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NAS KEY WEST
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FIRST QUARTER GROUNDWATER MONITORING PLAN LETTER REPORT FOR BUILDING 189 TRUMAN ANNEX NAS KEY WEST FL

11/2/1998

TETRA TECH NUS

7846-3.1-12

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November 2, 1998

Project Number 7846

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Remedial Project Manager
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2600 Blair Stone Road
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Reference: **Clean Contract No. N62467-94-D0888**
Contract Task Order No. 0059

Subject: **First Quarter Groundwater Monitoring Plan Letter Report**
Building 189, Truman Annex, Naval Air Station,
Key West, Florida

Tetra Tech NUS, Inc. (TtNUS) is pleased to submit the Groundwater Monitoring Report for the referenced Contract Task Order (CTO). This report has been prepared for the U.S. Navy Southern Division Naval Facilities Engineering Command under CTO-059, for the Comprehensive Long-term Environmental Action Navy (CLEAN) Contract Number N62467-94-D-0888.

Monitoring Objectives. The objective of the quarterly groundwater monitoring program at Site 189 is to evaluate the contaminant plume stability and monitor product recovery efforts until cleanup levels are achieved. The monitoring program, contaminants of concern, and target concentrations are presented in the Remedial Action Plan (RAP) for Berthing Wharf Building 189 (ABB-ES, 1994). In 1997, however, the Florida Department of Environmental Protection (FDEP) updated Chapter 62-770 of the Florida Administrative Code (FAC). As a result, new chemicals of concern (CoCs) and updated groundwater cleanup target levels (GCTLs) need to be established for Site 189.

The groundwater at the site is classified as a G-III aquifer (McKenzie, 1990). As a result of this classification, the GCTLs for groundwater of low yield/poor quality, as prescribed by Chapter 62-770, are the appropriate GCTLs. Based on the first two sampling events at Site 189, TtNUS recommends the following list of CoCs and GCTLs:

CoC	GCTL
Benzo(a)anthracene	2 µg/L
Benzo(a)pyrene	2 µg/L
Indeno(123cd)pyrene	2 µg/L
Total Recoverable Petroleum Hydrocarbons	50 mg/L

Baseline Sampling. On June 27, 1998, TtNUS personnel collected groundwater samples from six Site 189 monitoring wells (B189-MW01, B189-MW04, B189-MW07, B189-MW10, B189-MW12, and B189-MW13D). Monitoring well B189-MW06 was not sampled because it could not be located. Monitoring wells B189-MW02 and B189-MW03 were not sampled because free phase petroleum product was present. All sampling activities were conducted in accordance with TtNUS', FDEP approved Comprehensive Quality Assurance Plan (Comp QAP) #980038. Figure 1, Attachment A, depicts the site layout, well locations, and other features present at Site 189.

Prior to the collection of the groundwater samples, water level measurements were recorded from each site monitoring well. The depth to water ranged from 4.41 to 6.15 feet below land surface (bls). Depth to water measurements, along with top of casing elevations, were used to calculate groundwater elevations. Based on these elevations, the groundwater was flowing primarily to the east at the time of sampling. Figure 2, Attachment A, depicts the groundwater elevations recorded on June 27, 1998. Depth to water measurements, top of casing elevations, and groundwater elevation data are provided in Table 1, Attachment B.

All monitoring wells were purged prior to groundwater sampling. Purging and sampling were performed with a peristaltic pump using the low flow quiescent method. Water sampling logs, which detail the purge process, are provided in Attachment C.

Following collection of the groundwater samples, the sample bottles were packed on ice and shipped via overnight transport to PC&B Environmental Laboratories in Oviedo, Florida. The groundwater samples were analyzed for compounds specified in U.S. Environmental Protection Agency (USEPA) Methods 8021 (volatile organic aromatics [VOAs]), 504 (ethylene dibromide [EDB]), 8310 (polynuclear aromatic hydrocarbons [PAHs]), 6010 (lead), and by Florida Petroleum Range Organics (FLPRO). The analytical results are summarized in Table 2. A copy of the laboratory report is provided in Attachment D.

VOAs, EDB, and lead were not detected in any groundwater sample collected from Site 189 during the baseline sampling event.

PAHs were detected in the groundwater sample collected from monitoring well B189-MW01. The detected PAHs were benzo(a)anthracene, benzo(a)pyrene, benzo(g,h,i)perylene, chrysene, indeno(123cd)pyrene, and pyrene. Concentrations of these chemicals ranged from 1.2 micrograms per liter (µg/L) (benzo(a)anthracene) to 7.4 µg/L (benzo(g,h,i)perylene). PAH concentrations were below method detection limits in all other groundwater samples collected from Site 189.

Concentrations of total recoverable petroleum hydrocarbon (TRPH) were detected in the groundwater samples collected from monitoring wells B189-MW01, B189-MW04, and B189-MW10. TRPH concentrations ranged from 0.1 milligrams per liter (mg/L) (B189-MW04) to 1.3 mg/L (B189-MW01 and B189-MW10). TRPH concentrations were below the method detection limit of 0.1 mg/L in all other groundwater samples.

The results of the baseline sampling event were compared to FDEP GCTLs found in Table VIII of Chapter 62.770, FAC. The comparison revealed that benzo(a)pyrene and indeno(123cd)pyrene concentrations exceeded their respective GCTLs of 2 µg/L in samples collected from monitoring well B189-MW01. All other PAH concentrations, as well as detected TRPH concentrations, were well below their respective GCTLs.

Monthly Free Product Monitoring. TtNUS personnel visited the site on June 27, and July 25, 1998 to perform monthly free product monitoring and recovery. During both of these visits reportable quantities (>0.01 feet) of free product were detected in monitoring wells at the site. On the June 27 visit, approximately 0.1 feet of free product was detected in monitoring wells B189-MW02 and B189-MW03. Approximately 5 gallons of free product and groundwater was bailed from each well and placed in a 55-gallon drum for disposal. On the July 25, 1998 visit, approximately 0.02 feet of free product was detected in monitoring well B189-MW02 and a sheen was detected in monitoring well B189-MW03. A total of 8 gallons of free product and groundwater was removed from B189-MW02 and placed in a 55-gallon drum for disposal.

In accordance with the ABB RAP, the frequency of free product monitoring visits was increased to weekly since reportable quantities of free product were detected for two consecutive months. Weekly free product monitoring visits were conducted on August 15, August 24, and September 1, 1998. No

reportable quantities of free product were detected in any of the wells gauged during these three visits. However, a sheen was observed in monitoring wells B189-MW02 and B189-MW03 during each visit. Findings of all five free product monitoring events are summarized in Table 3, Attachment B.

The frequency of free product monitoring has been reduced to monthly since no reportable quantities were detected for three consecutive weeks.

First Quarterly Monitoring. On September 1 and 2, 1998, TtNUS personnel collected groundwater samples from nine Site 189 monitoring wells (B189-MW01, B189-MW02, B189-MW03, B189-MW04, B189-MW06R, B189-MW07, B189-MW10, B189-MW12, and B189-MW13D). Monitoring well B189-MW06, which could not be located during the baseline sampling event, was replaced with B189-MW06R in August 1998. All sampling activities were conducted in accordance with TtNUS', FDEP approved, Comp QAP #980038.

Immediately prior to the collection of the groundwater samples, water level and product measurements were recorded from each site monitoring well. Free phase petroleum product was not detected in any monitoring wells during this event. The water level data was used to determine purge volumes. Because the water level data from this sampling event was collected over a two day time period, a potentiometric surface map was not generated with this data. Water level data collected on October 2, 1998 was used to produce Figure 3, Attachment A, which shows groundwater flowing primarily to the west. Water sampling logs, which detail the purge process, are provided in Attachment C.

Following collection of the groundwater samples, the sample bottles were packed on ice and shipped via overnight transport to PC&B Environmental Laboratories in Oviedo, Florida. The groundwater samples were analyzed for compounds specified in the baseline sampling event. The analytical results of the first quarterly groundwater sampling event are summarized in Table 4. A copy of the laboratory report is provided in Attachment D.

EDB, lead, and TRPH were not detected in any groundwater sample collected from Site 189 during the September 1998 sampling event.

Methylene chloride was the only VOA detected the groundwater samples collected during the second sampling event. It was also detected in the equipment blank, trip blank, and laboratory method blanks.

PAH concentrations were detected in the samples collected from monitoring wells B189-MW01, B189-MW06R, and B189-MW07. The detected PAHs were benzo(g,h,i)perylene, chrysene, fluoranthene, fluorene, naphthalene, and pyrene. PAH concentrations ranged from 0.07 µg/L to 0.3 µg/L. All concentrations of PAH were well below their respective GCTLs.

Conclusions. Methylene chloride, various PAHs, and TRPH are were the only chemicals detected in Site 189 groundwater samples.

Although methylene chloride was detected in every groundwater sample during the first quarterly sampling, it was also detected in all laboratory and field blanks. Additionally, methylene chloride was not detected in the baseline sampling event, nor was it previously identified as a CoC by ABB. Based on the persistence of methylene chloride in the first quarterly sampling results and the absence of it in all other sampling data, these methylene chloride detections can be dismissed as laboratory artifacts.

PAH concentrations exceeded GCTLs during the baseline sampling event. Concentrations detected during the first quarterly sampling event were significantly reduced and did not exceed GCTLs. Additional monitoring data will be required to make any further conclusions concerning PAHs in Site 189 groundwater.

The TRPH concentrations detected in Site 189 groundwater during the baseline sampling event did not exceed GCTLs. TRPH was not detected during the first quarterly sampling event. At least one additional round of groundwater data will be required to make any further conclusions concerning TRPH in Site 189 groundwater.

Recommendations. Based on the results of the first two sampling events and Section 3.1 of the Site 189 RAP (ABB-ES, 1994), TtNUS recommends that future monitoring at Site 189 include only the following analyses:

USEPA Method 8310 for PAHs
Florida Petroleum Range Organics for TRPH

Sampling for VOAs, EDB, and lead should be discontinued since these compounds have not been detected in two consecutive sampling events.

The next quarterly sampling event is scheduled for December. If you have any questions with regard to this submittal, please contact me at (850) 656-5458.

Very truly yours,

Paul E. Calligan

Paul Calligan, P.G.
Task Order Manager

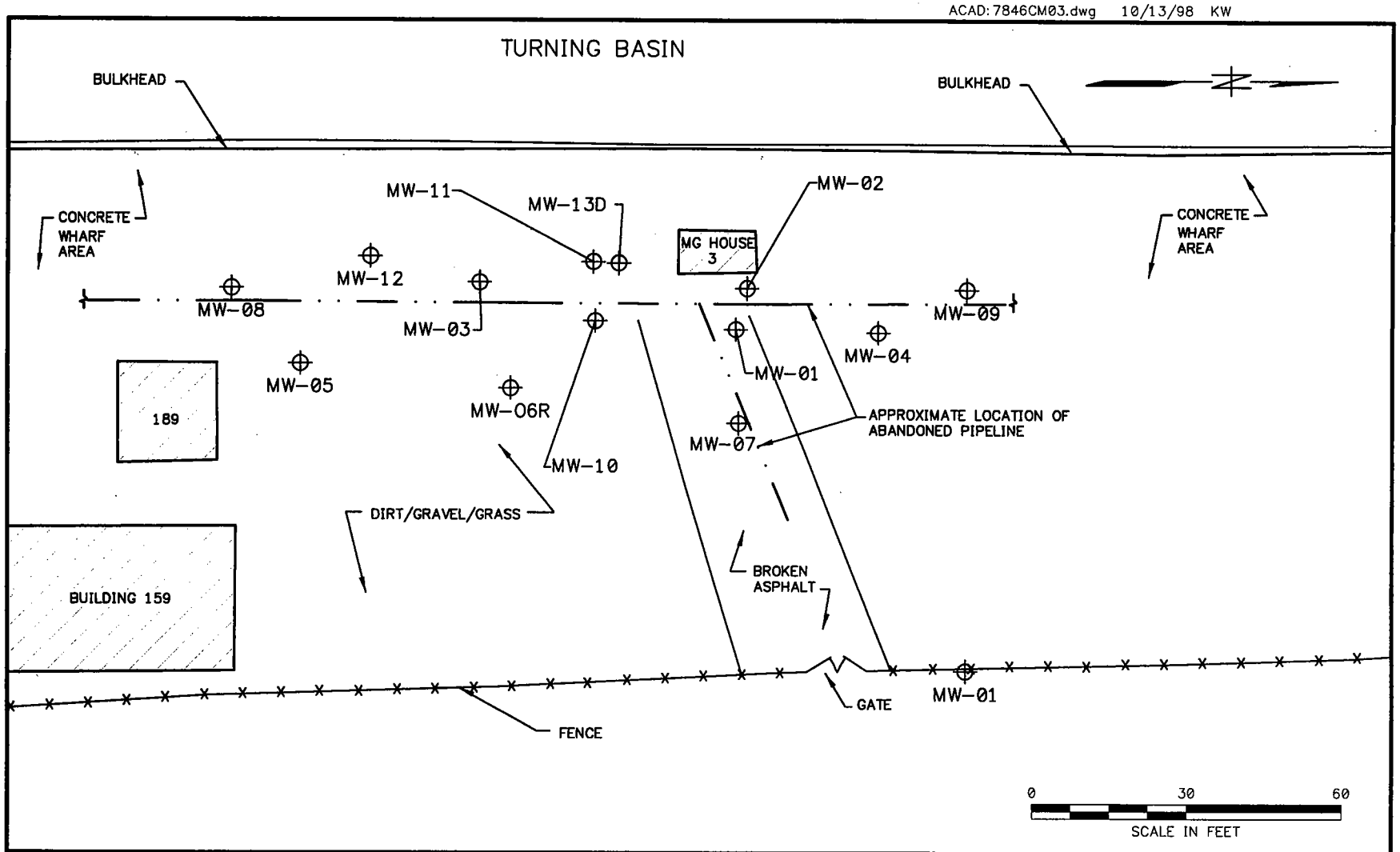
PC/pj

Enclosures

c: B. Glover, SDIV
D. Evans-Ripley (w/o attachments), SDIV
D. Wrobleski (w/o attachments), TtNUS
A. Kendrick, TtNUS
File

ATTACHMENT A

ACAD: 7846CM03.dwg 10/13/98 KW

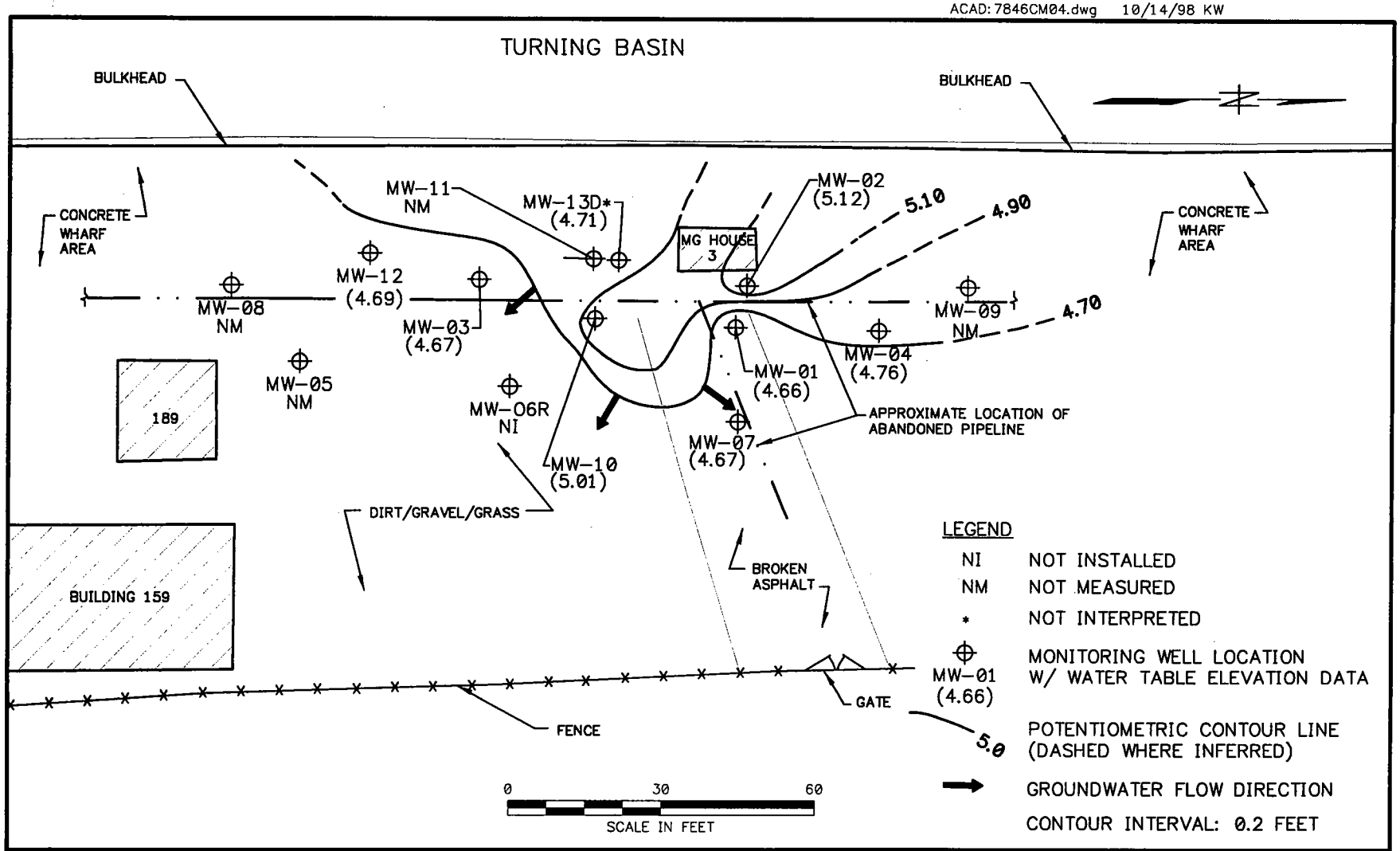


DRAWN BY HJP DATE 9/29/98			CONTRACT NO. 7846
CHECKED BY DATE			APPROVED BY DATE
COST/SCHED-AREA			APPROVED BY DATE
SCALE AS NOTED			DRAWING NO. FIGURE 1 REV. 0

SITE MAP
BUILDING 189
TRUMAN ANNEX
NAVAL AIR STATION
KEY WEST, FLORIDA

FORM CADD NO. SDV_AH12.DWG - REV 0 - 1/20/98

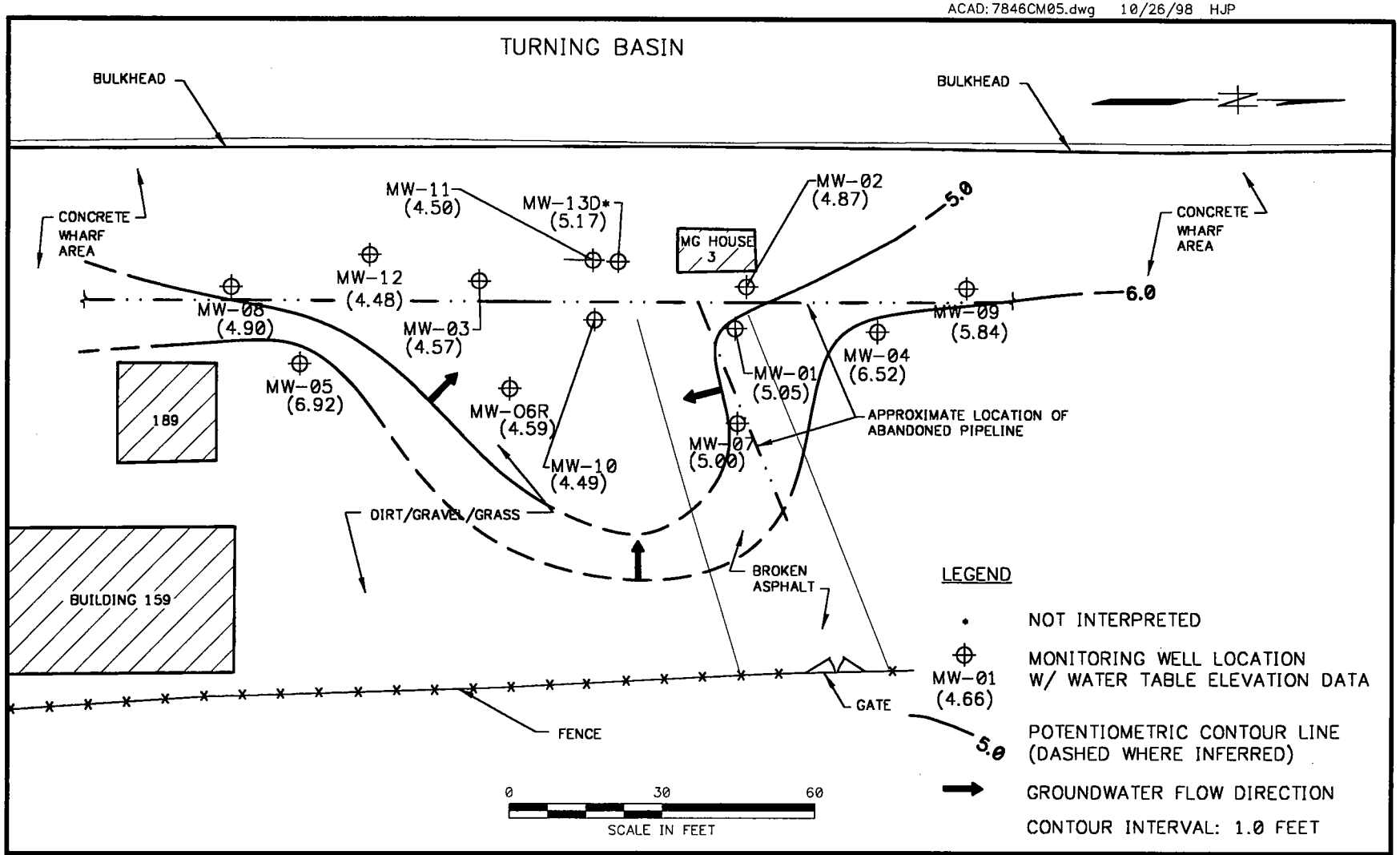
ACAD: 7846CM04.dwg 10/14/98 KW



DRAWN BY HJP DATE 9/29/98	POTENTIOMETRIC SURFACE MAP, JUNE 27 1998 BUILDING 189 TRUMAN ANNEX NAVAL AIR STATION KEY WEST, FLORIDA	CONTRACT NO. 7846	
CHECKED BY DATE		APPROVED BY DATE	
COST/SCHED-AREA		APPROVED BY DATE	
SCALE AS NOTED		DRAWING NO. FIGURE 2	REV. 0

FORM CADD NO. SDV_AH12.DWG - REV 0 - 1/20/98

ACAD: 7846CM05.dwg 10/26/98 HJP



DRAWN BY HJP DATE 9/29/98			CONTRACT NO. 7846
CHECKED BY DATE			APPROVED BY DATE
COST/SCHED-AREA			APPROVED BY DATE
SCALE AS NOTED			DRAWING NO. FIGURE 3 REV. 0

POTENTIOMETRIC SURFACE MAP, OCTOBER 2, 1998
BUILDING 189
TRUMAN ANNEX
NAVAL AIR STATION
KEY WEST, FLORIDA

FORM CADD NO. SDV_AH12.DWG - REV 0 - 1/20/98

ATTACHMENT B

TABLE 1
TOP OF CASING ELEVATIONS, WATER TABLE ELEVATIONS, AND TOTAL DEPTHS
Site 189, Truman Annex
Naval Air Station, Key West, Florida

Well ID	Total Depth	Top of Casing Elevation[1]	June 27, 1998		October 2, 1998	
			Groundwater Level	Groundwater Elevation	Groundwater Level	Groundwater Elevation
B189-MW01	12.88	10.00	5.34	4.66	4.95	5.05
B189-MW02[2]	NM	10.74	5.62	5.12	5.87	4.87
B189-MW03[2]	12.45	10.52	5.85	4.67	5.95	4.57
B189-MW04	12.97	10.91	6.15	4.76	4.39	6.52
B189-MW05	NM	11.04	NM	NM	4.12	6.92
B189-MW06R	NM	9.38	NM	NM	4.79	4.59
B189-MW07	12.61	9.08	4.41	4.67	4.08	5.00
B189-MW08	NM	10.62	NM	NM	5.72	4.90
B189-MW09	NM	10.86	NM	NM	5.02	5.84
B189-MW10	12.95	10.22	5.21	5.01	5.73	4.49
B189-MW11	NM	10.45	NM	NM	5.95	4.50
B189-MW12	12.95	10.57	5.88	4.69	6.09	4.48
B189-MW13D	36.00	10.52	5.81	4.71	5.35	5.17

NOTES:
[1] Top of casing and groundwater elevations are relative to an arbitrary site reference elevation of 10 feet.
[2] Free phase petroleum product was present in both B189-MW02 and B189-MW03. Product measurements were not taken because the product was viscous and adhered to the probe surface.
All measurements reported in feet.
NM – not measured. B189-MW06R had not yet been installed and the original well could not be found.

TABLE 2
SUMMARY OF GROUNDWATER QUALITY:
DETECTED ANALYTES,
BASELINE SAMPLING - JUNE 1998
Site 189, Truman Annex
Naval Air Station, Key West, Florida

Sample Identification[1]	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (g,h,i) perylene	Chrysene	Fluor-anthene	Fluorene	Naph-thalene	Indeno (123cd) pyrene	Pyrene	TRPH
Groundwater Cleanup Target Level[2]	2	2	2,100	50	2,800	2,800	200	2	2,100	50
B189-GW-MW1	1.2	3.10	7.4	2.70	<0.01	<0.01	<0.05	3.40	1.400	1.3
B189-GW-MW2	NS	NS	NS	NS	<0.01	<0.01	<0.05	NS	NS	NS
B189-GW-MW3	NS	NS	NS	NS	<0.01	<0.01	<0.05	NS	NS	NS
B189-GW-MW4	<1.0	<0.25	<0.1	<0.01	<0.01	<0.01	<0.05	<0.05	<0.025	0.1
B189-GW-MW6R	NS	NS	NS	NS	<0.01	<0.01	<0.05	NS	NS	NS
B189-GW-MW7	<1.0	<0.25	<0.1	<0.01	<0.01	<0.01	<0.05	<0.05	<0.025	<0.1
B189-GW-MW10	<1.0	<0.25	<0.1	<0.01	<0.01	<0.01	<0.05	<0.05	<0.025	1.3
B189-GW-MW10-D[3]	<1.0	<0.25	<0.1	<0.01	<0.01	<0.01	<0.05	<0.05	<0.025	1.0
B189-GW-MW12	<1.0	<0.25	<0.1	<0.01	<0.01	<0.01	<0.05	<0.05	<0.025	<0.1
B189-GW-MW13D	<1.0	<0.25	<0.1	<0.01	<0.01	<0.01	<0.05	<0.05	<0.025	<0.1
B189-GW-EQB[4]	<1.0	<0.25	<0.1	<0.01	<0.01	<0.01	<0.05	<0.05	<0.025	<0.1

NOTES:
[1]The orignal sample identifications (IDs) included "-001" appended to the end of the ID. These were removed in the text of this document for consistency and simplicity.
[2]Groundwater cleanup target levels as specified in Table VIII of Chapter 62-770, Florida Administrative Code.
[3]This groundwater sample is a duplicate sample collected from B189-MW10.
[4]This sample is an equipment rinsate blank.
Concentrations reported in microgram per liter for all chemicals except TRPH. TRPH is reported in milligrams per liter.
TRPH = total recoverable petroleum hydrocarbons.
NS = not sampled.

