

N60508.AR.000023
NAS WHITING FIELD
5090.3a

PIPELINE CLOSURE ASSESSMENT REPORT FOR AVGAS PIPELINE NAS WHITING FIELD
FL
4/18/2001
TETRA TECH NUS

Pipeline Closure Assessment Report for AVGAS Pipeline

**Naval Air Station Whiting Field
Milton, Florida**



**Southern Division
Naval Facilities Engineering Command
Contract Number N62467-94-D-0888
Contract Task Order CTO-0114**

April 2001

**PIPELINE CLOSURE ASSESSMENT REPORT
FOR
AVGAS PIPELINE**

**NAVAL AIR STATION WHITING FIELD
MILTON, FLORIDA**

**COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT**

**Submitted to:
Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive
North Charleston, South Carolina 29406**

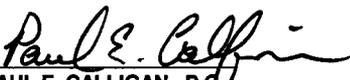
**Submitted by:
Tetra Tech NUS, Inc.
661 Anderson Drive
Foster Plaza 7
Pittsburgh, Pennsylvania 15220**

**CONTRACT NUMBER N62467-94-D-0888
CONTRACT TASK ORDER 0114**

APRIL 2001

PREPARED UNDER THE SUPERVISION OF:

APPROVED FOR SUBMITTAL BY:

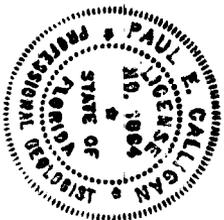

**PAUL E. CALLIGAN, P.G.
TASK ORDER MANAGER
FLORIDA LICENSE No. PG-0001864
TETRA TECH NUS, INC.
TALLAHASSEE, FLORIDA**


**DEBBIE WROBLEWSKI
PROGRAM MANAGER
TETRA TECH NUS, INC.
PITTSBURGH, PENNSYLVANIA**

PROFESSIONAL CERTIFICATION

**Pipeline Closure Assessment Report
AVGAS Pipeline
Naval Air Station Whiting Field
Milton, Florida**

This Pipeline Closure Assessment Report was prepared under the direct supervision of the undersigned geologist using geologic and hydrogeologic principles standard to the profession at the time the report was prepared. If conditions are determined to exist that differ from those described, the undersigned geologist should be notified to evaluate the effects of additional information on the assessment described in this report. This report was developed specifically for the referenced site and should not be construed to apply to any other site.



Paul E. Calligan

Paul E. Calligan, P.G.
Florida License No. PG-0001864

4/18/01

Date

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
EXECUTIVE SUMMARY	ES-1
1.0 INTRODUCTION	1-1
1.1 FACILITY BACKGROUND	1-1
1.2 SITE BACKGROUND	1-1
1.3 EXISTING PETROLEUM INVESTGATION SITES	1-2
1.4 PIPELINE CLEANING AND CLOSURE	1-2
1.5 PIPELINE CLOSURE ASSESSMENT	1-2
2.0 SOIL SCREENING INVESTIGATION	2-1
2.1 SAMPLING RATIONALE	2-1
2.2 SOIL SCREENING INVESTIGATION METHODOLOGY	2-1
2.2.1 AVGAS Pipeline Location	2-1
2.2.2 Soil Sample Collection	2-2
2.2.3 Soil Headspace Screening	2-2
2.2.4 Quality Assurance/Quality Control	2-3
2.3 ASSESSMENT RESULTS	2-3
2.3.1 Section A	2-3
2.3.2 Section B	2-4
2.3.3 Section C	2-4
2.3.4 Section D	2-5
2.3.5 Section E	2-5
2.3.6 Section F	2-8
2.3.7 Section G	2-8
3.0 CONFIRMATORY SOIL SAMPLING	3-1
3.1 SAMPLING RATIONALE	3-1
3.2 CONFIRMATORY SOIL SAMPLING METHODOLOGY	3-2
3.2.1 Quality Control (QC) Samples	3-2
3.2.2 Sample Handling	3-2
3.3 CONFIRMATORY SOIL SAMPLE RESULTS	3-2
3.3.1 Section C	3-3
3.3.2 Section D	3-3
3.3.3 Section E	3-3
3.3.4 Section G	3-4
4.0 GROUNDWATER ASSESSMENT	4-1
4.1 SSAMPLING RATIONALE	4-1
4.2 GROUNDWATER SAMPLING METHODOLOGY	4-1
4.3 GROUNDWATER SAMPLING RESULTS	4-1
5.0 CONCLUSIONS AND RECOMMENDATION	5-1
<u>APPENDICES</u>	
A WHITING FIELD NAVAL AIR STAION AVGAS PIPELINE CLOSURE REPORT	A-1
B BORING LOGS	B-1

C LABORATORY ANALYTICAL REPORT.....C-1

TABLE OF CONTENTS (Continued)

TABLES

NUMBER

2-1 Soil OVA Screening Results
3-1 Summary of Fixed-Base Soil Analytical Results

FIGURES

NUMBER

1-1 Facility Location Map
1-2 Site Plan and Petroleum Investigation Sites
2-1 DPT Boring Location Map and OVA Responses
2-2 OVA Response Cross Section – Pipeline Section E
3-1 Confirmatory Soil Sample Analytical Results

EXECUTIVE SUMMARY

Tetra Tech NUS, Inc. (TtNUS) has been authorized by Southern Division, Naval Facilities Engineering Command to prepare a pipeline closure assessment report for the AVGAS pipeline at the Naval Air Station Whiting Field, in Santa Rosa County, Florida. This Pipeline Closure Assessment Report has been prepared to evaluate soil and groundwater conditions at the site and to evaluate potential petroleum impact due to AVGAS pipeline operations.

SITE ASSESSMENT ACTIVITIES

A Florida-certified pollutant storage system contractor conducted pipeline cleaning and capping activities and submitted a pipeline closure report prior to the assessment activities. The following activities were conducted to evaluate potential petroleum impact due to AVGAS pipeline operations:

- Reviewed available Navy documents to identify potential sources and receptors for petroleum hydrocarbons in the vicinity, to evaluate the proximity of public and private potable water supply wells, to locate underground utility line areas, to locate nearby surface water bodies, and to determine surface hydrology and drainage;
- Located the AVGAS pipeline using geophysical methods;
- Conducted a direct push investigation by advancing 78 soil borings and collecting soil samples for field screening using a Flame Ionization Detector (FID);
- Collected eight soil samples for laboratory analysis of the Kerosene Analytical Group parameters to confirm the field screening results;
- Attempted to collect groundwater samples from two soil boring locations where saturated soil was encountered at less than 20 feet below ground surface.

CONCLUSIONS

The following conclusions regarding the AVGAS pipeline were based on data collected during the pipeline closure assessment:

- Saturated soil was encountered at less than 20 feet below ground surface at three adjacent soil boring locations. Attempts to collect a groundwater sample were unsuccessful.

- Seven sections of the pipeline (A through G) were identified where one or more soil samples had positive field screening responses greater than 10 ppm.
- Three of the pipeline sections (A, B, and F) with positive field screening responses were located within or contiguous to existing petroleum investigation sites.
- Three of the pipeline sections (C, D, and G) with positive field screening responses had reported petroleum constituent concentrations below soil cleanup target levels in confirmatory laboratory samples submitted for offsite analysis.
- One pipeline section (E) with positive field screening responses was located in an area that has not previously been investigated. Free petroleum product was observed in this area.

RECOMMENDATIONS

Based upon the hydrogeological and chemical data presented in this Pipeline Closure Assessment Report and the requirements of Chapter 62-770 of the Florida Administrative Code, Tetra Tech NUS, Inc. recommends the following actions:

- Pipeline sections A, B, and F should be included with investigations of the appropriate existing petroleum sites;
- Pipeline sections C, D, and G should be considered for no further action;
- A site assessment should be conducted at pipeline section E to evaluate petroleum impact to soil and groundwater due to AVGAS pipeline operations.

1.0 INTRODUCTION

Tetra Tech NUS (TtNUS) has prepared this Pipeline Closure Assessment Report to document closure assessment activities for the Aviation Gasoline (AVGAS) Pipeline at Naval Air Station Whiting Field (NASWF), Milton, Florida. This assessment report was prepared for the U.S. Navy (Navy) Southern Division (SouthDiv) Naval Facilities Engineering Command (NAVFAC) under Contract Task Order (CTO) 0114, for the Comprehensive Long-Term Environmental Action Navy (CLEAN III) Contract Number N62467-94-D-0888.

This assessment report provides the rationale, methodology and results for the field investigation activities conducted for the pipeline closure assessment. Data collected for the closure assessment was evaluated in accordance with the requirements Chapter 62-761 of the Florida Administrative Code (F.A.C.).

1.1 FACILITY BACKGROUND

NASWF, home of Training Air Wing Five (TRAWING FIVE), was constructed in the early 1940s. It was commissioned as the Naval Auxiliary Air Station Whiting Field in July 1943 and has served as a naval aviation training facility since its commissioning. The mission of tenant commands at NASWF has been to train student naval aviators in fixed-wing and helicopter operations.

NASWF is located in Santa Rosa County, which is in Florida's northwest coastal area, approximately 7 miles north of Milton, Florida and 20 miles northeast of Pensacola, Florida (Figure 1-1). The installation is approximately 3,842 acres in size and presently consists of two airfields separated by an industrial area (Figure 1-2).

1.2 SITE BACKGROUND

Historical information and construction plans provided by NASWF personnel indicate that the AVGAS Pipeline was installed for the distribution of AVGAS in approximately 1943 and continued operation until the late 1970s. Figure 1-2 presents the installation layout and the location of the AVGAS Pipeline. The pipeline consists of one 6-inch diameter steel pipe which runs from the former South Field AVGAS Storage Tank Farm (USTs 1466A through 1466G) to the former pump house (Building 1470), located near the intersection of Langley Street and the aircraft tow road. From this point the pipeline divides and two 6-inch diameter steel pipes run from the former pump house (Building 1470) to the former North Field AVGAS Storage Tank Farm (USTs 1467A through 1467H). The overall length of the AVGAS pipeline is approximately 7,050 feet.

1.3 EXISTING PETROLEUM INVESTIGATION SITES

Currently, 13 sites in the vicinity of the AVGAS pipeline are being investigated for petroleum releases under the petroleum storage tank or installation restoration (IR) programs (Figure 1-2). These sites include underground storage tanks (UST), above ground storage tanks (AST), fuel distribution systems, a JP-5 pipeline and other facilities.

1.4 PIPELINE CLEANING AND CLOSURE

A pipeline closure of the AVGAS pipeline was conducted by Florida Spill Response Corporation (FSRC), a certified pollutant storage systems contractor, in late August and early September 2000. Attempts to clean the pipeline with soft foam pigs were not successful since the pipeline could not be pressurized to advance the pigs. To close the AVGAS pipeline, water that was present in the pipeline was removed for proper offsite disposal and exposed ends of the pipeline were capped with grout plugs. Petroleum storage system closure documents were submitted to Escambia County environmental health services and the FDEP. A copy of the closure report prepared by FSRC is included as Appendix A.

1.5 PIPELINE CLOSURE ASSESSMENT

The objective of the pipeline closure assessment was to identify areas of possible contamination due to operation of the AVGAS Pipeline and prepare an assessment report for submittal to the Florida Department of Environmental Protection (FDEP). The field investigation included locating the buried portions of the AVGAS pipeline using geophysical techniques, collection of soil samples for headspace screening analysis from borings located along the AVGAS pipeline, collection of confirmatory soil samples for fixed-base laboratory analysis, groundwater sampling at locations where the depth to groundwater was less than 20 feet below grade, in order to meet the FDEP requirements for petroleum storage system closure.

2.0 SOIL SCREENING INVESTIGATION

The pipeline closure assessment included a soil investigation using direct-push technology (DPT) soil sampling and Organic Vapor Analyzer (OVA) soil headspace screening to identify areas of potential petroleum impact along the AVGAS pipeline. The closure assessment activities were performed in accordance with the FDEP April 1998 guidance document "Storage Tank System Closure Assessment Requirements", and Chapter 62-761, F.A.C.

2.1 SAMPLING RATIONALE

A total of 78 soil borings were advanced during the field investigation. Soil borings were installed at pipeline junctions and elbows, and at approximately 100-foot intervals along straight sections of the pipeline (Figure 2-1). Soil samples were collected continuously from the ground surface to a depth of 20 feet. Where areas along the AVGAS pipeline were identified above the 50-ppm threshold for "excessively contaminated soil" (as defined by Chapter 62-770, F.A.C.), except for areas within or adjacent to the boundaries of existing investigation sites, additional borings were installed to determine the approximate extent of the petroleum impact.

Soil boring identification numbers are a three part alpha-numeric code that includes (1) the base identifier (WHF), (2) the site designation (AVGAS), and (3) the soil boring designator "B" with a consecutive numerical value. Thus, the soil boring identification number for the third soil boring installed during the AVGAS Pipeline closure assessment was WHFAVGAS-B03.

2.2 SOIL SCREENING INVESTIGATION METHODOLOGY

During the soil screening investigation, field activities were conducted to determine the location of the AVGAS pipeline, to collect surface and subsurface soil samples, and to evaluate potential petroleum impact to site soils using headspace screening methods.

2.2.1 Avgas Pipeline Location

The subsurface position of the AVGAS pipeline was determined with a Fisher M-scope, an electromagnetic-induction pipe and cable locator. Navy personnel had previously excavated parts of the AVGAS pipeline to evaluate the condition of the pipeline. The pipeline cleaning subcontractor had exposed the ends of the

AVGAS pipeline for cleaning and capping. The majority of the length of the AVGAS pipeline was located using the M-scope in conductive tracing mode. The signal transmitter was directly clamped to exposed pipe ends or pipeline valves, and a mobile receiver was used to trace the electromagnetic signal transmitted through the pipeline. In the areas beyond the range of conductive tracing, the M-scope was used in inductive tracing mode. The signal transmitter was placed on the ground surface above the pipeline and the mobile receiver was used to trace the electromagnetic signal induced in the pipeline.

2.2.2 Soil Sample Collection

Soil borings for the soil screening investigation were advanced with a DPT rig and soil core samplers. The soil core samplers were four feet long and were lined with disposable plastic sleeves. Each soil boring was advanced from ground surface to 5 feet below land surface (BLS) with a hand auger to verify underground utility clearances. The soil borings were advanced continuously from ground surface to a depth of approximately 20 feet at each soil boring location. The site geologist logged the soil properties, including texture, color and soil moisture, for each soil core and noted staining or odors. Soil boring logs are provided in Appendix B. Soil samples were collected at two-foot intervals from each soil core for headspace screening.

2.2.3 Soil Headspace Screening

Soil samples were collected at two-foot intervals from each soil core for headspace screening in accordance with the procedures outlined in 62-770.200(8) F.A.C. From each two-foot interval, two 16-ounce glass jars were half-filled with soil sample, sealed with aluminum foil, and labeled. The soil samples were allowed to equilibrate to ambient air temperature. Organic vapor measurements were made with a MSA MicroFID OVA. The OVA response to total headspace organic vapors was measured by inserting the OVA probe through the foil sample cover and recording the highest instrument reading. If a positive response (> 5 ppm) was observed when screening the first sample jar, a filtered instrument reading was made from the second soil sample jar. A granular activated carbon (GAC) filter was attached to the instrument and a headspace organic vapor measurement was made from the second soil sample. The GAC filter adsorbs heavier organic vapors, such as petroleum hydrocarbons but allows lighter, naturally-occurring organic vapors, such as methane, to be detected by the OVA. The filtered concentration was subtracted from the total vapor concentration to determine the corrected OVA response.

2.2.4 Quality Assurance/Quality Control

The site assessment investigation was conducted in accordance with the Standard Operating Procedures (SOP) prescribed by the FDEP Quality Assurance Section Document DER-001/92, and adopted by the TtNUS Comprehensive Quality Assurance Plan (CompQAP) Number 980038. Quality assurance/Quality control (QA/QC) activities for the soil screening investigation included equipment decontamination and field instrument calibration.

The equipment involved in field sampling activities was decontaminated prior to and during drilling and sampling activities. This equipment includes DPT rigs, downhole tools, hand augers, and soil and water sampling equipment.

Prior to each day's activities, the OVA was field-calibrated with 100-ppm methane in air span gas, in accordance with the manufacturer directions. Calibration was documented on an Equipment Calibration Log. During calibration, a maintenance check was performed on the instrument.

2.3 ASSESSMENT RESULTS

Soil headspace screening data was collected at 78 soil boring locations during the AVGAS pipeline investigation. The OVA screening data is summarized in Table 2-1. The highest OVA response for each soil boring location is shown on Figure 2-1. The corrected OVA responses from headspace screening of samples from nine of the soil borings were at concentrations less than one ppm. The corrected OVA responses from headspace screening of samples from 38 of the soil borings were at concentrations less than five ppm. The corrected OVA responses from headspace screening of samples from 10 of the soil borings were at concentrations less than 10 ppm. One or more soil samples from 21 of the soil borings had corrected OVA responses exceeding 10 ppm.

Seven sections of the AVGAS pipeline with one or more soil samples with corrected OVA response greater than 10 ppm were identified. These pipeline sections are designated sections A through G on Figure 2-1.

2.3.1 Section A

Section A includes soil borings B01 and B02. This pipeline section is located within the boundaries of IR Site 4 / UST 1467.

The corrected OVA responses in B01 samples from ground surface to 14 feet were below 5 ppm. The screening results from soil samples collected between 14 and 20 feet had corrected OVA responses greater than 10 ppm, ranging from 43.7 ppm in the 16 to 18 feet interval to 5087.3 ppm in the 14 to 16 feet interval. The corrected OVA responses in B02 samples from ground surface to 14 feet were below 10 ppm. The screening results from two soil samples from B02 had corrected OVA responses greater than 10 ppm, ranging from 24.2 ppm in the 14 to 16 feet interval to 96.8 ppm in the 18 to 20 feet interval. The corrected OVA response in the sample collected from the 16 to 18 feet interval was less than 10 ppm.

Groundwater was not encountered in the soil borings advanced in this area of the AVGAS pipeline. Since this pipeline section is located within the boundaries of an existing investigation site, additional sampling was not conducted for this assessment.

2.3.2 Section B

Section B includes soil boring B05. This pipeline section is located immediately to the north of a pipeline junction on the JP-5 pipeline, which is under investigation.

The corrected OVA responses in B05 samples from ground surface to 10 feet were below 10 ppm. The screening results from soil samples collected between 10 and 18 feet had corrected OVA responses greater than 10 ppm, ranging from 38.5 ppm in the 12 to 14 feet interval to 818.6 ppm in the 16 to 18 feet interval. The corrected OVA response in the sample collected from the 18 to 20 feet interval was less than 10 ppm.

Groundwater was not encountered in the soil borings advanced in this area of the AVGAS pipeline. Since this pipeline section is located adjacent to an existing investigation site, additional sampling was not conducted for this assessment.

2.3.3 Section C

Section C includes soil boring B08. This pipeline section is located approximately 150 feet to the west of Building 2866, the Navy Exchange service station, and approximately 150 feet to the south of the JP-5 pipeline junction.

The corrected OVA response in the B08 sample collected from ground surface to two feet was 19.7 ppm. The other screening samples collected from B08 had corrected OVA responses of less than 10 ppm.

Groundwater was not encountered in the soil borings advanced in this area of the AVGAS pipeline. One confirmatory soil sample was collected at the B08 location, from the sample interval with the highest OVA response. Confirmatory soil sampling activities conducted during the AVGAS pipeline closure assessment are discussed in Chapter 3.0.

2.3.4 Section D

Section D includes soil borings B15, B16 and B17. This pipeline section is located approximately 300 feet to the southeast of Building 2866, the Navy Exchange service station, approximately 300 feet to the southwest of JP-5 storage tanks 2891/2892, and approximately 300 feet to the west of the oil/water separator investigation area.

The corrected OVA response in the B15 sample collected from 2 to 4 feet was 14.2 ppm. The other screening samples collected from B15 had corrected OVA responses of less than 10 ppm. The screening samples collected from B16 had corrected OVA responses of less than 10 ppm. The corrected OVA response in the B17 sample collected from 8 to 10 feet was 11.3 ppm. The other screening samples collected from B17 had corrected OVA responses of less than 5 ppm.

Groundwater was not encountered in the soil borings advanced in this area of the AVGAS pipeline. One confirmatory soil sample was collected at the B15 location, from the sample interval with the highest OVA response.

2.3.5 Section E

Section E includes soil borings B21 through B27, and B74 through B78. This pipeline section is located approximately 150 feet to the southeast of the oil/water separator investigation area and approximately 300 feet to the northwest of the JP-5 storage tank 1438/1439 investigation area.

Corrected OVA responses exceeding 10 ppm were detected in one or more samples from five of the seven soil borings initially advanced along this pipeline section. The horizontal and vertical distribution of screening soil samples collected from Section E and the headspace screening results are shown on Figure 2-2.

The screening results from two soil samples from B21 had corrected OVA responses greater than 10 ppm, ranging from 13.5 ppm in the 8 to 10 feet interval to 22.5 ppm in the 14 to 16 feet interval. The other screening samples collected from B21 had corrected OVA responses of less than 10 ppm.

The screening results from three soil samples from B22 had corrected OVA responses greater than 10 ppm. The corrected OVA response in the B22 sample collected from eight to ten feet was 11.9 ppm. The corrected OVA response in the B22 sample collected from 12 to 14 feet was 11.3 ppm. The corrected OVA response in the B22 sample collected from 16 to 18 feet was 11.6 ppm. The other screening samples collected from B22 had corrected OVA responses of less than 10 ppm.

The corrected OVA responses in B23 samples from ground surface to four feet were below 10 ppm. The screening results from soil samples collected between four and ten feet had corrected OVA responses greater than 10 ppm, ranging from 41.9 ppm in the eight to ten feet interval to 83.2 ppm in the six to eight feet interval. The corrected OVA responses in B23 samples from 10 to 14 feet were below 10 ppm. The screening results from soil samples from B23 collected between 14 and 18 feet had corrected OVA responses greater than 10 ppm, ranging from 17.4 ppm in the 16 to 18 feet interval to 22.8 ppm in the 14 to 16 feet interval. The corrected OVA response in the sample collected from the 18 to 20 feet interval was less than 10 ppm.

The screening samples collected from B24 had corrected OVA responses of less than 5 ppm.

The corrected OVA responses in B25 samples from two to 12 feet were above 10 ppm, ranging from 11.4 ppm in the six to eight feet interval to 5,342.6 ppm in the two to four feet interval. The corrected OVA response in the sample collected from the 14 to 16 feet interval was 226.0 ppm. The corrected OVA response in the sample collected from the 18 to 20 feet interval was 22.8 ppm. The other screening samples collected from B15 had corrected OVA responses of less than 5 ppm.

The corrected OVA responses in B26 samples from ground surface to 18 feet were above 10 ppm, ranging from 15.8 ppm in the ground surface to two feet interval to 1456.3 ppm in the 14 to 16 feet interval. The corrected OVA response in the sample collected from the 18 to 20 feet interval was less than 10 ppm.

The screening samples collected from B27 had corrected OVA responses of less than 5 ppm

Based on the screening results from borings B21 through B27, additional soil borings were installed to further evaluate the petroleum impact. Corrected OVA responses exceeding 10 ppm were detected in one or more samples from four of the five additional soil borings advanced at this pipeline section.

Three of the additional soil borings were advanced at locations along the AVGAS pipeline between existing soil boring locations. Corrected OVA responses from each soil sample from B74, located between B25 and

B26, were greater than 10 ppm. The lowest corrected OVA response, 154.2 ppm, was detected in the ground surface to two feet interval and the highest corrected OVA response, 5,557.6 ppm, was observed in the two to four feet and the eight to ten feet sample intervals.

The screening results from B75, located between B26 and B27, were less than 10 ppm for the sample intervals between ground surface and four feet. The corrected OVA response in B75 sample from four to six feet was 55.7 ppm. The corrected OVA response in the sample from six to eight feet was below 10 ppm. The screening results from soil samples from B75 collected between eight and 16 feet had corrected OVA responses greater than 10 ppm, ranging from 11.5 ppm in the eight to ten feet interval to 20.0 ppm in the 10 to 12 feet interval. The corrected OVA responses in the samples collected from the 16 to 20 feet interval was less than 10 ppm.

The screening samples collected from B76, located between B24 and B25, had corrected OVA responses of less than 10 ppm.

Two of the additional soil borings were advanced at locations stepped-out 50 feet from the AVGAS pipeline.

Soil boring B77 was located approximately 50 feet to the east of the AVGAS pipeline adjacent to the B74 location. The corrected OVA response in the B78 sample from ground surface to two feet was less than 1 ppm. The corrected OVA response in the screening sample collected from the two to four feet interval was 16.5 ppm. The corrected OVA response in the B78 sample from four to six feet was less than 1 ppm. The soil samples from B77 collected between six and 20 feet had corrected OVA responses greater than 10 ppm, ranging from 10.2 ppm in the 18 to 20 feet interval to 292.8 ppm in the 12 to 14 feet interval.

Soil boring B78 was located approximately 50 feet to the west of the AVGAS pipeline adjacent to the B74 location. The corrected OVA responses in B78 samples from ground surface to four feet were below 1 ppm. The screening results from soil samples from B78 collected between four and ten feet had corrected OVA responses greater than 10 ppm, ranging from 11.9 ppm in the 6 to 8 feet interval to 18.8 ppm in the 4 to 6 feet interval. The corrected OVA responses in the screening samples collected from below the ten feet interval were less than 5 ppm.

Groundwater was encountered in three of the soil borings advanced in this area of the AVGAS pipeline. Saturated soil was observed in soil samples collected below 16 feet at borings B25 and B26 and free petroleum product was observed at boring B74. Groundwater sampling activities conducted during the AVGAS pipeline closure assessment are discussed in Chapter 4.0.

Three confirmatory soil samples were collected from this pipeline section. These samples were collected at the B21, B23, and B74 soil boring locations from the sample interval in each boring with the highest OVA screening response.

2.3.6 Section F

Section F includes soil borings B32, B33 and B38. This pipeline section is located adjacent to the JP-5 storage tank 1438/1439 investigation area.

The corrected OVA responses in B32 samples from ground surface to six feet were below 5 ppm. The screening results from soil samples collected between 6 and 20 feet had corrected OVA responses greater than 10 ppm, ranging from 1,537.5 ppm in the 6 to 8 feet interval to 2,916.3 ppm in the 14 to 16 feet interval. The screening results from soil samples from B33 collected between ground surface and four feet had corrected OVA responses greater than 10 ppm, ranging from 26.2 ppm in the ground surface to two feet interval to 67.5 ppm in the 2 to 4 feet interval. The corrected OVA responses in the screening samples collected from the 4 to 8 feet interval at B33 were less than 10 ppm. The screening results from soil samples from B33 collected between 8 and 16 feet had corrected OVA responses greater than 10 ppm, ranging from 16.2 ppm in the 14 to 16 feet interval to 20.0 ppm in the 8 to 10 feet interval. The corrected OVA responses in the screening samples collected at B33 from below the 16 feet interval were less than 10 ppm. The corrected OVA responses in B38 samples from ground surface to two feet were below 1 ppm. The screening results from soil samples collected between 2 and 20 feet had corrected OVA responses greater than 10 ppm, ranging from 42.38 ppm in the 16 to 18 feet interval to 5345.8 ppm in the 8 to 10 feet interval.

Groundwater was not encountered in the soil borings advanced in this area of the AVGAS pipeline. Since this pipeline section is located adjacent to an existing investigation site, additional sampling was not conducted for this assessment.

2.3.7 Section G

Section G includes soil borings B45, B46 and B47. This pipeline section is approximately 450 feet to the west of IR Site 35 / 1429, the Public Works Maintenance Facility and 600 feet to the southwest of locations of JP-5 tanks 1438/1439.

The screening results from soil samples from B45 collected between ground surface and four feet had corrected OVA responses greater than 10 ppm, ranging from 12.3 ppm in the ground surface to two feet interval to 21.4 ppm in the 2 to 4 feet interval. The corrected OVA responses in the screening samples collected from below the four feet interval were less than 10 ppm. The screening results from soil samples from B46 collected between ground surface and four feet had corrected OVA responses greater than 10 ppm, ranging from 20.2 ppm in the ground surface to two feet interval to 20.4 ppm in the 2 to 4 feet interval. The corrected OVA responses in the screening samples collected from below the four feet interval were less than 10 ppm. The corrected OVA response in the B47 sample collected from 2 to 4 feet was 13.3 ppm. The other screening samples collected from B47 had corrected OVA responses of less than 5 ppm.

Groundwater was not encountered in the soil borings advanced in this area of the AVGAS pipeline. Three confirmatory soil samples were collected from this pipeline section, one from each soil boring from the sample interval with the highest OVA response.

3.0 CONFIRMATORY SOIL SAMPLING

In accordance with the requirements of 62-761 FAC, confirmatory soil samples were collected for fixed-base laboratory analysis from soil boring locations where positive field screening results (corrected OVA readings greater than 10 ppm) were detected. The confirmatory soil samples were analyzed for constituents of the Kerosene Analytical Group as defined in Rule 62-770.600, F.A.C.

The soil samples were analyzed for volatile organic aromatics (VOAs) by EPA Method 8021, polynuclear aromatic hydrocarbons (PAHs) by EPA Method 8310, and total recoverable petroleum hydrocarbons (TRPH) by the Florida petroleum residual organics (FL-PRO).

3.1 SAMPLING RATIONALE

Since pipeline Sections A, B and F were already part of existing investigation areas, confirmation samples were not collected from soil borings advanced in those sections. One confirmatory soil sample was collected from the one soil boring in Section C from the interval with the highest OVA screening response. One confirmatory soil sample was collected from Section D, from the sample interval from B15 with the highest OVA response. Three confirmatory soil samples were collected from Section E. Two of the samples were from borings B21 and B23, from the sample intervals with the highest OVA response. The third sample was collected from B74, from the sample interval which had the highest corrected OVA response detected during the field investigation. Three confirmatory soil samples were collected from Section G, one sample from each of the soil borings from the interval with the highest OVA screening response.

Each environmental sample collected for offsite analysis was assigned a unique sample identification. The sample identifications included the site designation AVGAS, an alphanumeric code that identifies the sample medium and data type, and the sample location (boring number), and the sampling event or sample depth.

The alphanumeric codes used in the sample identification system are:

Sample Medium

G = Groundwater

S = Soil

E = Equipment Rinsate

T = Trip Blank

Data Types

L = Fixed Base Laboratory Analytical Data

F = Field Laboratory Data

S = Field Screening Data

Thus the fixed-base analytical soil sample collected from soil boring WHFAVGAS-B01 at 4 feet BLS would be called AVGASSLB0104.

3.2 CONFIRMATORY SOIL SAMPLING METHODOLOGY

The sample collection methods, QA/QC standards, and decontamination procedures used while collecting the confirmatory soil samples are the same as those described in Section 2.2. Additional procedures for samples submitted for offsite analysis is specified below.

3.2.1 Quality Control (QC) Samples

Quality control samples, which included a rinsate blank and a field duplicate, were collected during the environmental sampling activities. Rinsate blanks are be used to assess the effectiveness of field decontamination procedures. The rinsate blank was obtained under representative field conditions by rinsing decontaminated sample collection equipment with organic free water and collecting the run-off for analysis. The sample ID for the rinsate blank was AVGASEL00101. Field duplicates are environmental samples collected independently at a sample location during a single act of sampling under representative field conditions. The field duplicate was submitted to the analytical laboratory with a disguised sample ID, AVGASSLBXXYYD so that the laboratory would not know which sample had been duplicated.

