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NSA PANAMA CITY
5090.3a

SITE ASSESSMENT LETTER REPORT ADDENDUM FOR SITE 307 PRODUCT LINE LEASE

CSS PANAMA CITY FL

11/30/1999

TETRA TECH

7766-3.7.3

TETRA TECH NUS, INC.
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TtNUS/CSS-006/7766/3.2

November 30, 1999

Project Number 7766

Mr. Dave Grabka
Environmental Specialist
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Reference: Clean Contract No. N62467-94-D0888
Contract Task Order No. 0047

Subject: Site Assessment Report Addendum
Site 307 Product Line Release
Navy Coastal Systems Station
Panama City, Florida

Dear Mr. Gabka:

This Site Assessment Report (SAR) Addendum discusses the rationale for the additional investigation at Site 307, presents the results of the investigation, and provides recommendations for the site.

Background

A SAR response letter dated June 8, 1999, was issued by the Florida Department of Environmental Protection (FDEP) and was received by Navy Southern Division Naval Facilities Engineering Command (SDIV) on July 6, 1999, for Site 307. Following the receipt of the response letter, a meeting was held at the site on July 27, 1999, between representatives of the FDEP; SDIV; and Tetra Tech NUS, Inc. (TtNUS). The purpose of the meeting was to review the physical constraints present in the study area (i.e., sea wall at Alligator Bayou, concrete covering surface area, and existing aboveground storage tank), and to discuss the response comments issued by the FDEP on the SAR.

The monitoring well locations, and their spatial relationship to the former product line and the physical constraints present in the study area, were reviewed. Based on the review it was proposed that the sampling plan outlined in the FDEP SAR response letter be performed. However, the need for an additional monitoring well, as cited in the response letter, would be evaluated after groundwater and soil samples were collected for laboratory analyses, and the analytical results reviewed.

TtNUS, on behalf of SDVIS, has prepared this SAR Addendum for Site 307 incorporating the findings from the investigation conducted after the July 27, 1999 meeting. The FDEP SAR response letter, and a letter summarizing the results of the SAR review meeting, are included as **Attachment I**.

Soil Field Investigation

On September 1, 1999 TtNUS installed soil boring SB08 midpoint between soil boring SB02 and SB03, as proposed by the FDEP in comment No. 1 of their SAR response letter. The location of soil boring SB08, is provided on **Figure 1**. Prior to advancing soil boring SB08, the depth to groundwater was measured in each of the site monitoring wells on August 31, 1999. The depth-to-water was measured from the top of well casing using an electronic water level measuring device. The depth-to-water from the water level measurements was approximately 4.7 feet bls. The groundwater level measurements were collected to identify the depth to the water table and verify the thickness of the vadose zone soils underlying Site 307. Groundwater level measurements collected at Site 307 during the site assessment (SA) are provided in **Table 1.** The depth-to-groundwater measurements are provided on a field measurement form presented in **Attachment II**.

Soil boring SB08 was advanced using a 3.5-inch inner diameter stainless steel hand auger to a depth of 2 feet below land surface (bls). Soil sample 307SB080102 was collected from the boring at 1 to 2 feet bls and sent to an offsite laboratory to be analyzed for volatile organic aromatics by SW-846 Method 8260B; semivolatile/polynuclear aromatic hydrocarbons (PAHs) by SW-846 Method 8310; and for total petroleum recoverable hydrocarbons (TRPH) by the Florida Pro analytical method. The soil sample and quality control samples (i.e., equipment blank) were collected following procedures prescribed by the FDEP Quality Assurance Section Document DER-001/92, and adopted by the TtNUS' Comprehensive Quality Assurance Plan 980038 (CompQAP).

Groundwater Field Investigation

In response to comment No. 2 issued by the FDEP in the SAR response letter, groundwater samples were collected from each of the monitoring wells on August 31, 1999. The groundwater samples were sent to an offsite laboratory to be analyzed for volatile organics by SW-846 Method 8021B; semivolatile/PAHs by SW-846 8310; and for TRPH by the Florida Pro analytical method.

Prior to collecting the groundwater samples, water levels and total well depths were measured from the top of each monitoring well casing using an electronic water level indicator. The measurements were used to calculate purge volumes for groundwater sampling, inspect for free product, and determine the groundwater flow direction at Site 307. On August 31, 1999 the groundwater flow direction was to the west toward Alligator Bayou as shown on **Figure 2**. The depth-to-groundwater field measurements are provided on field forms included in **Attachment II**.

Groundwater sampling was conducted using teflon tubing and a peristaltic pump. Each monitoring well was purged using a peristaltic pump, teflon tubing, and low flow quiescent purging techniques. Field parameter measurements of pH, temperature, and specific conductance were recorded during the purging of the wells. Each well was purged until the field parameters stabilized or until five well volumes were purged from the well. The field parameter measurements and the well purge volumes for the August 31, 1999 sampling event are provided on field forms included in **Attachment II**.

The groundwater volatile organic samples were collected by allowing the teflon tubing to fill via ambient pressure. The teflon tubing was then capped with a gloved finger and carefully withdrawn

from the well and drained into appropriate vials. The groundwater samples were immediately placed on ice and shipped to Accutest Laboratories, Inc. in Orlando, Florida for analysis. During the sampling event, quality control samples (e.g., equipment blank and duplicate sample) were collected and submitted to the laboratory as required by the CompQAP. Sampling activities were documented in a site-specific logbook, and the samples were transmitted under chain-of-custody protocols to the laboratory.

Soil Quality

The laboratory analysis of soil sample 307SB080102 (boring SB08) reported all volatile parameters and PAHs below laboratory detection limits and below the FDEP soil cleanup target levels (SCTLs) established for direct residential exposure. An estimated TRPH concentration of 7.42 milligrams per kilogram (mg/kg) was detected in the sample, which is below the TRPH SCTL of 350 mg/kg. Soil quality results from samples collected during the SAR and SAR Addendum are summarized in **Table 2**. The laboratory data sheets for the September 1, 1999 sampling and the soil sampling field forms are provided in **Attachment III**.

Groundwater Quality

The laboratory results from the August 31, 1999 groundwater sampling event reported estimated concentrations of TRPH at 0.043 milligrams per liter (mg/L) in PCY-307-MW01, 0.417 mg/L in PCY-MW04D, and 0.811 mg/L in the duplicate sample from PCY-307-TCW. Acenaphthylene was detected at concentrations of 1.2 micrograms per liter (ug/L) in the groundwater sample collected from PCY-307-TCW and in the duplicate sample. The estimated groundwater TRPH concentrations and the groundwater acenaphthylene concentration are below the FDEP groundwater cleanup target levels of 5 mg/L for TRPH and 210 ug/L for acenaphthylene. All other parameters were reported below laboratory detection limits and below their FDEP cleanup target levels. Groundwater quality results from samples collected during the SAR and SAR Addendum are summarized in **Table 3**. A TRPH and acenaphthylene groundwater concentration map for the August 31, 1999 sampling event is provided as **Figure 3**, and the groundwater laboratory data sheets are provided in **Attachment IV**.

Conclusions

The depth-to-groundwater measurements collected during the SAR and SAR Addendum identifies the water table at Site 307 being approximately 4 to 5 feet bls. The depth to groundwater indicates the TRPH concentrations detected in soil boring SB01, SB02, and SB05 during previous sampling events (see Table 2 for summary of soil quality results and Figure 1 for soil boring locations) were from samples that penetrated the water table surface (samples collected from 4 to 5 feet bls).

The shallow water table and the concrete surface covering, typically between 6.5 and 10 inches in thickness across the site (concrete thickness of 13 inches encountered adjacent to Alligator Bayou and the product line/utility trench), indicates the soil vadose zone is approximately 3 feet in thickness. Soil-quality data collected from borings SB06, SB07, and SB08 at 1 to 2 feet bls are vadose zone soil samples and indicate soil chemical-of-concern parameters are below their SCTLs in the vadose zone.

Groundwater laboratory data from two sampling events conducted at Site 307, indicate chemical-of-concern parameters have not been detected at concentrations above the FDEP Groundwater Cleanup Target Levels. No free product has been detected in any of the monitoring wells at Site 307.

No excessively contaminated soil or contaminated soil of constituents were detected in vadose zone soils above FDEP SCTLs.

The product line and associated UST system for Site 307 has been closed. A Tank Closure Assessment was completed on Tank 307R in August 1998, and the UST system removed.

Recommendations

It is proposed that the additional monitoring well that was requested by the FDEP in their response letter to the SAR not be installed based on the results of the additional soil and groundwater laboratory analyses collected for the SAR Addendum.

Based on the soil and groundwater laboratory analyses collected during the SAR and SAR Addendum, and the limited thickness of the vadose zone underlying the site, it is proposed Site 307 be considered for No Further Action without conditions or restrictions.

If you have any questions concerning this site, please call.

Sincerely,
TETRA TECH NUS, INC.

Gerald F. Goode
11/30/99
Gerald F. Goode, P.G.
Task Order Manager
Florida License No. 0001276

/gg

Attachments

cc: Nick Ugolini, Navy SOUTHDIV, Charleston, South Carolina
Arturo McDonald, Navy Coastal Systems Station, Panama City, Florida
Debbie Wroblewski
Mark Perry/File

TABLES

TABLE 1
DEPTH TO GROUNDWATER MEASUREMENTS
Site 307 Product Line Release
Coastal Systems Station, Panama City, Florida

Monitoring Well ID	Date	Top of Well Casing Elevation (feet NGVD)	Free Product Thickness (feet)	Depth to Water (feet bls)	Water Table Elevation (feet NGVD)	Well Screen Interval (feet bls)
PCY-307-MW01	10/05/98	6.03	0.00	4.24	1.79	3 to 13
	11/06/98		0.00	4.69	1.34	
	08/31/99		0.00	4.79	1.24	
PCY-307-MW02	10/05/98	6.15	0.00	4.17	1.98	3 to 13
	11/06/98		0.00	4.54	1.61	
	08/31/99		0.00	4.77	1.38	
PCY-307-MW03	10/05/98	6.01	0.00	4.15	1.86	3 to 13
	11/06/98		0.00	4.61	1.40	
	08/31/99		0.00	4.74	1.27	
PCY-307-MW4D	10/05/98	5.96	0.00	3.93	2.03	25 to 30
	11/06/98		0.00	4.53	1.43	
	08/31/99		0.00	4.51	1.45	
PCY-307-TCW (dispenser Island)	10/05/98	5.91	0.00	4.18	1.73	3 to 13
	11/06/98		0.00	4.69	1.22	
	08/31/99		0.00	4.69	1.22	

Notes: bls = below land surface.
ID = identification
NGVD = elevation relative to the National Geodetic Vertical Datum 1929.

TABLE 2
SUMMARY OF SOIL QUALITY:
SELECTED PARAMETERS FROM THE KEROSENE ANALYTICAL GROUP
Site 307 Product Line Release
Navy Coastal Systems Station, Panama City, Florida
FDEP ID No. 038518667

Soil Boring Location	Date Sampled	Sample Depth (feet bls)	Total VOA (µg/kg)	TPH (mg/kg)	Chrysene (µg/kg)	Fluor-anth (µg/kg)	Napth (µg/kg)	Benzo (a) anth (µg/kg)	Benzo (a) pyrene (µg/kg)	Benzo (b) fluoran (µg/kg)	Benzo (k) fluor (µg/kg)	Benzo (ghi) (µg/kg)	Indeno (1,2,3,-cd) (µg/kg)	Phenan-threne (ug/kg	Pyrene (µg/kg)
SB01	5-28-98	4-5	ND(1)	22200	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)
SB02	5-28-98	4-5	ND(1)	17600	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)
SB05	5-28-98	4-5	6696(2)	11800	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)	ND(3)
	10-13-98	4-5	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB06	2-4-99	1-2	NA	ND	5.45	ND	ND	ND	ND	6.80	ND	ND	ND	ND	ND
SB07	2-4-99	1-2	NA	ND	ND	ND	ND	ND	ND	8.39	ND	11.3	8.70	ND	ND
SB08	9-1-99	1-2	ND	7.42(J)	ND	ND	ND	ND	ND	8.39	ND	ND	ND	ND	ND
FDEP SELECT SOIL CLEANUP TARGET LEVELS DIRECT EXPOSURE #1			Benzene **1100** Toluene **300000** Ethylbenzne **240000** Xylenes **290000**	**350**	**140000**	**2800000**	**1000000**	**1400**	**100**	**1400**	**15000**	**2300000**	**1500**	**1900000**	**2200000**

Total VOA	sum of benzene, toluene, ethylbenzene and xylenes concentrations
Fluor	fluorene
Napth	naphthalene
Benzo (b) fluoran	benzo(b)fluoranthene
Benzo (g,h,i)	benzo(g,h,i)perylene
TPH	total recoverable petroluem hydrocarbons
Fluor-anth	fluoranthene
Benzo (a) anth	benzo(a)anthracene
Benzo (k) fluor	benzo(k)fluoranthene
Indeno (i,2,3-c,d)	indeno(1,2,3-cd)pyrene

ND	not detected
NA	not analyzed
J	indicates an estimated value
ug/kg	concentrations reported in micrograms per kilogram
mg/kg	concentrations reported in milligrams per kilogram

1) Results are considered minimum values due to poor seal cap on Encore sampler.
2) Results are considered minimum values due to poor seal cap on Encore sampler. Results confirmed by reanalysis on dissimilar column.
3) Elevated detection limits due to matrix interference. Reported Detection Limit ranged from 38000 ug/kg to 40000 ug/kg.

TABLE 3
SUMMARY OF GROUNDWATER QUALITY:
SELECT PARAMETERS FOR GASOLINE AND KEROSENE ANALYTICAL GROUPS
Site 307 Product Line Release
Coastal Systems Station, Panama City, Florida
FDEP ID No. 038518667

Well ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	DCE (µg/L)	EDB (µg/L)	TRPH (mg/L)	PHE NAN (µg/L)	FLU (µg/L)	ACENAP (µg/L)	NAP (µg/L)	Lead (mg/L)
PCY-307-MW01	10/06/98	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<0.020	<0.50	<1.0	<1.0	<1.0	<1.0	<0.0030
	08/31/99	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	0.430[(J)]	<1.0	<1.0	<1.0	<1.0	NA
PCY-307-MW02	10/06/98	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<0.020	<0.50	<1.0	<1.0	<1.0	<1.0	<0.0030
	08/31/99	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	<0.50	<1.0	<1.0	<1.0	<1.0	NA
PCY-307-MW03	10/06/98	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<0.020	<0.50	<1.0	<1.0	<1.0	<1.0	<0.0030
	08/31/99	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	<0.50	<1.1	<1.1	<1.1	<1.1	NA
PCY-307-MW04D	10/06/98	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<0.020	<0.50	<1.1	<1.1	<1.1	<1.1	<0.0030
	08/31/99	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	0.417[(J)]	<1.0	<1.0	<1.0	<1.0	NA
PCY-307-TCW	10/06/98	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<0.020	<0.50	<1.1	<1.1	<1.1	<1.1	<0.0030
(Former Dispenser)	08/31/99	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	<0.50	<1.0	<1.0	1.2	<1.0	NA
Duplicate	10/06/98	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<0.020	<0.50	<1.2	<1.2	<1.2	<1.2	<0.0030
	08/31/99	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	0.811[(J)]	<1.0	<1.0	1.2	<1.0	NA
Equipment Blank	10/06/98	< 1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<0.020	<0.50	<1.1	<1.1	<1.1	<1.1	<0.0030
	08/31/99	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	<0.50	<1.1	<1.1	<1.1	<1.1	NA
FDEP GROUND WATER CLEANUP TARGET LEVELS		**1**	**40**	**30**	**20**	**35**	**3**	**0.02**	**5**	**210**	**280**	**210**	**20**	**0.015**