TABLE 3
FREE PHASE PETROLEUM MEASUREMENTS
Site 189, Truman Annex
Naval Air Station, Key West, Florida

Field Data	B189-MW02				
	June 27, 1998	**July 25, 1998**	**August 15, 1998**	**August 24, 1998**	**September 1, 1998**
Depth to Product	unobtainable	5.65 feet	NA	NA	NA
Depth to Groundwater	5.62 feet	5.67 feet	6.02 feet	5.87 feet	5.98 feet
Appearance	sticky globules	dark and sticky	sheen	sheen	sheen
Apparent Thickness(2)	0.10 feet	0.02 feet	<0.01 feet	<0.01 feet	<0.01 feet
Removal Amount(3)	5 gallons	8 gallons	0 gallons	0 gallons	0 gallons

Field Data	B189-MW03				
	June 27, 1998	**July 25, 1998**	**August 15, 1998**	**August 24, 1998**	**September 1, 1998**
Depth to Product	unobtainable	NA	NA	NA	NA
Depth to Groundwater	5.85 feet	5.43 feet	6.15 feet	5.63 feet	5.75 feet
Appearance	sticky globules	sheen	NA	sheen	sheen
Apparent Thickness	0.10 feet	<0.01 feet	NA	<0.01 feet	<0.01 feet
Removal Amount	5 gallons	0 gallons	0 gallons	0 gallons	0 gallons

NOTES:
(1) Apparent thickness is measured or estimated thickness of
(2) Removal amount is the approximate amount of free product and groundwater mixture removed from a monitoring well during free product recovery.

NA = not applicable

TABLE 4
SUMMARY OF GROUNDWATER QUALITY:
DETECTED ANALYTES,
FIRST QUARTERLY SAMPLING - SEPTEMBER 1998
Site 189, Truman Annex
Naval Air Station, Key West, Florida

Sample Identification	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (g,h,i) perylene	Chrysene	Fluor-anthene	Fluorene	Naph-thalene	Indeno (123cd) pyrene	Pyrene	TRPH
Groundwater Cleanup Target Level[1]	2	2	2,100	50	2,800	2,800	200	2	2,100	50
B189-GW-MW1	<0.2	<0.25	0.3	0.30	0.70	<0.01	<0.05	<0.10	0.200	<0.1
B189-GW-MW2	<0.2	<0.25	<0.2	<0.01	<0.01	<0.01	<0.05	<0.10	<0.025	<0.1
B189-GW-MW3	<0.2	<0.25	<0.2	<0.01	<0.01	<0.01	<0.05	<0.10	<0.025	<0.1
B189-GW-MW4	<0.2	<0.25	<0.2	<0.01	<0.01	<0.01	<0.05	<0.10	<0.025	<0.1
B189-GW-MW6	<0.2	<0.25	<0.2	<0.01	<0.01	0.07	0.30	<0.10	0.070	<0.1
B189-GW-MW7	<0.2	<0.25	<0.2	<0.01	<0.01	0.08	<0.05	<0.10	0.078	<0.1
B189-GW-MW10	<0.2	<0.25	<0.2	<0.01	<0.01	<0.01	<0.05	<0.10	<0.025	<0.1
B189-GW-MW12	<0.2	<0.25	<0.2	<0.01	<0.01	<0.01	<0.05	<0.10	<0.025	<0.1
B189-GW-DUP[2]	<0.2	<0.25	<0.2	<0.01	<0.01	<0.01	<0.05	<0.10	<0.025	<0.1
B189-GW-MW13D	<0.2	<0.25	<0.2	<0.01	<0.01	<0.01	<0.05	<0.10	<0.025	<0.1
B189-GW-EQB[3]	<0.2	<0.25	<0.2	<0.01	<0.01	<0.01	<0.05	<0.10	<0.025	<0.1

NOTES:
[1]Groundwater cleanup target levels as specified in Table VIII of Chapter 62-770, Florida Administrative Code.
[2]This groundwater sample is a duplicate sample collected from B189-MW12.
[3]This sample is an equipment rinsate blank.

Concentrations reported in micrograms per liter for all chemicals except TRPH. TRPH is reported in milligrams per liter.
TRPH = total recoverable petroleum hydrocarbons.

ATTACHMENT C

FLORIDA

DEP Form # 62-770.900(3)
Form Title: Petroleum or Petroleum Products Water Sampling Log
Effective Date: September 23, 1997

Petroleum or Petroleum Products Water Sampling Log

FDEP FACILITY NO.: BLD 189	WELL NO.: MW4	SAMPLE ID: B189-GW-MW4-001	DATE: 6/27/98
SITE NAME: TRUMAN ANNEX / BLD 189		SITE LOCATION: TRUMAN ANNEX KEY WEST	

PURGE DATA

WELL DIAMETER (in): 2	TOTAL WELL DEPTH (ft): 12.97	DEPTH TO WATER (ft): 6.15	WELL CAPACITY (gal/ft): 0.16

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

= (12.97 – 6.15) x 0.16 =

PURGE METHOD: PERISTALTIC PUMP	PURGING INITIATED AT: 1505	PURGING ENDED AT: 1535
	PURGE RATE (gpm): ≈ 0.24	TOTAL VOLUME PURGED (gal):

WELL VOLS. PURGED	CUMUL. VOLUME PURGED (gal)	pH	TEMP. (°C)	COND. (µmhos)	COLOR turb		ODOR	APPEARANCE	DO	OTHER SAL
1	1.09	7.50	28.5	2.39		3			1.08	.11
2	2.18	7.48	27.9	2.25		2			1.02	.10
3	3.27	7.45	28.1	2.33		1			.46	.11
4	4.36	7.47	28.0	2.31		1			.49	.11
5	5.45	7.48	28.0	2.33		1			.44	.11

SAMPLING DATA

SAMPLED BY / AFFILIATION: RICK O. & SKIP V. / BRE		SAMPLER(S) SIGNATURE(S): Rick Smith / [signature]	
SAMPLING METHOD(S): PERISTALTIC (Lead) / BAILER (all others)		SAMPLING INITIATED AT: 1540	SAMPLING ENDED AT: 1550
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N)		DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATIONS			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (ml)	FINAL pH	
2	CG	40 ml	HCl		<2	EPA 8021 (VOH)
2	CG	40 ml	HCl		<2	EPA 8021 (VOA)
1	CG	40 ml	HCl		<2	EPA ~~8~~ 504.1 (EDB)
1	AG	1 L	$Na_2S_2O_3$			EPA 8310 (PAH)
1	HDP	500 ml	—			EPA 239.2 (LEAD)
1	CG	1 L	H_2SO_4		<2	FL-PRO (TRPH)

REMARKS:

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

WELL CAPACITY: 1.25" = 0.06 gal/ft; 2" = 0.16 gal/ft; 4" = 0.65 gal/ft; 6" = 1.47 gal/ft; 8" = 2.61 gal/ft; 12" = 5.88 gal/ft

NOTE: this does not constitute all the information required by Chapter 62-160, F.A.C.

FLORIDA

DEP Form # 62-770.900(3)
Form Title: Petroleum or Petroleum Products Water Sampling Log
Effective Date: September 23, 1997

Petroleum or Petroleum Products Water Sampling Log

FDEP FACILITY NO.: BLD 189	WELL NO.: MW-1	SAMPLE ID: B189-GW-MW1-001	DATE: 6/27/98
SITE NAME: TRUMAN ANNEX / BLD 189		SITE LOCATION: TRUMAN ANNEX KEY WEST	

PURGE DATA

WELL DIAMETER (in): 2	TOTAL WELL DEPTH (ft): 12.88	DEPTH TO WATER (ft): 5.34	WELL CAPACITY (gal/ft): 0.16

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

= (12.88 – 5.34) x 0.16 = 1.21

PURGE METHOD: PERISTALTIC PUMP	PURGING INITIATED AT: 1425	PURGING ENDED AT: 1450
	PURGE RATE (gpm): ≈ 0.24	TOTAL VOLUME PURGED (gal):

WELL VOLS. PURGED	CUMUL. VOLUME PURGED (gal)	pH	TEMP. (°C)	COND. (µmhos)	COLOR	TURB.	ODOR	APPEARANCE	OTHER DO	OTHER SALIN.
1	1.21	7.63	29.0	5.60		10			1.71	.30
2	2.42	7.61	28.8	5.[illegible]		10			.62	.32
3	3.63	7.60	28.7	6.24		10			.61	.33
4	4.84	7.63	28.8	6.12		9			.63	.32
5	6.05	7.61	28.9	6.15		8			.62	.32
6										

SAMPLING DATA

SAMPLED BY / AFFILIATION: RICK O. & SKIP V. / BRE		SAMPLER(S) SIGNATURE(S): Rick O Smith / [illegible]	
SAMPLING METHOD(S): PERISTALTIC (lead) / BAILER (all others)		SAMPLING INITIATED AT: 1455	SAMPLING ENDED AT: 1500
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N)		DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATIONS			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (ml)	FINAL pH	
2	CG	40 ml	HCl		<2	EPA Method 8021 (VOH)
2	CG	40 ml	HCl		<2	EPA Method 8021 (VOA)
1	CG	40 ml	HCl		<2	EPA Method 504.1 (EDB)
1	AG	1 L	$Na_2S_2O_3$			EPA Method 8310 (PAH)
1	HDP	500 ml	—			EPA Method 239.2 (Lead)
1	GG	1 L	H_2SO_4		<2	FL-PRO method (TRPH)

REMARKS:

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

WELL CAPACITY: 1.25" = 0.06 gal/ft; 2" = 0.16 gal/ft; 4" = 0.65 gal/ft; 6" = 1.47 gal/ft; 8" = 2.61 gal/ft; 12" = 5.88 gal/ft

NOTE: this does not constitute all the information required by Chapter 62-160, F.A.C.

FLORIDA

DEP Form # 62-770.900(3)
Form Title: Petroleum or Petroleum Products Water Sampling Log
Effective Date: September 23, 1997

Petroleum or Petroleum Products Water Sampling Log

FDEP FACILITY NO.: BLD 189	WELL NO.: MW7	SAMPLE ID: B189-GW-MW7-001	DATE: 6/27/98
SITE NAME: TRUMAN ANNEX / BLD. 189	SITE LOCATION: TRUMAN ANNEX / KEY WEST.		

PURGE DATA

WELL DIAMETER (in): 2	TOTAL WELL DEPTH (ft): 12.61	DEPTH TO WATER (ft): 4.41	WELL CAPACITY (gal/ft): 0.16

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

= (12.61 – 4.41) x 0.16 = 1.31

PURGE METHOD: PERISTALTIC PUMP	PURGING INITIATED AT: 1340	PURGING ENDED AT: 1410
	PURGE RATE (gpm): ≃ 0.24	TOTAL VOLUME PURGED (gal):

WELL VOLS. PURGED	CUMUL. VOLUME PURGED (gal)	pH	TEMP. (°C)	COND. (µmhos)	COLOR	TURB.	ODOR	APPEARANCE	OTHER DO	OTHER SALINITY
1	1.31	7.71	30.5	4.56		42			1.47	.23
2	2.62	7.68	30.7	4.16		11			1.42	.21
3	3.93	7.69	30.7	4.11		8			1.42	.21
4	5.24	7.68	30.7	4.08		6			1.42	.21
5	6.55	7.69	31.0	4.10		6			1.48	.21

SAMPLING DATA

SAMPLED BY / AFFILIATION: RICK O. & SKIP V. / BRE		SAMPLER(S) SIGNATURE(S): Rick O. Sanko / [signature]	
SAMPLING METHOD(S): PERISTALTIC (Lead) / BAILER (all other)		SAMPLING INITIATED AT: 1325	SAMPLING ENDED AT: 1420
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N)		DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATIONS			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (ml)	FINAL pH	
2	CG	40ml	HCl		<2	EPA 8021 (BOH)
2	CG	40ml	HCl		<2	EPA 8021 (VOA)
1	CG	40ml	HCl		<2	EPA 504.1 (EDB)
1	AG	1L	$Na_2S_2O_3$			EPA 8310 (PAH)
1	HDP	500mL	—			EPA 239.2 (Lead)
1	CG	1L	H_2SO_4		<2	FL-PRO (TRPH)

REMARKS:

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

WELL CAPACITY: 1.25" = 0.06 gal/ft; 2" = 0.16 gal/ft; 4" = 0.65 gal/ft; 6" = 1.47 gal/ft; 8" = 2.61 gal/ft; 12" = 5.88 gal/ft

NOTE: this does not constitute all the information required by Chapter 62-160, F.A.C.

FLORIDA

DEP Form # 62-770.900(3)
Form Title: Petroleum or Petroleum Products Water Sampling Log
Effective Date: September 23, 1997

Petroleum or Petroleum Products Water Sampling Log

FDEP FACILITY NO.: BLD 189	WELL NO.: MW10	SAMPLE ID: B189-GW-MW10-001	DATE: 6/27/98
SITE NAME: TRUMAN ANNEX / BLD 189		SITE LOCATION: TRUMAN ANNEX - KEY WEST	

PURGE DATA

WELL DIAMETER (in): 2	TOTAL WELL DEPTH (ft): 12.95	DEPTH TO WATER (ft): 5.21	WELL CAPACITY (gal/ft): 0.16

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

= (12.95 - 5.21) x 0.16 = 1.24

PURGE METHOD: PERISTALTIC PUMP / BAILER	PURGING INITIATED AT: 1300	PURGING ENDED AT: 1325
	PURGE RATE (gpm): 0.2642	TOTAL VOLUME PURGED (gal): 6.20

WELL VOLS. PURGED	CUMUL. VOLUME PURGED (gal)	pH	TEMP. (°C)	COND. (µmhos)	COLOR	TURB	ODOR	APPEARANCE	OTHER DO	OTHER SALIN.
1	1.24	8.82	28.7	3.19		438			.63	.15
2	2.48	8.91	27.8	3.21		41			.68	.16
3	3.72	8.94	27.7	3.20		29			.60	.16
4	4.96	8.95	27.8	3.21		21			.61	.16
5	6.20	8.90	28.0	3.21		15			.63	.6

SAMPLING DATA

SAMPLED BY / AFFILIATION: RICK O. / SKIP V.		SAMPLER(S) SIGNATURE(S): Rick O. / [illegible]	
SAMPLING METHOD(S): PERISTALTIC (lead) / BAILER (ALL OTHERS)		SAMPLING INITIATED AT: 1330	SAMPLING ENDED AT: 1335
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N)		DUPLICATE: (Y) N

SAMPLE CONTAINER SPECIFICATIONS			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (ml)	FINAL pH	
4	CG	40 ml	HCl		<2	EPA 8021 (VOH)
4	CG	40 ml	HCl		<2	EPA 8021 (VOA)
2	CG	40 ml	HCl		<2	EPA 504.1 (EDB)
2	AG	1L	$Na_2S_2O_3$		—	EPA 8310 (PAH)
2	HDP	500 ml	—		—	EPA 239.2 (Lead)
2	CG	1L	H_2SO_4		<2	FL-PRO (TRPH)

REMARKS: MW10 used for duplicate sample. (denoted as B189-GW-MW10-001D)

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

WELL CAPACITY: 1.25" = 0.06 gal/ft; 2" = 0.16 gal/ft; 4" = 0.65 gal/ft; 6" = 1.47 gal/ft; 8" = 2.61 gal/ft; 12" = 5.88 gal/ft

NOTE: this does not constitute all the information required by Chapter 62-160, F.A.C.

FLORIDA

DEP Form # 62-770.900(3)
Form Title: Petroleum or Petroleum Products Water Sampling Log
Effective Date: September 23, 1997

Petroleum or Petroleum Products Water Sampling Log

B189-GW-MW12-001

FDEP FACILITY NO.: BLD 189	WELL NO.: MW12	SAMPLE ID: ✓	DATE: 6/27/98
SITE NAME: TRUMAN ANNEX / BLD. 189	SITE LOCATION: TRUMAN ANNEX KEY WEST		

PURGE DATA

WELL DIAMETER (in): 2	TOTAL WELL DEPTH (ft): 12.95	DEPTH TO WATER (ft): 5.88	WELL CAPACITY (gal/ft): 0.16

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

= (12.95 – 5.88) x 0.16 = 1.13

PURGE METHOD: PERISTALTIC PUMP / BAILER	PURGING INITIATED AT: 1155		PURGING ENDED AT: 1230
	PURGE RATE (gpm): ≈ 0.24		TOTAL VOLUME PURGED (gal): 5.65

WELL VOLS. PURGED	CUMUL. VOLUME PURGED (gal)	pH	TEMP. (°C)	COND. (µmhos)	COLOR	turb	ODOR	APPEARANCE	OTHER PO	OTHER SAL
1	1.13	7.71	29.5	3.04	M.CLEAR	101	NO	M.CLEAR	.86	.16
2	2.26	7.75	29.2	3.25	M.CLEAR	41	NO	M.CLEAR	.53	.18
3	3.39	7.75	29.1	3.13	CLEAR	15	NO	CLEAR	.64	.17
4	4.52	7.76	29.3	3.07	CLEAR	4	NO	CLEAR	.71	.15
5	5.65	7.76	29.1	3.05	CLEAR	3	NO	CLEAR	.68	.15

SAMPLING DATA

SAMPLED BY / AFFILIATION: RICK O. & SKIP V. / BRE		SAMPLER(S) SIGNATURE(S): Rick Osborne / [illegible]	
SAMPLING METHOD(S): PERISTALTIC (LEAD) / BAILER (ALL OTHER)		SAMPLING INITIATED AT: ~~1155~~ 1225	SAMPLING ENDED AT: 1240
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N)		DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATIONS			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (ml)	FINAL pH	
2	CG	40ml	HCl		<2	EPA 8021 (VOH)
2	CG	40ml	HCl		<2	EPA 8021 (VOA)
1	CG	40ml	HCl		<2	EPA 504.1 (EDB)
1	AG	1L	$Na_2S_2O_3$		–	EPA 8310 (PAH)
1	HDP	500ml	–		–	EPA 239.2 (LEAD)
1	CG	1L	H_2SO_4		<2	FL-PRO (TRPH)

REMARKS:

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

WELL CAPACITY: 1.25" = 0.06 gal/ft; 2" = 0.16 gal/ft; 4" = 0.65 gal/ft; 6" = 1.47 gal/ft; 8" = 2.61 gal/ft; 12" = 5.88 gal/ft

NOTE: this does not constitute all the information required by Chapter 62-160, F.A.C.

DEP Form # 62-770.900(3)
Form Title: Petroleum or Petroleum Products Water Sampling Log
Effective Date: September 23, 1997

Petroleum or Petroleum Products Water Sampling Log

FDEP FACILITY NO.: BLD-189	WELL NO.: MW-13D	SAMPLE ID: B189-GW-MW13D-001	DATE: 6/27/98
SITE NAME: TRUMAN ANNEX / BLD. 189		SITE LOCATION: TRUMAN ANNEX KEY WEST	

PURGE DATA

WELL DIAMETER (in): 2	TOTAL WELL DEPTH (ft): 36.00	DEPTH TO WATER (ft): 5.81	WELL CAPACITY (gal/ft): 0.16

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

= (36 – 5.81) x 0.16 = 4.83

PURGE METHOD: PERISTALTIC PUMP / BAILER	PURGING INITIATED AT: 0925	PURGING ENDED AT: 1140
	PURGE RATE (gpm): ≈ 0.2642	TOTAL VOLUME PURGED (gal): 24.15

WELL VOLS. PURGED	CUMUL. VOLUME PURGED (gal)	pH	TEMP. (°C)	COND. (µmhos)	COLOR	TURB	ODOR	APPEARANCE	DO	OTHER SALINITY
1	4.83	7.44	28.0	5.63	MOSTLY CLEAR	75	NO	M. CLEAR	7.34	0.30
2	9.66	7.80	28.8	33.9	CLEAR	12	NO	CLEAR	2.92	2.14
3	14.49	7.80	27.8	5.65	CLEAR	2	NO	CLEAR	8.26	0.29
4	19.32	7.84	28.2	5.61	CLEAR	1	NO	CLEAR	7.25	0.29
5	24.15	7.85	29.1	5.62	CLEAR	1	NO	CLEAR	8.18	0.85

SAMPLING DATA

SAMPLED BY / AFFILIATION: RICK O. + SKIP N. / BRE		SAMPLER(S) SIGNATURE(S): Rick O Santo / [signature]	
SAMPLING METHOD(S): PERISTALTIC (lead) / BAILER (ALL OTHER)		SAMPLING INITIATED AT: ~~0925~~ 1145	SAMPLING ENDED AT: ~~1145~~ 1150
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N)		DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATIONS			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (ml)	FINAL pH	
2	CG	40 ml	HCl		<2	EPA 8021 (VOH)
2	CG	40ml	HCl		<2	EPA 8021 (VOA)
1	CG	40ml	HCl		<2	EPA 504.1 (EDB)
1	AG	1L	$Na_2S_2O_3$		—	EPA 8310 (PAH)
1	HDP	500ml	—		—	EPA 239.2 (LEAD)
1	CG	1L	H_2SO_4		<2	FLPRO (TRPH)

REMARKS:

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

WELL CAPACITY: 1.25" = 0.06 gal/ft; 2" = 0.16 gal/ft; 4" = 0.65 gal/ft; 6" = 1.47 gal/ft; 8" = 2.61 gal/ft; 12" = 5.88 gal/ft

NOTE: this does not constitute all the information required by Chapter 62-160, F.A.C.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: BLDG. 189
Project No.: 7486

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

Sample ID No.: 189-GW-MW04
Sample Location: TRUMAN ANNEX
Sampled By: P.D.B
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 9/2/98	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	%	NA
Time: 1545								
Method: PERIS. PUMP.								

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 9/2/98								
Method: PERIS. PUMP.	Initial	6.88	6.82	31.0	2	1.76	.42	
Monitor Reading (ppm): Ø	1	6.88	7.05	29.8	2	1.75	.38	
Well Casing Diameter & Material	2	6.86	7.02	29.9	-10	1.78	.38	
Type: 2" PVC	3	6.87	7.03	29.8	-10	1.74	.38	
Total Well Depth (TD): 13.00								
Static Water Level (WL): 5.82								
One Casing Volume(gal/L): 1.15								
Start Purge (hrs): 1430								
End Purge (hrs): 1530								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 4.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
8010/8020	HCL	40 mL	2
504	HCL	40 mL	2
610	Ø	~~40 mL~~ 1 LTR.	1
EPH PRO	HCL	1 LTR	1
LEAD	HNO3	250 mL	1

OBSERVATIONS / NOTES:

VOC - GRAVITY FEED

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

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Project Site Name: TRUMAN ANNEX 189
Project No.: 7486

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

Sample ID No.: 189-GW-MW10
Sample Location: TRUM. ANNEX
Sampled By: RPA
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 9/1/98	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	%	NA
Time: 1210								
Method: P.P.								

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 9/1/98								
Method: PERS. PUMP	Initial	7.96	14.6	28.2	8	1.47	.74	
Monitor Reading (ppm):	1	7.90	14.8	28.1	5	1.42	.74	
Well Casing Diameter & Material	2	7.94	14.3	28.2	4	1.46	.74	
Type: 2" PVC	3	7.92	14.8	28.2	10	1.45	.74	
Total Well Depth (TD): 13.0								
Static Water Level (WL): 5.52								
One Casing Volume(gal/L): 1.20								
Start Purge (hrs): 0900								
End Purge (hrs): 1000								
Total Purge Time (min): 50								
Total Vol. Purged (gal/L): 5.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected

OBSERVATIONS / NOTES:

VOC - GRAVITY FEED

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

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Project Site Name: BLDG 189
Project No.: 7486

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

Sample ID No.: TRUMAN ANNEX
Sample Location: 189-GW-MW13
Sampled By: PDP
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 9/1/98	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1315	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	%	NA
Method: P. Pump.								

PURGE DATA:

Date: 9/1/98	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Peristi Pump.	Initial	7.16	43.3	27.3	247	1.45	2.81	
Monitor Reading (ppm):	1	7.16	43.4	27.2	250	1.45	2.30	
Well Casing Diameter & Material	2	7.16	43.4	27.3	244	1.45	2.50	
Type: 2" PVC	3	7.20	43.5	27.4	210	1.50	2.80	
Total Well Depth (TD): 34.90		7.18	44.0	27.4	210	1.50	2.81	
Static Water Level (WL): 6.05		7.17	43.3	27.7	218	1.78	2.81	
One Casing Volume(gal/L): 4.6								
Start Purge (hrs): 1100								
End Purge (hrs): 1300								
Total Purge Time (min): 120								
Total Vol. Purged (gal/L): 20								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected

OBSERVATIONS / NOTES:

VOC GRAVITY FEED

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

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Project Site Name: BLDG 189
Project No.: 7486

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

Sample ID No.: 189-GW-MW06
Sample Location: Trun. Armx
Sampled By: P.D.H.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 9/1/98	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	%	NA
Time: 1440								
Method: Peris. Pump								

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 9/1/98								
Method: Peris. Pump.	Initial	6.94	6.01	30.2	46	1.51	.37	
Monitor Reading (ppm):	1	6.87	6.80	30.5	7	1.28	.36	
Well Casing Diameter & Material	2	6.86	6.85	30.6	3	1.29	.33	
Type: PVC 2"	3	6.88	6.24	30.6	3	1.28	.36	
Total Well Depth (TD): 13.00								
Static Water Level (WL): 4.32								
One Casing Volume(gal/L): 1.4								
Start Purge (hrs): 1330								
End Purge (hrs): 1430								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 5.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

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Project Site Name: BLDG 189
Project No.: 7486

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

Sample ID No.: 189-GW-MW03
Sample Location: TRUMAN ANNEX
Sampled By: PDD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 9/1/98	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	%	NA
Time: 1545								
Method: PERIS. PUMP								

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 9/1/98								
Method: PERIS PUMP	Initial	6.99	12.4	29.8	2	1.56	.62	.
Monitor Reading (ppm):	1							
Well Casing Diameter & Material	2							
Type: 2" PVC	3							
Total Well Depth (TD): 13.0								
Static Water Level (WL): 5.75								
One Casing Volume(gal/L): 1.16								
Start Purge (hrs): 1445								
End Purge (hrs): 1540								
Total Purge Time (min): 55.								
Total Vol. Purged (gal/L): 5.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected

OBSERVATIONS / NOTES:

VOC - GRAVITY FEED.

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: BLDG 189
Project No.: 7486

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

Sample ID No.: 189-GW-MW12
Sample Location: TRUMAN ANNEX
Sampled By: PDH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 9/2/98	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	%	NA
Time: 1745								
Method: PERS. PUMP								

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 9/2/98								
Method: PERS. PUMP.	Initial	6.94	16.7	29.8	1	1.15	.98	
Monitor Reading (ppm):	1	6.95	16.2	29.4	-10	1.10	.98	
Well Casing Diameter & Material	2	6.90	16.5	29.5	-10	1.10	.98	
Type: 2" PVC	3	6.91	16.5	29.5	-10	1.10	.98	
Total Well Depth (TD): 13.00								
Static Water Level (WL): 5.87								
One Casing Volume(gal/L): 1.14								
Start Purge (hrs): 1645								
End Purge (hrs): 1730								
Total Purge Time (min): 45								
Total Vol. Purged (gal/L): 4.80								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
8010 / 8020	HCL	40 ml	2
610	0	1 LTR	1
504	HCL	40 ml	2
FL. PRO	HCL	1 LTR.	1
LEAD	HNO_3	250 ml	1

OBSERVATIONS / NOTES:

VOC - GRAVITY FEED

Circle if Applicable:

MS/MSD	Duplicate ID No.:
	189-GW-DUP.

Signature(s): [signature]

GROUNDWATER SAMPLE LOG SHEET

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Project Site Name: BLDG 189
Project No.: 7486

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

Sample ID No.: 189-GW-MW01
Sample Location: TRUMAN ANNEX
Sampled By: [illegible]
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 9/2/98	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	%	NA
Time: 1300								
Method: PERIS PUMP.								

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 9/2/98								
Method: PERIS PUMP	Initial	6.84	267	30.2	2	1.30	1.64	
Monitor Reading (ppm): Ø	1							
Well Casing Diameter & Material	2							
Type: 2" PVC	3							
Total Well Depth (TD): 13.00								
Static Water Level (WL): 4.96								
One Casing Volume(gal/L): 1.3								
Start Purge (hrs): 1145								
End Purge (hrs): 1245								
Total Purge Time (min): 60 MIN								
Total Vol. Purged (gal/L): 4.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
8010 / 8020	HCL	40 ML	2
504	HCL	40 ML	2
FC PRO	HCL	1 LTR.	1
GLO	Ø	1 LTR	1
LEAD	HNO3	250 ML.	1

OBSERVATIONS / NOTES:

VOC - GRAVITY FEED

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s): [illegible]

GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: BL6189
Project No.: 7486

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

Sample ID No.: 189-GW-MW07
Sample Location: TRUMAN ARMY
Sampled By: P.D.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 9/2/98	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	%	NA
Time: 1115								
Method: PERIS PUMP.								