3.2.2 Sample Handling

Sample-handling procedures were in accordance with TtNUS Comprehensive Quality Assurance Plan (CompQAP No. 980038 Rev.2) which has been approved by the FDEP. Samples were packaged and shipped to Accutest Environmental Laboratories in Orlando, Florida.

3.3 CONFIRMATORY SOIL SAMPLE RESULTS

The analytical results for the confirmatory soil samples were compared to residential direct-exposure and leaching soil cleanup target levels (SCTLs) established in Chapter 62-777 F.A.C. The analytical results are summarized in Table 3-1. Analytes that were reported at concentrations above the standard laboratory detection limits are shown on Figure 3-1. The laboratory analytical reports are included in Appendix C.

3.3.1 Section C

One soil sample was collected from Section C for offsite laboratory analysis. The confirmatory sample from soil boring B08, AVGASSLB0802, was collected from the ground surface to two feet interval, which had a corrected OVA response of 19.7 ppm during the headspace screening analysis. Analytical results from AVGASSLB0802 indicated that concentrations of petroleum constituents in the sample were below the standard laboratory detection limits (Figure 3-1).

3.3.2 Section D

One soil sample was collected from Section D for offsite laboratory analysis. The confirmatory sample from soil boring B15, AVGASSLB1504, was collected from the 2 to 4 feet interval, which had a corrected OVA response of 14.2 ppm during the headspace screening analysis. Acetone was reported in the soil sample from B15 at an estimated concentration of 41.5 J $\mu\text{g}/\text{kg}$, which is below both the residential SCTL (780,000 $\mu\text{g}/\text{kg}$) and the leaching SCTL (2,800 $\mu\text{g}/\text{kg}$) for acetone. Methyl ethyl ketone (2-butanone) was reported in the soil sample from B15 at an estimated concentration of 3.9 J $\mu\text{g}/\text{kg}$, which is below both the residential SCTL (3,100,000 $\mu\text{g}/\text{kg}$) and the leaching SCTL (17,000 $\mu\text{g}/\text{kg}$) for methyl ethyl ketone. Analytical results from AVGASSLB1504 indicated that concentrations of other petroleum constituents in the sample were below the standard laboratory detection limits (Figure 3-1).

3.3.3 Section E

Three soil samples were collected from Section E for offsite laboratory analysis. The confirmatory sample from soil boring B21, AVGASSLB2116, was collected from the 14 to 16 feet interval, which had a corrected OVA response of 22.5 ppm during the headspace screening analysis. Analytical results from AVGASSLB2116 indicated that concentrations of petroleum constituents in the sample were below the standard laboratory detection limits (Figure 3-1). The confirmatory sample from soil boring B23, AVGASSLB2308, was collected from the 6 to 8 feet interval, which had a corrected OVA response of 83.2 ppm during the headspace screening analysis. Analytical results from AVGASSLB2308 indicated that concentrations of petroleum constituents in the sample were below the standard laboratory detection limits.

The confirmatory sample from soil boring B74, AVGASSLB7404, was collected from the 2 to 4 feet interval, which had a corrected OVA response of 5,557.6 ppm during the headspace screening analysis. Analytical results from AVGASSLB7404 indicated that concentrations of several petroleum constituents in the sample exceeded leaching SCTL values.

Benzene was reported at a concentration of 264 µg/kg, which is greater than the leaching SCTL of 7 µg/kg but below the residential direct exposure SCTL of 1,100 µg/kg. Ethylbenzene was reported at a concentration of 5,480 µg/kg, which is greater than the leaching SCTL of 600 µg/kg but below the residential direct exposure SCTL of 1,100,000 µg/kg. Xylene was reported at a concentration of 7,090 µg/kg, which is greater than the leaching SCTL of 200 µg/kg but below the residential direct exposure SCTL of 5,900,000 µg/kg. Methyl Bromide was reported at a concentration of 324 µg/kg, which is greater than the leaching SCTL of 50 µg/kg but below the residential direct exposure SCTL of 2,200 µg/kg. Methyl Chloride was reported at An estimated concentration of 234 µg/kg, which is greater than the leaching SCTL of 10 µg/kg but below the residential direct exposure SCTL of 1,700 µg/kg.

Toluene was reported at a concentration of 264 µg/kg, which is below the leaching SCTL of 500 µg/kg and the residential direct exposure SCTL of 380,000 µg/kg. Total recoverable petroleum hydrocarbons (TRPH) was reported at a concentration of 27.3 mg/kg, which is below the leaching and residential direct exposure SCTLs of 340 mg/kg.

3.3.4 Section G

Three soil samples were collected from Section G for offsite laboratory analysis. The confirmatory sample from soil boring B45, AVGASSLB4504, was collected from the 2 to 4 feet interval, which had a corrected OVA response of 21.4 ppm during the headspace screening analysis. Analytical results from AVGASSLB4504 indicated that concentrations of petroleum constituents in the sample were below the standard laboratory detection limits (Figure 3-1). The confirmatory sample from soil boring B46, AVGASSLB4604, was collected from the 2 to 4 feet interval, which had a corrected OVA response of 20.4 ppm during the headspace screening analysis. Analytical results from AVGASSLB4604 indicated that concentrations of petroleum constituents in the sample were below the standard laboratory detection limits. The confirmatory sample from soil boring B47, AVGASSLB4704, was collected from the 2 to 4 feet interval, which had a corrected OVA response of 13.3 ppm during the headspace screening analysis. Analytical results from AVGASSLB4704 indicated that concentrations of petroleum constituents in the sample were below the standard laboratory detection limits.

4.0 GROUNDWATER ASSESSMENT

Historical information from previous investigations performed at NASWF indicated that groundwater typically occurs at depths greater than 20 feet BLS. However, in accordance with Chapter 62-761, where groundwater was encountered at depths less than 20 feet BLS attempts were made during the DPT investigation to collect groundwater samples for laboratory analysis to determine if the groundwater has been impacted by petroleum products.

4.1 SAMPLING RATIONALE

Observations of soil cores collected from soil borings B25, B26 and B74 indicated the presence of a zone of saturated soil starting at a depth of approximately 16 feet BLS. At the B74 location, a petroleum product sheen was reported on the DPT sampling tools when sampling at depths below 16 feet.

4.2 GROUNDWATER SAMPLING METHODOLOGY

The DPT methods, QA/QC standards, and decontamination procedures used while collecting the groundwater samples are the same as those described in Section 2.2. Additional procedures for groundwater sampling are specified below.

Groundwater samples were collected using a retractable screen groundwater sampler and a peristaltic pump. The groundwater sampler was advanced to the desired sampling depth and the sampling screen was deployed by pulling back on the DPT rods. Sample tubing was inserted into the DPT rods and advanced to the depth of the sampler screen. The groundwater was collected from the sampler with a peristaltic pump.

4.3 GROUNDWATER SAMPLING RESULTS

A groundwater sample was collected from the 16 to 20 feet interval at the B74 location. The sample consisted of groundwater and free petroleum product. Since free product was present in the groundwater sample, the sample was not submitted for analysis.

Two attempts were made to collect a groundwater sample at the B26 location. Initially, the groundwater sampler was deployed in the 16 to 20 feet interval for sampling. When this zone did not produce water, the groundwater sampler was pulled back to the 14 to 18 feet interval and sampling was again attempted.

Groundwater could not be collected from this interval either. Since neither attempt to collect a groundwater sample at B26 was successful, a groundwater sample was not submitted for analysis.

5.0 CONCLUSIONS AND RECOMMENDATION

The results of the pipeline closure assessment performed by TtNUS at the AVGAS pipeline are summarized as follows:

- The AVGAS pipeline has been cleaned and capped in accordance with 62-761 F.A.C by a certified pollutant storage system contractor.
- The AVGAS Pipeline route passes through or near several existing petroleum investigation sites.
- Data for the pipeline closure assessment were collected from 78 soil borings advanced at locations adjacent to the AVGAS pipeline.
- Lithologies observed in the soil cores collected from the site were mostly sand and silty sand with frequent discontinuous clay horizons. Depth to groundwater was greater than 20 feet at most of the soil boring locations.
- Saturated soil was encountered at a depth of approximately 16 feet in three of the 78 soil borings.
- Petroleum saturated soil was observed at one soil boring location.
- Field headspace screening OVA responses were less than 10 ppm at 67 of the soil boring locations.
- Field headspace screening OVA responses greater than 10 ppm were detected at seven sections of the pipeline (Sections A through G).
- Excessively contaminated soil, as defined by Chapter 62-770 F.A.C. (field headspace screening OVA responses greater than 50 ppm for the KAG), was detected in 11 of the soil borings.
- Eight confirmatory soil samples were submitted to an offsite laboratory for VOC, PAH and TRPH analyses. The reported analytical results for six of the confirmatory soil samples were below standard laboratory detection limits for petroleum constituents.
- One confirmatory soil sample had petroleum related compounds reported at concentrations exceeding leaching SCTLs, but below residential direct exposure SCTLs.

Based on the field screening data and laboratory analytical results from the pipeline closure assessment and the requirements of Chapter 62-761 F.A.C., the following actions are recommended for the AVGAS pipeline:

- Section A – Excessively contaminated soil was detected at depths below 14 feet in the two soil borings included in Section A. Further investigation of this pipeline section should be conducted in conjunction with work at the existing site IR Site 4/1467.
- Section B – Excessively contaminated soil was detected at depths below 10 feet in the soil boring included in Section B. Further investigation of this pipeline section should be conducted in conjunction with work at the existing JP-5 pipeline junction site.
- Section C – One soil sample with a field screening OVA response over 10 ppm was collected from the soil boring included in Section C. Excessively contaminated soil was not detected in the soil samples from this boring. A confirmatory soil sample was collected from the sample interval with the highest field screening results and the analytical results for petroleum constituents were below standard laboratory detection limits. No further investigation is recommended for this pipeline section.
- Section D - Two soil samples with field screening OVA responses over 10 ppm were collected from two of the three soil borings included in Section C. Excessively contaminated soil was not detected in the soil samples from these borings. A confirmatory soil sample was collected from the sample interval with the highest field screening results and the analytical results for typical petroleum constituents were below standard laboratory detection limits. Detected concentrations of acetone and methyl ethyl ketone were below SCTLs. No further investigation is recommended for this pipeline section.
- Section E – Excessively contaminated soil was detected in five of the soil borings included in Section E. Soil samples with field screening OVA responses over 10 ppm were collected from four of the other soil borings included in Section E. Free petroleum product was recovered from one of the soil boring locations included in this section. Saturated soil was observed at a depth of approximately 16 feet in of the three borings included in this section. However, attempts to collect a groundwater sample were unsuccessful. A site assessment and a site assessment report (SAR), conducted in accordance with Chapter 62-770 F.A.C., are recommended for this pipeline section.
- Section F – Excessively contaminated soil was detected at depths below two feet in the soil borings included in Section F. Further investigation of this pipeline section should be conducted in conjunction with work at the existing Storage Tanks 1438/1439 investigation site.

- Section G – Soil samples with field screening OVA responses over 10 ppm were collected from the three soil borings included in Section G. Excessively contaminated soil was not detected in the soil samples from these borings. Confirmatory soil samples were collected from the sample interval in each soil boring with the highest field screening results. The analytical results reported for petroleum constituents for these samples were below standard laboratory detection limits. No further investigation is recommended for this pipeline section.

TABLES

TABLE 2-1

SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B01	10/17/2000		0-2	0.1	0.0	0.1	DRY
			2-4	0.1	0.0	0.1	DRY
			4-6	0.0	0.0	0.0	DRY
			6-8	2.4	4.5	2.4	DRY
			8-10	1.2	3.7	1.2	DRY
			10-12	1.2	0.8	0.4	DRY
			12-14	3.2	0.8	2.4	SLIGHTLY DAMP
			14-16	5088.0	0.7	5087.3	SLIGHTLY DAMP
			16-18	85.1	41.4	43.7	DAMP / DRY
18-20	2958.0	153.1	2804.9	DAMP / DRY			
WHFAVGAS-B02	10/17/2000		0-2	0.9	0.6	0.3	DRY
			2-4	0.8	2.1	0.8	DRY
			4-6	1.1	1.9	1.1	DRY
			6-8	1.2	2.1	1.2	DRY
			8-10	0.6	1.7	0.6	DRY
			10-12	0.8	2.0	0.8	DRY
			12-14	0.5	2.1	0.5	DRY
			14-16	26.2	2.0	24.2	DRY
			16-18	10.0	2.1	7.9	DRY
18-20	112.4	15.6	96.8	DRY			
WHFAVGAS-B03	10/17/2000		0-2	1.3	1.8	1.3	DRY
			2-4	1.2	1.9	1.2	DRY
			4-6	1.8	1.3	0.5	DRY
			6-8	3.5	3.4	0.1	DRY
			8-10	3.0	3.0	0.0	DRY
			10-12	3.0	3.4	3.0	DRY
			12-14	2.7	3.9	2.7	DRY
			14-16	2.9	4.1	2.9	DRY
			16-18	2.9	4.1	2.9	DRY
18-20	2.8	3.9	2.8	DRY			
WHFAVGAS-B04	10/17/2000		0-2	3.2	4.0	3.2	DRY
			2-4	2.4	3.7	2.4	DRY
			4-6	2.6	3.2	2.6	DRY
			6-8	2.3	2.7	2.3	DRY
			8-10	3.1	3.4	3.1	DRY
			10-12	3.0	2.8	0.2	DRY
			12-14	3.2	2.4	0.8	DRY
			14-16	2.4	2.7	2.4	DRY
			16-18	2.1	6.1	2.1	DRY
18-20	3.3	3.8	3.3	DRY			

TABLE 2-1

SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B05	10/17/2000		0-2	5.2	5.6	5.2	DRY
			2-4	4.8	4.6	0.2	DRY
			4-6	5.6	6.6	5.6	DRY
			6-8	5.3	6.2	5.3	DRY
			8-10	6.6	7.2	6.6	DRY
			10-12	102.3	7.3	95.0	DRY
			12-14	44.5	6.0	38.5	DRY
			14-16	133.0	6.1	126.9	DRY
			16-18	824.1	5.5	818.6	DRY
			18-20	13.1	6.2	6.9	DRY
WHFAVGAS-B06	10/17/2000		0-2	0.0	0.0	0.0	DRY
			2-4	0.0	0.0	0.0	DRY
			4-6	0.0	0.0	0.0	DRY
			6-8	0.0	0.0	0.0	DRY
			8-10	0.0	0.0	0.0	DRY
			10-12	0.0	0.0	0.0	DRY
			12-14	3.6	0.0	3.6	DRY
			14-16	0.0	0.0	0.0	DRY
			16-18	0.0	0.0	0.0	DRY
			18-20	0.0	0.0	0.0	DRY
WHFAVGAS-B07	10/17/2000		0-2	0.3	0.0	0.3	DRY
			2-4	0.6	0.0	0.6	DRY
			4-6	0.2	0.0	0.2	DRY
			6-8	0.8	0.0	0.8	DRY
			8-10	1.0	0.0	1.0	DRY
			10-12	0.0	0.0	0.0	DRY
			12-14	0.0	0.0	0.0	DRY
			14-16	0.0	0.0	0.0	DRY
			16-18	0.6	0.0	0.6	DRY
			18-20	0.2	0.0	0.2	DRY
WHFAVGAS-B08	10/17/2000		0-2	19.7	0.0	19.7	DRY
			2-4	4.2	0.3	3.9	DRY
			4-6	5.5	0.3	5.2	DRY
			6-8	0.0	0.0	0.0	DRY
			8-10	0.0	0.0	0.0	DRY
			10-12	0.0	0.0	0.0	DRY
			12-14	0.0	0.0	0.0	DRY
			14-16	0.0	0.0	0.0	DRY
			16-18	0.0	0.0	0.0	DRY
			18-20	0.0	0.0	0.0	DRY

TABLE 2-1

SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B09	10/17/2000		0-2	0.0	0.0	0.0	DRY
			2-4	0.0	0.0	0.0	DRY
			4-6	0.0	0.0	0.0	DRY
			6-8	0.0	0.0	0.0	DRY
			8-10	0.0	0.0	0.0	DRY
			10-12	0.0	0.0	0.0	DRY
			12-14	0.0	0.0	0.0	DRY
			14-16	0.0	0.0	0.0	DRY
			16-18	0.0	0.0	0.0	DRY
			18-20	0.0	0.0	0.0	DRY
WHFAVGAS-B10	10/18/2000		0-2	0.0	0.0	0.0	DRY
			2-4	0.0	0.0	0.0	DRY
			4-6	0.0	0.0	0.0	DRY
			6-8	0.2	0.2	0.0	DRY
			8-10	0.2	0.6	0.2	DRY
			10-12	0.8	0.7	0.1	DRY
			12-14	0.4	0.4	0.0	DRY
			14-16	4.0	0.7	3.3	DRY
			16-18	1.2	1.2	0	DRY
			18-20	1.2	0.8	0.4	DRY
WHFAVGAS-B11	10/18/2000		0-2	3.1	2.8	0.3	DRY
			2-4	3.9	2.1	1.8	DRY
			4-6	3.5	2.1	1.4	DRY
			6-8	4.3	4.0	0.3	DRY
			8-10	4.0	4.0	0.0	DRY
			10-12	4.0	3.0	1.0	DRY
			12-14	3.5	3.5	0.0	DRY
			14-16	10.2	3.6	6.6	DRY
			16-18	3.8	2.9	0.9	DRY
			18-20	3.4	2.9	0.5	DRY
WHFAVGAS-B12	10/18/2000		0-2	5.5	5.6	5.5	DRY
			2-4	5.1	5.9	5.1	DRY
			4-6	4.2	4.3	4.2	DRY
			6-8	3.9	-	3.9	DRY
			8-10	5.6	5.2	0.4	DRY
			10-12	3.9	-	3.9	DRY
			12-14	9.8	3.2	6.6	DRY
			14-16	3.7	-	3.7	DRY
			16-18	4.0	-	4.0	DRY
			18-20	3.7	-	3.7	DRY

TABLE 2-1

SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B13	10/18/2000		0-2	4.4	-	4.4	DRY
			2-4	4.2	-	4.2	DRY
			4-6	2.6	-	2.6	SLIGHTLY DAMP
			6-8	2.4	-	2.4	SLIGHTLY DAMP
			8-10	3.3	-	3.3	SLIGHTLY DAMP
			10-12	2.4	-	2.4	SLIGHTLY DAMP
			12-14	3.6	-	3.6	DRY
			14-16	2.5	-	2.5	DRY
			16-18	10.2	5.6	4.6	DRY
			18-20	5.5	5.5	0.0	DRY
WHFAVGAS-B14	10/18/2000		0-2	4.0	-	4.0	DRY
			2-4	4.8	-	4.8	DRY
			4-6	3.3	-	3.3	DRY
			6-8	3.0	-	3.0	DRY
			8-10	3.5	-	3.5	DRY
			10-12	3.2	-	3.2	DRY
			12-14	5.6	2.8	2.8	DRY
			14-16	3.1	-	3.1	DRY
			16-18	3.2	-	3.2	DRY
			18-20	3.1	-	3.1	DRY
WHFAVGAS-B15	10/18/2000		0-2	3.1	-	3.1	DRY
			2-4	17.8	3.6	14.2	DRY
			4-6	3.1	-	3.1	DRY
			6-8	3.7	-	3.7	DRY
			8-10	4.2	-	4.2	DRY
			10-12	4.1	-	4.1	DRY
			12-14	4.5	-	4.5	DRY
			14-16	3.6	-	3.6	DRY
			16-18	4.2	-	4.2	DRY
			18-20	5.5	-	5.5	DRY
WHFAVGAS-B16	10/18/2000		0-2	2.7	-	2.7	DRY
			2-4	2.3	-	2.3	DRY
			4-6	1.2	-	1.2	DRY
			6-8	1.7	-	1.7	DRY
			8-10	3.9	-	3.9	DRY
			10-12	1.2	-	1.2	DRY
			12-14	7.2	-	7.2	DRY
			14-16	1.8	-	1.8	DRY
			16-18	2.3	-	2.3	DRY
			18-20	2.0	-	2.0	DRY

TABLE 2-1

**SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA**

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B17	10/18/2000		0-2	2.5	-	2.5	DRY
			2-4	2.4	-	2.4	DRY
			4-6	1.1	-	1.1	DRY
			6-8	1.3	-	1.3	DRY
			8-10	11.3	-	11.3	DRY
			10-12	1.1	-	1.1	DRY
			12-14	3.8	-	3.8	DRY
			14-16	0.7	-	0.7	DRY
			16-18	3.1	-	3.1	DRY
			18-20	1.3	-	1.3	DRY
WHFAVGAS-B18	10/18/2000		0-2	1.7	-	3	DRY
			2-4	1.2	-	1.2	DRY
			4-6	0.8	-	0.8	DRY
			6-8	1.5	-	1.5	DRY
			8-10	1.3	-	1.3	DRY
			10-12	1.5	-	1.5	DRY
			12-14	3.6	-	3.6	DRY
			14-16	1.1	-	1.1	DRY
			16-18	1.7	-	1.7	DRY
			18-20	1.7	-	1.7	DRY
WHFAVGAS-B19	10/19/2000		0-2	0.2	-	0.2	DRY
			2-4	0.0	-	0.0	DRY
			4-6	0.2	-	0.0	DRY
			6-8	0.3	-	0.3	DRY
			8-10	3.8	-	3.8	DRY
			10-12	0.0	-	0.0	DRY
			12-14	0.0	-	0.0	DRY
			14-16	0.1	-	0.1	DRY
			16-18	2.8	-	2.8	DRY
			18-20	0.3	-	0.3	DRY
WHFAVGAS-B20	10/19/2000		0-2	1.8	-	1.8	DRY
			2-4	0.5	-	0.5	DRY
			4-6	0.8	-	0.8	DRY
			6-8	0.4	-	0.4	DRY
			8-10	5.6	-	5.6	DRY
			10-12	0.4	-	0.4	DRY
			12-14	1.1	-	1.1	DRY
			14-16	0.9	-	0.9	DRY
			16-18	1.9	-	1.9	DRY
			18-20	3.4	-	3.4	DRY

TABLE 2-1

SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B21	10/19/2000		0-2	5.4	-	5.4	DRY
			2-4	5.3	-	5.3	DRY
			4-6	5.9	-	5.9	DRY
			6-8	4.7	-	4.7	DRY
			8-10	13.5	-	13.5	DRY
			10-12	8.7	-	8.7	DRY
			12-14	7.6	-	7.6	DRY
			14-16	22.5	-	22.5	DRY
			16-18	7.4	-	7.4	DRY
			18-20	8.3	-	8.3	DRY
WHFAVGAS-B22	10/19/2000		0-2	8.1	-	8.1	DRY
			2-4	7.9	-	7.9	DRY
			4-6	9.8	-	9.8	DRY
			6-8	9.6	-	9.6	DRY
			8-10	11.9	-	11.9	DRY
			10-12	9.7	-	9.7	DRY
			12-14	11.3	-	11.3	DRY
			14-16	9.4	-	9.4	DRY
			16-18	11.6	-	11.6	DRY
			18-20	8.6	-	8.6	DRY
WHFAVGAS-B23	10/19/2000		0-2	8.7	-	8.7	DRY
			2-4	8.5	-	8.5	DRY
			4-6	56.5	-	56.5	DRY
			6-8	83.2	-	83.2	DRY
			8-10	41.9	-	41.9	DRY
			10-12	9.8	-	9.8	DRY
			12-14	7.2	-	7.2	DRY
			14-16	22.8	-	22.8	DRY
			16-18	17.4	-	17.4	DRY
			18-20	7.0	-	7.0	DRY
WHFAVGAS-B24	10/19/2000		0-2	4.0	-	4.0	DRY
			2-4	4.2	-	4.2	DRY
			4-6	4.0	-	4.0	DRY
			6-8	4.5	-	4.5	SLIGHTLY DAMP
			8-10	4.9	-	4.9	DRY
			10-12	4.4	-	4.4	DRY
			12-14	3.1	-	3.1	DRY
			14-16	7.4	3.7	3.7	DRY
			16-18	3.6	-	3.6	DRY
			18-20	4.9	-	4.9	DRY

TABLE 2-1

SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B25	10/19/2000		0-2	3.3	-	3.3	DAMP
			2-4	5348.0	5.4	5342.6	DRY
			4-6	127.7	13.2	114.5	SLIGHTLY DAMP
			6-8	16.1	4.7	11.4	SLIGHTLY DAMP
			8-10	38.5	5.3	33.2	SLIGHTLY DAMP
			10-12	60.2	6.7	53.5	SLIGHTLY DAMP
			12-14	33.7	32.1	1.6	SLIGHTLY DAMP
			14-16	228.5	2.5	226	SLIGHTLY DAMP
			16-18	4.4	-	4.4	SATURATED
			18-20	22.8	55.2	22.8	SATURATED
WHFAVGAS-B26	10/19/2000		0-2	19.3	3.5	15.8	DRY
			2-4	20.1	34.7	20.1	SLIGHTLY DAMP
			4-6	148.1	130.6	17.5	SLIGHTLY DAMP
			6-8	950.6	96.2	854.4	SLIGHTLY DAMP
			8-10	618.9	110.4	508.5	SLIGHTLY DAMP
			10-12	151.4	24.7	126.7	SLIGHTLY DAMP
			12-14	41.0	235.8	41.0	SLIGHTLY DAMP
			14-16	1460.0	3.7	1456.3	SLIGHTLY DAMP
			16-18	129.0	61.0	68	SATURATED
			18-20	25.1	18.4	6.7	SATURATED
WHFAVGAS-B27	10/19/2000		0-2	1.0	-	1.0	DRY
			2-4	1.0	-	1.0	DRY
			4-6	0.9	-	0.9	DRY
			6-8	1.0	-	1.0	DRY
			8-10	1.1	-	1.1	DRY
			10-12	1.2	-	1.2	DRY
			12-14	3.8	-	3.8	DRY
			14-16	1.3	-	1.3	DRY
			16-18	0.7	-	0.7	DRY
			18-20	0.7	-	0.7	DRY
WHFAVGAS-B28	10/19/2000		0-2	0.2	-	0.2	DRY
			2-4	0.3	-	0.3	DRY
			4-6	0.1	-	0.1	DRY
			6-8	0.0	-	0.0	DRY
			8-10	4.6	-	4.6	DRY
			10-12	0.4	-	0.4	DRY
			12-14	1.8	-	1.8	DRY
			14-16	0.5	-	0.5	DRY
			16-18	1.7	-	1.7	DRY
			18-20	0.1	-	0.1	DRY

TABLE 2-1

SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B29	10/20/2000		0-2	0.0	-	0.0	DRY
			2-4	0.0	-	0.0	DRY
			4-6	0.0	-	0.0	DRY
			6-8	0.0	-	0.0	DRY
			8-10	0.7	-	0.7	DRY
			10-12	0.0	-	0.0	DRY
			12-14	0.0	-	0.0	DRY
			14-16	0.0	-	0.0	DRY
			16-18	1.0	-	1.0	DRY
			18-20	0.0	-	0.0	DRY
WHFAVGAS-B30	10/20/2000		0-2	0.0	-	0.0	DRY
			2-4	0.0	-	0.0	DRY
			4-6	0.0	-	0.0	DRY
			6-8	0.0	-	0.0	DRY
			8-10	2.2	-	2.2	DRY
			10-12	0.1	-	0.1	DRY
			12-14	4.3	-	4.3	DRY
			14-16	0.0	-	0.0	DRY
			16-18	0.8	-	0.8	DRY
			18-20	0.0	-	0.0	DRY
WHFAVGAS-B31	10/20/2000		0-2	0.0	-	0.0	DRY
			2-4	0.0	-	0.0	DRY
			4-6	0.0	-	0.0	DRY
			6-8	0.1	-	0.1	DRY
			8-10	5.3	-	5.3	DRY
			10-12	0.0	-	0.0	DRY
			12-14	0.8	-	0.8	DRY
			14-16	3.5	-	3.5	DRY
			16-18	0.8	-	0.8	DRY
			18-20	2.1	-	2.1	DRY
WHFAVGAS-B32	10/20/2000		0-2	1.1	-	1.1	DRY
			2-4	1.0	-	1.0	DRY
			4-6	4.5	-	4.5	DRY
			6-8	1632.0	94.5	1537.5	DRY
			8-10	2372.0	14.4	2357.6	DRY
			10-12	2013.0	8.5	2004.5	DRY
			12-14	2446.0	183.4	2262.6	DRY
			14-16	3025.0	108.7	2916.3	DRY
			16-18	2800.0	77.5	2722.5	DRY
			18-20	1948.0	44.4	1903.6	DRY

TABLE 2-1

SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B33	10/20/2000		0-2	26.2	0.0	26.2	DRY
			2-4	67.5	0.0	67.5	DRY
			4-6	13.5	8.2	5.3	DRY
			6-8	9.4	8.2	1.2	DRY
			8-10	28.0	8.0	20.0	DRY
			10-12	26.9	7.9	19.0	DRY
			12-14	25.3	8.1	17.2	DRY
			14-16	24.5	8.3	16.2	DRY
			16-18	17.0	8.7	8.3	DRY
			18-20	17.0	8.0	9	DRY
WHFAVGAS-B34	10/20/2000		0-2	13.9	8.9	5	DRY
			2-4	15.6	8.6	7	DRY
			4-6	5.7	5.7	0.0	DRY
			6-8	5.9	5.8	0.1	DRY
			8-10	6.6	5.8	0.8	DRY
			10-12	5.8	6.0	5.8	DRY
			12-14	7.1	6.2	0.9	DRY
			14-16	5.4	6.1	5.4	DRY
			16-18	6.9	6.3	0.6	DRY
			18-20	5.3	6.0	5.3	DRY
WHFAVGAS-B35	10/20/2000		0-2	8.9	8.6	0.3	DRY
			2-4	8.9	8.5	0.4	DRY
			4-6	1.0	-	1.0	DRY
			6-8	0.4	-	0.4	DRY
			8-10	1.6	-	1.6	DRY
			10-12	1.0	-	1.0	DRY
			12-14	4.2	-	4.2	DRY
			14-16	0.8	-	0.8	DRY
			16-18	0.5	-	0.5	DRY
			18-20	0.1	-	0.1	DRY
WHFAVGAS-B36	10/20/2000		0-2	0.0	-	0.0	DRY
			2-4	0.0	8.6	0.0	DRY
			4-6	0.0	5.7	0.0	DRY
			6-8	0.0	5.8	0.0	DRY
			8-10	0.2	5.8	0.2	DRY
			10-12	0.0	6.0	0.0	DRY
			12-14	1.8	6.2	1.8	DRY
			14-16	0.0	6.1	0.0	DRY
			16-18	1.8	6.3	1.8	DRY
			18-20	0.0	6.0	0.0	DRY

