N65928.AR.002801
NTC ORLANDO
5090.3a

STOCKPILED SOIL REMOVAL AND TREATMENT FOR BUILDING 2273 ANALYTICAL DATA AND SUPPORT DOCUMENTS NTC ORLANDO FL
6/14/1999
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

248

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

June 14, 1999

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

RE: Stockpiled Soil Removal and Treatment, Building 2273, Main Base, Naval Training Center, Orlando, FL

Dear Mr. Hansel:

I have completed my review of the Stockpiled Soil Removal and Treatment Report for Building 2273, Main Base, NTC Orlando, dated May 12, 1999 (received May 17, 1999), prepared and submitted by Harding Lawson Associates (HLA). The report adequately documents the proper treatment and recycling of the stockpiled soil.

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

Sincerely,

David P. Grabka
Remedial Project Manager

cc: Wayne Hansel, Navy SouthDiv
Barbara Nwokike, Navy SouthDiv
Nancy Rodriguez, USEPA Region 4
Richard Allen, HLA, Jacksonville
Steve McCoy, TetraTech NUS, Oak Ridge
Alan Aiken, CH2M Hill, Orlando

TJB TB JJC JJC ESN ESN

Harding Lawson Associates

May 12, 1999

Document No.: 02530.110

Mr. David P. Grabka
Remedial Project Manager
State of Florida Department of Environmental Protection
Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Subject: Stockpiled Soil Removal and Treatment
Building 2273, Main Base
Naval Training Center, Orlando, Florida
CTO 107, Contract No.: N62467-89-D-0317

Dear Mr. Grabka:

Petroleum-impacted soil was excavated and stockpiled at Building 2273 (site) located at the Main Base in Orlando, Florida. The soil was excavated by the City of Orlando's contractor during the installation of the utilities in the right-of-way located along the southern boundary of the Main Base Naval Training Center. Prior to disposal of the petroleum-impacted soil, pre-burn soil samples were collected by Tetra Tech, NUS for laboratory analysis. The analytical results of the pre-burn soil samples are included in Attachment A.

On February 25, 1999 approximately 151 tons of stockpiled, petroleum-impacted soil was transported by the Navy's Environmental Detachment Charleston, from the above referenced building to Soil Treatment Services of Kissimmee, Florida for thermal treatment. Copies of the Waste Manifests are included in Attachment B. Copies of the Post-Burn analytical data and the Certificate of Materials Recycling are included in Attachment C.

Should you have any questions regarding this information, please call the undersigned at (407) 895-8845.

Very Truly Yours,
HARDING LAWSON ASSOCIATES

Christopher Pisarri
Staff Geologist

Manuel Alonso, P.G.
Senior Geologist
P.G. No. 0001256

cc: Wayne Hansel, Southern Division
Lt. Gary Whipple, NTC, Orlando
Nancy Rodriguez, USEPA Region IV
Rick Allen, Harding Lawson Associates
Nick Ugolini, Southern Division

Attachments: A, B and C

Attachment A
Pre-burn Analytical Data

ACCUTEST

02/17/99

Technical Report for

Tetra Tech, NUS

NTC Orlando

7781/CTO-0050

Accutest Job Number: F3661

Report to:

Tetra Tech, NUS
800 Oak Ridge Turnpike
Suite A-600
Oak Ridge, TN 37830

ATTN: Mike Campbell

Total number of pages in report:

Harry Behzadi, Ph.D.
Laboratory Director

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

ACCUTEST.

Sample Summary

Tetra Tech, NUS

Date: 02/17/99
Job No: F3661

NTC Orlando
Project No: 7781/CTO-0050

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F3661-1	02/11/99	07:55	PC	02/11/99	SO	Soil	7241-SB01-0304
F3661-2	02/11/99	13:35	PC	02/11/99	SO	Soil	7151-SB12-0506
F3661-3	02/11/99	14:45	PC	02/11/99	SO	Soil	2273-SB01
F3661-4	02/11/99	15:20	PC	02/11/99	SO	Soil	2426-SB01-0304

ACCUTEST.

Report of Analysis

Client Sample ID:	2273-SB01		
Lab Sample ID:	F3661-3	Date Sampled:	02/11/99
Matrix:	SO - Soil	Date Received:	02/11/99
Method:	SW846 8260B	Percent Solids:	93.5
Project:	NTC Orlando		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K002676.I	1	02/13/99	RAW	n/a	n/a	VK46
Run #2							

VOA 8021 List

CAS No.	Compound	Result	RDL	Units	Q
71-43-2	Benzene	ND	2.2	ug/kg	
75-27-4	Bromodichloromethane	ND	2.2	ug/kg	
75-25-2	Bromoform	ND	2.2	ug/kg	
108-90-7	Chlorobenzene	ND	2.2	ug/kg	
75-00-3	Chloroethane	ND	2.2	ug/kg	
67-66-3	Chloroform	ND	2.2	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	2.2	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.2	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	2.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.2	ug/kg	
124-48-1	Dibromochloromethane	ND	2.2	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	2.2	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	2.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	ug/kg	
541-73-1	m-Dichlorobenzene	ND	2.2	ug/kg	
95-50-1	o-Dichlorobenzene	ND	2.2	ug/kg	
106-46-7	p-Dichlorobenzene	ND	2.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	2.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	ug/kg	
100-41-4	Ethylbenzene	ND	2.2	ug/kg	
74-83-9	Methyl bromide	ND	5.4	ug/kg	
74-87-3	Methyl chloride	ND	5.4	ug/kg	
75-09-2	Methylene chloride	ND	5.4	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	2.2	ug/kg	
108-88-3	Toluene	ND	2.2	ug/kg	
79-01-6	Trichloroethylene	ND	2.2	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.2	ug/kg	
75-01-4	Vinyl chloride	ND	5.4	ug/kg	
1330-20-7	Xylene (total)	ND	6.5	ug/kg	

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

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

ACCUTEST

Report of Analysis

Client Sample ID:	2273-SB01		
Lab Sample ID:	F3661-3	Date Sampled:	02/11/99
Matrix:	SO - Soil	Date Received:	02/11/99
Method:	SW846 8260B	Percent Solids:	93.5
Project:	NTC Orlando		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K002676.D	1	02/13/99	RAW	n/a	n/a	VK46
Run #2							

VOA 8021 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		80-120%
2037-26-5	Toluene-D8	95%		81-117%
460-00-4	4-Bromofluorobenzene	107%		74-121%
17060-07-0	1,2-Dichloroethane-D4	104%		80-120%

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

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

ACCUTEST.

Report of Analysis

Client Sample ID:	2273-SB01		
Lab Sample ID:	F3661-3	Date Sampled:	02/11/99
Matrix:	SO - Soil	Date Received:	02/11/99
Method:	SW846 3550B/8270C	Percent Solids:	93.5
Project:	NTC Orlando		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L001098.D	1	02/12/99	NF	02/12/99	OP680	SL70
Run #2							

BN PAH List

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	ND	180	ug/kg	
208-96-8	Acenaphthylene	ND	180	ug/kg	
120-12-7	Anthracene	ND	180	ug/kg	
56-55-3	Benzo(a)anthracene	ND	180	ug/kg	
50-32-8	Benzo(a)pyrene	64.4	89	ug/kg	J
205-99-2	Benzo(b)fluoranthene	ND	180	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	180	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	180	ug/kg	
218-01-9	Chrysene	ND	180	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	89	ug/kg	
206-44-0	Fluoranthene	ND	180	ug/kg	
86-73-7	Fluorene	ND	180	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	180	ug/kg	
90-12-0	1-Methylnaphthalene	ND	180	ug/kg	
91-57-6	2-Methylnaphthalene	ND	180	ug/kg	
91-20-3	Naphthalene	ND	180	ug/kg	
85-01-8	Phenanthrene	ND	180	ug/kg	
129-00-0	Pyrene	244	180	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	86%		25-121%
4165-62-2	Phenol-d5	88%		24-113%
118-79-6	2,4,6-Tribromophenol	88%		19-122%
4165-60-0	Nitrobenzene-d5	94%		23-120%
321-60-8	2-Fluorobiphenyl	88%		30-115%
1718-51-0	Terphenyl-d14	99%		18-137%

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

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

ACCUTEST.

Report of Analysis

Client Sample ID:	2273-SB01		
Lab Sample ID:	F3661-3	Date Sampled:	02/11/99
Matrix:	SO - Soil	Date Received:	02/11/99
Method:	FLORIDA-PRO	Percent Solids:	93.5
Project:	NTC Orlando		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P03259.D	1	02/17/99	SKW	02/16/99	OP683	GOP157
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C8-C40)	415	89	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	124%		40-140%

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

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

ACCUTEST

Report of Analysis

Client Sample ID:	2273-SB01		
Lab Sample ID:	F3661-3	Date Sampled:	02/11/99
Matrix:	SO - Soil	Date Received:	02/11/99
		Percent Solids:	93.5
Project:	NTC Orlando		

Metals Analysis

Analyte	Result	RDL	Units	DF	Prep	Analyzed	By	Method
Arsenic	0.29 U	1.1	mg/kg	1	02/15/99	02/16/99	JK	SW846 6010A
Barium	9.4 B	21.4	mg/kg	1	02/15/99	02/16/99	JK	SW846 6010A
Cadmium	0.04 B	0.43	mg/kg	1	02/15/99	02/16/99	JK	SW846 6010A
Chromium	2.3	1.1	mg/kg	1	02/15/99	02/16/99	JK	SW846 6010A
Lead	3.5 B	10.7	mg/kg	1	02/15/99	02/16/99	JK	SW846 6010A
Mercury	0.045 U	0.045	mg/kg	1	02/16/99	02/16/99	JK	SW846 7471A
Selenium	0.33 U	10.7	mg/kg	1	02/15/99	02/16/99	JK	SW846 6010A
Silver	0.09 U	1.1	mg/kg	1	02/15/99	02/16/99	JK	SW846 6010A

RDL = Reported Detection Limit

BOTTORF Associates inc.

Soil Analysis Report

6729 Edgewater Commerce Parkway · Orlando, Florida · 32810-4278 · Phone 407 296-0646 · Fax: 407 299-7053

Sample Received From: Soil Treatment Services
3505 Pugmill Road
Kissimmee, FL 34741

Lab Control Number: 18473

Sample Name: March 4, 1999 Composite #2
Date Received: March 5, 1999
Date Reported: March 11, 1999

Parameter	Analysis Method	Reporting Units	Method Detection Limit	Analysis Date	Analyst	Result
Bromoform	8021	ug/kg	1.2	3/8/99	KB	<1.2
1,1,2,2-Tetrachlorethane	8021	ug/kg	1.0	3/8/99	KB	<1.0
1,2,3-Trichloropropane	8021	ug/kg	5.7	3/8/99	KB	<5.7
Bromobenzene	8021	ug/kg	1.1	3/8/99	KB	<1.1
4-Chlorotoluene	8021	ug/kg	1.4	3/8/99	KB	<1.4
m-Dichlorobenzene	8021	ug/kg	2.6	3/8/99	KB	<2.6
p-Dichlorobenzene	8021	ug/kg	2.5	3/8/99	KB	<2.5
o-Dichlorobenzene	8021	ug/kg	2.8	3/8/99	KB	<2.8
Total VOH	8021	ug/kg	n/a	3/8/99	KB	<9.0
8021 Dilution Factor	8021	x	n/a	n/a	n/a	1
Acenaphthene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Acenapthylene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Anthracene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Benzo(a)anthracene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Benzo(a)pyrene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Benzo(b)fluoranthene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Benzo(ghi)perylene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Benzo(k)fluoranthene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Chrysene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Dibenzo(a,h)anthracene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Fluoranthene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Fluorene	8100	ug/kg	5.0	3/8/99	KB	<5.0

BOTTORF Associates inc.