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 9/2/98								
Method: PERIS. PUMP.	Initial	7.12	20.4	31.2	3	2.09	1.23	
Monitor Reading (ppm): Ø	1							
Well Casing Diameter & Material	2							
Type: 2" PVC	3							
Total Well Depth (TD): 13.0								
Static Water Level (WL): 4.04								
One Casing Volume(gal/L): 1.43								
Start Purge (hrs): 10:00								
End Purge (hrs): 11:05								
Total Purge Time (min): 65								
Total Vol. Purged (gal/L): 5.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
~~POSTICIDES~~ 8010/8020	HCL	40 ml	2
504	HCL	40 ML	2
610	Ø	1 LTR	1
FL. PRO	HCL	1 LTR.	1
LEAD	HNO3	250 ML	1

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: BLDG 189
Project No.: 7486

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

Sample ID No.: 189-GW-MW02
Sample Location: TRUMAN ANNEX
Sampled By: P.DA.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 9/2/98	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	%	NA
Time: 0930								
Method: PERS. PUMP.								

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 9/2/98								
Method: PERIS PUMP.	Initial	6.99	19.1	30.4	12	1.69	1.14	
Monitor Reading (ppm):	1	6.89	18.9	30.0	2	1.39	1.11	
Well Casing Diameter & Material	2	6.89	18.8	30.1	2	1.40	1.11	
Type: 2" PVC	3	6.90	18.8	30.1	10	1.40	1.12	
Total Well Depth (TD): 12.52								
Static Water Level (WL): 5.98								
One Casing Volume(gal/L): 1.05								
Start Purge (hrs): 0810								
End Purge (hrs): 0915								
Total Purge Time (min): 65								
Total Vol. Purged (gal/L): 5.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
8010/8020	HCL	40mL	2
610	Ø	1 LTR	1
SOC	HCL	40mL	2
FC PRO	HCL	1 LTR	1
LEAD	HNO3	250 mL	1

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

ATTACHMENT D

PC&B Environmental Laboratories, Inc.

210 Park Road, Oviedo, Florida 32765
Phone: 407-359-7194 Fax: 407-359-7197

07-10-1998

Paul Calligan
Tetra Tech NUS, Inc.
1311 Executive Center Drive, Ellis Bldg.
Tallahassee, FL 32301-

Dear Paul Calligan:

Enclosed are the results of the analysis of your samples received 06/30/1998.

Our laboratory is certified by the Florida DHRS (Lab #E83239) and operates under an FDEP approved Comprehensive Quality Assurance Plan (#900134G). Unless otherwise noted, all results are reported as received. All data were determined in accordance with published procedures (EPA-600/4-79-020), Methods for Chemical Analysis of Water and Wastes, Revised March 1983 and/or Standard Methods for the examination of Water and Wastewater, 18th Edition 1989 and/or Test Methods for Evaluating Solid Waste (EPA-SW-846, Revised January 1995), unless stated otherwise in our CompQapp under method modifications.

If you have any questions, please do not hesitate to give me a call.

Sincerely,

Andrew Harrison
Laboratory Manager

PC&B Environmental Laboratories, Inc.

210 Park Road, Oviedo, Florida 32765
Phone: 407-359-7194 Fax: 407-359-7197

Client : Tetra Tech NUS, Inc.
1311 Executive Center Drive, Ellis Bldg.
Tallahassee, FL 32301-

Contact : Paul Calligan
Phone : (850) 656-5458

Laboratory Reference Number : 98060193

Project Name : CTO-0059
Project Number : CTO-0059
Sample temperature at time of receipt: 4 degrees C

Chain of Custody : 10942

Laboratory ID	Matrix	Client ID	Status	Date/Time Sampled	
98060193-1	Water	B189-GW-MW13D-001	RUN	06/27/1998	11:45
98060193-2	Water	B189-GW-MW12-001	RUN	06/27/1998	12:25
98060193-3	Water	B189-GW-MW10-001	RUN	06/27/1998	13:30
98060193-4	Water	B189-GW-MW7-001	RUN	06/27/1998	14:15
98060193-5	Water	B189-GW-MW1-001	RUN	06/27/1998	14:55
98060193-6	Water	B189-GW-MW4-001	RUN	06/27/1998	15:40
98060193-7	Water	B189-GW-EQB-001B	RUN	06/27/1998	15:05
98060193-8	Water	B189-GW-MW10-001D	RUN	06/27/1998	13:40

Number	Parameter	Description
8	EPA 504	EDB/DBCP
8	EPA 8310	PAH's by HPLC
8	FL-PRO	Petroleum Hydrocarbons
8	EPA 8021	Volatile Organics
8	EPA 6010	Lead by ICAP

Case Narrative

Paul Calligan
Tetra Tech NUS, Inc.
1311 Executive Center Drive, Ellis Bldg.
Tallahassee, FL 32301-

CASE NARRATIVE for Work Order: 98060193
Project Number: CTO-0059
Project Name: CTO-0059

This Case Narrative is a summary of events and/or problems encountered with this Work Order.

The samples were received in good condition, properly cooled and preserved. No problems were encountered with sample receipt.

There were very low level hits on the PAHs. They were not reported because we were unable to confirm them.

Definition of Flags

DL	=	No surrogate result due to dilution or matrix interference.
J	=	Estimated Value, value not accurate.
V	=	Analyte was detected in the blank and sample.

QC Batch Summary

Paul Calligan
Tetra Tech NUS, Inc.
1311 Executive Center Drive, Ellis Bldg.
Tallahassee, FL 32301-

QC BATCH SUMMARY for Work Order: 98060193
Project Number: CTO-0059
Project Name: CTO-0059

Method	SubNum	QC Batch
EPA 504 - EDB/DBCP		
	-1	9807EDB002
	-2	9807EDB002
	-3	9807EDB002
	-4	9807EDB002
	-5	9807EDB002
	-6	9807EDB002
	-7	9807EDB002
	-8	9807EDB002
EPA 6010 - Lead by ICAP		
	-1	9806RC117
	-2	9806RC117
	-3	9806RC117
	-4	9806RC117
	-5	9806RC117
	-6	9806RC117
	-7	9806RC117
	-8	9806RC117
EPA 8310 - PAH's by HPLC		
	-1	9806PAH089
	-2	9806PAH089
	-3	9806PAH089
	-4	9806PAH089
	-5	9806PAH089
	-6	9806PAH089
	-7	9806PAH089
	-8	9806PAH089
FL-PRO - Petroleum Hydrocarbons		
	-1	9807FLRO011
	-2	9807FLRO011
	-3	9807FLRO011
	-4	9807FLRO011

QC Batch Summary

Paul Calligan
Tetra Tech NUS, Inc.
1311 Executive Center Drive, Ellis Bldg.
Tallahassee, FL 32301-

QC BATCH SUMMARY for Work Order: 98060193
Project Number: CTO-0059
Project Name: CTO-0059

Method	SubNum	QC Batch
	-5	9807FLRO011
	-6	9807FLRO011
	-7	9807FLRO011
	-8	9807FLRO011
EPA 8021 - Volatile Organics		
	-1	9807MS2002
	-2	9807MS2002
	-3	9807MS2002
	-4	9807MS2002
	-5	9807MS2002
	-6	9807MS2002
	-7	9807MS2002
	-8	9807MS2002

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8021

Lab Reference Number :	98060193-1
Client Sample ID :	B189-GW-MW13D-001
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	GCMS
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
1.0	Benzene	1.0	U	ug/l	NM
1.0	Bromobenzene	1.0	U	ug/l	NM
1.0	Bromochloromethane	1.0	U	ug/l	NM
1.0	Bromodichloromethane	1.0	U	ug/l	NM
1.0	Bromoform	1.0	U	ug/l	NM
1.0	Bromomethane	1.0	U	ug/l	NM
1.0	n-Butylbenzene	1.0	U	ug/l	NM
1.0	sec-Butylbenzene	1.0	U	ug/l	NM
1.0	tert-Butylbenzene	1.0	U	ug/l	NM
1.0	Carbon tetrachloride	1.0	U	ug/l	NM
1.0	Chlorobenzene	1.0	U	ug/l	NM
1.0	Chloroethane	1.0	U	ug/l	NM
1.0	Chloroform	1.0	U	ug/l	NM
1.0	Chloromethane	1.0	U	ug/l	NM
1.0	2-Chlorotoluene	1.0	U	ug/l	NM
1.0	4-Chlorotoluene	1.0	U	ug/l	NM
1.0	Dibromochloromethane	1.0	U	ug/l	NM
1.0	1,2-Dibromoethane	1.0	U	ug/l	NM
1.0	Dibromomethane	1.0	U	ug/l	NM
1.0	1,2-Dichlorobenzene	1.0	U	ug/l	NM
1.0	1,3-Dichlorobenzene	1.0	U	ug/l	NM
1.0	1,4-Dichlorobenzene	1.0	U	ug/l	NM
1.0	Dichlorodifluoromethane	1.0	U	ug/l	NM
1.0	1,1-Dichloroethane	1.0	U	ug/l	NM
1.0	1,2-Dichloroethane	1.0	U	ug/l	NM
1.0	1,1-Dichloroethene	1.0	U	ug/l	NM
1.0	cis-1,2-Dichloroethene	1.0	U	ug/l	NM
1.0	trans-1,2-Dichloroethene	1.0	U	ug/l	NM
1.0	1,2-Dichloropropane	1.0	U	ug/l	NM
1.0	1,3-Dichloropropane	1.0	U	ug/l	NM
1.0	2,2-Dichloropropane	1.0	U	ug/l	NM
1.0	1,1-Dichloropropene	1.0	U	ug/l	NM
1.0	1,3-Dichloropropene (cis)	1.0	U	ug/l	NM
1.0	1,3-Dichloropropene (trans)	1.0	U	ug/l	NM
1.0	Ethylbenzene	1.0	U	ug/l	NM
1.0	Hexachlorobutadiene	1.0	U	ug/l	NM
1.0	Isopropylbenzene	1.0	U	ug/l	NM
1.0	p-Isopropyltoluene	1.0	U	ug/l	NM
1.0	Methylene chloride	1.0	U	ug/l	NM
1.0	Naphthalene	1.0	U	ug/l	NM
1.0	n-Propylbenzene	1.0	U	ug/l	NM
1.0	Styrene	1.0	U	ug/l	NM
1.0	1,1,1,2-Tetrachloroethane	1.0	U	ug/l	NM
1.0	1,1,2,2-Tetrachloroethane	1.0	U	ug/l	NM
1.0	Tetrachloroethene	1.0	U	ug/l	NM
1.0	Toluene	1.0	U	ug/l	NM
1.0	1,2,3-Trichlorobenzene	1.0	U	ug/l	NM
1.0	1,2,4-Trichlorobenzene	1.0	U	ug/l	NM
1.0	1,1,1-Trichloroethane	1.0	U	ug/l	NM
1.0	1,1,2-Trichloroethane	1.0	U	ug/l	NM
1.0	Trichloroethene	1.0	U	ug/l	NM
1.0	Trichlorofluoromethane	1.0	U	ug/l	NM
1.0	1,2,3-Trichloropropane	1.0	U	ug/l	NM
1.0	1,2,4-Trimethylbenzene	1.0	U	ug/l	NM

PC&B Environmental Laboratories, Inc.
210 Park Road
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PHONE: 407-359-7194
FAX: 359-7197

Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8021

Lab Reference Number :	98060193-1
Client Sample ID :	B189-GW-MW13D-001
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	GCMS
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
1.0	1,3,5-Trimethylbenzene	1.0	U	ug/l	NM
1.0	Vinyl chloride	1.0	U	ug/l	NM
1.0	MTBE	1.0	U	ug/l	NM
1.0	o-Xylene	1.0	U	ug/l	NM
1.0	m-Xylene	1.0	U	ug/l	NM
1.0	p-Xylene	1.0	U	ug/l	NM
1.0	MTBE	1.0	U	ug/l	NM
	(Surr) 1,2-Dichloroethane-d4 (%)	80		%	NM
	(Surr) Toluene-d8 (%)	124		%	NM
	(Surr) 4-Bromofluorobenzene (%)	114		%	NM

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
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Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8021

Lab Reference Number :	98060193-2
Client Sample ID :	B189-GW-MW12-001
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	GCMS
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
1.0	Benzene	1.0	U	ug/l	NM
1.0	Bromobenzene	1.0	U	ug/l	NM
1.0	Bromochloromethane	1.0	U	ug/l	NM
1.0	Bromodichloromethane	1.0	U	ug/l	NM
1.0	Bromoform	1.0	U	ug/l	NM
1.0	Bromomethane	1.0	U	ug/l	NM
1.0	n-Butylbenzene	1.0	U	ug/l	NM
1.0	sec-Butylbenzene	1.0	U	ug/l	NM
1.0	tert-Butylbenzene	1.0	U	ug/l	NM
1.0	Carbon tetrachloride	1.0	U	ug/l	NM
1.0	Chlorobenzene	1.0	U	ug/l	NM
1.0	Chloroethane	1.0	U	ug/l	NM
1.0	Chloroform	1.0	U	ug/l	NM
1.0	Chloromethane	1.0	U	ug/l	NM
1.0	2-Chlorotoluene	1.0	U	ug/l	NM
1.0	4-Chlorotoluene	1.0	U	ug/l	NM
1.0	Dibromochloromethane	1.0	U	ug/l	NM
1.0	1,2-Dibromoethane	1.0	U	ug/l	NM
1.0	Dibromomethane	1.0	U	ug/l	NM
1.0	1,2-Dichlorobenzene	1.0	U	ug/l	NM
1.0	1,3-Dichlorobenzene	1.0	U	ug/l	NM
1.0	1,4-Dichlorobenzene	1.0	U	ug/l	NM
1.0	Dichlorodifluoromethane	1.0	U	ug/l	NM
1.0	1,1-Dichloroethane	1.0	U	ug/l	NM
1.0	1,2-Dichloroethane	1.0	U	ug/l	NM
1.0	1,1-Dichloroethene	1.0	U	ug/l	NM
1.0	cis-1,2-Dichloroethene	1.0	U	ug/l	NM
1.0	trans-1,2-Dichloroethene	1.0	U	ug/l	NM
1.0	1,2-Dichloropropane	1.0	U	ug/l	NM
1.0	1,3-Dichloropropane	1.0	U	ug/l	NM
1.0	2,2-Dichloropropane	1.0	U	ug/l	NM
1.0	1,1-Dichloropropene	1.0	U	ug/l	NM
1.0	1,3-Dichloropropene (cis)	1.0	U	ug/l	NM
1.0	1,3-Dichloropropene (trans)	1.0	U	ug/l	NM
1.0	Ethylbenzene	1.0	U	ug/l	NM
1.0	Hexachlorobutadiene	1.0	U	ug/l	NM
1.0	Isopropylbenzene	1.0	U	ug/l	NM
1.0	p-Isopropyltoluene	1.0	U	ug/l	NM
1.0	Methylene chloride	1.0	U	ug/l	NM
1.0	Naphthalene	1.0	U	ug/l	NM
1.0	n-Propylbenzene	1.0	U	ug/l	NM
1.0	Styrene	1.0	U	ug/l	NM
1.0	1,1,1,2-Tetrachloroethane	1.0	U	ug/l	NM
1.0	1,1,2,2-Tetrachloroethane	1.0	U	ug/l	NM
1.0	Tetrachloroethene	1.0	U	ug/l	NM
1.0	Toluene	1.0	U	ug/l	NM
1.0	1,2,3-Trichlorobenzene	1.0	U	ug/l	NM
1.0	1,2,4-Trichlorobenzene	1.0	U	ug/l	NM
1.0	1,1,1-Trichloroethane	1.0	U	ug/l	NM
1.0	1,1,2-Trichloroethane	1.0	U	ug/l	NM
1.0	Trichloroethene	1.0	U	ug/l	NM
1.0	Trichlorofluoromethane	1.0	U	ug/l	NM
1.0	1,2,3-Trichloropropane	1.0	U	ug/l	NM
1.0	1,2,4-Trimethylbenzene	1.0	U	ug/l	NM

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8021

Lab Reference Number :	98060193-2
Client Sample ID :	B189-GW-MW12-001
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	GCMS
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
1.0	1,3,5-Trimethylbenzene	1.0	U	ug/l	NM
1.0	Vinyl chloride	1.0	U	ug/l	NM
1.0	MTBE	1.0	U	ug/l	NM
1.0	o-Xylene	1.0	U	ug/l	NM
1.0	m-Xylene	1.0	U	ug/l	NM
1.0	p-Xylene	1.0	U	ug/l	NM
1.0	MTBE	1.0	U	ug/l	NM
	(Surr) 1,2-Dichloroethane-d4 (%)	79		%	NM
	(Surr) Toluene-d8 (%)	127		%	NM
	(Surr) 4-Bromofluorobenzene (%)	114		%	NM

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8021

Lab Reference Number :	98060193-3
Client Sample ID :	B189-GW-MW10-001
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	GCMS
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
1.0	Benzene	1.0	U	ug/l	NM
1.0	Bromobenzene	1.0	U	ug/l	NM
1.0	Bromochloromethane	1.0	U	ug/l	NM
1.0	Bromodichloromethane	1.0	U	ug/l	NM
1.0	Bromoform	1.0	U	ug/l	NM
1.0	Bromomethane	1.0	U	ug/l	NM
1.0	n-Butylbenzene	1.0	U	ug/l	NM
1.0	sec-Butylbenzene	1.0	U	ug/l	NM
1.0	tert-Butylbenzene	1.0	U	ug/l	NM
1.0	Carbon tetrachloride	1.0	U	ug/l	NM
1.0	Chlorobenzene	1.0	U	ug/l	NM
1.0	Chloroethane	1.0	U	ug/l	NM
1.0	Chloroform	1.0	U	ug/l	NM
1.0	Chloromethane	1.0	U	ug/l	NM
1.0	2-Chlorotoluene	1.0	U	ug/l	NM
1.0	4-Chlorotoluene	1.0	U	ug/l	NM
1.0	Dibromochloromethane	1.0	U	ug/l	NM
1.0	1,2-Dibromoethane	1.0	U	ug/l	NM
1.0	Dibromomethane	1.0	U	ug/l	NM
1.0	1,2-Dichlorobenzene	1.0	U	ug/l	NM
1.0	1,3-Dichlorobenzene	1.0	U	ug/l	NM
1.0	1,4-Dichlorobenzene	1.0	U	ug/l	NM
1.0	Dichlorodifluoromethane	1.0	U	ug/l	NM
1.0	1,1-Dichloroethane	1.0	U	ug/l	NM
1.0	1,2-Dichloroethane	1.0	U	ug/l	NM
1.0	1,1-Dichloroethene	1.0	U	ug/l	NM
1.0	cis-1,2-Dichloroethene	1.0	U	ug/l	NM
1.0	trans-1,2-Dichloroethene	1.0	U	ug/l	NM
1.0	1,2-Dichloropropane	1.0	U	ug/l	NM
1.0	1,3-Dichloropropane	1.0	U	ug/l	NM
1.0	2,2-Dichloropropane	1.0	U	ug/l	NM
1.0	1,1-Dichloropropene	1.0	U	ug/l	NM
1.0	1,3-Dichloropropene (cis)	1.0	U	ug/l	NM
1.0	1,3-Dichloropropene (trans)	1.0	U	ug/l	NM
1.0	Ethylbenzene	1.0	U	ug/l	NM
1.0	Hexachlorobutadiene	1.0	U	ug/l	NM
1.0	Isopropylbenzene	1.0	U	ug/l	NM
1.0	p-Isopropyltoluene	1.0	U	ug/l	NM
1.0	Methylene chloride	1.0	U	ug/l	NM
1.0	Naphthalene	1.0	U	ug/l	NM
1.0	n-Propylbenzene	1.0	U	ug/l	NM
1.0	Styrene	1.0	U	ug/l	NM
1.0	1,1,1,2-Tetrachloroethane	1.0	U	ug/l	NM
1.0	1,1,2,2-Tetrachloroethane	1.0	U	ug/l	NM
1.0	Tetrachloroethene	1.0	U	ug/l	NM
1.0	Toluene	1.0	U	ug/l	NM
1.0	1,2,3-Trichlorobenzene	1.0	U	ug/l	NM
1.0	1,2,4-Trichlorobenzene	1.0	U	ug/l	NM
1.0	1,1,1-Trichloroethane	1.0	U	ug/l	NM
1.0	1,1,2-Trichloroethane	1.0	U	ug/l	NM
1.0	Trichloroethene	1.0	U	ug/l	NM
1.0	Trichlorofluoromethane	1.0	U	ug/l	NM
1.0	1,2,3-Trichloropropane	1.0	U	ug/l	NM
1.0	1,2,4-Trimethylbenzene	1.0	U	ug/l	NM

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Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8021

Lab Reference Number :	98060193-3
Client Sample ID :	B189-GW-MW10-001
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	GCMS
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
1.0	1,3,5-Trimethylbenzene	1.0	U	ug/l	NM
1.0	Vinyl chloride	1.0	U	ug/l	NM
1.0	MTBE	1.0	U	ug/l	NM
1.0	o-Xylene	1.0	U	ug/l	NM
1.0	m-Xylene	1.0	U	ug/l	NM
1.0	p-Xylene	1.0	U	ug/l	NM
1.0	MTBE	1.0	U	ug/l	NM
	(Surr) 1,2-Dichloroethane-d4 (%)	79		%	NM
	(Surr) Toluene-d8 (%)	121		%	NM
	(Surr) 4-Bromofluorobenzene (%)	119		%	NM

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

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Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8021

Lab Reference Number :	98060193-4
Client Sample ID :	B189-GW-MW7-001
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	GCMS
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
1.0	Benzene	1.0	U	ug/l	NM
1.0	Bromobenzene	1.0	U	ug/l	NM
1.0	Bromochloromethane	1.0	U	ug/l	NM
1.0	Bromodichloromethane	1.0	U	ug/l	NM
1.0	Bromoform	1.0	U	ug/l	NM
1.0	Bromomethane	1.0	U	ug/l	NM
1.0	n-Butylbenzene	1.0	U	ug/l	NM
1.0	sec-Butylbenzene	1.0	U	ug/l	NM
1.0	tert-Butylbenzene	1.0	U	ug/l	NM
1.0	Carbon tetrachloride	1.0	U	ug/l	NM
1.0	Chlorobenzene	1.0	U	ug/l	NM
1.0	Chloroethane	1.0	U	ug/l	NM
1.0	Chloroform	1.0	U	ug/l	NM
1.0	Chloromethane	1.0	U	ug/l	NM
1.0	2-Chlorotoluene	1.0	U	ug/l	NM
1.0	4-Chlorotoluene	1.0	U	ug/l	NM
1.0	Dibromochloromethane	1.0	U	ug/l	NM
1.0	1,2-Dibromoethane	1.0	U	ug/l	NM
1.0	Dibromomethane	1.0	U	ug/l	NM
1.0	1,2-Dichlorobenzene	1.0	U	ug/l	NM
1.0	1,3-Dichlorobenzene	1.0	U	ug/l	NM
1.0	1,4-Dichlorobenzene	1.0	U	ug/l	NM
1.0	Dichlorodifluoromethane	1.0	U	ug/l	NM
1.0	1,1-Dichloroethane	1.0	U	ug/l	NM
1.0	1,2-Dichloroethane	1.0	U	ug/l	NM
1.0	1,1-Dichloroethene	1.0	U	ug/l	NM
1.0	cis-1,2-Dichloroethene	1.0	U	ug/l	NM
1.0	trans-1,2-Dichloroethene	1.0	U	ug/l	NM
1.0	1,2-Dichloropropane	1.0	U	ug/l	NM
1.0	1,3-Dichloropropane	1.0	U	ug/l	NM
1.0	2,2-Dichloropropane	1.0	U	ug/l	NM
1.0	1,1-Dichloropropene	1.0	U	ug/l	NM
1.0	1,3-Dichloropropene (cis)	1.0	U	ug/l	NM
1.0	1,3-Dichloropropene (trans)	1.0	U	ug/l	NM
1.0	Ethylbenzene	1.0	U	ug/l	NM
1.0	Hexachlorobutadiene	1.0	U	ug/l	NM
1.0	Isopropylbenzene	1.0	U	ug/l	NM
1.0	p-Isopropyltoluene	1.0	U	ug/l	NM
1.0	Methylene chloride	1.0	U	ug/l	NM
1.0	Naphthalene	1.0	U	ug/l	NM
1.0	n-Propylbenzene	1.0	U	ug/l	NM
1.0	Styrene	1.0	U	ug/l	NM
1.0	1,1,1,2-Tetrachloroethane	1.0	U	ug/l	NM
1.0	1,1,2,2-Tetrachloroethane	1.0	U	ug/l	NM
1.0	Tetrachloroethene	1.0	U	ug/l	NM
1.0	Toluene	1.0	U	ug/l	NM
1.0	1,2,3-Trichlorobenzene	1.0	U	ug/l	NM
1.0	1,2,4-Trichlorobenzene	1.0	U	ug/l	NM
1.0	1,1,1-Trichloroethane	1.0	U	ug/l	NM
1.0	1,1,2-Trichloroethane	1.0	U	ug/l	NM
1.0	Trichloroethene	1.0	U	ug/l	NM
1.0	Trichlorofluoromethane	1.0	U	ug/l	NM
1.0	1,2,3-Trichloropropane	1.0	U	ug/l	NM
1.0	1,2,4-Trimethylbenzene	1.0	U	ug/l	NM

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Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8021

Lab Reference Number :	98060193-4
Client Sample ID :	B189-GW-MW7-001
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	GCMS
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
1.0	1,3,5-Trimethylbenzene	1.0	U	ug/l	NM
1.0	Vinyl chloride	1.0	U	ug/l	NM
1.0	MTBE	1.0	U	ug/l	NM
1.0	o-Xylene	1.0	U	ug/l	NM
1.0	m-Xylene	1.0	U	ug/l	NM
1.0	p-Xylene	1.0	U	ug/l	NM
1.0	MTBE	1.0	U	ug/l	NM
	(Surr) 1,2-Dichloroethane-d4 (%)	80		%	NM
	(Surr) Toluene-d8 (%)	128		%	NM
	(Surr) 4-Bromofluorobenzene (%)	109		%	NM

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

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Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8021

Lab Reference Number :	98060193-5
Client Sample ID :	B189-GW-MW1-001
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	GCMS
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
1.0	Benzene	1.0	U	ug/l	NM
1.0	Bromobenzene	1.0	U	ug/l	NM
1.0	Bromochloromethane	1.0	U	ug/l	NM
1.0	Bromodichloromethane	1.0	U	ug/l	NM
1.0	Bromoform	1.0	U	ug/l	NM
1.0	Bromomethane	1.0	U	ug/l	NM
1.0	n-Butylbenzene	1.0	U	ug/l	NM
1.0	sec-Butylbenzene	1.0	U	ug/l	NM
1.0	tert-Butylbenzene	1.0	U	ug/l	NM
1.0	Carbon tetrachloride	1.0	U	ug/l	NM
1.0	Chlorobenzene	1.0	U	ug/l	NM
1.0	Chloroethane	1.0	U	ug/l	NM
1.0	Chloroform	1.0	U	ug/l	NM
1.0	Chloromethane	1.0	U	ug/l	NM
1.0	2-Chlorotoluene	1.0	U	ug/l	NM
1.0	4-Chlorotoluene	1.0	U	ug/l	NM
1.0	Dibromochloromethane	1.0	U	ug/l	NM
1.0	1,2-Dibromoethane	1.0	U	ug/l	NM
1.0	Dibromomethane	1.0	U	ug/l	NM
1.0	1,2-Dichlorobenzene	1.0	U	ug/l	NM
1.0	1,3-Dichlorobenzene	1.0	U	ug/l	NM
1.0	1,4-Dichlorobenzene	1.0	U	ug/l	NM
1.0	Dichlorodifluoromethane	1.0	U	ug/l	NM
1.0	1,1-Dichloroethane	1.0	U	ug/l	NM
1.0	1,2-Dichloroethane	1.0	U	ug/l	NM
1.0	1,1-Dichloroethene	1.0	U	ug/l	NM
1.0	cis-1,2-Dichloroethene	1.0	U	ug/l	NM
1.0	trans-1,2-Dichloroethene	1.0	U	ug/l	NM
1.0	1,2-Dichloropropane	1.0	U	ug/l	NM
1.0	1,3-Dichloropropane	1.0	U	ug/l	NM
1.0	2,2-Dichloropropane	1.0	U	ug/l	NM
1.0	1,1-Dichloropropene	1.0	U	ug/l	NM
1.0	1,3-Dichloropropene (cis)	1.0	U	ug/l	NM
1.0	1,3-Dichloropropene (trans)	1.0	U	ug/l	NM
1.0	Ethylbenzene	1.0	U	ug/l	NM
1.0	Hexachlorobutadiene	1.0	U	ug/l	NM
1.0	Isopropylbenzene	1.0	U	ug/l	NM
1.0	p-Isopropyltoluene	1.0	U	ug/l	NM
1.0	Methylene chloride	1.0	U	ug/l	NM
1.0	Naphthalene	1.0	U	ug/l	NM
1.0	n-Propylbenzene	1.0	U	ug/l	NM
1.0	Styrene	1.0	U	ug/l	NM
1.0	1,1,1,2-Tetrachloroethane	1.0	U	ug/l	NM
1.0	1,1,2,2-Tetrachloroethane	1.0	U	ug/l	NM
1.0	Tetrachloroethene	1.0	U	ug/l	NM
1.0	Toluene	1.0	U	ug/l	NM
1.0	1,2,3-Trichlorobenzene	1.0	U	ug/l	NM
1.0	1,2,4-Trichlorobenzene	1.0	U	ug/l	NM
1.0	1,1,1-Trichloroethane	1.0	U	ug/l	NM
1.0	1,1,2-Trichloroethane	1.0	U	ug/l	NM
1.0	Trichloroethene	1.0	U	ug/l	NM
1.0	Trichlorofluoromethane	1.0	U	ug/l	NM
1.0	1,2,3-Trichloropropane	1.0	U	ug/l	NM
1.0	1,2,4-Trimethylbenzene	1.0	U	ug/l	NM

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Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8021

Lab Reference Number :	98060193-5
Client Sample ID :	B189-GW-MW1-001
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	GCMS
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
1.0	1,3,5-Trimethylbenzene	1.0	U	ug/l	NM
1.0	Vinyl chloride	1.0	U	ug/l	NM
1.0	MTBE	1.0	U	ug/l	NM
1.0	o-Xylene	1.0	U	ug/l	NM
1.0	m-Xylene	1.0	U	ug/l	NM
1.0	p-Xylene	1.0	U	ug/l	NM
1.0	MTBE	1.0	U	ug/l	NM
	(Surr) 1,2-Dichloroethane-d4 (%)	88		%	NM
	(Surr) Toluene-d8 (%)	132		%	NM
	(Surr) 4-Bromofluorobenzene (%)	115		%	NM

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

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Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8021

Lab Reference Number :	98060193-6
Client Sample ID :	B189-GW-MW4-001
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	GCMS
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
1.0	Benzene	1.0	U	ug/l	NM
1.0	Bromobenzene	1.0	U	ug/l	NM
1.0	Bromochloromethane	1.0	U	ug/l	NM
1.0	Bromodichloromethane	1.0	U	ug/l	NM
1.0	Bromoform	1.0	U	ug/l	NM
1.0	Bromomethane	1.0	U	ug/l	NM
1.0	n-Butylbenzene	1.0	U	ug/l	NM
1.0	sec-Butylbenzene	1.0	U	ug/l	NM
1.0	tert-Butylbenzene	1.0	U	ug/l	NM
1.0	Carbon tetrachloride	1.0	U	ug/l	NM
1.0	Chlorobenzene	1.0	U	ug/l	NM
1.0	Chloroethane	1.0	U	ug/l	NM
1.0	Chloroform	1.0	U	ug/l	NM
1.0	Chloromethane	1.0	U	ug/l	NM
1.0	2-Chlorotoluene	1.0	U	ug/l	NM
1.0	4-Chlorotoluene	1.0	U	ug/l	NM
1.0	Dibromochloromethane	1.0	U	ug/l	NM
1.0	1,2-Dibromoethane	1.0	U	ug/l	NM
1.0	Dibromomethane	1.0	U	ug/l	NM
1.0	1,2-Dichlorobenzene	1.0	U	ug/l	NM
1.0	1,3-Dichlorobenzene	1.0	U	ug/l	NM
1.0	1,4-Dichlorobenzene	1.0	U	ug/l	NM
1.0	Dichlorodifluoromethane	1.0	U	ug/l	NM
1.0	1,1-Dichloroethane	1.0	U	ug/l	NM
1.0	1,2-Dichloroethane	1.0	U	ug/l	NM
1.0	1,1-Dichloroethene	1.0	U	ug/l	NM
1.0	cis-1,2-Dichloroethene	1.0	U	ug/l	NM
1.0	trans-1,2-Dichloroethene	1.0	U	ug/l	NM
1.0	1,2-Dichloropropane	1.0	U	ug/l	NM
1.0	1,3-Dichloropropane	1.0	U	ug/l	NM
1.0	2,2-Dichloropropane	1.0	U	ug/l	NM
1.0	1,1-Dichloropropene	1.0	U	ug/l	NM
1.0	1,3-Dichloropropene (cis)	1.0	U	ug/l	NM
1.0	1,3-Dichloropropene (trans)	1.0	U	ug/l	NM
1.0	Ethylbenzene	1.0	U	ug/l	NM
1.0	Hexachlorobutadiene	1.0	U	ug/l	NM
1.0	Isopropylbenzene	1.0	U	ug/l	NM
1.0	p-Isopropyltoluene	1.0	U	ug/l	NM
1.0	Methylene chloride	1.0	U	ug/l	NM
1.0	Naphthalene	1.0	U	ug/l	NM
1.0	n-Propylbenzene	1.0	U	ug/l	NM
1.0	Styrene	1.0	U	ug/l	NM
1.0	1,1,1,2-Tetrachloroethane	1.0	U	ug/l	NM
1.0	1,1,2,2-Tetrachloroethane	1.0	U	ug/l	NM
1.0	Tetrachloroethene	1.0	U	ug/l	NM
1.0	Toluene	1.0	U	ug/l	NM
1.0	1,2,3-Trichlorobenzene	1.0	U	ug/l	NM
1.0	1,2,4-Trichlorobenzene	1.0	U	ug/l	NM
1.0	1,1,1-Trichloroethane	1.0	U	ug/l	NM
1.0	1,1,2-Trichloroethane	1.0	U	ug/l	NM
1.0	Trichloroethene	1.0	U	ug/l	NM
1.0	Trichlorofluoromethane	1.0	U	ug/l	NM
1.0	1,2,3-Trichloropropane	1.0	U	ug/l	NM
1.0	1,2,4-Trimethylbenzene	1.0	U	ug/l	NM

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Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8021

Lab Reference Number :	98060193-6
Client Sample ID :	B189-GW-MW4-001
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	GCMS
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
1.0	1,3,5-Trimethylbenzene	1.0	U	ug/l	NM
1.0	Vinyl chloride	1.0	U	ug/l	NM
1.0	MTBE	1.0	U	ug/l	NM
1.0	o-Xylene	1.0	U	ug/l	NM
1.0	m-Xylene	1.0	U	ug/l	NM
1.0	p-Xylene	1.0	U	ug/l	NM
1.0	MTBE	1.0	U	ug/l	NM
	(Surr) 1,2-Dichloroethane-d4 (%)	80		%	NM
	(Surr) Toluene-d8 (%)	128		%	NM
	(Surr) 4-Bromofluorobenzene (%)	113		%	NM

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

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Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8021

Lab Reference Number :	98060193-7
Client Sample ID :	B189-GW-EQB-001B
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	GCMS
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
1.0	Benzene	1.0	U	ug/l	NM
1.0	Bromobenzene	1.0	U	ug/l	NM
1.0	Bromochloromethane	1.0	U	ug/l	NM
1.0	Bromodichloromethane	1.0	U	ug/l	NM
1.0	Bromoform	1.0	U	ug/l	NM
1.0	Bromomethane	1.0	U	ug/l	NM
1.0	n-Butylbenzene	1.0	U	ug/l	NM
1.0	sec-Butylbenzene	1.0	U	ug/l	NM
1.0	tert-Butylbenzene	1.0	U	ug/l	NM
1.0	Carbon tetrachloride	1.0	U	ug/l	NM
1.0	Chlorobenzene	1.0	U	ug/l	NM
1.0	Chloroethane	1.0	U	ug/l	NM
1.0	Chloroform	1.0	U	ug/l	NM
1.0	Chloromethane	1.0	U	ug/l	NM
1.0	2-Chlorotoluene	1.0	U	ug/l	NM
1.0	4-Chlorotoluene	1.0	U	ug/l	NM
1.0	Dibromochloromethane	1.0	U	ug/l	NM
1.0	1,2-Dibromoethane	1.0	U	ug/l	NM
1.0	Dibromomethane	1.0	U	ug/l	NM
1.0	1,2-Dichlorobenzene	1.0	U	ug/l	NM
1.0	1,3-Dichlorobenzene	1.0	U	ug/l	NM
1.0	1,4-Dichlorobenzene	1.0	U	ug/l	NM
1.0	Dichlorodifluoromethane	1.0	U	ug/l	NM
1.0	1,1-Dichloroethane	1.0	U	ug/l	NM
1.0	1,2-Dichloroethane	1.0	U	ug/l	NM
1.0	1,1-Dichloroethene	1.0	U	ug/l	NM
1.0	cis-1,2-Dichloroethene	1.0	U	ug/l	NM
1.0	trans-1,2-Dichloroethene	1.0	U	ug/l	NM
1.0	1,2-Dichloropropane	1.0	U	ug/l	NM
1.0	1,3-Dichloropropane	1.0	U	ug/l	NM
1.0	2,2-Dichloropropane	1.0	U	ug/l	NM
1.0	1,1-Dichloropropene	1.0	U	ug/l	NM
1.0	1,3-Dichloropropene (cis)	1.0	U	ug/l	NM
1.0	1,3-Dichloropropene (trans)	1.0	U	ug/l	NM
1.0	Ethylbenzene	1.0	U	ug/l	NM
1.0	Hexachlorobutadiene	1.0	U	ug/l	NM
1.0	Isopropylbenzene	1.0	U	ug/l	NM
1.0	p-Isopropyltoluene	1.0	U	ug/l	NM
1.0	Methylene chloride	1.0	U	ug/l	NM
1.0	Naphthalene	1.0	U	ug/l	NM
1.0	n-Propylbenzene	1.0	U	ug/l	NM
1.0	Styrene	1.0	U	ug/l	NM
1.0	1,1,1,2-Tetrachloroethane	1.0	U	ug/l	NM
1.0	1,1,2,2-Tetrachloroethane	1.0	U	ug/l	NM
1.0	Tetrachloroethene	1.0	U	ug/l	NM
1.0	Toluene	1.0	U	ug/l	NM
1.0	1,2,3-Trichlorobenzene	1.0	U	ug/l	NM
1.0	1,2,4-Trichlorobenzene	1.0	U	ug/l	NM
1.0	1,1,1-Trichloroethane	1.0	U	ug/l	NM
1.0	1,1,2-Trichloroethane	1.0	U	ug/l	NM
1.0	Trichloroethene	1.0	U	ug/l	NM
1.0	Trichlorofluoromethane	1.0	U	ug/l	NM
1.0	1,2,3-Trichloropropane	1.0	U	ug/l	NM
1.0	1,2,4-Trimethylbenzene	1.0	U	ug/l	NM

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Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8021

Lab Reference Number :	98060193-7
Client Sample ID :	B189-GW-EQB-001B
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	GCMS
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
1.0	1,3,5-Trimethylbenzene	1.0	U	ug/l	NM
1.0	Vinyl chloride	1.0	U	ug/l	NM
1.0	MTBE	1.0	U	ug/l	NM
1.0	o-Xylene	1.0	U	ug/l	NM
1.0	m-Xylene	1.0	U	ug/l	NM
1.0	p-Xylene	1.0	U	ug/l	NM
1.0	MTBE	1.0	U	ug/l	NM
	(Surr) 1,2-Dichloroethane-d4 (%)	80		%	NM
	(Surr) Toluene-d8 (%)	127		%	NM
	(Surr) 4-Bromofluorobenzene (%)	116		%	NM

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

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Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8021

Lab Reference Number :	98060193-8
Client Sample ID :	B189-GW-MW10-001D
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
1.0	Benzene	1.0	U	ug/l	NM
1.0	Bromobenzene	1.0	U	ug/l	NM
1.0	Bromochloromethane	1.0	U	ug/l	NM
1.0	Bromodichloromethane	1.0	U	ug/l	NM
1.0	Bromoform	1.0	U	ug/l	NM
1.0	Bromomethane	1.0	U	ug/l	NM
1.0	n-Butylbenzene	1.0	U	ug/l	NM
1.0	sec-Butylbenzene	1.0	U	ug/l	NM
1.0	tert-Butylbenzene	1.0	U	ug/l	NM
1.0	Carbon tetrachloride	1.0	U	ug/l	NM
1.0	Chlorobenzene	1.0	U	ug/l	NM
1.0	Chloroethane	1.0	U	ug/l	NM
1.0	Chloroform	1.0	U	ug/l	NM
1.0	Chloromethane	1.0	U	ug/l	NM
1.0	2-Chlorotoluene	1.0	U	ug/l	NM
1.0	4-Chlorotoluene	1.0	U	ug/l	NM
1.0	Dibromochloromethane	1.0	U	ug/l	NM
1.0	1,2-Dibromoethane	1.0	U	ug/l	NM
1.0	Dibromomethane	1.0	U	ug/l	NM
1.0	1,2-Dichlorobenzene	1.0	U	ug/l	NM
1.0	1,3-Dichlorobenzene	1.0	U	ug/l	NM
1.0	1,4-Dichlorobenzene	1.0	U	ug/l	NM
1.0	Dichlorodifluoromethane	1.0	U	ug/l	NM
1.0	1,1-Dichloroethane	1.0	U	ug/l	NM
1.0	1,2-Dichloroethane	1.0	U	ug/l	NM
1.0	1,1-Dichloroethene	1.0	U	ug/l	NM
1.0	cis-1,2-Dichloroethene	1.0	U	ug/l	NM
1.0	trans-1,2-Dichloroethene	1.0	U	ug/l	NM
1.0	1,2-Dichloropropane	1.0	U	ug/l	NM
1.0	1,3-Dichloropropane	1.0	U	ug/l	NM
1.0	2,2-Dichloropropane	1.0	U	ug/l	NM
1.0	1,1-Dichloropropene	1.0	U	ug/l	NM
1.0	1,3-Dichloropropene (cis)	1.0	U	ug/l	NM
1.0	1,3-Dichloropropene (trans)	1.0	U	ug/l	NM
1.0	Ethylbenzene	1.0	U	ug/l	NM
1.0	Hexachlorobutadiene	1.0	U	ug/l	NM
1.0	Isopropylbenzene	1.0	U	ug/l	NM
1.0	p-Isopropyltoluene	1.0	U	ug/l	NM
1.0	Methylene chloride	1.0	U	ug/l	NM
1.0	Naphthalene	1.0	U	ug/l	NM
1.0	n-Propylbenzene	1.0	U	ug/l	NM
1.0	Styrene	1.0	U	ug/l	NM
1.0	1,1,1,2-Tetrachloroethane	1.0	U	ug/l	NM
1.0	1,1,2,2-Tetrachloroethane	1.0	U	ug/l	NM
1.0	Tetrachloroethene	1.0	U	ug/l	NM
1.0	Toluene	1.0	U	ug/l	NM
1.0	1,2,3-Trichlorobenzene	1.0	U	ug/l	NM
1.0	1,2,4-Trichlorobenzene	1.0	U	ug/l	NM
1.0	1,1,1-Trichloroethane	1.0	U	ug/l	NM
1.0	1,1,2-Trichloroethane	1.0	U	ug/l	NM
1.0	Trichloroethene	1.0	U	ug/l	NM
1.0	Trichlorofluoromethane	1.0	U	ug/l	NM
1.0	1,2,3-Trichloropropane	1.0	U	ug/l	NM
1.0	1,2,4-Trimethylbenzene	1.0	U	ug/l	NM

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Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8021

Lab Reference Number :	98060193-8
Client Sample ID :	B189-GW-MW10-001D
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
1.0	1,3,5-Trimethylbenzene	1.0	U	ug/l	NM
1.0	Vinyl chloride	1.0	U	ug/l	NM
1.0	MTBE	1.0	U	ug/l	NM
1.0	o-Xylene	1.0	U	ug/l	NM
1.0	m-Xylene	1.0	U	ug/l	NM
1.0	p-Xylene	1.0	U	ug/l	NM
1.0	MTBE	1.0	U	ug/l	NM
	(Surr) 1,2-Dichloroethane-d4 (%)	85		%	NM
	(Surr) Toluene-d8 (%)	126		%	NM
	(Surr) 4-Bromofluorobenzene (%)	104		%	NM

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

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Quality Control Report for Method Blank

Volatile Organics

Matrix: Water
Lab Sample ID: RB-07-01-98
QC Batch ID: 9807MS2002
Result Units: ug/l

Analysis Date: 07/01/1998
Preparation Date: 07/01/1998
Method: EPA 8021
Analyst: NM

Analyte	Result	Flag	Analyte	Result	Flag
Benzene	1.0	U	Bromobenzene	1.0	U
Bromochloromethane	1.0	U	Bromodichloromethane	1.0	U
Bromoform	1.0	U	Bromomethane	1.0	U
n-Butylbenzene	1.0	U	sec-Butylbenzene	1.0	U
tert-Butylbenzene	1.0	U	Carbon tetrachloride	1.0	U
Chlorobenzene	1.0	U	Chloroethane	1.0	U
Chloroform	1.0	U	Chloromethane	1.0	U
2-Chlorotoluene	1.0	U	4-Chlorotoluene	1.0	U
Dibromochloromethane	1.0	U	1,2-Dibromoethane	1.0	U
Dibromomethane	1.0	U	1,2-Dichlorobenzene	1.0	U
1,3-Dichlorobenzene	1.0	U	1,4-Dichlorobenzene	1.0	U
Dichlorodifluoromethane	1.0	U	1,1-Dichloroethane	1.0	U
1,2-Dichloroethane	1.0	U	1,1-Dichloroethene	1.0	U
cis-1,2-Dichloroethene	1.0	U	trans-1,2-Dichloroethene	1.0	U
1,2-Dichloropropane	1.0	U	1,3-Dichloropropane	1.0	U
2,2-Dichloropropane	1.0	U	1,1-Dichloropropene	1.0	U
1,3-Dichloropropene (cis)	1.0	U	1,3-Dichloropropene (trans)	1.0	U
Ethylbenzene	1.0	U	Hexachlorobutadiene	1.0	U
Isopropylbenzene	1.0	U	p-Isopropyltoluene	1.0	U
Methylene chloride	1.0		Naphthalene	1.0	U
n-Propylbenzene	1.0	U	Styrene	1.0	U
1,1,1,2-Tetrachloroethane	1.0	U	1,1,2,2-Tetrachloroethane	1.0	U
Tetrachloroethene	1.0	U	Toluene	1.0	U
1,2,3-Trichlorobenzene	1.0	U	1,2,4-Trichlorobenzene	1.0	U
1,1,1-Trichloroethane	1.0	U	1,1,2-Trichloroethane	1.0	U
Trichloroethene	1.0	U	Trichlorofluoromethane	1.0	U
1,2,3-Trichloropropane	1.0	U	1,2,4-Trimethylbenzene	1.0	U
1,3,5-Trimethylbenzene	1.0	U	Vinyl chloride	1.0	U
MTBE	1.0	U	o-Xylene	1.0	U
m-Xylene	1.0	U	p-Xylene	1.0	U
(Surr) 1,2-Dichloroethane-d4 (%)	83.0		(Surr) Toluene-d8 (%)	132.0	
(Surr) 4-Bromofluorobenzene (%)	107.0		MTBE	1.0	U

Quality Control Report for LCS/LCS Duplicate Analysis

Volatile Organics

Matrix: Water
Lab Sample ID: LCS
QC Batch ID: 9807MS2002
LCS Units: ug/l

Analysis Date: 07/01/1998
Preparation Date: 07/01/1998
Method: EPA 8021
Analyst: NM

Analyte	LCS Conc		LCS Result	LCS Percent Recovery	LCSD Result	LCSD Percent Recovery	RPD
Benzene	25.0	0.0	23.0	92	23.0	92	0
Carbon tetrachloride	25.0	0.0	26.0	104	26.0	104	0
Chlorobenzene	25.0	0.0	28.0	112	28.0	112	0
1,4-Dichlorobenzene	25.0	0.0	24.0	96	25.0	100	4
1,1-Dichloroethene	25.0	0.0	27.0	108	25.0	100	8
Ethylbenzene	25.0	0.0	30.0	120	30.0	120	0
Toluene	25.0	0.0	21.0	84	23.0	92	9
Trichloroethene	25.0	0.0	26.0	104	26.0	104	0

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
Benzene	75	120	20
Carbon tetrachloride	75	120	20
Chlorobenzene	75	120	20
1,4-Dichlorobenzene	75	120	20
1,1-Dichloroethene	75	120	20
Ethylbenzene	75	120	20
Toluene	75	120	20
Trichloroethene	75	120	20

Quality Control Report for Spike/Spike Duplicate Analysis

Volatile Organics

Matrix: Water
Lab Sample ID: MW-QC
QC Batch ID: 9807MS2002
Spike Units: ug/l

Analysis Date: 07/01/1998
Preparation Date: 07/01/1998
Method: EPA 8021
Analyst: NM

Analyte	Spike Amount	Sample Result	Spike Result	Spike Percent Recovery	MSD Result	MSD Percent Recovery	RPD
Benzene	50.0	0.0	50.0	100	52.0	104	4
Carbon tetrachloride	50.0	0.0	52.0	104	52.0	104	0
Chlorobenzene	50.0	0.0	51.0	102	52.0	104	2
1,4-Dichlorobenzene	50.0	0.0	47.0	94	49.0	98	4
1,1-Dichloroethene	50.0	0.0	58.0	116	57.0	114	2
Ethylbenzene	50.0	0.0	55.0	110	54.0	108	2
Trichloroethene	50.0	0.0	58.0	116	59.0	118	2

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
Benzene	58	141	14
Carbon tetrachloride	68	129	10
Chlorobenzene	69	124	9
1,4-Dichlorobenzene	69	136	11
1,1-Dichloroethene	72	126	9
Ethylbenzene	75	124	8
Trichloroethene	75	121	8

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PAH's by HPLC

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8310

Lab Reference Number :	98060193-1
Client Sample ID :	B189-GW-MW13D-001
Date Sampled :	06/27/1998
Date Extracted :	06/30/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
5	Acenaphthene	5	U	ug/l	DC
5	Acenaphthylene	5	U	ug/l	DC
5	Anthracene	5	U	ug/l	DC
1.0	Benzo(a)anthracene	1.0	U	ug/l	DC
0.25	Benzo(a)pyrene	0.25	U	ug/l	DC
0.1	Benzo(b)fluoranthene	0.1	U	ug/l	DC
0.1	Benzo(ghi)perylene	0.1	U	ug/l	DC
0.25	Benzo(k)fluoranthene	0.25	U	ug/l	DC
0.01	Chrysene	0.01	U	ug/l	DC
0.1	dibenzo(ah)anthracene	0.1	U	ug/l	DC
0.01	Fluoranthene	0.01	U	ug/l	DC
0.01	Fluorene	0.01	U	ug/l	DC
0.05	Indeno(123cd)pyrene	0.05	U	ug/l	DC
0.05	Naphthalene	0.05	U	ug/l	DC
0.05	1-Methyl naphthalene	0.05	U	ug/l	DC
0.05	2-Methyl naphthalene	0.05	U	ug/l	DC
0.025	Phenanthrene	0.025	U	ug/l	DC
0.025	Pyrene	0.025	U	ug/l	DC

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

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PAH's by HPLC

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8310

Lab Reference Number :	98060193-2
Client Sample ID :	B189-GW-MW12-001
Date Sampled :	06/27/1998
Date Extracted :	06/30/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
5	Acenaphthene	5	U	ug/l	DC
5	Acenaphthylene	5	U	ug/l	DC
5	Anthracene	5	U	ug/l	DC
1.0	Benzo(a)anthracene	1.0	U	ug/l	DC
0.25	Benzo(a)pyrene	0.25	U	ug/l	DC
0.1	Benzo(b)fluoranthene	0.1	U	ug/l	DC
0.1	Benzo(ghi)perylene	0.1	U	ug/l	DC
0.25	Benzo(k)fluoranthene	0.25	U	ug/l	DC
0.01	Chrysene	0.01	U	ug/l	DC
0.1	dibenzo(ah)anthracene	0.1	U	ug/l	DC
0.01	Fluoranthene	0.01	U	ug/l	DC
0.01	Fluorene	0.01	U	ug/l	DC
0.05	Indeno(123cd)pyrene	0.05	U	ug/l	DC
0.05	Naphthalene	0.05	U	ug/l	DC
0.05	1-Methyl naphthalene	0.05	U	ug/l	DC
0.05	2-Methyl naphthalene	0.05	U	ug/l	DC
0.025	Phenanthrene	0.025	U	ug/l	DC
0.025	Pyrene	0.025	U	ug/l	DC

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

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PAH's by HPLC

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8310

Lab Reference Number :	98060193-3
Client Sample ID :	B189-GW-MW10-001
Date Sampled :	06/27/1998
Date Extracted :	06/30/1998
Date Analyzed :	07/02/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	Yes
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
5	Acenaphthene	5	U	ug/l	DC
5	Acenaphthylene	5	U	ug/l	DC
5	Anthracene	5	U	ug/l	DC
1.0	Benzo(a)anthracene	1.0	U	ug/l	DC
0.25	Benzo(a)pyrene	0.25	U	ug/l	DC
0.1	Benzo(b)fluoranthene	0.1	U	ug/l	DC
0.1	Benzo(ghi)perylene	0.1	U	ug/l	DC
0.25	Benzo(k)fluoranthene	0.25	U	ug/l	DC
0.01	Chrysene	0.01	U	ug/l	DC
0.1	dibenzo(ah)anthracene	0.1	U	ug/l	DC
0.01	Fluoranthene	0.01	U	ug/l	DC
0.01	Fluorene	0.01	U	ug/l	DC
0.05	Indeno(123cd)pyrene	0.05	U	ug/l	DC
0.05	Naphthalene	0.05	U	ug/l	DC
0.05	1-Methyl naphthalene	0.05	U	ug/l	DC
0.05	2-Methyl naphthalene	0.05	U	ug/l	DC
0.025	Phenanthrene	0.025	U	ug/l	DC
0.025	Pyrene	0.025	U	ug/l	DC

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

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PAH's by HPLC

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8310

Lab Reference Number :	98060193-4
Client Sample ID :	B189-GW-MW7-001
Date Sampled :	06/27/1998
Date Extracted :	06/30/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	Yes
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
5	Acenaphthene	5	U	ug/l	DC
5	Acenaphthylene	5	U	ug/l	DC
5	Anthracene	5	U	ug/l	DC
1.0	Benzo(a)anthracene	1.0	U	ug/l	DC
0.25	Benzo(a)pyrene	0.25	U	ug/l	DC
0.1	Benzo(b)fluoranthene	0.1	U	ug/l	DC
0.1	Benzo(ghi)perylene	0.1	U	ug/l	DC
0.25	Benzo(k)fluoranthene	0.25	U	ug/l	DC
0.01	Chrysene	0.01	U	ug/l	DC
0.1	dibenzo(ah)anthracene	0.1	U	ug/l	DC
0.01	Fluoranthene	0.01	U	ug/l	DC
0.01	Fluorene	0.01	U	ug/l	DC
0.05	Indeno(123cd)pyrene	0.05	U	ug/l	DC
0.05	Naphthalene	0.05	U	ug/l	DC
0.05	1-Methyl naphthalene	0.05	U	ug/l	DC
0.05	2-Methyl naphthalene	0.05	U	ug/l	DC
0.025	Phenanthrene	0.025	U	ug/l	DC
0.025	Pyrene	0.025	U	ug/l	DC

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

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PAH's by HPLC

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8310

Lab Reference Number :	98060193-5
Client Sample ID :	B189-GW-MW1-001
Date Sampled :	06/27/1998
Date Extracted :	06/30/1998
Date Analyzed :	07/06/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	Yes
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
5	Acenaphthene	5	U	ug/l	DC
5	Acenaphthylene	5	U	ug/l	DC
5	Anthracene	5	U	ug/l	DC
1.0	Benzo(a)anthracene	1.2		ug/l	DC
0.25	Benzo(a)pyrene	3.10		ug/l	DC
0.1	Benzo(b)fluoranthene	0.1	U	ug/l	DC
0.1	Benzo(ghi)perylene	7.4		ug/l	DC
0.25	Benzo(k)fluoranthene	0.25	U	ug/l	DC
0.01	Chrysene	2.70		ug/l	DC
0.1	dibenzo(ah)anthracene	0.1	U	ug/l	DC
0.01	Fluoranthene	0.01	U	ug/l	DC
0.01	Fluorene	0.01	U	ug/l	DC
0.05	Indeno(123cd)pyrene	3.40		ug/l	DC
0.05	Naphthalene	0.05	U	ug/l	DC
0.05	1-Methyl naphthalene	0.05	U	ug/l	DC
0.05	2-Methyl naphthalene	0.05	U	ug/l	DC
0.025	Phenanthrene	0.025	U	ug/l	DC
0.025	Pyrene	1.400		ug/l	DC

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

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PAH's by HPLC

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8310

Lab Reference Number :	98060193-6
Client Sample ID :	B189-GW-MW4-001
Date Sampled :	06/27/1998
Date Extracted :	06/30/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
5	Acenaphthene	5	U	ug/l	DC
5	Acenaphthylene	5	U	ug/l	DC
5	Anthracene	5	U	ug/l	DC
1.0	Benzo(a)anthracene	1.0	U	ug/l	DC
0.25	Benzo(a)pyrene	0.25	U	ug/l	DC
0.1	Benzo(b)fluoranthene	0.1	U	ug/l	DC
0.1	Benzo(ghi)perylene	0.1	U	ug/l	DC
0.25	Benzo(k)fluoranthene	0.25	U	ug/l	DC
0.01	Chrysene	0.01	U	ug/l	DC
0.1	dibenzo(ah)anthracene	0.1	U	ug/l	DC
0.01	Fluoranthene	0.01	U	ug/l	DC
0.01	Fluorene	0.01	U	ug/l	DC
0.05	Indeno(123cd)pyrene	0.05	U	ug/l	DC
0.05	Naphthalene	0.05	U	ug/l	DC
0.05	1-Methyl naphthalene	0.05	U	ug/l	DC
0.05	2-Methyl naphthalene	0.05	U	ug/l	DC
0.025	Phenanthrene	0.025	U	ug/l	DC
0.025	Pyrene	0.025	U	ug/l	DC

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

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PAH's by HPLC

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8310

Lab Reference Number :	98060193-7
Client Sample ID :	B189-GW-EQB-001B
Date Sampled :	06/27/1998
Date Extracted :	06/30/1998
Date Analyzed :	07/02/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	Yes
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
5	Acenaphthene	5	U	ug/l	DC
5	Acenaphthylene	5	U	ug/l	DC
5	Anthracene	5	U	ug/l	DC
1.0	Benzo(a)anthracene	1.0	U	ug/l	DC
0.25	Benzo(a)pyrene	0.25	U	ug/l	DC
0.1	Benzo(b)fluoranthene	0.1	U	ug/l	DC
0.1	Benzo(ghi)perylene	0.1	U	ug/l	DC
0.25	Benzo(k)fluoranthene	0.25	U	ug/l	DC
0.01	Chrysene	0.01	U	ug/l	DC
0.1	dibenzo(ah)anthracene	0.1	U	ug/l	DC
0.01	Fluoranthene	0.01	U	ug/l	DC
0.01	Fluorene	0.01	U	ug/l	DC
0.05	Indeno(123cd)pyrene	0.05	U	ug/l	DC
0.05	Naphthalene	0.05	U	ug/l	DC
0.05	1-Methyl naphthalene	0.05	U	ug/l	DC
0.05	2-Methyl naphthalene	0.05	U	ug/l	DC
0.025	Phenanthrene	0.025	U	ug/l	DC
0.025	Pyrene	0.025	U	ug/l	DC

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

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PAH's by HPLC

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 8310

Lab Reference Number :	98060193-8
Client Sample ID :	B189-GW-MW10-001D
Date Sampled :	06/27/1998
Date Extracted :	06/30/1998
Date Analyzed :	07/02/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	Yes
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
5	Acenaphthene	5	U	ug/l	DC
5	Acenaphthylene	5	U	ug/l	DC
5	Anthracene	5	U	ug/l	DC
1.0	Benzo(a)anthracene	1.0	U	ug/l	DC
0.25	Benzo(a)pyrene	0.25	U	ug/l	DC
0.1	Benzo(b)fluoranthene	0.1	U	ug/l	DC
0.1	Benzo(ghi)perylene	0.1	U	ug/l	DC
0.25	Benzo(k)fluoranthene	0.25	U	ug/l	DC
0.01	Chrysene	0.01	U	ug/l	DC
0.1	dibenzo(ah)anthracene	0.1	U	ug/l	DC
0.01	Fluoranthene	0.01	U	ug/l	DC
0.01	Fluorene	0.01	U	ug/l	DC
0.05	Indeno(123cd)pyrene	0.05	U	ug/l	DC
0.05	Naphthalene	0.05	U	ug/l	DC
0.05	1-Methyl naphthalene	0.05	U	ug/l	DC
0.05	2-Methyl naphthalene	0.05	U	ug/l	DC
0.025	Phenanthrene	0.025	U	ug/l	DC
0.025	Pyrene	0.025	U	ug/l	DC

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

Quality Control Report for Method Blank

PAH's by HPLC

Matrix: Water
Lab Sample ID: RB-06-30
QC Batch ID: 9806PAH089
Result Units: ug/l

Analysis Date: 06/30/1998
Preparation Date: 06/30/1998
Method: EPA 8310
Analyst: DC

Analyte	Result	Flag	Analyte	Result	Flag
Acenaphthene	5	U	Acenaphthylene	5	U
Anthracene	5	U	Benzo(a)anthracene	1.0	U
Benzo(a)pyrene	0.25	U	Benzo(b)fluoranthene	0.1	U
Benzo(ghi)perylene	0.1	U	Benzo(k)fluoranthene	0.25	U
Chrysene	0.01	U	dibenzo(ah)anthracene	0.1	U
Fluoranthene	0.01	U	Fluorene	0.01	U
Indeno(123cd)pyrene	0.05	U	Naphthalene	0.05	U
1-Methyl naphthalene	0.05	U	2-Methyl naphthalene	0.05	U
Phenanthrene	0.025	U	Pyrene	0.025	U

Quality Control Report for LCS Analysis

PAH's by HPLC

Matrix: Water
Lab Sample ID: LCS
QC Batch ID: 9806PAH089
LCS Units: ug/l

Analysis Date: 06/30/1998
Preparation Date: 06/30/1998
Method: EPA 8310
Analyst: DC

Analyte	LCS Conc	LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Anthracene	5	4	83	70	120
Benzo(a)anthracene	5.0	5.5	110	70	120
Benzo(a)pyrene	5.00	5.60	112	70	120
Benzo(k)fluoranthene	5.00	5.80	116	70	120
Chrysene	5.00	5.30	106	70	120
Fluoranthene	5.00	5.30	106	70	120
Fluorene	5.00	4.10	82	70	120
Indeno(123cd)pyrene	5.00	3.70	74	70	120
Phenanthrene	5.000	4.400	88	70	120
Pyrene	5.000	5.400	108	70	120

Quality Control Report for Spike/Spike Duplicate Analysis

PAH's by HPLC

Matrix: Water
Lab Sample ID: 98060170-1
QC Batch ID: 9806PAH089
Spike Units: ug/l

Analysis Date: 07/01/1998
Preparation Date: 06/30/1998
Method: EPA 8310
Analyst: DC

Analyte	Spike Amount	Sample Result	Spike Result	Spike Percent Recovery	MSD Result	MSD Percent Recovery	RPD
Acenaphthylene	5	0	4	86	3	62	32
Anthracene	5	0	5	98	4	76	25
Benzo(a)anthracene	5.0	0.0	5.4	108	4.2	84	25
Benzo(a)pyrene	5.00	0.00	5.80	116	4.50	90	25
Benzo(b)fluoranthene	5.0	0.0	5.7	114	4.5	90	24
Benzo(k)fluoranthene	5.00	0.00	4.60	92	3.60	72	24
Chrysene	5.00	0.00	5.20	104	4.10	82	24
dibenzo(ah)anthracene	5.0	0.0	4.7	94	3.7	74	24
Fluoranthene	5.00	0.00	5.50	110	4.30	86	24
Phenanthrene	5.000	0.000	5.600	112	4.200	84	29
Pyrene	5.000	0.000	5.500	110	4.500	90	20

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
Acenaphthylene	60	133	25
Anthracene	60	133	25
Benzo(a)anthracene	60	133	25
Benzo(a)pyrene	60	133	25
Benzo(b)fluoranthene	60	133	25
Benzo(k)fluoranthene	60	133	25
Chrysene	60	133	25
dibenzo(ah)anthracene	60	133	25
Fluoranthene	60	133	25
Phenanthrene	60	133	30
Pyrene	60	133	25

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EDB/DBCP

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 504

Lab Reference Number :	98060193-1
Client Sample ID :	B189-GW-MW13D-001
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
0.02	Ethylene dibromide (EDB)	0.02	U	ug/l	ELA
0.1	1,2-Dibromo-3-chloropropane	0.1	U	ug/l	ELA

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

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EDB/DBCP

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 504

Lab Reference Number :	98060193-2
Client Sample ID :	B189-GW-MW12-001
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
0.02	Ethylene dibromide (EDB)	0.02	U	ug/l	ELA
0.1	1,2-Dibromo-3-chloropropane	0.1	U	ug/l	ELA

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

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EDB/DBCP

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 504

Lab Reference Number :	98060193-3
Client Sample ID :	B189-GW-MW10-001
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
0.02	Ethylene dibromide (EDB)	0.02	U	ug/l	ELA
0.1	1,2-Dibromo-3-chloropropane	0.1	U	ug/l	ELA

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

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Reviewed by : _____

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EDB/DBCP

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 504

Lab Reference Number :	98060193-4
Client Sample ID :	B189-GW-MW7-001
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
0.02	Ethylene dibromide (EDB)	0.02	U	ug/l	ELA
0.1	1,2-Dibromo-3-chloropropane	0.1	U	ug/l	ELA

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

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EDB/DBCP

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 504

Lab Reference Number :	98060193-5
Client Sample ID :	B189-GW-MW1-001
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
0.02	Ethylene dibromide (EDB)	0.02	U	ug/l	ELA
0.1	1,2-Dibromo-3-chloropropane	0.1	U	ug/l	ELA

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

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EDB/DBCP

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 504

Lab Reference Number :	98060193-6
Client Sample ID :	B189-GW-MW4-001
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
0.02	Ethylene dibromide (EDB)	0.02	U	ug/l	ELA
0.1	1,2-Dibromo-3-chloropropane	0.1	U	ug/l	ELA

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

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EDB/DBCP

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 504

Lab Reference Number :	98060193-7
Client Sample ID :	B189-GW-EQB-001B
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
0.02	Ethylene dibromide (EDB)	0.02	U	ug/l	ELA
0.1	1,2-Dibromo-3-chloropropane	0.1	U	ug/l	ELA

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

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Reviewed by : _____

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EDB/DBCP

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: EPA 504

Lab Reference Number :	98060193-8
Client Sample ID :	B189-GW-MW10-001D
Date Sampled :	06/27/1998
Date Extracted :	07/01/1998
Date Analyzed :	07/01/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
0.02	Ethylene dibromide (EDB)	0.02	U	ug/l	ELA
0.1	1,2-Dibromo-3-chloropropane	0.1	U	ug/l	ELA

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

Quality Control Report for Method Blank

EDB/DBCP

Matrix: Water
Lab Sample ID: RB-07-01-98
QC Batch ID: 9807EDB002
Result Units: ug/l

Analysis Date: 07/01/1998
Preparation Date: 07/01/1998
Method: EPA 504
Analyst: ELA

Analyte	Result	Flag	Analyte	Result	Flag
Ethylene dibromide (EDB)	0.02	U	1,2-Dibromo-3-chloropropane	0.1	U

Quality Control Report for LCS/LCS Duplicate Analysis

EDB/DBCP

Matrix: Water
Lab Sample ID: LCS
QC Batch ID: 9807EDB002
LCS Units: ug/l

Analysis Date: 07/01/1998
Preparation Date: 07/01/1998
Method: EPA 504
Analyst: ELA

Analyte	LCS Conc		LCS Result	LCS Percent Recovery	LCSD Result	LCSD Percent Recovery	RPD
Ethylene dibromide (EDB)	1.00	0.00	1.01	101	0.98	98	3
1,2-Dibromo-3-chloropropane	1.0	0.0	1.1	108	1.0	103	5

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
Ethylene dibromide (EDB)	75	120	20
1,2-Dibromo-3-chloropropane	75	120	20

Quality Control Report for Spike/Spike Duplicate Analysis

EDB/DBCP

Matrix: Water
Lab Sample ID: 9807193-1
QC Batch ID: 9807EDB002
Spike Units: ug/l

Analysis Date: 07/01/1998
Preparation Date: 07/01/1998
Method: EPA 504
Analyst: ELA

Analyte	Spike Amount	Sample Result	Spike Result	Spike Percent Recovery	MSD Result	MSD Percent Recovery	RPD
Ethylene dibromide (EDB)	1.00	0.00	1.07	107	0.95	95	12
1,2-Dibromo-3-chloropropane	1.0	0.0	1.0	104	0.9	94	10

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
Ethylene dibromide (EDB)	55	133	14
1,2-Dibromo-3-chloropropane	46	133	16

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Petroleum Hydrocarbons

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: FL-PRO

Lab Reference Number :	98060193-1
Client Sample ID :	B189-GW-MW13D-001
Date Sampled :	06/27/1998
Date Extracted :	07/02/1998
Date Analyzed :	07/02/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
0.1	Total PHS	0.1	U	mg/l	ELA
	(Surr) C-39 (%)	81		%	ELA

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Petroleum Hydrocarbons

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: FL-PRO

Lab Reference Number :	98060193-2
Client Sample ID :	B189-GW-MW12-001
Date Sampled :	06/27/1998
Date Extracted :	07/02/1998
Date Analyzed :	07/02/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
0.1	Total PHS	0.1	U	mg/l	ELA
	(Surr) C-39 (%)	105		%	ELA

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Petroleum Hydrocarbons

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: FL-PRO

Lab Reference Number :	98060193-3
Client Sample ID :	B189-GW-MW10-001
Date Sampled :	06/27/1998
Date Extracted :	07/02/1998
Date Analyzed :	07/02/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag	Units	Analyst
0.1	Total PHS	1.3	mg/l	ELA
	(Surr) C-39 (%)	107	%	ELA

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Petroleum Hydrocarbons

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: FL-PRO

Lab Reference Number :	98060193-4
Client Sample ID :	B189-GW-MW7-001
Date Sampled :	06/27/1998
Date Extracted :	07/02/1998
Date Analyzed :	07/02/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag	Units	Analyst
0.1	Total PHS	0.1 U	mg/l	ELA
	(Surr) C-39 (%)	95	%	ELA

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Petroleum Hydrocarbons

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: FL-PRO

Lab Reference Number :	98060193-5
Client Sample ID :	B189-GW-MW1-001
Date Sampled :	06/27/1998
Date Extracted :	07/02/1998
Date Analyzed :	07/02/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag	Units	Analyst
0.1	Total PHS	1.3	mg/l	ELA
	(Surr) C-39 (%)	122	%	ELA

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Petroleum Hydrocarbons

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: FL-PRO

Lab Reference Number :	98060193-6
Client Sample ID :	B189-GW-MW4-001
Date Sampled :	06/27/1998
Date Extracted :	07/02/1998
Date Analyzed :	07/02/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag	Units	Analyst
0.1	Total PHS	0.1	mg/l	ELA
	(Surr) C-39 (%)	116	%	ELA

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by :

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Petroleum Hydrocarbons

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: FL-PRO

Lab Reference Number :	98060193-7
Client Sample ID :	B189-GW-EQB-001B
Date Sampled :	06/27/1998
Date Extracted :	07/02/1998
Date Analyzed :	07/02/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
0.1	Total PHS	0.1	U	mg/l	ELA
	(Surr) C-39 (%)	78		%	ELA

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Petroleum Hydrocarbons

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998
ANALYTICAL PROTOCOL: FL-PRO

Lab Reference Number :	98060193-8
Client Sample ID :	B189-GW-MW10-001D
Date Sampled :	06/27/1998
Date Extracted :	07/02/1998
Date Analyzed :	07/02/1998
Sample Matrix (as Received):	Water
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag	Units	Analyst
0.1	Total PHS	1.0	mg/l	ELA
	(Surr) C-39 (%)	105	%	ELA

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

Quality Control Report for Method Blank

Petroleum Hydrocarbons

Matrix: Water
Lab Sample ID: RB-07-02-98
QC Batch ID: 9807FLRO011
Result Units: mg/l

Analysis Date: 07/02/1998
Preparation Date: 07/02/1998
Method: FL-PRO
Analyst: ELA

Analyte	Result	Flag	Analyte	Result	Flag
Total PHS	0.1	U	(Surr) C-39 (%)	45.0	

Quality Control Report for LCS/LCS Duplicate Analysis

Petroleum Hydrocarbons

Matrix: Water
Lab Sample ID: LCS
QC Batch ID: 9807FLRO011
LCS Units: mg/l

Analysis Date: 07/02/1998
Preparation Date: 07/02/1998
Method: FL-PRO
Analyst: ELA

Analyte	LCS Conc		LCS Result	LCS Percent Recovery	LCSD Result	LCSD Percent Recovery	RPD
(Surr) C-39	100.0	0.0	50.0	50	52.0	52	4
Total PHS	5.0	0.0	3.7	74	3.5	70	6

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
SS_C-39	40	150	20
Total PHS	70	120	20

Quality Control Report for Spike/Spike Duplicate Analysis

Petroleum Hydrocarbons

Matrix: Water
Lab Sample ID: 9806163-3
QC Batch ID: 9807FLRO011
Spike Units: mg/l

Analysis Date: 07/02/1998
Preparation Date: 07/02/1998
Method: FL-PRO
Analyst: ELA

Analyte	Spike Amount	Sample Result	Spike Result	Spike Percent Recovery	MSD Result	MSD Percent Recovery	RPD
(Surr) C-39	100.0	0.0	49.0	49	49.0	49	0
Total PHS	5.0	0.0	4.2	84	4.0	80	5

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
SS_C-39	40	136	31
Total PHS	57	110	10

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194

Report of Analysis

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998

Lab Reference Number :	98060193-1
Client Sample ID :	B189-GW-MW13D-001
Date Sampled :	06/27/1998
Sample Matrix (as Received):	Water

Method	Parameter	Results/Flag		Units	Analyst	Date Prep	Date Anal	MDL
EPA 6010	Lead, Total	3	U	ug/l	GG	06/30/1998	06/30/1998	3

U = Undetected. The value preceeding the 'U' is the MDL for the analyte. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194

Report of Analysis

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998

Lab Reference Number :	98060193-2
Client Sample ID :	B189-GW-MW12-001
Date Sampled :	06/27/1998
Sample Matrix (as Received):	Water

Method	Parameter	Results/Flag	Units	Analyst	Date Prep	Date Anal	MDL
EPA 6010	Lead, Total	3 U	ug/l	GG	06/30/1998	06/30/1998	3

U = Undetected. The value preceeding the 'U' is the MDL for the analyte. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194

Report of Analysis

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998

Lab Reference Number :	98060193-3
Client Sample ID :	B189-GW-MW10-001
Date Sampled :	06/27/1998
Sample Matrix (as Received):	Water

Method	Parameter	Results/Flag	Units	Analyst	Date Prep	Date Anal	MDL
EPA 6010	Lead, Total	3 U	ug/l	GG	06/30/1998	06/30/1998	3

U = Undetected. The value preceeding the 'U' is the MDL for the analyte. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194

Report of Analysis

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998

Lab Reference Number :	98060193-4
Client Sample ID :	B189-GW-MW7-001
Date Sampled :	06/27/1998
Sample Matrix (as Received):	Water

Method	Parameter	Results/Flag	Units	Analyst	Date Prep	Date Anal	MDL
EPA 6010	Lead, Total	3 U	ug/l	GG	06/30/1998	06/30/1998	3

U = Undetected. The value preceeding the 'U' is the MDL for the analyte. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194

Report of Analysis

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998

Lab Reference Number :	98060193-5
Client Sample ID :	B189-GW-MW1-001
Date Sampled :	06/27/1998
Sample Matrix (as Received):	Water

Method	Parameter	Results/Flag	Units	Analyst	Date Prep	Date Anal	MDL
EPA 6010	Lead, Total	3 U	ug/l	GG	06/30/1998	06/30/1998	3

U = Undetected. The value preceeding the 'U' is the MDL for the analyte. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194

Report of Analysis

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998

Lab Reference Number :	98060193-6
Client Sample ID :	B189-GW-MW4-001
Date Sampled :	06/27/1998
Sample Matrix (as Received):	Water

Method	Parameter	Results/Flag	Units	Analyst	Date Prep	Date Anal	MDL
EPA 6010	Lead, Total	3 U	ug/l	GG	06/30/1998	06/30/1998	3

U = Undetected. The value preceeding the 'U' is the MDL for the analyte. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194

Report of Analysis

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998

Lab Reference Number :	98060193-7
Client Sample ID :	B189-GW-EQB-001B
Date Sampled :	06/27/1998
Sample Matrix (as Received):	Water

Method	Parameter	Results/Flag	Units	Analyst	Date Prep	Date Anal	MDL
EPA 6010	Lead, Total	3 U	ug/l	GG	06/30/1998	06/30/1998	3

U = Undetected. The value preceeding the 'U' is the MDL for the analyte. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194

Report of Analysis

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: CTO-0059
PROJECT NUMBER: CTO-0059
DATE RECEIVED: 06/30/1998

Lab Reference Number :	98060193-8
Client Sample ID :	B189-GW-MW10-001D
Date Sampled :	06/27/1998
Sample Matrix (as Received):	Water

Method	Parameter	Results/Flag	Units	Analyst	Date Prep	Date Anal	MDL
EPA 6010	Lead, Total	3 U	ug/l	GG	06/30/1998	06/30/1998	3

U = Undetected. The value preceeding the 'U' is the MDL for the analyte. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

Quality Control Report for Method Blank

INORGANICS

Analyte	Units	Result	Flag	QC Batch ID	Analyst
Method: EPA 6010 QC Batch: 9806RC117 Sample ID: RB-06-30-98 Date Prep: 06/30/1998 Date Anal: 06/30/1998 Analyst: GG					
Lead, Total	ug/l	3	U	9806RC117	GG

Quality Control Report for LCS Analysis

INORGANICS

Analyte		LCS Conc		LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Method: EPA 6010	QC Batch: 9806RC117	Sample ID: LCS	Date Prep: 06/30/1998		Date Anal: 06/30/1998	Analyst: GG	
Lead, Total		100 ug/l	0	101	101	70	120

Quality Control Report for Duplicate Analysis

INORGANICS

Analyte			Sample Result	Dupe Result	RPD	Control Limit
Method: EPA 6010	QC Batch: 9806RC117	Sample ID: 98060193-6	Date Prep: 06/30/1998		Date Anal: 06/30/1998	Analyst: GG
Lead, Total		ug/l	0	0	0	18

Quality Control Report for Spike Analysis

INORGANICS

Analyte		Spike Amount	Sample Result	Spike Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Method: EPA 6010	QC Batch: 9806RC117	Sample ID: 98060193-7	Date Prep: 06/30/1998		Date Anal: 06/30/1998	Analyst: GG	
Lead, Total		100 ug/l	0	87	87	**66**	**124**

10942

PC&B Environmental

210 Park Road, Oviedo, FL 32765
407-359-7194 (FAX) 407-359-7197

Chain of Custody

Work Order: _____

Date: 6/27/98 Page 1 of 1

COMPANY: TetraTech NVS

ADDRESS: 1311 Executive Center Blvd.
Ellis Bld., Ste 220 Tallahassee FL 32301

SAMPLED BY: Rick Ofsanko/SKipV. SIGN: Rick Ofsanko

PHONE: 850-656-5458 FAX: 850-656-7403

ANALYSIS REQUESTED

#	SAMPLE ID	DATE/TIME	MATRIX: AIR	WATER	SLUDGE	SOIL/SOLID	ORG. LIQUID	EPA 8021 (HCl)	EPA 8310 (N/A)	EPA 504.1 (HCl)	EPA 239.2 (HNO3)	FL-PRO (HCl)	Number of Containers
1	B189-GW-MW13D-001	6-27-98/1145		X				4	1	1	1	1	8
2	B189-GW-MW12-001	6-27-98/1225		X				4	1	1	1	1	8
3	B189-GW-MW10-001	6-27-98/1330		X				4	1	1	1	1	8
4	B189-GW-MW7-001	6-27-98/1415		X				4	1	1	1	1	8
5	B189-GW-MW1-001	6-27-98/1455		X				4	1	1	1	1	8
6	B189-GW-MW4-001	6-27-98/1540		X				4	1	1	1	1	8
7	B189-GW-EQB-001B	6-27-98/1505		X				4	1	1	1	1	8
8	B189-GW-MW10-001D	6-27-98/1340		X				4	1	1	1	1	8
9													
10													
11													
12													
13													

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: PSM	6/18/98	1: Rick Ofsanko	6/19/98
2: Rick Ofsanko	6-27-98/1200	2: PSM	6/30/98
3:		3:	

PROJECT INFORMATION

PROJECT NAME: CTO-0059

PROJECT #: CTO-0059

SITE ADDRESS: TRUMAN ANNEX-BLD. 189

PROJECT MANAGER: PAUL CALLIGAN

SAMPLE RECEIPT

Total # of Containers	
Chain of Custody Seals	
Recv'd in Good Condition	
PO #:	

SPECIAL INSTRUCTIONS/COMMENTS:

Samples are contained by two coolers under one FEDEX shipment (#4944246882)

INVOICE TO: (IF DIFFERENT FROM ABOVE) Tallahassee Office

QUOTE/CONTRACT #:

WHITE: Project File YELLOW: Laboratory PINK: Sampler

10942

PC&B Environmental

210 Park Road, Oviedo, FL 32765
407-359-7194 **(FAX) 407-359-7197**

Chain of Custody

Work Order: 9806193

Date: 6/27/98 Page 1 of 1

COMPANY: [illegible]

ADDRESS: 1311 Executive Center Blvd.
Elite Bld. Suite 220 Tallahassee FL 32301

SAMPLED BY: [illegible] SIGN: [illegible]

PHONE: 850-656-5453 FAX: 850-656-7413

ANALYSIS REQUESTED

#	SAMPLE ID	DATE/TIME	AIR	WATER	SLUDGE	SOIL/SOLID	ORG. LIQUID	VOA 8260	SVOA 8270	PCB 8081	SVOA 8270	TPH-PRO											Number of Containers
								HCl	HA	HCl	HNO3	HCl											
1	B139-GW-MW13D-001	6-27-98/1145		X				4	1	1	1	1											8
2	B139-GW-MW12-001	6-27-98/1225		X				4	1	1	1	1											8
3	B139-GW-MW10-001	6-27-98/1330		X				4	1	1	1	1											8
4	B139-GW-MW7-001	6-27-98/1415		X				4	1	1	1	1											8
5	B139-GW-MW1-001	6-27-98/1455		X				4	1	1	1	1											8
6	B139-GW-MW4-001	6-27-98/1540		X				4	1	1	1	1											8
7	B139-GW-EQB-001B	6-27-98/1505		X				4	1	1	1	1											8
8	B139-GW-MW10-001D	6-27-98/1340		X				4	1	1	1	1											8
9																							
10																							
11																							
12																							
13																							

PRESERVATION

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: [illegible]	6/27/98	1: [illegible]	6/29/98
2: [illegible]	6-27-98/1200	2: [illegible]	6/30/98
3:		3:	

PROJECT INFORMATION

PROJECT NAME: CTO-0059

PROJECT #: CTO-0059

SITE ADDRESS: TRUMAN ANNEX - BLD. 139

PROJECT MANAGER: PAUL CALLIGAN

SAMPLE RECEIPT

Total # of Containers	
Chain of Custody Seals	
Recv'd in Good Condition	
PO #:	

SPECIAL INSTRUCTIONS/COMMENTS:
Samples are contained by the coolers under our FEDEX shipment (#4[illegible]165[illegible])

INVOICE TO: (IF DIFFERENT FROM ABOVE) Tallahassee Office

QUOTE/CONTRACT #:

WHITE: Project File YELLOW: Laboratory PINK: Sampler

PC&B Environmental Laboratories, Inc.