TABLE 2-1

SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B37	10/20/2000		0-2	0.0	8.9	0.0	DRY
			2-4	0.0	8.6	0.0	DRY
			4-6	0.0	5.7	0.0	DRY
			6-8	0.0	5.8	0.0	DRY
			8-10	0.0	5.8	0.0	DRY
			10-12	0.0	6.0	0.0	DRY
			12-14	0.0	6.2	0.0	DRY
			14-16	0.0	6.1	0.0	DRY
			16-18	0.0	6.3	0.0	DRY
			18-20	0.0	6.0	0.0	DRY
WHFAVGAS-B38	10/21/2000		0-2	0.0	-	0.0	DRY
			2-4	641.0	6.0	635	DRY
			4-6	3216.0	15.1	3200.9	DRY
			6-8	3161.0	14.8	3146.2	DRY
			8-10	5359.0	13.2	5345.8	DRY
			10-12	983.0	14.9	968.1	DRY
			12-14	131.0	61.2	69.8	DRY
			14-16	302.0	13.2	288.8	DRY
			16-18	53.3	10.9	42.38	DRY
			18-20	2060.0	10.4	2049.6	DRY
WHFAVGAS-B39	10/21/2000		0-2	3.0	-	3.0	DRY
			2-4	2.0	-	2.0	DRY
			4-6	1.4	-	1.4	DRY
			6-8	1.5	-	1.5	DRY
			8-10	1.4	-	1.4	DRY
			10-12	1.1	-	1.1	DRY
			12-14	2.6	-	2.6	DRY
			14-16	1.6	-	1.6	DRY
			16-18	1.4	-	1.4	DRY
			18-20	1.4	-	1.4	DRY
WHFAVGAS-B40	10/21/2000		0-2	1.7	-	1.7	DRY
			2-4	1.3	-	1.3	DRY
			4-6	2.7	-	2.7	DRY
			6-8	2.3	-	2.3	DRY
			8-10	2.1	-	2.1	DRY
			10-12	1.8	-	1.8	DRY
			12-14	1.8	-	1.8	DRY
			14-16	1.7	-	1.7	DRY
			16-18	1.9	-	1.9	DRY
			18-20	1.8	-	1.8	DRY

TABLE 2-1

SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B41	10/21/2000		0-2	1.3	-	1.3	DRY
			2-4	1.4	-	1.4	DRY
			4-6	2.1	-	2.1	DRY
			6-8	2.0	-	2.0	DRY
			8-10	2.0	-	2.0	DRY
			10-12	1.9	-	1.9	DRY
			12-14	2.1	-	2.1	DRY
			14-16	1.6	-	1.6	DRY
			16-18	1.5	-	1.5	DRY
			18-20	1.7	-	1.7	DRY
WHFAVGAS-B42	10/21/2000		0-2	0.8	-	0.8	DRY
			2-4	1.1	-	1.1	DRY
			4-6	3.4	-	3.4	DRY
			6-8	3.5	-	3.5	DRY
			8-10	4.0	-	4.0	DRY
			10-12	3.0	-	3.0	DRY
			12-14	3.4	-	3.4	DRY
			14-16	2.9	-	2.9	DRY
			16-18	2.6	-	2.6	DRY
			18-20	2.8	-	2.8	DRY
WHFAVGAS-B43	10/21/2000		0-2	1.1	-	1.1	DRY
			2-4	1.0	-	1.0	DRY
			4-6	2.0	-	2.0	DRY
			6-8	1.6	-	1.6	DRY
			8-10	2.7	-	2.7	DRY
			10-12	2.0	-	2.0	DRY
			12-14	1.5	-	1.5	DRY
			14-16	1.5	-	1.5	DRY
			16-18	1.3	-	1.3	DRY
			18-20	1.6	-	1.6	DRY
WHFAVGAS-B44	10/21/2000		0-2	4.0	-	4.0	DRY
			2-4	4.4	-	4.4	DRY
			4-6	2.4	-	2.4	DRY
			6-8	3.3	-	3.3	DRY
			8-10	3.3	-	3.3	DRY
			10-12	3.4	-	3.4	DRY
			12-14	3.4	-	3.4	DRY
			14-16	6.4	3.4	3.0	DRY
			16-18	3.1	-	3.1	DRY
			18-20	3.4	-	3.4	DRY

TABLE 2-1

SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B45	10/21/2000		0-2	17.5	5.2	12.3	DRY
			2-4	27.5	6.1	21.4	DRY
			4-6	2.5	-	2.5	DRY
			6-8	3.8	-	3.8	DRY
			8-10	2.2	-	5.2	DRY
			10-12	2.4	-	2.4	DRY
			12-14	2.8	-	2.8	DRY
			14-16	2.2	-	2.2	DRY
			16-18	2.0	-	2.0	DRY
			18-20	2.7	-	2.7	DRY
WHFAVGAS-B46	10/21/2000		0-2	22.2	2.0	20.2	DRY
			2-4	22.4	2.0	20.4	DRY
			4-6	2.4	-	2.4	DRY
			6-8	4.7	-	4.7	DRY
			8-10	2.3	-	2.3	DRY
			10-12	3.3	-	3.3	DRY
			12-14	2.1	-	2.1	DRY
			14-16	1.9	-	1.9	DRY
			16-18	2.0	-	2.0	DRY
			18-20	9.5	1.8	7.7	DRY
WHFAVGAS-B47	10/21/2000		0-2	4.8	-	4.8	DRY
			2-4	13.3	0.0	13.3	DRY
			4-6	3.2	-	3.2	DRY
			6-8	3.0	-	3.0	DRY
			8-10	2.9	-	2.9	DRY
			10-12	3.2	-	3.2	DRY
			12-14	3.0	-	3.0	DRY
			14-16	4.4	-	4.4	DRY
			16-18	2.9	-	2.9	DRY
			18-20	4.2	-	4.2	DRY
WHFAVGAS-B48	10/22/2000		0-2	0.0	-	0.0	DRY
			2-4	0.0	-	0.0	DRY
			4-6	0.0	-	0.0	DRY
			6-8	0.0	-	0.0	DRY
			8-10	0.0	-	0.0	DRY
			10-12	0.0	-	0.0	DRY
			12-14	0.0	-	0.0	DRY
			14-16	0.0	-	0.0	DRY
			16-18	0.0	-	0.0	DRY
			18-20	0.0	-	0.0	DRY

TABLE 2-1

SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B49	10/22/2000		0-2	0.2	-	0.2	DRY
			2-4	0.0	-	0.0	DRY
			4-6	0.0	-	0.0	DRY
			6-8	0.0	-	0.0	DRY
			8-10	0.1	-	0.1	DRY
			10-12	0.0	-	0.0	DRY
			12-14	0.0	-	0.0	DRY
			14-16	0.0	-	0.0	DRY
			16-18	0.0	-	0.0	DRY
			18-20	0.2	-	0.2	DRY
WHFAVGAS-B50	10/22/2000		0-2	1.2	-	1.2	DRY
			2-4	1.0	-	1.0	DRY
			4-6	1.2	-	1.2	DRY
			6-8	1.1	-	1.1	DRY
			8-10	1.1	-	1.1	DRY
			10-12	1.1	-	1.1	DRY
			12-14	1.5	-	1.5	DRY
			14-16	1.4	-	1.4	DRY
			16-18	1.2	-	1.2	DRY
			18-20	1.7	-	1.7	DRY
WHFAVGAS-B51	10/22/2000		0-2	3.4	-	3.4	DRY
			2-4	2.8	-	2.8	DRY
			4-6	2.7	-	2.7	DRY
			6-8	3.6	-	3.6	DRY
			8-10	4.0	-	4.0	DRY
			10-12	1.3	-	1.3	DRY
			12-14	4.9	-	4.9	DRY
			14-16	3.2	-	3.2	DRY
			16-18	9.1	-	9.1	DRY
			18-20	2.7	-	2.7	DRY
WHFAVGAS-B52	10/22/2000		0-2	2.0	-	2.0	DRY
			2-4	2.1	-	2.1	DRY
			4-6	2.6	-	2.6	DRY
			6-8	2.2	-	2.2	DRY
			8-10	2.3	-	2.3	DRY
			10-12	2.1	-	2.1	DRY
			12-14	2.1	-	2.1	DRY
			14-16	1.9	-	1.9	DRY
			16-18	2.2	-	2.2	DRY
			18-20	2.3	-	2.3	DRY

TABLE 2-1

SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B53	10/22/2000		0-2	1.6	-	1.6	DRY
			2-4	1.6	-	1.6	DRY
			4-6	1.5	-	1.5	DRY
			6-8	1.2	-	1.2	DRY
			8-10	1.3	-	1.3	DRY
			10-12	1.3	-	1.3	DRY
			12-14	1.2	-	1.2	DRY
			14-16	1.1	-	1.1	DRY
			16-18	1.2	-	1.2	DRY
			18-20	1.2	-	1.2	DRY
WHFAVGAS-B54	10/22/2000		0-2	5.1	3.1	2	DRY
			2-4	3.2	-	3.2	DRY
			4-6	3.0	-	3.0	DRY
			6-8	3.1	-	3.1	DRY
			8-10	2.9	-	2.9	DRY
			10-12	2.8	-	2.8	DRY
			12-14	2.5	-	2.5	DRY
			14-16	2.3	-	2.3	DRY
			16-18	2.3	-	2.3	DRY
			18-20	2.3	-	2.3	DRY
WHFAVGAS-B55	10/22/2000		0-2	3.1	-	3.1	DRY
			2-4	1.9	-	1.9	DRY
			4-6	2.9	-	2.9	DRY
			6-8	2.3	-	2.3	DRY
			8-10	2.4	-	2.4	DRY
			10-12	2.0	-	2.0	DRY
			12-14	2.6	-	2.6	DRY
			14-16	1.7	-	1.7	DRY
			16-18	2.4	-	2.4	DRY
			18-20	2.0	-	2.0	DRY
WHFAVGAS-B56	10/22/2000		0-2	1.2	-	1.2	DRY
			2-4	1.3	-	1.3	DRY
			4-6	1.6	-	1.6	DRY
			6-8	1.2	-	1.2	DRY
			8-10	1.3	-	1.3	DRY
			10-12	1.1	-	1.1	DRY
			12-14	0.9	-	0.9	DRY
			14-16	0.9	-	0.9	DRY
			16-18	0.9	-	0.9	DRY
			18-20	0.8	-	0.8	DRY

TABLE 2-1

SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B57	10/22/2000		0-2	0.7	-	0.7	DRY
			2-4	1.3	-	1.3	DRY
			4-6	1.2	-	1.2	DRY
			6-8	2.4	-	2.4	DRY
			8-10	2.7	-	2.7	DRY
			10-12	2.1	-	2.1	DRY
			12-14	1.9	-	1.9	DRY
			14-16	3.1	-	3.1	DRY
			16-18	0.5	-	0.5	DRY
			18-20	0.5	-	0.5	DRY
WHFAVGAS-B58	10/23/2000		0-2	0.0	-	0.0	DRY
			2-4	0.0	-	0.0	DRY
			4-6	0.0	-	0.0	DRY
			6-8	0.0	-	0.0	DRY
			8-10	0.0	-	0.0	DRY
			10-12	0.0	-	0.0	DRY
			12-14	0.0	-	0.0	DRY
			14-16	0.0	-	0.0	DRY
			16-18	0.0	-	0.0	DRY
			18-20	0.0	-	0.0	DRY
WHFAVGAS-B59	10/21/2000		0-2	0.1	-	0.1	DRY
			2-4	0.0	-	0.0	DRY
			4-6	0.1	-	0.1	DRY
			6-8	0.1	-	0.1	DRY
			8-10	0.9	-	0.9	DRY
			10-12	0.5	-	0.5	DRY
			12-14	0.4	-	0.4	DRY
			14-16	0.3	-	0.3	DRY
			16-18	2.8	-	2.8	DRY
			18-20	1.0	-	1.0	DRY
WHFAVGAS-B60	10/21/2000		0-2	1.0	-	1.0	DRY
			2-4	0.8	-	0.8	DRY
			4-6	1.0	-	1.0	DRY
			6-8	0.9	-	0.9	DRY
			8-10	0.9	-	0.9	DRY
			10-12	0.7	-	0.7	DRY
			12-14	1.2	-	1.2	DRY
			14-16	1.2	-	1.2	DRY
			16-18	2.0	-	2.0	DRY
			18-20	1.6	-	1.6	DRY

TABLE 2-1

SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B61	10/21/2000		0-2	1.2	-	1.2	DRY
			2-4	1.0	-	1.0	DRY
			4-6	1.0	-	1.0	DRY
			6-8	0.6	-	0.6	DRY
			8-10	0.4	-	0.4	DRY
			10-12	0.4	-	0.4	DRY
			12-14	0.5	-	0.5	DRY
			14-16	0.6	-	0.6	DRY
			16-18	0.7	-	0.7	DRY
			18-20	0.6	-	0.6	DRY
WHFAVGAS-B62	10/23/2000		0-2	2.3	-	2.3	DRY
			2-4	2.1	-	2.1	DRY
			4-6	2.0	-	2.0	DRY
			6-8	2.2	-	2.2	DRY
			8-10	2.2	-	2.2	DRY
			10-12	2.3	-	2.3	DRY
			12-14	1.9	-	1.9	DRY
			14-16	2.2	-	2.2	DRY
			16-18	2.1	-	2.1	DRY
			18-20	2.0	-	2.0	DRY
WHFAVGAS-B63	10/23/2000		0-2	3.9	-	3.9	DRY
			2-4	3.8	-	3.8	DRY
			4-6	3.9	-	3.9	DRY
			6-8	4.0	-	4.0	DRY
			8-10	3.9	-	3.9	DRY
			10-12	4.0	-	4.0	DRY
			12-14	4.2	-	4.2	DRY
			14-16	4.6	-	4.6	DRY
			16-18	4.3	-	4.3	DRY
			18-20	4.6	-	4.6	DRY
WHFAVGAS-B64	10/23/2000		0-2	4.2	-	4.2	DRY
			2-4	4.3	-	4.3	DRY
			4-6	1.4	-	1.4	DRY
			6-8	0.5	-	0.5	DRY
			8-10	0.3	-	1.3	DRY
			10-12	0.2	-	0.2	DRY
			12-14	0.5	-	0.2	DRY
			14-16	0.6	-	0.5	DRY
			16-18	0.3	-	0.3	DRY
			18-20	0.5	-	0.5	DRY

TABLE 2-1

SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B65	10/23/2000		0-2	0.8	-	0.8	DRY
			2-4	0.0	-	0.0	DRY
			4-6	0.0	-	0.0	DRY
			6-8	0.0	-	0.0	DRY
			8-10	0.0	-	0.0	DRY
			10-12	0.0	-	0.0	DRY
			12-14	0.0	-	0.0	DRY
			14-16	0.0	-	0.0	DRY
			16-18	0.0	-	0.0	DRY
			18-20	0.0	-	0.0	DRY
WHFAVGAS-B66	10/23/2000		0-2	0.1	-	0.1	DRY
			2-4	0.0	-	0.0	DRY
			4-6	0.0	-	0.0	DRY
			6-8	0.0	-	0.0	DRY
			8-10	0.0	-	0.0	DRY
			10-12	0.0	-	0.0	DRY
			12-14	0.0	-	0.0	DRY
			14-16	0.0	-	0.0	DRY
			16-18	0.0	-	0.0	DRY
			18-20	0.0	-	0.0	DRY
WHFAVGAS-B67	10/23/2000		0-2	0.0	-	0.0	DRY
			2-4	0.0	-	0.0	DRY
			4-6	0.0	-	0.0	DRY
			6-8	0.0	-	0.0	DRY
			8-10	0.0	-	0.0	DRY
			10-12	0.0	-	0.0	DRY
			12-14	0.0	-	0.0	DRY
			14-16	0.0	-	0.0	DRY
			16-18	0.0	-	0.0	DRY
			18-20	0.0	-	0.0	DRY
WHFAVGAS-B68	10/23/2000		0-2	0.1	-	0.1	DRY
			2-4	1.6	-	1.6	DRY
			4-6	0.0	-	0.0	DRY
			6-8	0.0	-	0.0	DRY
			8-10	0.0	-	0.0	DRY
			10-12	0.0	-	0.0	DRY
			12-14	0.0	-	0.0	DRY
			14-16	0.0	-	0.0	DRY
			16-18	0.0	-	0.0	DRY
			18-20	0.0	-	0.0	DRY

TABLE 2-1

SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B69	10/24/2000		0-2	0.0	-	0.0	DRY
			2-4	0.0	-	0.0	DRY
			4-6	0.0	-	0.0	DRY
			6-8	0.0	-	0.0	DRY
			8-10	6.7	-	6.7	DRY
			10-12	0.0	-	0.0	DRY
			12-14	0.0	-	0.0	DRY
			14-16	0.0	-	0.0	DRY
			16-18	0.0	-	0.0	DRY
			18-20	0.0	-	0.0	DRY
WHFAVGAS-B70	10/24/2000		0-2	0.0	-	0.0	DRY
			2-4	0.0	-	0.0	DRY
			4-6	0.0	-	0.0	DRY
			6-8	0.0	-	0.0	DRY
			8-10	0.0	-	0.0	DRY
			10-12	0.0	-	0.0	DRY
			12-14	0.0	-	0.0	DRY
			14-16	0.0	-	0.0	DRY
			16-18	1.2	-	1.2	DRY
			18-20	0.0	-	0.0	DRY
WHFAVGAS-B71	10/24/2000		0-2	0.0	-	0.0	DRY
			2-4	0.7	-	0.7	DRY
			4-6	0.0	-	0.0	DRY
			6-8	0.0	-	0.0	DRY
			8-10	0.0	-	0.0	DRY
			10-12	0.0	-	0.0	DRY
			12-14	0.0	-	0.0	DRY
			14-16	0.0	-	0.0	DRY
			16-18	0.0	-	0.0	DRY
			18-20	0.0	-	0.0	DRY
WHFAVGAS-B72	10/24/2000		0-2	0.0	-	0.0	DRY
			2-4	0.0	-	0.0	DRY
			4-6	0.0	-	0.0	DRY
			6-8	0.0	-	0.0	DRY
			8-10	0.1	-	0.1	DRY
			10-12	0.0	-	0.0	DRY
			12-14	1.6	-	1.6	DRY
			14-16	0.0	-	0.0	DRY
			16-18	4.1	-	4.1	DRY
			18-20	0.0	-	0.0	DRY

TABLE 2-1

SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B73	10/24/2000		0-2	10.4	0.6	9.8	DRY
			2-4	0.6	-	0.6	DRY
			4-6	0.0	-	0.0	DRY
			6-8	0.0	-	0.0	DRY
			8-10	0.7	-	0.7	DRY
			10-12	0.6	-	0.6	DRY
			12-14	17.9	17.9	0.0	DRY
			14-16	1.2	-	1.2	DRY
			16-18	7.3	0.6	6.7	DRY
			18-20	1.2	-	1.2	DRY
WHFAVGAS-B74	10/24/2000		0-2	159.2	5.0	154.2	DRY
			2-4	5562.0	4.4	5557.6	DRY
			4-6	5562.0	9.5	5552.5	DRY
			6-8	1137.0	71.2	1065.8	DRY
			8-10	5562.0	4.4	5557.6	DRY
			10-12	319.0	128.0	191.0	DRY
			12-14	1112.0	3.8	1108.2	DRY
			14-16	2181.0	206.0	1975	DRY
			16-18	5264.0	7.8	5256.2	DRY
			18-20	2677.0	217.0	2460	DRY
WHFAVGAS-B75	10/25/2000		0-2	0.0	-	0.0	DRY
			2-4	4.8	-	4.8	DRY
			4-6	55.7	-	55.7	DRY
			6-8	6.8	3.4	3.4	MOIST
			8-10	11.5	0.0	11.5	DRY
			10-12	25.5	5.5	20.0	DRY
			12-14	18.1	0.0	18.1	DRY WITH MOIST POCKET
			14-16	12.1	0.0	12.1	DRY
			16-18	6.5	0.0	6.5	DRY
			18-20	3.2	-	3.2	DRY
WHFAVGAS-B76	10/25/2000		0-2	0.0	-	0.0	DRY
			2-4	2.5	-	2.5	DRY
			4-6	4.9	-	4.9	DRY
			6-8	4.7	-	4.7	MOIST
			8-10	3.0	-	3.0	MOIST
			10-12	3.8	-	3.8	DRY
			12-14	11.2	5.0	6.2	DRY
			14-16	4.2	-	4.2	DRY
			16-18	4.3	-	4.3	DRY
			18-20	4.0	-	4.0	DRY

TABLE 2-1

SOIL OVA SCREENING RESULTS
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (fbis)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
WHFAVGAS-B77	10/25/2000		0-2	0.0	-	0.0	NO MOISTURE
			2-4	16.5	-	16.5	NO MOISTURE
			4-6	0.7	-	0.7	NO MOISTURE
			6-8	79.9	-	79.9	NO MOISTURE
			8-10	52.4	-	52.4	NO MOISTURE
			10-12	50.0	-	50.0	NO MOISTURE
			12-14	292.8	-	292.8	MOIST
			14-16	152.7	-	152.7	MOIST
			16-18	190.0	-	190.0	MOIST
			18-20	10.2	-	10.2	MOIST
WHFAVGAS-B78	10/25/2000		0-2	0.0	-	0.0	NO MOISTURE
			2-4	0.0	-	0.0	NO MOISTURE
			4-6	18.8	0.0	18.8	MOIST
			6-8	14.8	2.9	11.9	NO MOISTURE
			8-10	14.7	0.0	14.7	MOIST
			10-12	7.7	6.1	1.6	NO MOISTURE
			12-14	4.4	-	4.4	MOIST
			14-16	0.0	-	0.0	NO MOISTURE
			16-18	1.9	-	1.9	NO MOISTURE
			18-20	0.0	-	0.0	NO MOISTURE

TABLE 3-1

**SUMMARY OF FIXED-BASE SOIL ANALYTICAL RESULTS
AVGAS PIPELINE CLOSURE ASSESSMENT REPORT
NAS WHITING FIELD, MILTON, FLORIDA**

Rev. 0
2/28/01

COMPOUND	SCTL		Sample	AVGASSLB0802	AVGASSLB1504	AVGASSLB2116	AVGASSLB2308	AVGASSLB4504	AVGASSLB4604	AVGASSLB4704	AVGASSLB7404
	Residential	Leaching	Date	10/26/2000	10/26/2000	10/25/2000	10/25/2000	10/26/2000	10/26/2000	10/26/2000	10/26/2000
			Depth	0-2	2-4	14-16	6-8	2-4	2-4	2-4	2-4
PAHs:											
Acenaphthene	1,900,000	2,100		< 710	< 730	< 800	< 840	< 700	< 710	< 730	< 780
Acenaphthylene	1,100,000	27,000		< 710	< 730	< 800	< 840	< 700	< 710	< 730	< 780
Anthracene	18,000,000	2,500,000		< 350	< 360	< 400	< 420	< 350	< 350	< 360	< 390
Benzo(a)anthracene	1,400	3,200		< 350	< 360	< 400	< 420	< 350	< 350	< 360	< 390
Benzo(a)pyrene	100	8,000		< 71	< 73	< 80	< 84	< 70	< 71	< 73	< 78
Benzo(b)fluoranthene	1,400	10,000		< 71	< 73	< 80	< 84	< 70	< 71	< 73	< 78
Benzo(ghi)perylene	2,300,000	32,000,000		< 71	< 73	< 80	< 84	< 70	< 71	< 73	< 78
Benzo(k)fluoranthene	15,000	25,000		< 71	< 73	< 80	< 84	< 70	< 71	< 73	< 78
Chrysene	140,000	77,000		< 350	< 360	< 400	< 420	< 350	< 350	< 360	< 390
Dibenzo(a,h)anthracene	100	30,000		< 71	< 73	< 80	< 84	< 70	< 71	< 73	< 78
Fluoranthene	2,900,000	1,200,000		< 350	< 360	< 400	< 420	< 350	< 350	< 360	< 390
Fluorene	2,200,000	160,000		< 350	< 360	< 400	< 420	< 350	< 350	< 360	< 390
Indeno(1,2,3)pyrene	1,500	28,000		< 71	< 73	< 80	< 84	< 70	< 71	< 73	< 78
1-Methylnaphthalene	68,000	2,200		< 350	< 360	< 400	< 420	< 350	< 350	< 360	< 390
2-Methylnaphthalene	80,000	6,100		< 350	< 360	< 400	< 420	< 350	< 350	< 360	< 390
Naphthalene	40,000	1,700		< 350	< 360	< 400	< 420	< 350	< 350	< 360	< 390
Phenanthrene	2,000,000	250,000		< 350	< 360	< 400	< 420	< 350	< 350	< 360	< 390
Pyrene	2,200,000	880,000		< 350	< 360	< 400	< 420	< 350	< 350	< 360	< 390
VOAs:											
Benzene	1,100	7		< 5.8	< 5.2	< 4.9	< 5.0	< 5.2	< 4.9	< 4.8	264
Ethylbenzene	1,100,000	600		< 5.8	< 5.2	< 4.9	< 5.0	< 5.2	< 4.9	< 4.8	5,480
Toluene	380,000	500		< 5.8	< 5.2	< 4.9	< 5.0	< 5.2	< 4.9	< 4.8	264
Total Xylenes	5,900,000	200		< 17	< 15	< 15	< 15	< 15	< 15	< 14	7,090
OTHER ORGANICS:											
Acetone	780,000	2,800		< 58	41.5 J	< 49	< 50	< 52	< 49	< 48	< 2,500
Methyl ethyl ketone	3,100,000	17,000		< 12	3.9 J	< 9.8	< 10	< 10	< 9.8	< 9.7	< 510
Methyl bromide	2,200	50		< 5.8	< 5.2	< 4.9	< 5.0	< 5.2	< 4.9	< 4.8	324
Methyl chloride	1,700	10		< 5.8	< 5.2	< 4.9	< 5.0	< 5.2	< 4.9	< 4.8	234 J
TRPH (mg/kg)	340	340		< 8.8	< 9.1	< 10	< 10	< 8.8	< 8.8	< 9.1	27.3

Values reported in micrograms per kilogram except where noted.

SCTL = Soil Cleanup Target Level as defined by Chapter 62-777, F.A.C.

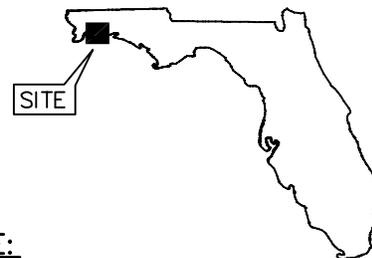
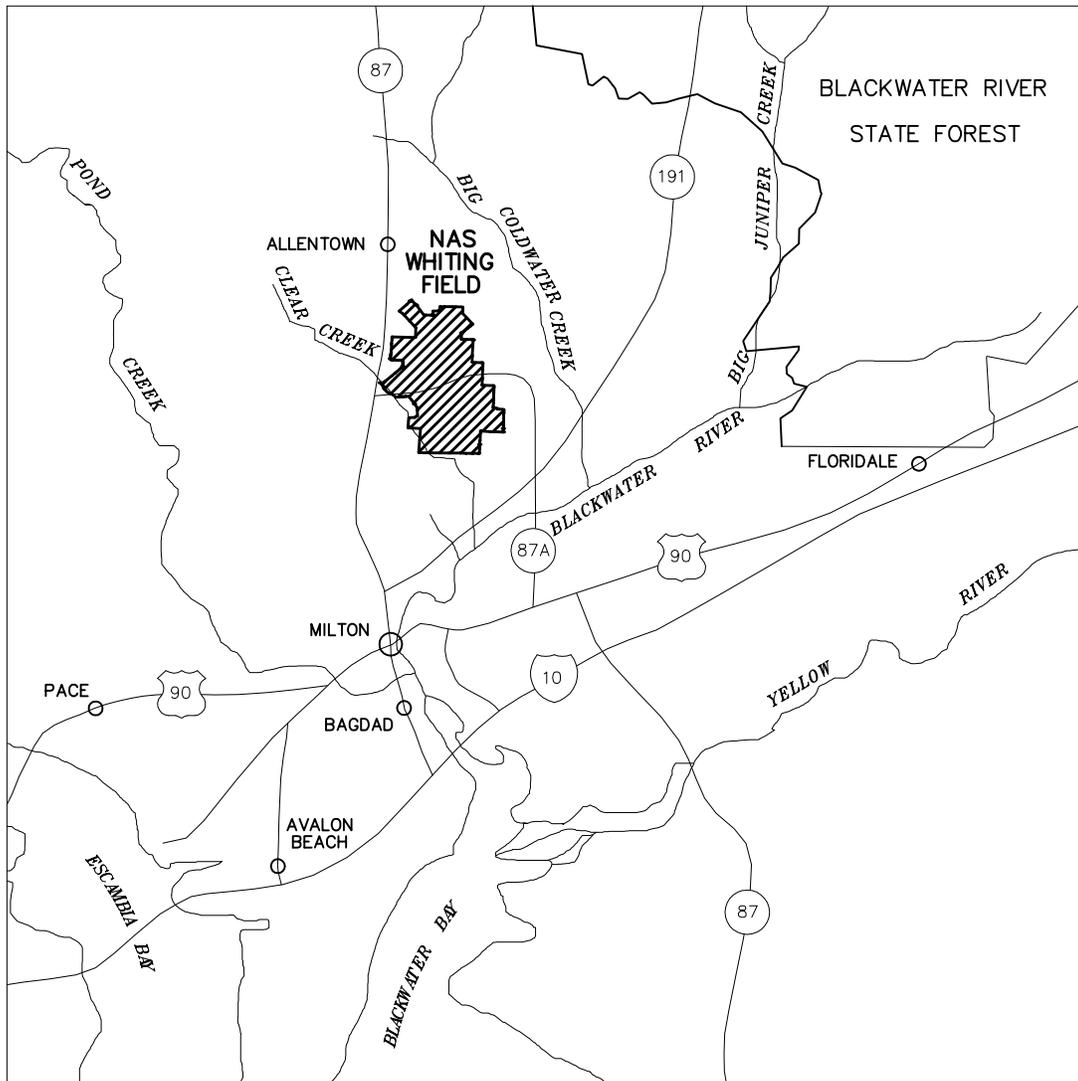
J = An estimated quantity less than the reporting limit but above the instrument detection limit.

TRPH = Total Recoverable Petroleum Hydrocarbons

Positive detections are shaded. Concentrations exceeding SCTLs are in bold.

