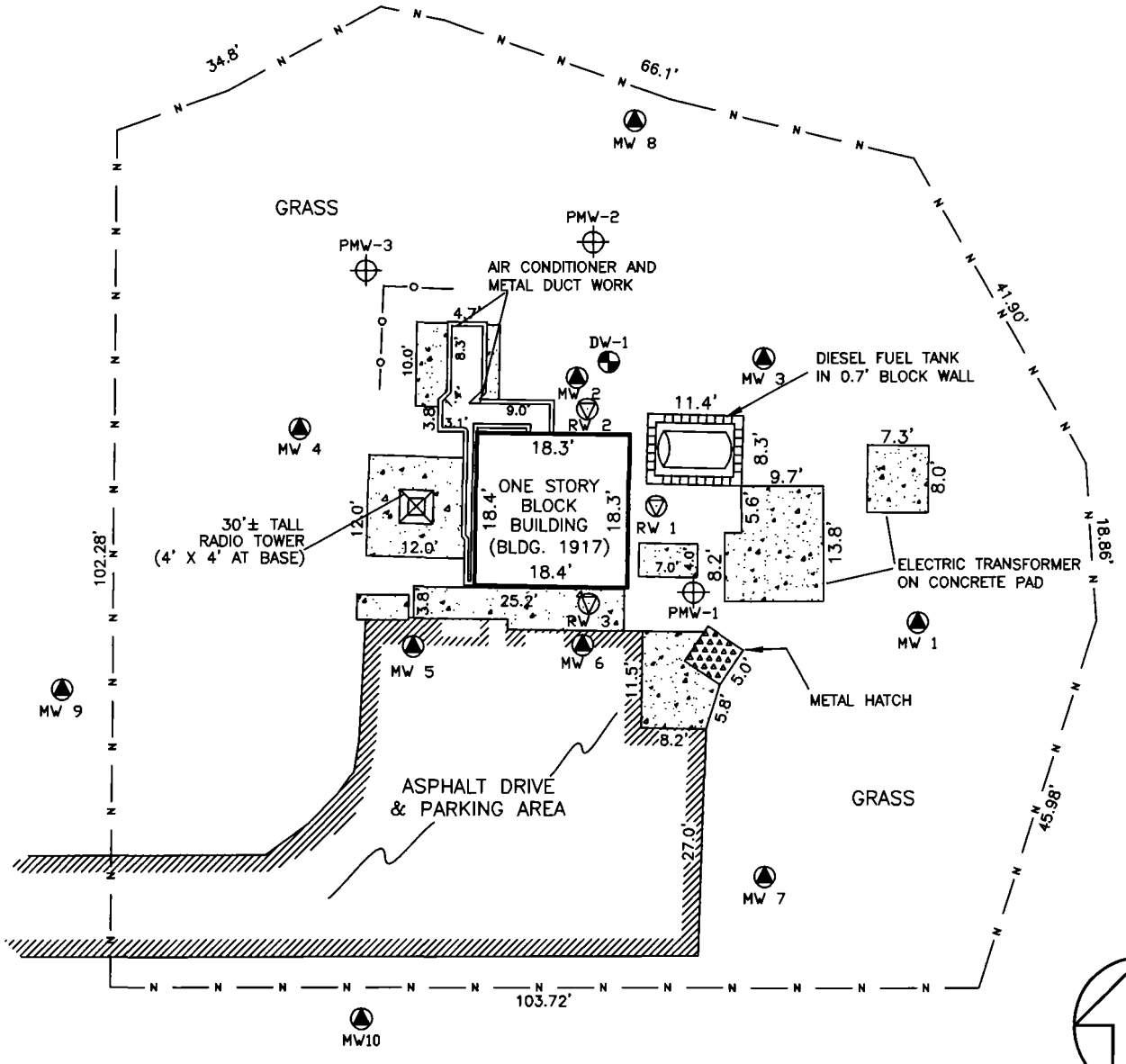
MW## — MONITOR WELL

RW## — RECOVERY WELL

SB-12 — SOIL BORING

PMW-1 — PROPOSED MONITORING WELL

DW-1 — PROPOSED DEEP MONITORING WELL



JOB #: 0403-374-05

FIGURE 4-7 – PROPOSED MONITORING WELL LOCATION MAP

AEROSTAR ENVIRONMENTAL SERVICES, INC.

TACAN FACILITY (BLDG. 1917)
PENSACOLA NAVAL AIR STATION

SCALE: 1" = 20'-0"

DATE: FEBRUARY 2006

DRAWN BY: C.K.

LEGEND

A.P.O. — A PORTION OF....

N — 8' CHAIN LINK SECURITY FENCE

O—O—O— 6' WOODEN PRIVACY FENCE

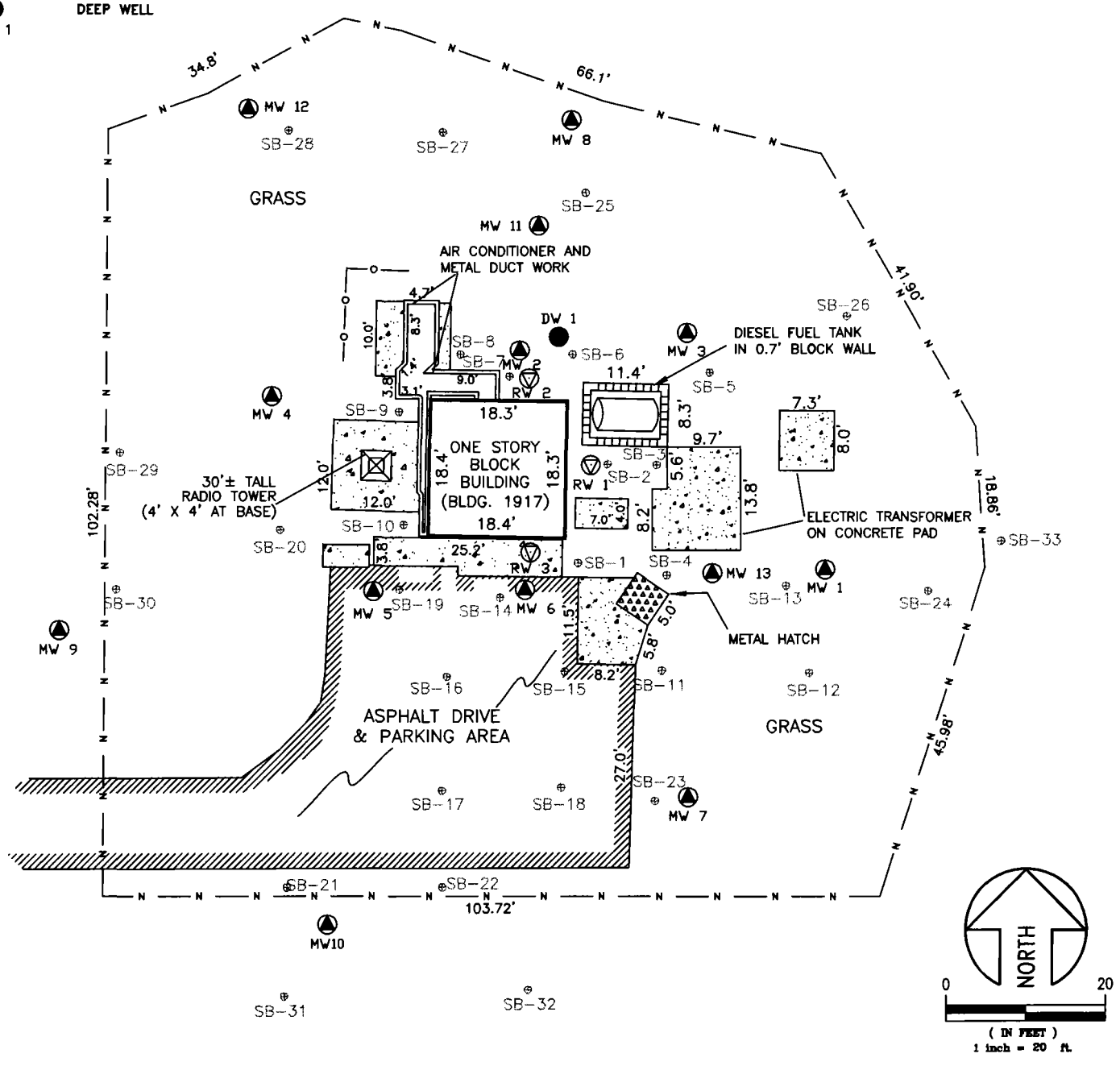
CONCRETE

MW 1 — MONITOR WELL

RW 1 — RECOVERY WELL

SB-1 — SOIL BORING

DW 1 — DEEP WELL



JOB #: 0403-374-05

FIGURE 6-1 UPDATED MONITORING WELL LOCATION MAP

AEROSTAR ENVIRONMENTAL SERVICES, INC.

TACAN FACILITY (BLDG. 1917)
PENSACOLA NAVAL AIR STATION

SCALE: 1" = 20'-0"

DATE: SEPTEMBER 2006

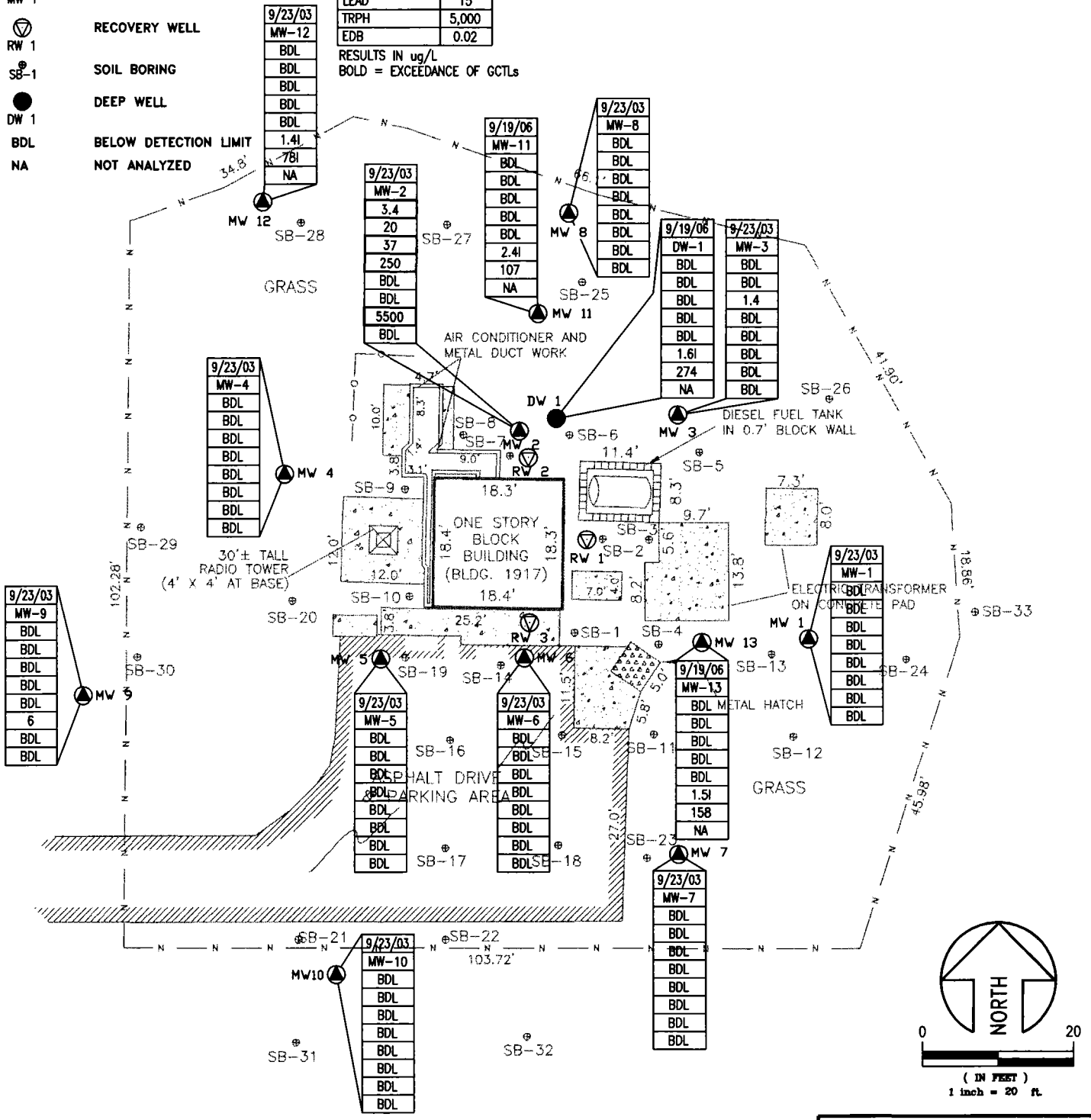
DRAWN BY: KRUCHELL

LEGEND

A.P.O.	A PORTION OF....
——N——	8' CHAIN LINK SECURITY FENCE
—o—o—o—	6' WOODEN PRIVACY FENCE
	CONCRETE
MW 1	MONITOR WELL
RW 1	RECOVERY WELL
SB-1	SOIL BORING
DW 1	DEEP WELL
BDL	BELOW DETECTION LIMIT
NA	NOT ANALYZED

DATE	
WELL NAME	
BENZENE	1.0
TOLUENE	40
ETHYLBENZENE	30
XYLENES	20
PAH	-
LEAD	15
TRPH	5,000
EDB	0.02

RESULTS IN ug/L
BOLD = EXCEEDANCE OF GCTLs



JOB #: 0403-374-05

FIGURE 6-2 HISTORICAL GROUNDWATER ANALYTICAL RESULTS

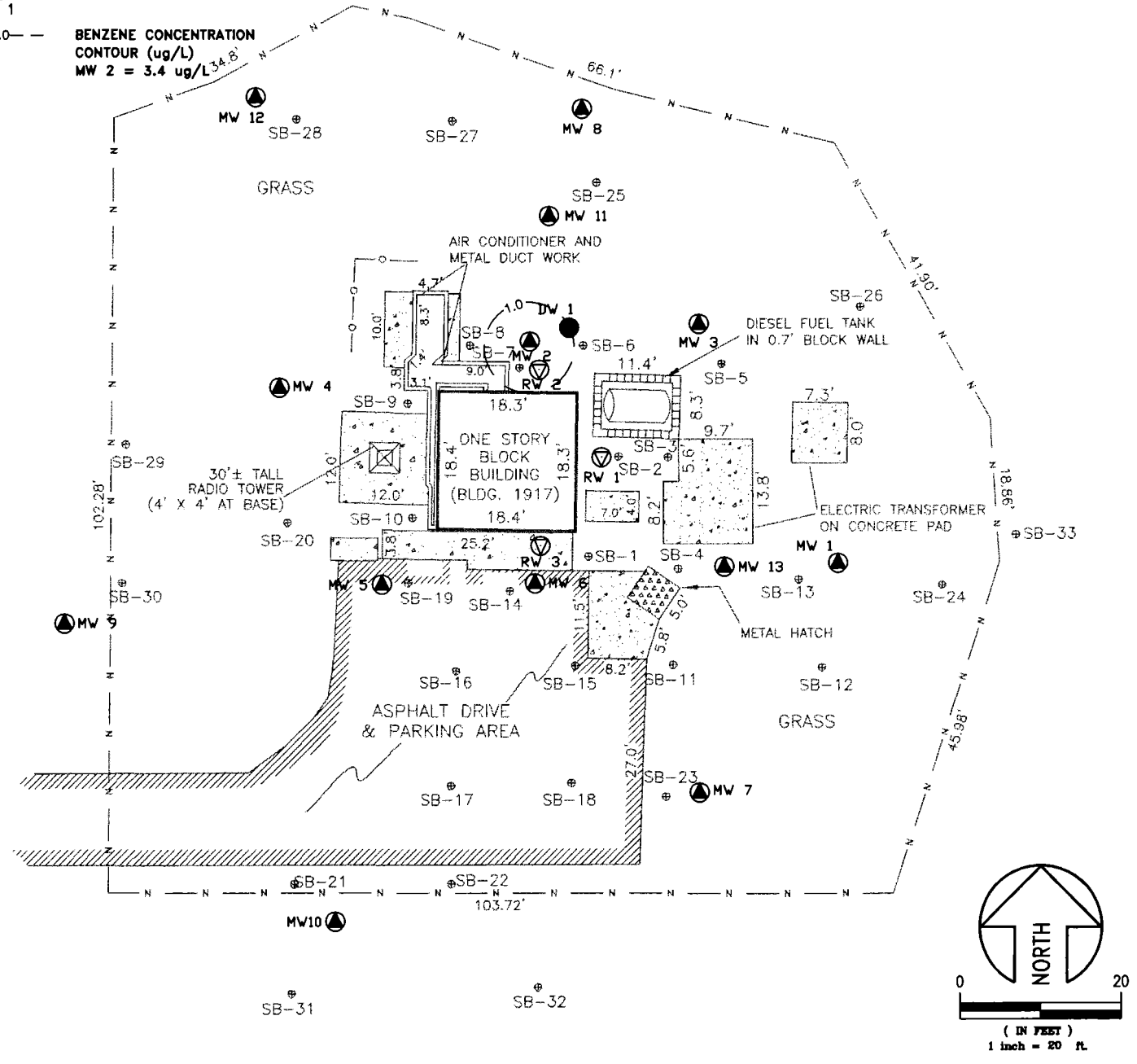
AEROSTAR ENVIRONMENTAL SERVICES, INC.

TACAN FACILITY (BLDG. 1917)
PENSACOLA NAVAL AIR STATION

SCALE: 1" = 20'-0"
DATE: SEPTEMBER 2006
DRAWN BY: KRUCHELL

LEGEND

A.P.O.	A PORTION OF....
——N——	8' CHAIN LINK SECURITY FENCE
—o—o—o—	6' WOODEN PRIVACY FENCE
	CONCRETE
MW 1	MONITOR WELL
RW 1	RECOVERY WELL
SB-1	SOIL BORING
DW 1	DEEP WELL
— —1.0— —	BENZENE CONCENTRATION CONTOUR (ug/L) MW 2 = 3.4 ug/L



JOB #: 0403-374-05

FIGURE 6-3 BENZENE CONCENTRATION CONTOUR

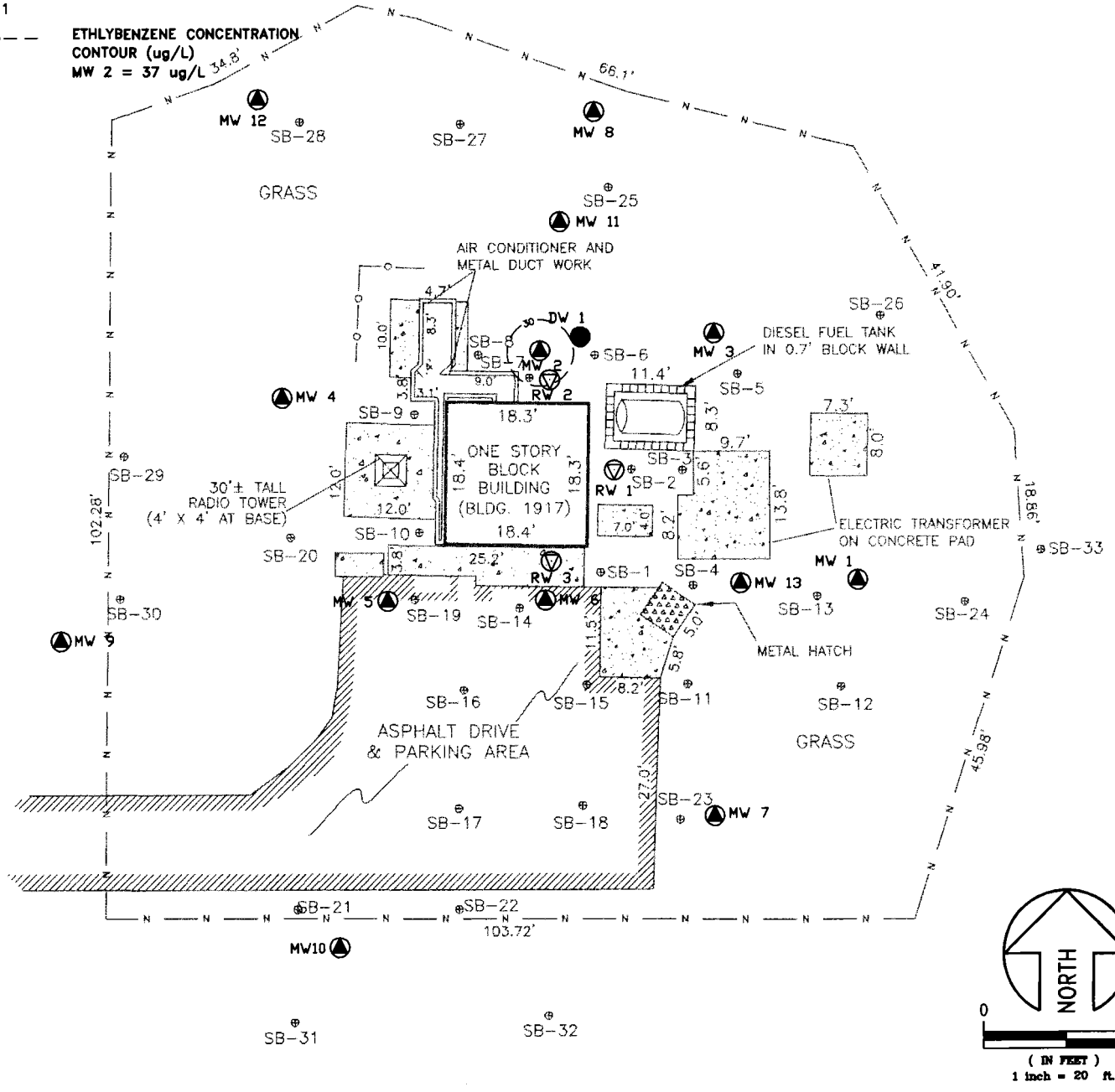
AEROSTAR ENVIRONMENTAL SERVICES, INC.

TACAN FACILITY (BLDG. 1917)
PENSACOLA NAVAL AIR STATION

SCALE: 1" = 20'-0"
DATE: SEPTEMBER 2006
DRAWN BY: KRUCHELL

LEGEND

- A.P.O. — A PORTION OF....
- 8' CHAIN LINK SECURITY FENCE
- 6' WOODEN PRIVACY FENCE
- CONCRETE
- MW 1 — MONITOR WELL
- RW 1 — RECOVERY WELL
- SB-1 — SOIL BORING
- DW 1 — DEEP WELL
- 30 — ETHLYBENZENE CONCENTRATION CONTOUR (ug/L)
  MW 2 = 37 ug/L



JOB #: 0403-374-05

FIGURE 6-4 ETHLYBENZENE CONCENTRATION CONTOUR

AEROSTAR ENVIRONMENTAL SERVICES, INC.

TACAN FACILITY (BLDG. 1917)
PENSACOLA NAVAL AIR STATION

SCALE: 1" = 20'-0"
DATE: SEPTEMBER 2006
DRAWN BY: KRUCHELL

LEGEND

A.P.O. — A PORTION OF....

N — 8' CHAIN LINK SECURITY FENCE

O—O—O— 6' WOODEN PRIVACY FENCE

CONCRETE

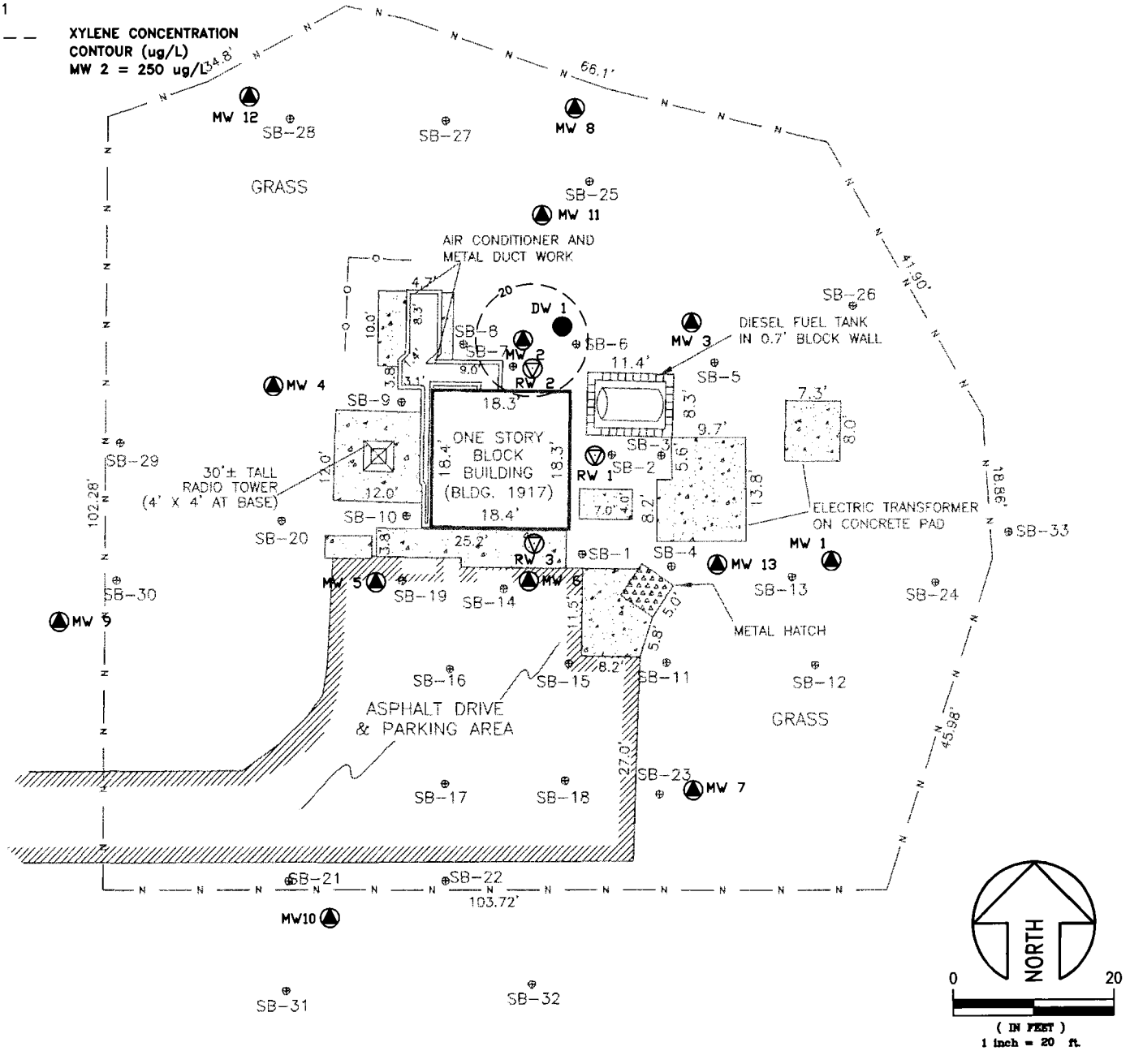
MW 1 — MONITOR WELL

RW 1 — RECOVERY WELL

SB-1 — SOIL BORING

DW 1 — DEEP WELL

20 — XYLENE CONCENTRATION CONTOUR (ug/L)
MW 2 = 250 ug/L



JOB #: 0403-374-05

FIGURE 6-5 XYLENE CONCENTRATION CONTOUR

AEROSTAR ENVIRONMENTAL SERVICES, INC.

TACAN FACILITY (BLDG. 1917)
PENSACOLA NAVAL AIR STATION

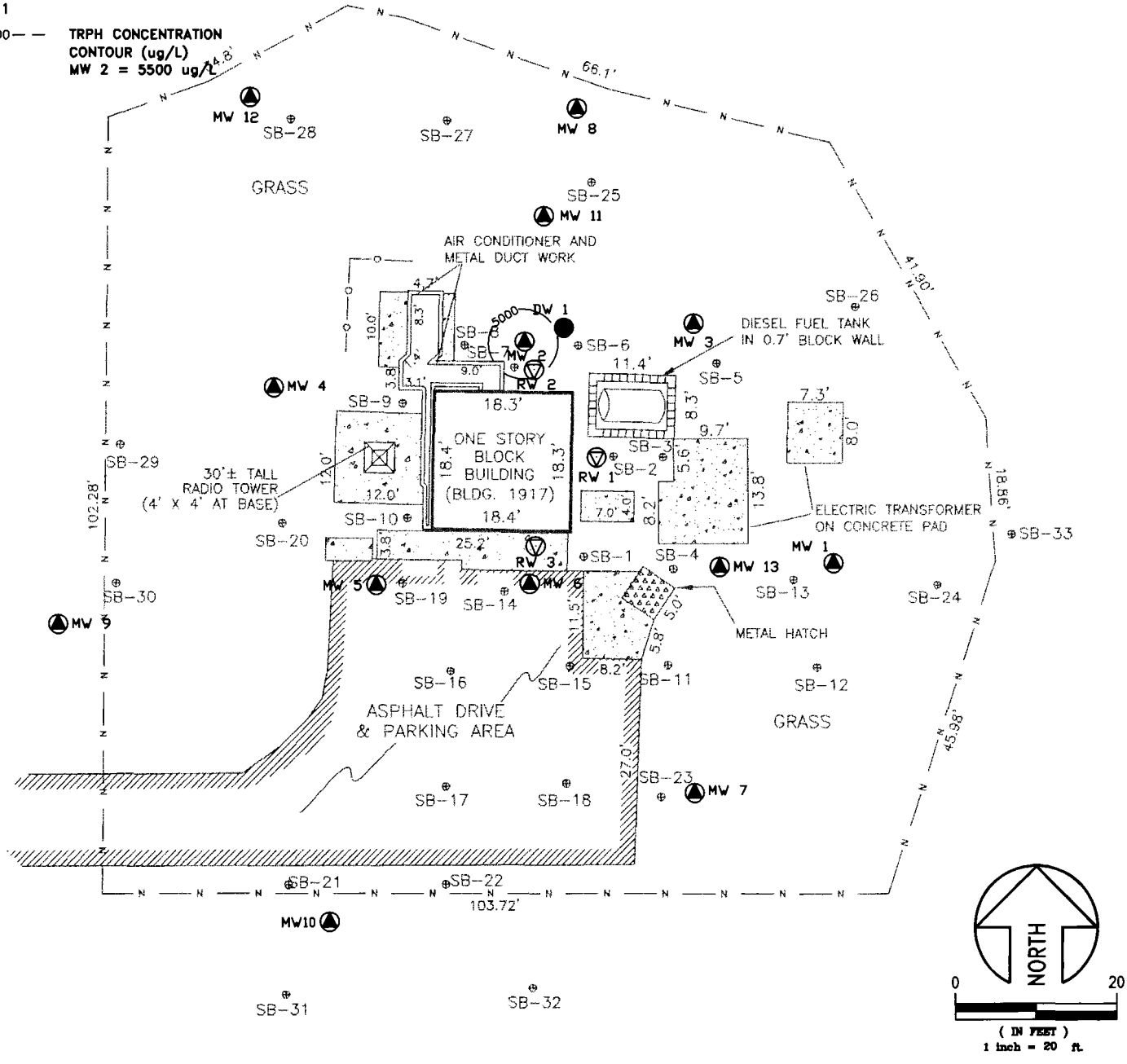
SCALE: 1" = 20'-0"

DATE: SEPTEMBER 2006

DRAWN BY: KRUCHELL

LEGEND

- A.P.O. — A PORTION OF....
- N — 8' CHAIN LINK SECURITY FENCE
- O—O—O— 6' WOODEN PRIVACY FENCE
- CONCRETE
- MW 1 — MONITOR WELL
- RW 1 — RECOVERY WELL
- SB-1 — SOIL BORING
- DW 1 — DEEP WELL
- —5000— TRPH CONCENTRATION CONTOUR (ug/L)
  MW 2 = 5500 ug/L



JOB #: 0403-374-05

FIGURE 6-6 TRPH CONCENTRATION CONTOUR

AEROSTAR ENVIRONMENTAL SERVICES, INC.

TACAN FACILITY (BLDG. 1917)
PENSACOLA NAVAL AIR STATION

SCALE: 1" = 20'-0"
DATE: SEPTEMBER 2006
DRAWN BY: KRUCHELL

TABLES

TABLE 2-1 MONITORING/RECOVERY WELL CONSTRUCTION DETAILS

Facility Name: BUILDING 1917 - TACAN FACILITY Facility ID#: 179802359

WELL NO.	DATE INSTALLED	INSTALLATION METHOD	TOP OF CASING ELEVATION	A/G RISER LENGTH, IF APPLICABLE	TOTAL WELL DEPTH (FEET)	SCREENED INTERVAL (FBLS)	WELL DIAMETER (IN.)	LITHOLOGY OF SCREENED INTERVAL
MW-1	9/18/2003	HSA	102.39	2.70	12.39	2.39-12.39	2	DARK BROWN SILTY MED. GRAIN SAND
MW-2	9/18/2003	HSA	102.46	2.33	12.95	2.95-12.95	2	DARK BROWN SILTY MED. GRAIN SAND
MW-3	9/18/2003	HSA	102.58	2.63	12.77	2.77-12.77	2	DARK BROWN SILTY MED. GRAIN SAND
MW-4	9/18/2003	HSA	102.68	3.00	12.32	2.32-12.32	2	DARK BROWN SILTY MED. GRAIN SAND
MW-5	9/18/2003	HSA	99.82	N/A	12.20	1.70 - 11.70	2	DARK BROWN SILTY MED. GRAIN SAND
MW-6	9/18/2003	HSA	99.63	N/A	12.22	1.72 - 11.72	2	DARK BROWN SILTY MED. GRAIN SAND
IMW-7	9/18/2003	HSA	101.96	2.50	12.84	7.84-12.84	2	DARK BROWN SILTY MED. GRAIN SAND
MW-8	9/19/2003	HSA	102.32	2.58	12.52	2.52-12.52	2	DARK BROWN SILTY MED. GRAIN SAND
MW-9	9/19/2003	HSA	102.40	2.50	12.64	2.64-12.64	2	DARK BROWN SILTY MED. GRAIN SAND
MW-10	9/19/2003	HSA	102.48	2.58	12.65	2.65-12.65	2	DARK BROWN SILTY MED. GRAIN SAND
RW-1	9/18/2003	HSA	100.00	N/A	7.00	2.00 - 7.00	2	ORANGE/ GREY SILTY MED. GRAIN SAND
RW-2	9/18/2003	HSA	99.95	N/A	7.00	2.00- 7.00	2	ORANGE/BR. SILTY MED. GRAIN SAND
RW-3	9/19/2003	HSA	99.76	N/A	7.00	2.00 - 7.00	2	DARK BROWN SILTY MED. GRAIN SAND
MW-11	09/05/06	HSA	Unk	2.50	10.90	1.9-10.9	2	DARK BROWN SILTY MED. GRAIN SAND
MW-12	09/05/06	HSA	Unk	2.50	11.00	1.0-11.00	2	DARK BROWN SILTY MED. GRAIN SAND
MW-13	09/05/06	HSA	Unk	2.50	11.10	1.10-11.10	2	DARK BROWN SILTY MED. GRAIN SAND
DW-1	09/06/06	HSA	Unk	2.50	25.50	20.5-25.5	2	DARK BROWN SILTY MED. GRAIN SAND

Note: All new wells will be surveyed during RAP Preparation.

TABLE 2-2 HISTORICAL GROUNDWATER ELEVATION SUMMARY

Facility Name: NASP - BUILDING 1917 (TACAN) Facility ID#: 17/9802359

No Data = Blank

WELL NO.	MW-1			MW-2			MW-3			MW-4			MW-5		
DIAMETER (in)	2			2			2			2			2		
WELL DEPTH	12.39			12.95			12.77			12.32			12.20		
SCREEN INT	2.39-12.39			2.95-12.95			2.77-12.77			2.32-12.32			1.70 - 11.70		
TOC ELEV	102.39			102.46			102.58			102.68			99.82		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
9/23/2003	99.18	3.21	0.00	99.09	3.37	0.00	99.23	3.35	0.00	99.27	3.41	0.00	99.31	0.51	0.00

WELL NO.	MW-6			MW-7			MW-8			MW-9			MW-10		
DIAMETER	2			2			2			2			2		
WELL DEPTH	12.22			12.84			12.52			12.64			12.65		
SCREEN INT	1.72 - 11.72			7.84-12.84			2.52-12.52			2.64-12.64			2.65-12.65		
TOC ELEV	99.63			101.96			102.32			102.40			102.48		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
9/23/2003	99.26	0.37	0.00	99.20	2.76	0.00	99.24	3.08	0.00	99.29	3.11	0.00	99.25	3.23	0.00

WELL NO.	MW-11			MW-12			MW-13			DW-1		
DIAMETER	2			2			2			2		
WELL DEPTH	10.90			11.00			11.10			25.50		
SCREEN INT	1.09-10.90			1.00-11.00			1.10-11.10			20.50-25.50		
TOC ELEV	Unk			Unk			Unk			Unk		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
9/19/2006		2.70	0.00		2.70	0.00		3.00	0.00		3.00	0.00

NOTE: TOC elevations will be surveyed for new wells during RAP preparation.

TABLE 3-1 POTABLE SUPPLY WELL DATA

Facility Name: TACAN FACILITY/BLDG 1917

WELL I.D./LOCAL NAME	LOCATION	TOTAL DEPTH	SCREENED INTERVAL	CASING DIAMETER
302116087170201/No. 1	S1-T3s-R30W/Duncan & Taylor Rds.	174 ft-bls	105-160 ft-bls	24 in.
302124087163601/No. 2	S1-T3s-R30W/Murray & Farrar Rds.	178 ft-bls	110-160 ft-bls	24 in.

TABLE 4-1 SOIL OVA SCREENING RESULTS

Facility Name: TACAN/BLDG 1917 Facility ID#: 17/9802359

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-1	9/17/03	2.0	0-1	0	0	0	
			1-2	1700	600	1100	
SB-2	9/17/03	2.0	0-1	11	5	6	
			1-2	3500	1500	2000	ANALYTICAL SAMPLE
SB-3	9/17/03	2.0	0-1	0	0	0	
			1-2	350	160	190	
SB-4	9/17/03	2.0	0-1	0	0	0	
			1-2	200	100	100	ANALYTICAL SAMPLE
SB-5	9/17/03	2.5	0-1	150	50	100	
			1-2	0	0	0	
			2-2.5	0	0	0	
SB-6	9/17/03	2.0	0-1	0	0	0	
			1-2	15	8	7	
SB-7	9//17/03	2.0	0-1	0	0	0	
			1-2	15	8	7	

TABLE 4-1 SOIL OVA SCREENING RESULTS

Facility Name: BLDG. 1917, NASP Facility ID#: 17/9802359

SAMPLE			OVA SCREENING RESULTS				
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-8	9/17/03	1.5	0 - 1	0	0	0	
SB-9	9/17/03	1.5	0	0	0	0	
SB-10	9/17/03	2.0	0-1	20	10	10	
			1-2	430	270	160	
SB-11	9/18/03	3.0	0-1	90	50	40	
			1-2	0	0	0	
			2-3	0	0	0	
SB-12	9/18/03	2.0	0-1	0	0	0	
			1-2	0	0	0	
SB-13	9/18/03	2.0	0-1	170	100	70	
			1-2	18	8	10	
SB-14	9//18/03	3.0	0-1	1500	400	1100	
			1-3	375	40	335	

TABLE 4-1 SOIL OVA SCREENING RESULTS

Facility Name: BLDG. 1917, NASP Facility ID#:17/9802359

SAMPLE			OVA SCREENING RESULTS				
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-15	9/18/03	3.0	0 - 1	0	0	0	
			1-3	0	0	0	
SB-16	9/18/03	3.0	0-1	0	0	0	
			1-3	0	0	0	
SB-17	9/18/03	3.0	0-1	220	90	130	
			1-2.5	85	20	65	
SB-18	9/18/03	3.0	0-1	0	0	0	
			1-2.5	0	0	0	
SB-19	9/18/03	3.0	0-1	12	10	2	
			1-2.5	0	0	0	
SB-20	9/18/03	3.0	0-1	120	45	75	
			1-2.5	12	4	8	
SB-21	9//18/03	2.5	0-1	120	50	70	ANALYTICAL SAMPLE
			1-2.5	0	0	0	

TABLE 4-1 SOIL OVA SCREENING RESULTS

Facility Name: BLDG. 1917, NASP Facility ID#:

SAMPLE			OVA SCREENING RESULTS				
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-22	9/18/03	2.5	0 - 1	25	10	15	
			1-2.5	10	4	6	
SB-23	9/18/03	2.5	0-1	14	8	6	
			1-2.5	0	0	0	
SB-24	9/18/03	3.0	0-1	130	100	30	
			1-2.5	50	20	30	
SB-25	9/18/03	3.0	0-1	0	0	0	
			1-2.5	0	0	0	
SB-26	9/18/03	3.0	0-1	20	15	5	
			1-2.5	0	0	0	
SB-27	9/18/03	3.0	0-1	40	35	5	
			1-2.5	0	0	0	
SB-28	9//18/03	3.0	0-1	50	26	24	
			1-2.5	0	0	0	

TABLE 4-1 SOIL OVA SCREENING RESULTS

Facility Name: BLDG. 1917, NASP Facility ID#: 17/9802359

SAMPLE			OVA SCREENING RESULTS				
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-29	9/18/03	2.5	0 - 1	25	10	15	
			1-2.5	0	0	0	
SB-30	9/18/03	2.5	0-1	300	200	100	
			1-2.5	10	5	5	
SB-31	9/18/03	2.5	0-1	60	32	28	
			1-2.5	70	40	30	
SB-32	9/18/03	2.5	0-1	11	8	3	
			1-2.5	0	0	0	
SB-33	9/18/03	2.5	0-1	0	0	0	
			1-2.5	0	0	0	

TABLE 4-1 SOIL OVA SCREENING RESULTS

Facility Name: TACAN, Bldg 1917 Facility ID#: 17/9802359

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
MW-10	9/19/03	2.5	0 - 1	70	50	20	
			1-2.5	15	10	5	
RW-3	9/18/03	2.5	0-1	1700	500	1200	
			1-2.5	2500	1000	1500	
MW-11	9/5/06	2.7	0-1	0	0	0	No observable odors
			1-2.5				
MW-12	9/5/06	2.7	0-1	0	0	0	No observable odors
			1-2.5				
MW-13	9/5/06	2.7	0-1	0	0	0	No observable odors
			1-2.5				
DW-1	9/6/06	2.7	0-1	0	0	0	No observable odors
			1-2.5				

TABLE 4-2 SUMMARY OF ANALYTICAL COMPOUNDS IN SOILS

Facility Name: TACAN/Bldg. 1917, NASP

Sample				OVA	Laboratory Analyses								Comments
Boring No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzene (ppm)	Ethyl-benzene (ppm)	Toluene (ppm)	Total Xylenes (ppm)	Total VOAs (ppm)	MTBE (ppm)	Naph-thalene (ppm)	TRPHs (ppm)	
SB-2	9/19/2003	2.5	2	2000	0.012	0.7900	ND	1.5	2.30	ND	ND	7900	HIGH FID RESPONSE
SB-4	9/19/03	2.5	2	100	ND	ND	ND	ND	ND	ND	ND	5.2	MEDIUM FID RESPONSE
SB-21	9/19/03	3	1	70	ND	ND	ND	ND	ND	ND	ND	26.0	LOW FID RESPONSE

TABLE 4-3: HISTORICAL GROUNDWATER LABORATORY ANALYTICAL SUMMARY

Facility Name: Tacan Site-NAS Pensacola, FL (Also referred to as Building 1917)

Facility ID# 17/9802359

Location	Sample Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDB	Total Lead	TRPHs	Naphthalene	1-methyl naphthalene	2-methyl naphthalene
MW-1	09/23/03	<1.0	<4.0	<1.0	<2.0	<1.0	<0.020	<5.00	<100	<10	<10	<10
MW-2	09/23/03	3.4	20	37	250	<1.0	<0.020	<5.00	5500	<10	16	<10
MW-3	09/23/03	<1.0	<4.0	1.4	<2.0	<1.0	<0.020	<5.00	<100	<10	<10	<10
MW-4	09/23/03	<1.0	<4.0	<1.0	<2.0	<1.0	<0.020	<5.00	<100	<10	<10	<10
MW-5	09/23/03	<1.0	<4.0	<1.0	<2.0	<1.0	<0.020	<5.00	<100	<10	<10	<10
MW-6	09/23/03	<1.0	<4.0	<1.0	<2.0	<1.0	<0.020	<5.00	<100	<10	<10	<10
MW-7	09/23/03	<1.0	<4.0	<1.0	<2.0	<1.0	<0.020	<5.00	<100	<10	<10	<10
MW-8	09/23/03	<1.0	<4.0	<1.0	<2.0	<1.0	<0.020	<5.00	<100	<10	<10	<10
MW-9	09/23/03	<1.0	<4.0	<1.0	<2.0	<1.0	<0.020	6	<100	<10	<10	<10
MW-10	09/23/03	<1.0	<4.0	<1.0	<2.0	<1.0	<0.020	<5.00	<100	<10	<10	<10
MW-11	09/19/06	<1.0	<5.0	<5.0	<10	<5.0	NA	2.4 I	107	<10	<10	<10
MW-12	09/19/06	<1.0	<5.0	<5.0	<10	<5.0	NA	1.4 I	78 I	<10	<10	<10
MW-13	09/19/06	<1.0	<5.0	<5.0	<10	<5.0	NA	1.5 I	158	<10	<10	<10
DW-1	09/19/06	<1.0	<5.0	<5.0	<10	<5.0	NA	1.6 I	274	<10	<10	<10
Ch. 62-777, F.A.C. GCTL		*1*	*40*	*30*	*20*	*20*	*0.02*	*15*	*5000*	*14*	*28*	*28*

LEGEND:

NA = Not Analyzed

NS = Not Sampled

NI = Not Installed

M/A = Missing/Abandoned

DRY = Dry Well

BDL = Below Detection Limit

GCTL = Groundwater Cleanup Target Level

F.A.C. = Florida Administrative Code

Results in ug/L

Exceedance of GCTL

APPENDIX A
DISCHARGE REPORTING FORM

Discharge Report Form

PLEASE PRINT OR TYPE

DEP Form # 62-761.900(1)
Form Title Discharge Report Form
Effective Date: July 13, 1998

Instructions are on the reverse side. Please complete all **applicable** blanks

1. **Facility ID Number** (if registered): 179802359 2. **Date of form completion:** 10/29/02

3. **General information**
Facility name or responsible party (if applicable): NAVAL AIR STATION PENSACOLA
Facility Owner or Operator, or Discharger:
Contact Person: GREG CAMPBELL Telephone Number: (850) 452-4611(103) County: ESCAMBIA
Facility or Discharger Mailing Address: BLDG 1917 - TACAN FACILITY 190 RADFORD BLVD. PENSACOLA 32508-6
Location of Discharge (street address): BLDG 1917 - TACAN FACILITY
Latitude and Longitude of Discharge (if known) UNKNOWN

4. **Date of receipt of test results or discovery of confirmed discharge:** _____ month/day/year

5. **Estimated number of gallons discharged:** UNKNOWN

6. **Discharge affected:** [ ] Air [X] Soil [X] Groundwater [ ] Drinking water well(s) [ ] Shoreline [ ] Surface water (water body name) _____

7. **Method of discovery** (check all that apply)

[ ] Liquid detector (automatic or manual)	[ ] Internal inspection	[ ] Closure/Closure Assessment
[ ] Vapor detector (automatic or manual)	[ ] Inventory control	[ ] Groundwater analytical samples
[ ] Tightness test	[ ] Monitoring wells	[ ] Soil analytical tests or samples
[ ] Pressure test	[ ] Automatic tank gauging	[X] Visual observation
[ ] Statistical Inventory Reconciliation	[ ] Manual tank gauging	[ ] Other _____

8. **Type of regulated substance discharged:** (check one)

[ ] Unknown	[ ] Used/waste oil	[ ] Jet fuel	[ ] Heating oil	[ ] New/lube oil
[ ] Gasoline	[ ] Aviation gas	[X] Diesel	[ ] Kerosene	[ ] Mineral acid

[ ] Hazardous substance - includes CERCLA substances from USTs above reportable quantities, pesticides, ammonia, chlorine, and derivatives (write in name or Chemical Abstract Service (CAS) number) _____
[ ] Other _____

9. **Source of Discharge:** (check all that apply)

[ ] Dispensing system	[ ] Pipe	[ ] Barge	[ ] Pipeline	[ ] Vehicle
[ ] Tank	[ ] Fitting	[ ] Tanker ship	[ ] Railroad tankcar	[ ] Airplane
[X] Unknown	[ ] Valve failure	[ ] Other Vessel	[ ] Tank truck	[ ] Drum

[ ] Other _____

10. **Cause of the discharge:** (check all that apply)

[ ] Loose connection	[ ] Puncture	[ ] Spill	[ ] Collision	[ ] Corrosion
[ ] Fire/explosion	[ ] Overfill	[ ] Human error	[ ] Vehicle Accident	[ ] Installation failure

[X] Other UNKNOWN AT THIS TIME

11. **Actions taken in response to the discharge:** ABSORBED

12. **Comments:**

13. **Agencies notified** (as applicable):

[ ] State Warning Point 1-800 320-0519	[X] National Response Center 1-800-424-8802	[ ] Florida Marine Patrol (800) 342-5367	[X] Fire Department. _____	[X] DEP (district/person) [X] County Tanks Program

14. **To the best of my knowledge and belief, all information submitted on this form is true, accurate, and complete.**

WILLIAM TAYLOR, JR.
Printed Name of Owner, Operator or Authorized Representative, or Discharger

William H. Taylor Jr.
Signature of Owner, Operator or Authorized Representative, or Discharger

APPENDIX B
SOURCE REMOVAL REPORT

BER Incident#

Source Removal Report

The Florida Dept. of Environmental Protection, Bureau of Emergency Response (BER), has created this form which may be used as a cleanup report for any type of discharge, including the cleanup of petroleum discharges under F.A.C. 62-770. BER requests that this form be used, as this form will allow quicker review and closure of the case. For petroleum discharges, the information contained herein must be provided to DEP within 60 days of soil/debris disposal, as required by FAC 62-770.300. Send the report and attachments to:

Fla. DEP Bureau of Emergency Response, Port Panama City, 1832 "B" Ave., Panama City, FL 32401
850/872-7650; fax 850/872-7668

Date of:
Incident: 10 / 28 / 02
Cleanup Initiated: 2 / 10 / 03
Cleanup Completed: 2 / 11 / 03

Material(s) Discharged: DIESEL

Amount:
UNKNOWN >25 gallons
gallons
gallons

Location of Incident: BUILDING 1917

Latitude: 30° 21' 28"

Nearest Town: PENSACOLA **County:** ESCAMBIA Longitude: 87° 18' 60"

Cause of Discharge:
- ☐ tank leak
- ☐ tank overfill
- ☐ valve leak
- ☐ vehicle crash
- ☐ drum leak
- ☐ pipe leak
- ☒ UNKNOWN

Environment Affected:
- ☒ soil
- ☒ groundwater
- ☐ air
- ☐ storm drain
- ☐ ditch
- ☐ surface water:
- ☐ impervious surface
- ☐ wells nearby

Responsible Party/Spiller:
Name: NAS PENSACOLA
Address: 190 RADFORD BLVD.
City: PENSACOLA State: FL Zip: 32508-6500
Contact: GREG CAMPBELL, P.E. Phone: 452-4611 (EXT. 103)

Cleanup Contractor:
Contact: ROBERT A. BARR III
BARCOR ENTERPRISES, INC.
Phone: 497-8322

Method(s) of Cleanup:
- ☒ soil excavation
- ☐ booms
- ☐ absorbants
- ☐
- ☐ vacuum truck
- ☐ skimmer
- ☐ neutralization

Free Product Recovered: 0 gallons

Free product disposal:
- ☐ incineration
- ☐ fuel blending
- ☐ wastewater treatment
- ☐

Amount of Soil Removed: 38.21 ☐ cubic yds. ☒ tons ☐ lbs ☐ drums

Disposal method of soil:
- ☐ soil thermal treatment facility
- ☐ hazardous waste
- ☐ landfill ☐

Disposal method of any other debris: N/A
- ☐ soil thermal treatment facility
- ☐ haz. waste
- ☐ landfill ☐

Dimensions of soil excavation: VARIES (SEE FIGURES 1 THRU 3)

Depth to groundwater: 3 feet. How determined?: HAND AUGER

Method/Instrument to Screen Soil:
- ☒ OVA/FID (Org. Vapor Analyzer)
- ☐ PID (Photolonization Detector)
- ☐

Summary of Instrument Readings: (OVA: net result w/out methane)
- highest reading observed: 701 ppm
- highest reading after excavation: 6 ppm
- lowest reading after excavation: 0 ppm

Comments:

Attach a copy of: scaled site drawing/map; table of instrument readings/depths; disposal manifests; lab reports of soil and waste analyses (with QA info); certificate of disposal (when available).

Certification: I certify that the above information and attachments are true and complete, to the best of my knowledge. I understand that submission of false information, or failure to comply with DEP's regulations, is a civil and criminal violation and may be grounds for enforcement action.

Print name: WILLIAM H. TAYLOR, JR. Affiliation: DIRECTOR, ENV. DEPT. NAS PENSACOLA

Signature: William H. Taylor Jr. Date: 3/3/03

BARCOR Enterprises, Inc.

1093 Freeboard Boulevard
Pensacola, Florida 32507
(850) 497-8322 ✦ Fax (850) 497-8337

State License # PC-C056750

February 24, 2003

Mr. Mark Shull
Naval Facilities Engineering Command
ROICC Pensacola
Naval Air Station
520 Turner Street, Bldg. 746
Pensacola, Florida 32506-5225

RE: Petroleum Contaminated Soil Removal And Disposal-NASP Building 1917 (TACAN FACILITY)

Dear Mr. Shull:

This letter provides notification that BARCOR Enterprises has completed the petroleum contaminated soil removal and disposal operations at the above referenced facility. This work was completed under contract number N62467-03-M-3140. BARCOR Enterprises excavated 38.21 tons of petroleum contaminated soil in the vicinity of building 1917 (TACAN Facility).

On 2/4/03 ENVIRO-PRO-TECH personnel (EPT) collected soil samples from borings (ESB-1 thru ESB-27) installed in areas suspected to be contaminated with diesel fuel. These samples were visually inspected and screened in the field with an organic vapor analysis instrument (Foxboro model 108 OVA-FID). All samples intervals were field screened using a filter to measure naturally occurring methane. Soil samples were placed in pint sized mason jars and allowed to equilibrate five (5) minutes before headspace measurements were taken with an OVA-FID. The sample locations are depicted in Figure 1 and the vapor results are tabulated in Table 1. Elevated vapor readings were encountered in borehole ESB-6. Stained soils emitting petroleum odor were encountered in boreholes ESB-1, ESB-4, ESB-5, ESB-6, and ESB-24.

On 2/10/03 BARCOR personnel mobilized and began excavating petroleum stained soil on the southwest corner and north side of the building. Soils were excavated by shovel to a depth of 1.5' within 3' of the building in accordance with the contract specification. Petroleum contaminated soils greater than 3' from the building were excavated to the water table, encountered at a depth of 3' below land surface across the site. Upon removing the visibly stained soils in these areas, soil samples (S-1 thru S-5) were collected and visually inspected and screened in the field with an organic vapor analysis instrument (Foxboro model 108 OVA-FID). All samples intervals were field screened using a filter to measure naturally occurring methane. Soil samples were placed in pint

sized mason jars and allowed to equilibrate five (5) minutes before headspace measurements were taken with an OVA-FID. The sample locations are depicted in Figure 2 and the vapor results are tabulated in Table 1. Elevated vapor readings were encountered in borehole S-1 through S-5. Groundwater began migrating into the excavation on the north side of the building. Diesel product is visible on the water table in this area.

On 2/11/03 the excavation continued on the east side, north side and southwest corner of the building. Upon removing the visibly stained soils, soil samples (S-6 thru S-25) were collected from the sides of the excavations to confirm that petroleum contaminated soils above the groundwater had been removed. These samples were visually inspected and screened in the field with an organic vapor analysis instrument (Foxboro model 108 OVA-FID). All samples intervals were field screened using a filter to measure naturally occurring methane. Soil samples were placed in pint sized mason jars and allowed to equilibrate five (5) minutes before headspace measurements were taken with an OVA-FID. The sample locations are depicted in Figure 3 and the vapor results are tabulated in Table 1. No vapor readings above 10 parts per million (ppm) were encountered in any of the soil samples.

The petroleum contaminated soils were transported and disposed of at Springhill Landfill. Waste profile and non-hazardous manifest sheets are enclosed.

Groundwater was encountered approximately 3 feet below land surface in the excavations. Free product is visible on the water table in the excavation on the north side of the building. No groundwater samples were collected for analysis.

Based on the data collected it appears that the petroleum contaminated soil has been successfully removed to the groundwater, except in soils within 3' of the building. Groundwater contamination is probable, although no samples were collected for analyses. Should you have any questions or need additional information, please contact me at (850) 497-8322.

Sincerely,

BARCOR Enterprises

Robert A. Barr III

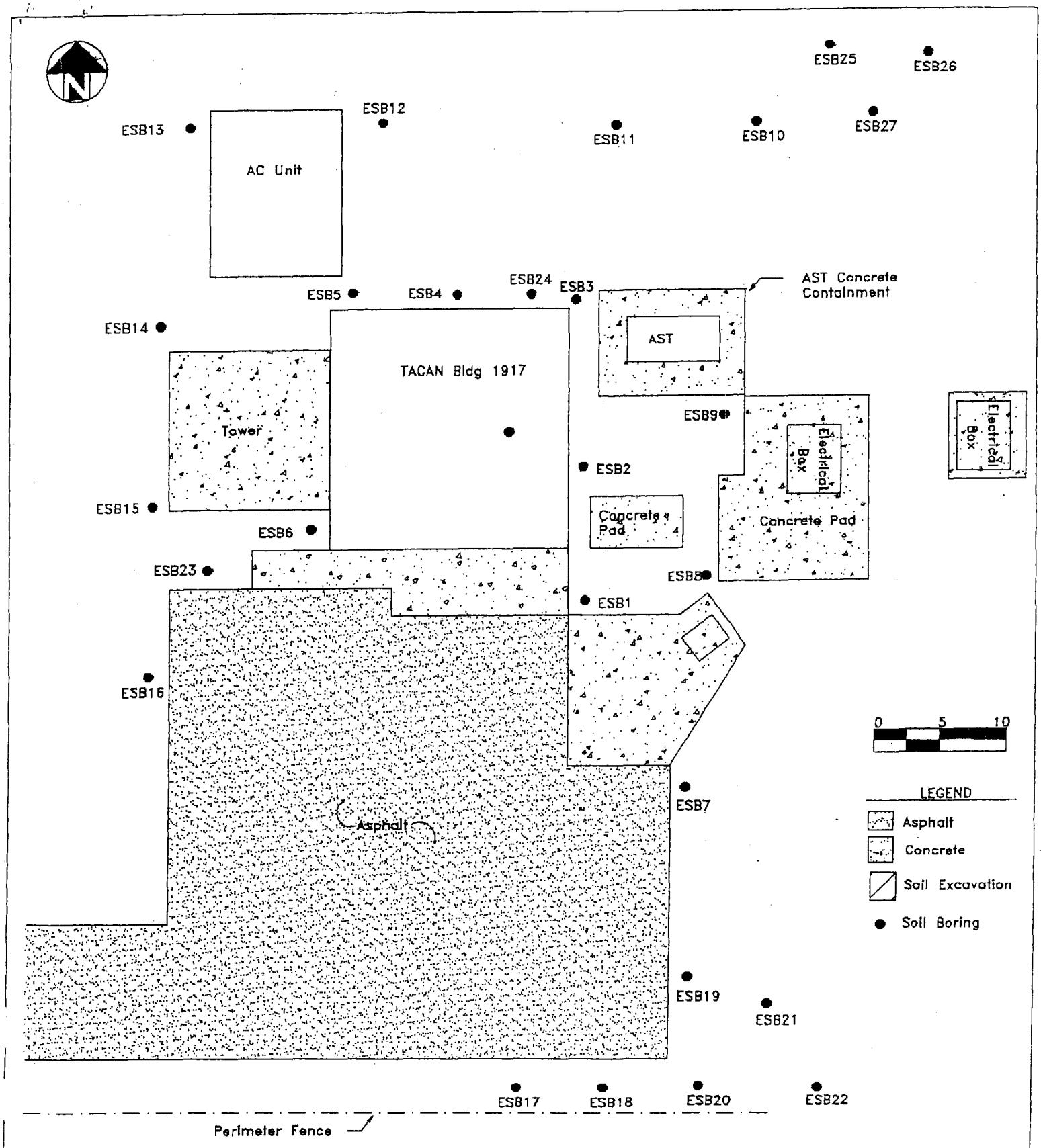


FIGURE 1	SITE: TACAN Site/Bldg 1917 Perimeter Rd NAS, Fl	Site Map Soil Boring Locations
BARCOR Enterprises 1093 Freeboard Blvd Pensacola, Florida 32507	PROJECT NO:	DATE: 2/4/03
	DRAWING NO: NAS1917	SCALE: 1" =10'

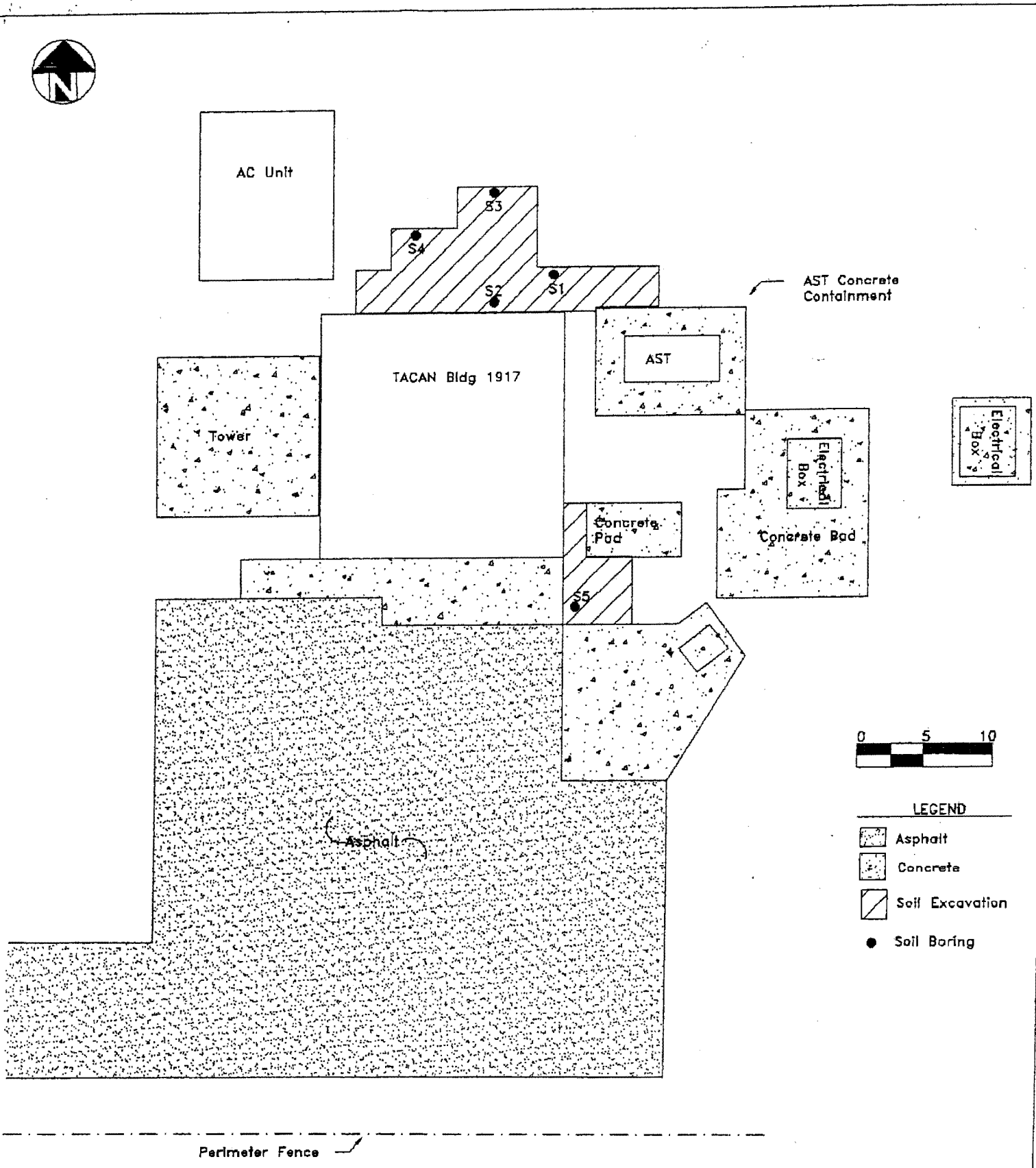


FIGURE 2	SITE: TACAN Site/Bldg 1917 Perimeter Rd NAS, Fl	Site Map Soil Boring Locations
BARCOR Enterprises 1093 Freeboard Blvd Pensacola, Florida 32507	PROJECT NO:	DATE: 2/10/03
	DRAWING NO: NAS1917	SCALE: 1" =10'

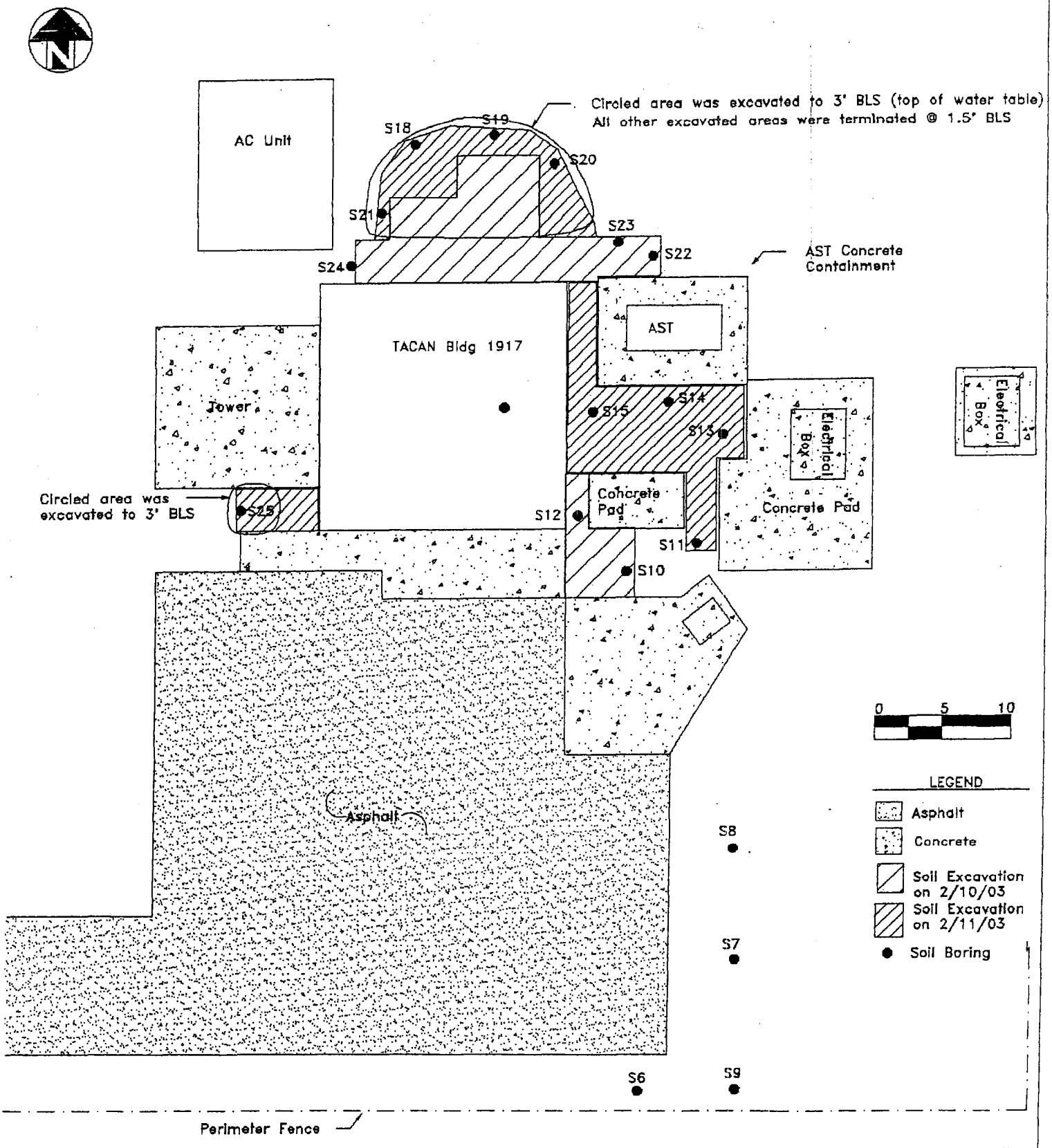


FIGURE 3	SITE: TACAN Site/Bldg 1917 Perimeter Rd NAS, Fl	Site Map Soil Boring Locations
BARCOR Enterprises 1093 Freeboard Blvd Pensacola, Florida 32507	PROJECT NO:	DATE: 2/11-12/03
	DRAWING NO: NAS1917	SCALE: 1" =10'

TABLE 1 - SOIL SCREENING SUMMARY

FACILITY NAME: TACN Facility Bldg. 1917
Sherman Field
NAS, FL

FAC ID#:

SAMPLE				OVA SCREENING RESULTS			
Boring Number	Date Collected	Depth to Water	Sample Interval (fbls)	Total Reading (ppm)	Carbon Filtered (ppm)	Net Reading (ppm)	Comments
ESB-1	2/4/03		0.5'-1'	5	0	5	Dark brown fn to med sand, slight petroleum odor
ESB-2	2/4/03		0.5'-1'	1	0	1	Dark brown fn to med sand, no odor
ESB-3	2/4/03		0.5'-1'	2	0	2	Dark brown fn to med sand, no odor
ESB-4	2/4/03		0.5'-1'	5	0	5	Dark brown fn to med sand, slight petroleum odor
ESB-5	2/4/03		0.5'-1'	0		0	Dark brown fn to med sand, slight petroleum odor
ESB-6	2/4/03		0.5'-1'	440	0	440	Dark brown fnto med sand, strong petro odor
			2	701	0	701	Tan fn to med sand, strong petro odor
		3	3	293	0	293	Brown fine to medium sand
ESB-7	2/4/03		0.5'-1'	0		0	Dark brown fn to med sand, no odor
ESB-8	2/4/03		0.5'-1'	0		0	Dark brown fn to med sand, no odor
ESB-9	2/4/03		0.5'-1'	0		0	Dark brown fn to med sand, no odor
ESB-10	2/4/03		0.5'-1'	0		0	Dark brown fn to med sand, no odor
ESB-11	2/4/03		0.5'-1'	0		0	Dark brown fn to med sand, no odor
ESB-12	2/4/03		0.5'-1'	0		0	Dark brown fn to med sand, no odor
ESB-13	2/4/03		0.5'-1'	0		0	Dark brown fn to med sand, no odor
ESB-14	2/4/03		0.5'-1'	0		0	Dark brown fn to med sand, no odor
ESB-15	2/4/03		0.5'-1'	0		0	Dark brown fn to med sand, no odor
ESB-16	2/4/03		0.5'-1'	0		0	Dark brown fn to med sand, no odor
ESB-17	2/4/03		0.5'-1'	0		0	Dark brown fn to med sand, no odor
ESB-18	2/4/03		0.5'-1'	1	0	1	Dark brown fn to med sand, no odor
ESB-19	2/4/03		0.5'-1'	1	0	1	Dark brown fn to med sand, no odor
ESB-20	2/4/03		0.5'-1'	1	0	1	Dark brown fn to med sand, no odor
ESB-21	2/4/03		0.5'-1'	0		0	Dark brown fn to med sand, no odor
ESB-22	2/4/03		0.5'-1'	0		0	Dark brown fn to med sand, no odor
ESB-23	2/4/03		0.5'-1'	0		0	Dark brown fn to med sand, no odor
ESB-24	2/4/03		0.5'-1'	2	0	2	Dark brown fn to med sand, strong odor
ESB-25	2/4/03		0.5'-1'	0		0	Dark brown fn to med sand, no odor
ESB-26	2/4/03		0.5'-1'	0		0	Dark brown fn to med sand, no odor
ESB-27	2/4/03		0.5'-1'	0		0	Dark brown fn to med sand, no odor
S-1	2/10/03	moist	2.5	500	0	500	Brown fn to med sand, strong petro odor
S-2	2/10/03		1.5	50	0	50	Brown fn to med sand, strong petro odor
S-3	2/10/03	moist	2.5	60	0	60	Brown fn to med sand, strong petro odor
S-4	2/10/03		2	100	0	100	Brown fn to med sand, strong petro odor
S-5	2/10/03		1.5	300	0	300	Brown fn to med sand, no odor
S-6	2/11/03		1	0		0	Brown fn to med sand, no odor
		moist	2.5	0		0	Brown grades to tan fn to med sand, no odor
S-7	2/11/03		1	0		0	Brown fn to med sand, no odor
		moist	2.5	0		0	Brown grades to tan fn to med sand, no odor
		wet	3	0		0	Tan fn to med sand, no odor
S-8	2/11/03		1	0		0	Brown fn to med sand, no odor
		moist	2.5	0		0	Brown grades to tan fn to med sand, no odor
		wet	3	0		0	Brown fn to med sand, no odor
S-9	2/11/03		1	0		0	Brown fn to med sand, no odor
		moist	2.5	0		0	Brown grades to tan fn to med sand, no odor
			3	0		0	Tan fn to med sand, no odor
S-10	2/11/03		1	0		0	Brown grades to tan fn to med sand, no odor

TABLE 1 - SOIL SCREENING SUMMARY

FACILITY NAME: TACN Facility Bldg. 1917
Sherman Field
NAS, FL

FAC ID#:

SAMPLE				OVA SCREENING RESULTS			
Boring Number	Date Collected	Depth to Water	Sample Interval (fbls)	Total Reading (ppm)	Carbon Filtered (ppm)	Net Reading (ppm)	Comments
		moist	2.5	0		0	Brown grades to tan fn to med sand, no odor
S-11	2/11/03		1	0		0	Brown fn to med sand, no odor
		moist	2.5	0		0	Brown grades to tan fn to med sand, no odor
S-12	2/11/03		1	0		0	Brown fn to med sand, no odor
		moist	2.5	0		0	Brown grades to tan fn to med sand, no odor
S-13	2/11/03		1	0		0	Brown fn to med sand, no odor
		moist	2.5	0		0	Brown grades to tan fn to med sand, no odor
S-14	2/11/03		1	0		0	Brown fn to med sand, no odor
		moist	2.5	0		0	Brown grades to tan fn to med sand, no odor
S-15	2/11/03		1	0		0	Brown fn to med sand, no odor
		moist	2.5	0		0	Brown grades to tan fn to med sand, no odor
S-16	2/11/03		1	0		0	Brown fn to med sand, no odor
		moist	2.5	0		0	Brown grades to tan fn to med sand, no odor
S-17	2/11/03		1	0		0	Brown fn to med sand, no odor
		moist	2.5	0		0	Brown grades to tan fn to med sand, no odor
S-18	2/11/03		1	0		0	Brown fn to med sand, no odor
		moist	2.5	6	0	6	Brown grades to tan fn to med sand, no odor
S-19	2/11/03		1	0		0	Brown fn to med sand, no odor
		moist	2.5	3	0	3	Brown grades to tan fn to med sand, no odor
S-20	2/11/03		1	0		0	Brown fn to med sand, no odor
		moist	2.5	6	0	6	Brown grades to tan fn to med sand, no odor
S-21	2/11/03		1	0		0	Brown fn to med sand, no odor
		moist	2.5	1	0	1	Brown grades to tan fn to med sand, no odor
S-22	2/11/03		1	0		0	Brown fn to med sand, no odor
		moist	2.5	0		0	Brown grades to tan fn to med sand, no odor
S-23	2/11/03		1	0		0	Brown fine to medium sand
		moist	2.5	0		0	Brown grades to tan fn to med sand, no odor
S-24	2/12/03		1	0		0	Tabn medium to coarse sand, no odor
			1.5	2	0	2	Tan medium to coarse sand, no odor
S-25	2/12/03		1	0		0	Brown fn to med sand, no odor
		moist	2.5	0		0	Brown grades to tan fn to med sand, no odor

STL

LOG NO: C3-02019
Received: 03 FEB 03
Reported: 05 FEB 03

Mr. Grady Swann
Enviro-Pro-Tech Inc.
1210 Barrancas Avenue
Pensacola, FL 32507

Cl Project No: 03-020

Project: SHERMAN FIELD, BEACON
Sampled By: Client
Code: 08573025

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED
02019-1	SOIL	02-03-03/12:00

PARAMETER	02019-1
Total Recoverable Petroleum Hydrocarbons (418.1), mg/kg dw	460000
Dilution Factor	500
Prep Date	02.04.03
Analysis Date	02.04.03
Batch ID	TP0148
Prep Method	9073/418.1
Analyst	BT
Percent Solids	91

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.
See the Project Sample Inspection Form (PSIF) to determine if a sample was received that did not meet EPA requirements for sample collection, preservation, or holding time.

Melissa L. Pope

Melissa L. Pope / Project Manager

Final Page Of Report

WASTE MANAGEMENT

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

Service Agreement on File? ☐YES ☐NO — Profile Number: CR 5586

☐Hazardous ☐Non-Hazardous ☐TSCA — Renewal Date: / /

A. Waste Generator Information

1. Generator Name: NAS Pensacola
2. SIC Code:
3. Facility Street Address: Bldg. 1917 TAGAIV
4. Phone: (850) 452-4611 ext. 103
5. Facility City: NAS Pensacola
6. State/Province: Florida
7. Zip/Postal Code:
8. Generator USEPA/Federal ID #: NA
9. County:
10. State/Province ID #:
11. Customer Name: BARCON Enterprises
12. Customer Phone: (850) 497-8382
13. Customer Contact: BOB BARR
14. Customer Fax: (850) 497-0969
15. Billing Address: 1093 Freelock Blvd Pensacola, FL. 32507 ☐Same as above

B. Waste Stream Information

1. Description
   a. Name of Waste: Diesel Contaminated Soil
   b. Process Generating Waste:

c. Color	d. Strong odor (describe):	e. Physical state @ 70°F	f. Layers	g. Free liquid range / h. pH: Range
Tan	Petroleum like diesel -	☑Solid ☐Liquid ☐Gas ☐Sludge ☐Other	☐Single Layer ☐Multi-layer	NA to % / to %

i. Liquid Flash Point: ☐<73°F ☐73-99°F ☐100-139°F ☐140-199°F ☑≥ 200°F ☐Not applicable

j. Chemical Composition (List all constituents [including halogenated organics, debris, and UHC's] present in any concentration and submit representative analysis):

Constituents	Concentration Range	Constituents	Concentration Range
99.999% Soil			
TRPH 0.0001% Diesel	46,000 ppm	~~TRPH~~	

TOTAL COMPOSITION MUST EQUAL OR EXCEED 100%

k. ☐Oxidizer ☐Pyrophoric ☐Explosive ☐Radioactive ☐Carcinogen ☐Infectious ☐Shock Sensitive ☐Water Reactive

l. Does the waste represented by this profile contain any of the carcinogens which require OSHA notification? (list in Section B.1.j) ☐YES ☑NO

m. Does the waste represented by this profile contain dioxins? (list in Section B.1.j) ☐YES ☑NO

n. Does the waste represented by this profile contain asbestos? ☐YES ☑NO
   If yes ☐friable ☐non-friable

o. Does the waste represented by this profile contain benzene? ☐YES ☑NO
   If yes, concentration _____ ppm
   Is the waste subject to the benzene waste operations NESHAP? ☐YES ☑NO

p. Is the waste subject to RCRA Subpart CC controls? ☐YES ☑NO
   If no, does the waste meet the organic LDR Exemption? ☐YES ☐NO
   If no, does the waste contain <500 ppmw volatile organic (VO)? ☐YES ☐NO
   Volatile organic concentration _____ ppmw

q. Does the waste contain any Class I or Class II ozone-depleting substances? ☐YES ☑NO

r. Does the waste contain debris? (list in Section B.1.j) ☐YES ☑NO

s. Is the waste subject to controls as a Group 1 wastewater or residual under the HON? ☐YES ☑NO
   If yes, is it a Table 8 _____ or Table 9 _____ compound?

2. Quantity of Waste
   Estimated Annual Volume 50-120 ☑Tons ☐Yards ☐Drums ☐Other (specify) _____

3. Shipping Information
   a. Packaging:
   ☑Bulk Solid; Type/Size: 22 cy. Truck ☐Bulk Liquid; Type/Size: _____
   ☐Drum; Type; Size: _____ ☐Other: _____

NON-HAZARDOUS MANIFEST

WASTE MANAGEMENT

Please print or type. *(Form designed for use on elite (12-pitch) typewriter.)*

NON-HAZARDOUS MANIFEST

1. Generator's US EPA ID No. | Manifest Document No.

2. Page 1 of

3. Generator's Name and Mailing Address: NAS Pensacola

A. Manifest Number: WMNA 297112

B. State Generator's ID

4. Generator's Phone: 850 - 452 - 4611 x103

5. Transporter 1 Company Name: B BART Hauling

6. US EPA ID Number

C. State Transporter's ID: US DOT 1018077

D. Transporter's Phone: 251-964-2050

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address: Springhill Landfill, 4945 Hwy 27, Campbellton/Graceville, FL 32440

10. US EPA ID Number: FLD

G. State Facility's ID: NA

H. Facility's Phone: 850-263-7100

11. Description of Waste Materials	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments
a. WM Profile # CR5586					
b. WM Profile #					
c. WM Profile #					
d. WM Profile #					

GENERATOR

J. Additional Descriptions for Materials Listed Above

Landfill_____ Solidification_____

Bio Remediation_____

K. Disposal Location

Cell Level

Grid

15. Special Handling Instructions and Additional Information: 335620

Purchase Order # EMERGENCY CONTACT:

16. GENERATOR'S CERTIFICATION:

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable regulations.

Printed/Typed Name	Signature "On behalf of"	Month	Day	Year
Robert A. Bass	c/o Greg Campbell	12	12	13

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Barry Childress		12	12	13

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Certificate of Final Treatment/Disposal

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.

Printed/Typed Name	Signature	Month	Day	Year
T Brown		12	12	13

NON-HAZARDOUS MANIFEST

WASTE MANAGEMENT

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. | 2. Page 1 of

3. Generator's Name and Mailing Address
NAS Bldg. 1917 (TCAA Facility)
NAS Pensacola
4. Generator's Phone

A. Manifest Number **WMNA 297111**
B. State Generator's ID

5. Transporter 1 Company Name: Bellview Site Contractors | 6. US EPA ID Number
C. State Transporter's ID: 88 2186
D. Transporter's Phone: 850-455-6801

7. Transporter 2 Company Name: Bellview Site Cont. 3(1 — | 8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

8. Designated Facility Name and Site Address
Springhill Landfill
4945 Hwy 273
Campbellton, FL 32420
10. US EPA ID Number
G. State Facility's ID
H. Facility's Phone: 850-863-7100

GENERATOR

11. Description of Waste Materials	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments
a. Cont. soil — WM Profile # CR 5586 CR 5586					
b. — WM Profile # 131.2					
c. RACOR — WM Profile # 77					
d. — WM Profile #					

J. Additional Descriptions for Materials Listed Above
Landfill _____ Solidification _____ 15.93 tons
Bio Remediation _____

K. Disposal Location
Cell Level
Grid

15. Special Handling Instructions and Additional Information

Purchase Order # EMERGENCY CONTACT:

16. GENERATOR'S CERTIFICATION:

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable regulations.

Printed/Typed Name: Robert A. Barr III | Signature "On behalf of": Robert A. Barr III c/o Greg Campbell | Month 12 Day 11 Year 03

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Eric Singerhouse | Signature | Month 12 Day 11 Year 03

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Certificate of Final Treatment/Disposal

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certificatelon of receipt of non-hazardous materials covered by this manifest.
Printed/Typed Name | Signature | Month 12 Day 11 Year 03

NON-HAZARDOUS MANIFEST

WASTE MANAGEMENT

Please print or type. *(Form designed for use on elite (12-pitch) typewriter.)*

NON-HAZARDOUS MANIFEST

1. Generator's US EPA ID No. | Manifest Document No.

2. Page 1 of

3. Generator's Name and Mailing Address: NAS Pensacola

A. Manifest Number: WMNA 297112

B. State Generator's ID

4. Generator's Phone: 850 - 452 - 4611 x103

5. Transporter 1 Company Name: B BARJ Hauling | 6. US EPA ID Number

C. State Transporter's ID: US Dot # 1018022

D. Transporter's Phone: 251-649-1550

7. Transporter 2 Company Name | 8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address: Springhill Landfill, 4995 Hwy 27, Campbellton/Graceville, FL 32465 | 10. US EPA ID Number

G. State Facility's ID

H. Facility's Phone: 850 - 263 - 7100

11. Description of Waste Materials	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments
a. WM Profile # CR5586					
b. WM Profile #					
c. WM Profile #					
d. WM Profile #					

GENERATOR

J. Additional Descriptions for Materials Listed Above

Landfill _____ Solidification _____

Bio Remediation _____

K. Disposal Location

Cell Level

Grid

15. Special Handling Instructions and Additional Information

335620

Purchase Order # EMERGENCY CONTACT:

16. GENERATOR'S CERTIFICATION:

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable regulations.

Printed/Typed Name	Signature "On behalf of"	Month	Day	Year
Robert A. Bass	c/o [illegible]	12	11	03

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Randy Childress	[illegible]	12	12	03

POST

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Certificate of Final Treatment/Disposal

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certificatelon of receipt of non-hazardous materials covered by this manifest.

Printed/Typed Name	Signature	Month	Day	Year
J Brown	[illegible]	12	12	03

WASTE MANAGEMENT

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

b. Shipping Frequency: Units _____ Per: ☐Month ☐Quarter ☐Year ☑One time ☐Other _____

c. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If no, skip d, e, and f) ☐YES ☑NO

d. Reportable Quantity (lbs.; kgs.): _____ e. Hazard Class/ID #: _____

f. USDOT Shipping Name: _____

g. Personal Protective Equipment Requirements: Level D

h. Transporter/Transfer Station: _____

C Generator's Certification (Please check appropriate responses, sign, and date below.)

1. Is this a USEPA hazardous waste (40 CFR Part 261)? If the answer is no, skip to 2 ☐YES ☑NO
   a. If yes, identify ALL USEPA listed and characteristic waste code numbers (D, F, K, P, U) _____
   b. If a characteristic hazardous waste, do underlying hazardous constituents (UHCs) apply? (If yes, list in Section B.1.) ☐YES ☑NO
   c. Does this waste contain debris? (If yes, list size and type in Chemical Composition - B.1.) ☐YES ☑NO

2. Is this a state hazardous waste? ☐YES ☑NO
   Identify ALL state hazardous waste codes _____

3. Is the waste from a CERCLA (40 CFR 300, Appendix B) or state mandated clean-up? ☐YES ☑NO
   If yes, attach Record of Decision (ROD), 104/106 or 122 order or court order that governs site clean-up activity. For state mandated clean-up provide relevant documentation.

4. Does the waste represented by this waste profile sheet contain radioactive material, or is disposal regulated by the Nuclear Regulatory Commission? ☐YES ☑NO

5. Does the waste represented by this waste profile sheet contain concentrations of Polychlorinated Biphenyls (PCBs) regulated by 40 CFR 761? (If yes, list in Chemical Composition - B.1.) ☐YES ☑NO
   a. If yes, were the PCBs imported into the U.S.? ☐YES ☐NO

6. Do the waste profile sheet and all attachments contain true and accurate descriptions of the waste material, and has all relevant information within the possession of the Generator regarding known or suspected hazards pertaining to the waste been disclosed to the Contractor? ☑YES ☐NO

7. Will all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor? ☑YES ☐NO

☐Check here if a Certificate of Destruction or Disposal is required.

Any sample submitted is representative as defined in 40 CFR 261 – Appendix I or by using an equivalent method. I authorize WM to obtain a sample from any waste shipment for purposes of recertification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Profile Sheet from information provided by the generator and additional information as it has determined to be reasonably necessary. If approved for management, Contractor has all the necessary permits and licenses for the waste that has been characterized and identified by this approved profile.

Certification Signature: _____ Title: President

Name (Type or Print): Robert A. Barr III Company Name: RARCOR Enterprise Date: 3/11/02

☐Check if additional information is attached. Indicate the number of attached pages _____

D WM Management's Decision — FOR WM USE ONLY

1. Management Method ☐Landfill ☐Non-hazardous Solidification ☐Bioremediation ☐Incineration ☐Hazardous Stabilization ☐Other (Specify) _____
2. Proposed Ultimate Management Facility: _____
3. Precautions, Special Handling Procedures, or Limitation on Approval: _____

4. Waste Form _____ 5. Source _____ 6. System Type _____

Special Waste Decision _____ ☐Approved ☐Disapproved

Salesperson's Signature: _____ Date: _____

Division Approval Signature (Optional): _____ Date: _____

Special Waste Approvals Person Signature: _____ Date: _____

APPENDIX C
HEALTH & SAFETY PLAN

AEROSTAR ENVIRONMENTAL SERVICES, INC.
SITE AND HEALTH SAFETY PLAN

SITE NAME: TACAN Site, Building 1917
Naval Air Station Pensacola

Site Contact: Mr. Greg Campbell
MAILING ADDRESS : NAS Pensacola, Building 1754
Pensacola, Florida 32508-5225

RPM: Ms. Beverly Washington
MAILING ADDRESS: 2155 Eagle Drive
North Charleston, SC 29406

AND COUNTY: Escambia County

CTO NUMBER: N62467-03-M-3726
EFFECTIVE DATE: August 26, 2003
AEROSTAR JOB #: 0403-374-05

SITE ENTRY PURPOSE	"X"	ENTRY DATE
Soil Borings	X	September 2003
Well Installations	X	September 2003
Gauging / Sampling	X	September 2003
Dewatering		
Tank Pull		
LPH System Removal		

FILL IN PURPOSE AS NEEDED

Original Plan Date: 09/10/2003 Work Order No.: N62467-03-M-3726 Work Order Date: 08/26/2003

Revised Plan Date: ____/____/____ Work Order No._____ Work Order Date ____/____/____

Revised Plan Date: ____/____/____ Work Order No._____ Work Order Date ____/____/____

PLAN PREPARATION:

Prepared by: Philip R. Foster Date: 09/10/2003

REVIEWED BY:

Hydrogeologist: Leon Carrero, P.G. Date: 9/11/03

Project Manager: Tiffany H. Whitson Date: 9/11/03

APPROVALS:

Field Safety Coordinator: _____ Date: 9/16/03
Philip Foster

Principal Hydrogeologist: _____ Date: 9/16/03
Leon J. Carrero, P.G.

NAVAL AIR STATION PENSACOLA SITE-SPECIFIC HEALTH AND SAFETY PLAN

The safety and security of response and support personnel and others involved in an emergency response incident is the primary concern. This Health and Safety Plan (HSP) provides a general framework for the protection of spill response, worker's health and safety, as well as complying with the requirements of state and federal laws.

The information contained in the HSP is intended to be used as a guide by the Safety Officer for preparing and implementing worker health and safety protection measures in order to maximize safety and allow critical spill response activities to proceed. Specific site control and emergency response procedures will need to be developed using forms provided in this outline or other forms developed by the activity. Other procedures for activities such as confined space entry or hot work will require additional controls in order to fulfill the regulatory requirements. These and other health and safety and regulatory matters must be identified by the Safety Officer. Once identified, the Safety Officer will then need to take appropriate action to address those safety issues or regulatory requirements.

All work will be performed in accordance with the Occupational Safety and Health Standards (29 CFR 1910-OSHA), EPA Hazardous Waste Regulations (29 and 40 CFR), Department of Transportation Regulations (49 CFR) and U.S. Army Corps of Engineers Safety and Health Requirements Manual (EM-385-1-1). Copies of these documents are on file at the AEROSTAR office.

This HSP will be kept on the site during field activities and will be reviewed as necessary. The plan will be amended or revised as project activities or conditions change or when supplemental information becomes available.

A. SITE DESCRIPTION: Building 1917 (TACAN Site) is a communications facility located on Forrest Sherman Field. The site includes a small concrete block building (Building 1917), communications tower, emergency generator, one aboveground storage tank (AST), and associated product piping.

B. SITE HISTORY: The site has been utilized as a communications facility since the 1940s. The AST fueling system leaked an unknown quantity of diesel fuel from an unknown section of the fueling system. Petroleum contaminated soil was excavated from the site. Petroleum contamination site assessment activities are now commencing at the site.

C. SUMMARY OF HAZARDS: This section provides safe work practices and control measures used to reduce or eliminate potential hazards. These practices and controls are to be implemented by the party in control of either the site or the particular hazard. The health and safety hazards posed by field activities have been identified in this section. As the site is located at the bulk terminal facility, hazards include potential for spills and/or releases, fire hazards, and traffic safety. In addition, potential contaminants include gasoline, diesel and used oil.

Diesel Fuel

Aspiration of liquid into the lungs may cause extensive pulmonary edema (dry land drowning). Prolonged or repeated skin contact will remove skin oils leading to irritation and/or dermatitis. High vapor concentrations are irritating to the eyes and lungs, and may cause headaches, dizziness, and unconsciousness.

Gasoline (unleaded)

Gasoline is a mixture of hydrocarbons, including aliphatic hydrocarbons, aromatic hydrocarbons, a variety of branched and unsaturated hydrocarbons, and additives. Extremely high levels of exposure could produce conditions

such as dizziness, coma, collapse, and death. Exposure to non-lethal doses is usually followed by complete recovery, although cases of permanent brain damage following massive exposure have been reported.

Secondary Chemical Hazard Identification
Oil and hazardous substance spill responses require the use of a wide variety of chemicals and materials which may singularly or in conjunction with the site work conditions create various hazards to site workers.

D. AREA VICINITY DESCRIPTION: The site is located within NAS Pensacola south of Pensacola, Florida. TACAN Site is located adjacent to two active airstrips within Forrest Sherman Field. There are no residential areas in the vicinity of the subject site.

F. TOPOGRAPHY AND SITE ACCESS: The TACAN Site is located in a remote area of Forrest Sherman Field. Site access is north from San Carlos Road. The site is partially grassed and partially asphalt with no apparent incline or slope. The approximate elevation of the subject site is 15 feet above mean sea level. Based upon review of the USGS "Fort Barrancas, Florida" topobathymetric quadrangle, regional groundwater flow in the vicinity of the subject property appears to be towards the east towards an intermittent stream that flows into Bayou Grande.

G. ADDITIONAL INFORMATION: _____
_____
_____.

1. **PROJECT OBJECTIVES** - THE OBJECTIVE OF THIS PROJECT IS TO:

1) Install 30 soil borings via hand auger to a total depth of one-foot below the water table. Collect soil samples for OVA field screening and laboratory analysis.

2) Install 10 shallow and 1 intermediate groundwater monitoring wells, and 4 free-product recovery wells.

3) Gauge and collect groundwater samples from monitoring wells for laboratory analysis.

2. **ON-SITE ORGANIZATION AND COORDINATION** - THE FOLLOWING ARE DESIGNATED TO CARRY OUT STATED JOB FUNCTIONS ON SITE.

(NOTE: ONE PERSON MAY CARRY OUT MORE THAN ONE JOB FUNCTION.)

	PRINT FULL NAME
PROJECT MANAGER:	Philip R. Foster
HYDROGEOLOGIST:	Leon J. Carrero, P.G.
SITE SAFETY OFFICER:	Philip R. Foster

ALL ACTIVITIES ON-SITE MUST BE CLEARED BY THE HYDROGEOLOGIST.

3. **ON-SITE CONTROL**

A SAFE PERIMETER HAS BEEN ESTABLISHED WITH CONTROL BOUNDARIES IDENTIFIED AND MARKED OFF WITH - (BOUNDARY TAPE, TRAFFIC CONES, BARRICADES).

4. **PHYSICAL HAZARDS**

THE FOLLOWING PHYSICAL HAZARDS ARE EXPECTED ON-SITE:
(i.e., overhead wire, utilities, substation power, mark out dates, slip, trip and fall, confined space, heavy traffic, etc.) Utility locations are unknown at this time. The HSP will be updated when locations are known.

Electrocution hazard from underground power lines. Traffic safety from tankers filling the diesel AST. Fire safety and potential spills or releases from diesel.

FIRST AID SUGGESTED FOR THE OBSERVED PHYSICAL HAZARDS IS:

Place traffic cones around sampling areas and wear traffic vests during sampling activities. Contact Greg Campbell at 850-452-4611 ext. 103 should a spill or release occur while onsite. The hazards associated with the contaminants listed above are best controlled through early detection, use of PPE,

implementation of engineering controls, or by avoiding the hazard. Early detection can be accomplished by using common sense and understanding the Health and Safety Plan.

5. PERSONAL PROTECTIVE EQUIPMENT

BASED ON EVALUATION OF POTENTIAL HAZARDS, THE FOLLOWING LEVELS OF PERSONAL PROTECTION HAVE BEEN DESIGNATED FOR THE APPLICABLE WORK AREAS OR TASKS:

JOB FUNCTION	LEVEL OF PROTECTION
Soil Borings	A B C **D** OTHER
Monitoring / Recovery Well Installation	A B C **D** OTHER
Soil / Groundwater Sampling	A B C **D** OTHER
_____	A B C D OTHER

SPECIFIC PROTECTIVE EQUIPMENT MODIFICATION FOR EACH LEVEL OF PROTECTION IS AS FOLLOWS:

Steel-toed boots, hard- hats (when necessary), safety glasses, ear protection, and gloves.

IF AIR PURIFYING RESPIRATORS ARE AUTHORIZED,_____ (FILTERING MEDIUM)IS THE APPROPRIATE CANISTER FOR USE WITH THE INVOLVED SUBSTANCES AND CONCENTRATIONS.

*Activated charcoal suitable for organic vapors and acid gases with dust/particle prefilters if required.

NO CHANGES TO THE SPECIFIED LEVELS OF PROTECTION SHALL BE MADE WITHOUT THE APPROVAL OF THE FIELD SAFETY COORDINATOR AND HYDROGEOLOGIST.

6. DECONTAMINATION PROCEDURES -

Personnel and equipment leaving an identified Exclusion Zone, (indicated in Section F), shall be thoroughly decontaminated. The standard level "C" decontamination protocol shall be used with the following decontamination approach:

(1) Wash gloves & boots using Decon solution and tap water rinse.
(2) Remove face mask respirator.
(3) Remove securing tape from wrists and ankles.
(4) Remove disposable tyvek (without boots).
(5) Remove boot covers and boots.
(6) Remove gloves.

For level "D" dress-down, follow steps 1, 4, 5 & 6.

7. ENVIRONMENTAL MONITORING

THE FOLLOWING MONITORING INSTRUMENTS SHALL BE USED AT SPECIFIED INTERVALS.

OXYGEN MONITOR	- CONTINUOUS/HOURLY/DAILY/OTHER _____
LEL INDICATOR	- CONTINUOUS/HOURLY/DAILY/OTHER _____
HNU	- CONTINUOUS/HOURLY/DAILY/OTHER _____
OVA	- CONTINUOUS/HOURLY/DAILY/OTHER _____
CARBON MONOXIDE INDICATOR	- CONTINUOUS/HOURLY/DAILY/OTHER _____
HYDROGEN SULFIDE	- CONTINUOUS/HOURLY/DAILY/OTHER _____
COLOIMETRIC TUBES (TYPE)	- CONTINUOUS/HOURLY/DAILY/OTHER _____ - _____
RADIATION DETECTOR	- CONTINUOUS/HOURLY/DAILY/OTHER _____
OTHER_____	- CONTINUOUS/HOURLY/DAILY/OTHER _____

GUIDELINES FOR AIR MONITORING GASOLINE HAZARDS [1]

Monitoring Instrument	Hazard	Measured Level	Action
CGI-Combustible Gas indicator (% Lower Explosive Limit of combustible Gases)	Explosive Atmosphere in immediate work area	< 10% LEL	Evacuate
CGI-Combustible Gas Indicator (Oxygen %)	Oxygen concentration	< 19.5%	Monitor while wearing SCBA. NOTE: combustible gas readings are not valid in atmospheres with < 19.5% Oxygen
		19.5 - 23.5%	Continue investigation with caution
		> 23.5%	Discontinue investigation monitoring. Fire Hazard Potential. Consult Specialist
Photoionization (Hnu)/ Flame Ionization (OVA) Meters **ACTIONS TAKEN ARE BASED ON SUSTAINED OR FREQUENT READINGS.**	Volatile Contaminants	Breathing Zone Background to 200 ppm	Level D protection [2]
		200 to 300 ppm over background.	Level C Protection [2]
		300 to 500 ppm over background.	Level B Protection [2]
		Over 500 ppm over background.	EVALUATE EXPOSURE SOURCE

[1] – Gasoline is used for this guideline based on it's higher volatility.

[2] – Meter readings are not the sole criteria for selecting the level of protection. These are only generalized guidelines.

GUIDELINES FOR MONITORING IONIZATION RADIATION

MEASURED RADIATION LEVELS	ACTION TAKEN BY FIELD CREW
1 Milli-rem/hour	Proceed with caution
2 Milli-rem/hour	Discontinue work and consult a health physicist

8. EMERGENCY PHONE NUMBERS

LOCAL POLICE	911
LOCAL FIRE	911
LOCAL RESCUE	911
LOCAL HOSPITAL	(850) 452-5242 ext. 131

LOCAL HOSPITAL: ADDRESS -

Branch Medical Clinic - NAS Pensacola

450 Turner Street
Pensacola, FL 32508

ROUTE FROM SITE: From the TACAN Site, travel south to San Carlos Street. Merge onto Blue Angel Parkway and travel east for approximately 1.5 miles. Turn right on Duncan Road and travel south for 0.2 miles. Turn left on Turner Street and travel east for 0.2 miles. The Branch Medical Clinic is on the left in Building 3600, Suite B.

KEY PERSONNEL: Office Resources

Aerostar Environmental Services, Inc.

(251) 776-7344 - (251) 776-1758 Fax

7856 Westside Park Drive Suite G

Mobile, Alabama 36695

Dawn Blackledge, P.G.	-	President
Tiffany Whitson	-	Project Manager
Leon J. Carrero, P.G.	-	Project Hydrogeologist
Philip Foster	-	Project Geologist

SITE MAP

Provide two maps, (MAP 1 and MAP 2), that show the following information:

A TOPOGRAPHIC MAP IS NOT ACCEPTABLE.

USE AN EXISTING SITE MAP OR NEATLY HAND SKETCH A SITE MAP THAT SHOWS THE LOCATION OF THE FOLLOWING:

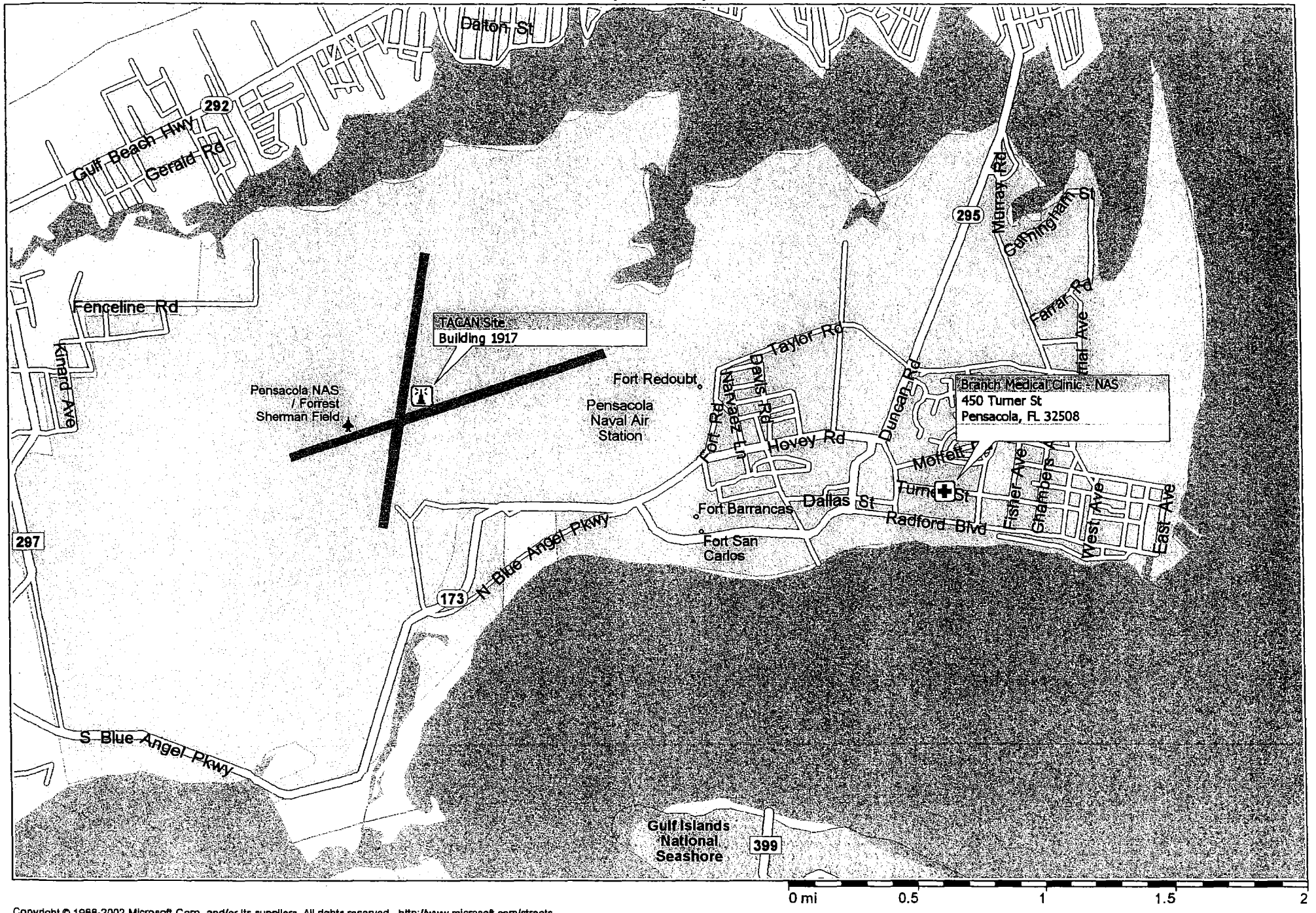
MAP 1 - LOCAL ROAD MAP indicating the site and adjacent roads,

MAP 2 - SITE MAP indicating the site's main features, such as,

(i.e., gasoline station repair building, pump islands, well locations, above ground and or under ground storage tanks, etc.).

COMMENTS:

Hospital Maps



BLUE HILL
TEMPLE
FIELD

APPENDIX D
SOIL BORING LOGS

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-1		179802359

Site Name:	Borehole Start Date: 9/17/2003	Borehole Start Time: 1530 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/17/2003	End Time: 1535 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	2

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
Hand Auger	1		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			<10			1	grass surface; light red, orange sand; med. grained, some lg. grains; subrounded; saturated @ 1' bls		w-s	
HA	2			1,700	600	1,100	2	dark gray sand; fine to med. grained; subrounded		s	
							3				
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-2		179802359

Site Name:	Borehole Start Date: 9/17/2003	Borehole Start Time: 1540 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/17/2003	End Time: 1545 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	2

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
Hand Auger	1		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			11	5	6	1	grass surface; light red, orange silty sand; fine to med. grained; subrounded; saturated @ 1' bls		w-s	
HA	2			3,500	1,500	2,000	2	dark gray sand; fine to med. grained; subrounded		s	SB-2/2'
							3				
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-3		179802359

Site Name:	Borehole Start Date: 9/17/2003	Borehole Start Time: 1550 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/17/2003	End Time: 1555 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	2

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
Hand Auger	1		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			<10			1	grass surface; light red, orange sand; fine to med. grained; subrounded; saturated @ 1' bls		W-S	
HA	2			350	160	190	2	dark gray sand; fine to med. grained; subrounded		S	
							3				
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-4		179802359

Site Name:	Borehole Start Date: 9/17/2003	Borehole Start Time: 1600 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/17/2003	End Time: 1605 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	2

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
Hand Auger	1		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			<10			1	grass surface; dark gray sand; fine to med. grained; subrounded; saturated @ 1' bls		w-s	
HA	2			200	100	100	2			s	SB-4/2'
							3				
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-5		179802359

Site Name:	Borehole Start Date: 9/17/2003	Borehole Start Time: 1610 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/17/2003	End Time: 1615 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	2.5

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	1.5		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			150	50	100	1	grass surface; dark gray sand; fine to med. grained; subrounded		w	
HA	1.5			100	40	60	2			s	
HA	2			<10			3				
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-6		179802359

Site Name:	Borehole Start Date: 9/17/2003	Borehole Start Time: 1620 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/17/2003	End Time: 1625 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	2

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	1		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			<10			1	grass surface; orange sand; fine to med. grained; subrounded; saturated @ 1' bls		W-S	
HA	2			15	8	3	2	dark gray sand; saturated		S	
							3				
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-7		179802359

Site Name:	Borehole Start Date: 9/17/2003	Borehole Start Time: 1630 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/17/2003	End Time: 1635 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	2

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	1		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			<10			1	grass surface; orange sand; fine to med. grained; subrounded; saturated @ 1' bls		W-S	
HA	2			15	8	3	2	dark gray sand; saturated		S	
							3				
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-8		179802359

Site Name:	Borehole Start Date: 9/17/2003	Borehole Start Time: 1640 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/17/2003	End Time: 1645 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	1

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	1		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			<10			1	dark gray sand; fine grained; subrounded to rounded; saturated @ 1' bls		W-S	
							2				
							3				
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-9		179802359

Site Name:	Borehole Start Date: 9/17/2003	Borehole Start Time: 1650 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/17/2003	End Time: 1655 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	1

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	1		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			<10			1 2 3 4 5 6 7 8 9 10 11 12	dark gray sand; fine grained; subrounded to rounded; saturated @ 1' bls		W-S	

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number: SB-10	Permit Number:	FDEP Facility Identification Number: 179802359
Site Name: NAS Pensacola Bldg. 1917 Tacan Site	Borehole Start Date: 9/17/2003 End Date: 9/17/2003	Borehole Start Time: 1700 ☐ AM ☑ PM End Time: 1705 ☐ AM ☑ PM
Environmental Contractor: Aerostar Environmental	Geologist's Name: Phillip Foster	Environmental Technician's Name:

Drilling Company: ProSonic	Pavement Thickness (inches): NA	Borehole Diameter (inches): 2	Borehole Depth (feet): 1
Drilling Method(s): hand auger	Apparent Borehole DTW (in feet from soil moisture content): 1	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			20	10	10	1	grass surface; orange to red sand; fine to med. grained; subrounded; saturated @ 1' bls		W-S	
HA	2			430	270	160	2	dark gray sand; fine grained; subrounded to rounded; saturated			
							3				
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-11		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 0850 ☑ AM ☐ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 0900 ☑ AM ☐ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	3

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	3		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			90	50	40	1	grass surface; dark gray sand; fine to very fine grained; subrounded to rounded; saturated @ 3' bls		m	
HA	2			<10			2			w	
HA	3			<10			3			s	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-12		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 0900 ☑ AM ☐ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 0905 ☑ AM ☐ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	2

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	2		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			<10			1	grass surface; dark gray sand; fine to very fine grained; subrounded to rounded; saturated @ 2' bls		w-s	
HA	2			<10			2				
							3				
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number: SB-13	Permit Number:	FDEP Facility Identification Number: 179802359
Site Name: NAS Pensacola Bldg. 1917 Tacan Site	Borehole Start Date: 9/18/2003 End Date: 9/18/2003	Borehole Start Time: 0905 ☑ AM ☐ PM End Time: 0910 ☑ AM ☐ PM
Environmental Contractor: Aerostar Environmental	Geologist's Name: Phillip Foster	Environmental Technician's Name:

Drilling Company: ProSonic	Pavement Thickness (inches): NA	Borehole Diameter (inches): 2	Borehole Depth (feet): 2
Drilling Method(s): hand auger	Apparent Borehole DTW (in feet from soil moisture content): 2	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			170	100	30	1	grass surface; dark gray sand; fine to very fine grained; subrounded to rounded; moist to wet		m-w	
HA	2			18	8	10	2	dark tan to tan sand;fine grained; rounded; saturated @ 2' bls		w-s	
							3				
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-14		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1020 ☑ AM ☐ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1030 ☑ AM ☐ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	3	1.75	10

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
Geoprobe	2.5		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
DP	1			1,500	400	1,100	1	3" ASPHALT; dark gray sand; fine grained; subrounded to rounded; saturated @ 2.5' bls		M-W	
							2			W-S	
DP	3			375	40	335	3				
							4			S	
							5	dark to light gray sand; medium to coarse grained; subrounded;			
							6				
							7				
							8			S	
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-15		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1040 ☑ AM ☐ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1045 ☑ AM ☐ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	3	2	3

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
Hand Auger	3		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			<10			1	3" ASPHALT; dark gray sand; fine grained; subrounded to rounded; saturated @ 3.0' bls		M-W	
							2			M-W	
HA	3			<10			3			W-S	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-16		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1050 ☑ AM ☐ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1100 ☑ AM ☐ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	3	2	3

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
Hand Auger	3		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			<10			1	3" ASPHALT; dark gray sand; fine grained; subrounded to rounded; moist to wet		M-W	
							2			M-W	
HA	3			<10			3	2.5' tan sand; fine grained; rounded; saturated @ 3' bls		W-S	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-17		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1110 ☑ AM ☐ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1120 ☑ AM ☐ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	3	2	3

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
Hand Auger	3		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			220	90	130	1	3" ASPHALT; dark gray sand; fine grained; subrounded to rounded; moist to wet		M-W	
HA	2.5			85	20	65	2			M-W	
							3	2.5' tan sand; fine grained; rounded; saturated @ 3' bls		W-S	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-18		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1120 ☑ AM ☐ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1125 ☑ AM ☐ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	3	2	3

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
Hand Auger	3		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			<10			1	3" ASPHALT; dark gray sand; fine grained; subrounded to rounded; moist to wet		M-W	
HA	2.5			<10			2			M-W	
							3	2.5' tan sand; fine grained; rounded; saturated @ 3' bls		W-S	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-19		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1145 ☑ AM ☐ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1205 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	3	2	3

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
Hand Auger	3		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			12	<10		1	3" ASPHALT; dark gray sand; fine grained; subrounded to rounded; saturated @ 3' bls		M-W	
HA	2.5			<10			2			M-W	
							3			W-S	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-20		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1215 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1222 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	3

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	3		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			120	45	75	1	grass surface; dark gray sand; fine grained; rounded; saturated @ 3' bls		m-w	
HA	2.5			12	4	8	2			w-s	
							3			s	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-21		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1300 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1310 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	2.5

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	2.5		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			120	50	70	1	grass surface; dark gray sand; fine grained; rounded; saturated @ 3' bls		m-w	SB-21/1'
HA	2.5			<10			2			w-s	
							3			s	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-22		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1300 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1305 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	2.5

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	2.5		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			25	10	15	1	grass surface; dark gray sand; fine grained; rounded; saturated @ 3' bls		m-w	
HA	2.5			10	4	6	2			w-s	
							3			s	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-23		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1310 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1315 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	2.5

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	2.5		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			14	8	6	1	grass surface; dark gray sand; fine grained; rounded; saturated @ 3' bls		m-w	
HA	2.5			<10			2			w-s	
							3			s	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-24		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1320 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1330 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	3

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	3		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			130	100	30	1	grass surface; to 1.5' bls dark gray sand; fine grained; rounded; moist		m	
HA	2.5			50	20	30	2	1.5 to 3' bls; tan sand; fine grained; rounded; wet to saturated @3' bls		w-s	
							3			s	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-25		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1505 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1515 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	3

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	3		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			<10			1	grass surface; to 1.5' bls dark gray sand; fine grained; rounded; moist		m	
HA	2.5			<10			2	1.5 to 3' bls; tan sand; fine grained; rounded; wet to saturated @3' bls		w-s	
							3			s	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-26		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1510 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1520 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	3

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	3		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			20	15	5	1	grass surface; to 1.5' bls dark gray sand; fine grained; rounded; moist		m	
HA	2.5			<10			2	1.5 to 3' bls; tan sand; fine grained; rounded; wet to saturated @3' bls		w-s	
							3			s	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-27		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1525 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1530 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	3

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	3		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			40	35	5	1	grass surface;dark gray sand; fine grained; rounded; moist to wet		m	
HA	2.5			<10			2			w	
							3	2.0 to 3' bls; tan sand; fine to medium grained; rounded; wet to saturated @3' bls		w - s	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-28		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1545 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1555 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	3

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	3		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			50	26	24	1	grass surface; to 1.5' bls dark gray sand; fine grained; rounded; moist to wet		m	
HA	2.5			<10			2	1.5 to 3' bls; tan sand; fine to medium grained; rounded; wet to saturated @3' bls		w	
							3			w - s	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-29		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1600 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1615 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	3

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	3		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			25	10	15	1	grass surface; dark gray sand; fine to medium grained; subrounded to rounded; saturated @ 3' bls		m-w	
HA	2.5			<10			2			w-s	
							3			s	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-30		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1620 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1630 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	3

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	3		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			300	200	100	1	grass surface; dark gray sand; fine to medium grained; subrounded to rounded; saturated @ 3' bls		m-w	
HA	2.5			10	5	5	2			w-s	
							3			s	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-31		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1615 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1625 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	3

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	3		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			60	32	28	1	grass surface; dark gray sand; fine to medium grained; subrounded to rounded; saturated @ 3' bls		m-w	
HA	2.5			70	40	30	2			w-s	
							3			s	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-32		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1630 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1640 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	3

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	3		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			11	8	3	1	grass surface; dark gray sand; fine to medium grained; subrounded to rounded; moist to wet		m-w	
HA	2.5			<10			2			w	
							3	2 to 3' bls; tan sand; fine to medium grained; rounded; wet to saturated @3' bls		s	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
SB-33		179802359

Site Name:	Borehole Start Date: 9/18/2003	Borehole Start Time: 1650 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/18/2003	End Time: 1700 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Phillip Foster	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
ProSonic	NA	2	3

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hand auger	3		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☑ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☑ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	1			<10			1	grass surface; to 1.5' bls dark gray sand; fine grained; rounded; moist to wet		m-w	
HA	2.5			<10			2	1.5 to 3' bls; tan sand; fine to medium grained; rounded to subrounded; saturated @3' bls		w	
							3			s	
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
MW-11	06-405JY8FL	179802359

Site Name:	Borehole Start Date: 9/6/2006	Borehole Start Time: 1100 ☑ AM ☐ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/6/2006	End Time: 1320 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Carrie Kruchell	Keith Dasinger

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
Singley Env.	NA	8.25	10.9

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hollow stem auger	2		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☑ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☑ Well ☐ Grout ☐ Bentonite ☐ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
PH	0-1			0	0	0	1	0 to 2.5' dark brown sand; med. grained; rounded; moist to wet @ approx. 2.7' bls			
PH	1-2.5			0	0	0	2			m-w	
							3				
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
MW-12	06-405JY8FL	179802359

Site Name:	Borehole Start Date:	9/6/2006	Borehole Start Time:	1320	☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date:	9/6/2006	End Time:	1400	☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Carrie Kruchell	Keith Dasinger

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
Singley Env.	NA	8.25	10.9

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hollow stem auger	2		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☑ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☑ Well ☐ Grout ☐ Bentonite ☐ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
PH	0-1			0	0	0	1	0 to 2.5' dark brown sand; med. grained; rounded; moist to wet @ approx. 2.7' bls			
PH	1-2.5			0	0	0	2			m-w	
							3				
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
MW-13	06-405JY8FL	179802359

Site Name:	Borehole Start Date: 9/6/2006	Borehole Start Time: 1400 ☐ AM ☑ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/6/2006	End Time: 1430 ☐ AM ☑ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Carrie Kruchell	Keith Dasinger

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
Singley Env.	NA	8.25	10.9

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hollow stem auger	2		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☑ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☑ Well ☐ Grout ☐ Bentonite ☐ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
PH	0-1			0	0	0	1	0 to 2.5' dark brown sand; med. grained; rounded; moist to wet @ approx. 2.7' bls			
PH	1-2.5			0	0	0	2			m-w	
							3				
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

BORING LOG

Boring/Well Number:	Permit Number:	FDEP Facility Identification Number:
DW-1	06-405JY8FL	179802359

Site Name:	Borehole Start Date: 9/7/2006	Borehole Start Time: 0830 ☑ AM ☐ PM
NAS Pensacola Bldg. 1917 Tacan Site	End Date: 9/7/2006	End Time: 1125 ☑ AM ☐ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Aerostar Environmental	Carrie Kruchell	Keith Dasinger

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
Singley Env.	NA	8.25	10.9

Drilling Method(s):	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type):
hollow stem auger	2		Heath Tech Porta FID II ☑ FID ☐ PID

Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☑ Spread ☐ Backfill ☐ Stockpile ☐ Other

(describe if other or multiple items are checked):

Borehole Completion (check one): ☑ Well ☐ Grout ☐ Bentonite ☐ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
PH	0-1			0	0	0	1	0 to 2.5' dark brown sand; med. grained; rounded; moist to wet @ approx. 2.7' bls			
PH	1-2.5			0	0	0	2			m-w	
							3				
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

APPENDIX E
GROUNDWATER SAMPLING LOGS

State of Florida, Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME:TACAN SITE	SITE LOCATION:NAS PENSACOLA	
WELL NO:MW-1	SAMPLE ID:MW-1	DATE:9/23/03

PURGING DATA

WELL DIAMETER (in):2	TOTAL WELL DEPTH (ft):15.09	STATIC DEPTH TO WATER (ft):3.21	WELL CAPACITY (gal/ft):0.16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY =

= (15.09 – 3.21) X 0.16 = 1.90

PURGE METHOD:Peristaltic Pump	PURGE INITIATED AT:14:40	PURGE ENDED AT:15:30	TOTAL VOL. PURGED (gal):6.0

TIME	VOLUME PURGED (gal)	CUMUL. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
14:50	1.0	1.0	0.10	3.23	5.03	26.0	198.1	NA	46	CLEAR	NONE
15:00	1.0	2.0	0.10	3.23	5.01	26.2	146	NA	79.3	CLEAR	NONE
15:05	1.0	3.0	0.20	3.23	5.01	26.2	151	NA	70.3	CLEAR	NONE
15:10	1.0	4.0	0.20	3.23	5.01	26.0	157	NA	48.3	CLEAR	NONE
15:20	1.0	5.0	0.10	3.23	5.28	25.6	161	NA	25.5	CLEAR	NONE
15:30	1.0	6.0	0.10	3.23	5.21	26.3	156	NA	17.8	CLEAR	NONE

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) Tiffany Whitson/Phillip Foster AFFILIATION: AEROSTAR	SAMPLER(S) SIGNATURE(S)	
SAMPLING METHOD(S):Peristaltic Pump	SAMPLING INITIATED AT:15:30	SAMPLING ENDED AT:15:40
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD
4	CG	40mL	HcL	-	-	BTEX/MTBE by
1	AG	1 L	None	-	-	PAHs
1	AG	1 L	H_2SO_4	-	-	FL-PRO
1	PE	500 ML	HNO_3	-	-	LEAD

REMARKS:

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

DEP-SOP-001/01: Form FD 2000-24

State of Florida, Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME:TACAN SITE	SITE LOCATION:NAS PENSACOLA	
WELL NO:MW-2	SAMPLE ID:MW-2	DATE:9/23/03

PURGING DATA

WELL DIAMETER (in):2	TOTAL WELL DEPTH (ft):15.28	STATIC DEPTH TO WATER (ft):	WELL CAPACITY (gal/ft):0.16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY =

= (–) X =

PURGE METHOD:Peristaltic Pump	PURGE INITIATED AT:15:14	PURGE ENDED AT:15:47	TOTAL VOL. PURGED (gal):

TIME	VOLUME PURGED (gal)	CUMUL. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
15:18	0.75	0.75	0.18	3.37	5.54	25.7	145	NA	80.1	CLEAR	slight
15:25	1.25	2.0	0.18	3.39	5.52	25.3	191	NA	183	gray/tan	slight
15:32	1.0	3.0	0.14	3.38	5.54	25.5	179	NA	162	gray/tan	slight
15:41	2.0	5.0	0.22	3.38	5.55	25.3	165	NA	90	tan/ brown	slight
15:50	1.0	6.0	0.11	3.38	5.58	25.4	162	NA	80	brown	slight

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) Tiffany Whitson AFFILIATION: AEROSTAR	SAMPLER(S) SIGNATURE(S)	
SAMPLING METHOD(S):Peristaltic Pump	SAMPLING INITIATED AT:15:50	SAMPLING ENDED AT:16:02
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
4	CG	40mL	HcL	-	-	BTEX/MTBE by EDB
1	AG	1 L	None	-	-	PAHs
1	AG	1 L	H_2SO_4	-	-	FL-PRO
1	PE	500 ML	HNO_3	-	-	LEAD

REMARKS:

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

State of Florida, Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME:TACAN SITE	SITE LOCATION:NAS PENSACOLA	
WELL NO:MW-3	SAMPLE ID:MW-3	DATE:9/23/03

PURGING DATA

WELL DIAMETER (in):2	TOTAL WELL DEPTH (ft):15.37	STATIC DEPTH TO WATER (ft):3.35	WELL CAPACITY (gal/ft):0.16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY =

= (15.37 – 3.35) X = 1.92

PURGE METHOD:Peristaltic Pump	PURGE INITIATED AT:15:40	PURGE ENDED AT:16:30	TOTAL VOL. PURGED (gal):6.5

TIME	VOLUME PURGED (gal)	CUMUL. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
15:50	1.0	1.0	0.10	3.4	5.24	26.5	194.2	NA	71.7	P. CLEAR	NONE
16:00	1.5	2.5	0.15	3.4	5.27	26.7	189.3	NA	61.2	P. CLEAR	NONE
16:07	1.0	3.5	0.14	3.4	5.26	26.6	190.6	NA	54.2	P. CLEAR	NONE
16:13	0.5	4.0	0.08	3.4	5.31	26.4	191.7	NA	48.1	P. CLEAR	NONE
16:20	1.5	5.5	0.22	3.4	5.31	26.4	192.0	NA	44.5	P. CLEAR	NONE
16:30	1.5	6.5	0.15	3.4	5.31	26.4	195	NA	42.5	P. CLEAR	NONE

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) Tiffany Whitson AFFILIATION: AEROSTAR	SAMPLER(S) SIGNATURE(S)	
SAMPLING METHOD(S):Peristaltic Pump	SAMPLING INITIATED AT:16:30	SAMPLING ENDED AT:16:40
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
4	CG	40mL	HcL	-	-	BTEX/MTBE by
1	AG	1 L	None	-	-	PAHs
1	AG	1 L	H_2SO_4	-	-	FL-PRO
1	PE	500 ML	HNO_3	-	-	LEAD

REMARKS:

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

State of Florida, Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME:TACAN SITE	SITE LOCATION:NAS PENSACOLA	
WELL NO:MW-4	SAMPLE ID:MW-4	DATE:9/23/03

PURGING DATA

WELL DIAMETER (in):2	TOTAL WELL DEPTH (ft):15.32	STATIC DEPTH TO WATER (ft):3.41	WELL CAPACITY (gal/ft):0.16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY =

= (15.32 – 3.41) X 0.16 = 1.90

PURGE METHOD:Peristaltic Pump	PURGE INITIATED AT:12:30	PURGE ENDED AT:13:06	TOTAL VOL. PURGED (gal):

TIME	VOLUME PURGED (gal)	CUMUL. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
12:35	0.5	0.5	0.10	3.44	6.33	30.4	184	NA	35.4	GRAY	NONE
12:43	1.5	2.0	0.19	3.52	5.34	27.8	169.2	NA	37.3	GRAY	NONE
12:53	1.5	3.5	0.15	3.51	5.38	27.2	165.4	NA	49.5	GRAY	NONE
13:05	2.0	5.5	0.16	3.5	5.45	27.4	164.1	NA	155	GRAY	NONE

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) Tiffany Whitson AFFILIATION: AEROSTAR	SAMPLER(S) SIGNATURE(S)	
SAMPLING METHOD(S):Peristaltic Pump	SAMPLING INITIATED AT:13:15	SAMPLING ENDED AT:13:20
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
4	CG	40mL	HcL	-	-	BTEX/MTBE by EDB
1	AG	1 L	None	-	-	PAHs
1	AG	1 L	H_2SO_4	-	-	FL-PRO
1	PE	500 ML	HNO_3	-	-	LEAD

REMARKS:

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

State of Florida, Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME:TACAN SITE	SITE LOCATION:NAS PENSACOLA	
WELL NO:MW-5	SAMPLE ID:MW-5	DATE:9/23/03

PURGING DATA

WELL DIAMETER (in):2	TOTAL WELL DEPTH (ft):12.2	STATIC DEPTH TO WATER (ft):0.51	WELL CAPACITY (gal/ft):0.16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY =

= (12.2 – 0.51) X 0.16 = 1.87

PURGE METHOD:Peristaltic Pump	PURGE INITIATED AT:12:30	PURGE ENDED AT:13:40	TOTAL VOL. PURGED (gal):6.0

TIME	VOLUME PURGED (gal)	CUMUL. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
12:35	0.5	0.5	0.10	0.51	5.85	31.0	191	NA	63.9	GRAY	NONE
12:45	1.5	2.0	0.15	0.52	5.75	29.0	190	NA	78.9	GRAY	NONE
12:55	1.0	3.0	0.10	0.52	5.79	28.7	190	NA	112	GRAY	NONE
13:05	1.0	4.0	0.10	0.52	5.78	29.1	192	NA	116	GRAY	NONE
POWER	DOWN	SWITCH	TO	EXTER	NAL	POW	ER				
13:30	1.0	5.0	0.10	0.52	5.93	29.6	192	NA	75.5	GRAY	NONE
13:40	1.0	6.0	0.10	0.52	5.84	28.5	190	NA	62.0	GRAY	NONE

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) Tiffany Whitson AFFILIATION: AEROSTAR	SAMPLER(S) SIGNATURE(S)	
SAMPLING METHOD(S):Peristaltic Pump	SAMPLING INITIATED AT:13:40	SAMPLING ENDED AT:13:45
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
4	CG	40mL	HcL	-	-	BTEX/MTBE by EDB
1	AG	1 L	None	-	-	PAHs
1	AG	1 L	H_2SO_4	-	-	FL-PRO
1	PE	500 ML	HNO_3	-	-	LEAD

REMARKS:

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

State of Florida, Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME:TACAN SITE	SITE LOCATION:NAS PENSACOLA	
WELL NO:MW-6	SAMPLE ID:MW-6	DATE:9/23/03

PURGING DATA

WELL DIAMETER (in):2	TOTAL WELL DEPTH (ft):12.22	STATIC DEPTH TO WATER (ft):0.37	WELL CAPACITY (gal/ft):0.16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY =

= (12.22 – 0.37) X 0.16 = 1.90

PURGE METHOD:Peristaltic Pump	PURGE INITIATED AT:13:50	PURGE ENDED AT:	TOTAL VOL. PURGED (gal):

TIME	VOLUME PURGED (gal)	CUMUL. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
14:00	1.0	1.0	0.10	0.38	5.79	29.6	210	NA	61.1	CLOUDY	NONE
14:07	1.0	2.0	0.14	0.38	5.62	29.4	167	NA	123	CLOUDY	NONE
14:15	1.0	3.0	0.125	0.38	5.54	29.0	153	NA	94.8	CLOUDY	NONE
14:20	0.5	3.5	0.10	0.38	5.49	28.9	144	NA	64.5	CLOUDY	NONE
14:30	1.0	4.5	0.10	0.38	5.36	28.1	198	NA	32.8	CLOUDY	NONE
14:40	1.0	5.5	0.10	0.38	5.35	28.5	194.9	NA	25.7	CLOUDY	NONE

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) Tiffany Whitson AFFILIATION: AEROSTAR	SAMPLER(S) SIGNATURE(S)	
SAMPLING METHOD(S):Peristaltic Pump	SAMPLING INITIATED AT:14:40	SAMPLING ENDED AT:14:50
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
4	CG	40mL	HcL	-	-	BTEX/MTBE by EDB
1	AG	1 L	None	-	-	PAHs
1	AG	1 L	H_2SO_4	-	-	FL-PRO
1	PE	500 ML	HNO_3	-	-	LEAD

REMARKS:

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

State of Florida, Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME:TACAN SITE	SITE LOCATION:NAS PENSACOLA	
WELL NO:MW-7	SAMPLE ID:MW-7	DATE:9/23/03

PURGING DATA

WELL DIAMETER (in):	TOTAL WELL DEPTH (ft):15:34	STATIC DEPTH TO WATER (ft):2.76	WELL CAPACITY (gal/ft):0.16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY =

= (15.34 – 2.76) X 0.16 = 2.0

PURGE METHOD:Peristaltic Pump	PURGE INITIATED AT:13:20	PURGE ENDED AT:13:57	TOTAL VOL. PURGED (gal):

TIME	VOLUME PURGED (gal)	CUMUL. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
13:25	1.0	1.0	0.2	2.77	5.42	27.1	198	NA	20.1	Tan/gray	NONE
13:35	2.0	3.0	0.2	2.86	5.39	27.2	174	NA	13.9	Tan/gray	NONE
13:46	1.5	4.5	0.14	2.87	5.39	26.9	172	NA	24.8	Tan/gray	NONE
13:55	1.0	5.5	0.11	2.89	5.35	26.7	171	NA	52.7	Tan/gray	NONE

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) Tiffany Whitson AFFILIATION: AEROSTAR	SAMPLER(S) SIGNATURE(S)	
SAMPLING METHOD(S):Peristaltic Pump	SAMPLING INITIATED AT:14:00	SAMPLING ENDED AT:14:11
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
4	CG	40mL	HcL	-	-	BTEX/MTBE by EDB
1	AG	1 L	None	-	-	PAHs
1	AG	1 L	H_2SO_4	-	-	FL-PRO
1	PE	500 ML	HNO_3	-	-	LEAD

REMARKS:

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

State of Florida, Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME:TACAN SITE	SITE LOCATION:NAS PENSACOLA	
WELL NO:MW-8	SAMPLE ID:MW-8	DATE:9/23/03

PURGING DATA

WELL DIAMETER (in):2	TOTAL WELL DEPTH (ft):15:10	STATIC DEPTH TO WATER (ft):3.08	WELL CAPACITY (gal/ft):0.16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY =

= (15.10 – 3.08) X 0.16 = 1.9

PURGE METHOD:Peristaltic Pump	PURGE INITIATED AT:14:20	PURGE ENDED AT:14:53	TOTAL VOL. PURGED (gal):

TIME	VOLUME PURGED (gal)	CUMUL. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
14:25	1.0	1.0	0.2	3.23	5.04	27.4	127.5	NA	234	BROWN	NONE
14:34	1.0	2.0	0.11	3.24	5.10	26.7	125.9	NA	259	BROWN	NONE
14:40	1.0	3.0	0.16	3.25	4.75	26.9	120.1	NA	202	BROWN	NONE
14:45	1.0	4.0	0.20	3.25	4.66	26.9	117.7	NA	160	BROWN	NONE
14:50	1.5	5.5	0.30	3.25	4.64	26.7	116.8	NA	121	BROWN	NONE

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) Tiffany Whitson AFFILIATION: AEROSTAR	SAMPLER(S) SIGNATURE(S)	
SAMPLING METHOD(S):Peristaltic Pump	SAMPLING INITIATED AT:14:57	SAMPLING ENDED AT:15:07
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
4	CG	40mL	HcL	-	-	BTEX/MTBE by EDB
1	AG	1 L	None	-	-	PAHs
1	AG	1 L	H_2SO_4	-	-	FL-PRO
1	PE	500 ML	HNO_3	-	-	LEAD

REMARKS:

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

State of Florida, Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME:TACAN SITE	SITE LOCATION:NAS PENSACOLA	
WELL NO:MW-9	SAMPLE ID:MW-9	DATE:9/23/03

PURGING DATA

WELL DIAMETER (in):2	TOTAL WELL DEPTH (ft):15:14	STATIC DEPTH TO WATER (ft):3.11	WELL CAPACITY (gal/ft):0.16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY =

= (15.14 – 3.11) X 0.16 = 1.92

PURGE METHOD:Peristaltic Pump	PURGE INITIATED AT:10:55	PURGE ENDED AT:12:15	TOTAL VOL. PURGED (gal):6.0

TIME	VOLUME PURGED (gal)	CUMUL. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
11:00	0.25	0.25	0.025	3.11	5.99	26.9	248	NA	236	CLOUDY	NONE
11:10	0.25	0.50	0.025	3.12	5.89	26.8	287	NA	260	CLOUDY	NONE
11:20	0.50	1.00	0.050	3.11	5.96	27.0	230	NA	290	CLOUDY	NONE
11:30	0.50	2.00	0.050	3.11	5.99	26.9	228	NA	311	CLOUDY	NONE
11:35	0.15	2.15	0.030	3.12	6.10	26.9	243	NA	317	CLOUDY	NONE
11:45	0.85	3.00	0.085	3.12	5.97	27.0	235	NA	298	CLOUDY	NONE
11:55	0.75	3.75	0.015	3.12	5.97	26.9	219	NA	239	CLOUDY	NONE
12:05	1.25	5.00	0.125	3.12	5.90	27.5	201	NA	185	CLOUDY	NONE
12:15	1.00	6.00	0.10	3.12	5.92	26.3	200	NA	153	CLOUDY	NONE

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) Tiffany Whitson AFFILIATION: AEROSTAR	SAMPLER(S) SIGNATURE(S)	
SAMPLING METHOD(S):Peristaltic Pump	SAMPLING INITIATED AT:12:15	SAMPLING ENDED AT:12:20
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
4	CG	40mL	HcL	-	-	BTEX/MTBE by EDB
1	AG	1 L	None	-	-	PAHs
1	AG	1 L	H_2SO_4	-	-	FL-PRO
1	PE	½ L	HNO_3	-	-	LEAD

REMARKS:

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

State of Florida, Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME:TACAN SITE	SITE LOCATION:NAS PENSACOLA	
WELL NO:MW-10	SAMPLE ID:MW-10	DATE:9/23/03

PURGING DATA

WELL DIAMETER (in):2	TOTAL WELL DEPTH (ft):15:23	STATIC DEPTH TO WATER (ft):3.23	WELL CAPACITY (gal/ft):0.16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY =

= (15.23 – 3.23) X 0.16 = 1.92

PURGE METHOD:Peristaltic Pump	PURGE INITIATED AT:10:58	PURGE ENDED AT:12:15	TOTAL VOL. PURGED (gal):6.0

TIME	VOLUME PURGED (gal)	CUMUL. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
11:08	0.25	0.25	0.025	3.25	5.99	26.8	238	NA	232	GRAY	NONE
11:16	0.25	0.50	0.03	3.26	6.09	26.9	248	NA	192	GRAY	NONE
11:26	0.25	0.75	0.025	3.26	6.07	27.2	254	NA	233	GRAY	NONE
11:36	0.50	1.25	0.050	3.26	6.09	27.4	193	NA	206	GRAY	NONE
11:49	0.50	1.75	0.039	3.27	6.12	27.8	247	NA	165	GRAY	NONE
12:01	0.75	2.50	0.06	3.34	5.84	26.9	234	NA	160	GRAY	NONE
12:14	2.50	5.0	0.19	3.36	5.71	26.9	201	NA	67.2	GRAY	NONE

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) Tiffany Whitson AFFILIATION: AEROSTAR	SAMPLER(S) SIGNATURE(S)	
SAMPLING METHOD(S):Peristaltic Pump	SAMPLING INITIATED AT:12:17	SAMPLING ENDED AT:12:25
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
4	CG	40mL	HcL	-	-	BTEX/MTBE by EDB
1	AG	1 L	None	-	-	PAHs
1	AG	1 L	H_2SO_4	-	-	FL-PRO
1	PE	500 mL	HNO_3	-	-	LEAD

REMARKS:

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

State of Florida, Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME:TACAN SITE/BUILDING 1917	SITE LOCATION:NAS PENSACOLA	
WELL NO:MW-11	SAMPLE ID:MW-11	DATE: 9/19/06

PURGING DATA

WELL DIAMETER (in):2	TOTAL WELL DEPTH (ft): 10.9	STATIC DEPTH TO WATER (ft): 2.7	WELL CAPACITY (gal/ft):0.16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY =

= (10.9 – 2.7) X 0.16 = 1.31

PURGE METHOD: Peristaltic Pump	PURGE INITIATED AT:1151	PURGE ENDED AT:1220	TOTAL VOL. PURGED (gal):5.7

TIME	VOLUME PURGED (gal)	CUMUL. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
1200	1.3	1.3	0.14	5.7	5.22	27.85	140	0.17	13.5	Dk brn	None
1210	1.7	3.0	0.17	5.7	5.14	27.8	137	0.14	10.8	Clear	None
1215	1.5	4.5	0.30	5.7	5.15	28.04	138	0.18	15.3	clear	none

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) : CLK/KD AFFILIATION: AEROSTAR	SAMPLER(S) SIGNATURE(S)	
SAMPLING METHOD(S):Peristaltic Pump	SAMPLING INITIATED AT: 1220	SAMPLING ENDED AT: 1225
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
1	CG	40 ml	HCl	N/A	N/A	8021B (BTEX & M)
2	AG	1 L	Ice	N/A	N/A	8270C
3	AG	1 L	H2SO4	N/A	N/A	FL-PRO
4	HDPE	275 ml	HNO3	N/A	N/A	Lead

REMARKS:
Partly cloudy, breezy, 85°

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

State of Florida, Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME:TACAN SITE/BUILDING 1917	SITE LOCATION:NAS PENSACOLA	
WELL NO:MW-12	SAMPLE ID:MW-12	DATE: 9/19/06

PURGING DATA

WELL DIAMETER (in): 2	TOTAL WELL DEPTH (ft): 11.0	STATIC DEPTH TO WATER (ft): 2.7	WELL CAPACITY (gal/ft):0.16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY =

= (11.0 – 2.7) X 0.16 = 1.35

PURGE METHOD: Peristaltic Pump	PURGE INITIATED AT: 1235	PURGE ENDED AT: 1300	TOTAL VOL. PURGED (gal): 4.5

TIME	VOLUME PURGED (gal)	CUMUL. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
1242	1.5	1.5	0.21	5.7	5.48	27.2	207	0.25	3.73	Lt brn	None
1251	1.5	3.0	0.09	5.8	5.45	27.0	204	0.18	2.36	Clear	None
1258	1.5	4.5	0.21	5.7	5.42	26.9	203	0.16	1.60	Clear	None

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) : CLK/KD AFFILIATION: AEROSTAR	SAMPLER(S) SIGNATURE(S)	
SAMPLING METHOD(S): Peristaltic Pump	SAMPLING INITIATED AT: 1300	SAMPLING ENDED AT: 1305
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
1	CG	40 ml	HCl	N/A	N/A	8021B (BTEX & M)
2	AG	1 L	Ice	N/A	N/A	8270C
3	AG	1 L	H2SO4	N/A	N/A	FL-PRO
4	HDPE	275 ml	HNO3	N/A	N/A	Lead

REMARKS:
Partly cloudy, breezy, 85°

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

State of Florida, Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME:TACAN SITE/BUILDING 1917	SITE LOCATION:NAS PENSACOLA	
WELL NO:MW-13	SAMPLE ID:MW-13	DATE: 9/19/06

PURGING DATA

WELL DIAMETER (in): 2	TOTAL WELL DEPTH (ft): 11.1	STATIC DEPTH TO WATER (ft): 3.0	WELL CAPACITY (gal/ft):0.16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY =

= (11.1 – 3.0) X 0.16 = 1.30

PURGE METHOD: Peristaltic Pump	PURGE INITIATED AT: 1014	PURGE ENDED AT: 1027	TOTAL VOL. PURGED (gal): 3.0

TIME	VOLUME PURGED (gal)	CUMUL. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
1017	1.0	1.0	0.33	5.8	6.35	28.6	290	2.8	7.61	Lt yellow	Slight
1022	1.0	2.0	0.40	5.8	6.10	28.5	287	1.9	4.46	Clear	Slight
1027	1.0	3.0	0.20	5.8	6.12	28.5	288	1.6	2.96	Clear	Slight

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) : CLK/KD AFFILIATION: AEROSTAR	SAMPLER(S) SIGNATURE(S)	
SAMPLING METHOD(S): Peristaltic Pump	SAMPLING INITIATED AT: 1030	SAMPLING ENDED AT: 1035
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
1	CG	40 ml	HCl	N/A	N/A	8021B (BTEX & M)
2	AG	1 L	Ice	N/A	N/A	8270C
3	AG	1 L	H2SO4	N/A	N/A	FL-PRO
4	HDPE	275 ml	HNO3	N/A	N/A	Lead

REMARKS:
Partly cloudy, breezy, 85°

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

State of Florida, Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME:TACAN SITE/BUILDING 1917	SITE LOCATION:NAS PENSACOLA	
WELL NO: DW-1	SAMPLE ID: DW-1	DATE: 9/19/06

PURGING DATA

WELL DIAMETER (in): 2	TOTAL WELL DEPTH (ft): 25.5	STATIC DEPTH TO WATER (ft): 3.0	WELL CAPACITY (gal/ft): 0.16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY =

= (25.5 – 3.0) X 0.16 = 3.60

PURGE METHOD: Peristaltic Pump	PURGE INITIATED AT: 1055	PURGE ENDED AT: 1130	TOTAL VOL. PURGED (gal): 7.0

TIME	VOLUME PURGED (gal)	CUMUL. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
1112	3.8	3.8	0.22	6.7	6.20	24.8	266	1.2	27.2	Brn/org	None
1120	1.4	5.2	0.18	6.7	6.03	24.8	224	1.0	41.6	Clear	None
1128	1.4	6.6	0.17	6.8	5.90	24.7	202	1.0	37.4	Clear	None

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) : CLK/KD AFFILIATION: AEROSTAR	SAMPLER(S) SIGNATURE(S)	
SAMPLING METHOD(S): Peristaltic Pump	SAMPLING INITIATED AT: 1130	SAMPLING ENDED AT: 1135
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
1	CG	40 ml	HCl	N/A	N/A	8021B (BTEX & M)
2	AG	1 L	Ice	N/A	N/A	8270C
3	AG	1 L	H2SO4	N/A	N/A	FL-PRO
4	HDPE	275 ml	HNO3	N/A	N/A	Lead

REMARKS:
Partly cloudy, breezy, 85°

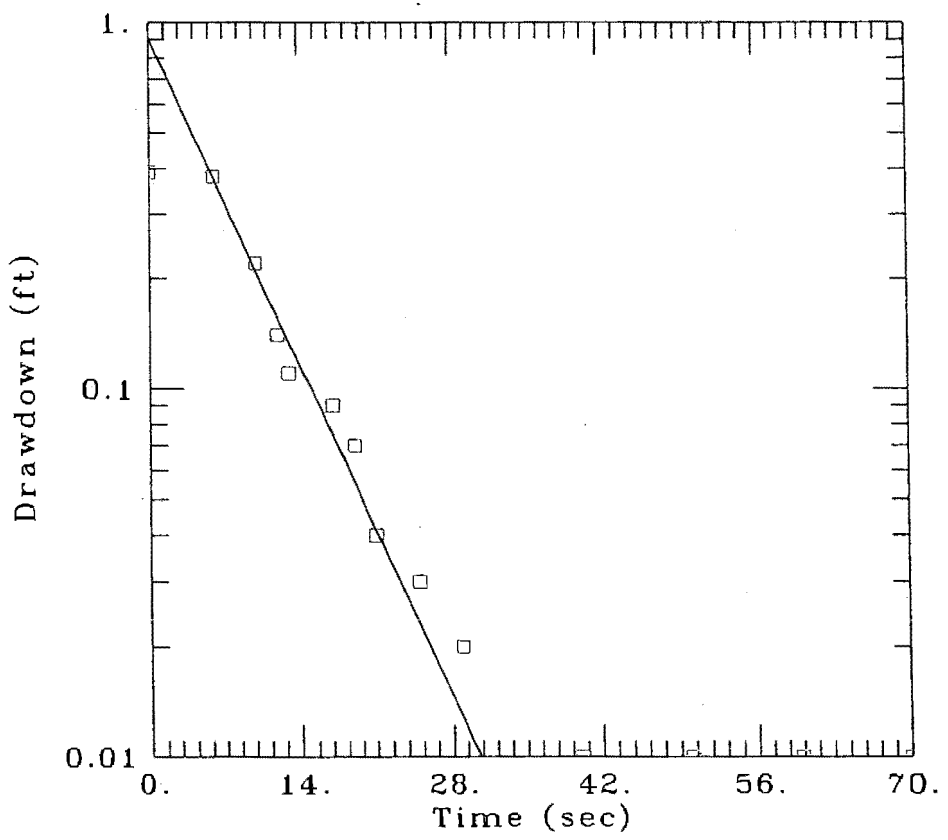
MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

APPENDIX F
SLUG TEST DATA

Aerostar Environmental Svcs	
Project No.: 0403-374-05	

TACAN Site MW-4 Test 2



DATA SET:
c:\aqt\mw4b.dat
11/17/03

AQUIFER TYPE:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

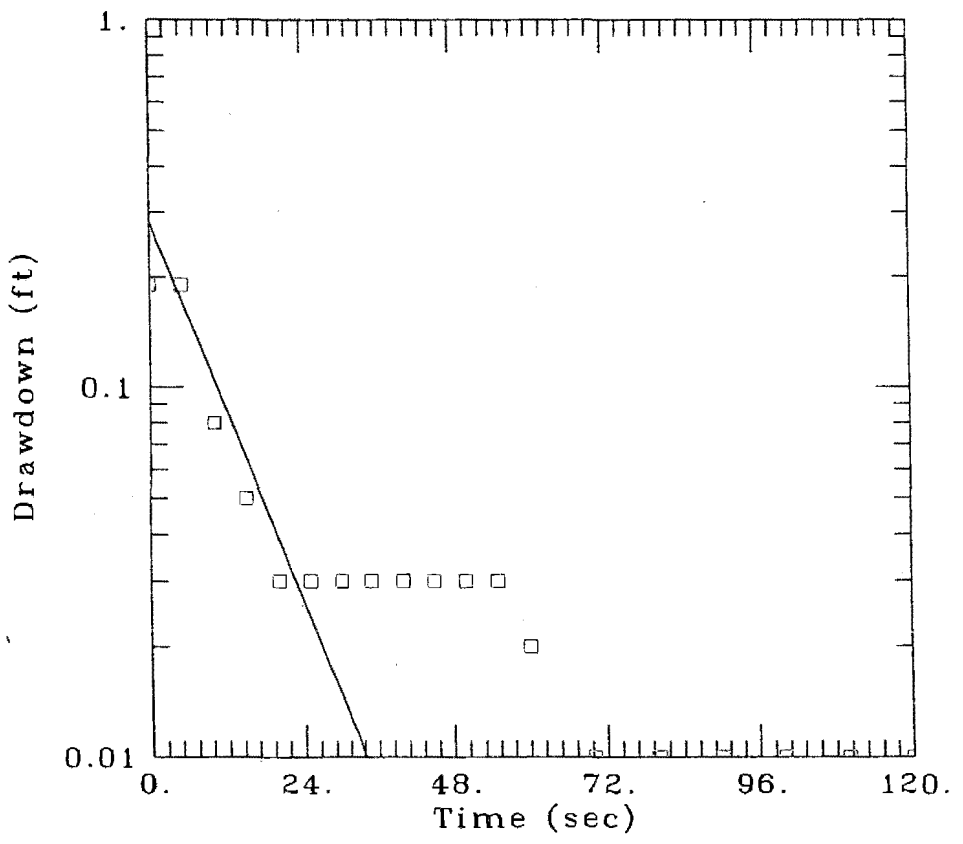
OBS. WELL:
MW-4

ESTIMATED PARAMETERS:
K = 0.0001688 ft/sec
y0 = 0.9118 ft

TEST DATA:
H0 = 0.39 ft
rc = 0.08333 ft
rw = 0.3438 ft
L = 6.64 ft
b = 6.64 ft
H = 6.64 ft

Aerostar Environmental Svcs	
Project No.: 0403-374-05	

TACAN Site MW-7 Test 1



DATA SET:
c:\aqt\mw7a.dat
11/17/03

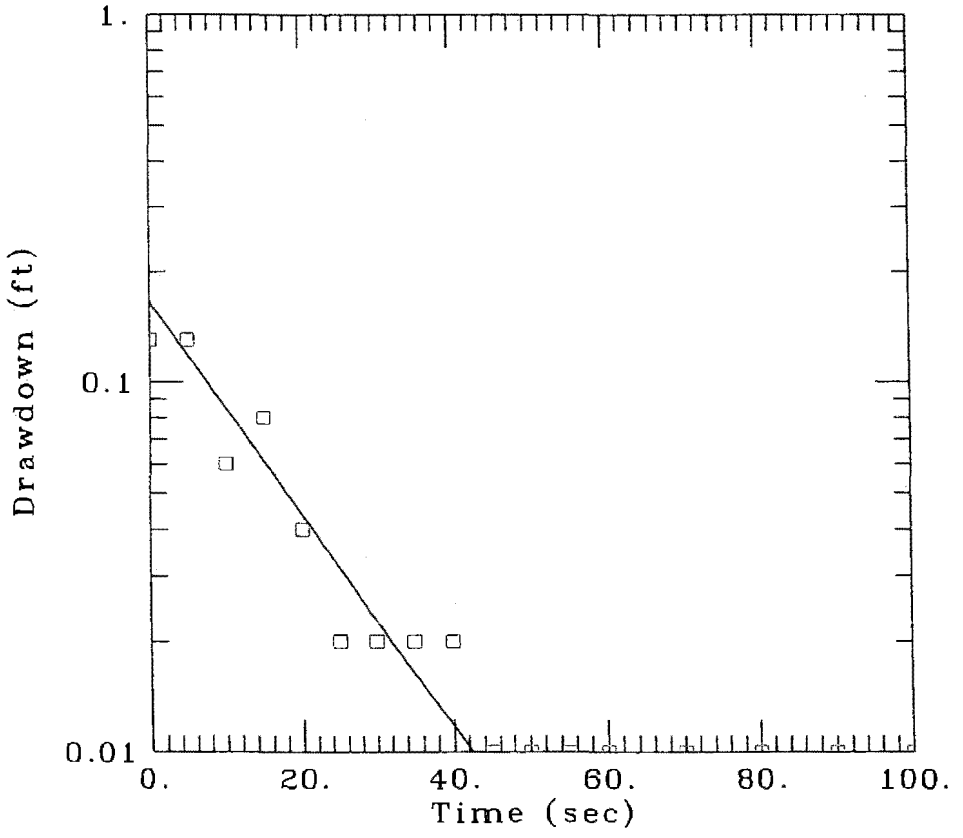
AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
OBS. WELL:
MW-7

ESTIMATED PARAMETERS:
K = 0.0001029 ft/sec
y0 = 0.2825 ft

TEST DATA:
H0 = 0.19 ft
rc = 0.08333 ft
rw = 0.3438 ft
L = 7.75 ft
b = 7.75 ft
H = 7.75 ft

Aerostar Environmental Svcs	
Project No.: 0403-374-05	

TACAN Site MW-7 Test 2



DATA SET:
c:\aqt\mw7b.dat
11/17/03

AQUIFER TYPE:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

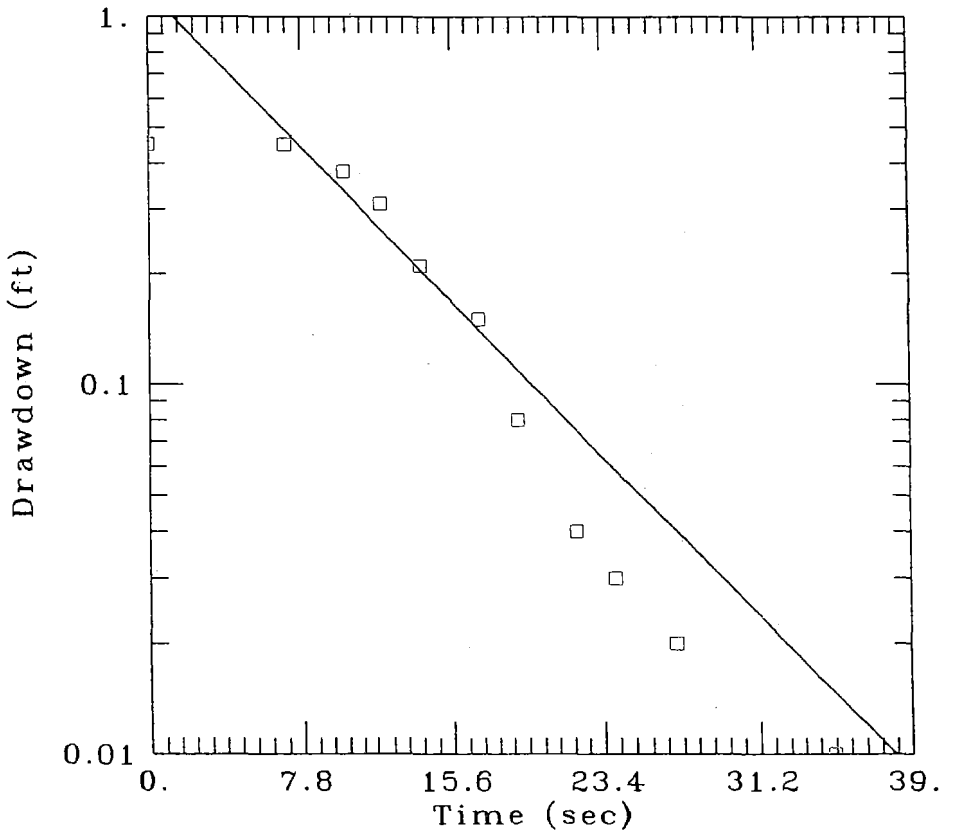
OBS. WELL:
MW7

ESTIMATED PARAMETERS:
K = 6.8801E-05 ft/sec
y0 = 0.165 ft

TEST DATA:
H0 = 0.13 ft
rc = 0.08333 ft
rw = 0.3438 ft
L = 7.75 ft
b = 7.75 ft
H = 7.75 ft

Aerostar Environmental Svcs	
Project No.: 0403-374-05	

TACAN Site MW-8 Test 1



DATA SET:
c:\aqt\mw8a.dat
11/17/03

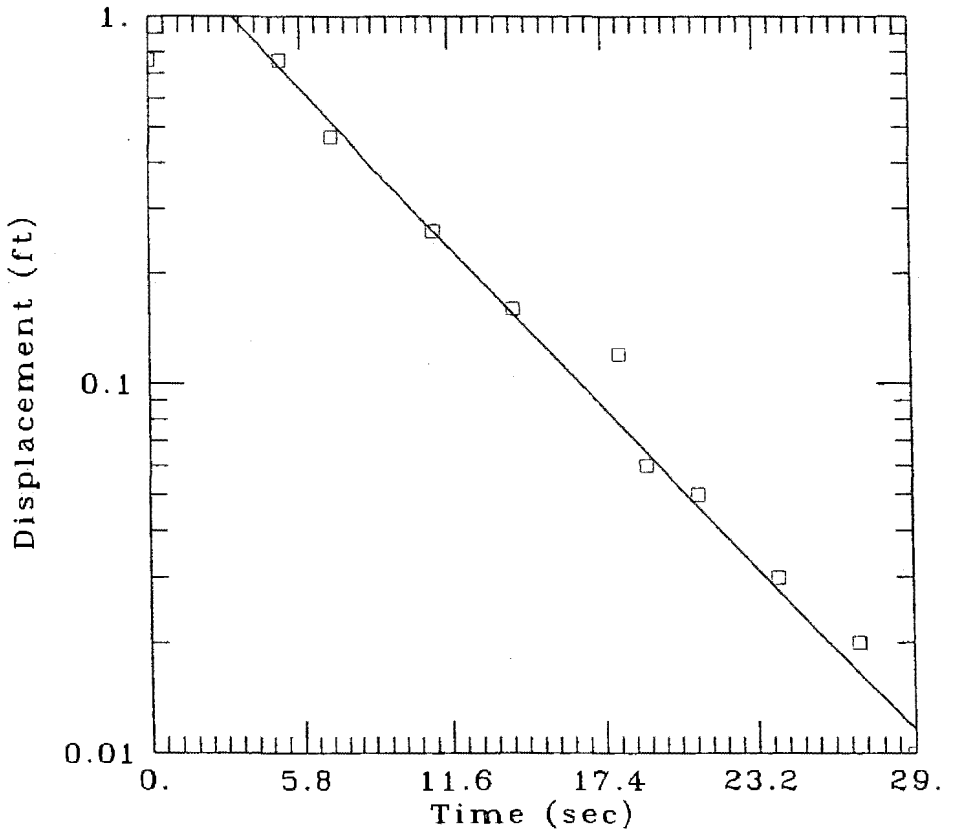
AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
OBS. WELL:
MW-8

ESTIMATED PARAMETERS:
K = 0.0001346 ft/sec
y0 = 1.18 ft

TEST DATA:
H0 = 0.45 ft
rc = 0.08333 ft
rw = 0.3438 ft
L = 7.36 ft
b = 7.36 ft
H = 7.36 ft

Aerostar Environmental Svcs	
Project No.: 0403-374-05	

TACAN Site MW-8 Test 2



DATA SET:
MW8B.DAT
11/18/03

AQUIFER TYPE:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

OBS. WELL:
MW-8

ESTIMATED PARAMETERS:
K = 0.0001856 ft/sec
y0 = 1.733 ft

TEST DATA:
H0 = 0.76 ft
rc = 0.08333 ft
rw = 0.3438 ft
L = 7.36 ft
b = 7.36 ft
H = 7.36 ft

APPENDIX G
SOIL LABORATORY ANALYTICAL REPORT & COC

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Report

For: Mr. Philip Foster
Aerostar
7856 Westside Park Drive
Mobile, AL 36695
CC:

Order Number: C309525
SDG Number:
Client Project ID:
Project: TACAN SITE-NAS PENSACOLA, FL
Report Date: 09/26/2003
Sampled By: Client
Sample Received Date: 09/19/2003
Requisition Number:
Purchase Order:

MLPope

Melissa L. Pope, Project Manager
mpope@stl-inc.com

Sample Summary

Order: C309525 Client: Aerostar
Date Received: 09/19/2003 Project: TACAN SITE-NAS PENSACOLA, FL

Client Sample ID	Lab Sample ID	Matrix	Date Sampled
SB-2/2'	C309525*1	Solid	09/19/2003 12:00
SB-4/2'	C309525*2	Solid	09/19/2003 12:20
SB-21/1'	C309525*3	Solid	09/19/2003 12:55

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09525-1	SB-2/2'	Solid	09/19/03	09/19/03 12:00	
09525-2	SB-4/2'	Solid	09/19/03	09/19/03 12:20	
09525-3	SB-21/1'	Solid	09/19/03	09/19/03 12:55	

Parameter	Units	Lab Sample IDs 09525-1	09525-2	09525-3
Aromatic Volatile Organics (8021B)				
Benzene	mg/kg dw	0.012	<0.00090	<0.00090
Ethylbenzene	mg/kg dw	0.79	<0.00090	<0.00090
Methyl t-butyl ether (MTBE)	mg/kg dw	<0.019	<0.0046	<0.0047
Toluene	mg/kg dw	<0.26	<0.0046	<0.0047
Xylenes, Total	mg/kg dw	1.5	<0.0018	<0.0018
Surrogate-a,a,a-Trifluorotolue ne (PID) *	%	178 %I1	108 %	110 %
Percent Solids		86	84	86
Dilution Factor		44.5	0.78	0.81
Prep Date		09/19/03	09/19/03	09/19/03
Analysis Date		09/23/03	09/24/03	09/23/03
Batch ID		EXT091A	KIS029A	KIS028B
Prep Method		5035/5030B	5035	5035
Analyst		CN	SB	SB
Quantitation Factor		51.7	0.93	0.94
FL-PRO (Petroleum Range Organic) Ranges (FL-PRO)				
GRO (C8-C10) Range	mg/kg dw	120L	<1.8	<0.75
DRO (C10-C28) Range	mg/kg dw	7800L	<1.8	4.2
ORO (C28-C40) Range	mg/kg dw	23	5.2	22
Total PRO (C8-C40)	mg/kg dw	7900	5.2	26
Surrogate - o-Terphenyl *	%	750 %J1	67 %	65 %
Surrogate - Nonatriacontane (C39) *	%	79 %	58 %J3	61 %
Percent Solids		86	84	86
Dilution Factor		1	1	1
Prep Date		09/22/03	09/22/03	09/22/03
Analysis Date		09/22/03	09/22/03	09/22/03
Batch ID		FLS193	FLS193	FLS193
Prep Method		3550B	3550B	3550B
Analyst		IE	IE	IE
Quantitation Factor		1.3	0.7	0.3

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09525-1	SB-2/2'	Solid	09/19/03	09/19/03 12:00	
09525-2	SB-4/2'	Solid	09/19/03	09/19/03 12:20	
09525-3	SB-21/1'	Solid	09/19/03	09/19/03 12:55	

Parameter	Units	Lab Sample IDs 09525-1	09525-2	09525-3
Polynuclear Aromatic Hydrocarbons (8270C)				
Acenaphthene	mg/kg dw	<0.39	<0.40	<0.38
Acenaphthylene	mg/kg dw	<0.51	<0.40	<0.38
Anthracene	mg/kg dw	<0.46	<0.40	<0.38
Benzo(a)anthracene	mg/kg dw	<0.73	<0.40	<0.38
Benzo(a)pyrene	mg/kg dw	<0.71	<0.10	<0.10
Benzo(b)fluoranthene	mg/kg dw	<0.77	<0.40	<0.38
Benzo(g,h,i)perylene	mg/kg dw	<0.57	<0.40	<0.38
Benzo(k)fluoranthene	mg/kg dw	<0.93	<0.40	<0.38
Chrysene	mg/kg dw	<0.74	<0.40	<0.38
Dibenzo(a,h)anthracene	mg/kg dw	<0.64	<0.10	<0.10
Fluoranthene	mg/kg dw	<0.62	<0.40	<0.38
Fluorene	mg/kg dw	<0.53	<0.40	<0.38
Indeno(1,2,3-cd)pyrene	mg/kg dw	<0.64	<0.40	<0.38
Naphthalene	mg/kg dw	<0.43	<0.40	<0.38
Phenanthrene	mg/kg dw	<0.49	<0.40	<0.38
Pyrene	mg/kg dw	1.21	<0.40	<0.38
1-Methylnaphthalene	mg/kg dw	<0.49	<0.40	<0.38
2-Methylnaphthalene	mg/kg dw	<0.51	<0.40	<0.38
Surrogate - 2-Fluorobiphenyl *	%	70 %	55 %	60 %
Surrogate - Nitrobenzene-d5 *	%	52 %	50 %	58 %
Surrogate - Terphenyl-d14 *	%	87 %	76 %	68 %
Percent Solids		86	84	86
Dilution Factor		10	1	1
Prep Date		09/22/03	09/22/03	09/22/03
Analysis Date		09/25/03	09/24/03	09/22/03
Batch ID		ALS059	ALS059	ALS059
Prep Method		3550B	3550B	3550B
Analyst		RDW	RDW	RDW
Quantitation Factor		380.87	39.60	38.12

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.

STL Pensacola

PROJECT SAMPLE INSPECTION FORM

Lab Order #: 0309525 Date Received: 19-Sept-03

1.	Was there a Chain of Custody?	(Yes)	No*	
2.	Was Chain of Custody properly filled out and relinquished?	(Yes)	No*	
3.	Were all samples properly labeled and identified?	(Yes)	No*	
4.	Were samples received cold? (Criteria: 2° - 6°C: STL-SOP 1055)	(Yes)	No*	N/A
5.	Did samples require splitting or compositing*?	Yes*	(No)	
6.	Were samples received in proper containers for analysis requested?	(Yes)	No*	
7.	Were all sample containers received intact?	(Yes)	No*	
8.	Were samples checked for preservative? *(Check pH of all H2O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)**	Yes	No*	(N/A)
9.	Is there sufficient volume for analysis requested?	(Yes)	No*	N/A (Can)
10.	Were samples received within Holding Time? (Refer to STL-SOP 1040)	(Yes)	No*	
11.	Is Headspace visible > ¼" in diameter in VOA vials?*	Yes*	No	(N/A)
12.	Were Trip Blanks Received?	Yes	No	(N/A)
13.	If sent, were matrix spike bottles returned?	Yes	No*	(N/A)
14.	If sent, were T-Handles returned?	Yes	No*	(N/A)
15.	If any issues, how was PM notified?	Mail ☐	Verbal ☐	

Airbill Number(s): [illegible] Shipped By: UPS FedX (HD) BUS ABX

(HD – Hand Delivery)

Cooler Numbers & Temp(s) (°C): Client 2° Cond

(IE, 340L-4°C-CCK8 – LIST THERMOMETER number for temperature)

Out of Control Events and Inspection Comments (list sample IDs/Tests where appropriate):

1-3. COC/Sample ID/COC discrepancy:

4. Insufficient Ice ☐ Delay in delivery ☐ Other ☐

5. Samples were Split ☐ Composited ☐ Requested by: Client ☐ PM ☐ Other:

6. Improper Containers (ID/Size/desc):

7. Broken bottles/Test:

8. Incorrect pH:

9. Test/Matrix/Volume:

10. Out of Holding Time/Test:

11. VOA headspace >1/4"
(list – size)

List additional comments by above number:

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: MAS Date: 9/19/03 Logged By: LK Date: 19-Sept-03

* Note all Out-of-Control and/or questionable events on Comment Section of this form. For holding times, the analytical department will flag immediate hold time samples(pH, Dissolved O2, Residual Cl) as out of hold time, therefore, those samples will not be documented on this PSIF.

* All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"

\+ All pH results for North Carolina, New York, and other requested samples are to be recorded on the pH log provided (STL-SOP 938).

* According to EPA, ¼" of headspace is acceptable in 40 ml vials requiring volatile analysis.

Out of Control Events and Inspection Comments ***(continued from front page):***

********** NOTE **********

ANY PERSON MAKING OR ADDING COMMENTS TO ANY PART OF THIS PSIF MUST INITIAL AND DATE ALL CORRECTIONS, COMMENTS AND/OR INSTRUCTIONS.

Chain of Custody Record

Lab Report No.: C30952

Company: AEROSTAR

Address: 7856 WESTSIDE PARK DR. MOBILE, AL 36695

Attn: PHILIP FOSTER Phone: Fax:

Sampled by (Print Name)/Affiliation Sampler Signature

Gulf Coast LabNet, Inc.
An Environmental Lab Services Co.
Phone: (251) 625-1331
Fax: (251) 625-1299

Modified from DEP Form #: 62-770.900(2) Page 1 of 1

FDEP Facility No.:

Project Name: TACAN SITE

Location: NAS PENSACOLA, FL

Project No.:

Item No.	Field ID No.	Sampled Date	Sampled Time	Grab or Comp.	Matrix Codes	No. Cont.	Low Level SOILS BTEX/MTBE H	PAH H	FL-PRO H	Syringe Kits	Remarks	Lab. No.
	SB-2 / 2'	9/19/03	1200		SO	4	X	X	X	3		
L	SB-4 / 2'	9/19/03	1220		SO	4	X	X	X			
3	SB-21 / 1'	9/19/03	1255		SO	4	X	X	X			
											0403-374-05	

← Preservative

← Analysis

REQUESTED DUE DATE

/ /

Shipment Method

Total Number of Containers: 12

Out: / / Via:

Returned: / / Via:

Additional Comments

Item #	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
	Aerostar	9-19-03	1547	GCL	9-19-03	1547
	GCL	9-19-03	1620	SRI	9-19-03	1620

Cooler No.(s) / Temperature(s) (°C): 22 cm

Sampling Kit No.: 2191

Equipment ID No.:

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H = Hydrochloric acid + ice I = Ice only N = Nitric acid + ice S = Sulfuric acid + ice O = Other (specify)

APPENDIX H
GROUNDWATER LABORATORY ANALYTICAL REPORTS & COC

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Report

For: Mr. Philip Foster
Aerostar
7856 Westside Park Drive
Mobile, AL 36695
CC:

Order Number: C309616
SDG Number:
Client Project ID: 0403-374-05
Project: TACAN SITE-NAS PENSACOLA, FL
Report Date: 09/30/2003
Sampled By: Client
Sample Received Date: 09/24/2003
Requisition Number:
Purchase Order:

Melissa L Pope

Melissa L. Pope, Project Manager
mpope@stl-inc.com
01/03/2006

Sample Summary

Order: C309616 Client: Aerostar
Date Received: 09/24/2003 Project: TACAN SITE-NAS PENSACOLA, FL

Client Sample ID	Lab Sample ID	Matrix	Date Sampled
MW-1	C309616*1	Liquid	09/23/2003 15:30
MW-2	C309616*2	Liquid	09/23/2003 15:50
MW-3	C309616*3	Liquid	09/23/2003 16:30
MW-4	C309616*4	Liquid	09/23/2003 13:15
MW-5	C309616*5	Liquid	09/23/2003 13:40
MW-6	C309616*6	Liquid	09/23/2003 14:40
MW-7	C309616*7	Liquid	09/23/2003 14:00
MW-8	C309616*8	Liquid	09/23/2003 14:57
MW-9	C309616*9	Liquid	09/23/2003 12:15
MW-10	C309616*10	Liquid	09/23/2003 12:17

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09616-1	MW-1	Liquid	09/24/03	09/23/03 15:30	
09616-2	MW-2	Liquid	09/24/03	09/23/03 15:50	
09616-3	MW-3	Liquid	09/24/03	09/23/03 16:30	
09616-4	MW-4	Liquid	09/24/03	09/23/03 13:15	
09616-5	MW-5	Liquid	09/24/03	09/23/03 13:40	

Parameter	Units	Sample ID 09616-1 MW-1	09616-2 MW-2	09616-3 MW-3	09616-4 MW-4	09616-5 MW-5
Lead (6010B)						
Lead	mg/l	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Dilution Factor		1	1	1	1	1
Prep Date		09/29/03	09/29/03	09/29/03	09/29/03	09/29/03
Analysis Date		09/29/03	09/29/03	09/29/03	09/29/03	09/29/03
Batch ID		PW357	PW357	PW357	PW357	PW357
Prep Method		3010A	3010A	3010A	3010A	3010A
Analyst		GSP	GSP	GSP	GSP	GSP
Quantitation Factor		1.000	1.000	1.000	1.000	1.000
Microextractable Organics (8011)						
1,2-Dibromoethane (EDB)	ug/l	<0.020	<0.020	<0.020	<0.020	<0.020
Surrogate -						
4-Bromofluorobenzene *	%	86 %	102 %	99 %	93 %	97 %
Dilution Factor		1	1	1	1	1
Prep Date		09/25/03	09/25/03	09/25/03	09/25/03	09/25/03
Analysis Date		09/25/03	09/25/03	09/25/03	09/25/03	09/25/03
Batch ID		EDW448	EDW448	EDW448	EDW448	EDW448
Prep Method		8011	8011	8011	8011	8011
Analyst		SB	SB	SB	SB	SB
Quantitation Factor		1.0	1.0	1.0	1.0	1.0

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09616-1	MW-1	Liquid	09/24/03	09/23/03 15:30	
09616-2	MW-2	Liquid	09/24/03	09/23/03 15:50	
09616-3	MW-3	Liquid	09/24/03	09/23/03 16:30	
09616-4	MW-4	Liquid	09/24/03	09/23/03 13:15	
09616-5	MW-5	Liquid	09/24/03	09/23/03 13:40	

Parameter	Units	Sample ID 09616-1 MW-1	09616-2 MW-2	09616-3 MW-3	09616-4 MW-4	09616-5 MW-5
FL-PRO (Petroleum Range Organic) Ranges (FL-PRO)						
GRO (C8-C10) Range	ug/l	<100	600	<100	<100	<100
DRO C10-C28	ug/l	<100	4900	<100	<100	<100
ORO (C28-C40) Range	ug/l	<100	<100	<100	<100	<100
Total PRO (C8-C40)	ug/l	<100	5500	<100	<100	<100
Surrogate - o-Terphenyl *	%	96 %	103 %	105 %	96 %	82 %
Surrogate - Nonatriacontane (C39) *	%	116 %	111 %	109 %	85 %	97 %
Dilution Factor		1	1	1	1	1
Prep Date		09/26/03	09/26/03	09/26/03	09/26/03	09/26/03
Analysis Date		09/29/03	09/29/03	09/29/03	09/29/03	09/29/03
Batch ID		FLW203	FLW203	FLW203	FLW203	FLW203
Prep Method		3520C	3520C	3520C	3520C	3520C
Analyst		IE	IE	IE	IE	IE
Quantitation Factor		1.0	1.0	1.0	1.0	1.0
Polynuclear Aromatic Hydrocarbons (8270C)						
Acenaphthene	ug/l	<10	<10	<10	<10	<10
Acenaphthylene	ug/l	<10	<10	<10	<10	<10
Anthracene	ug/l	<10	<10	<10	<10	<10
Benzo(a)anthracene	ug/l	<0.16	<0.16	<0.16	<0.16	<0.16
Benzo(a)pyrene	ug/l	<0.10	<0.10	<0.10	<0.10	<0.10
Benzo(b)fluoranthene	ug/l	<0.11	<0.11	<0.11	<0.11	<0.11
Benzo(g,h,i)perylene	ug/l	<10	<10	<10	<10	<10
Benzo(k)fluoranthene	ug/l	<0.16	<0.16	<0.16	<0.16	<0.16

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09616-1	MW-1	Liquid	09/24/03	09/23/03 15:30	
09616-2	MW-2	Liquid	09/24/03	09/23/03 15:50	
09616-3	MW-3	Liquid	09/24/03	09/23/03 16:30	
09616-4	MW-4	Liquid	09/24/03	09/23/03 13:15	
09616-5	MW-5	Liquid	09/24/03	09/23/03 13:40	

Parameter	Units	Sample ID 09616-1 MW-1	09616-2 MW-2	09616-3 MW-3	09616-4 MW-4	09616-5 MW-5
Polynuclear Aromatic Hydrocarbons (8270C)						
Chrysene	ug/l	<0.14	<0.14	<0.14	<0.14	<0.14
Dibenzo(a,h)anthracene	ug/l	<0.091	<0.090	<0.090	<0.090	<0.090
Fluoranthene	ug/l	<10	<10	<10	<10	<10
Fluorene	ug/l	<10	<10	<10	<10	<10
Indeno(1,2,3-cd)pyrene	ug/l	<0.11	<0.11	<0.11	<0.11	<0.11
Naphthalene	ug/l	<10	<10	<10	<10	<10
Phenanthrene	ug/l	<10	<10	<10	<10	<10
Pyrene	ug/l	<10	<10	<10	<10	<10
1-Methylnaphthalene	ug/l	<10	16	<10	<10	<10
2-Methylnaphthalene	ug/l	<10	<10	<10	<10	<10
Surrogate - 2-Fluorobiphenyl *	%	65 %	74 %	66 %	0 %J1	72 %
Surrogate - Nitrobenzene-d5 *	%	54 %	62 %	55 %	0 %J1	65 %
Surrogate - Terphenyl-d14 *	%	85 %	89 %	89 %	0 %J1	85 %
Dilution Factor		1.01	1	1	1	1
Prep Date		09/26/03	09/26/03	09/26/03	09/26/03	09/26/03
Analysis Date		09/29/03	09/29/03	09/29/03	09/29/03	09/29/03
Batch ID		ALW155	ALW155	ALW155	ALW155	ALW155
Prep Method		3520C	3520C	3520C	3520C	3520C
Analyst		RDW	RDW	RDW	RDW	RDW
Quantitation Factor		1.01	1	1	1	1

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09616-1	MW-1	Liquid	09/24/03	09/23/03 15:30	
09616-2	MW-2	Liquid	09/24/03	09/23/03 15:50	
09616-3	MW-3	Liquid	09/24/03	09/23/03 16:30	
09616-4	MW-4	Liquid	09/24/03	09/23/03 13:15	
09616-5	MW-5	Liquid	09/24/03	09/23/03 13:40	

Parameter	Units	Sample ID 09616-1 MW-1	09616-2 MW-2	09616-3 MW-3	09616-4 MW-4	09616-5 MW-5
Aromatic and Halogenated Volatiles (8260B)						
Benzene	ug/l	<1.0	3.4	<1.0	<1.0	<1.0
Bromobenzene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	ug/l	<0.60	<0.60	<0.60	<0.60	<0.60
Bromoform	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane (Methyl bromide)	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	ug/l	<0.40	<0.40	<0.40	<0.40	<0.40
Dibromomethane (Methylene bromide)	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	ug/l	<4.0	<4.0	<4.0	<4.0	<4.0
Dichlorodifluoromethane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethene (total)	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09616-1	MW-1	Liquid	09/24/03	09/23/03 15:30	
09616-2	MW-2	Liquid	09/24/03	09/23/03 15:50	
09616-3	MW-3	Liquid	09/24/03	09/23/03 16:30	
09616-4	MW-4	Liquid	09/24/03	09/23/03 13:15	
09616-5	MW-5	Liquid	09/24/03	09/23/03 13:40	

Parameter	Units	Sample ID 09616-1 MW-1	09616-2 MW-2	09616-3 MW-3	09616-4 MW-4	09616-5 MW-5
Aromatic and Halogenated Volatiles (8260B)						
trans-1,3-Dichloropropene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	ug/l	<1.0	37	1.4	<1.0	<1.0
Methylene chloride (Dichloromethane)	ug/l	<4.0	<4.0	<4.0	<4.0	<4.0
Methyl t-butyl ether (MTBE)	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	ug/l	<0.40	<0.40	<0.40	<0.40	<0.40
Tetrachloroethene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	ug/l	<4.0	20	<4.0	<4.0	<4.0
1,1,1-Trichloroethane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	ug/l	<0.51	<0.51	<0.51	<0.51	<0.51
Vinyl chloride	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, Total	ug/l	<2.0	250	<2.0	<2.0	<2.0
Surrogate - Dibromofluoromethane *	%	95 %	93 %	95 %	95 %	95 %
Surrogate - Toluene-d8 *	%	96 %	98 %	97 %	97 %	97 %
Surrogate - 4-Bromofluorobenzene *	%	92 %	97 %	92 %	93 %	93 %
Dilution Factor		1	1	1	1	1
Prep Date		09/27/03	09/27/03	09/27/03	09/27/03	09/27/03
Analysis Date		09/27/03	09/27/03	09/27/03	09/27/03	09/27/03
Batch ID		COW026	COW026	COW026	COW026	COW026
Prep Method		5030B	5030B	5030B	5030B	5030B
Analyst		GRH	GRH	GRH	GRH	GRH
Quantitation Factor		1	1	1	1	1

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09616-6	MW-6	Liquid	09/24/03	09/23/03 14:40	
09616-7	MW-7	Liquid	09/24/03	09/23/03 14:00	
09616-8	MW-8	Liquid	09/24/03	09/23/03 14:57	
09616-9	MW-9	Liquid	09/24/03	09/23/03 12:15	
09616-10	MW-10	Liquid	09/24/03	09/23/03 12:17	

Parameter	Units	Sample ID 09616-6 MW-6	09616-7 MW-7	09616-8 MW-8	09616-9 MW-9	09616-10 MW-10
Lead (6010B)						
Lead	mg/l	<0.0050	<0.0050	<0.0050	0.0060	<0.0050
Dilution Factor		1	1	1	1	1
Prep Date		09/29/03	09/29/03	09/29/03	09/29/03	09/29/03
Analysis Date		09/29/03	09/29/03	09/29/03	09/29/03	09/29/03
Batch ID		PW357	PW357	PW357	PW357	PW357
Prep Method		3010A	3010A	3010A	3010A	3010A
Analyst		GSP	GSP	GSP	GSP	GSP
Quantitation Factor		1.000	1.000	1.000	1.000	1.000
Microextractable Organics (8011)						
1,2-Dibromoethane (EDB)	ug/l	<0.020	<0.020	<0.020	<0.020	<0.020
Surrogate -						
4-Bromofluorobenzene *	%	97 %	93 %	96 %	96 %	95 %
Dilution Factor		1	1	1	1	1
Prep Date		09/25/03	09/25/03	09/25/03	09/25/03	09/25/03
Analysis Date		09/26/03	09/26/03	09/26/03	09/26/03	09/26/03
Batch ID		EDW449	EDW449	EDW449	EDW449	EDW449
Prep Method		8011	8011	8011	8011	8011
Analyst		SB	SB	SB	SB	SB
Quantitation Factor		1.0	1.0	1.0	1.0	1.0

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09616-6	MW-6	Liquid	09/24/03	09/23/03 14:40	
09616-7	MW-7	Liquid	09/24/03	09/23/03 14:00	
09616-8	MW-8	Liquid	09/24/03	09/23/03 14:57	
09616-9	MW-9	Liquid	09/24/03	09/23/03 12:15	
09616-10	MW-10	Liquid	09/24/03	09/23/03 12:17	

Parameter	Units	Sample ID 09616-6 MW-6	09616-7 MW-7	09616-8 MW-8	09616-9 MW-9	09616-10 MW-10
FL-PRO (Petroleum Range Organic) Ranges (FL-PRO)						
GRO (C8-C10) Range	ug/l	<100	<100	<100	<100	<100
DRO C10-C28	ug/l	<100	<100	<100	<100	<100
ORO (C28-C40) Range	ug/l	<100	<100	<100	<100	<100
Total PRO (C8-C40)	ug/l	<100	<100	<100	<100	<100
Surrogate - o-Terphenyl *	%	116 %	101 %	93 %	90 %	99 %
Surrogate - Nonatriacontane (C39) *	%	119 %	103 %	111 %	82 %	99 %
Dilution Factor		1	1	1	1	1
Prep Date		09/26/03	09/26/03	09/26/03	09/26/03	09/26/03
Analysis Date		09/29/03	09/29/03	09/29/03	09/29/03	09/29/03
Batch ID		FLW203	FLW203	FLW203	FLW203	FLW203
Prep Method		3520C	3520C	3520C	3520C	3520C
Analyst		IE	IE	IE	IE	IE
Quantitation Factor		1.0	1.0	1.0	1.0	1.0
Polynuclear Aromatic Hydrocarbons (8270C)						
Acenaphthene	ug/l	<10	<10	<10	<10	<10
Acenaphthylene	ug/l	<10	<10	<10	<10	<10
Anthracene	ug/l	<10	<10	<10	<10	<10
Benzo(a)anthracene	ug/l	<0.16	<0.16	<0.16	<0.16	<0.16
Benzo(a)pyrene	ug/l	<0.10	<0.10	<0.10	<0.10	<0.10
Benzo(b)fluoranthene	ug/l	<0.11	<0.11	<0.11	<0.11	<0.11
Benzo(g,h,i)perylene	ug/l	<10	<10	<10	<10	<10
Benzo(k)fluoranthene	ug/l	<0.16	<0.16	<0.16	<0.16	<0.16

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09616-6	MW-6	Liquid	09/24/03	09/23/03 14:40	
09616-7	MW-7	Liquid	09/24/03	09/23/03 14:00	
09616-8	MW-8	Liquid	09/24/03	09/23/03 14:57	
09616-9	MW-9	Liquid	09/24/03	09/23/03 12:15	
09616-10	MW-10	Liquid	09/24/03	09/23/03 12:17	

Parameter	Units	Sample ID 09616-6 MW-6	09616-7 MW-7	09616-8 MW-8	09616-9 MW-9	09616-10 MW-10
Polynuclear Aromatic Hydrocarbons (8270C)						
Chrysene	ug/l	<0.14	<0.14	<0.14	<0.14	<0.14
Dibenzo(a,h)anthracene	ug/l	<0.090	<0.091	<0.091	<0.091	<0.092
Fluoranthene	ug/l	<10	<10	<10	<10	<10
Fluorene	ug/l	<10	<10	<10	<10	<10
Indeno(1,2,3-cd)pyrene	ug/l	<0.11	<0.11	<0.11	<0.11	<0.11
Naphthalene	ug/l	<10	<10	<10	<10	<10
Phenanthrene	ug/l	<10	<10	<10	<10	<10
Pyrene	ug/l	<10	<10	<10	<10	<10
1-Methylnaphthalene	ug/l	<10	<10	<10	<10	<10
2-Methylnaphthalene	ug/l	<10	<10	<10	<10	<10
Surrogate - 2-Fluorobiphenyl *	%	63 %	6 %J1	68 %	70 %	72 %
Surrogate - Nitrobenzene-d5 *	%	55 %	19 %J1	56 %	64 %	65 %
Surrogate - Terphenyl-d14 *	%	83 %	13 %J1	89 %	85 %	94 %
Dilution Factor		1	1.01	1.01	1.01	1.02
Prep Date		09/26/03	09/26/03	09/26/03	09/26/03	09/26/03
Analysis Date		09/29/03	09/29/03	09/29/03	09/29/03	09/29/03
Batch ID		ALW155	ALW155	ALW155	ALW155	ALW155
Prep Method		3520C	3520C	3520C	3520C	3520C
Analyst		RDW	RDW	RDW	RDW	RDW
Quantitation Factor		1	1.01	1.01	1.01	1.02

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09616-6	MW-6	Liquid	09/24/03	09/23/03 14:40	
09616-7	MW-7	Liquid	09/24/03	09/23/03 14:00	
09616-8	MW-8	Liquid	09/24/03	09/23/03 14:57	
09616-9	MW-9	Liquid	09/24/03	09/23/03 12:15	
09616-10	MW-10	Liquid	09/24/03	09/23/03 12:17	

Parameter	Units	Sample ID 09616-6 MW-6	09616-7 MW-7	09616-8 MW-8	09616-9 MW-9	09616-10 MW-10
Aromatic and Halogenated Volatiles (8260B)						
Benzene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Bromobenzene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	ug/l	<0.60	<0.60	<0.60	<0.60	<0.60
Bromoform	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane (Methyl bromide)	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	ug/l	<0.40	<0.40	<0.40	<0.40	<0.40
Dibromomethane (Methylene bromide)	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	ug/l	<4.0	<4.0	<4.0	<4.0	<4.0
Dichlorodifluoromethane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethene (total)	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
09616-6	MW-6	Liquid	09/24/03	09/23/03 14:40	
09616-7	MW-7	Liquid	09/24/03	09/23/03 14:00	
09616-8	MW-8	Liquid	09/24/03	09/23/03 14:57	
09616-9	MW-9	Liquid	09/24/03	09/23/03 12:15	
09616-10	MW-10	Liquid	09/24/03	09/23/03 12:17	

Parameter	Units	Sample ID 09616-6 MW-6	09616-7 MW-7	09616-8 MW-8	09616-9 MW-9	09616-10 MW-10
Aromatic and Halogenated Volatiles (8260B)						
trans-1,3-Dichloropropene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene chloride (Dichloromethane)	ug/l	<4.0	<4.0	<4.0	<4.0	<4.0
Methyl t-butyl ether (MTBE)	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	ug/l	<0.40	<0.40	<0.40	<0.40	<0.40
Tetrachloroethene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	ug/l	<4.0	<4.0	<4.0	<4.0	<4.0
1,1,1-Trichloroethane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	ug/l	<0.51	<0.51	<0.51	<0.51	<0.51
Vinyl chloride	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, Total	ug/l	<2.0	<2.0	<2.0	<2.0	<2.0
Surrogate - Dibromofluoromethane *	%	94 %	94 %	95 %	96 %	95 %
Surrogate - Toluene-d8 *	%	98 %	97 %	98 %	96 %	97 %
Surrogate - 4-Bromofluorobenzene *	%	93 %	92 %	93 %	92 %	93 %
Dilution Factor		1	1	1	1	1
Prep Date		09/27/03	09/27/03	09/27/03	09/27/03	09/27/03
Analysis Date		09/27/03	09/27/03	09/27/03	09/27/03	09/27/03
Batch ID		COW026	COW026	COW026	COW026	COW026
Prep Method		5030B	5030B	5030B	5030B	5030B
Analyst		GRH	GRH	GRH	GRH	GRH
Quantitation Factor		1	1	1	1	1

Chain of Custody Record

Lab Report No.: C30952

Company: AEROSTAR

Address: 7856 WESTSIDE PARK DR. MOBILE, AL 36695

Attn: PHILIP FOSTER Phone: Fax:

Sampled by [Print Name]/Affiliation Sampler Signature

Gulf Coast LabNet, Inc.
An Environmental Lab Services Co.
Phone: (251) 625-1331
Fax: (251) 625-1299

Modified from DEP Form #: 62-770.900(2) Page 1 of 1

FDEP Facility No.:

Project Name: TACAN SITE

Location: NAS PENSACOLA, FL

Project No.:

Item No.	Field ID No.	Sampled Date	Sampled Time	Grab or Comp.	Matrix Codes	No. Cont.	H Low Level 5035 BTEX/MTBE	H PAH	H FL-PRO				Syringe Kits	
	SB-2 / 2'	9/19/03	1200		SO	4	X	X	X				3	
L	SB-4 / 2'	9/19/03	1220		SO	4	X	X	X					
3	SB-21 / 1'	9/19/03	1255		SO	4	X	X	X					
														0403-374-05

← Preservative

← Analysis

REQUESTED DUE DATE / /

Remarks	Lab. No.

Shipment Method

Out: / / Via:

Returned: / / Via:

Additional Comments

12 ← Total Number of Containers

Item #	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
	Aerostar	9-19-03	1547	GCC	9-19-03	1547
	GCC	9-19-03	1620	STL/FL	9-19-03	1620

Cooler No.(s) / Temperature(s) (°C)	Sampling Kit No.	Equipment ID No.
2° cool	2191	

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H = Hydrochloric acid + ice I = Ice only N = Nitric acid + ice S = Sulfuric acid + ice O = Other (specify)

GCAL
GULF COAST ANALYTICAL LABORATORIES, INC

NELAP CERTIFICATE NUMBER 01955

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

Report Date 09/28/2006

GCAL Report 206092023

Deliver To	Aerostar 803 Government St. Suite A Mobile, AL 36602 251-432-2664
Attn	Carrie Kruchell

Project Aerostar-TACAN

000001

CASE NARRATIVE

Client: Aerostar **Report:** 206092023

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

Additional Flags:

I - Indicates the result is between the MDL and RL (RDL).

SEMI-VOLATILES GAS CHROMATOGRAPHY

In the FLPRO analysis for prep batch 333066, no MS/MSD was performed due to insufficient sample volume. The LCS spike recoveries were acceptable.

In the 8015Modified C8-C40 analysis for prep batch 333066, Petroleum Hydrocarbons was recovered outside of the established control limits for the LCSD. The LCS/LCSD exhibited an RPD failure. Petroleum Hydrocarbons was detected at low levels in the method blank. This is due to probable laboratory contamination.

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates an estimated value
U	Indicates the compound was analyzed for but not detected
B	(ORGANICS) Indicates the analyte was detected in the associated Method Blank
B	(INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with ISO Guide 25 and NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Curtis Ekker

CURTIS EKKER
DATA VALIDATION MANAGER
GCAL REPORT 206092023

THIS REPORT CONTAINS 037 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20609202301	MW-13	Water	09/19/2006 10:30	09/20/2006 09:20
20609202302	DW-1	Water	09/19/2006 11:30	09/20/2006 09:20
20609202303	MW-11	Water	09/19/2006 12:20	09/20/2006 09:20
20609202304	MW-12	Water	09/19/2006 13:00	09/20/2006 09:20

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20609202301	MW-13	Water	09/19/2006 10:30	09/20/2006 09:20

8270C, SemiVolatiles

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
09/22/2006 13:30	333121	3510C	1	09/24/2006 19:53	RRR	333157

CAS#	Parameter	Result	RDL	MDL	Units
83-32-9	Acenaphthene	0.219U	10.0	0.219	ug/L
208-96-8	Acenaphthylene	0.258U	10.0	0.258	ug/L
120-12-7	Anthracene	0.350U	10.0	0.350	ug/L
56-55-3	Benzo(a)anthracene	0.205U	0.250	0.205	ug/L
50-32-8	Benzo(a)pyrene	0.130U	0.200	0.130	ug/L
205-99-2	Benzo(b)fluoranthene	0.244U	0.250	0.244	ug/L
191-24-2	Benzo(g,h,i)perylene	0.199U	10.0	0.199	ug/L
207-08-9	Benzo(k)fluoranthene	0.278U	0.500	0.278	ug/L
218-01-9	Chrysene	0.311U	10.0	0.311	ug/L
53-70-3	Dibenz(a,h)anthracene	0.287U	0.300	0.287	ug/L
206-44-0	Fluoranthene	0.231U	10.0	0.231	ug/L
86-73-7	Fluorene	0.230U	10.0	0.230	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.240U	0.250	0.240	ug/L
91-20-3	Naphthalene	0.211U	10.0	0.211	ug/L
85-01-8	Phenanthrene	0.191U	10.0	0.191	ug/L
129-00-0	Pyrene	0.234U	10.0	0.234	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	50	36.7	ug/L	73	43 - 110
321-60-8	2-Fluorobiphenyl	50	34.5	ug/L	69	16 - 128
1718-51-0	Terphenyl-d14	50	39.2	ug/L	78	47 - 121
4165-62-2	Phenol-d5	100	28.7	ug/L	29	10 - 76
367-12-4	2-Fluorophenol	100	48.9	ug/L	49	24 - 96
118-79-6	2,4,6-Tribromophenol	100	91.9	ug/L	92	19 - 133

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20609202301	MW-13	Water	09/19/2006 10:30	09/20/2006 09:20

8021B, Volatiles

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/21/2006 12:04	JAR	333057

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	0.054U	5.00	0.054	ug/L
100-41-4	Ethylbenzene	0.077U	5.00	0.077	ug/L
108-88-3	Toluene	0.125U	5.00	0.125	ug/L
1330-20-7	Xylene (total)	0.233U	10.0	0.233	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.859U	5.00	0.859	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
106-39-8	Bromochlorobenzene	30	25.6	ug/L	85	68 - 137

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20609202301	MW-13	Water	09/19/2006 10:30	09/20/2006 09:20

Florida PRO

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
09/22/2006 09:30	333066	8015Modified C8-C40	1	09/22/2006 17:05	TLS	333256

CAS#	Parameter	Result	RDL	MDL	Units
FLPRO-01	Petroleum Hydrocarbons	158	100	40.7	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
84-15-1	o-Terphenyl	100	132	ug/L	132	40 - 156
7194-86-7	Nonatriacontane	600	274	ug/L	46	10 - 106

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20609202301	MW-13	Water	09/19/2006 10:30	09/20/2006 09:20

SW-846 6010B - ICP Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
09/21/2006 11:20	333035	SW-846 3010A	1	09/22/2006 12:33	CNB	333140

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0015I	0.015	0.0012	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20609202302	DW-1	Water	09/19/2006 11:30	09/20/2006 09:20

8270C, SemiVolatiles

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
09/22/2006 13:30	333121	3510C	1	09/24/2006 20:08	RRR	333157

CAS#	Parameter	Result	RDL	MDL	Units
83-32-9	Acenaphthene	0.219U	10.0	0.219	ug/L
208-96-8	Acenaphthylene	0.258U	10.0	0.258	ug/L
120-12-7	Anthracene	0.350U	10.0	0.350	ug/L
56-55-3	Benzo(a)anthracene	0.205U	0.250	0.205	ug/L
50-32-8	Benzo(a)pyrene	0.130U	0.200	0.130	ug/L
205-99-2	Benzo(b)fluoranthene	0.244U	0.250	0.244	ug/L
191-24-2	Benzo(g,h,i)perylene	0.199U	10.0	0.199	ug/L
207-08-9	Benzo(k)fluoranthene	0.278U	0.500	0.278	ug/L
218-01-9	Chrysene	0.311U	10.0	0.311	ug/L
53-70-3	Dibenz(a,h)anthracene	0.287U	0.300	0.287	ug/L
206-44-0	Fluoranthene	0.231U	10.0	0.231	ug/L
86-73-7	Fluorene	0.230U	10.0	0.230	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.240U	0.250	0.240	ug/L
91-20-3	Naphthalene	0.211U	10.0	0.211	ug/L
85-01-8	Phenanthrene	0.191U	10.0	0.191	ug/L
129-00-0	Pyrene	0.234U	10.0	0.234	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	50	37.3	ug/L	75	43 - 110
321-60-8	2-Fluorobiphenyl	50	33.7	ug/L	67	16 - 128
1718-51-0	Terphenyl-d14	50	41.1	ug/L	82	47 - 121
4165-62-2	Phenol-d5	100	42	ug/L	42	10 - 76
367-12-4	2-Fluorophenol	100	62.9	ug/L	63	24 - 96
118-79-6	2,4,6-Tribromophenol	100	88.5	ug/L	89	19 - 133

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20609202302	DW-1	Water	09/19/2006 11:30	09/20/2006 09:20

8021B, Volatiles

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/21/2006 12:23	JAR	333057

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	0.054U	5.00	0.054	ug/L
100-41-4	Ethylbenzene	0.077U	5.00	0.077	ug/L
108-88-3	Toluene	0.125U	5.00	0.125	ug/L
1330-20-7	Xylene (total)	0.233U	10.0	0.233	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.859U	5.00	0.859	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
106-39-8	Bromochlorobenzene	30	25.7	ug/L	86	68 - 137

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20609202302	DW-1	Water	09/19/2006 11:30	09/20/2006 09:20

Florida PRO

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
09/22/2006 09:30	333066	8015Modified C8-C40	1	09/22/2006 17:34	TLS	333256

CAS#	Parameter	Result	RDL	MDL	Units
FLPRO-01	Petroleum Hydrocarbons	274	100	40.7	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
84-15-1	o-Terphenyl	100	129	ug/L	129	40 - 156
7194-86-7	Nonatriacontane	600	328	ug/L	55	10 - 106

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20609202302	DW-1	Water	09/19/2006 11:30	09/20/2006 09:20

SW-846 6010B - ICP Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
09/21/2006 11:20	333035	SW-846 3010A	1	09/22/2006 13:40	CNB	333140

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0016I	0.015	0.0012	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20609202303	MW-11	Water	09/19/2006 12:20	09/20/2006 09:20

8270C, SemiVolatiles

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
09/22/2006 13:30	333121	3510C	1	09/24/2006 20:23	RRR	333157

CAS#	Parameter	Result	RDL	MDL	Units
83-32-9	Acenaphthene	0.219U	10.0	0.219	ug/L
208-96-8	Acenaphthylene	0.258U	10.0	0.258	ug/L
120-12-7	Anthracene	0.350U	10.0	0.350	ug/L
56-55-3	Benzo(a)anthracene	0.205U	0.250	0.205	ug/L
50-32-8	Benzo(a)pyrene	0.130U	0.200	0.130	ug/L
205-99-2	Benzo(b)fluoranthene	0.244U	0.250	0.244	ug/L
191-24-2	Benzo(g,h,i)perylene	0.199U	10.0	0.199	ug/L
207-08-9	Benzo(k)fluoranthene	0.278U	0.500	0.278	ug/L
218-01-9	Chrysene	0.311U	10.0	0.311	ug/L
53-70-3	Dibenz(a,h)anthracene	0.287U	0.300	0.287	ug/L
206-44-0	Fluoranthene	0.231U	10.0	0.231	ug/L
86-73-7	Fluorene	0.230U	10.0	0.230	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.240U	0.250	0.240	ug/L
91-20-3	Naphthalene	0.211U	10.0	0.211	ug/L
85-01-8	Phenanthrene	0.191U	10.0	0.191	ug/L
129-00-0	Pyrene	0.234U	10.0	0.234	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	50	37.7	ug/L	75	43 - 110
321-60-8	2-Fluorobiphenyl	50	37.9	ug/L	76	16 - 128
1718-51-0	Terphenyl-d14	50	40.6	ug/L	81	47 - 121
4165-62-2	Phenol-d5	100	27.2	ug/L	27	10 - 76
367-12-4	2-Fluorophenol	100	44.6	ug/L	45	24 - 96
118-79-6	2,4,6-Tribromophenol	100	87.2	ug/L	87	19 - 133

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20609202303	MW-11	Water	09/19/2006 12:20	09/20/2006 09:20

8021B, Volatiles

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/21/2006 12:42	JAR	333057

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	0.054U	5.00	0.054	ug/L
100-41-4	Ethylbenzene	0.077U	5.00	0.077	ug/L
108-88-3	Toluene	0.125U	5.00	0.125	ug/L
1330-20-7	Xylene (total)	0.233U	10.0	0.233	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.859U	5.00	0.859	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
106-39-8	Bromochlorobenzene	30	26.5	ug/L	88	68 - 137

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20609202303	MW-11	Water	09/19/2006 12:20	09/20/2006 09:20

Florida PRO

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
09/22/2006 09:30	333066	8015Modified C8-C40	1	09/22/2006 18:03	TLS	333256

CAS#	Parameter	Result	RDL	MDL	Units
FLPRO-01	Petroleum Hydrocarbons	107	100	40.7	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
84-15-1	o-Terphenyl	100	118	ug/L	118	40 - 156
7194-86-7	Nonatriacontane	600	318	ug/L	53	10 - 106

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20609202303	MW-11	Water	09/19/2006 12:20	09/20/2006 09:20

SW-846 6010B - ICP Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
09/21/2006 11:20	333035	SW-846 3010A	1	09/22/2006 13:46	CNB	333140

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0024I	0.015	0.0012	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20609202304	MW-12	Water	09/19/2006 13:00	09/20/2006 09:20

8270C, SemiVolatiles

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
09/22/2006 13:30	333121	3510C	1	09/24/2006 20:37	RRR	333157

CAS#	Parameter	Result	RDL	MDL	Units
83-32-9	Acenaphthene	0.219U	10.0	0.219	ug/L
208-96-8	Acenaphthylene	0.258U	10.0	0.258	ug/L
120-12-7	Anthracene	0.350U	10.0	0.350	ug/L
56-55-3	Benzo(a)anthracene	0.205U	0.250	0.205	ug/L
50-32-8	Benzo(a)pyrene	0.130U	0.200	0.130	ug/L
205-99-2	Benzo(b)fluoranthene	0.244U	0.250	0.244	ug/L
191-24-2	Benzo(g,h,i)perylene	0.199U	10.0	0.199	ug/L
207-08-9	Benzo(k)fluoranthene	0.278U	0.500	0.278	ug/L
218-01-9	Chrysene	0.311U	10.0	0.311	ug/L
53-70-3	Dibenz(a,h)anthracene	0.287U	0.300	0.287	ug/L
206-44-0	Fluoranthene	0.231U	10.0	0.231	ug/L
86-73-7	Fluorene	0.230U	10.0	0.230	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.240U	0.250	0.240	ug/L
91-20-3	Naphthalene	0.211U	10.0	0.211	ug/L
85-01-8	Phenanthrene	0.191U	10.0	0.191	ug/L
129-00-0	Pyrene	0.234U	10.0	0.234	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	50	30.9	ug/L	62	43 - 110
321-60-8	2-Fluorobiphenyl	50	30.9	ug/L	62	16 - 128
1718-51-0	Terphenyl-d14	50	35.1	ug/L	70	47 - 121
4165-62-2	Phenol-d5	100	23.2	ug/L	23	10 - 76
367-12-4	2-Fluorophenol	100	36.6	ug/L	37	24 - 96
118-79-6	2,4,6-Tribromophenol	100	73.9	ug/L	74	19 - 133

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20609202304	MW-12	Water	09/19/2006 13:00	09/20/2006 09:20

8021B, Volatiles

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	09/21/2006 13:02	JAR	333057

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	0.054U	5.00	0.054	ug/L
100-41-4	Ethylbenzene	0.077U	5.00	0.077	ug/L
108-88-3	Toluene	0.125U	5.00	0.125	ug/L
1330-20-7	Xylene (total)	0.233U	10.0	0.233	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.859U	5.00	0.859	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
106-39-8	Bromochlorobenzene	30	26.5	ug/L	88	68 - 137

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20609202304	MW-12	Water	09/19/2006 13:00	09/20/2006 09:20

Florida PRO

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
09/22/2006 09:30	333066	8015Modified C8-C40	1	09/22/2006 18:32	TLS	333256

CAS#	Parameter	Result	RDL	MDL	Units
FLPRO-01	Petroleum Hydrocarbons	78.0I	100	40.7	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
84-15-1	o-Terphenyl	100	94.7	ug/L	95	40 - 156
7194-86-7	Nonatriacontane	600	268	ug/L	45	10 - 106

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20609202304	MW-12	Water	09/19/2006 13:00	09/20/2006 09:20

SW-846 6010B - ICP Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
09/21/2006 11:20	333035	SW-846 3010A	1	09/22/2006 13:52	CNB	333140

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0014I	0.015	0.0012	mg/L

GC/MS Semi-Volatiles Quality Control Summary

Analytical Batch	333157	**Client ID**	MB333121			LCS333121			LCSD333121		
Prep Batch	333121	**GCAL ID**	411357			411358			411359		
Prep Method	3510C	**Sample Type**	Method Blank			LCS			LCSD		
		Prep Date	09/22/2006 13:30			09/22/2006 13:30			09/22/2006 13:30		
		Analytical Date	09/24/2006 18:39			09/24/2006 18:54			09/24/2006 19:08		
		Matrix	Water			Water			Water		

8270C, SemiVolatiles		**Units**	ug/L	**Spike**			**Control**				**RPD**
		Result	**RDL**	**Added**	**Result**	**% R**	**Limits % R**	**Result**	**% R**	**RPD**	**Limit**
208-96-8	Acenaphthylene	0.258U	0.258	100	76.1	76	55 - 104	81.1	81	6	50
120-12-7	Anthracene	0.350U	0.350	100	84.6	85	58 - 113	82.5	83	3	50
56-55-3	Benzo(a)anthracene	0.205U	0.205	100	88.8	89	56 - 113	88.9	89	0.1	50
205-99-2	Benzo(b)fluoranthene	0.244U	0.244	100	95.9	96	55 - 116	81.6	82	16	50
207-08-9	Benzo(k)fluoranthene	0.278U	0.278	100	78.0	78	49 - 121	90.5	91	15	50
191-24-2	Benzo(g,h,i)perylene	0.199U	0.199	100	126	126	44 - 132	125	125	0.8	50
50-32-8	Benzo(a)pyrene	0.130U	0.130	100	96.0	96	56 - 118	94.6	95	1	50
218-01-9	Chrysene	0.311U	0.311	98.0	72.4	74	58 - 117	75.1	77	4	50
53-70-3	Dibenz(a,h)anthracene	0.287U	0.287	100	117	117	50 - 138	113	113	3	50
206-44-0	Fluoranthene	0.231U	0.231	100	88.1	88	55 - 118	88.6	89	0.6	50
86-73-7	Fluorene	0.230U	0.230	100	81.1	81	54 - 111	83.9	84	3	50
193-39-5	Indeno(1,2,3-cd)pyrene	0.240U	0.240	100	132	132	43 - 133	132	132	0	50
91-20-3	Naphthalene	0.211U	0.211	100	68.5	69	44 - 102	78.1	78	13	50
85-01-8	Phenanthrene	0.191U	0.191	100	78.6	79	58 - 111	80.5	81	2	50
83-32-9	Acenaphthene	0.219U	0.219	100	70.1	70	52 - 108	73.9	74	5	32
129-00-0	Pyrene	0.234U	0.234	100	73.5	74	54 - 117	75.9	76	3	30
Surrogate											
4165-60-0	Nitrobenzene-d5	37.2	74	50	38.3	77	43 - 110	37.3	75		
321-60-8	2-Fluorobiphenyl	35.4	71	50	40.2	80	16 - 128	40.2	80		
1718-51-0	Terphenyl-d14	40.6	81	50	38.8	78	47 - 121	39.6	79		
4165-62-2	Phenol-d5	30.7	31	100	30.8	31	10 - 76	31.1	31		
367-12-4	2-Fluorophenol	53.5	54	100	53.4	53	24 - 96	50.4	50		
118-79-6	2,4,6-Tribromophenol	93.8	94	100	96.6	97	19 - 133	95.3	95		

T20000 000021

General Chromatography Quality Control Summary

Analytical Batch 333057	Client ID	MB333057	LCS333057
Prep Batch N/A	GCAL ID	410989	410990
	Sample Type	Method Blank	LCS
	Analytical Date	09/21/2006 10:45	09/21/2006 11:05
	Matrix	Water	Water

8021B, Volatiles		Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R
1634-04-4	tert-Butyl methyl ether (MTBE)	0.859U	0.859	100	93.7	94	69 - 133
1330-20-7	Xylene (total)	0.233U	0.233	60.0	58.8	98	77 - 122
108-88-3	Toluene	0.125U	0.125	20.0	18.7	94	80 - 118
71-43-2	Benzene	0.054U	0.054	20.0	17.3	87	75 - 120
100-41-4	Ethylbenzene	0.077U	0.077	20.0	20.0	100	80 - 122
Surrogate							
106-39-8	Bromochlorobenzene	24.8	83	30	27.1	90	68 - 137

Analytical Batch 333057	Client ID	MW-12	410588MS	410588MSD
Prep Batch N/A	GCAL ID	20609202304	411112	411113
	Sample Type	SAMPLE	MS	MSD
	Analytical Date	09/21/2006 13:02	09/21/2006 14:20	09/21/2006 14:40
	Matrix	Water	Water	Water

8021B, Volatiles		Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
1634-04-4	tert-Butyl methyl ether (MTBE)	0.00	0.859	100	104	104	69 - 133	109	109	5	25
1330-20-7	Xylene (total)	0.00	0.233	60.0	66.3	111	77 - 122	67.3	112	1	17
108-88-3	Toluene	0.00	0.125	20.0	21.0	105	80 - 118	21.5	108	2	15
71-43-2	Benzene	0.00	0.054	20.0	19.5	98	75 - 120	20.0	100	3	19
100-41-4	Ethylbenzene	0.00	0.077	20.0	22.5	113	80 - 122	23.2	116	3	15
Surrogate											
106-39-8	Bromochlorobenzene	26.5	88	30	26.2	87	68 - 137	27.6	92		

220000

General Chromatography Quality Control Summary

Analytical Batch	333256	**Client ID**	MB333066	LCS333066	LCSD333066
Prep Batch	333066	**GCAL ID**	411084	411085	411086
Prep Method	8015Modified	**Sample Type**	Method Blank	LCS	LCSD
	C8-C40	**Prep Date**	09/22/2006 09:30	09/22/2006 09:30	09/22/2006 09:30
		Analytical Date	09/22/2006 15:37	09/22/2006 16:06	09/22/2006 16:36
		Matrix	Water	Water	Water

Florida PRO		**Units**	ug/L	**Spike**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
		Result	**RDL**	**Added**							
FLPRO-01	Petroleum Hydrocarbons	62.0I	40.7	1700	1680	99	55 - 118	2200	129*	27*	20
Surrogate											
84-15-1	o-Terphenyl	119	119	100	106	106	40 - 156	136	136		
7194-86-7	Nonatriacontane	252	42	600	210	35	10 - 106	299	50		

000023

Inorganics Quality Control Summary

Analytical Batch	333140	**Client ID**	MB333035		LCS333035
Prep Batch	333035	**GCAL ID**	410895		410896
Prep Method	SW-846	**Sample Type**	Method Blank		LCS
	3010A	**Prep Date**	09/21/2006 11:20		09/21/2006 11:20
		Analytical Date	09/22/2006 12:19		09/22/2006 12:26
		Matrix	Water		Water

SW-846 6010B - ICP Water	**Units**	mg/L	**Spike**	**Result**		**Control**
	Result	**RDL**	**Added**		**% R**	**Limits % R**
7439-92-1 Lead	0.0012U	0.0012	0.50	0.52	103	80 - 120

Analytical Batch	333140	**Client ID**	MW-13	410585MS	410585MSD
Prep Batch	333035	**GCAL ID**	20609202301	410898	411013
Prep Method	SW-846	**Sample Type**	SAMPLE	MS	MSD
	3010A	**Prep Date**	09/21/2006 11:20	09/21/2006 11:20	09/21/2006 11:20
		Analytical Date	09/22/2006 12:33	09/22/2006 12:40	09/22/2006 12:47
		Matrix	Water	Water	Water

SW-846 6010B - ICP Water	**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
	Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7439-92-1 Lead	0.0015	0.0012	0.50	0.53	106	75 - 125	0.53	107	0	20

Chain of Custody Record

Lab Report No.:

Company: AEROSTAR	**Gulf Coast LabNet, Inc.** An Environmental Lab Services Co.	Modified from DEP Form #: 62-770.900(2) — Page 1 of 1
Address: 803 Govt. St, Ste. A, Mobile, AL 36602	Phone: (251) 625-1331	FDEP Facility No.:
	Fax: (251) 625-1299	Project Name: TACAN
		Location: NAS Pensacola, FL
		Project No.: 0463-374-05

Attn: Carrie Kruchell — Phone: 251-432-2664 — Fax: 251-432-2685

Sampled by [Print Name]/Affiliation: CKruchell/KDasinger-AES — Sampler Signature:

Item No.	Field ID No.	Sampled Date	Sampled Time	Grab or Comp.	Matrix Codes	No. Cont.	H (8021 BTEX/MTBE)	H (8270 SAH)	S (FL-PRO)	2 (6010 Pb)	I (Batt)	←Preservative / ←Analysis	Remarks	Lab. No.
1	MW-13	9/19/06	1030	G	GW	5	2	1	1	1	X			1
2	DW-1	9/19/06	1130	G	GW	5	2	1	1	1	X			2
3	MW-11	9/19/06	1220	G	GW	5	2	1	1	1	X			3
4	MW-12	9/19/06	1300	G	GW	5	2	1	1	1	X			4

REQUESTED DUE DATE

Shipment Method: N/A — 20 ←Total Number of Containers

Out: / / Via: — Returned: / / Via:

Additional Comments: FDEP Format; Low Level; G PAH RL's/MDL's

Item #	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
	EMPTY CONTAINERS	9/15/06	-	CKruchell	9/15/06	-
	CKruchell	9/19/06	1645	DMcL/GCL	9-19-06	1645
	DMcL/GCL	9-19-06	1800	FedEx	9-19-06	1800
	FedEx	9-20-06	930	MR GCL	9-20-06	930

Cooler No.(s) / Temperature(s) (°C)	Sampling Kit No.	Equipment ID No.
3	5692	

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H = Hydrochloric acid + ice I = Ice only N = Nitric acid + ice S = Sulfuric acid + ice O = Other (specify)

0000525

PRESERVATION CHECKLIST / COOLER RECEIPT

Gulf Coast Analytical Laboratories, Inc.

WO:	206092023	**Type:**	D
Desc:		**Report:**	REVIEW_RPT
Work ID:	Aerostar-TACAN	**Status:**	WP
Project Seq:	47437	**Created:**	9/20/2006 13:15
Client:	4569 - Gulf Coast Labnet	**QA:**	
Profile:	80028 - Aero-FDEP TA - Aerostar-TACAN	**PO:**	

WORKORDER SAMPLES

			pH PRESERVATIVE			VOA HEADSPACE			
Container ID	**Type**	**Preservative**	A	U	N\A	A	U	N\A	**CONTAINER CONDITION**
20609202301-1	LA	H2SO4						X	OK
20609202301-2	OC	HNO3						X	OK
20609202301-3	40	HCL							OK
20609202301-4	40	HCL							OK
20609202301-5	LA	NONE			X			X	OK
Container ID	**Type**	**Preservative**	A	U	N\A	A	U	N\A	**CONTAINER CONDITION**
20609202302-1	LA	H2SO4						X	OK
20609202302-2	OC	HNO3						X	OK
20609202302-3	40	HCL							OK
20609202302-4	40	HCL							OK
20609202302-5	LA	NONE			X			X	OK
Container ID	**Type**	**Preservative**	A	U	N\A	A	U	N\A	**CONTAINER CONDITION**
20609202303-1	LA	H2SO4						X	OK
20609202303-2	OC	HNO3						X	OK
20609202303-3	40	HCL							OK
20609202303-4	40	HCL							OK
20609202303-5	LA	NONE			X			X	OK
Container ID	**Type**	**Preservative**	A	U	N\A	A	U	N\A	**CONTAINER CONDITION**
20609202304-1	LA	H2SO4						X	OK
20609202304-2	OC	HNO3						X	OK
20609202304-3	40	HCL							OK
20609202304-4	40	HCL							OK
20609202304-5	LA	NONE			X			X	OK

pH PRESERVATIVE VOA HEADSPACE

A = ACCEPTABLE
U = UNACCEPTABLE
N\A = NOT APPLICABLE

COOLER (S) TEMPERATURE (A) U LIMIT = 4C + \ - 2C

MAXIMUM VOLATILE HEADSPACE BUBBLE 6MM

Custody Seal
used [✓] Yes [ ] No
in tact [✓] Yes [ ] No

LABEL(S) VERIFIED RBG CUSTODIAN MA

JAC

000027