Soil Analysis Report

6729 Edgewater Commerce Parkway · Orlando, Florida · 32810-4278 · Phone 407 298-0846 · Fax: 407 299-7053

Sample Received From: Soil Treatment Services
3505 Pugmill Road
Kissimmee, FL 34741

Lab Control Number: 18473

Sample Name: March 4, 1999 Composite #2
Date Received: March 5, 1999
Date Reported: March 11, 1999

Parameter	Analysis Method	Reporting Units	Method Detection Limit	Analysis Date	Analyst	Result
Indeno(1,2,3-cd)pyrene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Naphthalene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Phenanthrene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Pyrene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Total PAH	8100	ug/kg	n/a	n/a	n/a	<5.0
8100 Dilution Factor	8100	x	n/a	n/a	n/a	1

BOTTORF Associates inc.

Soil Analysis Report

6729 Edgewater Commerce Parkway · Orlando, Florida · 32810-4278 · Phone 407 298-0846 · Fax: 407 299-7053

Sample Received From: Soil Treatment Services
3505 Pugmill Road
Kissimmee, FL 34741

Lab Control Number: 18473

Sample Name: March 4, 1999 Composite #2
Date Received: March 5, 1999
Date Reported: March 11, 1999

Parameter	Analysis Method	Reporting Units	Method Detection Limit	Analysis Date	Analyst	Result
Dichlorodiflouroethane	8021	ug/kg	1.2	3/8/99	KB	<1.2
Bromomethane	8021	ug/kg	1.7	3/8/99	KB	<1.7
Chloroethane	8021	ug/kg	2.5	3/8/99	KB	<2.5
1,1-Dichloroethene	8021	ug/kg	1.3	3/8/99	KB	<1.3
Methylene Chloride	8021	ug/kg	1.3	3/8/99	KB	<1.3
trans 1,2-Dichloroethylene	8021	ug/kg	1.1	3/8/99	KB	<1.1
1,1-Dichloroethane	8021	ug/kg	1.3	3/8/99	KB	<1.3
Chloroform	8021	ug/kg	1.0	3/8/99	KB	<1.0
1,1,1-Trichlorethane	8021	ug/kg	1.3	3/8/99	KB	<1.3
Carbon Tetrachloride	8021	ug/kg	1.1	3/8/99	KB	<1.1
Trichloroethylene	8021	ug/kg	1.8	3/8/99	KB	<1.8
1,2-Dichloropropane	8021	ug/kg	1.5	3/8/99	KB	<1.5
Bromodichloromethane	8021	ug/kg	9.0	3/8/99	KB	<9.0
cis 1,3-Dichloropropane	8021	ug/kg	1.2	3/8/99	KB	<1.2
trans 1,3-Dichloropropane	8021	ug/kg	1.4	3/8/99	KB	<1.4
1-Chloro 2-Bromomethane	8021	ug/kg	1.2	3/8/99	KB	<1.2
1,1,2-Trichloroethane	8021	ug/kg	1.3	3/8/99	KB	<1.3
Tertrachloroethylene	8021	ug/kg	1.1	3/8/99	KB	<1.1
Dibromochloromethane	8021	ug/kg	1.1	3/8/99	KB	<1.1
1,2-Dibromomethane	8021	ug/kg	1.4	3/8/99	KB	<1.4
Chlorobenzene	8021	ug/kg	3.8	3/8/99	KB	<3.8
1,1,1,2-Tetrachloroethane	8021	ug/kg	1.3	3/8/99	KB	<1.3

PVB
99-132 CNI
NTC #2273

BOTTORF Associates inc.

Soil Analysis Report

6729 Edgewater Commerce Parkway · Orlando, Florida · 32810-4278 · Phone 407 298-0846 · Fax: 407 299-7053

Sample Received From: Soil Treatment Services
3505 Pugmill Road
Kissimmee, FL 34741

Lab Control Number: 18473

Sample Name: March 4, 1999 Composite #2
Date Received: March 5, 1999
Date Reported: March 11, 1999

Parameter	Analysis Method	Reporting Units	Method Detection Limit	Analysis Date	Analyst	Result
Total Petroleum Hydrocarbons	FI-Pro	mg/kg	1.0	3/10/99	KB	19.3
Arsenic	7061	mg/kg	0.4	3/10/99	KB	0.6
Barium	7080	mg/kg	0.025	3/10/99	KB	13.1
Cadmium	7131	mg/kg	0.05	3/10/99	KB	0.9
Chromium	7191	mg/kg	0.1	3/10/99	KB	1.28
Lead	7421	mg/kg	0.05	3/10/99	KB	3.6
Mercury	7471	mg/kg	0.001	3/10/99	KB	<0.001
Selenium	7740	mg/kg	0.5	3/10/99	KB	<0.5
Silver	7760	mg/kg	0.05	3/10/99	KB	<0.05
Methyl-tert-butyl-ether	8021	ug/kg	1.4	3/8/99	KB	<1.4
Benzene	8021	ug/kg	0.9	3/8/99	KB	<0.9
Toluene	8021	ug/kg	0.7	3/8/99	KB	<0.7
Chlorobenzene	8021	ug/kg	1.7	3/8/99	KB	<1.7
Ethyl benzene	8021	ug/kg	0.8	3/8/99	KB	<0.8
m & p-Xylene	8021	ug/kg	1.6	3/8/99	KB	<1.6
o-Xylene	8021	ug/kg	0.8	3/8/99	KB	<0.8
m-Dichlorobenzene	8021	ug/kg	1.6	3/8/99	KB	<1.6
p-Dichlorobenzene	8021	ug/kg	1.6	3/8/99	KB	<1.6
o-Dichlorobenzene	8021	ug/kg	1.6	3/8/99	KB	<1.6
Total BTEX	8021	ug/kg	n/a	3/8/99	KB	<0.7

Data Release Authorization

The sample integrity and reliability was verified by Laboratory personnel prior to analysis. Analysis method used are in accordance with F.A.C. 62-160 and applicable EPA protocols. Laboratory Quality Assurance is in accordance with Bottorf Associates Comprehensive Quality Assurance Plan No. 910102.

Kent D. Bottorf — Kent D. Bottorf — 3/11/99
Laboratory Director — Signature — Date

OTTORF Associates inc.

Soil Analysis Report

6729 Edgewater Commerce Parkway · Orlando, Florida · 32810-4278 · Phone 407 298-0846 · Fax: 407 299-7053

Sample Received From: Soil Treatment Services
3505 Pugmill Road
Kissimmee, FL 34741

Lab Control Number: 18595

Sample Name: March 17, 1999 Composite #1
Date Received: March 19, 1999
Date Reported: March 25, 1999

Parameter	Analysis Method	Reporting Units	Method Detection Limit	Analysis Date	Analyst	Result
Dichlorodiflouroethane	8021	ug/kg	1.2	3/23/99	KB	<1.2
Bromomethane	8021	ug/kg	1.7	3/23/99	KB	<1.7
Chloroethane	8021	ug/kg	2.5	3/23/99	KB	<2.5
1,1-Dichloroethene	8021	ug/kg	1.3	3/23/99	KB	<1.3
Methylene Chloride	8021	ug/kg	1.3	3/23/99	KB	<1.3
trans 1,2-Dichloroethylene	8021	ug/kg	1.1	3/23/99	KB	<1.1
1,1-Dichloroethane	8021	ug/kg	1.3	3/23/99	KB	<1.3
Chloroform	8021	ug/kg	1.0	3/23/99	KB	<1.0
1,1,1-Trichlorethane	8021	ug/kg	1.3	3/23/99	KB	<1.3
Carbon Tetrachloride	8021	ug/kg	1.1	3/23/99	KB	<1.1
Trichloroethylene	8021	ug/kg	1.8	3/23/99	KB	<1.8
1,2-Dichloropropane	8021	ug/kg	1.5	3/23/99	KB	<1.5
Bromodichloromethane	8021	ug/kg	9.0	3/23/99	KB	<9.0
cis 1,3-Dichloropropane	8021	ug/kg	1.2	3/23/99	KB	<1.2
trans 1,3-Dichloropropane	8021	ug/kg	1.4	3/23/99	KB	<1.4
1-Chloro 2-Bromomethane	8021	ug/kg	1.2	3/23/99	KB	<1.2
1,1,2-Trichloroethane	8021	ug/kg	1.3	3/23/99	KB	<1.3
Tertrachloroethylene	8021	ug/kg	1.1	3/23/99	KB	<1.1
Dibromochloromethane	8021	ug/kg	1.1	3/23/99	KB	<1.1
1,2-Dibromomethane	8021	ug/kg	1.4	3/23/99	KB	<1.4
Chlorobenzene	8021	ug/kg	3.8	3/23/99	KB	<3.8
1,1,1,2-Tetrachloroethane	8021	ug/kg	1.3	3/23/99	KB	<1.3

ATTORF
Associates inc.

99-132A P/B CW NTC #2273

Soil Analysis Report

6729 Edgewater Commerce Parkway · Orlando, Florida · 32810-4278 · Phone 407 298-0846 · Fax: 407 299-7063

Sample Received From: Soil Treatment Services
3505 Pugmill Road
Kissimmee, FL 34741

Lab Control Number: 18595

Sample Name: March 17, 1999 Composite #1
Date Received: March 19, 1999
Date Reported: March 25, 1999

Parameter	Analysis Method	Reporting Units	Method Detection Limit	Analysis Date	Analyst	Result
Total Petroleum Hydrocarbons	FI-Pro	mg/kg	1.0	3/25/99	KB	20.1
Arsenic	7061	mg/kg	0.4	3/25/99	KB	<0.4
Barium	7080	mg/kg	0.025	3/25/99	KB	0.8
Cadmium	7131	mg/kg	0.05	3/25/99	KB	<0.05
Chromium	7191	mg/kg	0.1	3/25/99	KB	1.3
Lead	7421	mg/kg	0.05	3/25/99	KB	4.8
Mercury	7471	mg/kg	0.001	3/25/99	KB	<0.001
Selenium	7740	mg/kg	0.5	3/25/99	KB	<0.5
Silver	7760	mg/kg	0.05	3/25/99	KB	<0.05
...ethyl-tert-butyl-ether	8021	ug/kg	1.4	3/23/99	KB	<1.4
Benzene	8021	ug/kg	0.9	3/23/99	KB	<0.9
Toluene	8021	ug/kg	0.7	3/23/99	KB	<0.7
Chlorobenzene	8021	ug/kg	1.7	3/23/99	KB	<1.7
Ethyl benzene	8021	ug/kg	0.8	3/23/99	KB	<0.8
m & p-Xylene	8021	ug/kg	1.6	3/23/99	KB	<1.6
o-Xylene	8021	ug/kg	0.8	3/23/99	KB	<0.8
m-Dichlorobenzene	8021	ug/kg	1.6	3/23/99	KB	<1.6
p-Dichlorobenzene	8021	ug/kg	1.6	3/23/99	KB	<1.6
o-Dichlorobenzene	8021	ug/kg	1.6	3/23/99	KB	<1.6
Total BTEX	8021	ug/kg	n/a	3/23/99	KB	<0.7

Data Release Authorization

The sample integrity and reliability was verified by Laboratory personnel prior to analysis. Analysis method used are in accordance with F.A.C. 62-160 and applicable EPA protocols. Laboratory Quality Assurance is in accordance with Bottorf Associates Comprehensive Quality Assurance Plan No. 910102.