FIGURES

ACAD:0409CM03.dwg 12/13/00 HJP



NOTE:
NAS = NAVAL AIR STATION

SOURCE: ABB ENVIRONMENTAL SERVICES INC. 1992

DRAWN BY DATE
HJP 12/13/00

CHECKED BY DATE

COST/SCHED-AREA

SCALE
AS NOTED



FACILITY LOCATION MAP
NAS WHITING FIELD
AVGAS PIPELINE
MILTON, FLORIDA

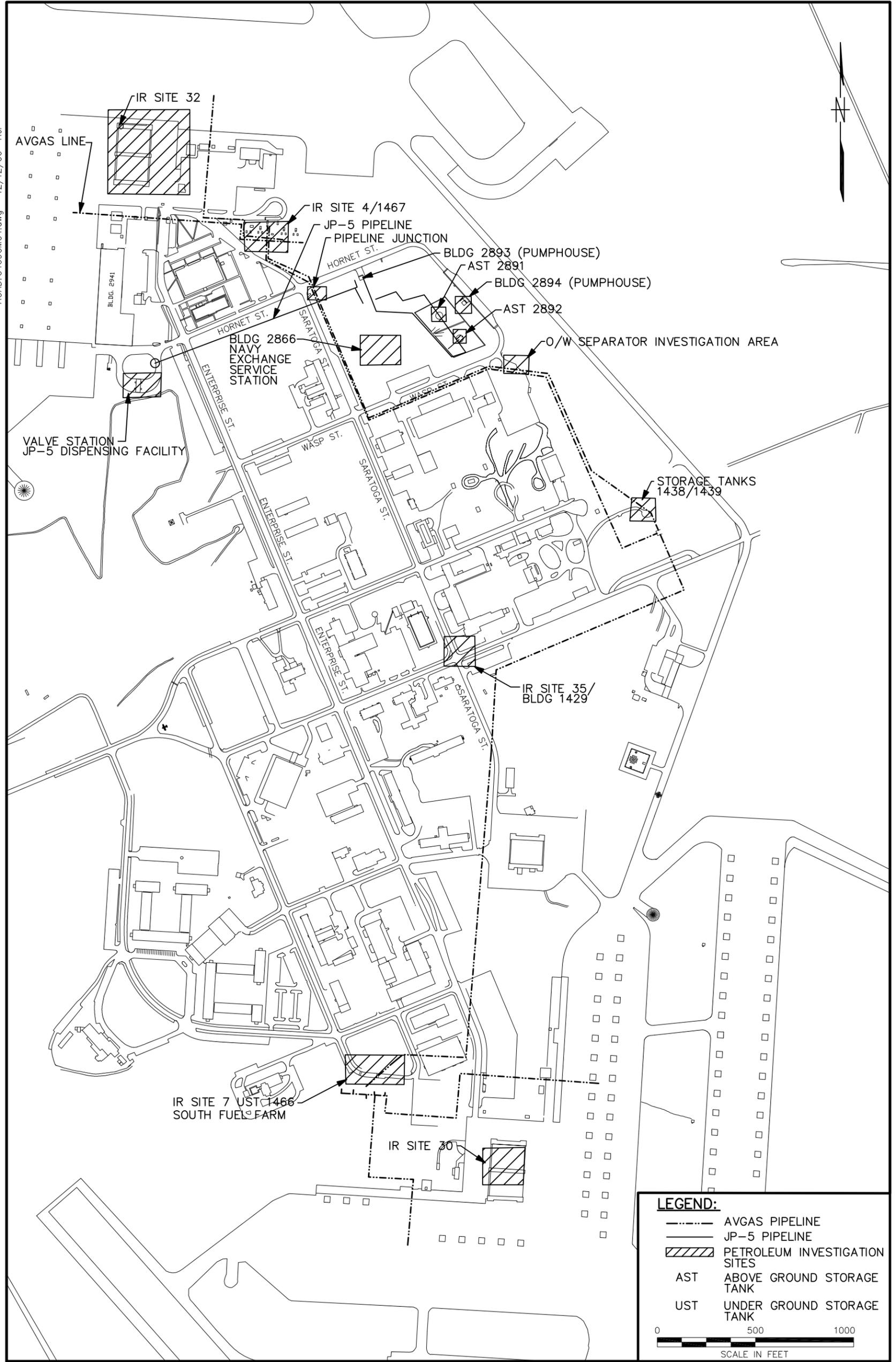
CONTRACT NO.
0409

APPROVED BY DATE

APPROVED BY DATE

DRAWING NO. REV.
FIGURE 1-1 0

ACAD: 0409CMD4.dwg 12/12/00 HJP



LEGEND:

- AVGAS PIPELINE
- JP-5 PIPELINE
- ▨▨▨▨ PETROLEUM INVESTIGATION SITES
- AST ABOVE GROUND STORAGE TANK
- UST UNDER GROUND STORAGE TANK

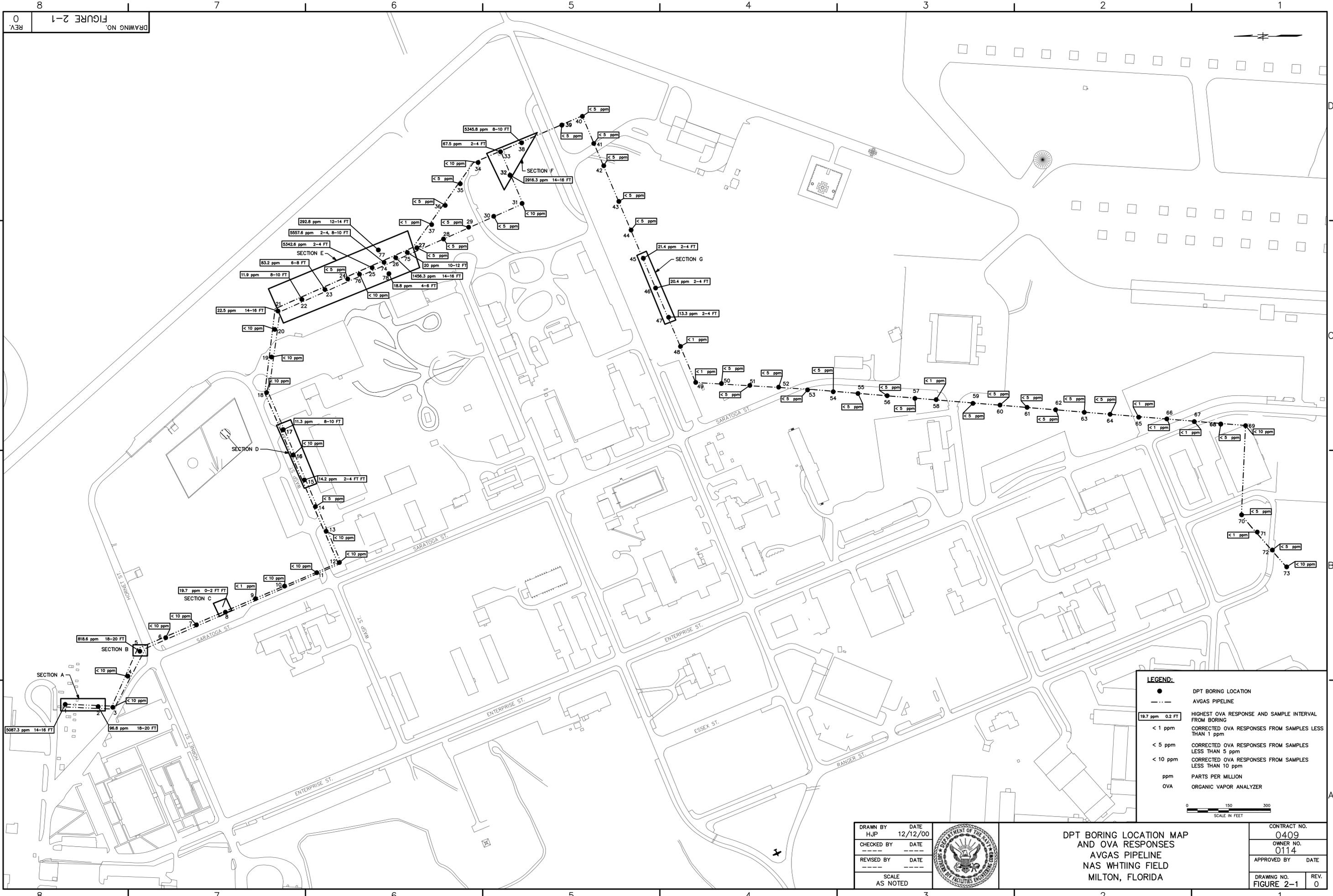
0 500 1000
SCALE IN FEET

DRAWN BY DATE
HJP 12/12/00
CHECKED BY DATE
COST/SCHED-AREA
SCALE
AS NOTED



SITE PLAN AND PETROLEUM INVESTIGATION SITES
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

CONTRACT NO.
0409
APPROVED BY DATE
APPROVED BY DATE
DRAWING NO. **FIGURE 1-2** REV. **0**



REV. 0
DRAWING NO. FIGURE 2-1

LEGEND:

- DPT BORING LOCATION
- AVGAS PIPELINE
- 19.7 ppm 0.2 FT HIGHEST OVA RESPONSE AND SAMPLE INTERVAL FROM BORING
- < 1 ppm CORRECTED OVA RESPONSES FROM SAMPLES LESS THAN 1 ppm
- < 5 ppm CORRECTED OVA RESPONSES FROM SAMPLES LESS THAN 5 ppm
- < 10 ppm CORRECTED OVA RESPONSES FROM SAMPLES LESS THAN 10 ppm
- ppm PARTS PER MILLION
- OVA ORGANIC VAPOR ANALYZER

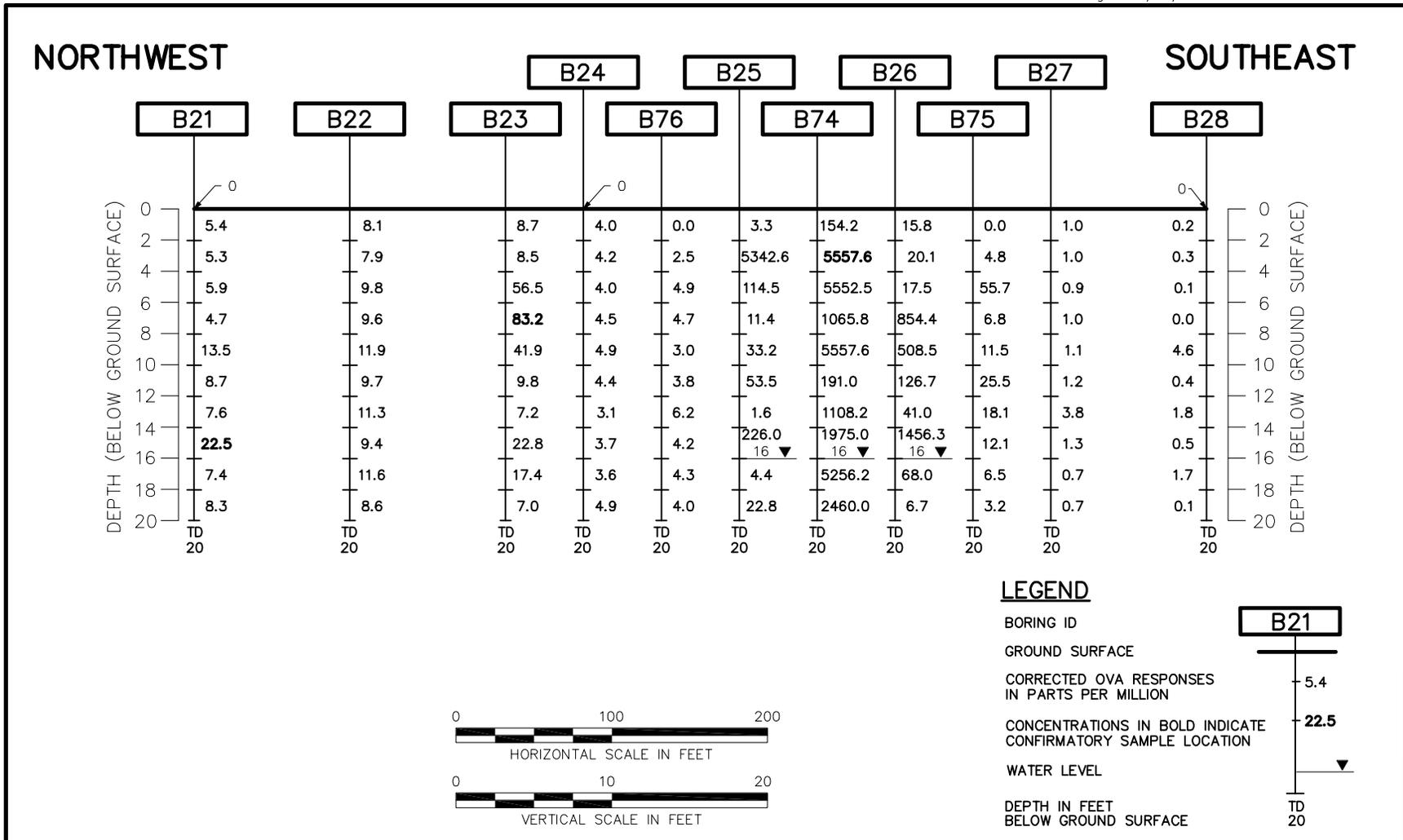
0 150 300
SCALE IN FEET

DRAWN BY HJP	DATE 12/12/00
CHECKED BY	DATE
REVISED BY	DATE
SCALE AS NOTED	



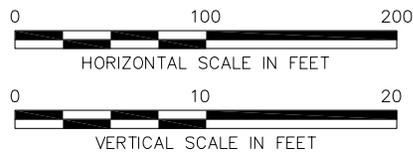
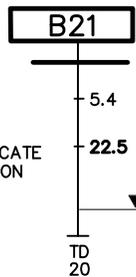
DPT BORING LOCATION MAP
AND OVA RESPONSES
AVGAS PIPELINE
NAS WHITING FIELD
MILTON, FLORIDA

CONTRACT NO. 0409
OWNER NO. 0114
APPROVED BY _____ DATE _____
DRAWING NO. FIGURE 2-1
REV. 0

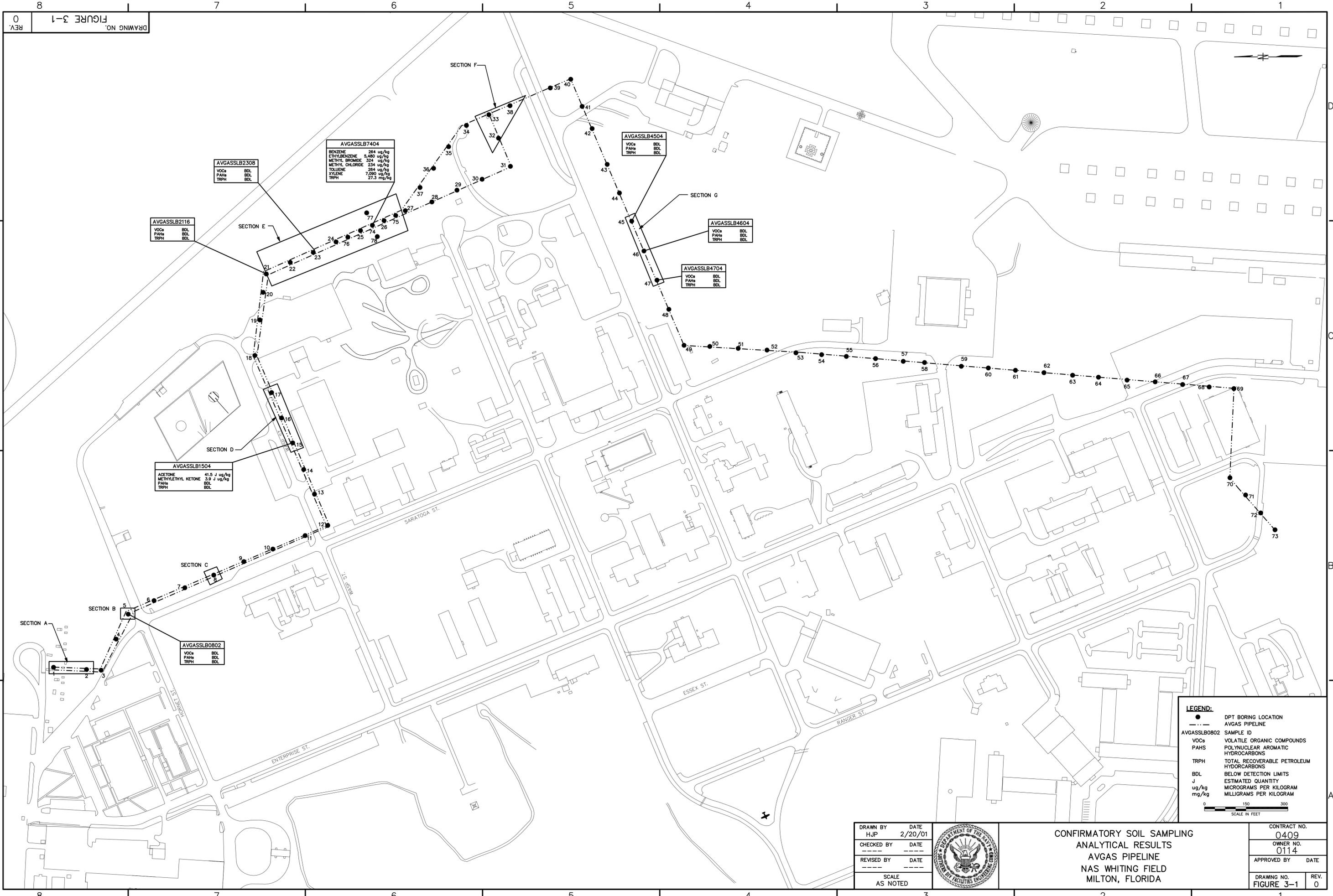


LEGEND

- BORING ID
- GROUND SURFACE
- CORRECTED OVA RESPONSES IN PARTS PER MILLION
- CONCENTRATIONS IN BOLD INDICATE CONFIRMATORY SAMPLE LOCATION
- WATER LEVEL
- DEPTH IN FEET BELOW GROUND SURFACE



DRAWN BY HJP	DATE 12/15/00		OVA RESPONSE CROSS SECTION PIPELINE SECTION E AVGAS PIPELINE NAS WHITING FIELD MILTON, FLORIDA	CONTRACT NO. 0409
CHECKED BY	DATE		APPROVED BY	DATE
COST/SCHED-AREA	DATE		APPROVED BY	DATE
SCALE AS NOTED	DRAWING NO. FIGURE 2-2		REV. 0	



0 REV. DRAWING NO. FIGURE 3-1

AVGASSLB2308
 VOCs BDL
 PAHs BDL
 TRPH BDL

AVGASSLB7404
 BENZENE 264 ug/kg
 ETHYLBENZENE 5,480 ug/kg
 METHYL BROMIDE 324 ug/kg
 METHYL CHLORIDE 234 ug/kg
 TOLUENE 264 ug/kg
 XYLENE 7,090 ug/kg
 TRPH 27.3 mg/kg

AVGASSLB2116
 VOCs BDL
 PAHs BDL
 TRPH BDL

AVGASSLB4504
 VOCs BDL
 PAHs BDL
 TRPH BDL

AVGASSLB4604
 VOCs BDL
 PAHs BDL
 TRPH BDL

AVGASSLB4704
 VOCs BDL
 PAHs BDL
 TRPH BDL

AVGASSLB1504
 ACETONE 41.5 J ug/kg
 METHYLETHYL KETONE 3.9 J ug/kg
 PAHs BDL
 TRPH BDL

AVGASSLB0802
 VOCs BDL
 PAHs BDL
 TRPH BDL

LEGEND:
 ● DPT BORING LOCATION
 --- AVGAS PIPELINE
 AVGASSLB0802 SAMPLE ID
 VOCs VOLATILE ORGANIC COMPOUNDS
 PAHs POLYNUCLEAR AROMATIC HYDROCARBONS
 TRPH TOTAL RECOVERABLE PETROLEUM HYDROCARBONS
 BDL BELOW DETECTION LIMITS
 J ESTIMATED QUANTITY
 ug/kg MICROGRAMS PER KILOGRAM
 mg/kg MILLIGRAMS PER KILOGRAM



DRAWN BY	HJP	DATE	2/20/01
CHECKED BY	---	DATE	---
REVISED BY	---	DATE	---
SCALE	AS NOTED		



CONFIRMATORY SOIL SAMPLING
 ANALYTICAL RESULTS
 AVGAS PIPELINE
 NAS WHITING FIELD
 MILTON, FLORIDA

CONTRACT NO.	0409
OWNER NO.	0114
APPROVED BY	DATE
DRAWING NO.	REV.
FIGURE 3-1	0

APPENDIX A

WHITING FIELD NAVAL AIR STATION AVGAS PIPELINE CLOSURE REPORT



**FLORIDA SPILL RESPONSE
CORPORATION**

**Closure Report
Whiting Field Naval Air Station
AVGAS Pipeline Closure**

Introduction: Whiting Naval Air Station is located just north of the City of Milton, located in Florida's panhandle region. The base is used primarily for flight training by all the nations armed forces.

A proper closure of a 6" aviation fuel pipeline was performed to meet all local and Federal requirements for underground fuel storage facilities. The pipeline(s) were a part of a refueling system located on base. The fueling systems underground storage tanks were removed in the mid 70's, according to government information. The pipelines were left in place. The pipelines were used to transfer fuel from the north fuel storage area to the south fuel storage area. There was a third fuel storage area located about half way between the north and south fueling facilities.

Florida Spill Response Corporation (FSRC) a certified pollution storage contractor was contracted to properly close the pipeline(s) in-place. The closure project was started on August 29, 2000, and completed on September 1, 2000.

An installation and abandonment form was completed, submitted to Santa Rosa County Petroleum Program; Environmental Health Services located in Pensacola, Florida. A copy of the approved form is provided with this closure report.

Pipeline Closure Activities: The initial plan of closure required the insertion of soft foam pigs to remove any remaining fuels. The ends of the pipelines were excavated in order to prep the pipelines to allow a means to launch and retrieve the foam pigs, and to allow any pipeline contents to be pushed into a tanker truck for disposal.

Florida Spill Response, prepared the lines and attached launch and retrieval tubes per the original work plan submitted to the client. Pipeline pigs are pushed through the pipes using compressed air. It generally only takes 20 PSI to move a pig through a pipeline system.

Page 2:

One section of the pipeline system called an spectacle flange was assumed to be part of the loop system based on exploratory digging with a hand shovel. FSRC and the client agreed to cut the spectacle flange out to isolate the two pipelines. When the inspection flange was removed, it was apparent that both lines were filled with water. It was believed the water was used to push the fuel out of the pipelines when the tanks were removed. FSRC again tried to push the soft pig through the lines, but still could not pressurize the line.

Since the line(s) could not be pressurized as required to advance the soft pig, FSRC recommended the removal of water in the pipelines and installation of concrete caps to complete the closure of the fuel lines. After consultation with Mr. Joseph Thayer with the Escambia County Health Department, the Health Department (850) 595-6713 approved the removal of water and capping the lines as an approved closure alternative.

FSRC contracted Industrial Water Services to remove the existing water in the pipeline(s). On August 31, 2000, 1,700 gallons of petroleum contact water (pcw) was removed via tanker truck by Industrial Water Services. A copy of the waste manifest is included with this closure report.

On Friday, September 1, 2000, the pipeline ends were capped using a soft foam plug inserted approximately 1 and 1/2 feet into the pipeline, and grouted with 40 pounds of "quick crete" cement mixture. The excavations were backfilled and graded to pre-excavation condition.

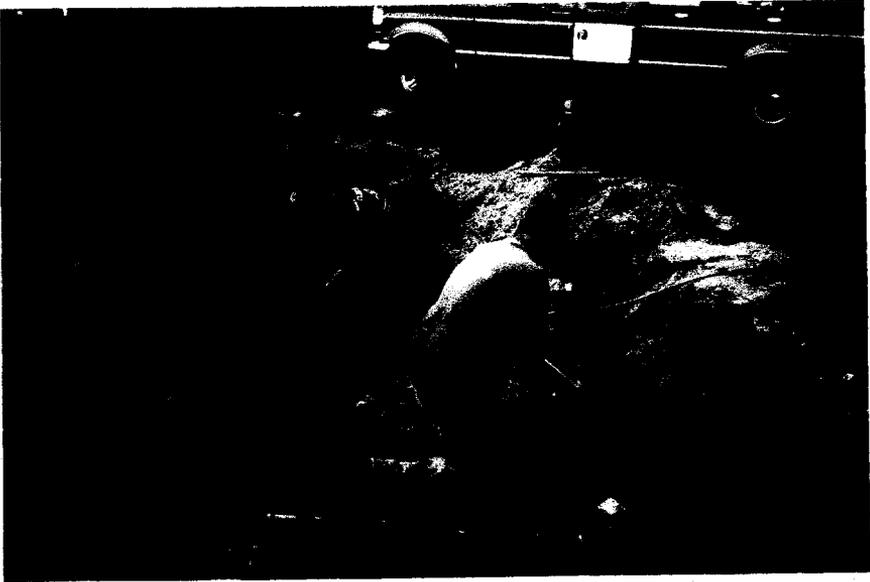


Martin S. Koivu
President



AREA A. EXCAVATION

AREA A. LAUNCH TUBE INSTALLATION





AREA A. PIG INSTALLATION





AREA A. PIG INSTALLATION

AREA A. CLEAN PIPE ENDS





AREA A. GROUT HOLDERS

AREA A. PLACEMENT OF PLUG PRIOR TO GROUTING

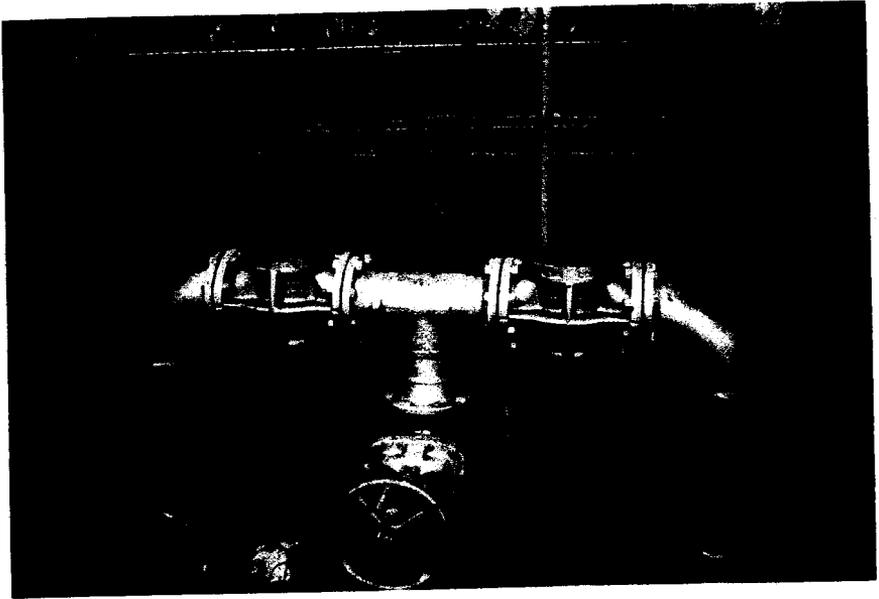




AREA A. GROUT MIX

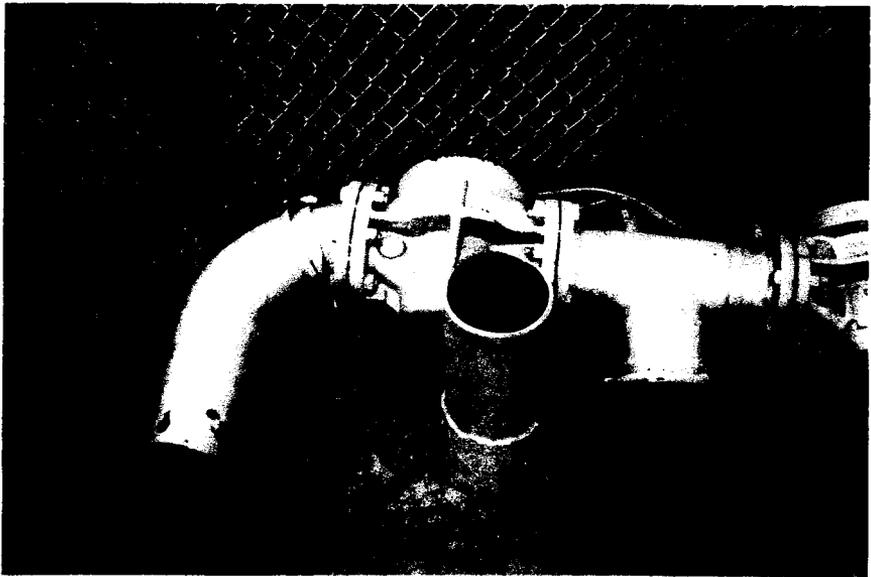
AREA A. FINISHED PIPE END

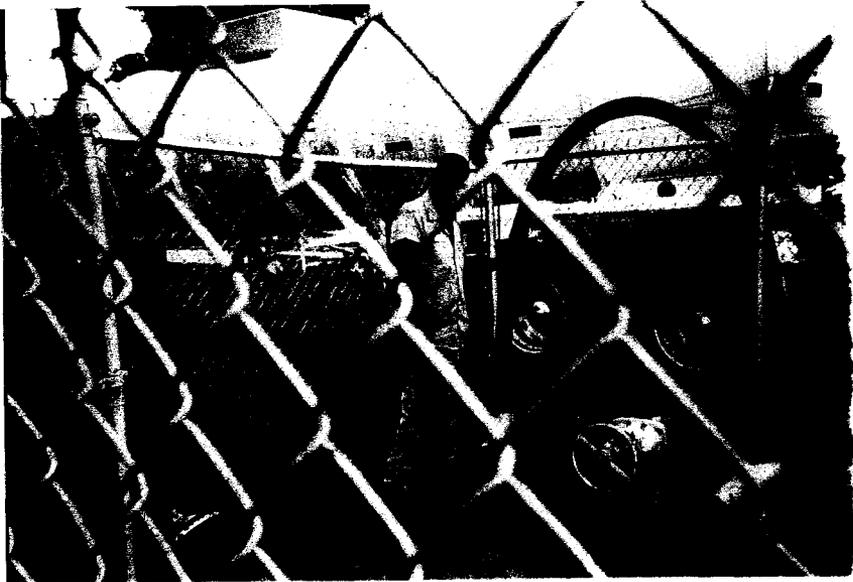




AREA B. SPECTACLE FLANGE

AREA B. DISMANTLED PIPE ENDS

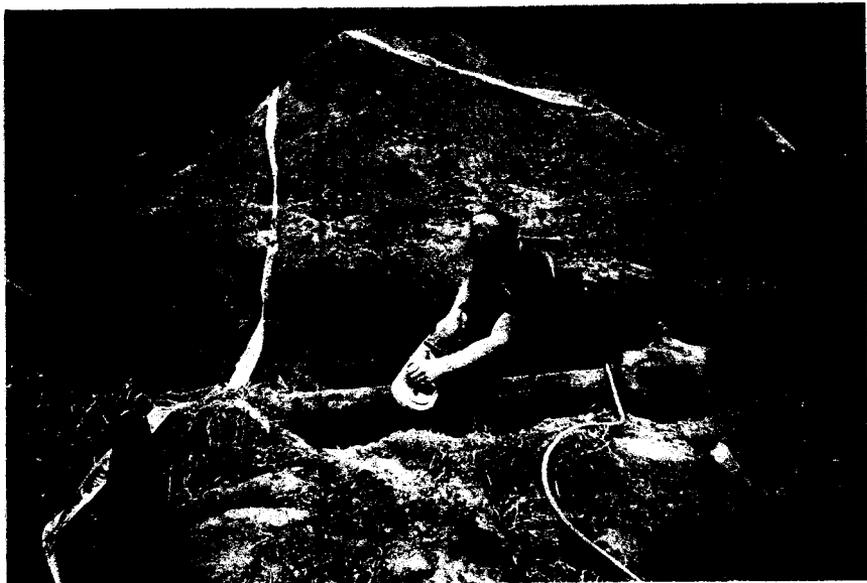




AREA B. PUMP OFF OF PETROLEUM CONTACT WATER (PCW)