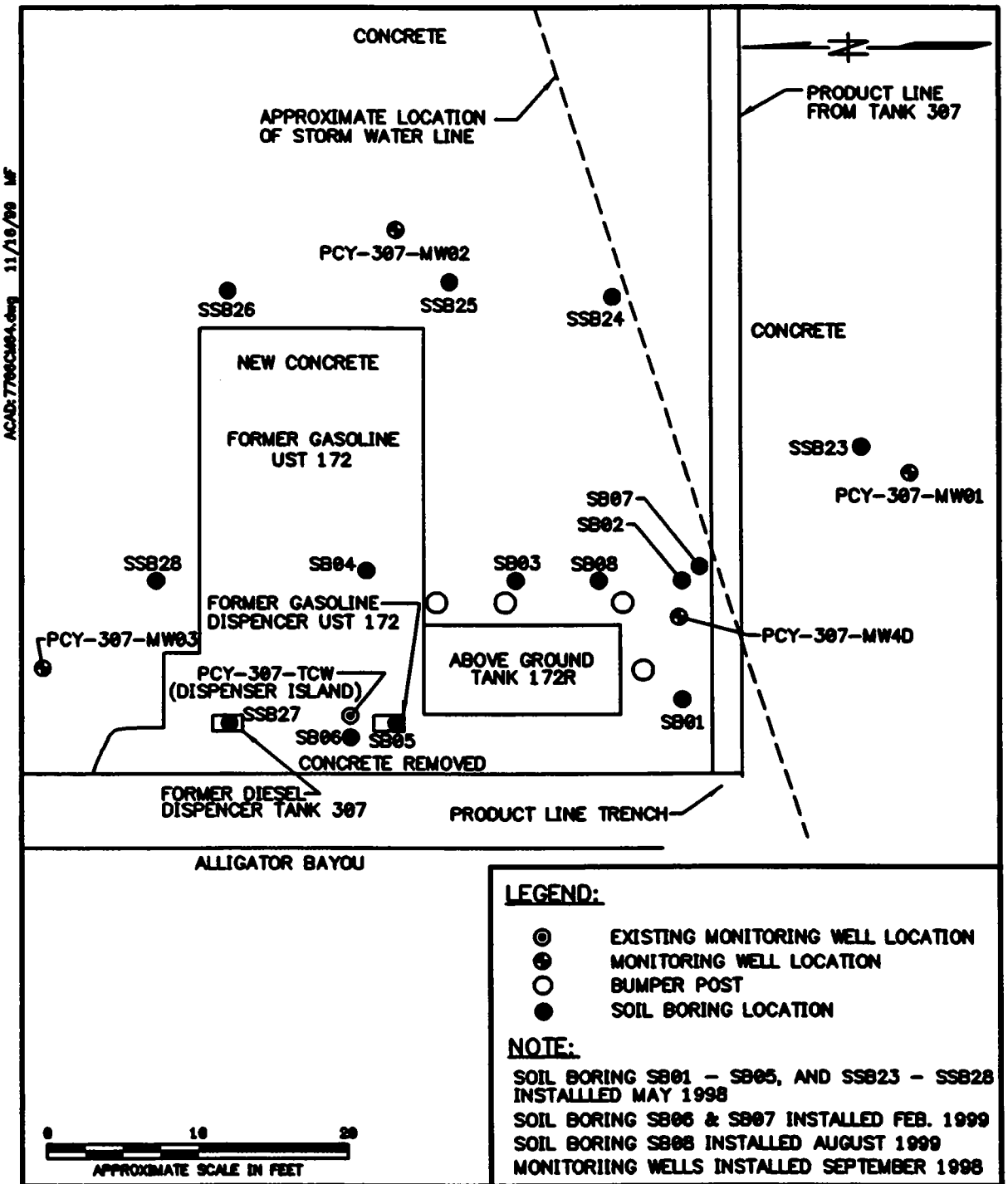
NOTE:

MTBE methyl tert-butyl ether
DCE 1,2-Dichloroethane
EDB 1,2-Dibromoethane = ethylene dibromide
TRPH total petroluem hydrocarbons (sample analyzed by Florida Pro Method)
PHENAN phenanthrene
FLU fluorene
ACENAP acenaphthylene
NAP naphthalene

ug/L micrograms per liter
mg/L milligrams per liter

Duplicate samples collected from monitoring well PCY-307-TCW

FIGURES



LEGEND:

- EXISTING MONITORING WELL LOCATION
- MONITORING WELL LOCATION
- BUMPER POST
- SOIL BORING LOCATION

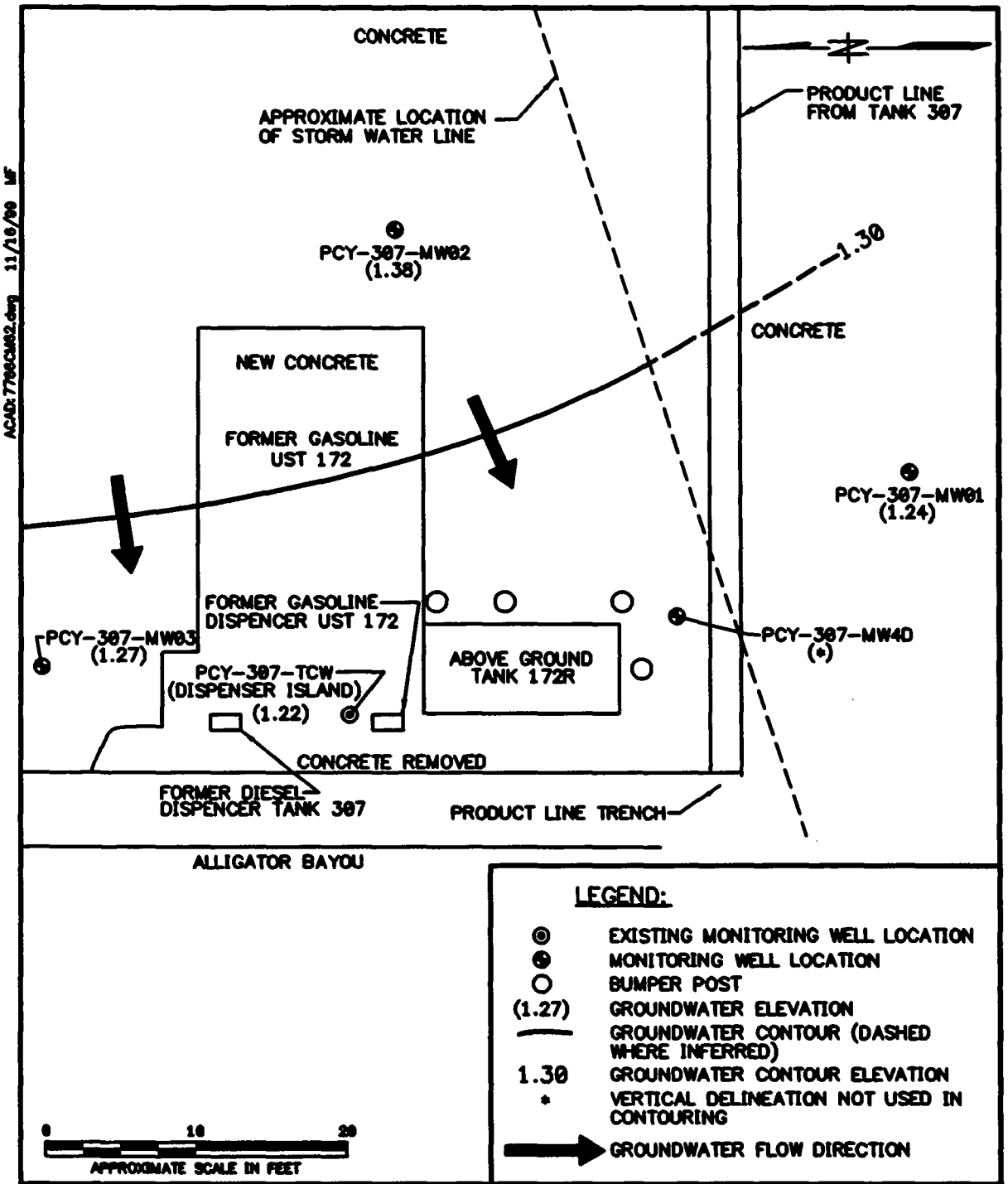
NOTE:

SOIL BORING SB01 - SB05, AND SSB23 - SSB28 INSTALLLED MAY 1998
SOIL BORING SB06 & SB07 INSTALLED FEB. 1999
SOIL BORING SB08 INSTALLED AUGUST 1999
MONITORIING WELLS INSTALLED SEPTEMBER 1998

DRAWN BY MF	DATE 11/16/99	SOIL BORING LOCATION MAP SITE 307 PRODUCT LINE RELEASE COASTAL SYSTEM STATION PANAMA CITY, FLORIDA	CONTRACT NO. 7766
CHECKED BY	DATE		APPROVED BY / DATE
COST/SCHED-AREA			APPROVED BY / DATE
SCALE AS NOTED			DRAWING NO. FIGURE 1 / REV. 0

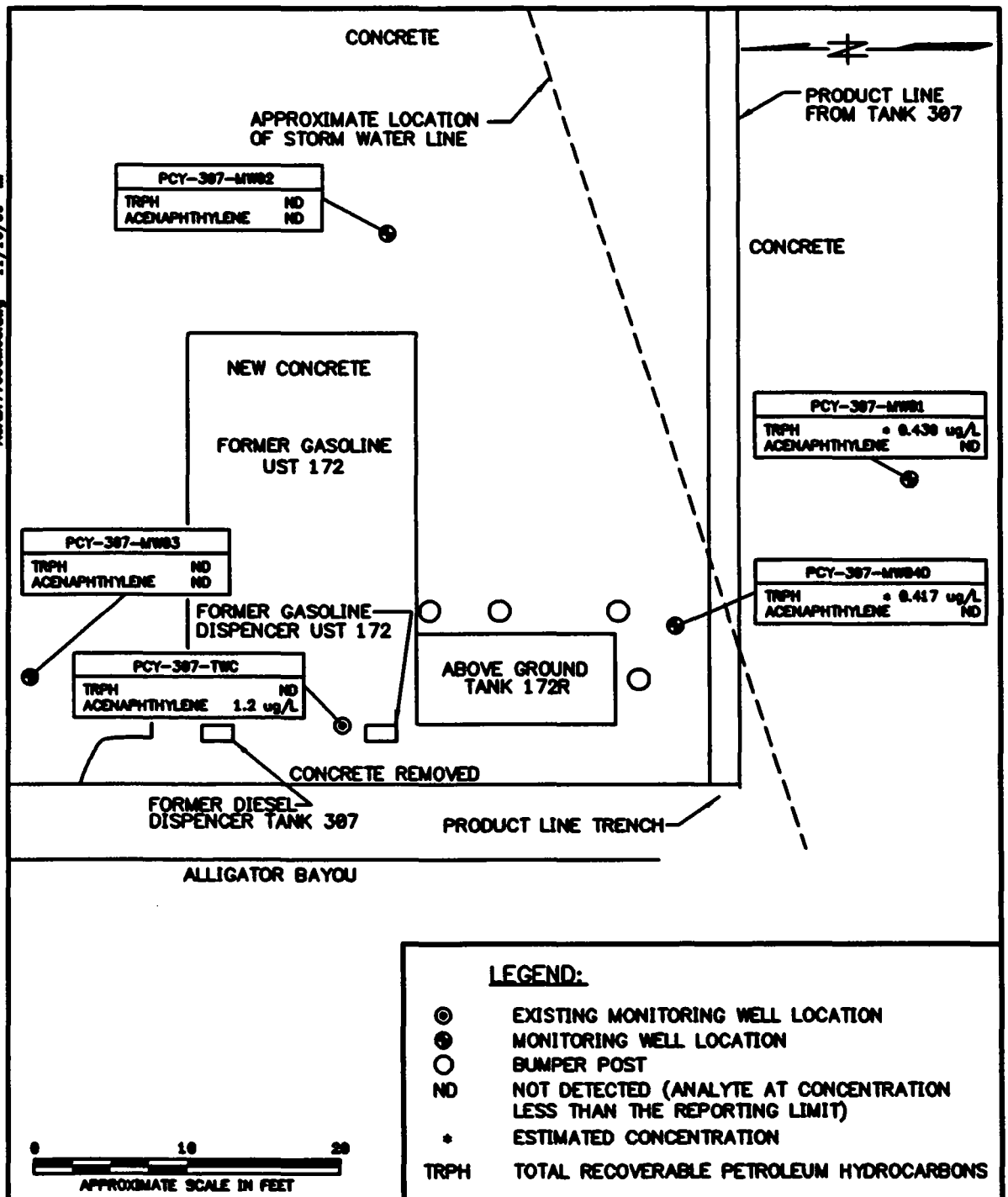
FORM CADD NO. SSEV_AV.DWG - REV 0 - 1/28/98

ACAD:7766C309A.dwg 11/16/99 MF



DRAWN BY MF DATE 11/16/99		GROUNDWATER ELEVATION CONTOUR MAP AUGUST 31, 1999 SITE 307 PRODUCT LINE RELEASE COASTAL SYSTEM STATION PANAMA CITY, FLORIDA	CONTRACT NO. 7766
CHECKED BY DATE			APPROVED BY DATE
COST/SCHED-AREA			APPROVED BY DATE
SCALE AS NOTED			DRAWING NO. FIGURE 2 / REV. 0

FORM CADD NO. SSEV_AV.DWG - REV 0 - 1/28/98



DRAWN BY MF DATE 11/16/99		GROUNDWATER TRPH & ACENAPHTHYLENE CONCENTRATION MAP AUGUST 31, 1999 SITE 307 PRODUCT LINE RELEASE COASTAL SYSTEM STATION PANAMA CITY, FLORIDA	CONTRACT NO. 7766
CHECKED BY DATE			APPROVED BY DATE
COST/SCHED-AREA			APPROVED BY DATE
SCALE AS NOTED			DRAWING NO. FIGURE 3 REV. 0

FORM CADD NO. 2REV_AV.DWG - REV 0 - 1/28/98

ATTACHMENT I

FDEP SAR Comment Letter Dated June 8, 1999
And
Site 307 Review Meeting Summary Letter

T+NUS/001-CSS/3.1

Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

FAX TRANSMITTAL LETTER

DATE: 7/6/99

TO: JERRY GOODE

AGENCY: TETRA TECH NUS

TELEPHONE: FAX # 385-9860

NUMBER OF PAGES (INCLUDING COVER SHEET) 3

FROM: DAVID GRABKA

AGENCY: FDEP

If any of the pages are not clearly received, please call IMMEDIATELY
PHONE NO. 488-3693

SENDERS NAME: DAVID GRABKA

COMMENTS:

JERRY, I HAVE FOUND THE LETTER CONCERNING SITE 307 BUT HAVE NO IDEA IF IT HAS BEEN SENT OF IF IT HAS, WHEN IT WAS SENT.

DAVE

Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

June 8, 1999

Mr. Nick Ugolini
Code 1843 (UST RPM)
Southern Division
Naval Facilities Engineering Command
P.O. Box 190010
North Charleston, South Carolina 29419-9010

RE: Site Assessment Report for Site 307, Product Line Release, Coastal Systems Station, Panama City, Florida

Dear Mr. Ugolini:

I have completed my review of the Site Assessment Report and request for No Further Action for Site 307, Product Line Release, Coastal Systems Station, Panama City, dated April 1, 1999 (received April 1, 1999), prepared and submitted by Tetra Tech NUS, Inc. I have the following comments and recommendations that should be addressed in a Site Assessment Report Addendum:

(1) The results from the soil boring analyses and the groundwater field screening suggest that there may be TRPH bound in the smear zone above the water table. Several soil samples taken at a depth of 4 to 5 feet bls contained TRPHs at levels exceeding residential, industrial and leachability based SCTLs. It is not clear from the text and soil boring logs whether these samples were collected above the water table, below the water table or within the capillary fringe. At least one soil sample should be collected above the water table and capillary fringe to determine if petroleum impacted soils exist in subsurface soils. I propose that the sample be collected between soil boring locations SB02 and SB03 and analyzed for volatiles, semi-volatiles and TRPH. If it is determined that contaminated soils exist in the vadose zone, a complete delineation of the contamination will be necessary. As a correlation between OVA readings and TRPH concentrations was not established, laboratory analyticals would be required to determine nature and extent.

(2) Except for monitoring well PCY-307-MW4D, the monitoring wells installed do not appear to have been located in areas likely to detect groundwater contamination as determined by DPT field screening. A water table monitoring well should be installed in the location suggested above for the soil sample. A complete round of groundwater sampling and analysis should then be conducted on all monitoring wells located on the site.

Groundwater samples should be analyzed for volatiles, semi-volatiles and TRPH.

If I can be of any further assistance with this matter, please contact me at (850)488-3693.

Sincerely,

David P. Grabka
Remedial Project Manager

cc: Arturo McDonald, Naval CSS Panama City
Gerald Goode, Tetra Tech NUS, Tallahassee
Craig Benedikt, USEPA Region IV
Tom Lubozynski, FDEP Northwest District

TJB TB JJC JJC ESN ESN

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

RECEIVED
SEP 9 1999
TETRA TECH NUS
TALLAHASSEE, FL

5090
Code 1843
3 Sept 99

Florida Department of Environmental Protection
Attn: Mr. Dave Grabka, Environmental Specialist
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

SITE ASSESSMENT REPORT ADDENDUM SITE 307 NAVY COASTAL SYSTEMS STATION, PANAMA CITY, FL

Dear Mr. Grabka:

I would like to thank you for taking the time to meet with me on July 27, 1999, to conduct a site visit for Site 307. The review of Site 307 allowed us an opportunity to walk the site and observe the physical constraints present in the study area (i.e., sea wall at Alligator Bayou, concrete surface area, and existing aboveground storage tank), inspect the spacial distribution of monitoring wells and sampling locations, and visually observe the limited area of the site.

As discussed during our meeting, we would like to proceed with the groundwater sampling and the collection of an additional soil sample as outlined in your review letter issued for the Site Assessment Report (SAR) for Site 307. Given the location and spacing of the existing monitoring wells, it is proposed the additional monitoring well requested in the review letter not be installed at this time. The need for the additional monitoring wells will be evaluated and discussed when the results from the second round of groundwater sampling and the soil sample analysis have been reviewed and evaluated.

Please let us know if this course of action is appropriate to address your concerns with the SAR.