210 Park Road, Oviedo, Florida 32765
Phone: 407-359-7194 Fax: 407-359-7197

09-17-1998

Paul Calligan
Tetra Tech NUS, Inc.
1311 Executive Center Drive, Ste. 220
Tallahassee, FL 32301-

Dear Paul Calligan:

Enclosed are the results of the analysis of your samples received 09/04/1998.

Our laboratory is certified by the Florida DHRS (Lab #E83239) and operates under an FDEP approved Comprehensive Quality Assurance Plan (#900134G). Unless otherwise noted, all results are reported as received. All data were determined in accordance with published procedures (EPA-600/4-79-020), Methods for Chemical Analysis of Water and Wastes, Revised March 1983 and/or Standard Methods for the examination of Water and Wastewater, 18th Edition 1989 and/or Test Methods for Evaluating Solid Waste (EPA-SW-846, Revised January 1995), unless stated otherwise in our CompQapp under method modifications.

If you have any questions, please do not hesitate to give me a call.

Sincerely,

Andrew Harrison
Laboratory Manager

PC&B Environmental Laboratories, Inc.

210 Park Road, Oviedo, Florida 32765
Phone: 407-359-7194 Fax: 407-359-7197

Client : Tetra Tech NUS, Inc.
1311 Executive Center Drive, Ste. 220
Tallahassee, FL 32301-

Contact : Paul Calligan
Phone : (850) 656-5458

Laboratory Reference Number : 98090037

Project Name : NAS Key West
Project Number : 7486
Sample temperature at time of receipt: 4 degrees C

Chain of Custody : 11172

Laboratory ID	Matrix	Client ID	Status	Date/Time Sampled	
98090037-1	Water	189-GW-MW06	RUN	09/01/1998	14:40
98090037-2	Water	189-GW-MW013	RUN	09/01/1998	13:15
98090037-3	Water	189-GW-MW04	RUN	09/02/1998	15:45
98090037-4	Water	189-GW-MW01	RUN	09/02/1998	13:00
98090037-5	Water	189-GW-MW03	RUN	09/01/1998	15:45
98090037-6	Water	189-GW-MW02	RUN	09/02/1998	09:30
98090037-7	Water	189-GW-MW07	RUN	09/02/1998	11:15
98090037-8	Water	189-GW-MW10	RUN	09/01/1998	10:10
98090037-9	Water	189-GW-MW12	RUN	09/02/1998	12:45
98090037-10	Water	189-GW-DUP	RUN	09/01/1998	
98090037-11	Water	189-GW-EQ	RUN	09/02/1998	16:00
98090037-12	Water	TRIP BLANK	RUN	08/26/1998	

Number	Parameter	Description
12	Group Test	EPA 601/602 Volatile Organics
11	EPA 504	EDB/DBCP
11	FL-PRO	Petroleum Hydrocarbons
11	EPA 610/8100	Polynuclear Aromatic Hydrocarbons
11	EPA 6010	Lead by ICAP

Case Narrative

Paul Calligan
Tetra Tech NUS, Inc.
1311 Executive Center Drive, Ste. 220
Tallahassee, FL 32301-

CASE NARRATIVE for Work Order: 98090037
Project Number: 7486
Project Name: NAS Key West

This Case Narrative is a summary of events and/or problems encountered with this Work Order.

For samples requesting EPA 601/602 analysis, the GCMS method EPA 624 was substituted in oeder to generate the highest quality data possible at no additional cost.

Definition of Flags

DL	=	No surrogate result due to dilution or matrix interference.
J	=	Estimated Value, value not accurate.
L	=	Off-scale high. Actual value is greater than value given.
T	=	Value reported is less than the laboratory method detection limit.
V	=	Analyte was detected in the blank and sample.

QC Batch Summary

Paul Calligan
Tetra Tech NUS, Inc.
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QC BATCH SUMMARY for Work Order: 98090037
Project Number: 7486
Project Name: NAS Key West

Method	SubNum	QC Batch
EPA 602/8021 - Aromatic Volatile Organics		
	-1	9809MS2013
	-2	9809MS2013
	-3	9809MS2013
	-4	9809MS2013
	-5	9809MS2013
	-6	9809MS2013
	-7	9809MS2013
	-8	9809MS2013
	-9	9809MS2013
	-10	9809MS2013
	-11	9809MS2013
	-12	9809MS2013
EPA 504 - EDB/DBCP		
	-1	9809EDB005
	-2	9809EDB005
	-3	9809EDB005
	-4	9809EDB005
	-5	9809EDB005
	-6	9809EDB005
	-7	9809EDB005
	-8	9809EDB005
	-9	9809EDB005
	-10	9809EDB005
	-11	9809EDB005
EPA 601/8021 - Halogenated Volatile Organics		
	-1	9809MS2013
	-2	9809MS2013
	-3	9809MS2013
	-4	9809MS2013
	-5	9809MS2013
	-6	9809MS2013

QC Batch Summary

Paul Calligan
Tetra Tech NUS, Inc.
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Tallahassee, FL 32301-

QC BATCH SUMMARY for Work Order: 98090037
Project Number: 7486
Project Name: NAS Key West

Method	SubNum	QC Batch
	-7	9809MS2013
	-8	9809MS2013
	-9	9809MS2013
	-10	9809MS2013
	-11	9809MS2013
	-12	9809MS2013
EPA 6010 - Lead by ICAP		
	-1	9809RC039
	-2	9809RC039
	-3	9809RC039
	-4	9809RC039
	-5	9809RC039
	-6	9809RC039
	-7	9809RC039
	-8	9809RC039
	-9	9809RC039
	-10	9809RC039
	-11	9809RC039
FL-PRO - Petroleum Hydrocarbons		
	-1	9809FLRO018
	-2	9809FLRO018
	-3	9809FLRO018
	-4	9809FLRO018
	-5	9809FLRO018
	-6	9809FLRO018
	-7	9809FLRO018
	-8	9809FLRO018
	-9	9809FLRO018
	-10	9809FLRO018
	-11	9809FLRO018
EPA 610/8100 - Polynuclear Aromatic Hydrocarbons		
	-1	9809PAH017A

QC Batch Summary

Paul Calligan
Tetra Tech NUS, Inc.
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Tallahassee, FL 32301-

QC BATCH SUMMARY for Work Order: 98090037
Project Number: 7486
Project Name: NAS Key West

Method	SubNum	QC Batch
	-2	9809PAH017A
	-3	9809PAH017A
	-4	9809PAH017A
	-5	9809PAH017A
	-6	9809PAH017A
	-7	9809PAH017A
	-8	9809PAH017A
	-9	9809PAH017A
	-10	9809PAH017A
	-11	9809PAH017A

PC&B Environmental Laboratories, Inc.
210 Park Road
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Halogenated Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West
PROJECT NUMBER: 7486
DATE RECEIVED: 09/04/1998
ANALYTICAL PROTOCOL: EPA 601/8021

Lab Reference Number	98090037-1	98090037-2	98090037-3	98090037-4	98090037-5
Client Sample ID	189-GW-MW06	189-GW-MW013	189-GW-MW04	189-GW-MW01	189-GW-MW03
Date Sampled	09/01/1998	09/01/1998	09/02/1998	09/02/1998	09/01/1998
Date Extracted	09/08/1998	09/08/1998	09/08/1998	09/08/1998	09/08/1998
Date Analyzed	09/08/1998	09/08/1998	09/08/1998	09/08/1998	09/08/1998
Sample Matrix (as Received)	Water	Water	Water	Water	Water
Analysis Confirmed	GCMS	GCMS	GCMS	GCMS	GCMS
Dilution Factor	1	1	1	1	1
Result Units	ug/l	ug/l	ug/l	ug/l	ug/l
Bromobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloroethyl vinyl ether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	3.4 V	2.2 V	2.1 V	2.0 V	1.8 V
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

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Halogenated Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West
PROJECT NUMBER: 7486
DATE RECEIVED: 09/04/1998
ANALYTICAL PROTOCOL: EPA 601/8021

Lab Reference Number	98090037-6	98090037-7	98090037-8	98090037-9	98090037-10
Client Sample ID	189-GW-MW02	189-GW-MW07	189-GW-MW10	189-GW-MW12	189-GW-DUP
Date Sampled	09/02/1998	09/02/1998	09/01/1998	09/02/1998	09/01/1998
Date Extracted	09/08/1998	09/08/1998	09/08/1998	09/08/1998	09/08/1998
Date Analyzed	09/08/1998	09/08/1998	09/08/1998	09/08/1998	09/08/1998
Sample Matrix (as Received)	Water	Water	Water	Water	Water
Analysis Confirmed	GCMS	GCMS	GCMS	GCMS	GCMS
Dilution Factor	1	1	1	1	1
Result Units	ug/l	ug/l	ug/l	ug/l	ug/l
Bromobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloroethyl vinyl ether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	3.7 V	1.4 V	1.5 V	1.3 V	1.9 V
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

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Halogenated Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West
PROJECT NUMBER: 7486
DATE RECEIVED: 09/04/1998
ANALYTICAL PROTOCOL: EPA 601/8021

Lab Reference Number	98090037-11	98090037-12
Client Sample ID	189-GW-EQ	TRIP BLANK
Date Sampled	09/02/1998	08/26/1998
Date Extracted	09/08/1998	09/08/1998
Date Analyzed	09/08/1998	09/08/1998
Sample Matrix (as Received)	Water	Water
Analysis Confirmed	GCMS	GCMS
Dilution Factor	1	1
Result Units	ug/l	ug/l
Bromobenzene	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U
Bromomethane	1.0 U	1.0 U
Carbon tetrachloride	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U
Chloroethane	1.0 U	1.0 U
2-Chloroethyl vinyl ether	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U
Chloromethane	1.0 U	1.0 U
Dibromochloromethane	1.0 U	1.0 U
Dibromomethane	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U
Dichlorodifluoromethane	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U
Methylene chloride	2.7 V	2.3 V
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U
1,1,1,2-Tetrachloroethane	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U
1,1,1-Trichloroethane	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U
Trichlorofluoromethane	1.0 U	1.0 U
1,2,3-Trichloropropane	1.0 U	1.0 U
Vinyl chloride	1.0 U	1.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

Method: EPA 601/8021 Matrix: Water Organics

Description: Halogenated Volatile Organics

Container: VOA Vial

Hold Time: 14

Analytes in this Method:

Parameter	MDL	Format	Units	Storet	CAS
Bromobenzene	1.0		ug/l		
Bromodichloromethane	1.0		ug/l		
Bromoform	1.0		ug/l		
Bromomethane	1.0		ug/l		
Carbon tetrachloride	1.0		ug/l		
Chlorobenzene	1.0		ug/l		
Chloroethane	1.0		ug/l		
2-Chloroethyl vinyl ether	1.0		ug/l		
Chloroform	1.0		ug/l		
Chloromethane	1.0		ug/l		
Dibromochloromethane	1.0		ug/l		
Dibromomethane	1.0		ug/l		
1,2-Dichlorobenzene	1.0		ug/l		
1,3-Dichlorobenzene	1.0		ug/l		
1,4-Dichlorobenzene	1.0		ug/l		
1,1-Dichloroethane	1.0		ug/l		
Dichlorodifluoromethane	1.0		ug/l		
1,2-Dichloroethane	1.0		ug/l		
1,1-Dichloroethene	1.0		ug/l		
trans-1,2-Dichloroethene	1.0		ug/l		
1,2-Dichloropropane	1.0		ug/l		
cis-1,3-Dichloropropene	1.0		ug/l		
trans-1,3-Dichloropropene	1.0		ug/l		
Methylene chloride	1.0		ug/l		
1,1,2,2-Tetrachloroethane	1.0		ug/l		
1,1,1,2-Tetrachloroethane	1.0		ug/l		
Tetrachloroethene	1.0		ug/l		
1,1,1-Trichloroethane	1.0		ug/l		
1,1,2-Trichloroethane	1.0		ug/l		
Trichloroethene	1.0		ug/l		
Trichlorofluoromethane	1.0		ug/l		
1,2,3-Trichloropropane	1.0		ug/l		
Vinyl chloride	1.0		ug/l		
cis-1,2-Dichloroethene	1.0		ug/l		

Quality Control Report for Method Blank

Halogenated Volatile Organics

Matrix: Water
Lab Sample ID: RB-09-08-98
QC Batch ID: 9809MS2013
Result Units: ug/l

Analysis Date: 09/08/1998
Preparation Date: 09/08/1998
Method: EPA 601
Analyst: NM

Analyte	Result	Flag	Analyte	Result	Flag
Bromobenzene	1.0	U	Bromodichloromethane	1.0	U
Bromoform	1.0	U	Bromomethane	1.0	U
Carbon tetrachloride	1.0	U	Chlorobenzene	1.0	U
Chloroethane	1.0	U	2-Chloroethyl vinyl ether	1.0	U
Chloroform	1.0	U	Chloromethane	1.0	U
Dibromochloromethane	1.0	U	Dibromomethane	1.0	U
1,2-Dichlorobenzene	1.0	U	1,3-Dichlorobenzene	1.0	U
1,4-Dichlorobenzene	1.0	U	1,1-Dichloroethane	1.0	U
Dichlorodifluoromethane	1.0	U	1,2-Dichloroethane	1.0	U
1,1-Dichloroethene	1.0	U	trans-1,2-Dichloroethene	1.0	U
1,2-Dichloropropane	1.0	U	cis-1,3-Dichloropropene	1.0	U
trans-1,3-Dichloropropene	5.0		Methylene chloride	1.0	U
1,1,2,2-Tetrachloroethane	1.0	U	1,1,1,2-Tetrachloroethane	1.0	U
Tetrachloroethene	1.0	U	1,1,1-Trichloroethane	1.0	U
1,1,2-Trichloroethane	1.0	U	Trichloroethene	1.0	U
Trichlorofluoromethane	1.0	U	1,2,3-Trichloropropane	1.0	U
Vinyl chloride	1.0	U	cis-1,2-Dichloroethene	1.0	U

Quality Control Report for LCS/LCS Duplicate Analysis

Halogenated Volatile Organics

Matrix: Water
Lab Sample ID: LCS
QC Batch ID: 9809MS2013
LCS Units: ug/l

Analysis Date: 09/08/1998
Preparation Date: 09/08/1998
Method: EPA 601
Analyst: NM

Analyte	LCS Conc		LCS Result	LCS Percent Recovery	LCSD Result	LCSD Percent Recovery	RPD
Carbon tetrachloride	25.0	0.0	24.0	96	24.0	96	0
Chlorobenzene	25.0	0.0	24.0	96	25.0	100	4
1,4-Dichlorobenzene	25.0	0.0	25.0	100	25.0	100	0
1,1-Dichloroethene	25.0	0.0	22.0	88	22.0	88	0
Trichloroethene	25.0	0.0	22.0	88	22.0	88	0

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
Carbon tetrachloride	51	134	4
Chlorobenzene	59	147	4
1,4-Dichlorobenzene	57	145	4
1,1-Dichloroethene	46	150	7
Trichloroethene	48	148	6

Quality Control Report for Spike/Spike Duplicate Analysis

Halogenated Volatile Organics

Matrix: Water
Lab Sample ID: MW-QC
QC Batch ID: 9809MS2013
Spike Units: ug/l

Analysis Date: 09/08/1998
Preparation Date: 09/08/1998
Method: EPA 601
Analyst: NM

Analyte	Spike Amount	Sample Result	Spike Result	Spike Percent Recovery	MSD Result	MSD Percent Recovery	RPD
Carbon tetrachloride	50.0	0.0	59.0	118	58.0	116	2
Chlorobenzene	50.0	0.0	48.0	96	48.0	96	0
1,4-Dichlorobenzene	50.0	0.0	51.0	102	54.0	108	6
1,1-Dichloroethene	50.0	0.0	55.0	110	55.0	110	0
Trichloroethene	50.0	0.0	57.0	114	55.0	110	4

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
Carbon tetrachloride	66	134	11
Chlorobenzene	69	127	10
1,4-Dichlorobenzene	69	134	11
1,1-Dichloroethene	69	132	11
Trichloroethene	68	129	10

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Aromatic Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West
PROJECT NUMBER: 7486
DATE RECEIVED: 09/04/1998
ANALYTICAL PROTOCOL: EPA 602/8021

Lab Reference Number	98090037-1	98090037-2	98090037-3	98090037-4	98090037-5
Client Sample ID	189-GW-MW06	189-GW-MW013	189-GW-MW04	189-GW-MW01	189-GW-MW03
Date Sampled	09/01/1998	09/01/1998	09/02/1998	09/02/1998	09/01/1998
Date Extracted	09/08/1998	09/08/1998	09/08/1998	09/08/1998	09/08/1998
Date Analyzed	09/08/1998	09/08/1998	09/08/1998	09/08/1998	09/08/1998
Sample Matrix (as Received)	Water	Water	Water	Water	Water
Analysis Confirmed	GCMS	GCMS	No	GCMS	GCMS
Dilution Factor	1	1	1	1	1
Result Units	ug/l	ug/l	ug/l	ug/l	ug/l
Benzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MTBE	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m & p-Xylenes	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

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Aromatic Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West
PROJECT NUMBER: 7486
DATE RECEIVED: 09/04/1998
ANALYTICAL PROTOCOL: EPA 602/8021

Lab Reference Number	98090037-6	98090037-7	98090037-8	98090037-9	98090037-10
Client Sample ID	189-GW-MW02	189-GW-MW07	189-GW-MW10	189-GW-MW12	189-GW-DUP
Date Sampled	09/02/1998	09/02/1998	09/01/1998	09/02/1998	09/01/1998
Date Extracted	09/08/1998	09/08/1998	09/08/1998	09/08/1998	09/08/1998
Date Analyzed	09/08/1998	09/08/1998	09/08/1998	09/08/1998	09/08/1998
Sample Matrix (as Received)	Water	Water	Water	Water	Water
Analysis Confirmed	GCMS	GCMS	GCMS	GCMS	GCMS
Dilution Factor	1	1	1	1	1
Result Units	ug/l	ug/l	ug/l	ug/l	ug/l
Benzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MTBE	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m & p-Xylenes	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

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Aromatic Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West
PROJECT NUMBER: 7486
DATE RECEIVED: 09/04/1998
ANALYTICAL PROTOCOL: EPA 602/8021

Lab Reference Number	98090037-11	98090037-12
Client Sample ID	189-GW-EQ	TRIP BLANK
Date Sampled	09/02/1998	08/26/1998
Date Extracted	09/08/1998	09/08/1998
Date Analyzed	09/08/1998	09/08/1998
Sample Matrix (as Received)	Water	Water
Analysis Confirmed	GCMS	GCMS
Dilution Factor	1	1
Result Units	ug/l	ug/l
Benzene	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U
Ethylbenzene	1.0 U	1.0 U
MTBE	5.0 U	5.0 U
Toluene	1.0 U	1.0 U
m & p-Xylenes	1.0 U	1.0 U
o-Xylene	1.0 U	1.0 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

Method: EPA 602/8021 Matrix: Water Organics:
Description: Aromatic Volatile Organics
Container: VOA Vial
Hold Time: 14

Analytes in this Method:

Parameter	MDL	Format	Units	Storet	CAS
Benzene	1.0		ug/l		
Chlorobenzene	1.0		ug/l		
1,2-Dichlorobenzene	1.0		ug/l		
1,3-Dichlorobenzene	1.0		ug/l		
1,4-Dichlorobenzene	1.0		ug/l		
Ethylbenzene	1.0		ug/l		
MTBE	5.0		ug/l		
Toluene	1.0		ug/l		
m & p-Xylenes	1.0		ug/l		
o-Xylene	1.0		ug/l		

Quality Control Report for Method Blank

Aromatic Volatile Organics

Matrix: Water
Lab Sample ID: RB-09-08-98
QC Batch ID: 9809MS2013
Result Units: ug/l

Analysis Date: 09/08/1998
Preparation Date: 09/08/1998
Method: EPA 602
Analyst: NM

Analyte	Result	Flag	Analyte	Result	Flag
Benzene	1.0	U	Chlorobenzene	1.0	U
1,2-Dichlorobenzene	1.0	U	1,3-Dichlorobenzene	1.0	U
1,4-Dichlorobenzene	1.0	U	Ethylbenzene	1.0	U
MTBE	5.0	U	Toluene	1.0	U
m & p-Xylenes	1.0	U	o-Xylene	1.0	U

Quality Control Report for LCS/LCS Duplicate Analysis

Aromatic Volatile Organics

Matrix: Water
Lab Sample ID: LCS
QC Batch ID: 9809MS2013
LCS Units: ug/l

Analysis Date: 09/08/1998
Preparation Date: 09/08/1998
Method: EPA 602
Analyst: NM

Analyte	LCS Conc		LCS Result	LCS Percent Recovery	LCSD Result	LCSD Percent Recovery	RPD
Benzene	25.0	0.0	22.0	88	22.0	88	0
Ethylbenzene	25.0	0.0	22.0	88	23.0	92	4
MTBE	25.0	0.0	25.0	100	23.0	92	8
Toluene	25.0	0.0	21.0	84	20.0	80	5
m & p-Xylenes	50.0	0.0	49.0	98	49.0	98	0
o-Xylene	25.0	0.0	23.0	92	23.0	92	0

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
Benzene	52	148	4
Ethylbenzene	50	143	7
MTBE	51	154	7
Toluene	46	152	5
m & p-Xylenes	44	146	6
o-Xylene	47	146	5

Quality Control Report for Spike/Spike Duplicate Analysis

Aromatic Volatile Organics

Matrix: Water
Lab Sample ID: MW-QC
QC Batch ID: 9809MS2013
Spike Units: ug/l

Analysis Date: 09/08/1998
Preparation Date: 09/08/1998
Method: EPA 602
Analyst: NM

Analyte	Spike Amount	Sample Result	Spike Result	Spike Percent Recovery	MSD Result	MSD Percent Recovery	RPD
Benzene	50.0	0.0	49.0	98	50.0	100	2
Ethylbenzene	50.0	0.0	46.0	92	46.0	92	0
MTBE	50.0	0.0	59.0	118	64.0	128	8
Toluene	50.0	0.0	50.0	100	49.0	98	2
m & p-Xylenes	100.0	0.0	96.0	96	95.0	95	1
o-Xylene	50.0	0.0	46.0	92	45.0	90	2

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
Benzene	60	144	14
Ethylbenzene	68	133	11
MTBE	58	140	14
Toluene	66	130	11
m & p-Xylenes	68	128	10
o-Xylene	68	131	11

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PAH's by HPLC

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West
PROJECT NUMBER: 7486
DATE RECEIVED: 09/04/1998
ANALYTICAL PROTOCOL: EPA 8310

Lab Reference Number	98090037-1	98090037-2	98090037-3	98090037-4	98090037-5
Client Sample ID	189-GW-MW06	189-GW-MW013	189-GW-MW04	189-GW-MW01	189-GW-MW03
Date Sampled	09/01/1998	09/01/1998	09/02/1998	09/02/1998	09/01/1998
Date Extracted	10/01/1998	10/01/1998	10/01/1998	09/30/1998	10/01/1998
Date Analyzed	10/02/1998	10/02/1998	10/02/1998	09/30/1998	10/02/1998
Sample Matrix (as Received)	Water	Water	Water	Water	Water
Analysis Confirmed	No	No	No	No	No
Dilution Factor	1	1	1	1	1
Result Units	ug/l	ug/l	ug/l	ug/l	ug/l
Acenaphthene	5 U	5 U	5 U	5 U	5 U
Acenaphthylene	5 U	5 U	5 U	5 U	5 U
Anthracene	5 U	5 U	5 U	5 U	5 U
Benzo(a)anthracene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzo(a)pyrene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Benzo(b)fluoranthene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzo(ghi)perylene	0.2 U	0.2 U	0.2 U	0.3	0.2 U
Benzo(k)fluoranthene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chrysene	0.01 U	0.01 U	0.01 U	0.30	0.01 U
dibenzo(ah)anthracene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Fluoranthene	0.01 U	0.01 U	0.01 U	0.70	0.01 U
Fluorene	0.07	0.01 U	0.01 U	0.01 U	0.01 U
Indeno(123cd)pyrene	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Naphthalene	0.30	0.05 U	0.05 U	0.05 U	0.05 U
1-Methyl naphthalene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
2-Methyl naphthalene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Phenanthrene	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Pyrene	0.070	0.025 U	0.025 U	0.200	0.025 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

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PAH's by HPLC

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West
PROJECT NUMBER: 7486
DATE RECEIVED: 09/04/1998
ANALYTICAL PROTOCOL: EPA 8310

Lab Reference Number	98090037-6	98090037-7	98090037-8	98090037-9	98090037-10
Client Sample ID	189-GW-MW02	189-GW-MW07	189-GW-MW10	189-GW-MW12	189-GW-DUP
Date Sampled	09/02/1998	09/02/1998	09/01/1998	09/02/1998	09/01/1998
Date Extracted	10/01/1998	10/01/1998	10/01/1998	10/01/1998	10/01/1998
Date Analyzed	10/02/1998	10/02/1998	10/02/1998	10/02/1998	10/02/1998
Sample Matrix (as Received)	Water	Water	Water	Water	Water
Analysis Confirmed	No	No	No	No	No
Dilution Factor	1	1	1	1	1
Result Units	ug/l	ug/l	ug/l	ug/l	ug/l
Acenaphthene	5 U	5 U	5 U	5 U	5 U
Acenaphthylene	5 U	5 U	5 U	5 U	5 U
Anthracene	5 U	5 U	5 U	5 U	5 U
Benzo(a)anthracene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzo(a)pyrene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Benzo(b)fluoranthene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzo(ghi)perylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzo(k)fluoranthene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chrysene	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
dibenzo(ah)anthracene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Fluoranthene	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Fluorene	0.01 U	0.08	0.01 U	0.01 U	0.01 U
Indeno(123cd)pyrene	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Naphthalene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1-Methyl naphthalene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
2-Methyl naphthalene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Phenanthrene	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Pyrene	0.025 U	0.078	0.025 U	0.025 U	0.025 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

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Polynuclear Aromatic Hydrocarb

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West
PROJECT NUMBER: 7486
DATE RECEIVED: 09/04/1998
ANALYTICAL PROTOCOL: EPA 610/8100

Lab Reference Number	98090037-11	
Client Sample ID	189-GW-EQ	
Date Sampled	09/02/1998	
Date Extracted	09/04/1998	
Date Analyzed	09/09/1998	
Sample Matrix (as Received)	Water	
Analysis Confirmed	No	
Dilution Factor	1	
Result Units	ug/l	
Acenaphthene	5	U
Acenaphthylene	5	U
Anthracene	5	U
Benzo(a)anthracene	5	U
Benzo(a)pyrene	5	U
Benzo(b)fluoranthene	5	U
Benzo(ghi)perylene	5	U
Benzo(k)fluoranthene	5	U
Chrysene	5	U
Dibenzo(ah)anthracene	5	U
Fluoranthene	5	U
Fluorene	5	U
Indeno(123-cd)pyrene	5	U
Naphthalene	5	U
1-Methyl naphthalene	5	U
2-Methyl naphthalene	5	U
Phenanthrene	5	U
Pyrene	5	U
(Surr) 2-Fluorobiphenyl (%)	74	

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

Method: EPA 610/8100 Matrix: Water Organics:
Description: Polynuclear Aromatic Hydrocarbons
Container: Amber Glass Min Vol: 1000
Hold Time: 7

Analytes in this Method:

Parameter	MDL	Format	Units	Storet	CAS
Acenaphthene	5		ug/l		
Acenaphthylene	5		ug/l		
Anthracene	5		ug/l		
Benzo(a)anthracene	5		ug/l		
Benzo(a)pyrene	5		ug/l		
Benzo(b)fluoranthene	5		ug/l		
Benzo(ghi)perylene	5		ug/l		
Benzo(k)fluoranthene	5		ug/l		
Chrysene	5		ug/l		
Dibenzo(ah)anthracene	5		ug/l		
Fluoranthene	5		ug/l		
Fluorene	5		ug/l		
Indeno(123-cd)pyrene	5		ug/l		
Naphthalene	5		ug/l		
1-Methyl naphthalene	5		ug/l		
2-Methyl naphthalene	5		ug/l		
Phenanthrene	5		ug/l		
Pyrene	5		ug/l		
SS_2-Fluorobiphenyl	1		ug/l		

Quality Control Report for Method Blank

Polynuclear Aromatic Hydrocarbons

Matrix: Water
Lab Sample ID: RB-09-04-98
QC Batch ID: 9809PAH017A
Result Units: ug/l

Analysis Date: 09/09/1998
Preparation Date: 09/04/1998
Method: EPA 610
Analyst: KN

Analyte	Result	Flag	Analyte	Result	Flag
Acenaphthene	5	U	Acenaphthylene	5	U
Anthracene	5	U	Benzo(a)anthracene	5	U
Benzo(a)pyrene	5	U	Benzo(b)fluoranthene	5	U
Benzo(ghi)perylene	5	U	Benzo(k)fluoranthene	5	U
Chrysene	5	U	Dibenzo(ah)anthracene	5	U
Fluoranthene	5	U	Fluorene	5	U
Indeno(123-cd)pyrene	5	U	Naphthalene	5	U
1-Methyl naphthalene	5	U	2-Methyl naphthalene	5	U
Phenanthrene	5	U	Pyrene	5	U
(Surr) 2-Fluorobiphenyl (%)	65				

Quality Control Report for LCS/LCS Duplicate Analysis

Polynuclear Aromatic Hydrocarbons

Matrix: Water
Lab Sample ID: LCS
QC Batch ID: 9809PAH017A
LCS Units: ug/l

Analysis Date: 09/09/1998
Preparation Date: 09/04/1998
Method: EPA 610
Analyst: KN

Analyte	LCS Conc		LCS Result	LCS Percent Recovery	LCSD Result	LCSD Percent Recovery	RPD
Indeno(123-cd)pyrene	50	0	40	80	40	80	0
Naphthalene	50	0	30	60	30	60	0
Phenanthrene	50	0	39	78	38	76	3
Pyrene	50	0	46	92	46	92	0
(Surr) 2-Fluorobiphenyl	100	0	63	63	63	63	0
Acenaphthene	50	0	46	92	45	90	2
Acenaphthylene	50	0	35	70	35	70	0
Anthracene	50	0	54	108	53	106	2
Benzo(a)anthracene	50	0	40	80	39	78	3
Benzo(a)pyrene	50	0	42	84	42	84	0
Benzo(b)fluoranthene	50	0	37	74	37	74	0
Benzo(ghi)perylene	50	0	37	74	37	74	0
Benzo(k)fluoranthene	50	0	51	102	51	102	0
Chrysene	50	0	42	84	42	84	0
Dibenzo(ah)anthracene	50	0	41	82	40	80	2
Fluoranthene	50	0	45	90	45	90	0
Fluorene	50	0	37	74	37	74	0

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
Indeno(123-cd)pyrene	40	133	15
Naphthalene	39	105	12
Phenanthrene	46	122	11
Pyrene	51	126	15
SS_2-Fluorobiphenyl	54	102	10
Acenaphthene	71	126	14
Acenaphthylene	49	109	15
Anthracene	69	133	17
Benzo(a)anthracene	42	125	15
Benzo(a)pyrene	47	130	16
Benzo(b)fluoranthene	30	148	19
Benzo(ghi)perylene	34	131	17
Benzo(k)fluoranthene	32	152	18
Chrysene	41	126	13
Dibenzo(ah)anthracene	40	135	17
Fluoranthene	49	126	15
Fluorene	50	117	16

Quality Control Report for Spike Analysis

Polynuclear Aromatic Hydrocarbons

Matrix: Water
Lab Sample ID: 9808157-2
QC Batch ID: 9809PAH017A
Spike Units: ug/l

Analysis Date: 09/09/1998
Preparation Date: 09/04/1998
Method: EPA 610
Analyst: KN

Analyte	Spike Amount	Sample Result	Spike Result	Percent Recovery	Lower Control Limit	Upper Control Limit
(Surr) 2-Fluorobiphenyl	100	0	81	81	**47**	**98**
Acenaphthene	50	0	54	108	**56**	**123**
Acenaphthylene	50	0	43	86	**46**	**101**
Anthracene	50	0	50	100	**62**	**126**
Benzo(a)anthracene	50	0	53	106	**43**	**113**
Benzo(a)pyrene	50	0	52	104	**49**	**113**
Benzo(b)fluoranthene	50	0	47	94	**46**	**120**
Benzo(ghi)perylene	50	0	31	62	**40**	**113**
Benzo(k)fluoranthene	50	0	45	90	**47**	**122**
Chrysene	50	0	55	110	**47**	**114**
Dibenzo(ah)anthracene	50	0	37	74	**40**	**118**
Fluoranthene	50	0	49	98	**52**	**111**
Fluorene	50	0	46	92	**46**	**108**
Indeno(123-cd)pyrene	50	0	36	72	**39**	**117**
Naphthalene	50	0	45	90	**40**	**97**
Phenanthrene	50	0	51	102	**47**	**113**
Pyrene	50	0	50	100	**54**	**111**

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EDB/DBCP

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West
PROJECT NUMBER: 7486
DATE RECEIVED: 09/04/1998
ANALYTICAL PROTOCOL: EPA 504

Lab Reference Number	98090037-1	98090037-2	98090037-3	98090037-4	98090037-5
Client Sample ID	189-GW-MW06	189-GW-MW013	189-GW-MW04	189-GW-MW01	189-GW-MW03
Date Sampled	09/01/1998	09/01/1998	09/02/1998	09/02/1998	09/01/1998
Date Extracted	09/10/1998	09/10/1998	09/10/1998	09/10/1998	09/10/1998
Date Analyzed	09/10/1998	09/10/1998	09/10/1998	09/10/1998	09/10/1998
Sample Matrix (as Received)	Water	Water	Water	Water	Water
Analysis Confirmed	No	No	No	No	No
Dilution Factor	1	1	1	1	1
Result Units	ug/l	ug/l	ug/l	ug/l	ug/l
Ethylene dibromide (EDB)	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
1,2-Dibromo-3-chloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

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EDB/DBCP

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West
PROJECT NUMBER: 7486
DATE RECEIVED: 09/04/1998
ANALYTICAL PROTOCOL: EPA 504

Lab Reference Number	98090037-6	98090037-7	98090037-8	98090037-9	98090037-10
Client Sample ID	189-GW-MW02	189-GW-MW07	189-GW-MW10	189-GW-MW12	189-GW-DUP
Date Sampled	09/02/1998	09/02/1998	09/01/1998	09/02/1998	09/01/1998
Date Extracted	09/10/1998	09/10/1998	09/10/1998	09/10/1998	09/10/1998
Date Analyzed	09/10/1998	09/10/1998	09/10/1998	09/10/1998	09/10/1998
Sample Matrix (as Received)	Water	Water	Water	Water	Water
Analysis Confirmed	No	No	No	No	No
Dilution Factor	1	1	1	1	1
Result Units	ug/l	ug/l	ug/l	ug/l	ug/l
Ethylene dibromide (EDB)	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
1,2-Dibromo-3-chloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

EDB/DBCP

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West
PROJECT NUMBER: 7486
DATE RECEIVED: 09/04/1998
ANALYTICAL PROTOCOL: EPA 504

Lab Reference Number	98090037-11	
Client Sample ID	189-GW-EQ	
Date Sampled	09/02/1998	
Date Extracted	09/10/1998	
Date Analyzed	09/10/1998	
Sample Matrix (as Received)	Water	
Analysis Confirmed	No	
Dilution Factor	1	
Result Units	ug/l	
Ethylene dibromide (EDB)	0.02	U
1,2-Dibromo-3-chloropropane	0.1	U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

Method: EPA 504 Matrix: Water Organics:
Description: EDB/DBCP
Container: VOA Vial
Hold Time: 14

Analytes in this Method:

Parameter	MDL	Format	Units	Storet	CAS
Ethylene dibromide (EDB)	0.02		ug/l		
1,2-Dibromo-3-chloropropane	0.1		ug/l		

Quality Control Report for Method Blank

EDB/DBCP

Matrix: Water
Lab Sample ID: RB-09-10-98
QC Batch ID: 9809EDB005
Result Units: ug/l

Analysis Date: 09/10/1998
Preparation Date: 09/10/1998
Method: EPA 504
Analyst: ELA

Analyte	Result	Flag	Analyte	Result	Flag
Ethylene dibromide (EDB)	0.02	U	1,2-Dibromo-3-chloropropane	0.1	U

Quality Control Report for LCS Analysis

EDB/DBCP

Matrix: Water
Lab Sample ID: LCS
QC Batch ID: 9809EDB005
LCS Units: ug/l

Analysis Date: 09/10/1998
Preparation Date: 09/10/1998
Method: EPA 504
Analyst: ELA

Analyte	LCS Conc	LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Ethylene dibromide (EDB)	1.00	0.81	81	75	120
1,2-Dibromo-3-chloropropane	1.0	0.8	83	75	120

Quality Control Report for Spike/Spike Duplicate Analysis

EDB/DBCP

Matrix: Water
Lab Sample ID: 9809037-7
QC Batch ID: 9809EDB005
Spike Units: ug/l

Analysis Date: 09/10/1998
Preparation Date: 09/10/1998
Method: EPA 504
Analyst: ELA

Analyte	Spike Amount	Sample Result	Spike Result	Spike Percent Recovery	MSD Result	MSD Percent Recovery	RPD
Ethylene dibromide (EDB)	1.00	0.00	0.79	79	0.84	84	6
1,2-Dibromo-3-chloropropane	1.0	0.0	0.6	60	0.7	66	10

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
Ethylene dibromide (EDB)	48	135	16
1,2-Dibromo-3-chloropropane	43	134	17

PC&B Environmental Laboratories, Inc.
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Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Petroleum Hydrocarbons

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West
PROJECT NUMBER: 7486
DATE RECEIVED: 09/04/1998
ANALYTICAL PROTOCOL: FL-PRO

Lab Reference Number	98090037-1	98090037-2	98090037-3	98090037-4	98090037-5
Client Sample ID	189-GW-MW06	189-GW-MW013	189-GW-MW04	189-GW-MW01	189-GW-MW03
Date Sampled	09/01/1998	09/01/1998	09/02/1998	09/02/1998	09/01/1998
Date Extracted	09/04/1998	09/04/1998	09/04/1998	09/04/1998	09/04/1998
Date Analyzed	09/07/1998	09/07/1998	09/07/1998	09/07/1998	09/07/1998
Sample Matrix (as Received)	Water	Water	Water	Water	Water
Analysis Confirmed	No	No	No	No	No
Dilution Factor	1	1	1	1	1
Result Units	mg/l	mg/l	mg/l	mg/l	mg/l
Total PHS	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
(Surr) C-39 (%)	50	77	50	90	62

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Petroleum Hydrocarbons

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West
PROJECT NUMBER: 7486
DATE RECEIVED: 09/04/1998
ANALYTICAL PROTOCOL: FL-PRO

Lab Reference Number	98090037-6	98090037-7	98090037-8	98090037-9	98090037-10
Client Sample ID	189-GW-MW02	189-GW-MW07	189-GW-MW10	189-GW-MW12	189-GW-DUP
Date Sampled	09/02/1998	09/02/1998	09/01/1998	09/02/1998	09/01/1998
Date Extracted	09/04/1998	09/04/1998	09/04/1998	09/04/1998	09/04/1998
Date Analyzed	09/07/1998	09/07/1998	09/07/1998	09/07/1998	09/07/1998
Sample Matrix (as Received)	Water	Water	Water	Water	Water
Analysis Confirmed	No	No	No	No	No
Dilution Factor	1	1	1	1	1
Result Units	mg/l	mg/l	mg/l	mg/l	mg/l
Total PHS	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
(Surr) C-39 (%)	64	41	92	63	41

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

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FAX: 359-7197

Petroleum Hydrocarbons

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West
PROJECT NUMBER: 7486
DATE RECEIVED: 09/04/1998
ANALYTICAL PROTOCOL: FL-PRO

Lab Reference Number	98090037-11
Client Sample ID	189-GW-EQ
Date Sampled	09/02/1998
Date Extracted	09/04/1998
Date Analyzed	09/07/1998
Sample Matrix (as Received)	Water
Analysis Confirmed	No
Dilution Factor	1
Result Units	mg/l
Total PHS	0.1 U
(Surr) C-39 (%)	57

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

Method: FL-PRO Matrix: Water Organics:
Description: Petroleum Hydrocarbons
Container: Amber Glass
Hold Time: 7

Analytes in this Method:

Parameter	MDL	Format	Units	Storet	CAS
Total PHS	0.1		mg/l		
SS_C-39	1.0		%		

Quality Control Report for Method Blank

Petroleum Hydrocarbons

Matrix: Water
Lab Sample ID: RB-09-04-98
QC Batch ID: 9809FLRO018
Result Units: mg/l

Analysis Date: 09/07/1998
Preparation Date: 09/04/1998
Method: FL-PRO
Analyst: ELA

Analyte	Result	Flag	Analyte	Result	Flag
Total PHS	0.1	U	(Surr) C-39 (%)	106.0	

Quality Control Report for LCS/LCS Duplicate Analysis

Petroleum Hydrocarbons

Matrix: Water
Lab Sample ID: LCS
QC Batch ID: 9809FLRO018
LCS Units: mg/l

Analysis Date: 09/07/1998
Preparation Date: 09/04/1998
Method: FL-PRO
Analyst: ELA

Analyte	LCS Conc		LCS Result	LCS Percent Recovery	LCSD Result	LCSD Percent Recovery	RPD
(Surr) C-39	100.0	0.0	115.0	115	114.0	114	1
Total PHS	5.0	0.0	4.6	92	4.4	88	4

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
SS_C-39	4	140	31
Total PHS	57	110	11

Quality Control Report for Spike/Spike Duplicate Analysis

Petroleum Hydrocarbons

Matrix: Water
Lab Sample ID: 9808218-2
QC Batch ID: 9809FLRO018
Spike Units: mg/l

Analysis Date: 09/07/1998
Preparation Date: 09/04/1998
Method: FL-PRO
Analyst: ELA

Analyte	Spike Amount	Sample Result	Spike Result	Spike Percent Recovery	MSD Result	MSD Percent Recovery	RPD
(Surr) C-39	100.0	0.0	109.0	109	108.0	108	1
Total PHS	5.0	0.0	3.8	76	4.0	80	5

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
SS_C-39	7	139	30
Total PHS	57	110	11

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194

Report of Analysis

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West
PROJECT NUMBER: 7486
DATE RECEIVED: 09/04/1998

Lab Reference Number			98090037-1	98090037-2	98090037-3	98090037-4	98090037-5
Client Sample ID			189-GW-MW06	189-GW-MW013	189-GW-MW04	189-GW-MW01	189-GW-MW03
Date Sampled			09/01/1998	09/01/1998	09/02/1998	09/02/1998	09/01/1998
Sample Matrix (as Received)			Water	Water	Water	Water	Water
EPA 6010	Lead, Total	ug/l	3 U	3 U	3 U	3 U	3 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194

Report of Analysis

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West
PROJECT NUMBER: 7486
DATE RECEIVED: 09/04/1998

Lab Reference Number			98090037-6	98090037-7	98090037-8	98090037-9	98090037-10
Client Sample ID			189-GW-MW02	189-GW-MW07	189-GW-MW10	189-GW-MW12	189-GW-DUP
Date Sampled			09/02/1998	09/02/1998	09/01/1998	09/02/1998	09/01/1998
Sample Matrix (as Received)			Water	Water	Water	Water	Water
EPA 6010	Lead, Total	ug/l	3 U	3 U	3 U	3 U	3 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194

Report of Analysis

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West
PROJECT NUMBER: 7486
DATE RECEIVED: 09/04/1998

Lab Reference Number			98090037-11
Client Sample ID			189-GW-EQ
Date Sampled			09/02/1998
Sample Matrix (as Received)			Water
EPA 6010	Lead, Total	ug/l	3 U

U = Undetected. The value preceeding the 'U' is the MDL for the analyte. Results reported on a Wet Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

Reviewed by : _____

Method: EPA 6010 Matrix: Water
Description: Lead by ICAP
Container: HDPE Plastic

Analytes in this Method:

Parameter	MDL	Format	Units	Storet	CAS
Lead, Total	3		ug/l		

Quality Control Report for Method Blank

INORGANICS

Analyte	Units	Result	Flag	QC Batch ID	Analyst
Method: EPA 6010 QC Batch: 9809RC039 Sample ID: RB-09-09-98 Date Prep: 09/09/1998 Date Anal: 09/10/1998 Analyst: GG					
Lead, Total	ug/l	3	U	9809RC039	GG

Quality Control Report for Duplicate Analysis

INORGANICS

Analyte			Sample Result	Dupe Result	RPD	Control Limit
Method: EPA 6010	QC Batch: 9809RC039	Sample ID: 98090037-10	Date Prep: 09/09/1998	Date Anal: 09/10/1998		Analyst: GG
Lead, Total		ug/l	0	0	0	6

Quality Control Report for LCS Analysis

INORGANICS

Analyte		LCS Conc		LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Method: EPA 6010	QC Batch: 9809RC039	Sample ID: LCS	Date Prep: 09/09/1998		Date Anal: 09/10/1998	Analyst: GG	
Lead, Total		100 ug/l	0	96	96	**85**	**117**

Quality Control Report for Spike Analysis

INORGANICS

Analyte		Spike Amount	Sample Result	Spike Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Method: EPA 6010	QC Batch: 9809RC039	Sample ID: 98090037-1	Date Prep: 09/09/1998		Date Anal: 09/10/1998	Analyst: GG	
Lead, Total		100 ug/l	0	88	88	78	115

11172

PC&B Environmental

210 Park Road, Oviedo, FL 32765
407-359-7194 (FAX) 407-359-7197

Chain of Custody

Work Order: 98090037

Date: 9/2/98 Page 1 of 1

COMPANY: TETRA TECH NUS

ADDRESS:

SAMPLED BY: P. HALVERSON SIGN: [signature]

PHONE: FAX:

ANALYSIS REQUESTED

#	SAMPLE ID	DATE/TIME	MATRIX: AIR	WATER	SLUDGE	SOIL/SOLID	ORG. LIQUID	LEAD (HNO3)	FL-PRO (HCL)	610/8100 (Ø)	602/8020 601/8010 (HCL)	504/8011 (HCL)	Number of Containers
1	189-GW-MW06	9/1/98/1440		✓				1	1	1	2	2	7
2	189-GW-MWD13	9/1/98-1315		✓				1	1	1	2	2	7
3	189-GW-MW04	9/2/98-1545		✓				1	1	1	2	2	7
4	189-GW-MW01	9/2/98-1300		✓				1	1	1	2	2	7
5	189-GW-MW03	9/1/98-1545		✓				1	1	1	2	2	7
6	189-GW-MW02	9/2/98-0930		✓				1	1	1	2	2	7
7	189-GW-MW07	9/2/98-1115		✓				1	1	1	2	2	7
8	189-GW-MW10	9/1/98-1010		✓				1	1	1	2	2	7
9	189-GW-MW12	9/2/98/1245		✓				1	1	1	2	2	7
10	189-GW-DUP	9/1/98/—		✓				1	1	1	2	2	7
11	~~189-EQ~~												
12	189-GW-EQ	9/2/98/1600		✓				1	1	1	2	2	7
13	TRIP BLANK												

PRESERVATION

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: [signature]	8/31/98	1: [signature]	8/31/98
2: [signature]	9/3/98	2: [signature]	9/4/98 9:40
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

QUOTE/CONTRACT #:

PROJECT INFORMATION

PROJECT NAME: NAS KEY WEST

PROJECT #: 7486

SITE ADDRESS: TRUMAN ANNEX, KEY WEST

PROJECT MANAGER: PAUL CALLIGAN

INVOICE TO: (IF DIFFERENT FROM ABOVE)

SAMPLE RECEIPT

Total # of Containers	
Chain of Custody Seals	
Recv'd in Good Condition	
PO #:	

WHITE: Project File YELLOW: Laboratory PINK: Sampler

PC&B Environmental Laboratories, Inc.

210 Park Road, Oviedo, Florida 32765
Phone: 407-359-7194 Fax: 407-359-7197

09-16-1998

Paul Calligan
Tetra Tech NUS, Inc.
1311 Executive Center Drive, Ste. 220
Tallahassee, FL 32301-

Dear Paul Calligan:

Enclosed are the results of the analysis of your samples received 08/28/1998.

Our laboratory is certified by the Florida DHRS (Lab #E83239) and operates under an FDEP approved Comprehensive Quality Assurance Plan (#900134G). Unless otherwise noted, all results are reported as received. All data were determined in accordance with published procedures (EPA-600/4-79-020), Methods for Chemical Analysis of Water and Wastes, Revised March 1983 and/or Standard Methods for the examination of Water and Wastewater, 18th Edition 1989 and/or Test Methods for Evaluating Solid Waste (EPA-SW-846, Revised January 1995), unless stated otherwise in our CompQapp under method modifications.

If you have any questions, please do not hesitate to give me a call.

Sincerely,

Andrew Harrison
Laboratory Manager

PC&B Environmental Laboratories, Inc.

210 Park Road, Oviedo, Florida 32765
Phone: 407-359-7194 Fax: 407-359-7197

Client : Tetra Tech NUS, Inc.
1311 Executive Center Drive, Ste. 220
Tallahassee, FL 32301-

Contact : Paul Calligan
Phone : (850) 656-5458

Laboratory Reference Number : 98080207

Project Name : NAS Key West Truck Fill Stand
Project Number : 7586
Sample temperature at time of receipt: 4 degrees C

Chain of Custody : 3146

Laboratory ID	Matrix	Client ID	Status	Date/Time Sampled
98080207-1	Soil	A902-PREBURN	RUN	08/27/1998 16:00

Number	Parameter	Description
1	Group Test	RCRA Metals by ICAP in Soil
1	FL-PRO	Petroleum Hydrocarbons
1	EPA 8100	Polynuclear Aromatic Hydrocarbons
1	EPA 8021	Volatile Organics
1	EPA 5050/9252	Total Halogens

Case Narrative

Paul Calligan
Tetra Tech NUS, Inc.
1311 Executive Center Drive, Ste. 220
Tallahassee, FL 32301-

CASE NARRATIVE for Work Order: 98080207
Project Number: 7586
Project Name: NAS Key West Truck Fill Stand

This Case Narrative is a summary of events and/or problems encountered with this Work Order.

For sample requesting EPA 8021 analysis, The GCMS method EPA 8260 was substituted in order to generate the highest quality data at no additional cost.

Analysis of EPA 8100 was performed in place of EPA 8310 due to soil matrix.

Definition of Flags

DL	=	No surrogate result due to dilution or matrix interference.
J	=	Estimated Value, value not accurate.
L	=	Off-scale high. Actual value is greater than value given.
T	=	Value reported is less than the laboratory method detection limit.
V	=	Analyte was detected in the blank and sample.

QC Batch Summary

Paul Calligan
Tetra Tech NUS, Inc.
1311 Executive Center Drive, Ste. 220
Tallahassee, FL 32301-

QC BATCH SUMMARY for Work Order: 98080207
Project Number: 7586
Project Name: NAS Key West Truck Fill Stand

Method	SubNum	QC Batch
EPA 6010 - Arsenic by ICAP		
	-1	9808RC111
EPA 6010 - Barium by ICAP		
	-1	9808RC111
EPA 6010 - Cadmium by ICAP		
	-1	9808RC111
EPA 6010 - Chromium by ICAP		
	-1	9808RC111
EPA 6010 - Lead by ICAP		
	-1	9808RC111
EPA 7471 - Mercury (Total) by Cold Vapor AA		
	-1	9808HG094
FL-PRO - Petroleum Hydrocarbons		
	-1	9809FLRO005
EPA 8100 - Polynuclear Aromatic Hydrocarbons		
	-1	9809PAH006
EPA 6010 - Selenium by ICAP		
	-1	9808RC111
EPA 6010 - Silver by ICAP		
	-1	9808RC111
EPA 5050/9252 - Total Halogens		
	-1	9808TX103
EPA 8021 - Volatile Organics		
	-1	9809MS1007

PC&B Environmental Laboratories, Inc.
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Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West Truck Fill Stand
PROJECT NUMBER: 7586
DATE RECEIVED: 08/28/1998
ANALYTICAL PROTOCOL: EPA 5035/8021

Lab Reference Number :	98080207-1
Client Sample ID :	A902-PREBURN
Date Sampled :	08/27/1998
Date Extracted :	08/28/1998
Date Analyzed :	09/03/1998
Percent Moisture	19.4
Sample Matrix (as Received):	Soil
Analysis Confirmed :	GCMS
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
5	Benzene	6	U	ug/kg	NM
5	Bromobenzene	6	U	ug/kg	NM
5	Bromochloromethane	6	U	ug/kg	NM
5	Bromodichloromethane	6	U	ug/kg	NM
5	Bromoform	6	U	ug/kg	NM
5	Bromomethane	6	U	ug/kg	NM
5	n-Butylbenzene	6	U	ug/kg	NM
5	sec-Butylbenzene	6	U	ug/kg	NM
5	tert-Butylbenzene	6	U	ug/kg	NM
5	Carbon tetrachloride	6	U	ug/kg	NM
5	Chlorobenzene	6	U	ug/kg	NM
5	Chloroethane	6	U	ug/kg	NM
5	Chloroform	6	U	ug/kg	NM
5	Chloromethane	6	U	ug/kg	NM
5	2-Chlorotoluene	6	U	ug/kg	NM
5	4-Chlorotoluene	6	U	ug/kg	NM
5	Dibromochloromethane	6	U	ug/kg	NM
5	1,2-Dibromoethane	6	U	ug/kg	NM
5	Dibromomethane	6	U	ug/kg	NM
5	1,2-Dichlorobenzene	6	U	ug/kg	NM
5	1,3-Dichlorobenzene	6	U	ug/kg	NM
5	1,4-Dichlorobenzene	6	U	ug/kg	NM
5	Dichlorodifluoromethane	6	U	ug/kg	NM
5	1,1-Dichloroethane	6	U	ug/kg	NM
5	1,2-Dichloroethane	6	U	ug/kg	NM
5	1,1-Dichloroethene	6	U	ug/kg	NM
5	cis-1,2-Dichloroethene	6	U	ug/kg	NM
5	trans-1,2-Dichloroethene	6	U	ug/kg	NM
5	1,2-Dichloropropane	6	U	ug/kg	NM
5	1,3-Dichloropropane	6	U	ug/kg	NM
5	2,2-Dichloropropane	6	U	ug/kg	NM
5	1,1-Dichloropropene	6	U	ug/kg	NM
5	Ethylbenzene	6	U	ug/kg	NM
5	Hexachlorobutadiene	6	U	ug/kg	NM
5	Isopropylbenzene	6	U	ug/kg	NM
5	p-Isopropyltoluene	6	U	ug/kg	NM
5	Methylene chloride	29	V	ug/kg	NM
5	Naphthalene	6	U	ug/kg	NM
5	n-Propylbenzene	6	U	ug/kg	NM
5	Styrene	6	U	ug/kg	NM
5	1,1,1,2-Tetrachloroethane	6	U	ug/kg	NM
5	1,1,2,2-Tetrachloroethane	6	U	ug/kg	NM
5	Tetrachloroethene	6	U	ug/kg	NM
5	Toluene	6	U	ug/kg	NM
5	1,2,3-Trichlorobenzene	6	U	ug/kg	NM
5	1,2,4-Trichlorobenzene	6	U	ug/kg	NM
5	1,1,1-Trichloroethane	6	U	ug/kg	NM
5	1,1,2-Trichloroethane	6	U	ug/kg	NM
5	Trichloroethene	6	U	ug/kg	NM
5	Trichlorofluoromethane	6	U	ug/kg	NM
5	1,2,3-Trichloropropane	6	U	ug/kg	NM
5	1,2,4-Trimethylbenzene	14		ug/kg	NM
5	1,3,5-Trimethylbenzene	6	U	ug/kg	NM

PC&B Environmental Laboratories, Inc.
210 Park Road
Oviedo, FL 32765
PHONE: 407-359-7194
FAX: 359-7197

Volatile Organics

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West Truck Fill Stand
PROJECT NUMBER: 7586
DATE RECEIVED: 08/28/1998
ANALYTICAL PROTOCOL: EPA 5035/8021

Lab Reference Number :	98080207-1
Client Sample ID :	A902-PREBURN
Date Sampled :	08/27/1998
Date Extracted :	08/28/1998
Date Analyzed :	09/03/1998
Percent Moisture	19.4
Sample Matrix (as Received):	Soil
Analysis Confirmed :	GCMS
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
5	Vinyl chloride	6	U	ug/kg	NM
5	m&p-Xylenes	6	U	ug/kg	NM
5	o-Xylene	6	U	ug/kg	NM
5	MTBE	6	U	ug/kg	NM
	(Surr) 1,2-Dichloroethane-d4 (%)	94		%	NM
	(Surr) Toluene-d8 (%)	100		%	NM
	(Surr) 4-Bromofluorobenzene (%)	128		%	NM

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Dry Weight basis.