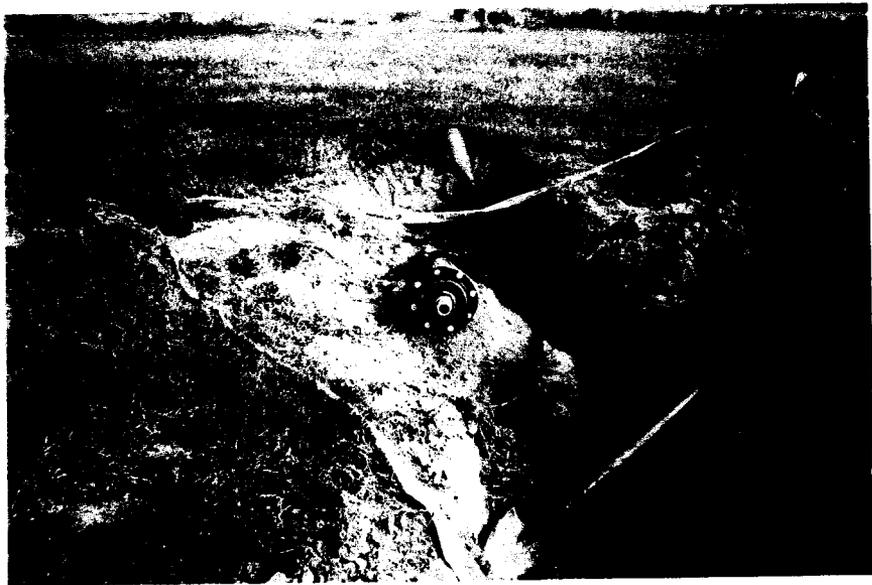
AREA B. CAPPED PIPE END





AREA C. PREPARATION FOR PIGGING

AREA C. RETRIEVAL TUBE FOR PIG





AREA D. EXCAVATED PIPE END

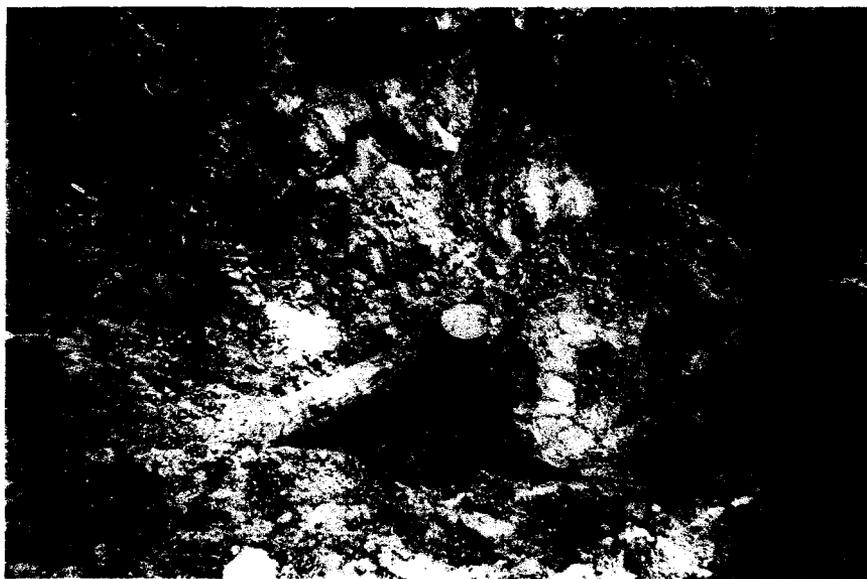
AREA D. PREPARATION FOR PIG





AREA D. PIPE END CUT FOR WORK

AREA D. GROUTED PIPE END



CONTAINMENT SYSTEMS
ENVIRONMENTAL HEALTH SERVICES
3300 North Pace Boulevard, Suite 300
Pensacola, Florida 32505
Telephone (850) 595-6707
FAX (850) 595-6709

INSTALLATION/ABANDONMENT NOTIFICATION FORM

- I. Name of Facility U.S. Naval Air Station - Whiting Field FAC# 5718516386
Address 7550 ESSEX St. #100 Whiting Field, Milton, FL 32570
Facility Phone Number: (850) 623-7181
- II. PSSSC Contractor Name FLORIDA SPILL RESPONSE CORPORATION
Contractor Phone Number: 321 431 7777 Contractor PSSC License # PC-C051728
- III. Type of work (circle ALL applicable items)
 - a. Installation of tanks
Type and number of tanks to be installed _____
 - b. Type of pipe to be installed _____
 - c. Lining of tank (complete Section IV below)
 - d. Installation of cathodic protection (circle one) (1) anode (2) impressed current
Name of NACE qualified installer _____
 - e. Removal - Assessment to be completed by FLORIDA SPILL RESPONSE CORPORATION
 - g. Is contamination at the site? (circle one) Yes No Don't know
 - h. Is site eligible for EDI/restoration? Yes No Don't know
 - i. Has a Discharge Notification Form been completed? Yes No Don't know
- IV. Subcontractor(s) working under PSSSC Contractors License (if applicable). Add a brief Description of the work they will perform
Abandoning in place several 1000 feet of bulk pipeline
- V. When will the work be ready for inspection? 8/31/00

IMPORTANT NOTICE: No storage tank shall be installed within: (1) 500' of existing potable water wells serving a community; or a non-transient, non-community water system (2) 100' of existing potable wells serving private residence or businesses.

The contractor is responsible for contacting the Building Inspection Department and obtaining any necessary permits. This form is NOT A PERMIT. Verbal or written notice shall be provided to this Department at least 48 hours prior to any activity that includes storage tank installations, upgrades or closures, 62-781.450 FAC.

I understand there are problems encountered when contaminated soil is removed from an excavation and stockpiled on the site prior to finding a disposal site for the soil. I will coordinate all contaminated soil removals with the Escambia County Health Department "PRIOR" to the removal of contaminated soils and I will not stockpile contaminated soil.

[Signature]
SIGNATURE OF APPLICANT

8/24/00
DATE

[Signature]
SIGNATURE OF TANK PROGRAM PERSONNEL

8/28/00
DATE

BUILDING INSPECTION PERSONNEL

DATE



Underground Storage System Installation and Removal Form for Certified Contractors

Pollutant Storage Systems Contractor as defined in Section 489.113, Florida Statutes (certified contractors as defined in Section 62-761.200, Florida Administrative Code) shall use this form to certify that the installation, replacement or removal of the underground storage tank system(s) located at the address listed below was performed in accordance with Department Reference Standards. This includes system components such as dispenser liners, piping sumps, and overfill protection devices.

General Facility Information

Facility Name: <u>NAS WHITING FIELD</u>	DEP Facility Identification No. : <u>5718516386</u>
Street Address (physical location): <u>7151 USS WASP STREET MILTON FLORIDA -32570-</u>	
County: <u>SANTA ROSA</u>	Telephone #: (<u>850</u>) <u>623-7181 EXT 49</u>
Owner Name: <u>SOUTHERN DIVISION NAVAL FACILITIES ENGINEERING COMMAND</u>	Telephone #: (<u>843</u>) <u>818-6894</u>
Owner Address: <u>P.O. BOX 190010 NORTH CHARLESTON S.C. 29419-9010</u>	

Storage Tank System Information

Number of Tanks Installed: _____	Number of Tanks Removed: _____
Date Work Initiated: <u>8/29/00</u>	Date Work Completed: <u>9/01/00</u>
Tank(s) Manufactured by: _____	
Description of work Completed: <u>EMPTIED AND SEALED TWO MILE LENGTH OF AVIATION FUEL PIPELINE.</u>	

Certification

I hereby certify and attest that I am familiar with the facility that is registered with the Florida Department of Environmental Protection; that to the best of my knowledge and belief, the storage tank system installation, replacement or removal at this facility was conducted in accordance with Chapter 489, Florida Statutes, Section 376.303, Florida Statutes, and Chapter 62-761, Florida Administrative Code, and its adopted reference standards and documents for underground storage tank systems.

FLORIDA SPILL RESPONSE CORPORATION

(Type or Print)

Certified Pollutant Tank Contractor Name

[Signature]
Certified Tank Contractor Signature

JOHN OKTAR

Field Supervisor Name

PC-C051728

PSSC Number

Pollutant Storage Systems
Contractor License Number

9/14/00

Date

9/14/00

Date

The owner or operator of the facility must register the tanks with the Department upon completion of the installation. The installer must submit this form to the County no more than 30 days after the completion of installation, replacement, or removal of a storage tank

31289

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Number 57207

2. Page 1 of 1

16D12358

3. Generator's Name and Mailing Address
Florida Spill Response Corp / U.S. NAVY
4050 W Kings Hwy

4. Generator's Phone () CBCO4 32926
Whiting Field
Milton FL

5. Transporter 1 Company Name
C+G Tank Line

6. US EPA ID Number
00-0005587

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
IWS, INC.
1980 AVENUE A
MOBILE, AL 36615

10. US EPA ID Number
A.L.O.O.O.O.8.5.9.4.2.1

A. Transporter's Phone

B. Transporter's Phone

C. Facility's Phone
(334) 694-7500

11. Waste Shipping Name and Description

12. Containers	13. Total Quantity	14. Unit WWVol
	1700	

a. Non Haz - Petroleum Contact Water

b.

c.

d.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name
James Hesketh / Agent for US Navy

Signature
James Hesketh

Month Day Year
8 13 00

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name
Claude James

Signature
Claude James

Month Day Year
8 13 00

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name
Mike D. Mitchell

Signature
Mike D. Mitchell

Month Day Year
8 13 00

ORIGINAL - RETURN TO GENERATOR

Tank Lines, Inc.

UNIFORM STRAIGHT BILL OF LADING
ORIGINAL - Not Negotiable - Domestic

NO 3272 (33)

Remit to:
C & G TANK LINES, INC.
530 W. VALLEY ROAD CHICKASAW, AL 36611
PHONE: (334) 456-9597 1-800-884-4249
FAX: (334) 456-9060

USEPA I. D. # ALR 000005587
Federal I. D. # 63-1054225
Emergency Call Chemtrec
Day or Night 1-800-424-9300

COMPANY _____
STREET ADDRESS _____
CITY AND STATE _____

PLEASE PAY FROM THIS INVOICE
NO STATEMENT WILL BE SENT
ICC REQUIRES PAYMENT WITHIN 7 DAYS

(DO NOT WRITE ABOVE THIS LINE - OFFICE USE ONLY) DATE BILLED _____

Fla. Spill Response Corp
U.S. NAVY.
Whiting Field Milton FL.

CONSIGNEE I.W.S.
DESTINATION Mobile Al.

CT	BC	DEST. CODE	TRACTOR NO.	TRAILER NO.	DATE OF SHIPMENT			CC	
			117	1103	MONTH	DAY	YEAR		
					8	31	00		
SHIPPER'S NO	HM	COMMODITY					GALWT	RATE	CHARGE
289		Non Haz Waste water					1700		

with "C" to designate hazardous materials Hazardous descriptions under commodity must be proper shipping defined in 172.101, Hazardous Materials Table

are to be prepaid unless otherwise indicated. Equipment is to be delivered to the consignee without on the consignor, the consignor shall sign the statement. Consignor shall not make delivery of this shipment payment of freight and other lawful charges.

Pump charges
Special Routing
Stop Charges

TOTAL CHARGES PLEASE PAY FROM THIS INVOICE

APPOINTMENT TIME		Explain any Delay in Detail
ARRIVE	15:15	
LEAVE	16:35	
TOTAL	1:20	

SHIPPER FLA Spill Resp. AGENT *[Signature]*

SHIPPER/GENERATOR'S CERTIFICATION: This is to certify that the named material is properly classified, described, packaged, marked and labeled, and is in proper condition for transportation according to the applicable regulations of the Department of Transportation.

APPOINTMENT TIME		Explain any Delay in Detail
ARRIVE		
LEAVE		
TOTAL		

CONSIGNEE AGENT

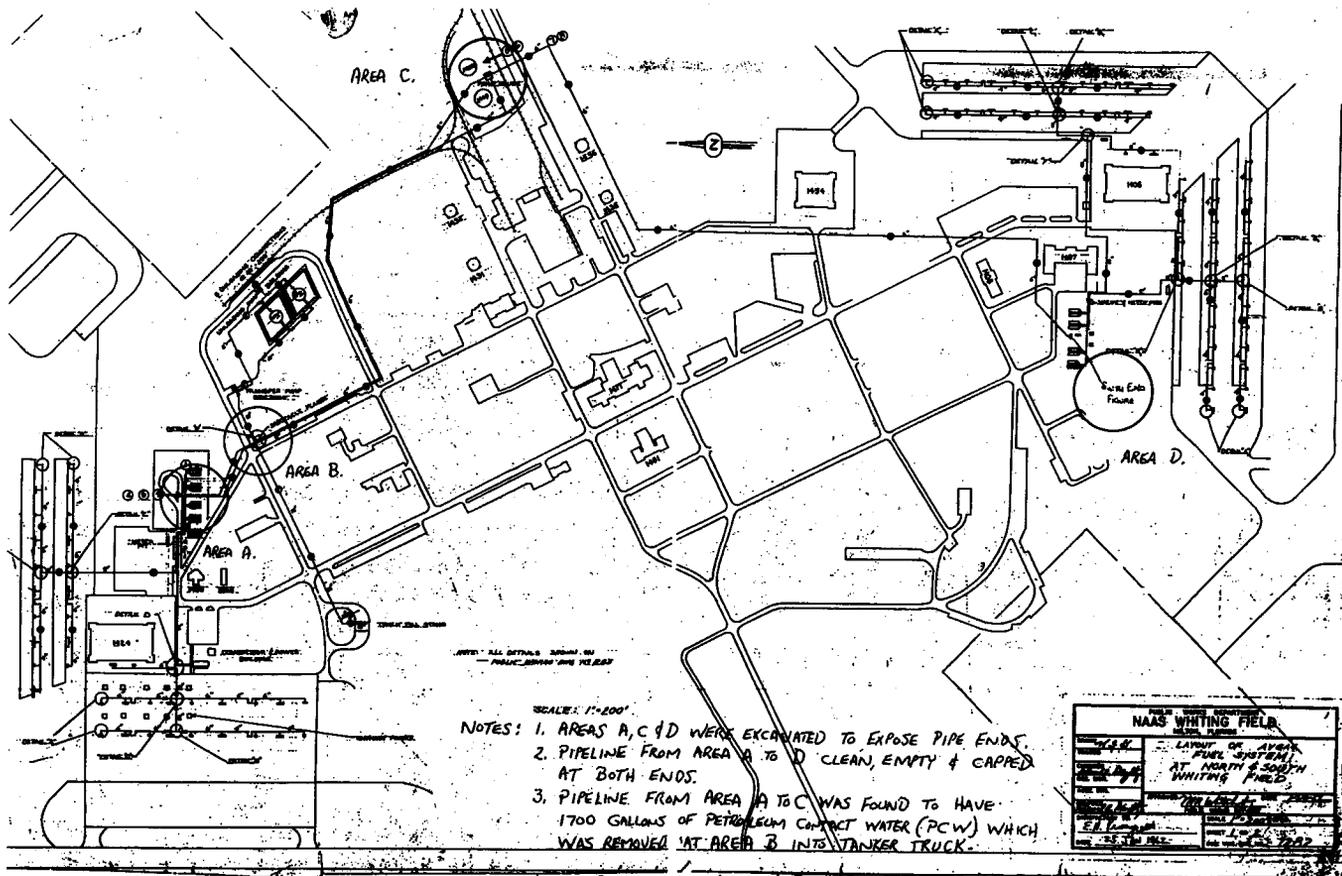
I hereby certify that the named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

SHIPPER CERTIFIES THAT THE TRAILER SUPPLIED FOR THIS SHIPMENT IS A PROPER CONTAINER FOR THIS COMMODITY AS DESCRIBED BY THE SHIPPER. C & G TANK LINES, INC.

[Signature] DATE 8/31/00

Material described herein has been received subject to the provisions of the tariffs in effect on the date of issuance of this bill of lading it is mutually agreed that every service to be performed shall be subject to all the conditions not prohibited by law herein contained.

WHITE - OFFICE • GREEN - CONSIGNEE • PINK - CUSTOMER COPY • CANARY - SHIPPER • GOLDENROD - FILE



NOTE: ALL DETAILS SHOWN ON
 THIS DRAWING ARE TO BE AS SHOWN

SCALE: 1"=200'

- NOTES: 1. AREAS A, C & D WERE EXCAVATED TO EXPOSE PIPE ENDS.
 2. PIPELINE FROM AREA A TO D CLEAN, EMPTY & CAPPED AT BOTH ENDS.
 3. PIPELINE FROM AREA A TO C WAS FOUND TO HAVE 1700 GALLONS OF PETROLEUM CONTACT WATER (PCW) WHICH WAS REMOVED AT AREA B INTO TANKER TRUCK.

4. ALL PIPE ENDS AT AREAS A, B, C & D WERE CAPPED AFTER COMPLETION OF WORK. AREAS A, C & D WERE THEN BACKFILLED & GRADED.

NAAS WHITING FIELD	
DATE	11/11/78
BY	J. J. [unclear]
LAYOUT OF AREAS A, B, C & D PIPE SYSTEMS AT NORTH & SOUTH WHITING FIELDS	
SCALE	1"=200'
PROJECT NO.	NAAS-78-01
REV.	1
DATE	11/11/78
BY	J. J. [unclear]
APP.	[unclear]
DATE	11/11/78

APPENDIX B
BORING LOGS

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B01	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/17/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2	TOTAL DEPTH (ft bls): 20'
LOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	Well Construction
	UNFILTERED	FILTERED	CORRECTED								
	0.1	0.0	0.1			dry	N	reddish orange, fg, ss			Borehole Start time: 0835
	0.1	0.0	0.1			dry	N	reddish orange, fg, ss			
	0.0	0.0	0.0			dry	N	reddish orange, s. gray, fg, ss			
	2.1	4.5	-2.1	100%		dry	N	reddish orange, s. gray, fg, ss			
	1.2	3.7	-2.5	"		dry	N	reddish orange, some gray cg, ss			
	1.2	0.0	0.4	"		dry	N	red, cg, ss some clay			
	3.2	0.0	2.4	"		slightly clay	N	red, cg, ss, some clay			
	5.0	0.0	5.0	"		s. clay	N	red, cg, ss, some clay cg			
	8.5	4.4	4.7	"		clay dry	N	red, cg, clayey			
	28.0	15.1	28.0	"		clay dry	N	reddish/gray, fg, some clay			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B02	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/17/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in):	TOTAL DEPTH (ft bla): 20'
FOOT ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla): NA

DEPTH (ft)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		0.9	0.6	0.3		4'-5"	dry	N	reddish org., cg, ss			Start: 0942
		0.8	0.1	-1.3		4'-5"	dry	N	reddish org., slightly brn. cg, ss			
		7.1	6.9	-0.8		5'-	s. damp	N	dk red, cg, ss, slightly clayey			
		7.2	3.1	-0.9		5'-	dry	N	dk. red, cg, ss			
		0.6	1.7	-1.1		5'-	dry	N	red, cg, ss, v. little clay			
		0.8	2.0	-1.2		5'-	dry	N	red, cg, ss, v. little clay			
		0.5	2.1	-1.0		5'-	dry	N	red, cg, ss, some clay			
		9.0	2.0	24.2		5'-	dry	N	red/yellowish, cg, clayey sand			
		10.0	2.1	7.9		5'-	dry	N	red/yellow, cg, ss			
		112.4	15.6	9.8		5'-	dry	N	red/yellow/gray, clay			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B03	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/17/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in):	TOTAL DEPTH (ft bla): 20'
FOOT ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla):

DEPTH (ft)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		1.3	1.3	-0.5			dry	N	lt. brn, cg, ss			Start 1255
		1.2	1.9	-0.7			dry	N	lt brn/red, cg, ss			
		1.6	1.3	0.5			dry	N	red, cg, ss			
		3.5	3.4	0.1			dry	N	red, cg, ss, some clay			
		3.0	3.0	0.0			dry	N	red, cg, ss, slightly clayey			
		3.0	3.4	-0.4			dry	N	red, cg, ss, slightly clayey			
		2.7	3.9	-1.2			dry	N	red, cg, ss			
		2.9	4.1	-1.2			dry	N	red/yellowish, cg, ss			
		2.9	4.0	-1.1			dry	N	red/yellowish, cg, ss			
		3.9	4.1	-1.1			dry	N	yellow/grey, cg, clay			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-804	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/17/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bla): 20'
ROCK ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla):

SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
	UNFILTERED	FILTERED	CORRECTED								
33	2.2	2.1	0.0		4'	dry	N	grey/red, sandy clay			Start: 1043
38	6.1	6.0	0.1			dry	N	yellow/red, cg, ss, very little clay			
-05											
	2.4	2.7	-0.3		4'	dry	N	yellow/red, cg, ss, some clayey sand			
	3.2	2.4	0.8			dry	N	yellow/red, cg, ss			
	3.0	2.8	0.2		4'	dry	N	red/yellow, cg, ss/clayey sand (slightly)			
	3.1	3.4	-0.3			dry	N	red, cg, ss			
	2.3	2.7	-0.4		4'	dry	N	red, cg, ss, slightly clayey			
	2.6	3.2	-0.6			dry	N	red, cg, ss			
	2.4	3.7	-1.3		4'	dry	N	reddish brn, cg, ss			
	2.2	4.0	-0.8			dry	N	lt. brn, cg, ss			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B05	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/17/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in):	TOTAL DEPTH (ft bls): 20'
FOOT ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls):

DEPTH (ft)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		5.2	5.6	-0.4							Starts 1115	
		4.8	4.6	0.2		dry	N	lt. brn, cg, ss				
		5.6	6.6	-1.0		dry	N	lt. brn., cg, ss				
		5.3	6.2	-0.9		dry	N	red/brn, cg, ss				
		6.6	7.2	-0.6		dry	N	red/brn, cg, ss				
		10.3	7.3	95.0		dry	N	red, cg, ss				
		44.5	6.0	38.5		dry	N	red, cg, ss, clayey sand				
		133.0	6.1	126.9		dry	N	red, cg, ss, clayey sand				
		624.1	5.5	818.6		dry	N	dk red, cg, sandy clay				
		13.1	6.2	6.9		dry	N	grey/red, cg, ss lt. red/yellow, cg, ss lens				

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B06	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/17/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bla): 20'
FOOT ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla): NA

DEPTH (ft)	SAMPLE INTERVAL SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		0.0	0.0	0.0			dry N	lt. brn/tan, cg, ss			Start 1345	
		0.0	0.0	0.0			dry N	lt. brn/gr, cg, ss				
		0.0	0.0	0.0			dry N	lt brn, cg, ss				
		0.0	0.0	0.0			dry N	red, cg, ss				
		0.0	0.0	0.0			dry N	red, cg, ss				
		0.0	0.0	0.0			dry N	red/yellow, cg, ss				
		3.6	0.0	0.0		4'	dry N	lt. brn/red, cg, ss				
		0.0	0.0	0.0		4'	dry N	red/yellow clay				
		0.0	0.0	0.0			dry N	red/gr, clay				
		0.0	0.0	0.0		4'	dry N	lt. red/wh clay				

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-807	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/17/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		0.30	0.0	0.3							Start: 1445 H# = Hand Augered	
		0.6	0.0	0.6			dry N	lt/dk brn, cg, ss				
		0.8	0.0	0.8			dry N	yellow brn, cg, ss				
		0.8	0.0	0.8			dry N	orange/yellow, cg, ss				
		1.0	0.0	1.0			dry N	brn/orange, cg, ss				
		1.0	0.0	1.0			dry N	red/orng, cg, ss				
		0.0	0.0	0.0			dry N	red/orng, cg, ss				
		0.0	0.0	0.0			dry N	red/gry/yellow, clay				
		0.0	0.0	0.0			dry N	red/gry, clay				
		0.6	0.0	0.6			dry N	red/wh clay, brown fcs, ss mix				
		0.2	0.0	0.2			dry N	red wh clay, wh cg sand mix				

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0408
BORING ID: WHFAVGAS-B 08	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/17/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bla): 20'
TOC ELEVATION (ft mas): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla):

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		19.7	0.0	19.7			dry	N	yellow/bm, cg, ss			1530
		4.2	0.3	3.9			dry	N	yellow, cg, ss			
		5.5	0.3	5.2			dry	N	yellow, cg, ss			
		0.0	0.0	0.0			dry	N	yellow/red, cg, ss, clayey sand			
		0.0	0.0	0.0			dry	N	red/wh clay			
		0.0	0.0	0.0			dry	N	lt. red/wh, clayey sand, cg			
		0.0	0.0	0.0			dry	N	lt. red/wh, clayey sand, cg			
		0.0	0.0	0.0			dry	N	lt. red/wh/yellow, clay			
		0.0	0.0	0.0			dry	N	lt. red/wh/yellow clay			
down		0.0	0.0	0.0			dry	N	wh, cg, ss			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-809	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/17/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls):

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
0												Start: 1035
2		0.0	0.0	0.0			dry N	med. brn, cg, ss				
4		0.0	0.0	0.0			dry N	med brn/yellow, cg, ss				
5		0.0	0.0	0.0			dry N	yellow, cg, ss				
6		0.0	0.0	0.0			dry N	red/yellow, cg, ss				
8		0.0	0.0	0.0			dry N	red/yellow, cg, ss, clayey sand				
10		0.0	0.0	0.0			dry N	red/yellow/wh, clay				
12		0.0	0.0	0.0			dry N	lt. red/wh. clay				
14		0.0	0.0	0.0			dry N	lt. red/wh, clay				
16		0.0	0.0	0.0			dry N	lt. red/wh, clay				
18		0.0	0.0	0.0			dry N	wh/red, cg, ss				
20												

3' sample: 12-20' logs

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B10	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/18/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bla): 20'
LOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla): NA

DEPTH (ft)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		0.0	0.0	0.0				lt. brn/arg, cg, ss				
		0.0	0.0	0.0				lt. brn, cg, ss				
		0.0	0.0	0.0				lt. brn, cg, ss				
		0.2	0.2	0.0				yellow/red, cg, ss, v. little clay				
		0.2	0.6	-0.4				yellow/red, cg, ss, v. little clay				
		0.8	0.7	0.1				yell/red, cg, ss, clayey sand				
		0.4	0.4	0.0				yell/red, cg, ss, clayey sand				
		4.0	0.7	3.3				dk red, cg, ss, clayey sand				
		1.2	0.0					lt. red, clay, v. little cg sand				
		0.8	0.0					lt red, cg, ss, some clay				

START
0853

7-10
10-13
13-17

CASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B	WELL NR: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/10/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (In): 2"	TOTAL DEPTH (ft bls): 20'
LOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
	UNFILTERED	FILTERED	CORRECTED								
	3.1	2.8	0.3	*	*	dry	N	lt. brn, cs, ss			Sheet 0955
	3.9	2.1	1.8	*	*	dry	N	yell., cs, ss			
	3.5	2.1	1.4	*	*	dry	N	yell, cs, ss			
	4.3	4.0	0.3	*	*	dry	N	yell, cs, ss			
	4.0	4.0	0.0	4"		dry	N	yell/red, cs, ss, v. little clay			
	4.0	3.0	1.0	4"		dry	N	yell/red, cs, ss, some clay			
	3.5	3.5	0.0	4"		dry	N	red/yell, clay			
	10.2	3.6	6.6	4"		dry	N	dk red/yell, clay			
	2.8	2.9	0.9	4"		dry	N	dk red/yell/wh, clay			
	3.4	2.9	0.5	2"		dry	N	br red/red, clay			

PHASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B12	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/16/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft ble): 20'
ROC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft ble): NA	DEPTH TO GW (ft ble): NA

DEPTH (ft)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		5.5	5.6	-0.1		#	dry	N	med. brn/, cg, ss			FID BG = ~4.5ppm
		5.1	5.9	-0.8		#	dry	N	med/lt. brn., cg, ss			
		4.2	4.3	-0.1			dry	N	red/yell, cg, ss, v. little clay			
		3.9	-	3.9		5'	dry	N	red/yell, cg, ss, v. little clay			
		5.6	5.2	0.4			dry	N	red/yell, cg, ss, some clay			
		3.9	-	3.9		4'	dry	N	red, cg, ss v. little clay			
		9.8	3.2	6.6			dry	N	red, cg, some clay, ss/brn, cg, ss			
		3.7	-	3.7		4'	dry	N	lt. red, cg, ss			
		4.0	-	4.0			dry	N	lt. red, clay			
		3.7	-	3.7		4'	dry	N	lt. red/clay			

1105

5-9
9-12

CASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 13	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/18/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
ROC ELEVATION (ft masl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

SAMPLE INTERVAL SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
	UNFILTERED	FILTERED	CORRECTED								
	5.5	4.2	5.0								
5.5	5.0	4.0			dry	N	red/wh clay				
0.0	2.5	2.5			dry	N	yell/wh clay, some ss				
5.5	3.6	3.6			dry	N	dk red, cg, clayey sand				
5.5	2.4	2.4			s. damp	N	dk red, cg, clayey sand				
5.5	3.3	3.3			s. damp	N	red/yell, cg, ss, v. little clay				
5.5	2.4	2.4			s. damp	N	dk red, cg, clayey sand				
5.5	2.6	2.6			s. damp	N	red/yell, cg, ss				
5.5	4.2	4.2			dry	N	red/wh clay, some ss				
5.5	4.4	4.4			dry	N	red/wh clay				
5.5	4.4	4.4			dry	N	red brn, cg, ss				
5.5	4.2	4.2			dry	N	red brn, cg, ss				

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B/4	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/18/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 3"	TOTAL DEPTH (ft bla): 20'
MEASUREMENT ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla): NA

SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
	UNFILTERED	FILTERED	CORRECTED								
3.1	40	-	40			dry	N	md brn/blk, cg, ss			1315 BG FID: 3.6
	48	-	48			dry	N	md brn, cg, ss			
	33	-	33			dry	N	md brn, cg, ss			
	3.0	-	3.0			dry	N	yell/brown, cg, ss, some clay			
	3.5	-	3.5			dry	N	red/yell, clay, some sand			
	3.2	-	3.2			dry	N	lt. red, cg, ss, clayey sand			
	5.0	2.8	2.8			dry	N	lt. red/org, clayey, sand			
	3.1	-	3.1			dry	N	lt. red, clayey sand			
	3.2	-	3.2			dry	N	lt red/wh, clayey sand			
	3.1	-	3.1			dry	N	lt red/wh clay			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B15	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/18/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (F1)	SAMPLE INTERVAL SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		3.1	—	3.1			dry	N	red brn / blk, cg, ss			1420
		17.8	3.0	14.2			dry	N	lt brn / blk, cg, ss			<u>RG FID:</u> 3.2
		3.1	—	3.1			dry	N	yell / brn, clayey sand			
		3.7	—	3.7			dry	N	red / yellow, clayey sand			
		4.2	—	4.2		5'	dry	N	yell / red / wh clayey sand			
		4.1	—	4.1		5'	dry	N	lt. red clayey sand			
		4.5	—	4.5		5'	dry	N	lt red / red, clayey sand			
		3.0	—	3.0		5'	dry	N	lt red, clayey sand			
		4.2	—	4.2		5'	dry	N	lt red / wh, clayey sand			
		5.5	—	5.5		5'	dry	N	lt. red / wh, clayey sand			
		3.5	—	3.5		5'	dry	N	lt. red / wh, clayey sand			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B(6)	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/15/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
FOOT ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		2.7	-	2.7			dry	N	md brn, cg, ss			<u>BG FID</u> 2.8 1510 WELL CONSTRUCTION
		2.3	-	2.3			dry	N	dk brn/yell, cg, ss			
		1.2	-	1.2			dry	N	red/yell, cg, ss			
		1.7	-	1.7			dry	N	red/yell., cg, ss			
		3.9	-	3.9			dry	N	red/yell, cg, ss, clayey sand			
		1.2	-	1.2			dry	N	red/wh, cg, ss clayey sand			
		2.2	1.2	6.0			dry	N	yell/wh/red, cg, ss, clayey SAND			
		1.8	-	1.8			dry	N	lt red/wh, cg, ss, clayey sand			
		2.3	-	2.3			dry	N	lt. red/wh, cg, ss, clayey sand			
20		-	-	-			dry	N	lt. red/wh, cg, ss			