Sincerely,

NICK UGOLINI
Remedial Project Manager
UST Program

SITE ASSESSMENT REPORT ADDENDUM SITE 307 NAVY COASTAL SYSTEMS STATION, PANAMA CITY, FL

Copy to:
Mr. A McDonald, CSS
[redacted]

ATTACHMENT II

FIELD MONITORING FORMS

GROUNDWATER LEVEL MEASUREMENT SHEET

Brown & Root Environmental

Project: Navy Coastal Systems Station
Project No.: 77606
Location: Site 307
Personnel: GG/TT/JE
Weather: Sunny/Scattered Clouds
Measuring Device: Slope Indicator #514
Date: 8-31-99
Remarks:

Well Number	Time	(A) Elevation of Reference Point (feet)*	(B) Water Level Indicator Reading (feet)*	=(A)-(B) Groundwater Elevation (feet)*	Total Well Depth (feet)* TOC	Comments
TCW	1548		4.65		13	
MW-01	1552		4.79		13	
MW-02	1550		4.77		13	
MW-03	1547		4.74		13	
MW-4D	1553		4.51		30	

Notes:

*All measurements to the nearest 0.01 foot

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Navy Coastal Systems Station
Project No.: 7416

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: PCY-307-MW01-002
Sample Location: Site 307
Sampled By: GG/TT/JE
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 8-31-99	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1815	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	%	NA
Method: Peristaltic	Clear	5.73	0.78	91.0	—	—	—	—

PURGE DATA:

Date: 8-31-99	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	~~Other~~ Flow Rate
Method: Peristaltic	Initial	5.66	0.19	96.9	—	—	—	1000 ml/min
Monitor Reading (ppm): —	1	5.56	0.03	99.6	—	—	—	"
Well Casing Diameter & Material	2	5.69	0.09	101.3	—	—	—	"
Type: 2" PVC	3	5.71	0.04	100.0	—	—	—	"
Total Well Depth (TD): 13' TOC	4	5.73	0.04	101.8	—	—	—	"
Static Water Level (WL): 4.79' TOC	5	5.73	0.78	91.0	—	—	—	"
One Casing Volume(gal/L): 5.0L								
Start Purge (hrs): 1633								
End Purge (hrs): 1710								
Total Purge Time (min): 37 min								
Total Vol. Purged (gal/L): 37 min 37L								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Volatiles (8021)	HCl/4°C	(3) 40 ml vials	yes
EL PRO	H_2SO_4/4°C	(1) 1 L Amber	yes
PAHs (8310)	4°C	(2) 1 L Amber	yes

OBSERVATIONS / NOTES:

PCY-307-MW01-002B – Equipment Blank – Time: 1825
Low Flow Purge
Iced Samples

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Navy Coastal Systems Station
Project No.: 17766

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: PCY-307-MW0000
Sample Location: Site 307
Sampled By: GG/TT/JE
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 8-31-99	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1801	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	%	NA
Method: Peristaltic	clear	5.61	2.08	101.2	—	—	—	—

PURGE DATA:

Date: 8-31-99	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	~~Other~~ Flow Rate
Method: Peristaltic	Initial	5.39	1.84	90.6	—	—	—	600 ml/min
Monitor Reading (ppm): —	1	5.54	5.192	95.5	—	—	—	"
Well Casing Diameter & Material	2	5.57	2.01	98.8	—	—	—	"
Type: 2" PVC	~ 3	5.63	2.03	99.6	—	—	—	"
Total Well Depth (TD): 13' TOC	~ 45.55	5.63	2.07	100.3	—	—	—	"
Static Water Level (WL): 4.77' TOC	~ 54	5.61	2.08	101.2	—	—	—	"
One Casing Volume(gal/L): 5.0 L								
Start Purge (hrs): 1604								
End Purge (hrs): 1656								
Total Purge Time (min): 30 min								
Total Vol. Purged (gal/L): 5.192 L								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Volatiles (8021)	HCl/4°C	(3) 40ml vials	yes
Fe, Pb, Mn	HNO3/4°C	(1) 1L Ambers	↓
PAHs	4°C	(2) 1L Ambers	↓

OBSERVATIONS / NOTES:

Low Flow Purge
Iced Samples

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Navy Coastal Systems Station
Project No.: 177660

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: PCY-307-MW03-002
Sample Location: Site 307
Sampled By: GG/TT/JF
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	Salinity %	Other NA
Date: 8-31-99								
Time: 1800								
Method: Peristaltic	clear	5.45	2.00	98.8	—	—	—	—

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other Flow Rate	WL
Date: 8-31-99									
Method: Peristaltic	Initial	5.32	2.74	96.0	—	—	—	1000mL/min	4.86'
Monitor Reading (ppm): —	~ 1	5.36	1.86	93.1	—	—	—	"	4.88'
Well Casing Diameter & Material	~ 2	5.49	1.90	94.8	—	—	—	"	4.88'
Type: 2" PVC	~ 3	5.46	1.91	96.3	—	—	—	"	4.88
Total Well Depth (TD): 13' TOC	~ 4	5.45	2.00	98.8	—	—	—	"	
Static Water Level (WL): 4.77' TOC									
One Casing Volume(gal/L): 5.1L									
Start Purge (hrs): 1619									
End Purge (hrs): 1644									
Total Purge Time (min): 25 min									
Total Vol. Purged (gal/L): 25 vol									

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Volatiles (8021)	HCl/4°C	(3) 40 mL vials	yes
Fl. PAH (8310)	H2SO4/4°C	(1) 1 L Amber	↓
PAHs (8310)	4°C	(2) 1 L Amber	↓

OBSERVATIONS / NOTES:

Low Flow Purge
Iced Samples

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Navy Coastal Systems Station
Project No.: 77660

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: PCY-307-MW4D-0000
Sample Location: Site 307
Sampled By: GG/TT/JE
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 8-31-99	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1800	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	%	NA
Method: Peristaltic	Clear	5.54	0.92	94.4	—	—	—	—

PURGE DATA:

Date: 8-31-99	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	~~Other~~ Flow Rate
Method: Peristaltic	Initial	5.82	0.03	100.7	—	—	—	1000mL/min
Monitor Reading (ppm):	1	5.66	2.90	94.3	—	—	—	"
Well Casing Diameter & Material	2	5.54	2.91	94.9	—	—	—	"
Type: 2" PVC	3	5.50	2.92	94.9	—	—	—	"
Total Well Depth (TD): 30' TOC	4	5.54	0.92	94.4	—	—	—	"
Static Water Level (WL): 4.51' TOC								
~~One Casing Volume(gal/L):~~ Screen Vol: 15.4L 3.1L								
Start Purge (hrs): 1700								
End Purge (hrs): 1708								
Total Purge Time (min): 20 min								
Total Vol. Purged (gal/L): 20L								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Volatiles (8260)	HCl/4°C	(2) 40mL Vials	yes
FL PRO	H_2SO_4/4°C	(1) 1L Amber	↓
PAHs	4°C	(2) 1L Amber	

OBSERVATIONS / NOTES:

Low Flow Purge
Note: Used Screen Vol.
Iced Samples

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Navy Coastal Systems Station
Project No.: 77606

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: PCY-307-TCW-0000
Sample Location: Site 307
Sampled By: GG/TT/JE
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	Salinity %	Other NA
Date: 8-31-99								
Time: 1810								
Method: Peristaltic	clear	5.80	2.08	101.3	—	—	—	—

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	~~Other~~ Flow Rate
Date: 8-31-99								
Method: Peristaltic	Initial	5.76	1.89	94.4	—	—	—	1000 ml/min
Monitor Reading (ppm): —	1	5.73	1.91	94.9	—	—	—	"
Well Casing Diameter & Material	2	5.89	2.00	98.0	—	—	—	"
Type: 2" PVC	~3	5.88	2.05	99.9	—	—	—	"
Total Well Depth (TD): 13' toc	~4	5.82	2.08	101.3	—	—	—	"
Static Water Level (WL): 4.05' toc								
One Casing Volume(gal/L): 5.1 L								
Start Purge (hrs): 1603								
End Purge (hrs): 1655								
Total Purge Time (min): 22								
Total Vol. Purged (gal/L): 22 L								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Volatiles (8260)	HCl/4°C	2 (2) 40 mL Vials	yes
EL PRO	H_2SO_4/4°C	2 (1) 1 L Amber	yes
PAHs (8310)	4°C	(2) 1 L Amber	yes

OBSERVATIONS / NOTES:

Low Flow Purge
Iced Samples

Circle if Applicable:

MS/MSD	Duplicate ID No.: PCY-307-TCW-0000

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Site 307 ~~[illegible]~~/Summit/[illegible]
Project No.: 7766

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 307SB08 0102-001
Sample Location: Navy Coastal Systems Station
Sampled By: D.A.
C.O.C. No.: Airbill# 813212974589

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 9/1/99 Time: 13:45 Method: Hand Auger ✓ Monitor Reading (ppm): —	Sample collected 1 to 2' zone (bls)	Gray	Sand, fine to medium grained

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

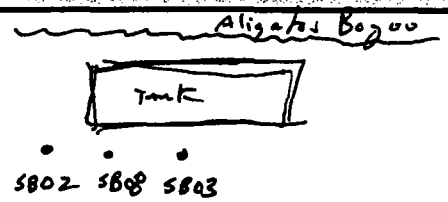
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
Encore Method 8021	Encore Sampler	D.A.	—
FCPRO	8oz Amber jar	D.A.	—
	8oz Amber jar	D.A.	—

OBSERVATIONS / NOTES:

- 6½ inch Concrete Cap
6.5 to 1' bls - Clayey Sand red
1' to 2' bls - Sand, Gray

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [illegible]

SOUTHNAVFAC

LOG OF BORING SB08

PROJECT NO: CTO 0047	PROJECT NAME: 307 CTO 0047
PROJECT LOCATION: Coastal Systems Station	DATE DRILLED: 9/1/99
DRILLING COMPANY: N/A	SURFACE ELEVATION: Feet NA
DRILLING METHOD: Hand Auger	BORING DIAMETER: 3 Inches
DRILLING RIG: N/A	GEOLOGIST: Gerald Goode

DEPTH feet	SAMPLE NUMBER	BLOWS/FT.	PID (ppm) Sample	B. Zone	Borehole	Drill B. Z.	GRAPHIC LOG	USCS/RQD	GEOLOGIC DESCRIPTION Density/Consistency, Hardness, Color	WELL DIAGRAM
1	307	SB08	01	02	-001				concrete 6.5" thick	
2	E.O.B								Clayey Sand, red 6.5 to 1 Ft Bls	
									Sand, fine to medium grained, gray, dry	
5										
10										
15										
20										
25										
30										
35										
40										

JCE NUMBER

ATTACHMENT III

Soil Laboratory Data Sheets
August 31, 1999

ACCUTEST

09/20/99

Technical Report for

Tetra-Tech, NUS

Site 307 CSS,Panama City

7766

Accutest Job Number: F4833

Report to:

Tetra Tech, NUS
1311 Executive Center Drive
Ellie Building, Suite 220
Tallahassee, FL 32301

ATTN: Gerald Goode

Total number of pages in report: 11

Harry Behzadi, Ph.D.
Laboratory Director

Results relate only to the items tested.
This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

CHAIN OF CUSTODY

ACCUTEST

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: 2049-7766-P98312
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Gerald Goode (T+NUS)
ADDRESS: 1401 Oven Park Dr. Suite 102
CITY, STATE, ZIP: Tallahassee FL 32308
SEND REPORT TO:
PHONE #: 850 385-9899

FACILITY INFORMATION

PROJECT NAME: SITE 307
LOCATION: Navy Coastal Systems Station Panama City, FL
PROJECT NO.: 7766
FAX #: 850-385-9860

ANALYTICAL INFORMATION

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	Method 8310 (none)	FL PRO (H2SO4)	Method 8021 (HCl)	Encore	Method 8310	FL PRO					Air c bottles	LAB USE ONLY
F4633-1	307SB080102-001B	9/1/99	13:00	S.A	SW water	5	X			X	X	2	1	2								5	
-2	307SB080102-001	9/1/99	13:45	S.A	SO										4	1	1					6	
					TOTAL Bottles							2	1	2	4	1	1						

DATA TURNAROUND INFORMATION

- [x] STANDARD
- [ ] 48 HOUR RUSH
- [ ] 24 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [x] STANDARD
- [ ] COMMERCIAL "B"
- [x] DISK DELIVERABLE
- [ ] STATE FORMS
- [ ] OTHER (SPECIFY)

Air bill 8132 1297 4589

COMMENTS/REMARKS

Samples Iced.

tclr = 4°c

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. Samples Received under Custody Seal		1. Gerald Goode	2.		2. Abby Wilson 9-3-99 1000
RELINQUISHED BY: 3. Gerald Goode	DATE TIME: 9/1/99 15:00	RECEIVED BY: Jo Coulen	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE ____

ACCUTEST

Sample Summary

Tetra-Tech, NUS

Job No: F4833

Site 307 CSS,Panama City
Project No: 7766

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F4833-1	09/01/99	00:00 GG	09/02/99	AQ	Ground Water	307SB080102-001B
F4833-2	09/01/99	00:00 GG	09/02/99	SO	Soil	307SB080102-001

ACCUTEST

Report of Analysis

Client Sample ID:	307SB080102-001B		
Lab Sample ID:	F4833-1	**Date Sampled:**	09/01/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR000678.D	1	09/03/99	JG	n/a	n/a	GQR18
Run #2							

VOA 8021 List

CAS No.	Compound	Result	RDL	Units	Q
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	
74-83-9	Bromomethane	ND	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	1.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	307SB080102-001B		
Lab Sample ID:	F4833-1	**Date Sampled:**	09/01/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR000678.D	1	09/03/99	JG	n/a	n/a	GQR18
Run #2							

VOA 8021 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
75-29-6	2-Chloropropane	89%		75-125%
352-33-0	1-Chloro-4-fluorobenzene	104%		65-125%
352-33-0	1-Chloro-4-fluorobenzene	107%		65-125%
98-08-8	aaa-Trifluorotoluene	101%		72-125%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	307SB080102-001B		
Lab Sample ID:	F4833-1	**Date Sampled:**	09/01/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	FLORIDA-PRO	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP05106.D	1	09/08/99	ME	09/07/99	OP972	GOP246
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C8-C40)	ND	0.50	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	104%		40-140%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	307SB080102-001B		
Lab Sample ID:	F4833-1	**Date Sampled:**	09/01/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8310	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC5720.D	1	09/10/99	AMA	09/07/99	M:OP1411	M:GLC28
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	ND	1.1	ug/l	
208-96-8	Acenaphthylene	ND	1.1	ug/l	
120-12-7	Anthracene	ND	1.1	ug/l	
56-55-3	Benzo (a) anthracene	ND	0.16	ug/l	
50-32-8	Benzo (a) pyrene	ND	0.16	ug/l	
205-99-2	Benzo (b) fluoranthene	ND	0.16	ug/l	
191-24-2	Benzo (g,h,i) perylene	ND	0.16	ug/l	
207-08-9	Benzo (k) fluoranthene	ND	0.16	ug/l	
218-01-9	Chrysene	ND	0.16	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	0.16	ug/l	
206-44-0	Fluoranthene	ND	1.1	ug/l	
86-73-7	Fluorene	ND	1.1	ug/l	
193-39-5	Indeno (1,2,3-cd) pyrene	ND	0.16	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	ug/l	
91-20-3	Naphthalene	ND	1.1	ug/l	
85-01-8	Phenanthrene	ND	1.1	ug/l	
129-00-0	Pyrene	ND	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	65%		20-160%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	307SB080102-001		
Lab Sample ID:	F4833-2	**Date Sampled:**	09/01/99
Matrix:	SO - Soil	**Date Received:**	09/02/99
Method:	SW846 8260B	**Percent Solids:**	96.7
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K004304.D	1	09/07/99	RAW	n/a	n/a	VK108
Run #2							

VOA 8021 List

CAS No.	Compound	Result	RDL	Units	Q
71-43-2	Benzene	ND	2.2	ug/kg	
75-27-4	Bromodichloromethane	ND	2.2	ug/kg	
75-25-2	Bromoform	ND	2.2	ug/kg	
108-90-7	Chlorobenzene	ND	2.2	ug/kg	
75-00-3	Chloroethane	ND	5.6	ug/kg	
67-66-3	Chloroform	ND	2.2	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	5.6	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.2	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	2.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.2	ug/kg	
124-48-1	Dibromochloromethane	ND	2.2	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.6	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	2.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	ug/kg	
541-73-1	m-Dichlorobenzene	ND	2.2	ug/kg	
95-50-1	o-Dichlorobenzene	ND	2.2	ug/kg	
106-46-7	p-Dichlorobenzene	ND	2.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	2.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	ug/kg	
100-41-4	Ethylbenzene	ND	2.2	ug/kg	
74-83-9	Methyl bromide	ND	5.6	ug/kg	
74-87-3	Methyl chloride	ND	5.6	ug/kg	
75-09-2	Methylene chloride	ND	5.6	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	2.2	ug/kg	
108-88-3	Toluene	ND	2.2	ug/kg	
79-01-6	Trichloroethylene	ND	2.2	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.6	ug/kg	
75-01-4	Vinyl chloride	ND	5.6	ug/kg	
1330-20-7	Xylene (total)	ND	6.7	ug/kg	

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	307SB080102-001		
Lab Sample ID:	F4833-2	**Date Sampled:**	09/01/99
Matrix:	SO - Soil	**Date Received:**	09/02/99
Method:	SW846 8260B	**Percent Solids:**	96.7
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K004304.D	1	09/07/99	RAW	n/a	n/a	VK108
Run #2							

VOA 8021 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		71-122%
2037-26-5	Toluene-D8	105%		73-128%
460-00-4	4-Bromofluorobenzene	100%		53-158%
17060-07-0	1,2-Dichloroethane-D4	79%		71-122%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	307SB080102-001		
Lab Sample ID:	F4833-2	**Date Sampled:**	09/01/99
Matrix:	SO - Soil	**Date Received:**	09/02/99
Method:	FLORIDA-PRO	**Percent Solids:**	96.7
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP05131.D	1	09/09/99	ME	09/08/99	OP975	GOP246
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C8-C40)	7.42	8.6	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	99%		40-140%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	307SB080102-001		
Lab Sample ID:	F4833-2	**Date Sampled:**	09/01/99
Matrix:	SO - Soil	**Date Received:**	09/02/99
Method:	SW846 8310	**Percent Solids:**	96.7
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC5715D.D	1	09/09/99	AMA	09/07/99	M:OP1413	M:GLC28
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	ND	69	ug/kg	
208-96-8	Acenaphthylene	ND	69	ug/kg	
120-12-7	Anthracene	ND	69	ug/kg	
56-55-3	Benzo (a) anthracene	ND	10	ug/kg	
50-32-8	Benzo (a) pyrene	ND	10	ug/kg	
205-99-2	Benzo (b) fluoranthene	ND	10	ug/kg	
191-24-2	Benzo (g,h,i) perylene	ND	10	ug/kg	
207-08-9	Benzo (k) fluoranthene	ND	10	ug/kg	
218-01-9	Chrysene	ND	10	ug/kg	
53-70-3	Dibenz(a,h)anthracene	ND	10	ug/kg	
206-44-0	Fluoranthene	ND	10	ug/kg	
86-73-7	Fluorene	ND	69	ug/kg	
193-39-5	Indeno (1,2,3-cd) pyrene	ND	10	ug/kg	
90-12-0	1-Methylnaphthalene	ND	69	ug/kg	
91-57-6	2-Methylnaphthalene	ND	69	ug/kg	
91-20-3	Naphthalene	ND	69	ug/kg	
85-01-8	Phenanthrene	ND	69	ug/kg	
129-00-0	Pyrene	ND	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	58%		20-130%

ND = Not detected
RDL = Reported Detection 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

QA/QC DATA

Blank Spike Summary

Job Number: F4833
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1411-BS1	LC5715K.D	1	09/09/99	CZ	09/07/99	OP1411	GLC28

The QC reported here applies to the following samples: **Method:** SW846 8310

F4833-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	10	7.9	79	1-124
208-96-8	Acenaphthylene	10	7.0	70	1-139
120-12-7	Anthracene	10	7.6	76	1-126
56-55-3	Benzo (a) anthracene	10	8.3	83	12-135
50-32-8	Benzo (a) pyrene	10	6.2	62	1-128
205-99-2	Benzo (b) fluoranthene	10	7.8	78	6-150
191-24-2	Benzo (g,h,i) perylene	10	6.2	62	1-116
207-08-9	Benzo (k) fluoranthene	10	7.7	77	1-159
218-01-9	Chrysene	10	9.6	96	1-199
53-70-3	Dibenz(a,h)anthracene	10	6.6	66	1-110
206-44-0	Fluoranthene	10	8.2	82	14-123
86-73-7	Fluorene	10	7.5	75	1-142
193-39-5	Indeno (1,2,3-cd) pyrene	10	6.5	65	1-116
90-12-0	1-Methylnaphthalene	10	9.4	94	50-150 [a]
91-57-6	2-Methylnaphthalene	10	7.5	75	1-122
91-20-3	Naphthalene	10	6.6	66	1-122
85-01-8	Phenanthrene	10	7.6	76	1-155
129-00-0	Pyrene	10	8.6	86	1-140

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	72%	20-160%

(a) Advisory control limits.

Blank Spike Summary

Job Number: F4833
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

	Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
(a)	OP1413-BS1	LC5715G.D	1	09/09/99	CZ	09/07/99	OP1413	GLC28

The QC reported here applies to the following samples: **Method:** SW846 8310

F4833-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	667	418	63	1-124
208-96-8	Acenaphthylene	667	839	126	1-139
120-12-7	Anthracene	667	439	66	1-126
56-55-3	Benzo (a) anthracene	667	541	81	12-135
50-32-8	Benzo (a) pyrene	667	445	67	1-128
205-99-2	Benzo (b) fluoranthene	667	566	85	6-150
191-24-2	Benzo (g,h,i) perylene	667	481	72	1-116
207-08-9	Benzo (k) fluoranthene	667	519	78	1-159
218-01-9	Chrysene	667	623	93	1-199
53-70-3	Dibenz(a,h)anthracene	667	532	80	1-110
206-44-0	Fluoranthene	667	491	74	14-123
86-73-7	Fluorene	667	391	59	1-142
193-39-5	Indeno (1,2,3-cd) pyrene	667	504	76	1-116
90-12-0	1-Methylnaphthalene	667	372	56	50-150 [b]
91-57-6	2-Methylnaphthalene	667	407	61	1-122
91-20-3	Naphthalene	667	366	55	1-122
85-01-8	Phenanthrene	667	432	65	1-155
129-00-0	Pyrene	667	534	80	1-140

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	71%	20-130%

(a) SAMPLE NOT YET APPROVED BY LAB. DO NOT REPORT.
(b) Advisory control limits.

Blank Spike Summary

Job Number: F4833
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

	Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
(a)	OP1413-BS2	LC5715I.D	1	09/09/99	CZ	09/09/99	OP1413	GLC28

The QC reported here applies to the following samples: **Method:** SW846 8310

F4833-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	667	452	68	1-124
208-96-8	Acenaphthylene	667	1180	177*	1-139
120-12-7	Anthracene	667	454	68	1-126
56-55-3	Benzo (a) anthracene	667	618	93	12-135
50-32-8	Benzo (a) pyrene	667	525	79	1-128
205-99-2	Benzo (b) fluoranthene	667	609	91	6-150
191-24-2	Benzo (g,h,i) perylene	667	560	84	1-116
207-08-9	Benzo (k) fluoranthene	667	605	91	1-159
218-01-9	Chrysene	667	705	106	1-199
53-70-3	Dibenz(a,h)anthracene	667	611	92	1-110
206-44-0	Fluoranthene	667	568	85	14-123
86-73-7	Fluorene	667	425	64	1-142
193-39-5	Indeno (1,2,3-cd) pyrene	667	578	87	1-116
90-12-0	1-Methylnaphthalene	667	462	69	50-150 [b]
91-57-6	2-Methylnaphthalene	667	446	67	1-122
91-20-3	Naphthalene	667	398	60	1-122
85-01-8	Phenanthrene	667	500	75	1-155
129-00-0	Pyrene	667	596	89	1-140

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	78%	20-130%

(a) SAMPLE NOT YET APPROVED BY LAB. DO NOT REPORT.
(b) Advisory control limits.

Duplicate Summary

Job Number: F4833
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1411-DUP	LC5710.D	1	09/09/99	CZ	08/27/99	OP1411	GLC28
F4776-4	LC5716.D	1	09/09/99	CZ	08/27/99	OP1411	GLC28

The QC reported here applies to the following samples: **Method:** SW846 8310

F4833-1

CAS No.	Compound	F4776-4 ug/l	Q	DUP ug/l	Q	RPD	Limits
83-32-9	Acenaphthene	ND		ND		0	
208-96-8	Acenaphthylene	ND		ND		0	
120-12-7	Anthracene	ND		ND		0	
56-55-3	Benzo (a) anthracene	ND		ND		0	
50-32-8	Benzo (a) pyrene	ND		ND		0	
205-99-2	Benzo (b) fluoranthene	ND		ND		0	
191-24-2	Benzo (g,h,i) perylene	ND		ND		0	
207-08-9	Benzo (k) fluoranthene	ND		ND		0	
218-01-9	Chrysene	ND		ND		0	
53-70-3	Dibenz(a,h)anthracene	ND		ND		0	
206-44-0	Fluoranthene	ND		ND		0	
86-73-7	Fluorene	ND		ND		0	
193-39-5	Indeno (1,2,3-cd) pyrene	ND		ND		0	
90-12-0	1-Methylnaphthalene	ND		ND		0	
91-57-6	2-Methylnaphthalene	ND		ND		0	
91-20-3	Naphthalene	ND		ND		0	
85-01-8	Phenanthrene	ND		ND		0	
129-00-0	Pyrene	ND		ND		0	

CAS No.	Surrogate Recoveries	DUP	F4776-4	Limits
84-15-1	o-Terphenyl	72%	66%	20-160%

Duplicate Summary

Job Number: F4833
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1413-DUP	LC5749.D	1	09/11/99	CZ	09/02/99	OP1413	GLC29
F4782-14	LC5754.D	1	09/11/99	CZ	09/02/99	OP1413	GLC29

The QC reported here applies to the following samples: **Method:** SW846 8310

F4833-2

CAS No.	Compound	F4782-14 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
83-32-9	Acenaphthene	ND		ND		0	
208-96-8	Acenaphthylene	ND		ND		0	
120-12-7	Anthracene	ND		ND		0	
56-55-3	Benzo (a) anthracene	ND		ND		0	
50-32-8	Benzo (a) pyrene	ND		ND		0	
205-99-2	Benzo (b) fluoranthene	ND		ND		0	
191-24-2	Benzo (g,h,i) perylene	ND		ND		0	
207-08-9	Benzo (k) fluoranthene	ND		ND		0	
218-01-9	Chrysene	ND		ND		0	
53-70-3	Dibenz(a,h)anthracene	ND		ND		0	
206-44-0	Fluoranthene	ND		ND		0	
86-73-7	Fluorene	ND		ND		0	
193-39-5	Indeno (1,2,3-cd) pyrene	ND		ND		0	
90-12-0	1-Methylnaphthalene	ND		ND		0	
91-57-6	2-Methylnaphthalene	ND		ND		0	
91-20-3	Naphthalene	ND		ND		0	
85-01-8	Phenanthrene	ND		ND		0	
129-00-0	Pyrene	ND		ND		0	

CAS No.	Surrogate Recoveries	DUP	F4782-14	Limits
84-15-1	o-Terphenyl	44%	41%	20-130%

Method Blank Summary

Job Number: F4833
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1411-MB1	LC5715J.D	1	09/09/99	CZ	09/07/99	OP1411	GLC28

The QC reported here applies to the following samples: **Method:** SW846 8310

F4833-1

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	ND	1.0	ug/l	
208-96-8	Acenaphthylene	ND	1.0	ug/l	
120-12-7	Anthracene	ND	1.0	ug/l	
56-55-3	Benzo (a) anthracene	ND	0.15	ug/l	
50-32-8	Benzo (a) pyrene	ND	0.15	ug/l	
205-99-2	Benzo (b) fluoranthene	ND	0.15	ug/l	
191-24-2	Benzo (g,h,i) perylene	ND	0.15	ug/l	
207-08-9	Benzo (k) fluoranthene	ND	0.15	ug/l	
218-01-9	Chrysene	ND	0.15	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	0.15	ug/l	
206-44-0	Fluoranthene	ND	1.0	ug/l	
86-73-7	Fluorene	ND	1.0	ug/l	
193-39-5	Indeno (1,2,3-cd) pyrene	ND	0.15	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	1.0	ug/l	
85-01-8	Phenanthrene	ND	1.0	ug/l	
129-00-0	Pyrene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	63%	20-160%

Method Blank Summary

Job Number: F4833
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

	Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
(a)	OP1413-MB1	LC5715F.D	1	09/09/99	CZ	09/07/99	OP1413	GLC28

The QC reported here applies to the following samples: **Method:** SW846 8310

F4833-2

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	ND	67	ug/kg	
208-96-8	Acenaphthylene	ND	67	ug/kg	
120-12-7	Anthracene	ND	67	ug/kg	
56-55-3	Benzo (a) anthracene	ND	10	ug/kg	
50-32-8	Benzo (a) pyrene	ND	10	ug/kg	
205-99-2	Benzo (b) fluoranthene	ND	10	ug/kg	
191-24-2	Benzo (g,h,i) perylene	ND	10	ug/kg	
207-08-9	Benzo (k) fluoranthene	ND	10	ug/kg	
218-01-9	Chrysene	ND	10	ug/kg	
53-70-3	Dibenz(a,h)anthracene	ND	10	ug/kg	
206-44-0	Fluoranthene	ND	10	ug/kg	
86-73-7	Fluorene	ND	67	ug/kg	
193-39-5	Indeno (1,2,3-cd) pyrene	ND	10	ug/kg	
90-12-0	1-Methylnaphthalene	ND	67	ug/kg	
91-57-6	2-Methylnaphthalene	ND	67	ug/kg	
91-20-3	Naphthalene	ND	67	ug/kg	
85-01-8	Phenanthrene	ND	67	ug/kg	
129-00-0	Pyrene	ND	10	ug/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	78%	20-130%

(a) SAMPLE NOT YET APPROVED BY LAB. DO NOT REPORT.

Method Blank Summary

Job Number: F4833
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

	Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
(a)	OP1413-MB2	LC5715H.D	1	09/09/99	CZ	09/09/99	OP1413	GLC28

The QC reported here applies to the following samples: **Method:** SW846 8310

F4833-2

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	ND	67	ug/kg	
208-96-8	Acenaphthylene	ND	67	ug/kg	
120-12-7	Anthracene	ND	67	ug/kg	
56-55-3	Benzo (a) anthracene	ND	10	ug/kg	
50-32-8	Benzo (a) pyrene	ND	10	ug/kg	
205-99-2	Benzo (b) fluoranthene	ND	10	ug/kg	
191-24-2	Benzo (g,h,i) perylene	ND	10	ug/kg	
207-08-9	Benzo (k) fluoranthene	ND	10	ug/kg	
218-01-9	Chrysene	ND	10	ug/kg	
53-70-3	Dibenz(a,h)anthracene	ND	10	ug/kg	
206-44-0	Fluoranthene	ND	10	ug/kg	
86-73-7	Fluorene	ND	67	ug/kg	
193-39-5	Indeno (1,2,3-cd) pyrene	ND	10	ug/kg	
90-12-0	1-Methylnaphthalene	ND	67	ug/kg	
91-57-6	2-Methylnaphthalene	ND	67	ug/kg	
91-20-3	Naphthalene	ND	67	ug/kg	
85-01-8	Phenanthrene	ND	67	ug/kg	
129-00-0	Pyrene	ND	10	ug/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	79%	20-130%

(a) SAMPLE NOT YET APPROVED BY LAB. DO NOT REPORT.

Matrix Spike Summary

Job Number: F4833
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1411-MS	LC5709.D	1	09/09/99	CZ	08/27/99	OP1411	GLC28
F4776-4	LC5716.D	1	09/09/99	CZ	08/27/99	OP1411	GLC28

The QC reported here applies to the following samples: **Method:** SW846 8310

F4833-1

CAS No.	Compound	F4776-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
83-32-9	Acenaphthene	ND		20	14.3	72	1-124
208-96-8	Acenaphthylene	ND		20	13.8	69	1-139
120-12-7	Anthracene	ND		20	15.3	76	1-126
56-55-3	Benzo (a) anthracene	ND		20	17.8	89	12-135
50-32-8	Benzo (a) pyrene	ND		20	17.4	87	1-128
205-99-2	Benzo (b) fluoranthene	ND		20	17.4	87	6-150
191-24-2	Benzo (g,h,i) perylene	ND		20	17.0	85	1-116
207-08-9	Benzo (k) fluoranthene	ND		20	17.1	86	1-159
218-01-9	Chrysene	ND		20	20.4	102	1-199
53-70-3	Dibenz(a,h)anthracene	ND		20	17.4	87	1-110
206-44-0	Fluoranthene	ND		20	16.1	80	14-123
86-73-7	Fluorene	ND		20	14.4	72	1-142
193-39-5	Indeno (1,2,3-cd) pyrene	ND		20	16.8	84	1-116
90-12-0	1-Methylnaphthalene	ND		20	16.8	84	50-150 [a]
91-57-6	2-Methylnaphthalene	ND		20	13.6	68	1-122
91-20-3	Naphthalene	ND		20	12.6	63	1-122
85-01-8	Phenanthrene	ND		20	14.8	74	1-155
129-00-0	Pyrene	ND		20	17.6	88	1-140

CAS No.	Surrogate Recoveries	MS	F4776-4	Limits
84-15-1	o-Terphenyl	78%	66%	20-160%

(a) Advisory control limits.

Matrix Spike Summary

Job Number: F4833
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1413-MS	LC5748.D	1	09/11/99	CZ	09/02/99	OP1413	GLC29
F4782-14	LC5754.D	1	09/11/99	CZ	09/02/99	OP1413	GLC29

The QC reported here applies to the following samples: **Method:** SW846 8310

F4833-2

CAS No.	Compound	F4782-14 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
83-32-9	Acenaphthene	ND		1150	715	62	1-124
208-96-8	Acenaphthylene	ND		1150	448	39	1-139
120-12-7	Anthracene	ND		1150	432	38	1-126
56-55-3	Benzo (a) anthracene	ND		1150	617	54	12-135
50-32-8	Benzo (a) pyrene	ND		1150	504	44	1-128
205-99-2	Benzo (b) fluoranthene	ND		1150	564	49	6-150
191-24-2	Benzo (g,h,i) perylene	ND		1150	452	39	1-116
207-08-9	Benzo (k) fluoranthene	ND		1150	592	51	1-159
218-01-9	Chrysene	ND		1150	679	59	1-199
53-70-3	Dibenz(a,h)anthracene	ND		1150	537	47	1-110
206-44-0	Fluoranthene	ND		1150	547	48	14-123
86-73-7	Fluorene	ND		1150	519	45	1-142
193-39-5	Indeno (1,2,3-cd) pyrene	ND		1150	492	43	1-116
90-12-0	1-Methylnaphthalene	ND		1150	535	46*	50-150 [a]
91-57-6	2-Methylnaphthalene	ND		1150	500	43	1-122
91-20-3	Naphthalene	ND		1150	446	39	1-122
85-01-8	Phenanthrene	ND		1150	573	50	1-155
129-00-0	Pyrene	ND		1150	654	57	1-140

CAS No.	Surrogate Recoveries	MS	F4782-14	Limits
84-15-1	o-Terphenyl	52%	41%	20-130%

(a) Advisory control limits.

Method Blank Summary

Job Number: F4833
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1411-MB	LC5707.D	1	09/09/99	CZ	08/27/99	OP1411	GLC28

The QC reported here applies to the following samples: **Method:** SW846 8310

OP1411-DUP, OP1411-MS

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	ND	1.0	ug/l	
208-96-8	Acenaphthylene	ND	1.0	ug/l	
120-12-7	Anthracene	ND	1.0	ug/l	
56-55-3	Benzo (a) anthracene	ND	0.15	ug/l	
50-32-8	Benzo (a) pyrene	ND	0.15	ug/l	
205-99-2	Benzo (b) fluoranthene	ND	0.15	ug/l	
191-24-2	Benzo (g,h,i) perylene	ND	0.15	ug/l	
207-08-9	Benzo (k) fluoranthene	ND	0.15	ug/l	
218-01-9	Chrysene	ND	0.15	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	0.15	ug/l	
206-44-0	Fluoranthene	ND	1.0	ug/l	
86-73-7	Fluorene	ND	1.0	ug/l	
193-39-5	Indeno (1,2,3-cd) pyrene	ND	0.15	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	1.0	ug/l	
85-01-8	Phenanthrene	ND	1.0	ug/l	
129-00-0	Pyrene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	64%	20-160%

Method Blank Summary

Job Number: F4833
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1413-MB	LC5746.D	1	09/11/99	CZ	09/02/99	OP1413	GLC29

The QC reported here applies to the following samples: **Method:** SW846 8310

OP1413-DUP, OP1413-MS

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	ND	67	ug/kg	
208-96-8	Acenaphthylene	ND	67	ug/kg	
120-12-7	Anthracene	ND	67	ug/kg	
56-55-3	Benzo (a) anthracene	ND	10	ug/kg	
50-32-8	Benzo (a) pyrene	ND	10	ug/kg	
205-99-2	Benzo (b) fluoranthene	ND	10	ug/kg	
191-24-2	Benzo (g,h,i) perylene	ND	10	ug/kg	
207-08-9	Benzo (k) fluoranthene	ND	10	ug/kg	
218-01-9	Chrysene	ND	10	ug/kg	
53-70-3	Dibenz(a,h)anthracene	ND	10	ug/kg	
206-44-0	Fluoranthene	ND	10	ug/kg	
86-73-7	Fluorene	ND	67	ug/kg	
193-39-5	Indeno (1,2,3-cd) pyrene	ND	10	ug/kg	
90-12-0	1-Methylnaphthalene	ND	67	ug/kg	
91-57-6	2-Methylnaphthalene	ND	67	ug/kg	
91-20-3	Naphthalene	ND	67	ug/kg	
85-01-8	Phenanthrene	ND	67	ug/kg	
129-00-0	Pyrene	ND	10	ug/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	56%	20-130%

Semivolatile Surrogate Recovery Summary

Job Number: F4833
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

Method: SW846 8310 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
F4833-1	LC5720.D	65.0
OP1411-BS1	LC5715K.D	72.0
OP1411-DUP	LC5710.D	72.0
OP1411-MB1	LC5715J.D	63.0
OP1411-MS	LC5709.D	78.0
OP1411-MB	LC5707.D	64.0

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	20-160%

(a) Recovery from GC signal #2

Semivolatile Surrogate Recovery Summary

Job Number: F4833
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

Method: SW846 8310 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
F4833-2	LC5715D.D	58.0
OP1413-BS1 [b]	LC5715G.D	71.0
OP1413-BS2 [b]	LC5715I.D	78.0
OP1413-DUP	LC5749.D	44.0
OP1413-MB1 [b]	LC5715F.D	78.0
OP1413-MB2 [b]	LC5715H.D	79.0
OP1413-MS	LC5748.D	52.0
OP1413-MB	LC5746.D	56.0

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	20-130%

(a) Recovery from GC signal #2
(b) SAMPLE NOT YET APPROVED BY LAB. DO NOT REPORT.

Blank Spike Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP972-BS	OP05105.D	1	09/08/99	ME	09/07/99	OP972	GOP246

The QC reported here applies to the following samples: **Method:** FLORIDA-PRO

F4833-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C8-C40)	1.7	1.70	100	49-123

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	106%	40-140%

Blank Spike Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP975-BS	OP05127.D	1	09/09/99	ME	09/08/99	OP975	GOP246

The QC reported here applies to the following samples: **Method:** FLORIDA-PRO

F4833-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C8-C40)	28.3	28.8	102	50-132

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	100%	40-140%

Method Blank Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP972-MB	OP05104.D	1	09/08/99	ME	09/07/99	OP972	GOP246

The QC reported here applies to the following samples: **Method:** FLORIDA-PRO

F4833-1

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C8-C40)	ND	0.50	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	105%	40-140%

Method Blank Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP972-MB	OP05153.D	1	09/10/99	ME	09/07/99	OP972	GOP247

The QC reported here applies to the following samples: **Method:** FLORIDA-PRO

F4833-1

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C8-C40)	ND	0.50	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	102%	40-140%

Method Blank Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP975-MB	OP05126.D	1	09/09/99	ME	09/08/99	OP975	GOP246

The QC reported here applies to the following samples: **Method:** FLORIDA-PRO

F4833-2

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C8-C40)	ND	8.3	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	105%	40-140%

Method Blank Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP975-MB	OP05160.D	1	09/10/99	ME	09/08/99	OP975	GOP247

The QC reported here applies to the following samples: **Method:** FLORIDA-PRO

F4833-2

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C8-C40)	ND	8.3	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	104%	40-140%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP972-MS	OP05156.D	2	09/10/99	ME	09/07/99	OP972	GOP247
OP972-MSD	OP05157.D	2	09/10/99	ME	09/07/99	OP972	GOP247
F4844-5	OP05155.D	2	09/10/99	ME	09/07/99	OP972	GOP247

The QC reported here applies to the following samples: **Method:** FLORIDA-PRO

F4833-1

CAS No.	Compound	F4844-5 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C8-C40)	3.03		3.4	6.35	98	6.74	109	6	49-123/25

CAS No.	Surrogate Recoveries	MS	MSD	F4844-5	Limits
84-15-1	o-Terphenyl	98%	95%	98%	40-140%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP975-MS	OP05132.D	1	09/09/99	ME	09/08/99	OP975	GOP246
OP975-MSD	OP05133.D	1	09/09/99	ME	09/08/99	OP975	GOP246
F4833-2	OP05131.D	1	09/09/99	ME	09/08/99	OP975	GOP246

The QC reported here applies to the following samples: **Method:** FLORIDA-PRO

F4833-2

CAS No.	Compound	F4833-2 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C8-C40)	7.42	J	29.2	37.7	104	35.4	96	6	50-132/35

CAS No.	Surrogate Recoveries	MS	MSD	F4833-2	Limits
84-15-1	o-Terphenyl	106%	102%	99%	40-140%

Blank Spike Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR18-BS	QR000681.D	1	09/04/99	JG	n/a	n/a	GQR18

The QC reported here applies to the following samples: **Method:** SW846 8021B

F4833-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	17.6	88	69-120
75-27-4	Bromodichloromethane	20	19.6	98	54-120
75-25-2	Bromoform	20	16.1	80	34-126
74-83-9	Bromomethane	20	12.7	64	47-150
56-23-5	Carbon tetrachloride	20	22.0	110	48-124
108-90-7	Chlorobenzene	20	19.6	98	74-129
124-48-1	Dibromochloromethane	20	18.3	92	57-131
75-00-3	Chloroethane	20	21.7	108	43-150
110-75-8	2-Chloroethylvinyl ether	20	19.1	96	67-135
67-66-3	Chloroform	20	19.4	97	48-125
74-87-3	Chloromethane	20	20.3	102	53-150
106-93-4	1,2-Dibromoethane	20	16.1	80	50-150
95-50-1	1,2-Dichlorobenzene	20	18.0	90	71-131
541-73-1	1,3-Dichlorobenzene	20	18.9	94	70-125
106-46-7	1,4-Dichlorobenzene	20	19.3	96	73-127
75-71-8	Dichlorodifluoromethane	20	22.0	110	50-150
75-34-3	1,1-Dichloroethane	20	19.5	98	51-136
107-06-2	1,2-Dichloroethane	20	20.6	103	50-144
75-35-4	1,1-Dichloroethene	20	19.1	96	72-148
156-59-2	cis-1,2-Dichloroethene	20	20.8	104	50-150
156-60-5	trans-1,2-Dichloroethene	20	17.1	86	60-128
78-87-5	1,2-Dichloropropane	20	20.0	100	57-121
10061-01-5	cis-1,3-Dichloropropene	20	17.8	89	55-120
10061-02-6	trans-1,3-Dichloropropene	20	17.5	88	49-121
100-41-4	Ethylbenzene	20	17.8	89	83-121
75-09-2	Methylene chloride	20	20.6	103	58-130
1634-04-4	Methyl Tert Butyl Ether	20	20.1	100	72-131
79-34-5	1,1,2,2-Tetrachloroethane	20	18.9	94	25-135
127-18-4	Tetrachloroethene	20	21.0	105	54-127
108-88-3	Toluene	20	17.5	88	62-125
71-55-6	1,1,1-Trichloroethane	20	20.9	104	63-120
79-00-5	1,1,2-Trichloroethane	20	20.1	100	49-133
79-01-6	Trichloroethene	20	20.0	100	30-170
75-69-4	Trichlorofluoromethane	20	24.0	120	54-147
75-01-4	Vinyl chloride	20	19.3	96	39-164
1330-20-7	Xylenes (total)	60	61.1	102	77-118

Blank Spike Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR18-BS	QR000681.D	1	09/04/99	JG	n/a	n/a	GQR18

The QC reported here applies to the following samples: **Method:** SW846 8021B

F4833-1

CAS No.	Surrogate Recoveries	BSP	Limits
75-29-6	2-Chloropropane	84%	75-125%
352-33-0	1-Chloro-4-fluorobenzene	105%	65-125%
352-33-0	1-Chloro-4-fluorobenzene	105%	65-125%
98-08-8	aaa-Trifluorotoluene	103%	72-125%

Method Blank Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR18-MB	QR000663.D	1	09/03/99	JG	n/a	n/a	GQR18

The QC reported here applies to the following samples: **Method:** SW846 8021B

F4833-1

CAS No.	Compound	Result	RDL	Units	Q
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	
74-83-9	Bromomethane	ND	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	1.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	ug/l	
67-66-3	Chloroform [a]	1.7	1.0	ug/l	
74-87-3	Chloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	

Method Blank Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR18-MB	QR000663.D	1	09/03/99	JG	n/a	n/a	GQR18

The QC reported here applies to the following samples: **Method:** SW846 8021B

F4833-1

CAS No.	Surrogate Recoveries		Limits
75-29-6	2-Chloropropane	92%	75-125%
352-33-0	1-Chloro-4-fluorobenzene	103%	65-125%
352-33-0	1-Chloro-4-fluorobenzene	102%	65-125%
98-08-8	aaa-Trifluorotoluene	99%	72-125%

(a) Suspected laboratory contaminant.

Method Blank Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR18-MB	QR000755.D	1	09/10/99	JG	n/a	n/a	GQR18

The QC reported here applies to the following samples: **Method:** SW846 8021B

F4833-1

CAS No.	Compound	Result	RDL	Units	Q
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	
74-83-9	Bromomethane	ND	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	1.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	

Method Blank Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR18-MB	QR000755.D	1	09/10/99	JG	n/a	n/a	GQR18

The QC reported here applies to the following samples: **Method:** SW846 8021B

F4833-1

CAS No.	Surrogate Recoveries		Limits
75-29-6	2-Chloropropane	94%	75-125%
352-33-0	1-Chloro-4-fluorobenzene	102%	65-125%
352-33-0	1-Chloro-4-fluorobenzene	103%	65-125%
98-08-8	aaa-Trifluorotoluene	99%	72-125%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F4836-2MS	QR000679.D	1	09/04/99	JG	n/a	n/a	GQR18
F4836-2MSD	QR000680.D	1	09/04/99	JG	n/a	n/a	GQR18
F4836-2	QR000667.D	1	09/03/99	JG	n/a	n/a	GQR18

The QC reported here applies to the following samples: **Method:** SW846 8021B

F4833-1

CAS No.	Compound	F4836-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	22.6	113	22.0	110	3	69-120/12
75-27-4	Bromodichloromethane	ND		20	24.3	122*	24.1	120	1	54-120/17
75-25-2	Bromoform	ND		20	20.4	102	20.2	101	1	34-126/23
74-83-9	Bromomethane	ND		20	15.5	78	13.8	69	12	47-150/26
56-23-5	Carbon tetrachloride	ND		20	27.1	136*	27.0	135*	0	48-124/19
108-90-7	Chlorobenzene	ND		20	23.3	116	22.8	114	2	74-129/14
124-48-1	Dibromochloromethane	ND		20	23.3	116	23.2	116	0	57-131/19
75-00-3	Chloroethane	ND		20	24.4	122	25.3	126	4	43-150/26
110-75-8	2-Chloroethylvinyl ether	ND		20	ND	0*	ND	0*	nc	67-135/11
67-66-3	Chloroform	ND		20	22.8	114	22.3	112	2	48-125/19
74-87-3	Chloromethane	ND		20	13.5	68	16.2	81	18*	53-150/14
106-93-4	1,2-Dibromoethane	ND		20	20.5	102	20.5	102	0	50-150/30
95-50-1	1,2-Dichlorobenzene	ND		20	22.7	114	22.7	114	0	71-131/15
541-73-1	1,3-Dichlorobenzene	ND		20	23.5	118	23.3	116	1	70-125/14
106-46-7	1,4-Dichlorobenzene	ND		20	23.9	120	23.7	118	1	73-127/14
75-71-8	Dichlorodifluoromethane	ND		20	28.0	140	26.9	134	4	50-150/30
75-34-3	1,1-Dichloroethane	ND		20	24.2	121	23.6	118	2	51-136/21
107-06-2	1,2-Dichloroethane	ND		20	23.8	119	23.8	119	0	50-144/23
75-35-4	1,1-Dichloroethene	ND		20	24.3	122	23.5	118	3	72-148/19
156-59-2	cis-1,2-Dichloroethene	ND		20	25.8	129	25.0	125	3	50-150/30
156-60-5	trans-1,2-Dichloroethene	ND		20	21.9	110	21.5	108	2	60-128/17
78-87-5	1,2-Dichloropropane	ND		20	24.7	124*	24.6	123*	0	57-121/16
10061-01-5	cis-1,3-Dichloropropene	ND		20	22.3	112	22.3	112	0	55-120/16
10061-02-6	trans-1,3-Dichloropropene	ND		20	22.0	110	21.9	110	0	49-121/18
100-41-4	Ethylbenzene	ND		20	22.7	114	22.0	110	3	83-121/10
75-09-2	Methylene chloride	ND		20	23.8	119	23.3	116	2	58-130/13
1634-04-4	Methyl Tert Butyl Ether	ND		20	22.0	110	21.5	108	2	72-131/15
79-34-5	1,1,2,2-Tetrachloroethane	ND		20	23.2	116	23.3	116	0	25-135/28
127-18-4	Tetrachloroethene	ND		20	25.9	130*	25.5	128*	2	54-127/18
108-88-3	Toluene	ND		20	22.6	113	22.1	110	2	62-125/16
71-55-6	1,1,1-Trichloroethane	ND		20	26.0	130*	25.6	128*	2	63-120/12
79-00-5	1,1,2-Trichloroethane	ND		20	24.2	121	24.4	122	1	49-133/21
79-01-6	Trichloroethene	ND		20	25.4	127	24.8	124	2	33-170/34
75-69-4	Trichlorofluoromethane	ND		20	29.1	146	28.4	142	2	54-147/16
75-01-4	Vinyl chloride	ND		20	23.0	115	22.3	112	3	39-164/21
1330-20-7	Xylenes (total)	ND		60	89.0	148*	86.8	145*	2	77-118/10

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F4836-2MS	QR000679.D	1	09/04/99	JG	n/a	n/a	GQR18
F4836-2MSD	QR000680.D	1	09/04/99	JG	n/a	n/a	GQR18
F4836-2	QR000667.D	1	09/03/99	JG	n/a	n/a	GQR18

The QC reported here applies to the following samples: **Method:** SW846 8021B

F4833-1

CAS No.	Surrogate Recoveries	MS	MSD	F4836-2	Limits
75-29-6	2-Chloropropane	86%	86%	93%	75-125%
352-33-0	1-Chloro-4-fluorobenzene	106%	105%	103%	65-125%
352-33-0	1-Chloro-4-fluorobenzene	106%	106%	103%	65-125%
98-08-8	aaa-Trifluorotoluene	104%	103%	100%	72-125%

Blank Spike Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VK108-BS	K004316.D	1	09/07/99	RAW	n/a	n/a	VK108

The QC reported here applies to the following samples: **Method:** SW846 8260B

F4833-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	48.4	97	67-125
75-27-4	Bromodichloromethane	50	45.8	92	65-125
75-25-2	Bromoform	50	49.8	100	44-148
108-90-7	Chlorobenzene	50	55.9	112	73-125
75-00-3	Chloroethane	50	44.4	89	57-125
67-66-3	Chloroform	50	50.3	101	66-125
110-75-8	2-Chloroethyl vinyl ether	250	542	217	22-231
56-23-5	Carbon tetrachloride	50	50.2	100	56-131
75-34-3	1,1-Dichloroethane	50	47.7	95	73-125
75-35-4	1,1-Dichloroethylene	50	43.2	86	61-125
106-93-4	1,2-Dibromoethane	50	48.4	97	66-130
107-06-2	1,2-Dichloroethane	50	39.8	80	62-125
78-87-5	1,2-Dichloropropane	50	49.6	99	70-125
124-48-1	Dibromochloromethane	50	55.2	110	59-133
75-71-8	Dichlorodifluoromethane	50	30.4	61	1-159
156-59-2	cis-1,2-Dichloroethylene	50	51.8	104	69-125
10061-01-5	cis-1,3-Dichloropropene	50	44.7	89	63-125
541-73-1	m-Dichlorobenzene	50	49.6	99	69-125
95-50-1	o-Dichlorobenzene	50	48.0	96	71-125
106-46-7	p-Dichlorobenzene	50	47.9	96	65-125
156-60-5	trans-1,2-Dichloroethylene	50	42.0	84	66-125
10061-02-6	trans-1,3-Dichloropropene	50	46.3	93	62-127
100-41-4	Ethylbenzene	50	54.0	108	72-125
74-83-9	Methyl bromide	50	61.6	123	66-125
74-87-3	Methyl chloride	50	39.3	79	71-125
75-09-2	Methylene chloride	50	44.9	90	71-125
1634-04-4	Methyl Tert Butyl Ether	250	201	80	65-125
71-55-6	1,1,1-Trichloroethane	50	49.1	98	65-125
79-34-5	1,1,2,2-Tetrachloroethane	50	41.6	83	64-125
79-00-5	1,1,2-Trichloroethane	50	49.2	98	67-125
127-18-4	Tetrachloroethylene	50	58.8	118	36-161
108-88-3	Toluene	50	53.8	108	69-125
79-01-6	Trichloroethylene	50	49.4	99	64-125
75-69-4	Trichlorofluoromethane	50	41.1	82	48-125
75-01-4	Vinyl chloride	50	41.0	82	45-125
1330-20-7	Xylene (total)	150	158	105	73-125

Blank Spike Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VK108-BS	K004316.D	1	09/07/99	RAW	n/a	n/a	VK108

The QC reported here applies to the following samples: **Method:** SW846 8260B

F4833-2

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	71-122%
2037-26-5	Toluene-D8	107%	73-128%
460-00-4	4-Bromofluorobenzene	91%	53-158%
17060-07-0	1,2-Dichloroethane-D4	82%	71-122%

Method Blank Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VK108-MB	K004303.D	1	09/07/99	RAW	n/a	n/a	VK108

The QC reported here applies to the following samples: **Method:** SW846 8260B

F4833-2

CAS No.	Compound	Result	RDL	Units	Q
71-43-2	Benzene	ND	2.0	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	ug/kg	
75-25-2	Bromoform	ND	2.0	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	ug/kg	
67-66-3	Chloroform	ND	2.0	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	2.0	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ug/kg	
541-73-1	m-Dichlorobenzene	ND	2.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	2.0	ug/kg	
106-46-7	p-Dichlorobenzene	ND	2.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	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	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	2.0	ug/kg	
108-88-3	Toluene	ND	2.0	ug/kg	
79-01-6	Trichloroethylene	ND	2.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	ug/kg	
1330-20-7	Xylene (total)	ND	6.0	ug/kg	

Method Blank Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VK108-MB	K004303.D	1	09/07/99	RAW	n/a	n/a	VK108

The QC reported here applies to the following samples: **Method:** SW846 8260B

F4833-2

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	71-122%
2037-26-5	Toluene-D8	104%	73-128%
460-00-4	4-Bromofluorobenzene	99%	53-158%
17060-07-0	1,2-Dichloroethane-D4	82%	71-122%

Method Blank Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VK108-MB	K004319.D	1	09/08/99	RAW	n/a	n/a	VK108

The QC reported here applies to the following samples: **Method:** SW846 8260B

F4833-2

CAS No.	Compound	Result	RDL	Units	Q
71-43-2	Benzene	ND	2.0	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	ug/kg	
75-25-2	Bromoform	ND	2.0	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	ug/kg	
67-66-3	Chloroform	ND	2.0	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	2.0	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ug/kg	
541-73-1	m-Dichlorobenzene	ND	2.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	2.0	ug/kg	
106-46-7	p-Dichlorobenzene	ND	2.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	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	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	2.0	ug/kg	
108-88-3	Toluene	ND	2.0	ug/kg	
79-01-6	Trichloroethylene	ND	2.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	ug/kg	
1330-20-7	Xylene (total)	ND	6.0	ug/kg	

Method Blank Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VK108-MB	K004319.D	1	09/08/99	RAW	n/a	n/a	VK108

The QC reported here applies to the following samples: **Method:** SW846 8260B

F4833-2

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	71-122%
2037-26-5	Toluene-D8	102%	73-128%
460-00-4	4-Bromofluorobenzene	96%	53-158%
17060-07-0	1,2-Dichloroethane-D4	83%	71-122%

Method Blank Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VK108-MB	K004339.D	1	09/09/99	RAW	n/a	n/a	VK108

The QC reported here applies to the following samples: **Method:** SW846 8260B

F4833-2

CAS No.	Compound	Result	RDL	Units	Q
71-43-2	Benzene	ND	2.0	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	ug/kg	
75-25-2	Bromoform	ND	2.0	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	ug/kg	
67-66-3	Chloroform	ND	2.0	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	2.0	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ug/kg	
541-73-1	m-Dichlorobenzene	ND	2.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	2.0	ug/kg	
106-46-7	p-Dichlorobenzene	ND	2.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	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	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	2.0	ug/kg	
108-88-3	Toluene	ND	2.0	ug/kg	
79-01-6	Trichloroethylene	ND	2.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	ug/kg	
1330-20-7	Xylene (total)	ND	6.0	ug/kg	

Method Blank Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VK108-MB	K004339.D	1	09/09/99	RAW	n/a	n/a	VK108

The QC reported here applies to the following samples: **Method:** SW846 8260B

F4833-2

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	111%	71-122%
2037-26-5	Toluene-D8	97%	73-128%
460-00-4	4-Bromofluorobenzene	105%	53-158%
17060-07-0	1,2-Dichloroethane-D4	101%	71-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F4833-2MS	K004314.D	1	09/07/99	RAW	n/a	n/a	VK108
F4833-2MSD	K004315.D	1	09/07/99	RAW	n/a	n/a	VK108
F4833-2	K004304.D	1	09/07/99	RAW	n/a	n/a	VK108

The QC reported here applies to the following samples: **Method:** SW846 8260B

F4833-2

CAS No.	Compound	F4833-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		61	56.0	92	56.3	92	0	67-125/24
75-27-4	Bromodichloromethane	ND		61	53.6	88	53.8	88	0	65-125/24
75-25-2	Bromoform	ND		61	55.2	90	57.9	95	5	44-148/24
108-90-7	Chlorobenzene	ND		61	64.6	106	64.4	106	0	73-125/24
75-00-3	Chloroethane	ND		61	53.3	87	51.6	84	3	57-125/30
67-66-3	Chloroform	ND		61	55.5	91	54.5	89	2	66-125/23
110-75-8	2-Chloroethyl vinyl ether	ND		305	641	210	639	210	0	22-231/20
56-23-5	Carbon tetrachloride	ND		61	60.0	98	61.5	101	2	56-131/21
75-34-3	1,1-Dichloroethane	ND		61	55.8	91	55.5	91	0	73-125/24
75-35-4	1,1-Dichloroethylene	ND		61	50.2	82	51.2	84	2	61-125/20
106-93-4	1,2-Dibromoethane	ND		61	56.9	93	57.2	94	0	66-130/22
107-06-2	1,2-Dichloroethane	ND		61	46.4	76	47.1	77	1	62-125/24
78-87-5	1,2-Dichloropropane	ND		61	56.9	93	57.5	94	1	70-125/18
124-48-1	Dibromochloromethane	ND		61	63.7	104	64.8	106	2	59-133/20
75-71-8	Dichlorodifluoromethane	ND		61	36.6	60	34.5	56	6	1-159/20
156-59-2	cis-1,2-Dichloroethylene	ND		61	60.9	100	60.8	100	0	69-125/25
10061-01-5	cis-1,3-Dichloropropene	ND		61	52.0	85	51.4	84	1	63-125/23
541-73-1	m-Dichlorobenzene	ND		61	56.2	92	58.1	95	3	69-125/18
95-50-1	o-Dichlorobenzene	ND		61	52.9	87	54.1	89	2	71-125/21
106-46-7	p-Dichlorobenzene	ND		61	54.6	90	55.6	91	2	65-125/22
156-60-5	trans-1,2-Dichloroethylene	ND		61	49.2	81	49.7	81	1	66-125/18
10061-02-6	trans-1,3-Dichloropropene	ND		61	54.7	90	54.5	89	0	62-127/24
100-41-4	Ethylbenzene	ND		61	62.9	103	62.5	102	1	72-125/24
74-83-9	Methyl bromide	ND		61	74.4	122	72.2	118	3	66-125/40
74-87-3	Methyl chloride	ND		61	43.2	71	44.5	73	3	71-125/42
75-09-2	Methylene chloride	ND		61	57.2	94	56.4	92	1	71-125/24
1634-04-4	Methyl Tert Butyl Ether	ND		305	241	79	244	80	1	65-125/20
71-55-6	1,1,1-Trichloroethane	ND		61	56.9	93	56.5	93	1	65-125/20
79-34-5	1,1,2,2-Tetrachloroethane	ND		61	43.2	71	47.0	77	8	64-125/44
79-00-5	1,1,2-Trichloroethane	ND		61	57.3	94	57.2	94	0	67-125/22
127-18-4	Tetrachloroethylene	ND		61	71.0	116	71.0	116	0	36-161/27
108-88-3	Toluene	ND		61	62.6	103	63.0	103	1	69-125/18
79-01-6	Trichloroethylene	ND		61	60.6	99	57.6	94	5	64-125/36
75-69-4	Trichlorofluoromethane	ND		61	46.7	76	46.6	76	0	48-125/27
75-01-4	Vinyl chloride	ND		61	47.6	78	44.5	73	7	45-125/48
1330-20-7	Xylene (total)	ND		183	185	101	184	100	0	73-125/23

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F4833
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F4833-2MS	K004314.D	1	09/07/99	RAW	n/a	n/a	VK108
F4833-2MSD	K004315.D	1	09/07/99	RAW	n/a	n/a	VK108
F4833-2	K004304.D	1	09/07/99	RAW	n/a	n/a	VK108

The QC reported here applies to the following samples: **Method:** SW846 8260B

F4833-2

CAS No.	Surrogate Recoveries	MS	MSD	F4833-2	Limits
1868-53-7	Dibromofluoromethane	103%	104%	101%	71-122%
2037-26-5	Toluene-D8	108%	106%	105%	73-128%
460-00-4	4-Bromofluorobenzene	91%	91%	100%	53-158%
17060-07-0	1,2-Dichloroethane-D4	81%	83%	79%	71-122%

ATTACHMENT IV

Groundwater Laboratory Data Sheets
September 1, 1999

ACCUTEST

09/20/99

Technical Report for

Tetra-Tech, NUS

Site 307 CSS,Panama City

7766

Accutest Job Number: F4836

Report to:

Tetra Tech, NUS
1311 Executive Center Drive
Ellie Building, Suite 220
Tallahassee, FL 32301

ATTN: Gerald Goode

Total number of pages in report: 31

Harry Behzadi, Ph.D.
Laboratory Director

Results relate only to the items tested.
This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

CHAIN OF CUSTODY

ACCUTEST

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: 2044-7766-998312
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Gerald Goode (CTNUS)
ADDRESS: 1401 Oven Park Dr. Suite 102
CITY, STATE, ZIP: Tallahassee, FL 32301
SEND REPORT TO:
PHONE #: 850 385-9899

FACILITY INFORMATION

PROJECT NAME: Site 307 Navy Coastal Systems Station
LOCATION: Panama City, FL
PROJECT NO.: 7766
FAX #: 850 385-9860

ANALYTICAL INFORMATION

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	PAHs (8310) (GW-2)	FL PRO (GW-2)	VOCs (8021) (HCl)	LAB USE ONLY
F48861	PCY-307-MW03-002	8-31-99	1800	GG	GW	5	X			X	X	2	1	2	
-2	PCY-307-MW02-002	8-31-99	1801	GG	GW	5	X			X	X	2	1	2	
-3	PCY-307-TCW-002	8-31-99	1810	GG	GW	5	X			X	X	2	1	2	
-4	PCY-307-MW01-002	8-31-99	1815	GG	GW	5	X			X	X	2	1	2	
-5	PCY-307-MW4D-002	8-31-99	1800	GG	GW	5	X			X	X	2	1	2	
-6	PCY-307-TCW-002D	8-31-99	1810	GG	GW	5	X			X	X	2	1	2	
-7	PCY-307-MW01-002B	8-31-99	1805	GG	GW	5	X			X	X	2	1	2	
												14	7	14	

DATA TURNAROUND INFORMATION

- [x] STANDARD
- [ ] 48 HOUR RUSH
- [ ] 24 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [x] STANDARD
- [ ] COMMERCIAL "B"
- [x] DISK DELIVERABLE
- [ ] STATE FORMS
- [ ] OTHER (SPECIFY) Air Bill 8132 1297 4589

COMMENTS/REMARKS

Samples Iced

Cooler w/c

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. Received by FCC Seal	Custody	1. [signature]	2.		2.
RELINQUISHED BY: 3. [signature]	DATE TIME: 9-1-99 1553	RECEIVED BY: 4. Abby Wilson 9-2-99 1030	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE ____ C

ACCUTEST

Sample Summary

Tetra-Tech, NUS

Job No: F4836

Site 307 CSS,Panama City
Project No: 7766

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F4836-1	08/31/99	18:00 GG	09/02/99	AQ	Ground Water	PCY-307-MW03-002
F4836-2	08/31/99	18:01 GG	09/02/99	AQ	Ground Water	PCY-307-MW02-002
F4836-3	08/31/99	18:10 GG	09/02/99	AQ	Ground Water	PCY-307-TCW-002
F4836-4	08/31/99	18:15 GG	09/02/99	AQ	Ground Water	PCY-307-MW01-002
F4836-5	08/31/99	18:20 GG	09/02/99	AQ	Ground Water	PCY-307-MW4D-002
F4836-6	08/31/99	18:10 GG	09/02/99	AQ	Ground Water	PCY-307-TCW-002D
F4836-7	08/31/99	18:25 GG	09/02/99	AQ	Ground Water	PCY-307-MW01-002B

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW03-002		
Lab Sample ID:	F4836-1	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR000676.D	1	09/03/99	JG	n/a	n/a	GQR18
Run #2							

VOA 8021 List

CAS No.	Compound	Result	RDL	Units	Q
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	
74-83-9	Bromomethane	ND	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	1.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW03-002		
Lab Sample ID:	F4836-1	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR000676.D	1	09/03/99	JG	n/a	n/a	GQR18
Run #2							

VOA 8021 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
75-29-6	2-Chloropropane	88%		75-125%
352-33-0	1-Chloro-4-fluorobenzene	104%		65-125%
352-33-0	1-Chloro-4-fluorobenzene	103%		65-125%
98-08-8	aaa-Trifluorotoluene	100%		72-125%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW03-002		
Lab Sample ID:	F4836-1	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	FLORIDA-PRO	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP05107.D	1	09/08/99	ME	09/07/99	OP972	GOP246
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C8-C40)	ND	0.50	mg/l	

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

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW03-002		
Lab Sample ID:	F4836-1	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8310	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC5721.D	1	09/10/99	AMA	09/07/99	M:OP1411	M:GLC28
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	ND	1.1	ug/l	
208-96-8	Acenaphthylene	ND	1.1	ug/l	
120-12-7	Anthracene	ND	1.1	ug/l	
56-55-3	Benzo (a) anthracene	ND	0.17	ug/l	
50-32-8	Benzo (a) pyrene	ND	0.17	ug/l	
205-99-2	Benzo (b) fluoranthene	ND	0.17	ug/l	
191-24-2	Benzo (g,h,i) perylene	ND	0.17	ug/l	
207-08-9	Benzo (k) fluoranthene	ND	0.17	ug/l	
218-01-9	Chrysene	ND	0.17	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	0.17	ug/l	
206-44-0	Fluoranthene	ND	1.1	ug/l	
86-73-7	Fluorene	ND	1.1	ug/l	
193-39-5	Indeno (1,2,3-cd) pyrene	ND	0.17	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	ug/l	
91-20-3	Naphthalene	ND	1.1	ug/l	
85-01-8	Phenanthrene	ND	1.1	ug/l	
129-00-0	Pyrene	ND	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	54%		20-160%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW02-002		
Lab Sample ID:	F4836-2	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR000667.D	1	09/03/99	JG	n/a	n/a	GQR18
Run #2							

VOA 8021 List

CAS No.	Compound	Result	RDL	Units	Q
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	
74-83-9	Bromomethane	ND	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	1.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW02-002		
Lab Sample ID:	F4836-2	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR000667.D	1	09/03/99	JG	n/a	n/a	GQR18
Run #2							

VOA 8021 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
75-29-6	2-Chloropropane	93%		75-125%
352-33-0	1-Chloro-4-fluorobenzene	103%		65-125%
352-33-0	1-Chloro-4-fluorobenzene	103%		65-125%
98-08-8	aaa-Trifluorotoluene	100%		72-125%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW02-002		
Lab Sample ID:	F4836-2	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	FLORIDA-PRO	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP05108.D	1	09/08/99	ME	09/07/99	OP972	GOP246
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C8-C40)	ND	0.50	mg/l	

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

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW02-002		
Lab Sample ID:	F4836-2	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8310	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC5722.D	1	09/10/99	AMA	09/07/99	M:OP1411	M:GLC28
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	ND	1.0	ug/l	
208-96-8	Acenaphthylene	ND	1.0	ug/l	
120-12-7	Anthracene	ND	1.0	ug/l	
56-55-3	Benzo (a) anthracene	ND	0.16	ug/l	
50-32-8	Benzo (a) pyrene	ND	0.16	ug/l	
205-99-2	Benzo (b) fluoranthene	ND	0.16	ug/l	
191-24-2	Benzo (g,h,i) perylene	ND	0.16	ug/l	
207-08-9	Benzo (k) fluoranthene	ND	0.16	ug/l	
218-01-9	Chrysene	ND	0.16	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	0.16	ug/l	
206-44-0	Fluoranthene	ND	1.0	ug/l	
86-73-7	Fluorene	ND	1.0	ug/l	
193-39-5	Indeno (1,2,3-cd) pyrene	ND	0.16	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	1.0	ug/l	
85-01-8	Phenanthrene	ND	1.0	ug/l	
129-00-0	Pyrene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	60%		20-160%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-TCW-002		
Lab Sample ID:	F4836-3	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR000677.D	1	09/03/99	JG	n/a	n/a	GQR18
Run #2							

VOA 8021 List

CAS No.	Compound	Result	RDL	Units	Q
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	
74-83-9	Bromomethane	ND	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	1.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-TCW-002		
Lab Sample ID:	F4836-3	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR000677.D	1	09/03/99	JG	n/a	n/a	GQR18
Run #2							

VOA 8021 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
75-29-6	2-Chloropropane	89%		75-125%
352-33-0	1-Chloro-4-fluorobenzene	104%		65-125%
352-33-0	1-Chloro-4-fluorobenzene	104%		65-125%
98-08-8	aaa-Trifluorotoluene	99%		72-125%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-TCW-002		
Lab Sample ID:	F4836-3	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	FLORIDA-PRO	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP05109.D	1	09/08/99	ME	09/07/99	OP972	GOP246
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C8-C40)	ND	0.50	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		40-140%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-TCW-002		
Lab Sample ID:	F4836-3	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8310	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC5723.D	1	09/10/99	AMA	09/07/99	M:OP1411	M:GLC28
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	1.2	1.0	ug/l	
208-96-8	Acenaphthylene	ND	1.0	ug/l	
120-12-7	Anthracene	ND	1.0	ug/l	
56-55-3	Benzo (a) anthracene	ND	0.15	ug/l	
50-32-8	Benzo (a) pyrene	ND	0.15	ug/l	
205-99-2	Benzo (b) fluoranthene	ND	0.15	ug/l	
191-24-2	Benzo (g,h,i) perylene	ND	0.15	ug/l	
207-08-9	Benzo (k) fluoranthene	ND	0.15	ug/l	
218-01-9	Chrysene	ND	0.15	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	0.15	ug/l	
206-44-0	Fluoranthene	ND	1.0	ug/l	
86-73-7	Fluorene	ND	1.0	ug/l	
193-39-5	Indeno (1,2,3-cd) pyrene	ND	0.15	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	1.0	ug/l	
85-01-8	Phenanthrene	ND	1.0	ug/l	
129-00-0	Pyrene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	59%		20-160%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW01-002		
Lab Sample ID:	F4836-4	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR000668.D	1	09/03/99	JG	n/a	n/a	GQR18
Run #2							

VOA 8021 List

CAS No.	Compound	Result	RDL	Units	Q
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	
74-83-9	Bromomethane	ND	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	1.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW01-002		
Lab Sample ID:	F4836-4	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR000668.D	1	09/03/99	JG	n/a	n/a	GQR18
Run #2							

VOA 8021 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
75-29-6	2-Chloropropane	92%		75-125%
352-33-0	1-Chloro-4-fluorobenzene	101%		65-125%
352-33-0	1-Chloro-4-fluorobenzene	102%		65-125%
98-08-8	aaa-Trifluorotoluene	99%		72-125%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW01-002		
Lab Sample ID:	F4836-4	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	FLORIDA-PRO	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP05110.D	1	09/08/99	ME	09/07/99	OP972	GOP246
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C8-C40)	0.430	0.50	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	106%		40-140%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW01-002		
Lab Sample ID:	F4836-4	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8310	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC5724.D	1	09/10/99	AMA	09/07/99	M:OP1411	M:GLC28
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	ND	1.0	ug/l	
208-96-8	Acenaphthylene	ND	1.0	ug/l	
120-12-7	Anthracene	ND	1.0	ug/l	
56-55-3	Benzo (a) anthracene	ND	0.15	ug/l	
50-32-8	Benzo (a) pyrene	ND	0.15	ug/l	
205-99-2	Benzo (b) fluoranthene	ND	0.15	ug/l	
191-24-2	Benzo (g,h,i) perylene	ND	0.15	ug/l	
207-08-9	Benzo (k) fluoranthene	ND	0.15	ug/l	
218-01-9	Chrysene	ND	0.15	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	0.15	ug/l	
206-44-0	Fluoranthene	ND	1.0	ug/l	
86-73-7	Fluorene	ND	1.0	ug/l	
193-39-5	Indeno (1,2,3-cd) pyrene	ND	0.15	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	1.0	ug/l	
85-01-8	Phenanthrene	ND	1.0	ug/l	
129-00-0	Pyrene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	59%		20-160%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW4D-002		
Lab Sample ID:	F4836-5	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR000669.D	1	09/03/99	JG	n/a	n/a	GQR18
Run #2							

VOA 8021 List

CAS No.	Compound	Result	RDL	Units	Q
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	
74-83-9	Bromomethane	ND	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	1.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW4D-002		
Lab Sample ID:	F4836-5	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR000669.D	1	09/03/99	JG	n/a	n/a	GQR18
Run #2							

VOA 8021 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
75-29-6	2-Chloropropane	92%		75-125%
352-33-0	1-Chloro-4-fluorobenzene	103%		65-125%
352-33-0	1-Chloro-4-fluorobenzene	103%		65-125%
98-08-8	aaa-Trifluorotoluene	100%		72-125%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW4D-002		
Lab Sample ID:	F4836-5	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	FLORIDA-PRO	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP05111.D	1	09/08/99	ME	09/07/99	OP972	GOP246
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C8-C40)	0.417	0.50	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	109%		40-140%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW4D-002		
Lab Sample ID:	F4836-5	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8310	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC5725.D	1	09/10/99	AMA	09/07/99	M:OP1411	M:GLC28
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	ND	1.0	ug/l	
208-96-8	Acenaphthylene	ND	1.0	ug/l	
120-12-7	Anthracene	ND	1.0	ug/l	
56-55-3	Benzo (a) anthracene	ND	0.15	ug/l	
50-32-8	Benzo (a) pyrene	ND	0.15	ug/l	
205-99-2	Benzo (b) fluoranthene	ND	0.15	ug/l	
191-24-2	Benzo (g,h,i) perylene	ND	0.15	ug/l	
207-08-9	Benzo (k) fluoranthene	ND	0.15	ug/l	
218-01-9	Chrysene	ND	0.15	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	0.15	ug/l	
206-44-0	Fluoranthene	ND	1.0	ug/l	
86-73-7	Fluorene	ND	1.0	ug/l	
193-39-5	Indeno (1,2,3-cd) pyrene	ND	0.15	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	1.0	ug/l	
85-01-8	Phenanthrene	ND	1.0	ug/l	
129-00-0	Pyrene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	70%		20-160%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-TCW-002D		
Lab Sample ID:	F4836-6	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR000670.D	1	09/03/99	JG	n/a	n/a	GQR18
Run #2							

VOA 8021 List

CAS No.	Compound	Result	RDL	Units	Q
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	
74-83-9	Bromomethane	ND	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	1.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-TCW-002D		
Lab Sample ID:	F4836-6	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR000670.D	1	09/03/99	JG	n/a	n/a	GQR18
Run #2							

VOA 8021 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
75-29-6	2-Chloropropane	92%		75-125%
352-33-0	1-Chloro-4-fluorobenzene	104%		65-125%
352-33-0	1-Chloro-4-fluorobenzene	103%		65-125%
98-08-8	aaa-Trifluorotoluene	100%		72-125%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-TCW-002D		
Lab Sample ID:	F4836-6	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	FLORIDA-PRO	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP05112.D	1	09/08/99	ME	09/07/99	OP972	GOP246
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C8-C40)	0.811	0.50	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		40-140%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-TCW-002D		
Lab Sample ID:	F4836-6	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8310	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC5726.D	1	09/10/99	AMA	09/07/99	M:OP1411	M:GLC28
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	1.2	1.0	ug/l	
208-96-8	Acenaphthylene	ND	1.0	ug/l	
120-12-7	Anthracene	ND	1.0	ug/l	
56-55-3	Benzo (a) anthracene	ND	0.15	ug/l	
50-32-8	Benzo (a) pyrene	ND	0.15	ug/l	
205-99-2	Benzo (b) fluoranthene	ND	0.15	ug/l	
191-24-2	Benzo (g,h,i) perylene	ND	0.15	ug/l	
207-08-9	Benzo (k) fluoranthene	ND	0.15	ug/l	
218-01-9	Chrysene	ND	0.15	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	0.15	ug/l	
206-44-0	Fluoranthene	ND	1.0	ug/l	
86-73-7	Fluorene	ND	1.0	ug/l	
193-39-5	Indeno (1,2,3-cd) pyrene	ND	0.15	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	1.0	ug/l	
85-01-8	Phenanthrene	ND	1.0	ug/l	
129-00-0	Pyrene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	57%		20-160%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW01-002B		
Lab Sample ID:	F4836-7	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR000671.D	1	09/03/99	JG	n/a	n/a	GQR18
Run #2							

VOA 8021 List

CAS No.	Compound	Result	RDL	Units	Q
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	
74-83-9	Bromomethane	ND	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	1.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW01-002B		
Lab Sample ID:	F4836-7	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR000671.D	1	09/03/99	JG	n/a	n/a	GQR18
Run #2							

VOA 8021 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
75-29-6	2-Chloropropane	90%		75-125%
352-33-0	1-Chloro-4-fluorobenzene	102%		65-125%
352-33-0	1-Chloro-4-fluorobenzene	103%		65-125%
98-08-8	aaa-Trifluorotoluene	99%		72-125%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW01-002B		
Lab Sample ID:	F4836-7	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	FLORIDA-PRO	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP05113.D	1	09/08/99	ME	09/07/99	OP972	GOP246
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C8-C40)	ND	0.50	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	99%		40-140%

ND = Not detected
RDL = Reported Detection 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

ACCUTEST

Report of Analysis

Client Sample ID:	PCY-307-MW01-002B		
Lab Sample ID:	F4836-7	**Date Sampled:**	08/31/99
Matrix:	AQ - Ground Water	**Date Received:**	09/02/99
Method:	SW846 8310	**Percent Solids:**	n/a
Project:	Site 307 CSS,Panama City		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LC5727.D	1	09/10/99	AMA	09/07/99	M:OP1411	M:GLC28
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	ND	1.1	ug/l	
208-96-8	Acenaphthylene	ND	1.1	ug/l	
120-12-7	Anthracene	ND	1.1	ug/l	
56-55-3	Benzo (a) anthracene	ND	0.17	ug/l	
50-32-8	Benzo (a) pyrene	ND	0.17	ug/l	
205-99-2	Benzo (b) fluoranthene	ND	0.17	ug/l	
191-24-2	Benzo (g,h,i) perylene	ND	0.17	ug/l	
207-08-9	Benzo (k) fluoranthene	ND	0.17	ug/l	
218-01-9	Chrysene	ND	0.17	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	0.17	ug/l	
206-44-0	Fluoranthene	ND	1.1	ug/l	
86-73-7	Fluorene	ND	1.1	ug/l	
193-39-5	Indeno (1,2,3-cd) pyrene	ND	0.17	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	ug/l	
91-20-3	Naphthalene	ND	1.1	ug/l	
85-01-8	Phenanthrene	ND	1.1	ug/l	
129-00-0	Pyrene	ND	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	56%		20-160%

ND = Not detected
RDL = Reported Detection 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

QA/QC DATA

Blank Spike Summary

Job Number: F4836
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1411-BS1	LC5715K.D	1	09/09/99	CZ	09/07/99	OP1411	GLC28

The QC reported here applies to the following samples: **Method:** SW846 8310

F4836-1, F4836-2, F4836-3, F4836-4, F4836-5, F4836-6, F4836-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	10	7.9	79	1-124
208-96-8	Acenaphthylene	10	7.0	70	1-139
120-12-7	Anthracene	10	7.6	76	1-126
56-55-3	Benzo (a) anthracene	10	8.3	83	12-135
50-32-8	Benzo (a) pyrene	10	6.2	62	1-128
205-99-2	Benzo (b) fluoranthene	10	7.8	78	6-150
191-24-2	Benzo (g,h,i) perylene	10	6.2	62	1-116
207-08-9	Benzo (k) fluoranthene	10	7.7	77	1-159
218-01-9	Chrysene	10	9.6	96	1-199
53-70-3	Dibenz(a,h)anthracene	10	6.6	66	1-110
206-44-0	Fluoranthene	10	8.2	82	14-123
86-73-7	Fluorene	10	7.5	75	1-142
193-39-5	Indeno (1,2,3-cd) pyrene	10	6.5	65	1-116
90-12-0	1-Methylnaphthalene	10	9.4	94	50-150 [a]
91-57-6	2-Methylnaphthalene	10	7.5	75	1-122
91-20-3	Naphthalene	10	6.6	66	1-122
85-01-8	Phenanthrene	10	7.6	76	1-155
129-00-0	Pyrene	10	8.6	86	1-140

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	72%	20-160%

(a) Advisory control limits.

Duplicate Summary

Job Number: F4836
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1411-DUP	LC5710.D	1	09/09/99	CZ	08/27/99	OP1411	GLC28
F4776-4	LC5716.D	1	09/09/99	CZ	08/27/99	OP1411	GLC28

The QC reported here applies to the following samples: **Method:** SW846 8310

F4836-1, F4836-2, F4836-3, F4836-4, F4836-5, F4836-6, F4836-7

CAS No.	Compound	F4776-4 ug/l	Q	DUP ug/l	Q	RPD	Limits
83-32-9	Acenaphthene	ND		ND		0	
208-96-8	Acenaphthylene	ND		ND		0	
120-12-7	Anthracene	ND		ND		0	
56-55-3	Benzo (a) anthracene	ND		ND		0	
50-32-8	Benzo (a) pyrene	ND		ND		0	
205-99-2	Benzo (b) fluoranthene	ND		ND		0	
191-24-2	Benzo (g,h,i) perylene	ND		ND		0	
207-08-9	Benzo (k) fluoranthene	ND		ND		0	
218-01-9	Chrysene	ND		ND		0	
53-70-3	Dibenz(a,h)anthracene	ND		ND		0	
206-44-0	Fluoranthene	ND		ND		0	
86-73-7	Fluorene	ND		ND		0	
193-39-5	Indeno (1,2,3-cd) pyrene	ND		ND		0	
90-12-0	1-Methylnaphthalene	ND		ND		0	
91-57-6	2-Methylnaphthalene	ND		ND		0	
91-20-3	Naphthalene	ND		ND		0	
85-01-8	Phenanthrene	ND		ND		0	
129-00-0	Pyrene	ND		ND		0	

CAS No.	Surrogate Recoveries	DUP	F4776-4	Limits
84-15-1	o-Terphenyl	72%	66%	20-160%

Method Blank Summary

Job Number: F4836
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1411-MB1	LC5715J.D	1	09/09/99	CZ	09/07/99	OP1411	GLC28

The QC reported here applies to the following samples: **Method:** SW846 8310

F4836-1, F4836-2, F4836-3, F4836-4, F4836-5, F4836-6, F4836-7

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	ND	1.0	ug/l	
208-96-8	Acenaphthylene	ND	1.0	ug/l	
120-12-7	Anthracene	ND	1.0	ug/l	
56-55-3	Benzo (a) anthracene	ND	0.15	ug/l	
50-32-8	Benzo (a) pyrene	ND	0.15	ug/l	
205-99-2	Benzo (b) fluoranthene	ND	0.15	ug/l	
191-24-2	Benzo (g,h,i) perylene	ND	0.15	ug/l	
207-08-9	Benzo (k) fluoranthene	ND	0.15	ug/l	
218-01-9	Chrysene	ND	0.15	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	0.15	ug/l	
206-44-0	Fluoranthene	ND	1.0	ug/l	
86-73-7	Fluorene	ND	1.0	ug/l	
193-39-5	Indeno (1,2,3-cd) pyrene	ND	0.15	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	1.0	ug/l	
85-01-8	Phenanthrene	ND	1.0	ug/l	
129-00-0	Pyrene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	63%	20-160%

Matrix Spike Summary

Job Number: F4836
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1411-MS	LC5709.D	1	09/09/99	CZ	08/27/99	OP1411	GLC28
F4776-4	LC5716.D	1	09/09/99	CZ	08/27/99	OP1411	GLC28

The QC reported here applies to the following samples: **Method:** SW846 8310

F4836-1, F4836-2, F4836-3, F4836-4, F4836-5, F4836-6, F4836-7

CAS No.	Compound	F4776-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
83-32-9	Acenaphthene	ND		20	14.3	72	1-124
208-96-8	Acenaphthylene	ND		20	13.8	69	1-139
120-12-7	Anthracene	ND		20	15.3	76	1-126
56-55-3	Benzo (a) anthracene	ND		20	17.8	89	12-135
50-32-8	Benzo (a) pyrene	ND		20	17.4	87	1-128
205-99-2	Benzo (b) fluoranthene	ND		20	17.4	87	6-150
191-24-2	Benzo (g,h,i) perylene	ND		20	17.0	85	1-116
207-08-9	Benzo (k) fluoranthene	ND		20	17.1	86	1-159
218-01-9	Chrysene	ND		20	20.4	102	1-199
53-70-3	Dibenz(a,h)anthracene	ND		20	17.4	87	1-110
206-44-0	Fluoranthene	ND		20	16.1	80	14-123
86-73-7	Fluorene	ND		20	14.4	72	1-142
193-39-5	Indeno (1,2,3-cd) pyrene	ND		20	16.8	84	1-116
90-12-0	1-Methylnaphthalene	ND		20	16.8	84	50-150 [a]
91-57-6	2-Methylnaphthalene	ND		20	13.6	68	1-122
91-20-3	Naphthalene	ND		20	12.6	63	1-122
85-01-8	Phenanthrene	ND		20	14.8	74	1-155
129-00-0	Pyrene	ND		20	17.6	88	1-140

CAS No.	Surrogate Recoveries	MS	F4776-4	Limits
84-15-1	o-Terphenyl	78%	66%	20-160%

(a) Advisory control limits.