FDEP CompQAPP # 900134G - FHRS Certification # E83239/83353

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Quality Control Report for Method Blank

Volatile Organics

Matrix: Soil
Lab Sample ID: RB-09-03-98
QC Batch ID: 9809MS1007
Result Units: ug/kg

Analysis Date: 09/03/1998
Preparation Date: 09/03/1998
Method: EPA 8021
Analyst: NM

Analyte	Result	Flag	Analyte	Result	Flag
Benzene	5	U	Bromobenzene	5	U
Bromochloromethane	5	U	Bromodichloromethane	5	U
Bromoform	5	U	Bromomethane	5	U
n-Butylbenzene	5	U	sec-Butylbenzene	5	U
tert-Butylbenzene	5	U	Carbon tetrachloride	5	U
Chlorobenzene	5	U	Chloroethane	5	U
Chloroform	5	U	Chloromethane	5	U
2-Chlorotoluene	5	U	4-Chlorotoluene	5	U
Dibromochloromethane	5	U	1,2-Dibromoethane	5	U
Dibromomethane	5	U	1,2-Dichlorobenzene	5	U
1,3-Dichlorobenzene	5	U	1,4-Dichlorobenzene	5	U
Dichlorodifluoromethane	5	U	1,1-Dichloroethane	5	U
1,2-Dichloroethane	5	U	1,1-Dichloroethene	5	U
cis-1,2-Dichloroethene	5	U	trans-1,2-Dichloroethene	5	U
1,2-Dichloropropane	5	U	1,3-Dichloropropane	5	U
2,2-Dichloropropane	5	U	1,1-Dichloropropene	5	U
Ethylbenzene	5	U	Hexachlorobutadiene	5	U
Isopropylbenzene	5	U	p-Isopropyltoluene	5	U
Methylene chloride	15		Naphthalene	5	U
n-Propylbenzene	5	U	Styrene	5	U
1,1,1,2-Tetrachloroethane	5	U	1,1,2,2-Tetrachloroethane	5	U
Tetrachloroethene	5	U	Toluene	5	U
1,2,3-Trichlorobenzene	5	U	1,2,4-Trichlorobenzene	5	U
1,1,1-Trichloroethane	5	U	1,1,2-Trichloroethane	5	U
Trichloroethene	5	U	Trichlorofluoromethane	5	U
1,2,3-Trichloropropane	5	U	1,2,4-Trimethylbenzene	5	U
1,3,5-Trimethylbenzene	5	U	Vinyl chloride	5	U
m&p-Xylenes	5	U	o-Xylene	5	U
(Surr) 1,2-Dichloroethane-d4 (%)	111		(Surr) Toluene-d8 (%)	104	
(Surr) 4-Bromofluorobenzene (%)	118		MTBE	5	U

Quality Control Report for LCS Analysis

Volatile Organics

Matrix: Soil
Lab Sample ID: LCS
QC Batch ID: 9809MS1007
LCS Units: ug/kg

Analysis Date: 09/03/1998
Preparation Date: 09/03/1998
Method: EPA 8021
Analyst: NM

Analyte	LCS Conc	LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Benzene	20	21	105	**69**	**139**
Carbon tetrachloride	20	18	90	**64**	**134**
Chlorobenzene	20	20	100	**77**	**127**
1,4-Dichlorobenzene	20	24	120	**80**	**125**
1,1-Dichloroethene	20	22	110	**64**	**137**
Ethylbenzene	20	19	95	**66**	**128**
Toluene	20	17	85	**65**	**135**
Trichloroethene	20	19	95	**69**	**136**

Quality Control Report for Spike/Spike Duplicate Analysis

Volatile Organics

Matrix: Soil
Lab Sample ID: 9809007-3
QC Batch ID: 9809MS1007
Spike Units: ug/kg

Analysis Date: 09/03/1998
Preparation Date: 09/03/1998
Method: EPA 8021
Analyst: NM

Analyte	Spike Amount	Sample Result	Spike Result	Spike Percent Recovery	MSD Result	MSD Percent Recovery	RPD
Benzene	50	0	49	98	53	106	8
Carbon tetrachloride	50	0	57	114	51	102	11
Chlorobenzene	50	0	48	96	51	102	6
1,4-Dichlorobenzene	50	0	54	108	60	120	11
1,1-Dichloroethene	50	0	52	104	52	104	0
Ethylbenzene	50	0	49	98	49	98	0
Toluene	50	0	42	84	45	90	7
Trichloroethene	50	0	53	106	52	104	2

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
Benzene	59	144	18
Carbon tetrachloride	49	148	15
Chlorobenzene	67	130	18
1,4-Dichlorobenzene	56	141	18
1,1-Dichloroethene	52	143	18
Ethylbenzene	42	157	19
Toluene	54	136	19
Trichloroethene	59	144	18

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Polynuclear Aromatic Hydrocarb

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West Truck Fill Stand
PROJECT NUMBER: 7586
DATE RECEIVED: 08/28/1998
ANALYTICAL PROTOCOL: EPA 8100

Lab Reference Number :	98080207-1
Client Sample ID :	A902-PREBURN
Date Sampled :	08/27/1998
Date Extracted :	09/01/1998
Date Analyzed :	09/02/1998
Percent Moisture	19.4
Sample Matrix (as Received):	Soil
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag		Units	Analyst
100	Acenaphthene	125	U	ug/kg	ELA
100	Acenaphthylene	125	U	ug/kg	ELA
100	Anthracene	125	U	ug/kg	ELA
100	Benzo(a)anthracene	125	U	ug/kg	ELA
100	Benzo(a)pyrene	125	U	ug/kg	ELA
100	Benzo(b)fluoranthene	125	U	ug/kg	ELA
100	Benzo(ghi)perylene	125	U	ug/kg	ELA
100	Benzo(k)fluoranthene	125	U	ug/kg	ELA
100	Chrysene	125	U	ug/kg	ELA
100	Dibenzo(ah)anthracene	125	U	ug/kg	ELA
100	Fluoranthene	125	U	ug/kg	ELA
100	Fluorene	125	U	ug/kg	ELA
100	Indeno(123-cd)pyrene	125	U	ug/kg	ELA
100	Naphthalene	125	U	ug/kg	ELA
100	1-Methyl naphthalene	125	U	ug/kg	ELA
100	2-Methyl naphthalene	125	U	ug/kg	ELA
100	Phenanthrene	125	U	ug/kg	ELA
100	Pyrene	125	U	ug/kg	ELA
	(Surr) 2-Fluorobiphenyl (%)	57		%	ELA

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Dry Weight basis.

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Quality Control Report for Spike Analysis

Polynuclear Aromatic Hydrocarbons

Matrix: Soil
Lab Sample ID: 9808142-3
QC Batch ID: 9809PAH006
Spike Units: ug/kg

Analysis Date: 09/02/1998
Preparation Date: 09/01/1998
Method: EPA 8100
Analyst: ELA

Analyte	Spike Amount	Sample Result	Spike Result	Percent Recovery	Lower Control Limit	Upper Control Limit
(Surr) 2-Fluorobiphenyl	100	0	80	80	**45**	**101**
Acenaphthene	50	0	54	108	**46**	**125**
Acenaphthylene	50	0	41	82	**42**	**105**
Anthracene	50	0	56	112	**53**	**132**
Benzo(a)anthracene	50	0	45	90	**41**	**121**
Benzo(a)pyrene	50	0	46	92	**45**	**119**
Benzo(b)fluoranthene	50	0	56	112	**44**	**125**
Benzo(ghi)perylene	50	0	44	88	**37**	**120**
Benzo(k)fluoranthene	50	0	45	90	**44**	**126**
Chrysene	50	0	45	90	**48**	**117**
Dibenzo(ah)anthracene	50	0	46	92	**39**	**123**
Fluoranthene	50	0	47	94	**49**	**118**
Fluorene	50	0	44	88	**44**	**112**
Indeno(123-cd)pyrene	50	0	46	92	**36**	**124**
Naphthalene	50	0	38	76	**38**	**102**
Phenanthrene	50	0	44	88	**45**	**118**
Pyrene	50	0	47	94	**49**	**120**

Quality Control Report for Method Blank

Polynuclear Aromatic Hydrocarbons

Matrix: Soil
Lab Sample ID: RB-09-01-98
QC Batch ID: 9809PAH006
Result Units: ug/kg

Analysis Date: 09/02/1998
Preparation Date: 09/01/1998
Method: EPA 8100
Analyst: ELA

Analyte	Result	Flag	Analyte	Result	Flag
Acenaphthene	100	U	Acenaphthylene	100	U
Anthracene	100	U	Benzo(a)anthracene	100	U
Benzo(a)pyrene	100	U	Benzo(b)fluoranthene	100	U
Benzo(ghi)perylene	100	U	Benzo(k)fluoranthene	100	U
Chrysene	100	U	Dibenzo(ah)anthracene	100	U
Fluoranthene	100	U	Fluorene	100	U
Indeno(123-cd)pyrene	100	U	Naphthalene	100	U
1-Methyl naphthalene	100	U	2-Methyl naphthalene	100	U
Phenanthrene	100	U	Pyrene	100	U
(Surr) 2-Fluorobiphenyl (%)	73				

Quality Control Report for LCS/LCS Duplicate Analysis

Polynuclear Aromatic Hydrocarbons

Matrix: Soil
Lab Sample ID: LCS
QC Batch ID: 9809PAH006
LCS Units: ug/kg

Analysis Date: 09/02/1998
Preparation Date: 09/01/1998
Method: EPA 8100
Analyst: ELA

Analyte	LCS Conc		LCS Result	LCS Percent Recovery	LCSD Result	LCSD Percent Recovery	RPD
(Surr) 2-Fluorobiphenyl	100	0	78	78	77	77	1
Acenaphthene	50	0	50	100	51	102	2
Acenaphthylene	50	0	39	78	38	76	3
Anthracene	50	0	52	104	52	104	0
Benzo(a)anthracene	50	0	40	80	41	82	2
Benzo(a)pyrene	50	0	43	86	43	86	0
Benzo(b)fluoranthene	50	0	52	104	50	100	4
Benzo(ghi)perylene	50	0	41	82	41	82	0
Benzo(k)fluoranthene	50	0	43	86	43	86	0
Chrysene	50	0	42	84	43	86	2
Dibenzo(ah)anthracene	50	0	43	86	44	88	2
Fluoranthene	50	0	44	88	44	88	0
Fluorene	50	0	41	82	41	82	0
Indeno(123-cd)pyrene	50	0	42	84	42	84	0
Naphthalene	50	0	36	72	35	70	3
Phenanthrene	50	0	42	84	42	84	0
Pyrene	50	0	44	88	45	90	2

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
SS_2-Fluorobiphenyl	51	100	11
Acenaphthene	62	125	11
Acenaphthylene	55	100	9
Anthracene	64	128	11
Benzo(a)anthracene	54	110	11
Benzo(a)pyrene	56	114	11
Benzo(b)fluoranthene	53	119	13
Benzo(ghi)perylene	50	112	13
Benzo(k)fluoranthene	53	119	13
Chrysene	53	114	12
Dibenzo(ah)anthracene	51	116	13
Fluoranthene	58	110	10
Fluorene	54	107	11
Indeno(123-cd)pyrene	51	115	13
Naphthalene	53	94	9
Phenanthrene	53	112	12
Pyrene	60	111	10

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Petroleum Hydrocarbons

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West Truck Fill Stand
PROJECT NUMBER: 7586
DATE RECEIVED: 08/28/1998
ANALYTICAL PROTOCOL: FL-PRO

Lab Reference Number :	98080207-1
Client Sample ID :	A902-PREBURN
Date Sampled :	08/27/1998
Date Extracted :	09/01/1998
Date Analyzed :	09/02/1998
Percent Moisture	19.4
Sample Matrix (as Received):	Soil
Analysis Confirmed :	No
Dilution Factor :	1

MDL	Analyte	Results/Flag	Units	Analyst
4.0	Total PHS	16.1	mg/kg	ELA
	(Surr) C-39 (%)	80	%	ELA

U = Undetected. The value preceeding the 'U' is the MDL for the analyte, based on dilution. Results reported on a Dry Weight basis.

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Quality Control Report for Spike Analysis

INORGANICS

Analyte		Spike Amount	Sample Result	Spike Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Method: FL-PRO	QC Batch: 9809FLRO005	Sample ID: 9808142-2	Date Prep: 09/01/1998		Date Anal: 09/02/1998	Analyst: ELA	
SS_C-39		100.0 mg/kg	0.0	90.0	90	5	141
Method: FL-PRO	QC Batch: 9809FLRO005	Sample ID: 9808142-2	Date Prep: 09/01/1998		Date Anal: 09/02/1998	Analyst: ELA	
Total PHS		5.0 mg/kg	0.0	3.9	78	54	111

Quality Control Report for Method Blank

INORGANICS

Analyte	Units	Result	Flag	QC Batch ID	Analyst
Method: FL-PRO QC Batch: 9809FLRO005 Sample ID: RB-09-01-98 Date Prep: 09/01/1998 Date Anal: 09/02/1998 Analyst: ELA					
Total PHS	mg/kg	4.0	U	9809FLRO005	ELA
Method: FL-PRO QC Batch: 9809FLRO005 Sample ID: RB-09-01-98 Date Prep: 09/01/1998 Date Anal: 09/02/1998 Analyst: ELA					
(Surr) C-39 (%)	%	78.0		9809FLRO005	ELA

Quality Control Report for LCS/LCS Duplicate Analysis

INORGANICS

Analyte		LCS Conc	LCS Result	Percent Recovery	LCSD Result	Percent Recovery	RPD
Method: FL-PRO	QC Batch: 9809FLRO005	Sample ID: LCS	Date Prep: 09/01/1998	Date Anal: 09/02/1998	Analyst: ELA		
SS_C-39		100.0 mg/kg	87.0	87	91.0	91	4
Method: FL-PRO	QC Batch: 9809FLRO005	Sample ID: LCS	Date Prep: 09/01/1998	Date Anal: 09/02/1998	Analyst: ELA		
Total PHS		5.0 mg/kg	4.2	84	4.1	82	2

Quality Control Limits

Analyte	Lower Limit	Upper Limit	RPD
SS_C-39	0	145	33
Total PHS	55	110	11

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Report of Analysis

CLIENT NAME: Tetra Tech NUS, Inc.
PROJECT NAME: NAS Key West Truck Fill Stand
PROJECT NUMBER: 7586
DATE RECEIVED: 08/28/1998

Lab Reference Number :	98080207-1
Client Sample ID :	A902-PREBURN
Date Sampled :	08/27/1998
Percent Moisture	19.4
Sample Matrix (as Received):	Soil

Method	Parameter	Results/Flag		Units	Analyst	Date Prep	Date Anal	MDL
EPA 6010	Arsenic, Total	1.6		mg/kg	GG	08/28/1998	08/31/1998	0.5
EPA 6010	Barium, Total	5.2		mg/kg	GG	08/28/1998	08/31/1998	2.0
EPA 6010	Cadmium, Total	0.1	U	mg/kg	GG	08/28/1998	08/31/1998	0.1
EPA 6010	Chromium, Total	3.0		mg/kg	GG	08/28/1998	08/31/1998	0.1
EPA 6010	Lead, Total	2.7		mg/kg	GG	08/28/1998	08/31/1998	0.3
EPA 7471	Mercury, Total	0.1	U	mg/kg	SH	08/28/1998	08/28/1998	0.1
EPA 6010	Selenium, Total	0.6	U	mg/kg	GG	08/28/1998	08/31/1998	0.5
EPA 6010	Silver, Total	0.6	U	mg/kg	GG	08/28/1998	08/31/1998	0.5
EPA 5050/9252	Total Halogens	620	U	mg/kg	SH	08/28/1998	08/28/1998	500

U = Undetected. The value preceeding the 'U' is the MDL for the analyte. Results reported on a Dry Weight basis (where applicable).

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Quality Control Report for Method Blank

INORGANICS

Analyte		Units	Result	Flag	QC Batch ID		Analyst
Method: EPA 6010A	QC Batch: 9808RC111	Sample ID: RB-08-28-98		Date Prep: 08/28/1998		Date Anal: 08/31/1998	Analyst: GG
Arsenic, Total		mg/kg	0.5	U	9808RC111		GG
Method: EPA 6010A	QC Batch: 9808RC111	Sample ID: RB-08-28-98		Date Prep: 08/28/1998		Date Anal: 08/31/1998	Analyst: GG
Barium, Total		mg/kg	2.0	U	9808RC111		GG
Method: EPA 6010A	QC Batch: 9808RC111	Sample ID: RB-08-28-98		Date Prep: 08/28/1998		Date Anal: 08/31/1998	Analyst: GG
Cadmium, Total		mg/kg	0.1	U	9808RC111		GG
Method: EPA 6010A	QC Batch: 9808RC111	Sample ID: RB-08-28-98		Date Prep: 08/28/1998		Date Anal: 08/31/1998	Analyst: GG
Chromium, Total		mg/kg	0.1	U	9808RC111		GG
Method: EPA 6010A	QC Batch: 9808RC111	Sample ID: RB-08-28-98		Date Prep: 08/28/1998		Date Anal: 08/31/1998	Analyst: GG
Lead, Total		mg/kg	0.3	U	9808RC111		GG
Method: EPA 6010A	QC Batch: 9808RC111	Sample ID: RB-08-28-98		Date Prep: 08/28/1998		Date Anal: 08/31/1998	Analyst: GG
Selenium, Total		mg/kg	0.5	U	9808RC111		GG
Method: EPA 6010A	QC Batch: 9808RC111	Sample ID: RB-08-28-98		Date Prep: 08/28/1998		Date Anal: 08/31/1998	Analyst: GG
Silver, Total		mg/kg	0.5	U	9808RC111		GG
Method: EPA 7471	QC Batch: 9808HG094	Sample ID: RB-08-28-98		Date Prep: 08/28/1998		Date Anal: 08/28/1998	Analyst: SH
Mercury, Total		mg/kg	0.1	U	9808HG094		SH

Quality Control Report for Duplicate Analysis

INORGANICS

Analyte			Sample Result	Dupe Result	RPD	Control Limit
Method: EPA 6010A	QC Batch: 9808RC111	Sample ID: 98080209-1	Date Prep: 08/28/1998	Date Anal: 08/31/1998		Analyst: GG
Arsenic, Total		mg/kg	1.5	1.3	14	15
Method: EPA 6010A	QC Batch: 9808RC111	Sample ID: 98080209-1	Date Prep: 08/28/1998	Date Anal: 08/31/1998		Analyst: GG
Barium, Total		mg/kg	30.0	29.0	3	9
Method: EPA 6010A	QC Batch: 9808RC111	Sample ID: 98080209-1	Date Prep: 08/28/1998	Date Anal: 08/31/1998		Analyst: GG
Cadmium, Total		mg/kg	0.2	0.2	0	8
Method: EPA 6010A	QC Batch: 9808RC111	Sample ID: 98080209-1	Date Prep: 08/28/1998	Date Anal: 08/31/1998		Analyst: GG
Chromium, Total		mg/kg	4.5	4.6	2	10
Method: EPA 6010A	QC Batch: 9808RC111	Sample ID: 98080209-1	Date Prep: 08/28/1998	Date Anal: 08/31/1998		Analyst: GG
Lead, Total		mg/kg	105.0	106.0	1	10
Method: EPA 6010A	QC Batch: 9808RC111	Sample ID: 98080209-1	Date Prep: 08/28/1998	Date Anal: 08/31/1998		Analyst: GG
Selenium, Total		mg/kg	0.0	0.0	0	10
Method: EPA 6010A	QC Batch: 9808RC111	Sample ID: 98080209-1	Date Prep: 08/28/1998	Date Anal: 08/31/1998		Analyst: GG
Silver, Total		mg/kg	0.0	0.0	0	9
Method: EPA 7471	QC Batch: 9808HG094	Sample ID: 98080192-1	Date Prep: 08/28/1998	Date Anal: 08/28/1998		Analyst: SH
Mercury, Total		mg/kg	0.00	0.00	0	9
Method: EPA 5050/9252	QC Batch: 9808TX103	Sample ID: 98080192-1	Date Prep: 08/28/1998	Date Anal: 08/28/1998		Analyst: SH
TX as Chloride		mg/kg	0	0	0	7

Quality Control Report for LCS Analysis

INORGANICS

Analyte		LCS Conc		LCS Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Method: EPA 6010A Arsenic, Total	QC Batch: 9808RC111	Sample ID: LCS 20.0 mg/kg	Date Prep: 08/28/1998 0.0	Date Anal: 08/31/1998 20.5	103	Analyst: GG 80	119
Method: EPA 6010A Barium, Total	QC Batch: 9808RC111	Sample ID: LCS 50.0 mg/kg	Date Prep: 08/28/1998 0.0	Date Anal: 08/31/1998 52.5	105	Analyst: GG 80	120
Method: EPA 6010A Cadmium, Total	QC Batch: 9808RC111	Sample ID: LCS 10.0 mg/kg	Date Prep: 08/28/1998 0.0	Date Anal: 08/31/1998 10.3	103	Analyst: GG 78	120
Method: EPA 6010A Chromium, Total	QC Batch: 9808RC111	Sample ID: LCS 10.0 mg/kg	Date Prep: 08/28/1998 0.0	Date Anal: 08/31/1998 10.3	103	Analyst: GG 80	123
Method: EPA 6010A Lead, Total	QC Batch: 9808RC111	Sample ID: LCS 10.0 mg/kg	Date Prep: 08/28/1998 0.0	Date Anal: 08/31/1998 10.4	104	Analyst: GG 77	124
Method: EPA 6010A Selenium, Total	QC Batch: 9808RC111	Sample ID: LCS 10.0 mg/kg	Date Prep: 08/28/1998 0.0	Date Anal: 08/31/1998 9.6	96	Analyst: GG 75	121
Method: EPA 6010A Silver, Total	QC Batch: 9808RC111	Sample ID: LCS 10.0 mg/kg	Date Prep: 08/28/1998 0.0	Date Anal: 08/31/1998 10.0	100	Analyst: GG 74	120
Method: EPA 7471 Mercury, Total	QC Batch: 9808HG094	Sample ID: LCS 0.17 mg/kg	Date Prep: 08/28/1998 0.00	Date Anal: 08/28/1998 0.17	100	Analyst: SH 85	122
Method: EPA 5050/9252 TX as Chloride	QC Batch: 9808TX103	Sample ID: LCS 1000 mg/kg	Date Prep: 08/28/1998 0	Date Anal: 08/28/1998 1000	100	Analyst: SH 70	120

Quality Control Report for Spike Analysis

INORGANICS

Analyte		Spike Amount	Sample Result	Spike Result	Percent Recovery	Lower Control Limit	Upper Control Limit
Method: EPA 6010A Arsenic, Total	QC Batch: 9808RC111	Sample ID: 98080207-1 20.0 mg/kg	Date Prep: 08/28/1998 1.3	Date Anal: 08/31/1998 19.6	92	Analyst: GG 70	114
Method: EPA 6010A Barium, Total	QC Batch: 9808RC111	Sample ID: 98080207-1 50.0 mg/kg	Date Prep: 08/28/1998 4.2	Date Anal: 08/31/1998 46.3	84	Analyst: GG 71	123
Method: EPA 6010A Cadmium, Total	QC Batch: 9808RC111	Sample ID: 98080207-1 10.0 mg/kg	Date Prep: 08/28/1998 0.0	Date Anal: 08/31/1998 8.0	80	Analyst: GG 70	113
Method: EPA 6010A Chromium, Total	QC Batch: 9808RC111	Sample ID: 98080207-1 10.0 mg/kg	Date Prep: 08/28/1998 2.4	Date Anal: 08/31/1998 10.9	85	Analyst: GG 69	126
Method: EPA 6010A Lead, Total	QC Batch: 9808RC111	Sample ID: 98080207-1 10.0 mg/kg	Date Prep: 08/28/1998 2.2	Date Anal: 08/31/1998 11.4	92	Analyst: GG 66	123
Method: EPA 6010A Selenium, Total	QC Batch: 9808RC111	Sample ID: 98080207-1 10.0 mg/kg	Date Prep: 08/28/1998 0.0	Date Anal: 08/31/1998 8.0	80	Analyst: GG 59	107
Method: EPA 6010A Silver, Total	QC Batch: 9808RC111	Sample ID: 98080207-1 10.0 mg/kg	Date Prep: 08/28/1998 0.0	Date Anal: 08/31/1998 9.0	90	Analyst: GG 65	114
Method: EPA 7471 Mercury, Total	QC Batch: 9808HG094	Sample ID: 98080202-3 0.17 mg/kg	Date Prep: 08/28/1998 0.00	Date Anal: 08/28/1998 0.16	94	Analyst: SH 78	131
Method: EPA 5050/9252 TX as Chloride	QC Batch: 9808TX103	Sample ID: 98080202-3 1000 mg/kg	Date Prep: 08/28/1998 0	Date Anal: 08/28/1998 920	92	Analyst: SH 74	113

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TETRA TECH INC 220
Brown & Root Environmental
REPORT TO ADDRESS: 1311 EXECUTIVE CNT. BLVD
TALL. FL. 32301
TELEPHONE: 850-656-5458 FAX: 850-656-7403

SITE MANAGER: PAUL CALLIGAN
PROJECT NAME: NAS KEY WEST TRUCK FILL STAND
BRE PROJECT NO.: 7586 CODE:
P.O. NO.:

SHIPPED TO: PCB LAB. OVEIDS
(LABORATORY NAME, CITY)

PAGE 1 OF 1

CHAIN OF CUSTODY RECORD

SAMPLED BY (PRINT): P. HALVERSON / P. CALLIGAN
SAMPLER SIGNATURE:

LABORATORY ANALYSIS

☒ STANDARD TAT ☐ RUSH
☐ 24 HR. ☐ 48 HR. ☐ 72 HR. ☐ 7 DAYS
RESULTS DUE DATE:

LAB NO.	DATE	TIME	SAMPLE IDENTIFICATION	SAMPLE TYPE COMP.	SAMPLE TYPE GRAB	MATRIX	PARAMETERS / PRES. TYPE: VOC	TOTAL HALIDES	8021	8310 PAH	PCB/PCB					NUMBER OF CONTAINERS	COMMENTS
	8/21/98	1600	AR02-PREBURN	X		S	3	1	1	1	1					7	KEPT ON ICE 4°C
TOTAL NUMBER OF CONTAINERS							3	1	1	1	1					7	

EMPTY BOTTLES RELINQUISHED BY (SIGNATURE) ①	SEAL INTACT? YES NO N/A	DATE: TIME:	EMPTY BOTTLES RECEIVED BY (SIGNATURE) ②	SEAL INTACT? YES NO N/A	DATE: 8/25/98 TIME:
RELINQUISHED BY (SIGNATURE) ③	SEAL INTACT? YES NO N/A	DATE: 8/27/98 TIME: 1700	RECEIVED BY (SIGNATURE) ④	SEAL INTACT? YES NO N/A	DATE: TIME:
RELINQUISHED BY (SIGNATURE) ⑤	SEAL INTACT? YES NO N/A	DATE: TIME:	RECEIVED BY (SIGNATURE) ⑥	SEAL INTACT? YES NO N/A	DATE: TIME:

SPECIAL INSTRUCTIONS:

LABORATORY REMARKS:

SAMPLE CONTAINERS PRECLEANED BY: ☐ BRE ☐ LABORATORY ☐ MANUFACTURER

METHOD OF SHIPMENT: FED EX

BILL OF LADING NO.: 8070411378 53

WHITE-FULLY EXECUTED COPY
YELLOW-RECEIVING LABORATORY COPY
PINK-SAMPLERS' COPY/QA COPY
GOLDENROD-SITE MANAGERS' COPY

SAMPLING TEAM: P. HALVERSON, P. CALLIGAN

RECEIVED FOR LABORATORY BY (SIGNATURE):
DATE: 8/25/98 TIME: 9:30

No. 3146

NO. 39150 (3/97)