PHASE: NAS Whiting Field - Av Gas Pipeline

SITE ID: WHFAVGAS

PROJECT NO.: N0409

BORING ID: WHFAVGAS-17

WELL ID: NA

PIEZOMETER ID: NA

CONTRACTOR: Ambient Technologies

COMPLETION DATE: 10/18/00

LOGGED BY: C. Waller

METHOD: DPT

BORING DIAMETER (in): 2"

TOTAL DEPTH (ft bla):

DOC ELEVATION (ft msl): NA

SCREEN INTERVAL (ft bla): NA

DEPTH TO GW (ft bla):

DEPTH (ft)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		2.5	-	2.5			dry	N	med brn/yell, cg, ss			1600 Bg FID: 2.0
		3.5	-	2.4			dry	N	med brn, cg, ss			
		1.1	-	1.1			dry	N	yell/red, cg, ss, some clay			
		1.3	-	1.3			dry	N	red, cg, ss			
		11.3	6.2	10.1			dry	N	red, cg, ss, clayey sand/brn, cg, ss			
		1.1	-	1.1			dry	N	red, cg, ss			
		3.6	-	3.8			dry	N	red, cg, ss			
		0.7	-	0.7			dry	N	red, cg, ss			
		3.1	-	3.1			dry	N	red, cg, ss, some clay			
		1.3	-	1.3			dry	N	med red, cg, ss			

CASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 18	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/15/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
ROC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
	UNFILTERED	FILTERED	CORRECTED								
	1.7	-	1.7			dry	N	brn, cg, ss			
	1.2	-	1.2			dry	N	reddish/brn, cg, ss			
	0.8	-	0.8			dry	N	red, cg, ss, some clay			
	1.5	-	1.5			dry	N	red, cg, ss, clayey sand			
	1.3	-	1.3			dry	N	dk red, cg, ss, clayey sand			
	1.5	-	1.5			dry	N	med. yell, cg, ss, v. little clay			
	3.6	-	3.6			dry	N	yell, cg, ss, clayey sand			
	1.1	-	1.1			dry	N	yell/red, cg, ss, some clay			
	1.7	-	1.7			dry	N	brn lt. red, cg, ss			
	1.1	-	1.1			dry	N	lt. red/wh clay			

1645
 BG FID:
 1.7
 WELL
 CONSTRUCTION

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 9	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/19/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 3"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		0.2	-	0.2			dry	N	red brn, cg, ss			0740 36 FID: 0.1 ppm * ~ 4" of asphalt on top
		0.0	-	0.0			dry	N	red brn/reddish, cg, ss, some clay			
		0.2	-	0.2		100%	dry	N	red/yellow, cg, ss, v. little clay			
		0.3	-	0.3		"	dry	N	red, cg, ss, v. little clay			
		3.8	-	3.8		"	dry	N	red, cg, ss, some clay			
		0.0	-	0.0		"	dry	N	red, cg, ss, some clay			
		0.0	-	0.0		"	dry	N	red, cg, ss			
		0.1	-	0.1		"	dry	N	red/yell., cg, ss, some clay			
		2.8	-	2.8		"	dry	N	red/yell, cg, ss, some clay			
		0.3	-	0.3		"	dry	N	red/yell, cg, ss, clayey sand			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 20	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE:	LOGGED BY: G. Waller P. HALVERSON
METHOD: DPT	BORING DIAMETER (in):	TOTAL DEPTH (ft bla): 20'
TOC ELEVATION (ft masl): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla): N/A

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
0-2		1.8	-	0.0		HA	dry	none	0-2" - asphalt brown, cg, ss			1510 Blind: 0.0 ppm
2-4		0.5	-	0.0		HA	"	"	brown, cg, ss			
4-6		0.8	-	0.0		100%	"	"	red/brown, clay			
6-8		0.4	-	0.0		"	"	"	red/brown, clay			
8-10		6.6	0.4	5.2		"	"	"	red/brown, cg, ss			
10-12		0.4	-	0.0		"	"	"	red/brown, clay w/some white clay			
12-14		1.1	-	0.0		"	"	"	red/brown, clay			
14-16		0.9	-	0.0		"	"	"	yell/red, clay			
16-18		1.9	-	0.0		"	"	"	yell/red, clay			
18-20		3.4	0.0			"	"	"	yell/white, cg, ss w/some clay			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B21	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/19/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION	
		UNFILTERED	FILTERED	CORRECTED									
		5.4	5.3	0.1			dry	N	lt. brn, cg, ss			0954 BGFID: 20 ppm	
		5.3	5.2	0.1			dry	N	lt. brn/yell., cg, ss				
		5.9	4.8	1.1		100%	dry	N	red/yell., cg, ss				
		4.7	-	4.7			"	dry	N	yellowish red, cg, ss			
		13.5	7.2	6.3			"	dry	N	red/yell, cg, clayey sand, ss			↓ FID 26 210 ppm
		8.7	7.1	0.9			"	dry	N	red/yell, cg, ss, clayey sand			
		7.0	6.4	0.6			"	dry	N	lt red/yell, cg, ss, clayey sand			
		22.5	8.0	14.5			"	dry	N	lt red, cg, ss, clayey sand/brn, cg ss mix			
		7.4	6.7	-13			"	dry	N	lt red/red, cg, ss, clayey sand			
		8.3	-0.8				"	dry	N	lt red, cg, ss, clayey sand			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-822	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/19/00	LOGGED BY: C. Walter
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bbs): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bbs): NA	DEPTH TO GW (ft bbs): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		6.1	8.0	0.1			dry	N	lt. brn, cg, ss			1030 86 FID: 8.1
		7.9	7.6	0.1			dry	N	med. brn/yell, cg, ss			
		9.8	9.6	0.2	100%		dry	N	med red, cg, ss, some clay			
		9.6	9.4	0.2	"		dry	N	med red, cg, ss, some clay			
		11.9	8.6	3.3	"		dry	N	med red/yell, cg, ss, clayey sand			
		9.7	8.4	1.3	"		dry	N	red/yell, cg, ss, clayey sand			
		11.3	7.8	4.5	"		dry	N	red/yell, cg, ss, clayey sand			
		9.4	8.4	1.0	"		dry	N	red/yell/wh, cg, ss, clayey sand			
		11.6	8.6	3.0	"		dry	N	red, cg, ss, clayey sand			
		8.4	0.2		"		dry	N	red/yell/wh, clayey sand			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B23	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 1d1d100	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		8.7	8.1	0.6			dry	N	red brn/blk, cg, ss			
		8.5	7.9	0.6			dry	N	H brn./yell, cg, ss			
		56.5	7.2	49.3	100%		dry	S. petrol odor	red/yell, cg, ss, some clay			
		83.8	28.4	54.8	"		dry	"	red/yell, cg, ss, some clay			
		41.9	6.5	35.4	"		dry	"	red/yell, cg, ss, some clay/brn/blk cg, ss			
		9.8	6.5	3.3	"		dry	S. petrol odor	lt red/yell/wh, cg, ss			
		7.2	5.1	2.1	"		dry	"	red, cg, ss, clayey sand			
		22.8	5.5	17.3	"		dry	"	red, cg, ss, clayey sand/blk, ss, CS mix			
		12.4	6.4	11.0	"		dry	"	red/blk, cg, ss, some clay			
		7.0	5.5	1.5	"		dry	"	red/yell/wh, cg, ss, some clay			

1181
BG FID
10.5ppm

BASE: NAS Whiting Field - Av Gas Pipeline

SITE ID: WHFAVGAS

PROJECT NO.: N0409

BORING ID: WHFAVGAS-B24

WELL ID: NA

PIEZOMETER ID: NA

CONTRACTOR: Ambient Technologies

COMPLETION DATE: 1d 19/00

LOGGED BY: C. Waller

METHOD: DPT

BORING DIAMETER (in): 2"

TOTAL DEPTH (ft bla): 20'

TOC ELEVATION (ft mas): NA

SCREEN INTERVAL (ft bla): NA

DEPTH TO GW (ft bla): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		4.0	-	4.0			dry	N	blk/gry, cg, ss			1205 Bg FID: 5.1 ppm
		4.2	-	4.2			dry	N	grey/red, clayey sand, cg, ss			
		4.0	-	4.0		100%	dry	N	yell/gry, clay			
		4.5	-	4.5		"	s. damp	dry	yell/grey, clay			
		4.9	-	4.9		"	dry	N	yell./brn., cg, ss, clayey sand			
		4.4	-	4.4		"	dry	N	grey/yell., cg, ss, clayey sand			
		3.1	-	3.1		"	dry	N	bl/grey + yell clay mix			
		7.4	3.7	3.7		"	dry	N	yell. clay			
		3.6	-	3.6		"	dry	N	lt red, cg, ss / yell./gry clayey sand			
		4.9	-	4.9		"	dry	N	yell/grey, cg, ss, clayey sand			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS- <u>26</u>	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/19/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOT ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): ~20'*

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		19.3	20.1	15.8								
		19.3	20.1	15.8								
		148.1	34.7	113.4	100%							
		950.6	20.2	82.0	"							
		616.9	90.2	52.7	"							
		151.4	1104	52.7	"							
		41.0	24.7	16.3	"							
		1400.0	235.8	1224.2	"							
		129.0	61.0	68.0	"							
		25.1	16.4	6.7	"							
		129.0	61.0	68.0	"							
		25.1	16.4	6.7	"							

1445
 BG FID:
 1.8

* Same as last boring. ~100' away from the clayey sand.

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B27	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/19/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bla): 2'2"
TOC ELEVATION (ft masl): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		1.0	-	1.0			dry	N	red, cg, ss, v. little clay			
		1.0	-	1.0			dry	N	red, cg, ss, v. little clay			
		0.9	-	0.9	100%		dry	N	red/yell., cg, ss, some clay			
		1.0	-	1.0	"		dry	N	yell/gry, cg, ss, some clay			
		1.1	-	1.1	"		dry	N	red/wh, cg, ss, v. little clay			
		1.2	-	1.2	"		dry	N	red/yell., cg, ss, some clay			
		3.8	-	3.8	"		dry	N	red/yell., cg, ss, some clay			
		1.3	-	1.3	"		dry	N	red, cg, ss			
		0.7	-	0.7	"		dry	N	red/yell., cg, ss, some clay			
		0.7	-	0.7	"		dry	N	lt red, cg, ss, v. little clay			

1630
1.3 = 16 FID

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 28	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/19/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		0.2	-	0.2			dry	N	lt. brn, cg, ss			
		0.3	-	0.3			dry	N	lt brn, cg, ss			
		0.1	-	0.1	100%		dry	N	yell/bn, cg, ss			
		0.0	-	0.0	"		dry	N	red/yell., cg, ss, some clay			
		4.6	-	4.6	"		dry	N	red/yell., cg, ss, some clay			
		0.4	-	0.4	"		dry	N	red, cg, ss			
		1.8	-	1.8	"		dry	N	red, cg, ss, some clay			
		0.5	-	0.5	"		dry	N	red/yell., cg, ss, some clay			
		1.7	-	1.7	"		dry	N	red/yell., cg, ss, some clay			
					"				red/yell., cg, ss, clayey sand			

1700
B6 FID: 0.1

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B29	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/20/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
											0735 BG FID: 0.0 PPM	
2		0.0	0.0	0.0			dry	N	med. brn, cg, ss			
4		0.0	0.0	0.0			dry	N	med brn, cg, ss			
5		0.0	0.0	0.0	100%		dry	N	lt brn/yell, cg, ss			
8		0.0	0.0	0.0	"		dry	N	red/yell, cg, ss			
10		0.7	-	0.7	"		dry	N	red/yell/brn, cg, ss			
12		0.0	0.0	0.0	"		dry	N	red/yell, cg, ss, some clay			
14		0.0	-	0.0	"		dry	N	red/brn, cg, ss, some clay			
15		0.0	-	0.0	"		dry	N	red, cg, ss, some clay			
16		1.0	-	1.0	"		dry	N	red/brn, cg, ss, clay			
18		0.0	-	0.0	"		dry	N	red/yell, cg, ss, clayey sand			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B30	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/20/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		0.0	-	0.0			dry	N	lt brn, cg, ss			0f20 RG FID: 0.0 ppm
		0.0	-	0.0			dry	N	lt brn, cg, ss			
		0.0	-	0.0		100%	dry	N	brn/yell, cg, ss			
		0.0	-	0.0		"	dry	N	yell/red, cg, ss, v. little clay			
		2.2	-	2.2		"	dry	N	brn/red, cg, ss, some clay			
		0.1	-	0.1		"	dry	N	red/yell., cg, ss, clayey sand			
		4.3	-	4.3		"	dry	N	brn/red, cg, ss, some clay			
		0.0	-	0.0		"	dry	N	red, cg, ss, clayey sand			
		0.8	-	0.8		"	dry	N	red/yell, cg, ss, some clay			
		0.0	-	0.0		"	dry	N	red/yell, clay			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 31	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/20/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bla): 20'
TOTOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		0.0	↓	0.0			dry	N	yell/brn, cg, ss			0.50 RG FID: 0.1 ppm WELL CONSTRUCTION
		0.0	-	0.0			dry	N	yell/brn, cg, ss			
		0.0	-	0.0	100%		dry	N	red/yell, cg, ss			
		0.1	-	0.1		"	dry	N	red/yell, cg, ss some clay			
		5.3	0.2	5.1		"	dry	N	red/brn, cg, ss, v. little clay			
		0.0	-	0.0		"	dry	N	red/yell, cg, ss, clayey sand			
		0.8	-	0.8		"	dry	N	red/brn/yell, cg, ss, some clay			
		3.5	-	3.5		"	dry	N	red, cg, ss, some clay			
		0.8	-	0.8		"	dry	N	red, cg, ss, some clay			
		2.1	-	2.1		"	dry	N	red/yell, clay			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B (32)	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/20/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bta): 20
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bta): NA	DEPTH TO GW (ft bta): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
2		1.1	-	1.1			dry	N	med brn / gry, ss, cg			0945 BG FID: 0.2 ppm Switched to H Range FID RB = 8.9
1		1.0	-	1.0			dry	N	med brn / blk, cg, ss			
5		4.5	-	4.5	100%		dry	petrol odor	yell / brn, cg, ss			
5		1632.0	94.5	1536.5	"		dry	petrol	brn / blk, cg, ss, some clay			
0		23720	244.4	2357.0	"		dry	petrol	brn / yell, cg, ss, some clay apparent blk staining			
0		2013	258.5	1974.5	"		dry	petrol	red / yellow, cg, ss, some clay apparent black staining			
0		2446	183.4	2262.0	"		dry	petrol	red, cg, ss black staining			
0		3025	108.2	2416.3	"		dry	petrol	red, cg, ss, clayey sand blk staining			
0		2800	77.5	2721.5	"		dry	petrol	red, cg, ss, clayey sand blk staining			
0		1948	44.4	1403.6	"		dry	"	"			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B33	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/20/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bla): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USGS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		26.2	0.0	26.2			dry	N	yell/brn, cg, ss			BGFID: 7.3 1050 WELL CONSTRUCTION
		67.5	0.0	67.5			dry	N	yell/brn, cg, ss			
		13.5	8.2	5.3		100%	dry	N	yell/red, cg, ss, some clay			
		9.4	8.2	1.2		"	dry	N	yell/brn, cg, ss, v. little clay			
		28.0	8.0	20.0		"	dry	N	red/yell/wh, cg, ss, clayey sand			
		26.9	7.9	19.0		"	dry	N	brn/yell, cg, ss, some clay			
		25.3	8.1	17.2		"	dry	N	brn/yell, cg, ss, v. little clay			
		24.5	8.3	16.2		"	dry	N	lt red/wh, cg, ss, clayey sand			
		12.0	8.7	8.3		"	dry	N	lt. red, cg, ss, some clay			
		8.0	9.0	8.0		"	dry	N	lt red/wh, cg, ss			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS- 8 34	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/20/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		13.9	8.9	5.0			dry	N	red/bn, cg, ss			BGFID: 5.2 1320
		15.6	8.6	7.0			dry	N	med bn, cg, ss			
	5.7	8.9	5.7	0.0	100%		dry	N	red/yell, cg, ss, v. little clay			
	5.9	5.8	5.8	0.1	"		dry	N	red bn/yell, cg, ss			
	6.6	5.8	0.8	"	"		dry	N	red/bn, cg, ss, some clay			
	5.8	6.0	-0.2	"	"		dry	N	red/wh/grecl, cg, ss, clayey sand			
	7.1	6.2	0.9	"	"		dry	N	bn, cg, ss / red/wh sandy clay mix			
	5.4	6.1	-0.7	"	"		dry	N	red, cg, ss			
	6.9	6.3	0.6	"	"		dry	N	red, cg, ss, some clay			
	5.3	6.0	-0.7	"	"		dry	N	lt red/wh, cg, ss, some clay			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-835	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/20/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		8.9	8.6	0.3	#	#	dry	N	lt brn, cg, ss			86 FID: 8.1 1400 WELL CONSTRUCTION
		8.9	8.5	0.4	#	#	dry	N	brn, cg, ss			
		1.0	-	1.0	100%		dry	N	brn (yell), cg, ss, some clay			
		0.4	-	0.4	"		dry	N	yell/brn, cg, ss, some clay			
		1.6	-	1.6	"		dry	N	red/brn, cg, ss			
		1.0	-	1.0	"		dry	N	red, cg, ss			
		4.2	-	4.2	"		dry	N	red/yell/wh, clay			
		0.8	-	0.8	"		dry	N	red/yell/wh, clay			
		0.5	-	0.5	"		dry	N	lt red, cg, ss, some clay			
		0.1	-	0.1	"		dry	N	lt. red/wh, cg, ss, some clay			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-536	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/20/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bla): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla):

DEPTH (F-T)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		0.0	-	0.0			dry	N	med brn, cg, ss			1621 BG FID: 0.0 ppm WELL CONSTRUCTION
		0.0	-	0.0			dry	N	lt brn, cg, ss, v. little clay			
		0.0	-	0.0	100%		dry	N	red/brn, cg, ss, clayey sand			
		0.0	-	0.0			dry	N	red/brn, cg, ss, some ^{fw} clay			
		0.2	-	0.2			dry	N	yell/red, cg, ss, v. little clay			
		0.0	-	0.0			dry	N	red/brn, cg, ss, v. little clay			
		1.8	-	1.8			dry	N	red/wh, clay			
		0.0	-	0.0			dry	N	lt red/wh, clay			
		1.8	-	1.8			dry	N	lt red/wh, clay			
		0.0	-	0.0			dry	N	lt red/wh, cg, ss, some clay			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B37	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/20/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bla): 20'
TOC ELEVATION (ft mas): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		0.0	-	0.0			dry	N	med brn, cg, ss			$\frac{1700}{36 \text{ FTD}}$ 0.0 WELL CONSTRUCTION
		0.0	-	0.0			"	N	red/brn, cg, ss			
		0.0	-	0.0	100%		"	N	brn/yell., cg, ss, some clay			
		0.0	-	0.0			"	N	brn/yell, cg, ss, some clay			
		0.0	-	0.0			"	sat atcl	lt brn, cg, ss			
		0.0	-	0.0			dry	N	red, cg, ss			
		0.0	-	0.0			"	N	red, cg, ss, some clay			
		0.0	-	0.0			"	N	red, cg, ss, some clay			
		0.0	-	0.0			"	N	brn/yell, cg, ss, some clay			
		0.0	-	0.0			"	N	lt red, clay			

BASE: NAS Whiting Field - Av Gas Pipeline

SITE ID: WHFAVGAS

PROJECT NO.: N0409

BORING ID: WHFAVGAS-³⁸

WELL ID: NA

PIEZOMETER ID: NA

CONTRACTOR: Ambient Technologies

COMPLETION DATE: 10/21/00

LOGGED BY: C. Waller

METHOD: DPT

BORING DIAMETER (in): 2"

TOTAL DEPTH (ft bls): 20'

TOC ELEVATION (ft msl): NA

SCREEN INTERVAL (ft bls): NA

DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
2000.0	10.4	641.0	6.0	634.0				red brn, cg, ss				
2049.6	10.4	641.0	6.0	634.0				dk gry, cg, ss				
5328	10.4	151.5	151.5	3200.9	100%			red / gry, cg, ss, some clay blk staining				
302.0	13.2	14.8	14.8	3146.2				red, cg, ss, some clay blk staining				
5328	13.2	5346.8	5346.8					red / yell, cg, ss, some clay blk staining				
483.0	14.9	468.1	468.1					red / yell / wh, cg, ss, clayey sand				
131.0	61.2	69.8	69.8					red / yell, cg, ss, clayey sand				
302.0	13.2	286.8	286.8					lt red / wh cg, ss, some clay				
5328	10.4	42.38	42.38					lt red / wh, cg, ss				
2000.0	10.4							lt. red / wh, cg, ss				

0743
 BG FID: 0.5
 ppm
 0.0 ppm
 WELL CONSTRUCTION

SE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B-39	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 12/21/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
CELESTIAL ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

SAMPLE INTERVAL/ SAMPLE ID	FID (P.M)			FT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
	UNFILTERED	FILTERED	REPORTED								
	3.0	-	-		55	dry	N	lt brn/yell, cg, ss			
	2.0	-	2.0		55	dry	N	red/yell, cg, ss, some clay			
	1.4	-	1.4		100*	"	N	red/yell/wh, cg, ss, some clay			
	1.5	-	1.5		"	"	N	red/yell, cg, ss, clayey sand			
	1.4	-	1.4		"	"	N	red/brn, cg, ss, some clay			
	1.1	-	1.1		"	"	N	red/yell, clayey sand			
	2.6	-	2.6		"	"	N	yell/brn, cg, ss, clayey sand			
	1.6	-	1.6		"	"	N	red/yell, cg, ss, clayey sand			
	1.4	-	1.4		"	"	N	lt red/yell, cg, ss, clayey sand			
	1.4	-	1.4		"	"	N	wh, cg, ss			

0825

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS- 40	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/2/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
FOOT ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (F1)	SAMPLE INTERVAL SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		1.7	-	1.7		HA	dry	N	red brn, cg, ss			0900 86 FID: 2.3 ppm
		1.3	-	1.3		HA	dry	N	med brn, cg, ss			
		2.7	-	2.7		100%	"	"	red/yell, cg, ss, some clay			
		2.3	-	2.3		"	"	"	red/yell/wh, ss, clayey sand cg			
		2.1	-	2.1		"	"	"	red, cg, ss, some clay			
		1.8	-	1.8		"	"	"	lt red/wh, cg, ss			
		1.8	-	1.8		"	"	"	red/yell, cg, ss, some clay			
		1.7	-	1.7		"	"	"	"			
		1.9	-	1.9		"	"	"	"			
		1.8	-	1.8		"	"	"	red/wh, cg, ss, clayey sand			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B41	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/21/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bla): 20'
LOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla): NA

DEPTH (ft)	SAMPLE INTERVAL SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		2.2 ppm										
10.10	1.3	-	-	1.3	#	dry	N	yell/born, cg, ss			1010 86 FID: 2.2 ppm	
10.20	1.4	-	-	1.4	#	dry	N	yell/born, cg, ss				
10.30	2.1	-	-	2.1	1008	"	"	yell/born, cg, ss, some clay				
10.40	2.0	-	-	2.0	"	"	"	"				
10.50	2.0	-	-	2.0	"	"	"	"				
10.60	1.9	-	-	1.9	"	"	"	red/yell, cg, ss, clayey sand				
10.70	2.1	-	-	2.1	"	"	"	yell/red, cg, ss, some clay				
10.80	1.6	-	-	1.6	"	"	"	"				
10.90	1.5	-	-	1.5	"	"	"	yell/red, clay				
11.00	1.7	-	-	1.7	"	"	"	"				

PROJECT NAME: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B/2	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/21/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
GROUND ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
	UNFILTERED	FILTERED	CORRECTED								
2.8	0.8	-	0.8			dry	N	yell/tan, CG, SS			
1.1	-	-	1.1			dry	N	yell/tan, CG, SS			
3.4	-	-	3.4	100%		"	"	LT. BRN, CG, SS			
3.5	-	-	3.5	"		"	"	LT. BRN, CG, SS			
4.0	-	-	4.0	"		"	"	LT BRN, RED, CG, SS, SOME CLAY			
3.0	-	-	3.0	"		"	"	LT BRN, RED, SS, CG, SOME CLAY			
3.4	-	-	3.4	"		"	"	LT. BRN, RED, SOME CLAY, SS, CG			
2.9	-	-	2.9	"		"	"	RED, SOME CLAY, CG, SS			
2.6	-	-	2.6	"		"	"	RED, LT TAN, CLAY, SS, CG			
2.8	-	-	2.8	"		"	"	TAN SAND			

117

CASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B43	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/24/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bta): 20'
LOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bta): NA	DEPTH TO GW (ft bta): NA

SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
	UNFILTERED	FILTERED	CORRECTED							
	1.1	-	1.1		dry	N	lt brn, cg, ss			
	1.0	-	1.0		dry	N	lt. brn, cg, ss			
	2.0	-	2.0		"	"	Yell/brn, cg, ss, some clay			
	1.6	-	1.6		"	"	red/wh/yell, cg, ss, clayey sand			
	2.2	-	2.2		"	"	red/brn, cg, ss, some clay			
	2.0	-	2.0		"	"	red/yell, cg, ss, clayey sand			
	1.5	-	1.5		"	"	"			
	1.5	-	1.5		"	"	lt red/yell, cg, ss, some clay			
	1.3	-	1.3		"	"	Yell/red, cg, ss, some clay			
	1.6	-	1.6		"	"	lt red/wh, cg, ss			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B44	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/21/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls):
BOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls):

DEPTH (FT)	SAMPLE INTERVAL SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		4.0	—	4.0			dry	N	lt. brn, cg, ss			12.3 (
		4.4	—	4.4			dry	N	red brn, cg, ss			36 FT @ 4.0
		2.4	—	2.4		100%	H	N	yell/brn, cg, ss, some clay			
		3.3	—	3.3		"	"	"	yell/brn, cg, ss, v. little clay			
		3.3	—	3.3		"	"	"	red/brn, cg, ss, v.l. clay			
		3.4	—	3.4		"	"	"	red/brn, cg, ss, v.l. clay			
		3.4	—	3.4		"	"	"	lt. red, cg, ss, some clay			
		6.4	3.4	3.0		"	"	"	red/brn, cg, ss, some clay			
		3.1	—	3.1		"	"	"	lt red/wh, cg, ss, clayey sand			
		3.4	—	3.4		"	"	"	red/yell, cg, ss, clayey sand			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B45	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/21/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (In): 2"	TOTAL DEPTH (ft bls):
LOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls):

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		17.5	5.2	12.3		dry	N	red/born/yell, CG, SS				
		27.5	6.1	21.4		dry	N	med. brn, CG, SS				
		2.5	-	2.5		dry	N	red/yell, CG, SS, some clay				
		3.8	-	3.8		"	"	wh, CG, SS				
		2.2	-	2.2		"	"	red/yell, CG, SS, some clay				
		2.4	-	2.4		"	"	brn/yell, CG, SS, some clay				
		2.8	-	2.8		"	"	lt. red, CG, SS				
		2.2	-	2.2		"	"	red/yell, CG, SS some clay				
		2.0	-	2.0		"	"	lt red/wh, CG, SS				
		2.7	-	2.7		"	"	red/brn, CG, SS				

14250
1500

PHASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 46	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/21/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls):
ROC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls):

DEPTH (F1)	SAMPLE INTERVAL SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		1528 BB FID: 2.0 ppm										
9.5	1.8	22.2	2.0	20.2		# dry	N	lt. brn/yell, cg, ss				
		22.4	2.0	20.4		# dry	N	lt brn, cg, ss				
		2.4	2.4			100%	K S	red/yell, cg, ss, clayey sand				
		4.7	4.7			"	H H	red/yell, cg, ss, some clay / brn, cg, ss max				
		2.3	2.3			"	" "	red/yell, cg, ss, some clay				
		3.3	3.3			"	" "	red/yell, cg, ss, clayey sand				
		2.1	2.1			"	" "	red/brn, cg, ss, v.l. clay				
		1.9	1.9			"	" "	red/brn, cg, ss, some clay				
		2.0	2.0			"	" "	red/yell, clay				
						"	" "	red/yell/brn, cg, ss mix				

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 48	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/22/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
												0745 26 FID: 0.0 ppm
0												
2		0.0	-	0.0			dry	N	red, cg, ss, v.l. clay			
4		0.0	-	0.0			dry	N	red/brn. cg, ss			
5		0.0	-	0.0		100%	dry	N	red, cg, ss, some clay			
6		0.0	-	0.0			dry	N	red, cg, ss, some clay			
7		0.0	-	0.0			dry	N	red, cg, ss, v.l. clay			
8		0.0	-	0.0			dry	N	red, cg, ss, some clay			
9		0.0	-	0.0			dry	N	red, cg, ss, v.l. clay			
10		0.0	-	0.0			dry	N	red, cg, ss, some clay			
11		0.0	-	0.0			dry	N	red, cg, ss, v.l. clay			
12		0.0	-	0.0			dry	N	"			
13		0.0	-	0.0			dry	N	"			
14		0.0	-	0.0			dry	N	red/yell. cg, ss, v.l. clay			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 49	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/22/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bla): 20'
TOC ELEVATION (ft masl): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
0		0.2	-	0.2							0821 BG FID: 0.0 ppm	
2		0.0	-	0.0			dry	N	brn, cg, ss			
4		0.0	-	0.0			dry	N	brn, cg, ss			
5		0.0	-	0.0			dry	N	red/brn, cg, ss			
6		0.0	-	0.0			dry	N	red, cg, ss, v. l. clay			
8		0.1	-	0.1			dry	N	red/yell, cg, ss, v. l. clay			
10		0.0	-	0.0			dry	N	red/blk, cg, ss, v. little clay			
12		0.0	-	0.0			dry	N	lt red, cg, ss			
14		0.0	-	0.0			dry	N	red/brn, cg, ss			
16		0.0	-	0.0			dry	N	red/yell, cg, ss, v. l. clay			
18		0.2	-	0.2			dry	N	red, cg, ss, some clay			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B50	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/22/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft mas): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
2		1.2	-	1.2			dry	N	brn/blk, cg, ss			OBSO BG FID: 0.0 ppm
4		1.0	-	1.0			dry	N	red/brn, cg, ss			
5		1.2	-	1.2	100%		dry	N	red, cg, ss, v.l. clay			
7		1.1	-	1.1	"	"	"	N	"			
8		1.1	-	1.1	"	"	"	N	"			
10		1.1	-	1.1	"	"	"	N	"			
12		1.1	-	1.1	"	"	"	N	"			
14		1.5	-	1.5	"	"	"	N	"			
15		1.4	-	1.4	"	"	"	N	red/yell, cg, ss, some clay			
17		1.2	-	1.2	"	"	"	N	red/yell, cg, ss, clayey sand			
18		1.2	-	1.2	"	"	"	N	"			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B51	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/22/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (In): 2"	TOTAL DEPTH (ft bla):
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla):