Method Blank Summary

Job Number: F4836
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1411-MB	LC5707.D	1	09/09/99	CZ	08/27/99	OP1411	GLC28

The QC reported here applies to the following samples: **Method:** SW846 8310

OP1411-DUP, OP1411-MS

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	ND	1.0	ug/l	
208-96-8	Acenaphthylene	ND	1.0	ug/l	
120-12-7	Anthracene	ND	1.0	ug/l	
56-55-3	Benzo (a) anthracene	ND	0.15	ug/l	
50-32-8	Benzo (a) pyrene	ND	0.15	ug/l	
205-99-2	Benzo (b) fluoranthene	ND	0.15	ug/l	
191-24-2	Benzo (g,h,i) perylene	ND	0.15	ug/l	
207-08-9	Benzo (k) fluoranthene	ND	0.15	ug/l	
218-01-9	Chrysene	ND	0.15	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	0.15	ug/l	
206-44-0	Fluoranthene	ND	1.0	ug/l	
86-73-7	Fluorene	ND	1.0	ug/l	
193-39-5	Indeno (1,2,3-cd) pyrene	ND	0.15	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	1.0	ug/l	
85-01-8	Phenanthrene	ND	1.0	ug/l	
129-00-0	Pyrene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	64%	20-160%

Semivolatile Surrogate Recovery Summary

Job Number: F4836
Account: ALSE Accutest Labs Southeast
Project: TETRFLTA: Site 307 CSS,Panama City

Method: SW846 8310 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
F4836-1	LC5721.D	54.0
F4836-2	LC5722.D	60.0
F4836-3	LC5723.D	59.0
F4836-4	LC5724.D	59.0
F4836-5	LC5725.D	70.0
F4836-6	LC5726.D	57.0
F4836-7	LC5727.D	56.0
OP1411-BS1	LC5715K.D	72.0
OP1411-DUP	LC5710.D	72.0
OP1411-MB1	LC5715J.D	63.0
OP1411-MS	LC5709.D	78.0
OP1411-MB	LC5707.D	64.0

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	20-160%

(a) Recovery from GC signal #2

Blank Spike Summary

Job Number: F4836
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP972-BS	OP05105.D	1	09/08/99	ME	09/07/99	OP972	GOP246

The QC reported here applies to the following samples: **Method:** FLORIDA-PRO

F4836-1, F4836-2, F4836-3, F4836-4, F4836-5, F4836-6, F4836-7

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C8-C40)	1.7	1.70	100	49-123

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	106%	40-140%

Method Blank Summary

Job Number: F4836
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP972-MB	OP05104.D	1	09/08/99	ME	09/07/99	OP972	GOP246

The QC reported here applies to the following samples: **Method:** FLORIDA-PRO

F4836-1, F4836-2, F4836-3, F4836-4, F4836-5, F4836-6, F4836-7

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C8-C40)	ND	0.50	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	105%	40-140%

Method Blank Summary

Job Number: F4836
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP972-MB	OP05153.D	1	09/10/99	ME	09/07/99	OP972	GOP247

The QC reported here applies to the following samples: **Method:** FLORIDA-PRO

F4836-1, F4836-2, F4836-3, F4836-4, F4836-5, F4836-6, F4836-7

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C8-C40)	ND	0.50	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	102%	40-140%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F4836
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP972-MS	OP05156.D	2	09/10/99	ME	09/07/99	OP972	GOP247
OP972-MSD	OP05157.D	2	09/10/99	ME	09/07/99	OP972	GOP247
F4844-5	OP05155.D	2	09/10/99	ME	09/07/99	OP972	GOP247

The QC reported here applies to the following samples: **Method:** FLORIDA-PRO

F4836-1, F4836-2, F4836-3, F4836-4, F4836-5, F4836-6, F4836-7

CAS No.	Compound	F4844-5 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C8-C40)	3.03		3.4	6.35	98	6.74	109	6	49-123/25

CAS No.	Surrogate Recoveries	MS	MSD	F4844-5	Limits
84-15-1	o-Terphenyl	98%	95%	98%	40-140%

Blank Spike Summary

Job Number: F4836
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR18-BS	QR000681.D	1	09/04/99	JG	n/a	n/a	GQR18

The QC reported here applies to the following samples: **Method:** SW846 8021B

F4836-1, F4836-2, F4836-3, F4836-4, F4836-5, F4836-6, F4836-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	17.6	88	69-120
75-27-4	Bromodichloromethane	20	19.6	98	54-120
75-25-2	Bromoform	20	16.1	80	34-126
74-83-9	Bromomethane	20	12.7	64	47-150
56-23-5	Carbon tetrachloride	20	22.0	110	48-124
108-90-7	Chlorobenzene	20	19.6	98	74-129
124-48-1	Dibromochloromethane	20	18.3	92	57-131
75-00-3	Chloroethane	20	21.7	108	43-150
110-75-8	2-Chloroethylvinyl ether	20	19.1	96	67-135
67-66-3	Chloroform	20	19.4	97	48-125
74-87-3	Chloromethane	20	20.3	102	53-150
106-93-4	1,2-Dibromoethane	20	16.1	80	50-150
95-50-1	1,2-Dichlorobenzene	20	18.0	90	71-131
541-73-1	1,3-Dichlorobenzene	20	18.9	94	70-125
106-46-7	1,4-Dichlorobenzene	20	19.3	96	73-127
75-71-8	Dichlorodifluoromethane	20	22.0	110	50-150
75-34-3	1,1-Dichloroethane	20	19.5	98	51-136
107-06-2	1,2-Dichloroethane	20	20.6	103	50-144
75-35-4	1,1-Dichloroethene	20	19.1	96	72-148
156-59-2	cis-1,2-Dichloroethene	20	20.8	104	50-150
156-60-5	trans-1,2-Dichloroethene	20	17.1	86	60-128
78-87-5	1,2-Dichloropropane	20	20.0	100	57-121
10061-01-5	cis-1,3-Dichloropropene	20	17.8	89	55-120
10061-02-6	trans-1,3-Dichloropropene	20	17.5	88	49-121
100-41-4	Ethylbenzene	20	17.8	89	83-121
75-09-2	Methylene chloride	20	20.6	103	58-130
1634-04-4	Methyl Tert Butyl Ether	20	20.1	100	72-131
79-34-5	1,1,2,2-Tetrachloroethane	20	18.9	94	25-135
127-18-4	Tetrachloroethene	20	21.0	105	54-127
108-88-3	Toluene	20	17.5	88	62-125
71-55-6	1,1,1-Trichloroethane	20	20.9	104	63-120
79-00-5	1,1,2-Trichloroethane	20	20.1	100	49-133
79-01-6	Trichloroethene	20	20.0	100	30-170
75-69-4	Trichlorofluoromethane	20	24.0	120	54-147
75-01-4	Vinyl chloride	20	19.3	96	39-164
1330-20-7	Xylenes (total)	60	61.1	102	77-118

Blank Spike Summary

Job Number: F4836
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR18-BS	QR000681.D	1	09/04/99	JG	n/a	n/a	GQR18

The QC reported here applies to the following samples: **Method:** SW846 8021B

F4836-1, F4836-2, F4836-3, F4836-4, F4836-5, F4836-6, F4836-7

CAS No.	Surrogate Recoveries	BSP	Limits
75-29-6	2-Chloropropane	84%	75-125%
352-33-0	1-Chloro-4-fluorobenzene	105%	65-125%
352-33-0	1-Chloro-4-fluorobenzene	105%	65-125%
98-08-8	aaa-Trifluorotoluene	103%	72-125%

Method Blank Summary

Job Number: F4836
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR18-MB	QR000663.D	1	09/03/99	JG	n/a	n/a	GQR18

The QC reported here applies to the following samples: **Method:** SW846 8021B

F4836-1, F4836-2, F4836-3, F4836-4, F4836-5, F4836-6, F4836-7

CAS No.	Compound	Result	RDL	Units	Q
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	
74-83-9	Bromomethane	ND	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	1.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	ug/l	
67-66-3	Chloroform [a]	1.7	1.0	ug/l	
74-87-3	Chloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	

Method Blank Summary

Job Number: F4836
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR18-MB	QR000663.D	1	09/03/99	JG	n/a	n/a	GQR18

The QC reported here applies to the following samples: **Method:** SW846 8021B

F4836-1, F4836-2, F4836-3, F4836-4, F4836-5, F4836-6, F4836-7

CAS No.	Surrogate Recoveries		Limits
75-29-6	2-Chloropropane	92%	75-125%
352-33-0	1-Chloro-4-fluorobenzene	103%	65-125%
352-33-0	1-Chloro-4-fluorobenzene	102%	65-125%
98-08-8	aaa-Trifluorotoluene	99%	72-125%

(a) Suspected laboratory contaminant.

Method Blank Summary

Job Number: F4836
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR18-MB	QR000755.D	1	09/10/99	JG	n/a	n/a	GQR18

The QC reported here applies to the following samples: **Method:** SW846 8021B

F4836-1, F4836-2, F4836-3, F4836-4, F4836-5, F4836-6, F4836-7

CAS No.	Compound	Result	RDL	Units	Q
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	
74-83-9	Bromomethane	ND	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	1.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	

Method Blank Summary

Job Number: F4836
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR18-MB	QR000755.D	1	09/10/99	JG	n/a	n/a	GQR18

The QC reported here applies to the following samples: **Method:** SW846 8021B

F4836-1, F4836-2, F4836-3, F4836-4, F4836-5, F4836-6, F4836-7

CAS No.	Surrogate Recoveries		Limits
75-29-6	2-Chloropropane	94%	75-125%
352-33-0	1-Chloro-4-fluorobenzene	102%	65-125%
352-33-0	1-Chloro-4-fluorobenzene	103%	65-125%
98-08-8	aaa-Trifluorotoluene	99%	72-125%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F4836
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F4836-2MS	QR000679.D	1	09/04/99	JG	n/a	n/a	GQR18
F4836-2MSD	QR000680.D	1	09/04/99	JG	n/a	n/a	GQR18
F4836-2	QR000667.D	1	09/03/99	JG	n/a	n/a	GQR18

The QC reported here applies to the following samples: **Method:** SW846 8021B

F4836-1, F4836-2, F4836-3, F4836-4, F4836-5, F4836-6, F4836-7

CAS No.	Compound	F4836-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	22.6	113	22.0	110	3	69-120/12
75-27-4	Bromodichloromethane	ND		20	24.3	122*	24.1	120	1	54-120/17
75-25-2	Bromoform	ND		20	20.4	102	20.2	101	1	34-126/23
74-83-9	Bromomethane	ND		20	15.5	78	13.8	69	12	47-150/26
56-23-5	Carbon tetrachloride	ND		20	27.1	136*	27.0	135*	0	48-124/19
108-90-7	Chlorobenzene	ND		20	23.3	116	22.8	114	2	74-129/14
124-48-1	Dibromochloromethane	ND		20	23.3	116	23.2	116	0	57-131/19
75-00-3	Chloroethane	ND		20	24.4	122	25.3	126	4	43-150/26
110-75-8	2-Chloroethylvinyl ether	ND		20	ND	0*	ND	0*	nc	67-135/11
67-66-3	Chloroform	ND		20	22.8	114	22.3	112	2	48-125/19
74-87-3	Chloromethane	ND		20	13.5	68	16.2	81	18*	53-150/14
106-93-4	1,2-Dibromoethane	ND		20	20.5	102	20.5	102	0	50-150/30
95-50-1	1,2-Dichlorobenzene	ND		20	22.7	114	22.7	114	0	71-131/15
541-73-1	1,3-Dichlorobenzene	ND		20	23.5	118	23.3	116	1	70-125/14
106-46-7	1,4-Dichlorobenzene	ND		20	23.9	120	23.7	118	1	73-127/14
75-71-8	Dichlorodifluoromethane	ND		20	28.0	140	26.9	134	4	50-150/30
75-34-3	1,1-Dichloroethane	ND		20	24.2	121	23.6	118	2	51-136/21
107-06-2	1,2-Dichloroethane	ND		20	23.8	119	23.8	119	0	50-144/23
75-35-4	1,1-Dichloroethene	ND		20	24.3	122	23.5	118	3	72-148/19
156-59-2	cis-1,2-Dichloroethene	ND		20	25.8	129	25.0	125	3	50-150/30
156-60-5	trans-1,2-Dichloroethene	ND		20	21.9	110	21.5	108	2	60-128/17
78-87-5	1,2-Dichloropropane	ND		20	24.7	124*	24.6	123*	0	57-121/16
10061-01-5	cis-1,3-Dichloropropene	ND		20	22.3	112	22.3	112	0	55-120/16
10061-02-6	trans-1,3-Dichloropropene	ND		20	22.0	110	21.9	110	0	49-121/18
100-41-4	Ethylbenzene	ND		20	22.7	114	22.0	110	3	83-121/10
75-09-2	Methylene chloride	ND		20	23.8	119	23.3	116	2	58-130/13
1634-04-4	Methyl Tert Butyl Ether	ND		20	22.0	110	21.5	108	2	72-131/15
79-34-5	1,1,2,2-Tetrachloroethane	ND		20	23.2	116	23.3	116	0	25-135/28
127-18-4	Tetrachloroethene	ND		20	25.9	130*	25.5	128*	2	54-127/18
108-88-3	Toluene	ND		20	22.6	113	22.1	110	2	62-125/16
71-55-6	1,1,1-Trichloroethane	ND		20	26.0	130*	25.6	128*	2	63-120/12
79-00-5	1,1,2-Trichloroethane	ND		20	24.2	121	24.4	122	1	49-133/21
79-01-6	Trichloroethene	ND		20	25.4	127	24.8	124	2	33-170/34
75-69-4	Trichlorofluoromethane	ND		20	29.1	146	28.4	142	2	54-147/16
75-01-4	Vinyl chloride	ND		20	23.0	115	22.3	112	3	39-164/21
1330-20-7	Xylenes (total)	ND		60	89.0	148*	86.8	145*	2	77-118/10

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F4836
Account: TETRFLTA Tetra-Tech, NUS
Project: Site 307 CSS,Panama City

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F4836-2MS	QR000679.D	1	09/04/99	JG	n/a	n/a	GQR18
F4836-2MSD	QR000680.D	1	09/04/99	JG	n/a	n/a	GQR18
F4836-2	QR000667.D	1	09/03/99	JG	n/a	n/a	GQR18

The QC reported here applies to the following samples: **Method:** SW846 8021B

F4836-1, F4836-2, F4836-3, F4836-4, F4836-5, F4836-6, F4836-7

CAS No.	Surrogate Recoveries	MS	MSD	F4836-2	Limits
75-29-6	2-Chloropropane	86%	86%	93%	75-125%
352-33-0	1-Chloro-4-fluorobenzene	106%	105%	103%	65-125%
352-33-0	1-Chloro-4-fluorobenzene	106%	106%	103%	65-125%
98-08-8	aaa-Trifluorotoluene	104%	103%	100%	72-125%