Kent D. Bottorf — Kent D. Bottorf — 3/25/99
Laboratory Director — Signature — Date

OTTORF Associates inc.

Soil Analysis Report

6729 Edgewater Commerce Parkway · Orlando, Florida · 32810-4278 · Phone 407 298-0846 · Fax: 407 299-7053

Sample Received From: Soil Treatment Services
3505 Pugmill Road
Kissimmee, FL 34741

Lab Control Number: 18595

Sample Name: March 17, 1999 Composite #1
Date Received: March 19, 1999
Date Reported: March 25, 1999

Parameter	Analysis Method	Reporting Units	Method Detection Limit	Analysis Date	Analyst	Result
Bromoform	8021	ug/kg	1.2	3/23/99	KB	<1.2
1,1,2,2-Tetrachlorethane	8021	ug/kg	1.0	3/23/99	KB	<1.0
1,2,3-Trichloropropane	8021	ug/kg	5.7	3/23/99	KB	<5.7
Bromobenzene	8021	ug/kg	1.1	3/23/99	KB	<1.1
4-Chlorotoluene	8021	ug/kg	1.4	3/23/99	KB	<1.4
m-Dichlorobenzene	8021	ug/kg	2.6	3/23/99	KB	<2.6
p-Dichlorobenzene	8021	ug/kg	2.5	3/23/99	KB	<2.5
o-Dichlorobenzene	8021	ug/kg	2.8	3/23/99	KB	<2.8
Total VOH	8021	ug/kg	n/a	3/23/99	KB	<9.0
8021 Dilution Factor	8021	x	n/a	n/a	n/a	1
Acenaphthene	8100	ug/kg	5.0	3/23/99	KB	<5.0
Acenapthylene	8100	ug/kg	5.0	3/23/99	KB	<5.0
Anthracene	8100	ug/kg	5.0	3/23/99	KB	<5.0
Benzo(a)anthracene	8100	ug/kg	5.0	3/23/99	KB	<5.0
Benzo(a)pyrene	8100	ug/kg	5.0	3/23/99	KB	<5.0
Benzo(b)fluoranthene	8100	ug/kg	5.0	3/23/99	KB	<5.0
Benzo(ghi)perylene	8100	ug/kg	5.0	3/23/99	KB	<5.0
Benzo(k)fluoranthene	8100	ug/kg	5.0	3/23/99	KB	<5.0
Chrysene	8100	ug/kg	5.0	3/23/99	KB	<5.0
Dibenzo(a,h)anthracene	8100	ug/kg	5.0	3/23/99	KB	<5.0
Fluoranthene	8100	ug/kg	5.0	3/23/99	KB	<5.0
Fluorene	8100	ug/kg	5.0	3/23/99	KB	<5.0

OTTORF Associates inc.

Soil Analysis Report

6729 Edgewater Commerce Parkway · Orlando, Florida · 32810-4278 · Phone 407 298-0846 · Fax: 407 299-7053

Sample Received From: Soil Treatment Services
3505 Pugmill Road
Kissimmee, FL 34741

Lab Control Number: 18595

Sample Name: March 17, 1999 Composite #1
Date Received: March 19, 1999
Date Reported: March 25, 1999

Parameter	Analysis Method	Reporting Units	Method Detection Limit	Analysis Date	Analyst	Result
Indeno(1,2,3-cd)pyrene	8100	ug/kg	5.0	3/23/99	KB	<5.0
Naphthalene	8100	ug/kg	5.0	3/23/99	KB	<5.0
Phenanthrene	8100	ug/kg	5.0	3/23/99	KB	<5.0
Pyrene	8100	ug/kg	5.0	3/23/99	KB	<5.0
Total PAH	8100	ug/kg	n/a	n/a	n/a	<5.0
8100 Dilution Factor	8100	x	n/a	n/a	n/a	1

PWS

99-132 CDE
NTC #2273

BOTTORF Associates inc.

Soil Analysis Report

6729 Edgewater Commerce Parkway · Orlando, Florida · 32810-4278 · Phone 407 298-0846 · Fax: 407 299-7053

Sample Received From: Soil Treatment Services
3505 Pugmill Road
Kissimmee, FL 34741

Lab Control Number: 18472

Sample Name: March 4, 1999 Composite #1
Date Received: March 5, 1999
Date Reported: March 11, 1999

Parameter	Analysis Method	Reporting Units	Method Detection Limit	Analysis Date	Analyst	Result
Total Petroleum Hydrocarbons	FI-Pro	mg/kg	1.0	3/10/99	KB	15.1
Arsenic	7061	mg/kg	0.4	3/10/99	KB	0.6
Barium	7080	mg/kg	0.025	3/10/99	KB	12.3
Cadmium	7131	mg/kg	0.05	3/10/99	KB	0.8
Chromium	7191	mg/kg	0.1	3/10/99	KB	1.31
Lead	7421	mg/kg	0.05	3/10/99	KB	2.3
Mercury	7471	mg/kg	0.001	3/10/99	KB	<0.001
Selenium	7740	mg/kg	0.5	3/10/99	KB	<0.5
Silver	7760	mg/kg	0.05	3/10/99	KB	<0.05
Methyl-tert-butyl-ether	8021	ug/kg	1.4	3/8/99	KB	<1.4
Benzene	8021	ug/kg	0.9	3/8/99	KB	<0.9
Toluene	8021	ug/kg	0.7	3/8/99	KB	<0.7
Chlorobenzene	8021	ug/kg	1.7	3/8/99	KB	<1.7
Ethyl benzene	8021	ug/kg	0.8	3/8/99	KB	<0.8
m & p-Xylene	8021	ug/kg	1.6	3/8/99	KB	<1.6
o-Xylene	8021	ug/kg	0.8	3/8/99	KB	<0.8
m-Dichlorobenzene	8021	ug/kg	1.6	3/8/99	KB	<1.6
p-Dichlorobenzene	8021	ug/kg	1.6	3/8/99	KB	<1.6
o-Dichlorobenzene	8021	ug/kg	1.6	3/8/99	KB	<1.6
Total BTEX	8021	ug/kg	n/a	3/8/99	KB	<0.7

Data Release Authorization

The sample integrity and reliability was verified by Laboratory personnel prior to analysis. Analysis method used are in accordance with F.A.C. 62-160 and applicable EPA protocols. Laboratory Quality Assurance is in accordance with Bottorf Associates Comprehensive Quality Assurance Plan No. 910102.

Kent D. Bottorf
Laboratory Director

Kent D. Bottorf
Signature

3/11/99
Date

OTTORF Associates inc.

Soil Analysis Report

6729 Edgewater Commerce Parkway · Orlando, Florida · 32810-4278 · Phone 407 298-0846 · Fax: 407 299-7053

ample Received From: Soil Treatment Services
3505 Pugmill Road
Kissimmee, FL 34741

Lab Control Number: 18472

Sample Name: March 4, 1999 Composite #1
Date Received: March 5, 1999
Date Reported: March 11, 1999

Parameter	Analysis Method	Reporting Units	Method Detection Limit	Analysis Date	Analyst	Result
Dichlorodiflouroethane	8021	ug/kg	1.2	3/8/99	KB	<1.2
Bromomethane	8021	ug/kg	1.7	3/8/99	KB	<1.7
Chloroethane	8021	ug/kg	2.5	3/8/99	KB	<2.5
1,1-Dichloroethene	8021	ug/kg	1.3	3/8/99	KB	<1.3
Methylene Chloride	8021	ug/kg	1.3	3/8/99	KB	<1.3
trans 1,2-Dichloroethylene	8021	ug/kg	1.1	3/8/99	KB	<1.1
1,1-Dichloroethane	8021	ug/kg	1.3	3/8/99	KB	<1.3
Chloroform	8021	ug/kg	1.0	3/8/99	KB	<1.0
1,1,1-Trichlorethane	8021	ug/kg	1.3	3/8/99	KB	<1.3
arbon Tetrachloride	8021	ug/kg	1.1	3/8/99	KB	<1.1
Trichloroethylene	8021	ug/kg	1.8	3/8/99	KB	<1.8
1,2-Dichloropropane	8021	ug/kg	1.5	3/8/99	KB	<1.5
Bromodichloromethane	8021	ug/kg	9.0	3/8/99	KB	<9.0
cis 1,3-Dichloropropane	8021	ug/kg	1.2	3/8/99	KB	<1.2
trans 1,3-Dichloropropane	8021	ug/kg	1.4	3/8/99	KB	<1.4
1-Chloro 2-Bromomethane	8021	ug/kg	1.2	3/8/99	KB	<1.2
1,1,2-Trichloroethane	8021	ug/kg	1.3	3/8/99	KB	<1.3
Tertrachloroethylene	8021	ug/kg	1.1	3/8/99	KB	<1.1
Dibromochloromethane	8021	ug/kg	1.1	3/8/99	KB	<1.1
1,2-Dibromomethane	8021	ug/kg	1.4	3/8/99	KB	<1.4
Chlorobenzene	8021	ug/kg	3.8	3/8/99	KB	<3.8
1,1,1,2-Tetrachloroethane	8021	ug/kg	1.3	3/8/99	KB	<1.3

BOTTORF Associates inc.

Soil Analysis Report

6729 Edgewater Commerce Parkway · Orlando, Florida · 32810-4278 · Phone 407 298-0846 · Fax: 407 299-7053

Sample Received From: Soil Treatment Services
3505 Pugmill Road
Kissimmee, FL 34741

Lab Control Number: 18472

Sample Name: March 4, 1999 Composite #1
Date Received: March 5, 1999
Date Reported: March 11, 1999

Parameter	Analysis Method	Reporting Units	Method Detection Limit	Analysis Date	Analyst	Result
Bromoform	8021	ug/kg	1.2	3/8/99	KB	<1.2
1,1,2,2-Tetrachlorethane	8021	ug/kg	1.0	3/8/99	KB	<1.0
1,2,3-Trichloropropane	8021	ug/kg	5.7	3/8/99	KB	<5.7
Bromobenzene	8021	ug/kg	1.1	3/8/99	KB	<1.1
4-Chlorotoluene	8021	ug/kg	1.4	3/8/99	KB	<1.4
m-Dichlorobenzene	8021	ug/kg	2.6	3/8/99	KB	<2.6
p-Dichlorobenzene	8021	ug/kg	2.5	3/8/99	KB	<2.5
o-Dichlorobenzene	8021	ug/kg	2.8	3/8/99	KB	<2.8
Total VOH	8021	ug/kg	n/a	3/8/99	KB	<9.0
8021 Dilution Factor	8021	x	n/a	n/a	n/a	1
Acenaphthene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Acenapthylene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Anthracene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Benzo(a)anthracene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Benzo(a)pyrene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Benzo(b)fluoranthene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Benzo(ghi)perylene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Benzo(k)fluoranthene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Chrysene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Dibenzo(a,h)anthracene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Fluoranthene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Fluorene	8100	ug/kg	5.0	3/8/99	KB	<5.0

BOTTORF Associates inc.

Soil Analysis Report

6729 Edgewater Commerce Parkway · Orlando, Florida · 32810-4278 · Phone 407 298-0846 · Fax: 407 299-7053

Sample Received From: Soil Trealment Services
3505 Pugmill Road
Kissimmee, FL 34741

Lab Control Number: 18472

Sample Name: March 4, 1999 Composite #1
Date Received: March 5, 1999
Date Reported: March 11, 1999

Parameter	Analysis Method	Reporting Units	Method Detection Limit	Analysis Date	Analyst	Result
Indeno(1,2,3-cd)pyrene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Naphthalene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Phenanthrene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Pyrene	8100	ug/kg	5.0	3/8/99	KB	<5.0
Total PAH	8100	ug/kg	n/a	n/a	n/a	<5.0
8100 Dilution Factor	8100	x	n/a	n/a	n/a	1

Attachment B
Waste Manifests

NON-HAZARDOUS
WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No. 1

2. Page 1 of

STS #49644

3. Generator's Name and Mailing Address
U.S. Navy Training Center
Off Colonial Drive and McGuire Street
Orlando, FL 32813

4. Generator's Phone ( )

5. Transporter 1 Company Name ~~Soil Main~~ SOIL

6. US EPA ID Number

A. Transporter's Phone ~~800-842-4225~~

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
STS
3505 Pug Mill Road
Kissimmee, FL 34741

10. US EPA ID Number

C. Facility's Phone
407-933-8414

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-REGULATED MATERIAL—SOIL	1	[illegible]	[illegible]	[illegible]
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above
E.) SOIL

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Site # 2273

Truck # 333

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

Printed/Typed Name: G.B. WHIPPLE
Signature: G.B. Whipple
Month 2 Day 25 Year 99

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: JEFF CHADWICK
Signature: Jeff Chadwick
Month 2 Day 25 Year 99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

Soil Treatment Services
3505 Pug Mill Rd.
Kissimmee, FL 34741-6462
1-407-933-8414

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

Printed/Typed Name: Rick Keen
Signature
Month 2 Day 5 Year 99

SOIL TREATMENT SERVICES inc.

NON-HAZARDOUS PETROLEUM CONTAMINATED SOIL RECEIVING MANIFEST

№ 49044

Job: US NTC

Location: Colonial DR & McCoy St

Billing: [illegible]

Job #: 2273

TRANSPORTER CERTIFICATION

I hereby declare that the contents of this consignment are the exact same as loaded on my vehicle at the site referenced above. Additionally, I certify that I have not added or removed any material from this consignment prior to delivery.

[illegible] / 22.06 TONS

TRANSPORTER'S NAME (PRINTED): [illegible] SIGNATURE: [illegible]

D. Additional Descriptions for Materials Listed Above: #1 Soil

E. Handling Codes for Wastes Listed Above:

15. Special Handling Instructions and Additional Information

Site # 2273

Truck # 333

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

Printed/Typed Name	Signature	Month	Day	Year
G B. WHIPPLE	G B Whipple	2	25	99

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
JEFF CHADWICK	Jeff Chadwick	2	25	99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

Soil Treatment Services
3505 Pug Mill Rd.
Kissimmee, FL 34741-6452
1-407-933-8414

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

Printed/Typed Name	Signature	Month	Day	Year
[illegible] Keen	[illegible]	2	5	99

Prepared by J. J. KELLER & ASSOCIATES, INC. Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

ORIGINAL – RETURN TO GENERATOR

(12-pitch) typewriter.)

N-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No. 2

2. Page 1 of

STS # 49045

Generator's Name and Mailing Address
U.S. Navy Training Center
Off Colonial Drive and McGuire Street
Orlando, FL 32813

4. Generator's Phone ( )

5. Transporter 1 Company Name
~~[illegible]~~ Scl[illegible]

6. US EPA ID Number

A. Transporter's Phone
800-842-4225

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
STS
3505 Pug Mill Road
Kissimmee, FL 34741

10. US EPA ID Number

C. Facility's Phone
407-933-8414

11. Waste Shipping Name and Description	12. Container(s) No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-REGULATED MATERIAL—SOIL	1	DT	20	Y
b.				
c.				
d.				

GENERATOR

D. Additional Descriptions for Materials Listed Above
a.) Soil

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
SSN # 2273
[illegible] # 982

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

Printed/Typed Name: G.B. WHIPPLE
Signature: G.B. Whipple
Month 2 Day 25 Year 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Ducky C Bays
Signature: [illegible]
Month 2 Day 25 Year 99

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

FACILITY

19. Discrepancy Indication Space

STS Treatment Services Inc.
3505 Pug Mill Rd.
Kissimmee, FL 34741-6462
1-407-933-8414

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

Printed/Typed Name: [illegible] Keene
Signature: [illegible]
Month 2 Day 25 Year 99

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-8018

12-BLS-C5 Rev. 12/98

ORIGINAL – RETURN TO GENERATOR

SOIL TREATMENT SERVICES inc.

NON-HAZARDOUS PETROLEUM CONTAMINATED SOIL RECEIVING MANIFEST

№ 49045

US UTC

Location: Chenault Dr & Williams St

Billing: UTC

Job #: #2273

TRANSPORTER CERTIFICATION

I hereby declare that the contents of this consignment are the exact same as loaded on my vehicle at the site referenced above. Additionally, I certify that I have not added or removed any material from this consignment prior to delivery.

[illegible] 1 [illegible]

[illegible] 20 BR

[illegible] TO

[illegible] 20 MT

1 22.71 TONS

TRANSPORTER'S NAME (PRINTED) S.L.T.S. SIGNATURE [illegible]

D. Additional Descriptions for Materials Listed Above: Soil

E. Handling Codes for Wastes Listed Above:

15. Special Handling Instructions and Additional Information

Job # 2273

Truck # 982

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

Printed/Typed Name	Signature	Month	Day	Year
G.B. WAIPLE	G.B. Waiple	2	25	99

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Dicky L Boys	[illegible]	2	25	99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

Soil Treatment Services Inc.
3505 Pug Mill Rd.
Kissimmee, FL 34741-6462
1-407-933-8414

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

Printed/Typed Name	Signature	Month	Day	Year
John Kears	[illegible]	2	25	99

TRANSPORTER

DESTINATION

Printed by J.J. KELLER & ASSOCIATES, INC. Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

ORIGINAL – RETURN TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No. 3

2. Page 1 of

SLS # 49152

Generator's Name and Mailing Address
U.S. Navy Training Center
Colonial Drive and McGuire Street
Orlando, FL 32813

4. Generator's Phone

5. Transporter 1 Company Name
~~Bell Trans~~ SOLAR

6. US EPA ID Number
800-842-4225

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
STS
3505 Pug Mill Road
Kissimmee, FL 34741

10. US EPA ID Number

C. Facility's Phone
407-933-8414

11. Waste Shipping Name and Description		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-REGULATED MATERIAL---SOIL	DT	20		Y	
b.					
c.					
d.					

GENERATOR

D. Additional Descriptions for Materials Listed Above
a.) Soil

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Site # 2273
Truck # 926

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

Printed/Typed Name	Signature	Month	Day	Year
G.B. WHIPPLE	G.B. Whipple	2	25	99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Todd Lewis 926	Todd Lewis	2	25	99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

SOIL TREATMENT SERVICES INC
3505 Pug Mill Rd
Kissimmee, FL 34741-8402

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

STS # 49152

Printed/Typed Name	Signature	Month	Day	Year
STS	CK	3	9	99

ORIGINAL – RETURN TO GENERATOR

PBL5HC-B1 V. 12/94

SOIL TREATMENT SERVICES inc.

NON-HAZARDOUS PETROLEUM CONTAMINATED SOIL RECEIVING MANIFEST

№ 49152

Job: U.S. N.T.C

Location: Hwy 50 + McFusic Rd. Orl, Fl

Billing: CNI

Job #: 2273

ID 926...01

3-04-99 10:55

75360 lb GR

25000*lb TA

50360 lb NT

/ 25.18 TONS

TRANSPORTER CERTIFICATION

I hereby declare that the contents of this consignment are the exact same as loaded on my vehicle at the site referenced above. Additionally, I certify that I have not added or removed any material from this consignment prior to delivery.

CK

TRANSPORTER'S NAME (PRINTED): SOLAR

SIGNATURE:

...able (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No. 4

2. Page 1 of

S+S # 09647

Generator's Name and Mailing Address

U.S. Navy Training Center
Off Colonial Drive and McGuire Street
Orlando, FL 32813

4. Generator's Phone ( )

5. Transporter 1 Company Name: Soil Tech

6. US EPA ID Number

A. Transporter's Phone: 800-842-4225

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

STS
3505 Pug Mill Road
Kissimmee, FL 34741

10. US EPA ID Number

C. Facility's Phone: 407-933-8414

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-REGULATED MATERIAL—SOIL	1	DT	20	Y
b.				
c.				
d.				

GENERATOR

D. Additional Descriptions for Materials Listed Above

a.) Soil

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Site # 2273

Truck # 509

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

Printed/Typed Name: G.B. WHIPPLE | Signature: G.B. Whipple | Month 2 Day 25 Year 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: DANIEL FERNANDEZ | Signature | Month 2 Day 25 Year 99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACI

19. Discrepancy Indication Space

SOIL TECHNOLOGY LANDFARM OPER
3505 Pug Mill Rd.
Kissimmee, FL 34741-6462
1-407-933-8414

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

Printed/Typed Name: Stan Keene | Signature | Month 12 Day 25 Year 99

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

ORIGINAL – RETURN TO GENERATOR

TREATMENT SERVICES inc.

NON-HAZARDOUS PETROLEUM CONTAMINATED SOIL RECEIVING MANIFEST

NO 49047

To: US VTC

Location: Colonial Dr & N. Gulf

Billing: CNE

Job #: 2273

TRANSPORTER CERTIFICATION

I hereby declare that the contents of this consignment are the exact same as loaded on my vehicle at the site referenced above. Additionally, I certify that I have not added or removed any material from this consignment prior to delivery.

[illegible]

[illegible]

[illegible] 1b GR

[illegible] 1b TR

62840 1b NT / 31.42 TONS

TRANSPORTER'S NAME (PRINTED) S.K. Tr. H SIGNATURE

D. Additional Descriptions for Materials Listed Above

a.) Soil

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Site # 2273

Truck # 509

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

Printed/Typed Name	Signature	Month	Day	Year
G.B. WHIPPLE	G.B. Whipple	2	25	99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
DANIEL FERNANDEZ	[illegible]	2	[illegible]	[illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FAC

19. Discrepancy Indication Space

[illegible]
3505 Pug Mill Rd.
Kissimmee, FL 34741-6462
1-407-933-8414

TY

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

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[illegible]	2	25	99

Printed by J. J. KELLER & ASSOCIATES, INC. Neenah, WI 54957-0308

12-BLS-C5 Rev. 12/98

ORIGINAL – RETURN TO GENERATOR

(Elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No. 5

2. Page 1 of

STS #19946

3. Generator's Name and Mailing Address

U.S. Navy Training Center
Off Colonial Drive and McCulloch Street
Orlando, FL 32813

4. Generator's Phone ( )

5. Transporter 1 Company Name: Soil Tech

6. US EPA ID Number

A. Transporter's Phone: 800-842-4225

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

STS
3505 Pug Mill Road
Kissimmee, FL 34741

10. US EPA ID Number

C. Facility's Phone: 407-933-8414

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-REGULATED MATERIAL—SOIL	1	DT	20	Y
b.				
c.				
d.				

GENERATOR

D. Additional Descriptions for Materials Listed Above

a.) Soil

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Site # 2273

Truck # 583

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

Printed/Typed Name	Signature	Month	Day	Year
G.E. WHIPPLE	G.E. Whipple	12	25	99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[illegible]	12	25	99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACIL

19. Discrepancy Indication Space

Soil Treatment Services Inc.
3505 Pug Mill Rd.
Kissimmee, FL 34741-6462
1-407-933-8414

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

Printed/Typed Name	Signature	Month	Day	Year
Arlen Keene	Arlen Keene	12	25	99

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

ORIGINAL – RETURN TO GENERATOR

...EATMENT
SERVICES inc.

NON-HAZARDOUS PETROLEUM CONTAMINATED SOIL RECEIVING MANIFEST

№ 49046

US ATC

Location: Colonial Dr. & NT Guard R

Billing: CNT

Job #: # 2273

TRANSPORTER CERTIFICATION

I hereby declare that the contents of this consignment are the exact same as loaded on my vehicle at the site referenced above. Additionally, I certify that I have not added or removed any material from this consignment prior to delivery.

[illegible]

[illegible]

[illegible]

23600 lb TA

37520 lb NT — 18.76 TONS

TRANSPORTER'S NAME (PRINTED): Scott

SIGNATURE:

D. Additional Descriptions for Materials Listed Above

a.) Soil

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Site # 2273

Truck # 583

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

Printed/Typed Name	Signature	Month	Day	Year
G. E. WHIPPLE	G. E. Whipple	12	25	99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FA

19. Discrepancy Indication Space

Soil Treatment Services Inc.
3505 Pug Mill Rd.
Kissimmee, FL 34741-6462
1-407-933-8414

ITY

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

Printed/Typed Name	Signature	Month	Day	Year
[illegible] Keene	[illegible]	12	25	99

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

12-BLS-C5 Rev. 12/98

ORIGINAL – RETURN TO GENERATOR

Attachment C
Post-burn Analytical Data
and
Certificate of Materials Recycling

#5446

#99-132 &
#99-132(A)

CERTIFICATE OF MATERIALS RECYCLING

WHEREAS, Soil Treatment Services Inc., is a corporation organized under the laws of the State of Florida with its principal place of business and Kissimmee, Florida and

WHEREAS, Soil Treatment Services Inc., operates a facility which uses, reuses and recycles various waste materials under the authority of the Florida Department of Environmental Regulation;

Now, Therefore, Soil Treatment Services Inc., does issue hereby this certificate to:

C.N.I., Inc.
P.O. Box 253
Ellenton, Fla. 34222

Job: Naval Training Center
McCoy Annex
Site #2273
Orlando, Fla.

To evidence the total use, reuse and recycling of 151.13 tons of soil contaminated with petroleum products. Service performed by incineration.

Said use, reuse and recycling has been completed in a manner consistent with acceptable engineering standards and in compliance with applicable rules and regulations set forth by State and Federal Authorities on or about the date stated:

SOIL TREATMENT SERVICES, INC.

March 17th, 1999
DATE

Larry A. Keene, President

Seal

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: P3746
Account: TETTNOAK Tetra Tech, NUS
Project: TETTNOAK1362 -

QC Batch ID: MP1604
Matrix Type: SOLID

Methods: SW846 6010A
Units: mg/kg

Prep Date: 02/26/99

Metal	RDL	IDL	MB raw	final
Aluminum	20.0	5.8	anr	
Antimony	5.0	.33	anr	
Arsenic	1.0	.2	0.2	<1.0
Barium	20.0	.01	-0.1	<20.0
Beryllium	0.50	.02	anr	
Cadmium	0.40	.02	0.03	<0.40
Calcium	500	.85	anr	
Chromium	1.0	.04	-0.05	<1.0
Cobalt	5.0	.04	anr	
Copper	2.5	.07	anr	
Iron	10.0	.82	anr	
Lead	10.0	.14	-0.03	<10.0
Magnesium	500	.50	anr	
Manganese	1.5	.01	anr	
Molybdenum	5.0	.12	anr	
Nickel	4.0	.09	anr	
Potassium	500	2.9	anr	
Selenium	10.0	.31	0.24	<10.0
Silver	1.0	.08	0.02	<1.0
Sodium	500	14.2	anr	
Thallium	1.0	.41	anr	
Tin	5.0	.15	anr	
Vanadium	5.0	.04	anr	
Zinc	2.0	.03	anr	

Associated samples MP1604: P3746-1, P3746-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F3746
Account: TETTNOAK - Tetra Tech, NUS
Project: TETTNOAK136Z -

QC Batch ID: MP1604
Matrix Type: SOLID

Methods: SW846 6010A
Units: mg/kg

Prep Date: 02/26/99 02/26/99

Metal	F3751 1 Original	DUP	RPD	QC Limits	F3751-1 Original	MS	Spikelot MPFLICP	% Rec	QC Limits
Aluminum	anr								
Antimony	anr								
Arsenic	1.2	[illegible]	25.1	0-25	1.2	422	446.33	94.2	72-110
Barium	29.0	21.2	[illegible]	0-14	29.0	476	446.93	99.9	64-116
Beryllium	anr								
Cadmium	1.0	0.99	1.0	0-16	1.0	10.8	11.17	87.9	64-125
Calcium	anr								
Chromium	9.1	9.6	1.7	0-33	9.1	46.8	44.69	84.3	66-119
Cobalt	anr								
Copper	anr								
Iron	anr						* *		
Lead	234	229	1.9	0-44	234	318	111.73	75.7	60-127
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	1.3	1.2	8.8	0-26	1.3	387	446.93	86.4	65-115
Silver	0.29	0.26	9.7	0-21	0.29	10.4	11.17	90.2	63-123
Sodium	anr								
Thallium	anr								
Tin	anr								
Vanadium	anr								
Zinc	anr								

Associated samples MP1604: F3746-1, F3746-2

Results < RDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F3746
Account: TETTNOAK - Tetra Tech, NUS
Project: TETTNOAK1362 -

QC Batch ID: MP1604
Matrix Type: SOLID

Methods: SW846 6010A
Units: mg/kg

Prep Date. 02/26/99

Metal	BSP Result	Spikelot MPPLICP	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	187	40	96.5	80-120
Barium	400	40	100.0	80-120
Beryllium	anr			
Cadmium	9.7	10	97.1	80-120
Calcium	anr			
Chromium	17.7	40	94.3	80-120
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	96.7	100	96.7	80-120
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium	anr			
Selenium	397	400	99.2	80-120
Silver	9.0	10	90.2	80-120
Sodium	anr			
Thallium	anr			
Tin				
Vanadium	anr			
Zinc	anr			

Associated samples MP1604: F3746-1, F3746-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: F3746
Account: TETTNOAK - Tetra Tech, NUS
Project: TETTNOAK1362 -

QC Batch ID: MP1604
Matrix Type: SOLID

Methods: SW846 6010A
Units: ug/L

Prep Date: 02/26/99

Metal	F3751-1 Original	SDL 1:5	RPD	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	10.9	0.00	100.0(a)	0-10
Barium	260	261	3.4	0-10
Beryllium	anr			
Cadmium	8.92	9.97	11.8 (a)	0-10
Calcium	anr			
Chromium	81.5	88.5	8.5	0-10
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	2090	2290	9.7	0-10
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Potassium	anr			
Selenium	12.0	37.5	213.4(a)	0-10
Silver	2.58	8.96	247.3(a)	0-10
Sodium	anr			
Thallium	anr			
Tin	anr			
Vanadium	anr			
Zinc	anr			

Associated samples MP1604: F3746-1, F3746-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Method Blank Summary

Job Number: F3746
Account: TETTNOAK Tetra Tech, NUS
Project:

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP704-MB	P03401.D	1	03/01/99	SKW	02/26/99	OP704	GOP162

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

F3746-1, F3746-2

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

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	88%	40-140%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F3746
Account: TETTNOAK Tetra Tech, NUS
Project:

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP704-MS	P03406.D	5	03/01/99	SKW	02/26/99	OP704	GOP162
OP704-MSD	P03407.D	5	03/01/99	SKW	02/26/99	OP704	GOP162
F3750-3	P03405.D	5	03/01/99	SKW	02/26/99	OP704	GOP162

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

F3746-1, F3746-2

CAS No.	Compound	F3750-3 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C8-C40)	163		29.6	151	-40* [a]	147	-54* [a]	3	40-145/35

CAS No.	Surrogate Recoveries	MS	MSD	F3750-3	Limits
84-15-1	o-Terphenyl	76%	73%	74%	40-140%

(a) Spike recovery indicates possible sample nonhomogenity.

Blank Spike Summary

Job Number: F3746
Account: TETTNOAK Tetra Tech, NUS
Project:

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP705-BS	L001201.D	1	02/27/99	NF	02/26/99	OP705	SL76

The QC reported here applies to the following samples: **Method:** SW846 3550B/8270C

F3746-1, F3746-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	1660	1620	97	48-135
208-96-8	Acenaphthylene	1660	1870	112	51-135
120-12-7	Anthracene	1660	1670	100	50-135
56-55-3	Benzo(a)anthracene	1660	1620	97	44-132
50-32-8	Benzo(a)pyrene	1660	1620	97	49-135
205-99-2	Benzo(b)fluoranthene	1660	1550	93	35-135
191-24-2	Benzo(g,h,i)perylene	1660	1530	92	32-159
207-08-9	Benzo(k)fluoranthene	1660	1640	98	35-135
218-01-9	Chrysene	1660	1600	96	41-130
53-70-3	Dibenzo(a,h)anthracene	1660	1210	73	26-143
206-44-0	Fluoranthene	1660	1610	97	24-148
86-73-7	Fluorene	1660	1600	96	51-135
193-39-5	Indeno(1,2,3-cd)pyrene	1660	1590	95	36-152
91-57-6	2-Methylnaphthalene	1660	1610	97	47-125
91-20-3	Naphthalene	1660	1590	95	45-125
85-01-8	Phenanthrene	1660	1550	93	52-135
129-00-0	Pyrene	1660	1660	100	32-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	91%	25-121%
4165-62-2	Phenol-d5	91%	24-113%
118-79-6	2,4,6-Tribromophenol	93%	19-122%
4165-60-0	Nitrobenzene-d5	97%	23-120%
321-60-8	2-Fluorobiphenyl	94%	30-115%
1718-51-0	Terphenyl-d14	104%	18-137%

Blank Spike Summary

Job Number: F3746
Account: TETTNOAK Tetra Tech, NUS
Project:

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP705-BS	L001216.D	1	03/01/99	NF	02/26/99	OP705	SL77

The QC reported here applies to the following samples: **Method:** SW846 3550B/8270C

F3746-1, F3746-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	1660	1620	97	48-135
208-96-8	Acenaphthylene	1660	1830	110	51-135
120-12-7	Anthracene	1660	1620	97	50-135
56-55-3	Benzo(a)anthracene	1660	1580	95	44-132
50-32-8	Benzo(a)pyrene	1660	1660	100	49-135
205-99-2	Benzo(b)fluoranthene	1660	1580	95	35-135
191-24-2	Benzo(g,h,i)perylene	1660	1630	98	32-159
207-08-9	Benzo(k)fluoranthene	1660	1640	98	35-135
218-01-9	Chrysene	1660	1580	95	41-130
53-70-3	Dibenzo(a,h)anthracene	1660	1280	77	26-143
206-44-0	Fluoranthene	1660	1630	98	24-148
86-73-7	Fluorene	1660	1640	98	51-135
193-39-5	Indeno(1,2,3-cd)pyrene	1660	1710	103	36-152
91-57-6	2-Methylnaphthalene	1660	1600	96	47-125
91-20-3	Naphthalene	1660	1600	96	45-125
85-01-8	Phenanthrene	1660	1540	92	52-135
129-00-0	Pyrene	1660	1530	92	32-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	91%	25-121%
4165-62-2	Phenol-d5	91%	24-113%
118-79-6	2,4,6-Tribromophenol	89%	19-122%
4165-60-0	Nitrobenzene-d5	96%	23-120%
321-60-8	2-Fluorobiphenyl	94%	30-115%
1718-51-0	Terphenyl-d14	96%	18-137%

Method Blank Summary

Job Number: F3746
Account: TETTNOAK Tetra Tech, NUS
Project:

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP705-MB	L001202.D	1	02/27/99	NF	02/26/99	OP705	SL76

The QC reported here applies to the following samples: **Method:** SW846 3550B/8270C

F3746-1, F3746-2

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	ND	170	ug/kg	
208-96-8	Acenaphthylene	ND	170	ug/kg	
120-12-7	Anthracene	ND	170	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	ug/kg	
50-32-8	Benzo(a)pyrene	ND	83	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	ug/kg	
218-01-9	Chrysene	ND	170	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	83	ug/kg	
206-44-0	Fluoranthene	ND	170	ug/kg	
86-73-7	Fluorene	ND	170	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	ug/kg	
91-20-3	Naphthalene	ND	170	ug/kg	
85-01-8	Phenanthrene	ND	170	ug/kg	
129-00-0	Pyrene	ND	170	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	86%	25-121%
4165-62-2	Phenol-d5	94%	24-113%
118-79-6	2,4,6-Tribromophenol	82%	19-122%
4165-60-0	Nitrobenzene-d5	94%	23-120%
321-60-8	2-Fluorobiphenyl	95%	30-115%
1718-51-0	Terphenyl-d14	97%	18-137%

Method Blank Summary

Job Number: F3746
Account: TETTNOAK Tetra Tech, NUS
Project:

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP705-MB	L001217.D	1	03/01/99	NF	02/26/99	OP705	SL77

The QC reported here applies to the following samples: **Method:** SW846 3550B/8270C

F3746-1, F3746-2

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	ND	330	ug/kg	
208-96-8	Acenaphthylene	ND	330	ug/kg	
120-12-7	Anthracene	ND	330	ug/kg	
56-55-3	Benzo(a)anthracene	ND	330	ug/kg	
50-32-8	Benzo(a)pyrene	ND	330	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	330	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	330	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	330	ug/kg	
218-01-9	Chrysene	ND	330	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	330	ug/kg	
206-44-0	Fluoranthene	ND	330	ug/kg	
86-73-7	Fluorene	ND	330	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	
90-12-0	1-Methylnaphthalene	ND	330	ug/kg	
91-57-6	2-Methylnaphthalene	ND	330	ug/kg	
91-20-3	Naphthalene	ND	330	ug/kg	
85-01-8	Phenanthrene	ND	330	ug/kg	
129-00-0	Pyrene	ND	330	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	86%	25-121%
4165-62-2	Phenol-d5	94%	24-113%
118-79-6	2,4,6-Tribromophenol	86%	19-122%
4165-60-0	Nitrobenzene-d5	96%	23-120%
321-60-8	2-Fluorobiphenyl	92%	30-115%
1718-51-0	Terphenyl-d14	94%	18-137%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F3746
Account: TETTNOAK Tetra Tech, NUS
Project:

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP705-MS	L001219.D	2	03/01/99	NF	02/26/99	OP705	SL77
OP705-MSD	L001220.D	2	03/01/99	NF	02/26/99	OP705	SL77
F3751-1	L001218.D	1	03/01/99	NF	02/26/99	OP705	SL77

The QC reported here applies to the following samples: **Method:** SW846 3550B/8270C

F3746-1, F3746-2

CAS No.	Compound	F3751-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		1860	1730	93	1640	88	5	48-135/21
208-96-8	Acenaphthylene	ND		1860	2050	110	1990	107	3	51-135/22
120-12-7	Anthracene	ND		1860	1760	95	1730	93	2	50-135/20
56-55-3	Benzo(a)anthracene	247	J	1860	1790	83	1830	85	2	44-132/26
50-32-8	Benzo(a)pyrene	429		1860	1920	80	1990	84	4	49-135/22
205-99-2	Benzo(b)fluoranthene	507		1860	1870	73	1900	75	2	35-135/35
191-24-2	Benzo(g,h,i)perylene	544		1860	2320	95	2390	99	3	32-159/44
207-08-9	Benzo(k)fluoranthene	375		1860	1780	76	1750	74	2	35-135/35
218-01-9	Chrysene	378		1860	1850	79	1870	80	1	41-130/33
53-70-3	Dibenzo(a,h)anthracene	ND		1860	1510	81	1520	82	1	26-143/42
206-44-0	Fluoranthene	492		1860	2010	82	2140	89	6	24-148/25
86-73-7	Fluorene	ND		1860	1730	93	1650	89	5	51-135/25
193-39-5	Indeno(1,2,3-cd)pyrene	529		1860	2270	94	2300	95	1	36-152/42
91-57-6	2-Methylnaphthalene	ND		1860	1640	88	1640	88	0	47-125/22
91-20-3	Naphthalene	ND		1860	1610	86	1580	85	2	45-125/24
85-01-8	Phenanthrene	212	J	1860	1740	82	1780	84	2	52-135/22
129-00-0	Pyrene	375		1860	1770	75	1930	84	9	32-140/28

CAS No.	Surrogate Recoveries	MS	MSD	F3751-1	Limits
367-12-4	2-Fluorophenol	79%	77%	77%	25-121%
4165-62-2	Phenol-d5	85%	85%	86%	24-113%
118-79-6	2,4,6-Tribromophenol	82%	81%	83%	19-122%
4165-60-0	Nitrobenzene-d5	84%	84%	83%	23-120%
321-60-8	2-Fluorobiphenyl	86%	85%	86%	30-115%
1718-51-0	Terphenyl-d14	84%	83%	85%	18-137%

Blank Spike Summary

Job Number: F3746
Account: TETTNOAK Tetra Tech, NUS
Project:

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG192-BS	G0007907.D	50	02/25/99	RAW	n/a	n/a	VG192

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

F3746-1, F3746-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	2500	2380	95	73-122
75-27-4	Bromodichloromethane	2500	2360	94	63-127
75-25-2	Bromoform	2500	2240	90	56-135
108-90-7	Chlorobenzene	2500	2440	98	74-115
75-00-3	Chloroethane	2500	2190	88	48-142
67-66-3	Chloroform	2500	2270	91	74-120
110-75-8	2-Chloroethyl vinyl ether	12500	23600	189*	80-120
56-23-5	Carbon tetrachloride	2500	2350	94	26-154
75-34-3	1,1-Dichloroethane	2500	2460	98	71-122
75-35-4	1,1-Dichloroethylene	2500	2310	92	67-127
106-93-4	1,2-Dibromoethane	2500	2270	91	71-135
107-06-2	1,2-Dichloroethane	2500	2420	97	67-159
78-87-5	1,2-Dichloropropane	2500	2430	97	70-124
124-48-1	Dibromochloromethane	2500	2400	96	64-122
75-71-8	Dichlorodifluoromethane	2500	1860	74	59-122
156-59-2	cis-1,2-Dichloroethylene	2500	2420	97	71-122
10061-01-5	cis-1,3-Dichloropropene	2500	2400	96	59-129
541-73-1	m-Dichlorobenzene	2500	2380	95	75-120
95-50-1	o-Dichlorobenzene	2500	2410	96	72-120
106-46-7	p-Dichlorobenzene	2500	2370	95	70-120
156-60-5	trans-1,2-Dichloroethylene	2500	2400	96	66-123
10061-02-6	trans-1,3-Dichloropropene	2500	2400	96	59-134
100-41-4	Ethylbenzene	2500	2420	97	72-120
74-83-9	Methyl bromide	2500	2920	117	35-150
74-87-3	Methyl chloride	2500	2490	100	23-150
75-09-2	Methylene chloride	2500	2210	88	61-135
1634-04-4	Methyl Tert Butyl Ether	2500	2370	95	80-120
71-55-6	1,1,1-Trichloroethane	2500	2270	91	75-120
79-34-5	1,1,2,2-Tetrachloroethane	2500	2310	92	37-170
79-00-5	1,1,2-Trichloroethane	2500	2380	95	68-133
127-18-4	Tetrachloroethylene	2500	2340	94	66-119
108-88-3	Toluene	2500	2390	96	70-122
79-01-6	Trichloroethylene	2500	2320	93	42-154
75-69-4	Trichlorofluoromethane	2500	1710	68	44-126
75-01-4	Vinyl chloride	2500	2130	85	29-178
1330-20-7	Xylene (total)	7500	7250	97	58-127

Blank Spike Summary

Job Number: F3746
Account: TETTNOAK Tetra Tech, NUS
Project:

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG192-BS	G0007907.D	50	02/25/99	RAW	n/a	n/a	VG192

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

F3746-1, F3746-2

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	96%	80-120%
2037-26-5	Toluene-D8	102%	81-117%
460-00-4	4-Bromofluorobenzene	103%	74-121%
17060-07-0	1,2-Dichloroethane-D4	105%	80-120%

Method Blank Summary

Job Number: F3746
Account: TETTNOAK Tetra Tech, NUS
Project:

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG192-MB	G0007893.D	50	02/25/99	RAW	n/a	n/a	VG192

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

F3746-1, F3746-2

CAS No.	Compound	Result	RDL	Units	Q
71-43-2	Benzene	ND	100	ug/kg	
75-27-4	Bromodichloromethane	ND	100	ug/kg	
75-25-2	Bromoform	ND	100	ug/kg	
108-90-7	Chlorobenzene	ND	100	ug/kg	
75-00-3	Chloroethane	ND	100	ug/kg	
67-66-3	Chloroform	ND	100	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	250	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	100	ug/kg	
106-93-4	1,2-Dibromoethane	ND	100	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	ug/kg	
124-48-1	Dibromochloromethane	ND	100	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	250	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	100	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	100	ug/kg	
541-73-1	m-Dichlorobenzene	ND	100	ug/kg	
95-50-1	o-Dichlorobenzene	ND	100	ug/kg	
106-46-7	p-Dichlorobenzene	ND	100	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	100	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	ug/kg	
100-41-4	Ethylbenzene	ND	100	ug/kg	
74-83-9	Methyl bromide	ND	250	ug/kg	
74-87-3	Methyl chloride	ND	250	ug/kg	
75-09-2	Methylene chloride	ND	250	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	100	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	ug/kg	
127-18-4	Tetrachloroethylene	ND	100	ug/kg	
108-88-3	Toluene	ND	100	ug/kg	
79-01-6	Trichloroethylene	ND	100	ug/kg	
75-69-4	Trichlorofluoromethane	ND	250	ug/kg	
75-01-4	Vinyl chloride	ND	100	ug/kg	
1330-20-7	Xylene (total)	ND	300	ug/kg	

Method Blank Summary

Job Number: F3746
Account: TETTNOAK Tetra Tech, NUS
Project:

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG192-MB	G0007893.D	50	02/25/99	RAW	n/a	n/a	VG192

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

F3746-1, F3746-2

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	93%	80-120%
2037-26-5	Toluene-D8	101%	81-117%
460-00-4	4-Bromofluorobenzene	104%	74-121%
17060-07-0	1,2-Dichloroethane-D4	98%	80-120%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F3746
Account: TETTNOAK Tetra Tech, NUS
Project:

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F3717-1MS	G0007905.D	50	02/25/99	RAW	n/a	n/a	VG192
F3717-1MSD	G0007906.D	50	02/25/99	RAW	n/a	n/a	VG192
F3717-1	G0007895.D	50	02/25/99	RAW	n/a	n/a	VG192

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

F3746-1, F3746-2

CAS No.	Compound	F3717-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		2840	2680	94	2620	92	2	73-122/24
75-27-4	Bromodichloromethane	ND		2840	2520	89	2480	87	2	63-127/24
75-25-2	Bromoform	ND		2840	2250	79	2190	77	3	56-135/24
108-90-7	Chlorobenzene	ND		2840	2660	94	2600	92	2	74-115/24
75-00-3	Chloroethane	ND		2840	2530	89	2590	91	2	48-142/30
67-66-3	Chloroform	ND		2840	2500	88	2430	86	3	74-120/23
110-75-8	2-Chloroethyl vinyl ether	ND		14200	28300	199*	29200	206*	3	80-120/20
56-23-5	Carbon tetrachloride	ND		2840	2420	85	2420	85	0	26-154/21
75-34-3	1,1-Dichloroethane	ND		2840	2730	96	2640	93	3	71-122/24
75-35-4	1,1-Dichloroethylene	ND		2840	2530	89	2380	84	6	67-127/20
106-93-4	1,2-Dibromoethane	ND		2840	2410	85	2350	83	2	71-135/22
107-06-2	1,2-Dichloroethane	ND		2840	2580	91	2530	89	2	67-159/24
78-87-5	1,2-Dichloropropane	ND		2840	2630	93	2570	90	2	70-124/18
124-48-1	Dibromochloromethane	ND		2840	2510	88	2480	87	1	64-122/20
75-71-8	Dichlorodifluoromethane	ND		2840	2180	77	2240	79	3	59-122/20
156-59-2	cis-1,2-Dichloroethylene	ND		2840	2650	93	2600	92	2	71-122/25
10061-01-5	cis-1,3-Dichloropropene	ND		2840	2530	89	2530	89	0	59-129/23
541-73-1	m-Dichlorobenzene	ND		2840	2700	95	2640	93	2	75-120/18
95-50-1	o-Dichlorobenzene	ND		2840	2620	92	2560	90	2	72-120/21
106-46-7	p-Dichlorobenzene	ND		2840	2690	95	2570	90	4	70-120/22
156-60-5	trans-1,2-Dichloroethylene	ND		2840	2600	92	2550	90	2	66-123/18
10061-02-6	trans-1,3-Dichloropropene	ND		2840	2560	90	2500	88	2	59-134/24
100-41-4	Ethylbenzene	ND		2840	2680	94	2570	90	4	72-120/24
74-83-9	Methyl bromide	ND		2840	2910	102	3410	120	16	35-150/40
74-87-3	Methyl chloride	ND		2840	2460	87	2760	97	11	23-150/42
75-09-2	Methylene chloride	ND		2840	2450	86	2390	84	2	61-135/24
1634-04-4	Methyl Tert Butyl Ether	ND		2840	2480	87	2420	85	2	80-120/20
71-55-6	1,1,1-Trichloroethane	ND		2840	2510	88	2400	84	4	75-120/20
79-34-5	1,1,2,2-Tetrachloroethane	ND		2840	2500	88	2390	84	4	37-170/44
79-00-5	1,1,2-Trichloroethane	ND		2840	2580	91	2520	89	2	68-133/22
127-18-4	Tetrachloroethylene	ND		2840	2580	91	2520	89	2	66-119/27
108-88-3	Toluene	ND		2840	2630	93	2530	89	4	70-122/18
79-01-6	Trichloroethylene	ND		2840	2560	90	2490	88	3	42-154/36
75-69-4	Trichlorofluoromethane	ND		2840	2220	78	2280	80	3	44-126/27
75-01-4	Vinyl chloride	ND		2840	2420	85	2540	89	5	29-178/48
1330-20-7	Xylene (total)	ND		8520	8050	94	7680	90	5	58-127/23

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F3746
Account: TETTNOAK Tetra Tech, NUS
Project:

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F3717-1MS	G0007905.D	50	02/25/99	RAW	n/a	n/a	VG192
F3717-1MSD	G0007906.D	50	02/25/99	RAW	n/a	n/a	VG192
F3717-1	G0007895.D	50	02/25/99	RAW	n/a	n/a	VG192

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

F3746-1, F3746-2

CAS No.	Surrogate Recoveries	MS	MSD	F3717-1	Limits
1868-53-7	Dibromofluoromethane	95%	94%	91%	80-120%
2037-26-5	Toluene-D8	101%	101%	100%	81-117%
460-00-4	4-Bromofluorobenzene	104%	107%	102%	74-121%
17060-07-0	1,2-Dichloroethane-D4	101%	103%	97%	80-120%

ACCUTEST

Report of Analysis

Client Sample ID:	2273-S02		
Lab Sample ID:	F3746-1	**Date Sampled:**	02/24/99
Matrix:	SO - Soil	**Date Received:**	02/24/99
		Percent Solids:	97.8
Project:			

Metals Analysis

Analyte	Result	RDL	Units	DF	Prep	Analyzed	By	Method
Arsenic	0.28 U	1.0	mg/kg	1	02/26/99	02/26/99	JK	SW846 6010A
Barium	5.2 B	20.4	mg/kg	1	02/26/99	02/26/99	JK	SW846 6010A
Cadmium	0.02 U	0.41	mg/kg	1	02/26/99	02/26/99	JK	SW846 6010A
Chromium	0.98 B	1.0	mg/kg	1	02/26/99	02/26/99	JK	SW846 6010A
Lead	0.83 B	10.2	mg/kg	1	02/26/99	02/26/99	JK	SW846 6010A
Mercury	0.043 U	0.043	mg/kg	1	02/25/99	02/26/99	JK	SW846 7471A
Selenium	0.32 U	10.2	mg/kg	1	02/26/99	02/26/99	JK	SW846 6010A
Silver	0.16 B	1.0	mg/kg	1	02/26/99	02/26/99	JK	SW846 6010A

RDL = Reported Detection Limit

ACCUTEST

Report of Analysis

Client Sample ID:	2273-S03		
Lab Sample ID:	F3746-2	Date Sampled:	02/24/99
Matrix:	SO - Soil	Date Received:	02/24/99
Method:	SW846 8260B	Percent Solids:	97.7
Project:			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	G0007909.D	50	02/25/99	RAW	n/a	n/a	VG192
Run #2							

VOA 8021 List

CAS No.	Compound	Result	RDL	Units	Q
71-43-2	Benzene	ND	100	ug/kg	
75-27-4	Bromodichloromethane	ND	100	ug/kg	
75-25-2	Bromoform	ND	100	ug/kg	
108-90-7	Chlorobenzene	ND	100	ug/kg	
75-00-3	Chloroethane	ND	100	ug/kg	
67-66-3	Chloroform	ND	100	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	250	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	100	ug/kg	
106-93-4	1,2-Dibromoethane	ND	100	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	ug/kg	
124-48-1	Dibromochloromethane	ND	100	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	250	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	100	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	100	ug/kg	
541-73-1	m-Dichlorobenzene	ND	100	ug/kg	
95-50-1	o-Dichlorobenzene	ND	100	ug/kg	
106-46-7	p-Dichlorobenzene	ND	100	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	100	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	ug/kg	
100-41-4	Ethylbenzene	ND	100	ug/kg	
74-83-9	Methyl bromide	ND	250	ug/kg	
74-87-3	Methyl chloride	ND	250	ug/kg	
75-09-2	Methylene chloride	ND	250	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	100	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	ug/kg	
127-18-4	Tetrachloroethylene	ND	100	ug/kg	
108-88-3	Toluene	ND	100	ug/kg	
79-01-6	Trichloroethylene	ND	100	ug/kg	
75-69-4	Trichlorofluoromethane	ND	250	ug/kg	
75-01-4	Vinyl chloride	ND	250	ug/kg	
1330-20-7	Xylene (total)	ND	300	ug/kg	

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

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

ACCUTEST

Report of Analysis

Client Sample ID:	2273-S03		
Lab Sample ID:	F3746-2	Date Sampled:	02/24/99
Matrix:	SO - Soil	Date Received:	02/24/99
Method:	SW846 8260B	Percent Solids:	97.7
Project:			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	G0007909.D	50	02/25/99	RAW	n/a	n/a	VG192
Run #2							

VOA 8021 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%		80-120%
2037-26-5	Toluene-D8	102%		81-117%
460-00-4	4-Bromofluorobenzene	102%		74-121%
17060-07-0	1,2-Dichloroethane-D4	97%		80-120%

(a) Sample introduction performed using method 5030A.

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

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

ACCUTEST

Report of Analysis

Client Sample ID:	2273-S03		
Lab Sample ID:	F3746-2	Date Sampled:	02/24/99
Matrix:	SO - Soil	Date Received:	02/24/99
Method:	SW846 3550B/8270C	Percent Solids:	97.7
Project:			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L001204.D	1	02/27/99	NF	02/26/99	OF705	SL76
Run #2							

BN PAH List

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	ND	170	ug/kg	
208-96-8	Acenaphthylene	ND	170	ug/kg	
120-12-7	Anthracene	ND	170	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	ug/kg	
50-32-8	Benzo(a)pyrene	ND	85	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	ug/kg	
218-01-9	Chrysene	ND	170	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	85	ug/kg	
206-44-0	Fluoranthene	ND	170	ug/kg	
86-73-7	Fluorene	ND	170	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	ug/kg	
91-20-3	Naphthalene	ND	170	ug/kg	
85-01-8	Phenanthrene	ND	170	ug/kg	
129-00-0	Pyrene	ND	170	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	81%		25-121%
4165-62-2	Phenol-d5	88%		24-113%
118-79-6	2,4,6-Tribromophenol	83%		19-122%
4165-60-0	Nitrobenzene-d5	87%		23-120%
321-60-8	2-Fluorobiphenyl	89%		30-115%
1718-51-0	Terphenyl-d14	92%		18-137%

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

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

ACCUTEST

Report of Analysis

Client Sample ID:	2273-S03		
Lab Sample ID:	F3746-2	**Date Sampled:**	02/24/99
Matrix:	SO - Soil	**Date Received:**	02/24/99
Method:	FLORIDA-PRO	**Percent Solids:**	97.7
Project:			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P03421.D	1	03/02/99	SKW	02/26/99	GP704	GOP162
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C8-C40)	ND	8.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	83%		40-140%

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

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

ACCUTEST

Report of Analysis

Client Sample ID:	2273-S03		
Lab Sample ID:	F3746-2	**Date Sampled:**	02/24/99
Matrix:	SO - Soil	**Date Received:**	02/24/99
		Percent Solids:	97.7
Project:			

Metals Analysis

Analyte	Result	RDL	Units	DF	Prep	Analyzed	By	Method
Arsenic	0.28 U	1.0	mg/kg	1	02/26/99	02/26/99	JK	SW846 6010A
Barium	5.0 B	20.5	mg/kg	1	02/26/99	02/26/99	JK	SW846 6010A
Cadmium	0.02 U	0.41	mg/kg	1	02/26/99	02/26/99	JK	SW846 6010A
Chromium	0.80 B	1.0	mg/kg	1	02/26/99	02/26/99	JK	SW846 6010A
Lead	0.64 B	10.2	mg/kg	1	02/26/99	02/26/99	JK	SW846 6010A
Mercury	0.043 U	0.043	mg/kg	1	02/25/99	02/26/99	JK	SW846 7471A
Selenium	0.32 U	10.2	mg/kg	1	02/26/99	02/26/99	JK	SW846 6010A
Silver	0.17 B	1.0	mg/kg	1	02/26/99	02/26/99	JK	SW846 6010A

RDL = Reported Detection Limit

CHAIN OF CUSTODY

ACCUTEST

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

ACCUTEST JOB #:

ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: T.T. NUS

ADDRESS:

CITY: Tallahassee STATE: ZIP:

SEND REPORT TO: Paul Calligan 850-656-5458

PHONE #: FAX #: 850 - 656-7403

FACILITY INFORMATION

PROJECT NAME: NTC

LOCATION: 7781

PROJECT NO.:

ANALYTICAL INFORMATION

MATRIX CODES

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

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	8021	8 RCRA	FLORD	5272	LAB USE ONLY
374801	2273-S02	2-24-99	1410	RA	S	2					X	X	X	X	X	
-2	2273-S03	2-24-99	1410	RA	S	2					X	X	X	X	X	

DATA TURNAROUND INFORMATION

- [ ] STANDARD
- [ ] 48 HOUR RUSH
- [ ] 24 HOUR EMERGENCY
- [x] OTHER 72 Hour

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

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

COMMENTS/REMARKS

X prebuin characterization

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

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. Abby Wilson	2-24-99 1510	[signature]	2.		2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE	ON ICE / TEMPERATURE C

QA/QC DATA

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F3746
Account: TETTNOAK - Tetra Tech, NUS
Project: TETTNOAK0162

QC Batch ID: MP1603
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 02/25/99

Metal	RDL	IDL	MB raw	final
Mercury	0.042	.0417	0.0042	<0.042

Associated samples MP1603: F3746-1, F3746-2

Results < IDL are shown as zero for calculation purposes
[*] Outside of QC limits
[anr] Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F3746
Account: TETTNOAK - Tetra Tech, NUS
Project: TETTNOAK1362 -

QC Batch ID: MP1603
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 02/25/99 02/25/99

Metal	F3746-1 Original	DUP	RPD	QC Limits	F3746-1 Original	MS	Spikelot HCPLWS	% Rec	QC Limits
Mercury	0.00	0.00	NC	0-20	0.00	0.47	0.51	91.9	75-125

Associated samples MP1603: F3746-1, F3746-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: P3746
Account: TETTNOAK - Tetra Tech, NUS
Project: TETTNOAK1362 -

QC Batch ID: MP1603
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 02/25/99

Metal	BSP Result	Spikelot HGFLWS	% Rec	QC Limits
Mercury	0.50	0.5	100.0	80 120

Associated samples MP1603: P3746-1, P3746-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

ACCUTEST

CHAIN OF CUSTODY

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

ACCUTEST JOB #:

ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Tetra Tech NUS, Inc.
ADDRESS: 1811 Executive Center Dr., #220
CITY: Tallahassee STATE: FL ZIP: 32301
SEND REPORT TO: Paul Calligan
PHONE #: (850) 656-5458

FACILITY INFORMATION

PROJECT NAME: NTC Orlando UST
LOCATION: Orlando, FL
PROJECT NO.: 7781 / CTO-0050
FAX #: (850) 656-7403

ANALYTICAL INFORMATION

MATRIX CODES

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

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	FL PRO, 8310	8 RCRA Metals	8021 (Encore samplers)	LAB USE ONLY
3661-1	7211-SB01-0304	2-11-99	0755	P.C.	S	5						1	1	3	
-2	7151-SB12-0506	2-11-99	1335	P.C.	S	5						1	1	3	
-3	2273-S01	2-11-99	1445	P.C.	S	5						1	1	3	
-4	2426-SB01-0304	2-11-99	1520	P.C.	S	5						1	1	3	

DATA TURNAROUND INFORMATION

[ ] STANDARD
[ ] 48 HOUR RUSH
[ ] 24 HOUR EMERGENCY
[✓] OTHER 72 HOUR

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

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

COMMENTS/REMARKS

KPH 7/07

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

RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. [signature]	2-9-99 1080	1.	2. [signature]	2-11-99/1639	2. [signature] Wilson 2-11-99 1639
3.		3.	4.		4.
5.		5.			

SEAL # | PRESERVE WHERE APPLICABLE | ICE | TEMPERATURE °C

ACCUTEST

03/04/99

2293

Technical Report for

Tetra Tech, NUS

Accutest Job Number: F3746

Report to:

Tetra Tech, NUS
800 Oak Ridge Turnpike
Suite A-600
Oak Ridge, TN 37830

ATTN: Mike Campbell

Total number of pages in report: 13

Harry Behzadi, Ph.D.
Laboratory Director

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

ACCUTEST

Sample Summary

Tetra Tech, NUS

Date: 03/03/99
Job No: F3746

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F3746-1	02/24/99	14:10 RA	02/24/99	SO	Soil	2273-S02
F3746-2	02/24/99	14:10 RA	02/24/99	SO	Soil	2273-S03

ACCUTEST

Report of Analysis

Client Sample ID:	2273-S02		
Lab Sample ID:	F3746-1	**Date Sampled:**	02/24/99
Matrix:	SO - Soil	**Date Received:**	02/24/99
Method:	SW846 8260B	**Percent Solids:**	97.8
Project:			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	G0007908.D	50	02/25/99	RAW	n/a	n/a	VG192
Run #2							

VOA 8021 List

CAS No.	Compound	Result	RDL	Units	Q
71-43-2	Benzene	ND	100	ug/kg	
75-27-4	Bromodichloromethane	ND	100	ug/kg	
75-25-2	Bromoform	ND	100	ug/kg	
108-90-7	Chlorobenzene	ND	100	ug/kg	
75-00-3	Chloroethane	ND	100	ug/kg	
67-66-3	Chloroform	ND	100	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	260	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	100	ug/kg	
106-93-4	1,2-Dibromoethane	ND	100	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	ug/kg	
124-48-1	Dibromochloromethane	ND	100	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	260	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	100	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	100	ug/kg	
541-73-1	m-Dichlorobenzene	ND	100	ug/kg	
95-50-1	o-Dichlorobenzene	ND	100	ug/kg	
106-46-7	p-Dichlorobenzene	ND	100	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	100	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	ug/kg	
100-41-4	Ethylbenzene	ND	100	ug/kg	
74-83-9	Methyl bromide	ND	260	ug/kg	
74-87-3	Methyl chloride	ND	260	ug/kg	
75-09-2	Methylene chloride	ND	260	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	100	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	ug/kg	
127-18-4	Tetrachloroethylene	ND	100	ug/kg	
108-88-3	Toluene	ND	100	ug/kg	
79-01-6	Trichloroethylene	ND	100	ug/kg	
75-69-4	Trichlorofluoromethane	ND	260	ug/kg	
75-01-4	Vinyl chloride	ND	260	ug/kg	
1330-20-7	Xylene (total)	ND	310	ug/kg	

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

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

ACCUTEST

Report of Analysis

Client Sample ID:	2273-S02		
Lab Sample ID:	F3746-1	**Date Sampled:**	02/24/99
Matrix:	SO - Soil	**Date Received:**	02/24/99
Method:	SW846 8260B	**Percent Solids:**	97.8
Project:			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	G0007908.D	50	02/25/99	RAW	n/a	n/a	VG192
Run #2							

VOA 8021 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		80-120%
2037-26-5	Toluene-D8	100%		81-117%
460-00-4	4-Bromofluorobenzene	101%		74-121%
17060-07-0	1,2-Dichloroethane-D4	97%		80-120%

(a) Sample introduction performed using method 5030A.

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

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

ACCUTEST

Report of Analysis

Client Sample ID:	2273-S02		
Lab Sample ID:	F3746-1	**Date Sampled:**	02/24/99
Matrix:	SO - Soil	**Date Received:**	02/24/99
Method:	SW846 3550B/8270C	**Percent Solids:**	97.8
Project:			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L001203.D	1	02/27/99	NF	02/26/99	OP705	SL76
Run #2							

BN PAH List

CAS No.	Compound	Result	RDL	Units	Q
83-32-9	Acenaphthene	ND	170	ug/kg	
208-96-8	Acenaphthylene	ND	170	ug/kg	
120-12-7	Anthracene	ND	170	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	ug/kg	
50-32-8	Benzo(a)pyrene	ND	85	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	ug/kg	
218-01-9	Chrysene	ND	170	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	85	ug/kg	
206-44-0	Fluoranthene	ND	170	ug/kg	
86-73-7	Fluorene	ND	170	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	ug/kg	
91-20-3	Naphthalene	ND	170	ug/kg	
85-01-8	Phenanthrene	ND	170	ug/kg	
129-00-0	Pyrene	ND	170	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	82%		25-121%
4165-62-2	Phenol-d5	90%		24-113%
118-79-6	2,4,6-Tribromophenol	87%		19-122%
4165-60-0	Nitrobenzene-d5	92%		23-120%
321-60-8	2-Fluorobiphenyl	91%		30-115%
1718-51-0	Terphenyl-d14	96%		18-137%

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

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

ACCUTEST

Report of Analysis

Client Sample ID:	2273-S02		
Lab Sample ID:	F3746-1	**Date Sampled:**	02/24/99
Matrix:	SO - Soil	**Date Received:**	02/24/99
Method:	FLORIDA-PRO	**Percent Solids:**	97.8
Project:			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P03420.D	1	03/02/99	SKW	02/26/99	O2704	GOP162
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C8-C40)	ND	8.5	mg/kg	

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

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

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