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		3.4	-	3.4	#		dry	N	brn, cg, ss			0935 BGFID: 2.7
		2.8	-	2.8	#		dry	N	red/brn, cg, ss			
		2.7	-	2.7	100%		dm	N	red, cg, ss			
		3.6	-	3.6	"		dm	N	red, cg, ss			
		4.0	-	4.0	"		dm	N	red, cg, ss			
		1.3	-	1.3	"		dm	N	red/yell, cg, ss, some clay			
		4.9	-	4.9	"		dm	N	red/yell, cg, ss, some clay			
		3.2	-	3.2	"		dm	N	red/yell, cg, ss, some clay			
		9.1 2.8	-	6.3	"		dm	N	red/yell, cg, ss, some clay			
		2.7	-	2.7	"		dm	N	lt red/yell, cg, ss, v.l. clay			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B54	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/22/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls):
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls):

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
2.3	2.3	5.1	3.1	2.0		dry	N	red, cg, ss			8001042 BG FID: 37 ppm	
3.2	3.2	-	-	3.2		"	"	"				
3.0	3.0	-	-	3.0	100%	"	"	"				
3.1	3.1	-	-	3.1	"	"	"	"				
2.9	2.9	-	-	2.9	"	"	"	"				
2.8	2.8	-	-	2.8	"	"	"	"				
2.5	2.5	-	-	2.5	"	"	"	"				
2.3	2.3	-	-	2.3	"	"	"	"				
2.3	2.3	-	-	2.3	"	"	"	"				
2.3	2.3	-	-	2.3	"	"	"	"				

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B55	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/22/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
2.0	-	2.1	-	3.1								1015 BG FID: 2.6 ppm
2.0	-	1.9	-	1.9								
2.0	-	2.9	-	2.9				red, cg, ss, some clay				
2.0	-	2.3	-	2.3								
2.0	-	2.4	-	2.4								
2.0	-	2.0	-	2.0								
2.0	-	2.6	-	2.6								
2.0	-	1.7	-	1.7								
2.0	-	2.4	-	2.4								
2.0	-	2.0	-	2.0								
2.0	-	2.0	-	2.0								

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B56	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/22/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
	0.8	0.9	-	0.8	"	"	"	"				<u>1356</u> BG FID : 1.6 ppm WELL CONSTRUCTION
	0.9	0.9	-	0.9	"	"	"	"				
	0.9	0.9	-	0.9	"	"	"	"				
	1.1	1.1	-	1.1	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.6	1.6	-	1.6	100%	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.2	1.2	-	1.2	"	"	"	"				
	1.3	1.3	-	1.3	"	"	"	"				
	1.6	1.6	-	1.6	"	"	"	"				
	1.3	1.3	-	1.3	"							

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B57	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/22/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bla): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
0.7	0.7	1.3	-	0.7		dry	N	brn/red, cg, ss				
1.3	1.3	1.3	-	1.3		"	"	red, cg, ss				
1.8	1.8	1.8	-	1.8		"	"	"				
2.4	2.4	2.4	-	2.4		"	"	"				
2.7	2.7	2.7	-	2.7		"	"	"				
2.1	2.1	2.1	-	2.1		"	"	"				
1.9	1.9	1.9	-	1.9		"	"	"				
3.1	3.1	3.1	-	3.1		"	"	"				
0.5	0.5	0.5	-	0.5		"	"	"				
0.5	0.5	0.5	-	0.5		"	"	"				

1420:
 BG FID:
 0.9ppm

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B58	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/23/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
0												0730 BGFID: 0.0 ppm
2		0.0	-	0.0		##	dry	N	red, cg, ss, some clay			
4		0.0	-	0.0		##	dry	N	red, cg, ss, some clay			
5		0.0	-	0.0		100%	dry	N	"			
6		0.0	-	0.0		"	dry	N	"			
8		0.0	-	0.0		"	"	"	"			
10		0.0	-	0.0		"	"	"	"			
12		0.0	-	0.0		"	"	"	"			
14		0.0	-	0.0		"	"	"	"			
15		0.0	-	0.0		"	"	"	"			
16		0.0	-	0.0		"	"	"	"			
17		0.0	-	0.0		"	"	"	"			
18		0.0	-	0.0		"	"	"	"			
19		0.0	-	0.0		"	"	"	"			
20		0.0	-	0.0		"	"	"	"			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 59	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/23/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft ms): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
0												0810 B6FID: 0.0 ppm WELL CONSTRUCTION
2		0.1	-	0.1		HA	dry	N	red, cg, ss, v.l. clay			
4		0.0	-	0.0		HA	dry	N	red, cg, ss, some clay			
5		0.1	-	0.1		100%	dry	N	red/yell, cg, ss, some clay			
6		0.1	-	0.1		"	dry	N	"			
7		0.9	-	0.9		"	dry	N	"			
10		0.5	-	0.5		"	dry	N	red, cg, ss, v.l. clay			
12		0.4	-	0.4		"	dry	N	red/yell, cg, ss, v.l. clay			
15		0.3	-	0.3		"	dry	N	red, cg, ss			
18		2.8	-	2.8		"	dry	N	red, cg, ss			
20		1.0	-	1.0		"	dry	N	"			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 60	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/23/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft mal): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
2		1.0	-	1.0		HA	dry	N	brn/red, cg, ss			0847 BG FID:
4		0.8	-	0.8		HA	dry	N	red/yell, cg, ss, v. l. clay			
5		1.0	-	1.0		100%	dry	N	yell/red, cg, ss, some clay			
6		0.9	-	0.9		"	dry	N	red/yell, cg, ss, some clay			
7		0.9	-	0.9		"	dry	N	red/yell, cg, ss, clayey sand			
8		0.7	-	0.7		"	dry	N	red, cg, ss			
12		1.2	-	1.2		"	dry	N	red/yell, cg, ss			
14		1.2	-	1.2		"	dry	N	"			
16		2.0	-	2.0		"	dry	N	red/yell, cg, ss, some clay			
18		1.0	-	1.0		"	dry	N	red/wh/yell, cg, ss			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B61	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/23/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
0												0939 B6 FID: 0.3 ppm
2		1.2	-	1.2		HA	dry	N	red/bm, cg, ss, v.l. clay			
4		1.0	-	1.2		HA	dry	N	blk/bm, cg, ss			
6		1.0	-	1.2		100%	"	"	red/yell, cg, ss, some clay			
8		0.6	-	0.6		"	"	"	red/yell, cg, ss, clayey sand			
10		0.4	-	0.4		"	"	"	"			
12		0.4	-	0.4		"	"	"	red/yell, cg, ss, some clay			
14		0.5	-	0.5		"	"	"	lt red/yell, cg, ss, v.l. clay			
16		0.6	-	0.6		"	"	"	lt. red, cg, ss			
18		0.7	-	0.7		"	"	"	lt. red/wh, cg, ss			
20		0.6	-			"	"	"	red, cg, ss, some clay			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B62	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/23/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft masl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
2		2.3	-	2.3		HA	dry	N	brn/red, cg, ss			1030 BG FID: 2.7ppm
1		2.1	-	2.1		HA	"	"	red/brn, cg, ss, v.l. clay			
6		2.0	-	2.0		100%	"	"	red/yell, cg, ss, some clay			
6		2.2	-	2.2		"	"	"	red/yell, cg, ss, clayey sand			
1		2.2	-	2.2		"	"	"	red/yell, cg, ss, some clay			
0		2.3	-	2.3		"	"	"	red/yell, cg, ss, clayey sand			
2		1.9	-	1.9		"	"	"	lt red/yell, cg, ss, some clay			
5		2.2	-	2.2		"	"	"	red, cg, ss			
6		2.1	-	2.1		"	"	"	"			
1		2.0	-	2.0		"	"	"	lt red/wh, cg, ss			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B63	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/23/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		3.9	-	3.9		#	dry	N	red, cg, ss, v. l. clay			110 BGFID: 4.2 ppm
		3.8	-	3.8		#	dry	N	red/bm, cg, ss, some clay			
		3.9	-	3.9		100%	"	"	yell, cg, ss, some clay			
		4.0	-	4.0		"	"	"	"			
		3.9	-	3.9		"	"	"	yell/red/wh, clay			
		4.0	-	4.0		"	"	"	"			
		4.2	-	4.2		"	"	"	red/wh/yell, cg, ss, some clay			
		4.6	-	4.6		"	"	"	red/yell, cg, ss, some clay			
		4.3	-	4.3		"	"	"	yell/red, cg, ss, v. l. clay			
		4.6	-	4.6		"	"	"	lt. red/wh, cg, ss			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 64	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/23/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bla): 20'
TOC ELEVATION (ft mas): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		4.2	-	4.2		27	N	brn, cg, ss			1326 Bg PID: 2.5 ppm	
		4.3	-	4.3		"	"	brn, cg, ss				
		1.4	-	1.4	100%	"	"	brn/yell, cg, ss, some clay				
		0.5	-	0.5	"	"	"	red/yell/wh, cg, ss, clayey sand				
		0.3	-	0.3	"	"	"	red/yell, cg, ss, clayey sand				
		0.2	-	0.2	"	"	"	"				
		0.5	-	0.5	"	"	"	red/wh/yell, cg, ss, some clay				
		0.6	-	0.6	"	"	"	red/yell, cg, ss, v.l. clay				
		0.3	-	0.3	"	"	"	yell/red, cg, ss				
		0.5	-	0.5	"	"	"	lt. red/yell/wh, cg, ss				

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 65	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/23/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft mas): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	1422 BG FID: 0.1 ppm WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		0.8	-	0.8		HA	dry	N	red/yell, cg, ss, v.l. clay			
		0.0	-	0.0		HA	dry	N	red/bwn, cg, ss, some clay			
		0.0	-	0.0		100%	"	N	yell/bwn, cg, ss, v.l. clay			
		0.0	-	0.0		"	"	N	yell/bwn/wh, cg, ss, some clay			
		0.0	-	0.0		"	"	"	red/yell/wh, cg, ss, clayey sand			
		0.0	-	0.0		"	"	"	"			
		0.0	-	0.0		"	"	"	red, cg, ss, some clay			
		0.0	-	0.0		"	cl	"	red/yell, cg, ss, clayey sand			
		0.0	-	0.0		"	"	"	red/yell, cg, ss, some clay			
		0.0	-	0.0		"	"	"	red/yell, cg, ss			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 66	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/24/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	0745 RG FID: 0.0 ppm WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		0.1	-	0.1								
		0.0	-	0.0		dry	N	red/bm, cg, ss				
		0.0	-	0.0		"	U	red/bm, cg, ss				
		0.0	-	0.0	100%	"	"	yell/red, cg, ss, some clay				
		0.0	-	0.0	"	"	"	red/yell, cg, ss, some clay				
		0.0	-	0.0	"	"	"	red/wh, cg, ss, some clay				
		0.0	-	0.0	"	"	"	red/wh, cg, ss, v. l. clay				
		0.0	-	0.0	"	"	"	red/wh, cg, ss				
		0.0	-	0.0	"	"	"	"				
		0.0	-	0.0	"	"	"	wh/yell, cg, ss				
		0.0	-	0.0	"	"	"	yell/red/wh, cg, ss				

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B67	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/23/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls): 20'
TOC ELEVATION (ft mas): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	1035 BGFID: 0.0 ppm WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		0.0	-	0.0		HA	dm	N	red/bm, cg, ss			
		0.0	-	0.0		HA	dy	N	red/bm, cg, ss			
		0.0	-	0.0	100%	"	"	"	red/yell, cg, ss, some clay			
		0.0	-	0.0	"	"	"	"	"			
		0.0	-	0.0	"	"	"	"	red/yell/wh, cg, ss, clayey sand			
		0.0	-	0.0	"	"	"	"	"			
		0.0	-	0.0	"	"	"	"	"			
		0.0	-	0.0	"	"	"	"	red/yell, cg, ss			
		0.0	-	0.0					red/yell, cg, ss			
		0.0	-	0.0					yellow, cg, ss			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 68	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/23/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bla): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		0.1	-	0.1							1600 BG FID: 0.1 ppm	
		1.6	-	1.6		dry	N	blk/red, cg, ss, v.l. clay				
		0.0	-	0.0		dry	N	red/yell, cg, ss, v.l. clay				
		0.0	-	0.0		100%	"	red/yell, cg, ss, some clay				
		0.0	-	0.0		"	"	"				
		0.0	-	0.0		"	"	red/whl yell., cg, ss, clayey sand				
		0.0	-	0.0		"	"	"				
		0.0	-	0.0		"	"	red/yell/wh, clay				
		0.0	-	0.0		"	"	lt red/wh, clay				
		0.0	-	0.0		"	"	lt red/wh, clay				
		0.0	-	0.0		"	"	"				

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 20	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/24/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bla): 20'
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		0.0	-	0.0		HA	dry	N	yell/bwn, cg, ss, some clay			0920 Bg FID: 0.0 ppm.
		0.0	-	0.0		HA	dry	N	red/yell, cg, ss, some clay			
		0.0	-	0.0		100%	dry	N	red/yell, clay			
		0.0	-	0.0		"	dry	N	red/yell clay			
		0.0	-	0.0		"	dry	N	red/yell, cg, sand, some clay, ss			
		0.0	-	0.0		"	dry	N	red/yell sand, cg, ss			
		0.0	-	0.0		"	dry	N	yell/white, cg, little clay			
		0.0	-	0.0		"	dry	N	red/white, cg, ss, some clay			
		1.2	-	0.0		"	dry	N	red/yell, cg, ss, little clay			
		0.0	-	0.0		"	dry	N	yell/white, cg, little clay			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 701	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/24/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (In): 2"	TOTAL DEPTH (ft bla): 20'
TOC ELEVATION (ft msf): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	1041 REG FID: 0.6 ppm WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
2		0.0	-	0.0		HA by N		brown/red, clay				
1		0.7	-	0.0		HA		red/yell, cg, ss				
1		0.0	-	0.0		100%		red/yell, cg, ss				
1		0.0	-	0.0		"		yell/red, cg, ss				
0		0.0	-	0.0		"		yell/red, cg, ss mixed w/red/brown gravel				
2		0.0	-	0.0		"		white/gray clay; mixed w/yellow/red cg, ss				
4		0.0	-	0.0		"		red/yell, cg, ss				
5		0.0	-	0.0		"		yellow/gray, cg, ss				
7		0.0	-	0.0		"		yell/gray, cg, ss				
7		0.0	-	0.0		"		yell/white, cg, ss				

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 72	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/24/00	LOGGED BY: C. Waller
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bla): 20'
TOC ELEVATION (ft mas): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla): NA

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		0.0	-	0.0	NA	HA	dry	red/brown, cg, ss				
		0.0	-	0.0	"	HA	"	red/brown, cg, ss				
		0.0	-	0.0	"	50%	"	red/brown, cg, ss				
		0.0	-	0.0	"	50%	"	red/brown silty clay				
		0.1	-	0.0	"	50%	"	yell/brown, cg, ss w/some clay				
		0.0	-	0.0	"	50%	"	yell/brown, cg, ss w/some clay				
		1.6	-	0.0	"	100%	"	yell/brown, cg, ss w/some clay				
		0.0	-	0.0	"	100%	"	yell/brown, cg, ss				
		4.1	-	0.0	"	100%	"	brown/red, cg, ss				
			-		"		"	yell/white, cg, ss				

1230
Bky-d:
ppm
WELL CONSTRUCTION

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 873	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/24/00	LOGGED BY: Walter P. HALVERSON
METHOD: DPT	BORING DIAMETER (In): 2 ¹¹	TOTAL DEPTH (ft bls): 20'
OC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls): N/A

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
		10.4	0.6	9.8	NA	HA	dry	none	brown, c, ss			1330 BKRND. 0-0
		0.6	-	0.0	"	HA	dry	"	brown, c, ss			
		0.0	-	0.0	"	100%	dry	"	red/brown, c, ss w/ some clay			
		0.0	-	0.0	"	"	dry	"	red/brown, c, ss w/ some clay			
		0.7	-	0.0	"	"	"	"	red/brown, c, ss w/ some clay			
		0.6	-	0.0	"	"	"	"	red/brown, c, ss w/ some clay			
		17.9	0.4	17.5	"	"	"	"	red/brown, c, ss w/ some clay			
		1.2	-	0.0	"	"	"	"	red/brown, c, ss			
		7.3	0.6	6.7	"	"	"	"	red/brown, c, ss / mixed w/ white, c, ss			
		1.2	-	0.0	"	"	"	"	red/white, c, ss			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 74	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE:	LOGGED BY: C. Walton P. HALVERSON
METHOD: DPT	BORING DIAMETER (in):	TOTAL DEPTH (ft bls):
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls):

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
0-2		159.2	5.0	154.2	NA	HA	✓	✓	LT BRN. CG, DRY			0820 BRND-0.0
2-4		5562.0	44	5557.6	"	HA	✓	✓	LT BRN, SS, CG			
4-6		5562.0	43.7	5552.5	"	100%	✓	✓	LT BRN, SOME CLAY, GREY SS, CG			
6-8		1137.0	71.2	5557.6	"	"	✓	✓	LT BRN, CLAY, CG, SS			
8-10		5562.0	4.4	5557.6	"	"	✓	✓	LT BRN, RED, SOME CLAY, SS, CG			
10-12		319.0	128.0	191.0	"	"	✓	✓	RED & BRN, CG, SS SOME CLAY			
12-14		1112.0	3.8	1108.2	"	"	✓	✓	LT BRN, CLAY, RED SS, CG			
14-16		2191.0	206.0	1975.0	"	"	✓	✓	RED, CLAY, LT BRN. CG, SS			
16-18		5264.0	78	5256.2	"	"	✓	✓	CLAY, SS, CG, LT. BRN. RED.			
18-20		2672.0	217.0	2460.0	"	"	✓	✓	VERY MOIST, FREE PRODUCT, GREY			

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 75	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/25/00	LOGGED BY: C. Weller P. HALVERSON
METHOD: DPT	BORING DIAMETER (in): 2"	TOTAL DEPTH (ft bls):
LOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls):

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
0-2		0.0	-	0.0	NA	HA	DRY	Ø	DARK GREY, CG, SS			
2-4		4.8	-	4.8	"	HA	DRY	Ø	DRY BRN) CG, SS			
4-6		55.7	-	55.7	"	100%	DRY	Ø	BRN) BLK, GREY, SS, CG.			
6-8		6.8	3.4	3.4	"	"	moist	YES	LT BRN) CG, SS, Some CLAY			
8-10		11.5	0.0	11.5	"	"	DRY	Ø	RED, Brown) CG, SS, Some CLAY			
10-12		25.5	5.5	20.0	"	"	DRY	YES	BRN, GREY, Some CLAY			
12-14		18.1	0.0	18.1	"	"	DRY w/ moist locally.	YES	BRN, RED, LT BRN, Some CLAY GREY			
14-16		12.1	0.0	12.1	"	"	DRY	Ø	RED CG, SS, Some CLAY			
16-18		6.6	0.0	6.5	"	"	DRY	Ø	red/brown, cg, ss, Some clay			
18-20		3.2	-	3.2	"	"	DRY	Ø	red/grey, cg, ss, Some clay			

1130
BKRD-0.0

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 76	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE:	LOGGED BY: Walter P. HALVERSON
METHOD: DPT	BORING DIAMETER (in):	TOTAL DEPTH (ft bla): 20
TOC ELEVATION (ft ms): NA	SCREEN INTERVAL (ft bla): NA	DEPTH TO GW (ft bla):

DEPTH (FT)	SAMPLE INTERVAL/ SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
0-2	0	1	0	NA	HA	0	0	DARK GREY, CG				
2-4	2.5	1	2.5	"	HA	0	0	LT. BROWN GREY, SS, CG, SOME CLAY				
4-6	4.9	1	4.9	"	100%	0	0	LT. BRN GREY, SOME CLAY SS, CG				
6-8	4.7	1	4.7	"	"	Some	0	GREY CLAY SS, CG				
8-10	3.0	1	3.0	"	"	Some	0	GREY, RED, BROWN CLAY SS, CG				
10-12	3.8	1	3.8	"	"	DRY	0	RED COARSE GRAIN SAND				
12-14	11.2	5.0	6.2	"	"	DRY	0	RED CG SAND				
14-16	4.2	1	4.2	"	"	DRY	0	GREY, RED, & BROWN CLAY CG, SS				
16-18	4.3	1	4.3	"	"	DRY	0	GREY, RED, SOME CLAY CG, SS				
18-20	4.0	1	4.0	"	"	DRY	0	GREY, RED, BRN. CG, SS				

1215-START
BIRM-42

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 77	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE:	LOGGED BY: C. Walker P. HALVERSON
METHOD: DPT	BORING DIAMETER (In): 2"	TOTAL DEPTH (ft bls): 20
TOC ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls):

DEPTH (FT)	SAMPLE INTERVAL SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
0-2		0.0		0.0	NAHA	NO	NO	GREY SAND w/ ORGANICS SS, CG			21430 0.0ppm	
2-4		16.5	3.5	13.5	" HA	NO	NO	BRN & LT. GREY w/ SOME CLAY				
4-6		0.7		0.7	" 100%	NO	NO	GREY COURSE SAND				
6-8		19.9	4.9	15.0	" "	NO	NO	GREY COURSE SAND, SOME BRN. SAND. CLAY				
8-10		52.4	1.7	50.7	" "	NO	SOME ODOR	GREY & BRN. C. SAND				
10-12		50.0	2.0	48.0	" "	NO	SOME ODOR	BRN. COURSE SAND				
12-14		292.8	9.6	283.2	" "	YES	YES	BRN SAND, SS, CG, MOIST				
14-16		152.7	4.8	147.9	" "	YES	YES	LT BRN SAND, MOIST, CG, SS.				
16-18		140.0	5.6	134.4	" "	YES	YES	LT. BRN. SAND, CG, SS.				
18-20		10.2	2.5	7.7	" "	YES	YES	LT BRN SAND CG, SS				

BASE: NAS Whiting Field - Av Gas Pipeline	SITE ID: WHFAVGAS	PROJECT NO.: N0409
BORING ID: WHFAVGAS-B 78	WELL ID: NA	PIEZOMETER ID: NA
CONTRACTOR: Ambient Technologies	COMPLETION DATE: 10/25/00	LOGGED BY: G. Walker P. HALVERSON
METHOD: DPT	BORING DIAMETER (in):	TOTAL DEPTH (ft bls): 20'
FOOT ELEVATION (ft msl): NA	SCREEN INTERVAL (ft bls): NA	DEPTH TO GW (ft bls):

DEPTH (FT)	SAMPLE INTERVAL SAMPLE ID	FID (PPM)			SPT BLOWS PER FT	FT RECOVERED	MOISTURE	ODOR	LITHOLOGIC DESCRIPTION	LITHOLOGIC SYMBOLS	USCS	WELL CONSTRUCTION
		UNFILTERED	FILTERED	CORRECTED								
	0-2	0.0	/	0.0	NA	HA	NO	NO	BRN. C.S. SS.			
	2-4	0.0	/	0.0	"	HA	NO	NO	DARK GREY C.S, S.S.			
	4-6	18.8	0.0	18.8	"	100%	YES	NO	LT. GREY WET COURSE SAND			
	6-8	14.8	2.9	11.9	"	"	NO	NO	RED & LT BRN. CLAY			
	8-10	14.7	0.0	14.7	"	"	YES	NO	MOIST LT. GREY SAND CG, SS			
	10-12	7.7	6.1	1.0	"	"	NO	NO	RED, BRN, & LT. BRN CLAY			
	12-14	4.4	/	4.4	"	"	YES	NO	RED, BRN, GREY CS, SS SOME CLAY, A LITTLE MOISTURE			
	14-16	0.0	/	0.0	"	"	NO	NO	RED BRN, TAN C.G. SS. SOME CLAY			
	16-18	1.9	/	1.9	"	"	NO	NO	RED, BRN, TAN, CG, SS SOME CLAY			
	18-20	0.0	/	0.0	"	"	NO	NO	RED, BRN, TAN CG, SS SOME CLAY			

1520
0.0 ppm,

APPENDIX C
LABORATORY ANALYTICAL REPORT

Sample Summary

Tetra-Tech, NUS

Job No: F7979

NAS Whiting Field PO#NO052-MSA0200-014

Project No: CTO 114, WR-06

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F7979-1	10/25/00	16:40 PH	10/27/00	SO	Soil	AVGASSLB2308
F7979-2	10/25/00	17:30 PH	10/27/00	SO	Soil	AVGASSLB2116
F7979-3	10/26/00	09:30 PH	10/27/00	SO	Soil	AVGASSLB0802
F7979-4	10/26/00	09:45 PH	10/27/00	SO	Soil	AVGASSLB1504
F7979-5	10/26/00	10:00 PH	10/27/00	SO	Soil	AVGASSLB4504
F7979-6	10/26/00	10:20 PH	10/27/00	SO	Soil	AVGASSLB4604
F7979-7	10/26/00	10:30 PH	10/27/00	SO	Soil	AVGASSLB4704
F7979-8	10/26/00	11:30 PH	10/27/00	AQ	Water	AVGASEL00101
F7979-9	10/26/00	12:30 PH	10/27/00	SO	Soil	AVGASSLB7404
F7979-10	10/26/00	00:00 PH	10/27/00	SO	Soil	AVGASSLBXXYYD

Report of Analysis

Client Sample ID: AVGASSLB2308		Date Sampled: 10/25/00
Lab Sample ID: F7979-1		Date Received: 10/27/00
Matrix: SO - Soil		Percent Solids: 79.2
Method: SW846 8260B		
Project: NAS Whiting Field PO#NOO52-MSA0200-014		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	H009864.D	1	11/07/00	NAF	n/a	n/a	VH213

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	50	ug/kg	
71-43-2	Benzene	ND	5.0	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	ug/kg	
75-25-2	Bromoform	ND	5.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	ug/kg	
67-66-3	Chloroform	ND	5.0	ug/kg	
75-15-0	Carbon disulfide	ND	10	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	10	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	ug/kg	
591-78-6	2-Hexanone	ND	10	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	10	ug/kg	
74-83-9	Methyl bromide	ND	5.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	ug/kg	
75-09-2	Methylene chloride	ND	10	ug/kg	
78-93-3	Methyl ethyl ketone	ND	10	ug/kg	
100-42-5	Styrene	ND	5.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	ug/kg	
108-88-3	Toluene	ND	5.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AVGASSLB2308 Lab Sample ID: F7979-1 Matrix: SO - Soil Method: SW846 8260B Project: NAS Whiting Field PO#NOO52-MSA0200-014	Date Sampled: 10/25/00 Date Received: 10/27/00 Percent Solids: 79.2
---------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		71-122%
2037-26-5	Toluene-D8	100%		73-128%
460-00-4	4-Bromofluorobenzene	98%		53-158%
17060-07-0	1,2-Dichloroethane-D4	107%		71-122%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AVGASSLB2308	Date Sampled: 10/25/00
Lab Sample ID: F7979-1	Date Received: 10/27/00
Matrix: SO - Soil	Percent Solids: 79.2
Method: EPA 8310	
Project: NAS Whiting Field PO#NOO52-MSA0200-014	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	EE000633.D	1	11/11/00	MRE	11/08/00	OP2285	GEE29

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	840	ug/kg	
208-96-8	Acenaphthylene	ND	840	ug/kg	
120-12-7	Anthracene	ND	420	ug/kg	
56-55-3	Benzo(a)anthracene	ND	420	ug/kg	
50-32-8	Benzo(a)pyrene	ND	84	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	84	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	84	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	84	ug/kg	
218-01-9	Chrysene	ND	420	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	84	ug/kg	
206-44-0	Fluoranthene	ND	420	ug/kg	
86-73-7	Fluorene	ND	420	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	84	ug/kg	
91-20-3	Naphthalene	ND	420	ug/kg	
90-12-0	1-Methylnaphthalene	ND	420	ug/kg	
91-57-6	2-Methylnaphthalene	ND	420	ug/kg	
85-01-8	Phenanthrene	ND	420	ug/kg	
129-00-0	Pyrene	ND	420	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	101%		22-130%
92-94-4	p-Terphenyl	101%		53-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AVGASSLB2308	Date Sampled: 10/25/00
Lab Sample ID: F7979-1	Date Received: 10/27/00
Matrix: SO - Soil	Percent Solids: 79.2
Method: FLORIDA-PRO	
Project: NAS Whiting Field PO#NOO52-MSA0200-014	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	OP11858.D	1	11/13/00	KP	11/08/00	OP2283	GOP478

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	49%		40-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB2116	
Lab Sample ID:	F7979-2	Date Sampled: 10/25/00
Matrix:	SO - Soil	Date Received: 10/27/00
Method:	SW846 8260B	Percent Solids: 83.2
Project:	NAS Whiting Field PO#NO052-MSA0200-014	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009865.D	1	11/07/00	NAF	n/a	n/a	VH213
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	49	ug/kg	
71-43-2	Benzene	ND	4.9	ug/kg	
75-27-4	Bromodichloromethane	ND	4.9	ug/kg	
75-25-2	Bromoform	ND	4.9	ug/kg	
108-90-7	Chlorobenzene	ND	4.9	ug/kg	
75-00-3	Chloroethane	ND	4.9	ug/kg	
67-66-3	Chloroform	ND	4.9	ug/kg	
75-15-0	Carbon disulfide	ND	9.8	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.9	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.9	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.9	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.9	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.9	ug/kg	
124-48-1	Dibromochloromethane	ND	4.9	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.9	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	9.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.9	ug/kg	
100-41-4	Ethylbenzene	ND	4.9	ug/kg	
591-78-6	2-Hexanone	ND	9.8	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	9.8	ug/kg	
74-83-9	Methyl bromide	ND	4.9	ug/kg	
74-87-3	Methyl chloride	ND	4.9	ug/kg	
75-09-2	Methylene chloride	ND	9.8	ug/kg	
78-93-3	Methyl ethyl ketone	ND	9.8	ug/kg	
100-42-5	Styrene	ND	4.9	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.9	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.9	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.9	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.9	ug/kg	
108-88-3	Toluene	ND	4.9	ug/kg	
79-01-6	Trichloroethylene	ND	4.9	ug/kg	
75-01-4	Vinyl chloride	ND	4.9	ug/kg	
1330-20-7	Xylene (total)	ND	15	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB2116	Date Sampled:	10/25/00
Lab Sample ID:	F7979-2	Date Received:	10/27/00
Matrix:	SO - Soil	Percent Solids:	83.2
Method:	SW846 8260B		
Project:	NAS Whiting Field PO#NOO52-MSA0200-014		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		71-122%
2037-26-5	Toluene-D8	98%		73-128%
460-00-4	4-Bromofluorobenzene	97%		53-158%
17060-07-0	1,2-Dichloroethane-D4	108%		71-122%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB2116		Date Sampled:	10/25/00
Lab Sample ID:	F7979-2		Date Received:	10/27/00
Matrix:	SO - Soil		Percent Solids:	83.2
Method:	EPA 8310			
Project:	NAS Whiting Field PO#NOO52-MSA0200-014			

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	EE000634.D	1	11/11/00	MRE	11/08/00	OP2285	GEE29

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	800	ug/kg	
208-96-8	Acenaphthylene	ND	800	ug/kg	
120-12-7	Anthracene	ND	400	ug/kg	
56-55-3	Benzo(a)anthracene	ND	400	ug/kg	
50-32-8	Benzo(a)pyrene	ND	80	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	80	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	80	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	80	ug/kg	
218-01-9	Chrysene	ND	400	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	80	ug/kg	
206-44-0	Fluoranthene	ND	400	ug/kg	
86-73-7	Fluorene	ND	400	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	80	ug/kg	
91-20-3	Naphthalene	ND	400	ug/kg	
90-12-0	1-Methylnaphthalene	ND	400	ug/kg	
91-57-6	2-Methylnaphthalene	ND	400	ug/kg	
85-01-8	Phenanthrene	ND	400	ug/kg	
129-00-0	Pyrene	ND	400	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	102%		22-130%
92-94-4	p-Terphenyl	102%		53-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB2116	Date Sampled:	10/25/00
Lab Sample ID:	F7979-2	Date Received:	10/27/00
Matrix:	SO - Soil	Percent Solids:	83.2
Method:	FLORIDA-PRO		
Project:	NAS Whiting Field PO#NOO52-MSA0200-014		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11859.D	1	11/13/00	KP	11/08/00	OP2283	GOP478
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	82%		40-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB0802		Date Sampled:	10/26/00	
Lab Sample ID:	F7979-3		Date Received:	10/27/00	
Matrix:	SO - Soil		Percent Solids:	94.2	
Method:	SW846 8260B				
Project:	NAS Whiting Field PO#NOO52-MSA0200-014				

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009866.D	1	11/07/00	NAF	n/a	n/a	VH213
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	58	ug/kg	
71-43-2	Benzene	ND	5.8	ug/kg	
75-27-4	Bromodichloromethane	ND	5.8	ug/kg	
75-25-2	Bromoform	ND	5.8	ug/kg	
108-90-7	Chlorobenzene	ND	5.8	ug/kg	
75-00-3	Chloroethane	ND	5.8	ug/kg	
67-66-3	Chloroform	ND	5.8	ug/kg	
75-15-0	Carbon disulfide	ND	12	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.8	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.8	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.8	ug/kg	
124-48-1	Dibromochloromethane	ND	5.8	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	12	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	ug/kg	
100-41-4	Ethylbenzene	ND	5.8	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	12	ug/kg	
74-83-9	Methyl bromide	ND	5.8	ug/kg	
74-87-3	Methyl chloride	ND	5.8	ug/kg	
75-09-2	Methylene chloride	ND	12	ug/kg	
78-93-3	Methyl ethyl ketone	ND	12	ug/kg	
100-42-5	Styrene	ND	5.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.8	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.8	ug/kg	
108-88-3	Toluene	ND	5.8	ug/kg	
79-01-6	Trichloroethylene	ND	5.8	ug/kg	
75-01-4	Vinyl chloride	ND	5.8	ug/kg	
1330-20-7	Xylene (total)	ND	17	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB0802	Date Sampled:	10/26/00
Lab Sample ID:	F7979-3	Date Received:	10/27/00
Matrix:	SO - Soil	Percent Solids:	94.2
Method:	SW846 8260B		
Project:	NAS Whiting Field PO#NOO52-MSA0200-014		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		71-122%
2037-26-5	Toluene-D8	104%		73-128%
460-00-4	4-Bromofluorobenzene	104%		53-158%
17060-07-0	1,2-Dichloroethane-D4	110%		71-122%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AVGASSLB0802

Lab Sample ID: F7979-3

Date Sampled: 10/26/00

Matrix: SO - Soil

Date Received: 10/27/00

Method: EPA 8310

Percent Solids: 94.2

Project: NAS Whiting Field PO#NOO52-MSA0200-014

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	EE000635.D	1	11/11/00	MRE	11/08/00	OP2285	GEE29

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	710	ug/kg	
208-96-8	Acenaphthylene	ND	710	ug/kg	
120-12-7	Anthracene	ND	350	ug/kg	
56-55-3	Benzo(a)anthracene	ND	350	ug/kg	
50-32-8	Benzo(a)pyrene	ND	71	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	71	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	71	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	71	ug/kg	
218-01-9	Chrysene	ND	350	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	71	ug/kg	
206-44-0	Fluoranthene	ND	350	ug/kg	
86-73-7	Fluorene	ND	350	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	71	ug/kg	
91-20-3	Naphthalene	ND	350	ug/kg	
90-12-0	1-Methylnaphthalene	ND	350	ug/kg	
91-57-6	2-Methylnaphthalene	ND	350	ug/kg	
85-01-8	Phenanthrene	ND	350	ug/kg	
129-00-0	Pyrene	ND	350	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	98%		22-130%
92-94-4	p-Terphenyl	97%		53-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB0802		Date Sampled:	10/26/00	
Lab Sample ID:	F7979-3		Date Received:	10/27/00	
Matrix:	SO - Soil		Percent Solids:	94.2	
Method:	FLORIDA-PRO				
Project:	NAS Whiting Field PO#NOO52-MSA0200-014				

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	OP11860.D	1	11/13/00	KP	11/08/00	OP2283	GOP478

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	8.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	82%		40-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AVGASSLB1504	Date Sampled: 10/26/00
Lab Sample ID: F7979-4	Date Received: 10/27/00
Matrix: SO - Soil	Percent Solids: 91.7
Method: SW846 8260B	
Project: NAS Whiting Field PO#NOO52-MSA0200-014	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	H009867.D	1	11/07/00	NAF	n/a	n/a	VH213

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	41.5	52	ug/kg	J
71-43-2	Benzene	ND	5.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.2	ug/kg	
75-25-2	Bromoform	ND	5.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.2	ug/kg	
75-00-3	Chloroethane	ND	5.2	ug/kg	
67-66-3	Chloroform	ND	5.2	ug/kg	
75-15-0	Carbon disulfide	ND	10	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.2	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.2	ug/kg	
124-48-1	Dibromochloromethane	ND	5.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.2	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	10	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.2	ug/kg	
100-41-4	Ethylbenzene	ND	5.2	ug/kg	
591-78-6	2-Hexanone	ND	10	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	10	ug/kg	
74-83-9	Methyl bromide	ND	5.2	ug/kg	
74-87-3	Methyl chloride	ND	5.2	ug/kg	
75-09-2	Methylene chloride	ND	10	ug/kg	
78-93-3	Methyl ethyl ketone	3.9	10	ug/kg	J
100-42-5	Styrene	ND	5.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.2	ug/kg	
108-88-3	Toluene	ND	5.2	ug/kg	
79-01-6	Trichloroethylene	ND	5.2	ug/kg	
75-01-4	Vinyl chloride	ND	5.2	ug/kg	
1330-20-7	Xylene (total)	ND	15	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AVGASSLB1504		Date Sampled: 10/26/00
Lab Sample ID: F7979-4		Date Received: 10/27/00
Matrix: SO - Soil		Percent Solids: 91.7
Method: SW846 8260B		
Project: NAS Whiting Field PO#NOO52-MSA0200-014		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		71-122%
2037-26-5	Toluene-D8	102%		73-128%
460-00-4	4-Bromofluorobenzene	102%		53-158%
17060-07-0	1,2-Dichloroethane-D4	112%		71-122%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AVGASSLB1504

Lab Sample ID: F7979-4

Date Sampled: 10/26/00

Matrix: SO - Soil

Date Received: 10/27/00

Method: EPA 8310

Percent Solids: 91.7

Project: NAS Whiting Field PO#NOO52-MSA0200-014

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE000636.D	1	11/11/00	MRE	11/08/00	OP2285	GEE29
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	730	ug/kg	
208-96-8	Acenaphthylene	ND	730	ug/kg	
120-12-7	Anthracene	ND	360	ug/kg	
56-55-3	Benzo(a)anthracene	ND	360	ug/kg	
50-32-8	Benzo(a)pyrene	ND	73	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	73	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	73	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	73	ug/kg	
218-01-9	Chrysene	ND	360	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	73	ug/kg	
206-44-0	Fluoranthene	ND	360	ug/kg	
86-73-7	Fluorene	ND	360	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	73	ug/kg	
91-20-3	Naphthalene	ND	360	ug/kg	
90-12-0	1-Methylnaphthalene	ND	360	ug/kg	
91-57-6	2-Methylnaphthalene	ND	360	ug/kg	
85-01-8	Phenanthrene	ND	360	ug/kg	
129-00-0	Pyrene	ND	360	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	97%		22-130%
92-94-4	p-Terphenyl	96%		53-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB1504	Date Sampled:	10/26/00
Lab Sample ID:	F7979-4	Date Received:	10/27/00
Matrix:	SO - Soil	Percent Solids:	91.7
Method:	FLORIDA-PRO		
Project:	NAS Whiting Field PO#NO052-MSA0200-014		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11861.D	1	11/13/00	KP	11/08/00	OP2283	GOP478
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	9.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	82%		40-140%	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB4504	Date Sampled:	10/26/00
Lab Sample ID:	F7979-5	Date Received:	10/27/00
Matrix:	SO - Soil	Percent Solids:	95.1
Method:	SW846 8260B		
Project:	NAS Whiting Field PO#NOO52-MSA0200-014		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	H009868.D	1	11/07/00	NAF	n/a	n/a	VH213

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	52	ug/kg	
71-43-2	Benzene	ND	5.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.2	ug/kg	
75-25-2	Bromoform	ND	5.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.2	ug/kg	
75-00-3	Chloroethane	ND	5.2	ug/kg	
67-66-3	Chloroform	ND	5.2	ug/kg	
75-15-0	Carbon disulfide	ND	10	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.2	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.2	ug/kg	
124-48-1	Dibromochloromethane	ND	5.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.2	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	10	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.2	ug/kg	
100-41-4	Ethylbenzene	ND	5.2	ug/kg	
591-78-6	2-Hexanone	ND	10	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	10	ug/kg	
74-83-9	Methyl bromide	ND	5.2	ug/kg	
74-87-3	Methyl chloride	ND	5.2	ug/kg	
75-09-2	Methylene chloride	ND	10	ug/kg	
78-93-3	Methyl ethyl ketone	ND	10	ug/kg	
100-42-5	Styrene	ND	5.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.2	ug/kg	
108-88-3	Toluene	ND	5.2	ug/kg	
79-01-6	Trichloroethylene	ND	5.2	ug/kg	
75-01-4	Vinyl chloride	ND	5.2	ug/kg	
1330-20-7	Xylene (total)	ND	15	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB4504	Date Sampled:	10/26/00
Lab Sample ID:	F7979-5	Date Received:	10/27/00
Matrix:	SO - Soil	Percent Solids:	95.1
Method:	SW846 8260B		
Project:	NAS Whiting Field PO#NOO52-MSA0200-014		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		71-122%
2037-26-5	Toluene-D8	99%		73-128%
460-00-4	4-Bromofluorobenzene	100%		53-158%
17060-07-0	1,2-Dichloroethane-D4	112%		71-122%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB4504		Date Sampled:	10/26/00	
Lab Sample ID:	F7979-5		Date Received:	10/27/00	
Matrix:	SO - Soil		Percent Solids:	95.1	
Method:	EPA 8310				
Project:	NAS Whiting Field PO#NOO52-MSA0200-014				

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	EE000637.D	1	11/11/00	MRE	11/08/00	OP2285	GEE29

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	700	ug/kg	
208-96-8	Acenaphthylene	ND	700	ug/kg	
120-12-7	Anthracene	ND	350	ug/kg	
56-55-3	Benzo(a)anthracene	ND	350	ug/kg	
50-32-8	Benzo(a)pyrene	ND	70	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	70	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	70	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	70	ug/kg	
218-01-9	Chrysene	ND	350	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	70	ug/kg	
206-44-0	Fluoranthene	ND	350	ug/kg	
86-73-7	Fluorene	ND	350	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	70	ug/kg	
91-20-3	Naphthalene	ND	350	ug/kg	
90-12-0	1-Methylnaphthalene	ND	350	ug/kg	
91-57-6	2-Methylnaphthalene	ND	350	ug/kg	
85-01-8	Phenanthrene	ND	350	ug/kg	
129-00-0	Pyrene	ND	350	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		22-130%
92-94-4	p-Terphenyl	95%		53-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AVGASSLB4504	Date Sampled: 10/26/00
Lab Sample ID: F7979-5	Date Received: 10/27/00
Matrix: SO - Soil	Percent Solids: 95.1
Method: FLORIDA-PRO	
Project: NAS Whiting Field PO#NOO52-MSA0200-014	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	OP11862.D	1	11/13/00	KP	11/08/00	OP2283	GOP478

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	8.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	91%		40-140%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB4604		Date Sampled:	10/26/00	
Lab Sample ID:	F7979-6		Date Received:	10/27/00	
Matrix:	SO - Soil		Percent Solids:	94.2	
Method:	SW846 8260B				
Project:	NAS Whiting Field PO#NOO52-MSA0200-014				

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	H009878.D	1	11/08/00	NAF	n/a	n/a	VH214

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	49	ug/kg	
71-43-2	Benzene	ND	4.9	ug/kg	
75-27-4	Bromodichloromethane	ND	4.9	ug/kg	
75-25-2	Bromoform	ND	4.9	ug/kg	
108-90-7	Chlorobenzene	ND	4.9	ug/kg	
75-00-3	Chloroethane	ND	4.9	ug/kg	
67-66-3	Chloroform	ND	4.9	ug/kg	
75-15-0	Carbon disulfide	ND	9.8	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.9	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.9	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.9	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.9	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.9	ug/kg	
124-48-1	Dibromochloromethane	ND	4.9	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.9	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	9.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.9	ug/kg	
100-41-4	Ethylbenzene	ND	4.9	ug/kg	
591-78-6	2-Hexanone	ND	9.8	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	9.8	ug/kg	
74-83-9	Methyl bromide	ND	4.9	ug/kg	
74-87-3	Methyl chloride	ND	4.9	ug/kg	
75-09-2	Methylene chloride	ND	9.8	ug/kg	
78-93-3	Methyl ethyl ketone	ND	9.8	ug/kg	
100-42-5	Styrene	ND	4.9	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.9	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.9	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.9	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.9	ug/kg	
108-88-3	Toluene	ND	4.9	ug/kg	
79-01-6	Trichloroethylene	ND	4.9	ug/kg	
75-01-4	Vinyl chloride	ND	4.9	ug/kg	
1330-20-7	Xylene (total)	ND	15	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB4604	Date Sampled:	10/26/00
Lab Sample ID:	F7979-6	Date Received:	10/27/00
Matrix:	SO - Soil	Percent Solids:	94.2
Method:	SW846 8260B		
Project:	NAS Whiting Field PO#NOO52-MSA0200-014		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		71-122%
2037-26-5	Toluene-D8	101%		73-128%
460-00-4	4-Bromofluorobenzene	102%		53-158%
17060-07-0	1,2-Dichloroethane-D4	109%		71-122%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB4604	Date Sampled:	10/26/00
Lab Sample ID:	F7979-6	Date Received:	10/27/00
Matrix:	SO - Soil	Percent Solids:	94.2
Method:	EPA 8310		
Project:	NAS Whiting Field PO#NOO52-MSA0200-014		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	EE000638.D	1	11/11/00	MRE	11/08/00	OP2285	GEE29

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	710	ug/kg	
208-96-8	Acenaphthylene	ND	710	ug/kg	
120-12-7	Anthracene	ND	350	ug/kg	
56-55-3	Benzo(a)anthracene	ND	350	ug/kg	
50-32-8	Benzo(a)pyrene	ND	71	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	71	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	71	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	71	ug/kg	
218-01-9	Chrysene	ND	350	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	71	ug/kg	
206-44-0	Fluoranthene	ND	350	ug/kg	
86-73-7	Fluorene	ND	350	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	71	ug/kg	
91-20-3	Naphthalene	ND	350	ug/kg	
90-12-0	1-Methylnaphthalene	ND	350	ug/kg	
91-57-6	2-Methylnaphthalene	ND	350	ug/kg	
85-01-8	Phenanthrene	ND	350	ug/kg	
129-00-0	Pyrene	ND	350	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	109%		22-130%
92-94-4	p-Terphenyl	109%		53-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB4604	Date Sampled:	10/26/00
Lab Sample ID:	F7979-6	Date Received:	10/27/00
Matrix:	SO - Soil	Percent Solids:	94.2
Method:	FLORIDA-PRO		
Project:	NAS Whiting Field PO#NOO52-MSA0200-014		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11866.D	1	11/13/00	KP	11/08/00	OP2283	GOP478
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	8.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	80%		40-140%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB4704		Date Sampled:	10/26/00	
Lab Sample ID:	F7979-7		Date Received:	10/27/00	
Matrix:	SO - Soil		Percent Solids:	91.2	
Method:	SW846 8260B				
Project:	NAS Whiting Field PO#NO052-MSA0200-014				

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	H009879.D	1	11/08/00	NAF	n/a	n/a	VH214

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	4.8	ug/kg	
71-43-2	Benzene	ND	4.8	ug/kg	
75-27-4	Bromodichloromethane	ND	4.8	ug/kg	
75-25-2	Bromoform	ND	4.8	ug/kg	
108-90-7	Chlorobenzene	ND	4.8	ug/kg	
75-00-3	Chloroethane	ND	4.8	ug/kg	
67-66-3	Chloroform	ND	4.8	ug/kg	
75-15-0	Carbon disulfide	ND	9.7	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.8	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.8	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.8	ug/kg	
124-48-1	Dibromochloromethane	ND	4.8	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.8	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	9.7	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.8	ug/kg	
100-41-4	Ethylbenzene	ND	4.8	ug/kg	
591-78-6	2-Hexanone	ND	9.7	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	9.7	ug/kg	
74-83-9	Methyl bromide	ND	4.8	ug/kg	
74-87-3	Methyl chloride	ND	4.8	ug/kg	
75-09-2	Methylene chloride	ND	9.7	ug/kg	
78-93-3	Methyl ethyl ketone	ND	9.7	ug/kg	
100-42-5	Styrene	ND	4.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.8	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.8	ug/kg	
108-88-3	Toluene	ND	4.8	ug/kg	
79-01-6	Trichloroethylene	ND	4.8	ug/kg	
75-01-4	Vinyl chloride	ND	4.8	ug/kg	
1330-20-7	Xylene (total)	ND	14	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB4704	Date Sampled:	10/26/00
Lab Sample ID:	F7979-7	Date Received:	10/27/00
Matrix:	SO - Soil	Percent Solids:	91.2
Method:	SW846 8260B		
Project:	NAS Whiting Field PO#NOO52-MSA0200-014		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		71-122%
2037-26-5	Toluene-D8	101%		73-128%
460-00-4	4-Bromofluorobenzene	100%		53-158%
17060-07-0	1,2-Dichloroethane-D4	107%		71-122%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AVGASSLB4704

Lab Sample ID: F7979-7

Date Sampled: 10/26/00

Matrix: SO - Soil

Date Received: 10/27/00

Method: EPA 8310

Percent Solids: 91.2

Project: NAS Whiting Field PO#NOO52-MSA0200-014

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	EE000641.D	1	11/11/00	MRE	11/08/00	OP2285	GEE29

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	730	ug/kg	
208-96-8	Acenaphthylene	ND	730	ug/kg	
120-12-7	Anthracene	ND	360	ug/kg	
56-55-3	Benzo(a)anthracene	ND	360	ug/kg	
50-32-8	Benzo(a)pyrene	ND	73	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	73	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	73	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	73	ug/kg	
218-01-9	Chrysene	ND	360	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	73	ug/kg	
206-44-0	Fluoranthene	ND	360	ug/kg	
86-73-7	Fluorene	ND	360	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	73	ug/kg	
91-20-3	Naphthalene	ND	360	ug/kg	
90-12-0	1-Methylnaphthalene	ND	360	ug/kg	
91-57-6	2-Methylnaphthalene	ND	360	ug/kg	
85-01-8	Phenanthrene	ND	360	ug/kg	
129-00-0	Pyrene	ND	360	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	110%		22-130%
92-94-4	p-Terphenyl	108%		53-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AVGASSLB4704 Lab Sample ID: F7979-7 Matrix: SO - Soil Method: FLORIDA-PRO Project: NAS Whiting Field PO#NOO52-MSA0200-014	Date Sampled: 10/26/00 Date Received: 10/27/00 Percent Solids: 91.2
---------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	OP11867.D	1	11/13/00	KP	11/08/00	OP2283	GOP478

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	9.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	98%		40-140%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASEL00101		Date Sampled:	10/26/00	
Lab Sample ID:	F7979-8		Date Received:	10/27/00	
Matrix:	AQ - Water		Percent Solids:	n/a	
Method:	SW846 8260B				
Project:	NAS Whiting Field PO#NO052-MSA0200-014				

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	C0001144.D	1	10/31/00	JG	n/a	n/a	VC50

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	42.3	5.0	ug/l	
71-43-2	Benzene	ND	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	2.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	ug/l	
74-83-9	Methyl bromide	ND	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	ug/l	
100-42-5	Styrene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
79-01-6	Trichloroethylene	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AVGASEL00101		Date Sampled: 10/26/00
Lab Sample ID: F7979-8		Date Received: 10/27/00
Matrix: AQ - Water		Percent Solids: n/a
Method: SW846 8260B		
Project: NAS Whiting Field PO#NOO52-MSA0200-014		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		80-120%
17060-07-0	1,2-Dichloroethane-D4	105%		69-128%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	91%		80-120%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASEL00101	Date Sampled:	10/26/00
Lab Sample ID:	F7979-8	Date Received:	10/27/00
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	EPA 8310		
Project:	NAS Whiting Field PO#NOO52-MSA0200-014		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	AA005065.D	1	10/31/00	MRE	10/30/00	OP2238	GAA166

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	4.4	ug/l	
208-96-8	Acenaphthylene	ND	4.4	ug/l	
120-12-7	Anthracene	ND	2.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.22	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.22	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.22	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.22	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.22	ug/l	
218-01-9	Chrysene	ND	2.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.22	ug/l	
206-44-0	Fluoranthene	ND	2.2	ug/l	
86-73-7	Fluorene	ND	2.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.22	ug/l	
91-20-3	Naphthalene	ND	2.2	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.2	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.2	ug/l	
85-01-8	Phenanthrene	ND	2.2	ug/l	
129-00-0	Pyrene	ND	2.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		29-133%
92-94-4	p-Terphenyl	75%		33-133%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AVGASEL00101	Date Sampled: 10/26/00
Lab Sample ID: F7979-8	Date Received: 10/27/00
Matrix: AQ - Water	Percent Solids: n/a
Method: FLORIDA-PRO	
Project: NAS Whiting Field PO#NOO52-MSA0200-014	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	OP11711.D	1	11/03/00	KP	10/31/00	OP2247	GOP474

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	0.25	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	108%		40-140%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB7404		Date Sampled:	10/26/00	
Lab Sample ID:	F7979-9		Date Received:	10/27/00	
Matrix:	SO - Soil		Percent Solids:	86.0	
Method:	SW846 8260B				
Project:	NAS Whiting Field PO#NO052-MSA0200-014				

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	H009880.D	50	11/08/00	NAF	n/a	n/a	VH214

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	2500	ug/kg	
71-43-2	Benzene	264	250	ug/kg	
75-27-4	Bromodichloromethane	ND	250	ug/kg	
75-25-2	Bromoform	ND	250	ug/kg	
108-90-7	Chlorobenzene	ND	250	ug/kg	
75-00-3	Chloroethane	ND	250	ug/kg	
67-66-3	Chloroform	ND	250	ug/kg	
75-15-0	Carbon disulfide	ND	510	ug/kg	
56-23-5	Carbon tetrachloride	ND	250	ug/kg	
75-34-3	1,1-Dichloroethane	ND	250	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	250	ug/kg	
107-06-2	1,2-Dichloroethane	ND	250	ug/kg	
78-87-5	1,2-Dichloropropane	ND	250	ug/kg	
124-48-1	Dibromochloromethane	ND	250	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	250	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	510	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	250	ug/kg	
100-41-4	Ethylbenzene	5480	250	ug/kg	
591-78-6	2-Hexanone	ND	510	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	510	ug/kg	
74-83-9	Methyl bromide	324	250	ug/kg	
74-87-3	Methyl chloride	234	250	ug/kg	J
75-09-2	Methylene chloride	ND	510	ug/kg	
78-93-3	Methyl ethyl ketone	ND	510	ug/kg	
100-42-5	Styrene	ND	250	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	250	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	250	ug/kg	
127-18-4	Tetrachloroethylene	ND	250	ug/kg	
108-88-3	Toluene	264	250	ug/kg	
79-01-6	Trichloroethylene	ND	250	ug/kg	
75-01-4	Vinyl chloride	ND	250	ug/kg	
1330-20-7	Xylene (total)	7090	760	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB7404	Date Sampled:	10/26/00
Lab Sample ID:	F7979-9	Date Received:	10/27/00
Matrix:	SO - Soil	Percent Solids:	86.0
Method:	SW846 8260B		
Project:	NAS Whiting Field PO#NOO52-MSA0200-014		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		71-122%
2037-26-5	Toluene-D8	105%		73-128%
460-00-4	4-Bromofluorobenzene	104%		53-158%
17060-07-0	1,2-Dichloroethane-D4	100%		71-122%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB7404		Date Sampled:	10/26/00
Lab Sample ID:	F7979-9		Date Received:	10/27/00
Matrix:	SO - Soil		Percent Solids:	86.0
Method:	EPA 8310			
Project:	NAS Whiting Field PO#NOO52-MSA0200-014			

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	EE000652.D	1	11/11/00	MRE	11/08/00	OP2285	GEE29

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	780	ug/kg	
208-96-8	Acenaphthylene	ND	780	ug/kg	
120-12-7	Anthracene	ND	390	ug/kg	
56-55-3	Benzo(a)anthracene	ND	390	ug/kg	
50-32-8	Benzo(a)pyrene	ND	78	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	78	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	78	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	78	ug/kg	
218-01-9	Chrysene	ND	390	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	78	ug/kg	
206-44-0	Fluoranthene	ND	390	ug/kg	
86-73-7	Fluorene	ND	390	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	78	ug/kg	
91-20-3	Naphthalene	ND	390	ug/kg	
90-12-0	1-Methylnaphthalene	ND	390	ug/kg	
91-57-6	2-Methylnaphthalene	ND	390	ug/kg	
85-01-8	Phenanthrene	ND	390	ug/kg	
129-00-0	Pyrene	ND	390	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	101%		22-130%
92-94-4	p-Terphenyl	100%		53-130%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLB7404		Date Sampled:	10/26/00	
Lab Sample ID:	F7979-9		Date Received:	10/27/00	
Matrix:	SO - Soil		Percent Solids:	86.0	
Method:	FLORIDA-PRO				
Project:	NAS Whiting Field PO#NOO52-MSA0200-014				

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11868.D	1	11/13/00	KP	11/08/00	OP2283	GOP478
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	27.3	9.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	80%		40-140%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AVGASSLBXXYYD		Date Sampled: 10/26/00
Lab Sample ID: F7979-10		Date Received: 10/27/00
Matrix: SO - Soil	Percent Solids: 86.6	
Method: SW846 8260B		
Project: NAS Whiting Field PO#NOO52-MSA0200-014		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	H009881.D	50	11/08/00	NAF	n/a	n/a	VH214

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	2300	ug/kg	
71-43-2	Benzene	121	230	ug/kg	J
75-27-4	Bromodichloromethane	ND	230	ug/kg	
75-25-2	Bromoform	ND	230	ug/kg	
108-90-7	Chlorobenzene	ND	230	ug/kg	
75-00-3	Chloroethane	ND	230	ug/kg	
67-66-3	Chloroform	ND	230	ug/kg	
75-15-0	Carbon disulfide	ND	460	ug/kg	
56-23-5	Carbon tetrachloride	ND	230	ug/kg	
75-34-3	1,1-Dichloroethane	ND	230	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	230	ug/kg	
107-06-2	1,2-Dichloroethane	ND	230	ug/kg	
78-87-5	1,2-Dichloropropane	ND	230	ug/kg	
124-48-1	Dibromochloromethane	ND	230	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	230	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	460	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	230	ug/kg	
100-41-4	Ethylbenzene	1410	230	ug/kg	
591-78-6	2-Hexanone	ND	460	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	460	ug/kg	
74-83-9	Methyl bromide	ND	230	ug/kg	
74-87-3	Methyl chloride	164	230	ug/kg	J
75-09-2	Methylene chloride	ND	460	ug/kg	
78-93-3	Methyl ethyl ketone	ND	460	ug/kg	
100-42-5	Styrene	ND	230	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	230	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	230	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	230	ug/kg	
127-18-4	Tetrachloroethylene	ND	230	ug/kg	
108-88-3	Toluene	384	230	ug/kg	
79-01-6	Trichloroethylene	ND	230	ug/kg	
75-01-4	Vinyl chloride	ND	230	ug/kg	
1330-20-7	Xylene (total)	1740	690	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLBXXYYD	Date Sampled:	10/26/00
Lab Sample ID:	F7979-10	Date Received:	10/27/00
Matrix:	SO - Soil	Percent Solids:	86.6
Method:	SW846 8260B		
Project:	NAS Whiting Field PO#NOO52-MSA0200-014		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	88%		71-122%
2037-26-5	Toluene-D8	99%		73-128%
460-00-4	4-Bromofluorobenzene	99%		53-158%
17060-07-0	1,2-Dichloroethane-D4	98%		71-122%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: AVGASSLBXXYYD

Lab Sample ID: F7979-10

Date Sampled: 10/26/00

Matrix: SO - Soil

Date Received: 10/27/00

Method: EPA 8310

Percent Solids: 86.6

Project: NAS Whiting Field PO#NOO52-MSA0200-014

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	EE000644.D	1	11/11/00	MRE	11/08/00	OP2285	GEE29

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	770	ug/kg	
208-96-8	Acenaphthylene	ND	770	ug/kg	
120-12-7	Anthracene	ND	380	ug/kg	
56-55-3	Benzo(a)anthracene	ND	380	ug/kg	
50-32-8	Benzo(a)pyrene	ND	77	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	77	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	77	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	77	ug/kg	
218-01-9	Chrysene	ND	380	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	77	ug/kg	
206-44-0	Fluoranthene	ND	380	ug/kg	
86-73-7	Fluorene	ND	380	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	77	ug/kg	
91-20-3	Naphthalene	ND	380	ug/kg	
90-12-0	1-Methylnaphthalene	ND	380	ug/kg	
91-57-6	2-Methylnaphthalene	ND	380	ug/kg	
85-01-8	Phenanthrene	ND	380	ug/kg	
129-00-0	Pyrene	ND	380	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	90%		22-130%
92-94-4	p-Terphenyl	89%		53-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AVGASSLBXXYYD	Date Sampled:	10/26/00
Lab Sample ID:	F7979-10	Date Received:	10/27/00
Matrix:	SO - Soil	Percent Solids:	86.6
Method:	FLORIDA-PRO	Project: NAS Whiting Field PO#NOO52-MSA0200-014	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11869.D	1	11/14/00	KP	11/08/00	OP2283	GOP478
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	10.7	9.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		40-140%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound