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QUARTERLY REPORT ON GROUNDWATER MONITORING WASTEWATER TREATMENT FACILITY NAVAL AIR STATION, PENSACOLA, FLORIDA

January 1990

Prepared for:

DEPARTMENT OF THE NAVY
Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive, P.O. Box 10068
Charleston, South Carolina 29411-0068

Contract Number N62467-88-C-0200

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DEPARTMENT OF ENVIRONMENTAL REGULATION

NORTHWEST DISTRICT
160 GOVERNMENTAL CENTER
PENSACOLA, FLORIDA 32501-5794

BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY
ROBERT V. KRIEGEL
DISTRICT MANAGER

QUARTERLY REPORT ON GROUND WATER MONITORING
Rule 17-4.245(6)(k)2.

SMS # 1017F00625 DATE FEB 9 1990

DER PERMIT # HF17-148989

U.S. Navy Public Works - Storage Surface Impoundment Closure
Installation Name

NAS Pensacola | Pensacola | Florida | Escambia
Address | City | State Zip | County

T. W. BONE, Captain, CEC, USN | Commanding Officer
Owner or Authorized Representative's Name | Title

Method of Discharge N/A

Type of Industry Military

Report for Period 9/1/89 (date) to 11/30/89 (date)

Attach monitoring data as approved in monitoring plan using parameter monitoring report forms. When applicable, attach additional sheets describing any changes in the background water quality and the discharge plume since the last reported description. Include any changes in size, direction of movement, rate of movement, and concentration changes of plume constituents in violation of the applicable standards.

NOTE: Pursuant to Rule 17-4.245(6)(k)3., at any time there is a change in the permitted volume, location or chemical, physical or microbiological composition of the discharge plume, the permittee shall notify the department and, if required by the department, submit a new report stating the volume and chemical, physical and microbiological compositionr of the discharge at the point of release or contact with the ground water at the site boundary.

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

TWBone 2/9/90

Owner or Authorized Representative's Signature | Date

328358

DER Form 17-1.216(2)
Effective January 1, 1983

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ATTACHMENT A

LIST OF HONITORING WELLS SAMPLED AND ANALYTICAL PARAMETERS (Source: U.S. Navy)

328353

			pH (150.1)	Specific Conductance	Sodium (200.7)	Chlorides (300.0)	List I (624)	List II (625)	List III	List IV	Groundwater Elev.
DACKC	UC-1	S	X	X			X	X	X		X
	DC-3	S									
	DC-4	S									
	DC-5	S									
/POC	CH8	S	X	X			X	X	X		X
CAIPOC	CH9	S	X	X			X	X	X		X
rOC	CH10	S	X	X			X	X	X		X
POC	CH11	S	X	X			X	X	X		X
rOC	CH12R	S	X	X			X	X	X		X
rOC	CH13	S	X	X			X	X	X		X
POC	CH14	S	X	X			X	X	X		X
CA	CH62	S					X	X			X
CA	CH63	D	X	X	X	X	X	X			X
CA	CH64	I	X	X	X	X	X	X			X
CA	CH65	D	X	X	X	X	X	X			X
CA	CH66	I	X	X	X	X	X	X			X
CA	CH67	S	X	X	X	X	X	X			X
CA	CH68	D	X	X	X	X	X	X			X
CA	CH63	I	X	X	X	X	X	X			X
	CH70	S									
CA	CH71	S	X	X	X	X					X
CA	CH72	S	X	X	X	X					X
	CH73	S									
CA	CH76	S	X	X	X	X					X
CA	CH77	S	X	X	X	X					X
CA	CH78	S	X	X	X	X					X
CA	CH23	S	X	X	X	X					X
	CH80	S									
	CH81	S									
		S									
CA	CH83	S	X	X	X	X					X
CA	CH84	I	X	X	X	X	X	X			X
CA	RW1-6		X	X	X	X					X
	RINS 1		X	X			X	X	X		X
	DUP 1		X	X			X	X	X		X
	DUP 2		X	X			X	X	X		X
	TB 1		X	X			X	X	X		X
	FD 1		X	X			X	X	X		X

DACC = BACKGROUND WELL
POC = POINT OF COMPLIANCE WELL
CA = CORRECTIVE ACTION WELL
LIST I = VOLATILES (METHOD 624)
LIST II = BASE NEUTRALS (METHOD 625)
LIST III = SPECIFIC CONDITION 34(c) H017-127026 (Attached)
LIST IV = 40 CFR 264 APPENDIX IX

NOTE: LISTS III AND IV HAVE HAD CONSTITUENTS LISTED IN LISTS I AND II DELETED ELIMINATING TESTING MORE THAN ONCE FOR ONE PARAMETER.

PERMITTEE:

U.S. Navy Public Works

I.D. Number: 1017F00625 (FL9170024567)
Permit/Certification Number: H017-127026
Date of Issue:

Expiration Date: November 1, 1988

SPECIFIC CONDITIONS:

b. The following wells, as shown in Figure E-14 in the Part B application, shall constitute the POC wells to which the groundwater protection standards shall apply:

Shallow Wells: DG-5, DG-4, DG-1, DG-6.
Intermediate Well: GM-75.

The background monitoring well shall be well DG-1. The facility may designate or install another well that is more representative of unaffected background to ensure completion of corrective action. The facility may apply for alternate concentration limits (ACL) in accordance with 40 CFR 264.94 for the groundwater protection standard as a permit modification in accordance with PAC Rule 17-30.290.

34 c. The groundwater protection standard (40 CFR 264.92) as established under 40 CFR 264.94 shall be:

Parameter	Standard
Arsenic	0.05 mg/l*
Barium	1.0 mg/l*
Cadmium	0.01 mg/l*
Chromium (total)	0.05 mg/l*
Lead	0.05 mg/l*
Mercury	0.002 mg/l*
Selenium	0.01 mg/l*
Silver	0.05 mg/l*
Copper	1.00 mg/l**
Zinc	5.00 mg/l**
Iron	0.3 mg/l**
Manganese	0.05 mg/l**
Antimony	minimum detection limit
Thallium	minimum detection limit
Nickel	minimum detection limit
Chloride	250 mg/l**
Sulfate	250 mg/l**
Sodium	160 mg/l**

*Federal primary drinking water standard (40 CFR 264.94 Table 1)
**Florida secondary drinking water standards (PAC 17-22.104(2))

328360

PERMITTEE:

U.S. Navy Public Works

I.D. Number: 1017700625 (PL9170024567)
Permit/Certification Number: R017-127026
Date of Issue:

Expiration Date: November 1, 1988

SPECIFIC CONDITIONS:

ACID EXTRACTABLES

2-Chlorophenol	minimum detection limit
2,4-Dichlorophenol	minimum detection limit
2,4-Dimethylphenol	minimum detection limit
4,6-Dinitro-o-Cresol	minimum detection limit
2,4-Dinitrophenol	minimum detection limit
2-Nitrophenol	minimum detection limit
4-Nitrophenol	minimum detection limit
p-Chloro-m-Cresol	minimum detection limit
Pentachlorophenol	minimum detection limit
Phenol	minimum detection limit
2,4,6-Trichlorophenol	minimum detection limit
2-methyl phenol	minimum detection limit
o-methyly phenol	minimum detection limit
methyl ethyl phenol	minimum detection limit
dimethyl ethyl phenol	minimum detection limit
tetramethyl butyl phenol	minimum detection limit

VOLATILES

Acrolein	minimum detection limit
Acrylonitrile	minimum detection limit
Benzene	minimum detection limit
Bis(chloromethyl) ether	minimum detection limit
Bromoform	minimum detection limit
Carbon Tetrachloride	minimum detection limit
Chlorobenzene	minimum detection limit
Chlorodibromomethane	minimum detection limit
Chloroethane	minimum detection limit
2-Chloroethylvinyl Ether	minimum detection limit
Chloroform	minimum detection limit
Dichlorobromomethane	minimum detection limit
Dichlorodifluoromethane	minimum detection limit
1,1-Dichloroethane	minimum detection limit
1,2-Dichloroethane	[illegible]imum detection Unit
1,1-Dichloroethylene	minimum detection limit

PERMITTEE:

U.S. Navy Public Works

I.D. Number: 1017F00625 (FL9170024567)
Permit/Certification Number: H017-127026
Date of Issue:

Expiration Date: November 1, 1988

SPECIFIC CONDITIONS:

1,2-Dichloropropane	minimum detection limit
1,2-Dichloropropylene	minimum detection limit
Ethylbenzene	minimum detection limit
Methyl Bromide	minimum detection limit
Methyl Chloride	minimum detection limit
Methyl Ethyl Ketone	minimum detection limit
Methylene Chloride	minimum detection limit
1,1,2,2-Tetrachloroethane	minimum detection limit
Tetrachloroethylene	minimum detection limit
Toluene	minimum detection limit
1,2-trans-Dichloroethylene	minimum detection limit
1,1,1-Trichloroethane	minimum detection limit
1,1,2-Trichloroethane	minimum detection limit
Trichloroethylene	minimum detection limit
Trichlorofluoromethane	minimum detection limit
Vinyl Chloride	minimum detection limit

BASE NEUTRAL EXTRACTABLES

Acenaphthene	minimum detection limit
Acenaphthylene	minimum detection limit
Anthracene	minimum detection limit
Benzidine	minimum detection limit
Benzo(a)anthracene	minimum detection limit
Benzo(a)pyrene	minimum detection limit
3,4-Benzofluoranthene	minimum detection limit
Benzo(ghi)perylene	minimum detection limit
Bis(2-chloroethoxy)methane	minimum detection limit
Bis(2-chloroethyl)ether	minimum detection limit
Bis(2-chloroisopropyl)ether	minimum detection limit
Bis(2-ethylhexyl)phthalate	minimum detection limit
4-Bromophenyl Phenyl Ether	minimum detection limit
Butylbenzyl Phthalate	minimum detection limit
2-Chloronaphthalene	minimum detection limit
4-Chlorophenyl Phenyl Ether	minimum detection limit
Chrysene	minimum detection limit
Dibenzo(a,h)anthracene	minimum detection limit
1,2-Dichlorobenzene	minimum detection limit
1,3-Dichlorobenzene	minimum detection limit
1,4-Dichlorobenzene	minimum detection limit
3,3-Dichlorobenzidine	minimum detection limit

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PERMITTEE:

U.S. Navy Public Works

I.D. Number: 1017F00625 (FL9170024567)
Permit/Certification Number: H017-127026
Date of Issue:

Expiration Date: November 1, 1988

SPECIFIC COHDIIIOHS:

Diethylphthalate	minimum detection limit
Dimethylphthalate	minimum detection limit
Dill-Butyl Phthalate	minimum detection limit
2,4-Dinitrotoluene	minimum detection limit
Di-n-Octyl-Phthalate	minimum dctcctioa limit
1,2-Diphenylhydrazine	minimum detection limit
Fluoranthene	minimum dctectloa limit
Pluorenc	minimum detectlon limit
Hexachlorobenzene	minimum detection limit
Hexachlorobutadiene	minimum detection Limit
Hexachlorocyclopentadiene	minimum dctcction limit
Hexachloroethane	minimum dctcction limit
Indeno(1,2,3-cd)pyrene	minimum dctectioa limit
Isophorone	minimum detection limit
Methyl napthalene	minimum detection limit
2-Methyl napthalene	minimum dctection limit
Naphthalene	minimum detection limit
Nitrobenzene	minimum detection limit
N-Nitrosodimethylamine	minimum detection limit
N-Nitrosodi-n-propylamine	minimum detection limit
N-Nitrosodiphenylamide	minimum detection limit
Phenanthrene	minimum detection limit
Pyrene	minimum dctection limit
1,2,4-Trichlorobenzene	minimum detection limit

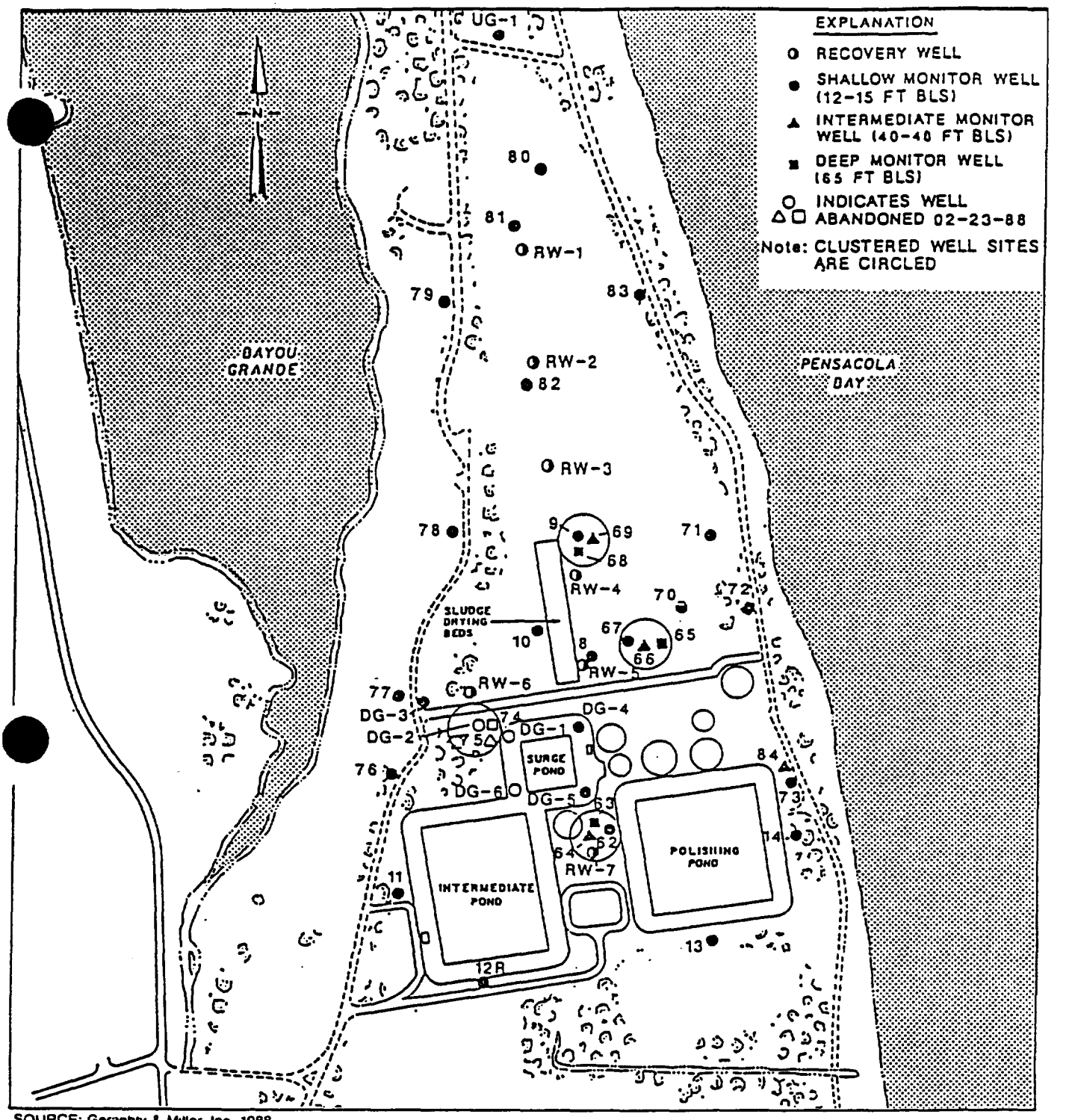
ADDITIONAL CONSTITUENTS

Benzyl Alcohol	minimum detectlon limit
Methyl Dihydro Indene	minimum detection limit
Tetramethylbenzene	minimum detection limit
"alkylated" benzene	minimum dctectioa limit
2-hexanone	minimum detection limit
Trimethyl Benzene	minimum detection limit
Hydroxymethyl Pentanone	minimum detection limit
Cyanide (complexed)	minimum detection limit

ATTACHMENT B

LOCATIONS OF MONITORING AND RECOVERY WELLS
AT NAS PENSACOLA WASTEWATER TREATMENT PLANT

328362



SOURCE: Geraghty & Miller, Inc. 1988

SCALE

0 300 600 FEET

Attachment B LOCATIONS OF MONITORING AND RECOVERY WELLS AT NAS PENSACOLA WASTEWATER TREATMENT PLANT

ATTACHMENT C

CORRECTIVE-ACTION MONITORING WELLS
GROUNDWATER SAMPLING ANALYTICAL RESULTS

328363

M E M O R A N D U M

TO: John Barksdale

Hahn/EC

FROM: Gary Hahn

DATE: January 9, 1990

SUBJECT: U.S. Navy Southern Division Report

RE: 1046.001

CC: Lab File

Attached is the laboratory report of the analysis conducted on twenty-seven samples received at the Analytical Services Center on November 30, 1989. Analysis was performed according to the procedures set forth in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, Third Edition, U.S. EPA, 1986.

All samples on which this report is based will be retained by E & E for a period of 30 days from the date of this report unless otherwise instructed by the client. If additional storage of samples is requested by the client, a storage fee of $1.00 per sample container per month will be charged for each sample, with such charges accruing until destruction of the samples is authorized by the client.

GH:ec
enclosure

M E M O R A N D U M

TO: John Barksdale

FROM: Gary Hahn Gary Hahn/EC

DATE: January 9, 1990

SUBJECT: U.S. Navy Southern Division Report

RE: 1046.003

CC: Lab File

Attached is the laboratory report of the analysis conducted on nineteen samples received at the Analytical Services Center on December 1, 1989. Analysis was performed according to the procedures set forth in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, Third Edition, U.S. EPA, 1986.

All samples on which this report is based will be retained by E & E for a period of 30 days from the date of this report unless otherwise instructed by the client. If additional storage of samples is requested by the client, a storage fee of $1.00 per sample container per month will be charged for each sample, with such charges accruing until destruction of the samples is authorized by the client.

GH:ec
enclosure

328364

PARAMETER	METHOD
List III Metals (exceptions are listed below)	Method 6010 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," *SW-846,* U.S. EPA, *1986.*
Arsenic	Method *7060* - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," *SW-846,* U.S. EPA, *1986.*
Lead	Method *7421* - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," *SW-846,* U.S. EPA, *1986.*
Mercury	Method 7470 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," *SW-846,* U.S. EPA, *1986.*
Selenium	Method *7740* - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," *SW-846,* U.S. EPA, *1986.*
Thallium	Method *7841* - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," *SW-846,* U.S. EPA, *1986.*
Sodium	Method *6010* - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," *SW-846,* U.S. EPA, *1986.*
Chloride	Method 325.3 - "Methods for the Chemical Analysis of Water and Wastes," EPA-600/4-79-020, March *1983.*
Sulfate	Method *375.4* - "Methods for the Chemical Analysis of Water and Wastes," EPA-600/4-79-020, March *1983.*
Cyanide	Method 335.2 - "Methods for the Chemical Analysis of Water and Wastes," EPA-600/4-79-020, March *1983.*
Volatile Organics	Method *8240* - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," *SW-846,* U.S. EPA, *1986.*
Semi-Volatile Organics	Method *8270* - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," *SW-846,* U.S. EPA, *1986.*

EPA - CLP DEFINED QUALIFIERS

Note: All qualifiers appear in the "Q" column.

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific.' analysis.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

Table C-1

GROUNDWATER SAMPLE DESIGNATIONS
CORRECTIVE-ACTION MONITORING WELLS

Sample location	Sample Designation
Well GM-62	P32W062
Well GM-63	P32063
Well OM-64	P32064
Well GM-65	P32065
Well GM-66	P32066
Well GM-67	P32067
Well GM-68	P32W068
Well GM-69	P32W069
Well On-71	P32W071
Well On-72	P32W072
Well OX-76	P32W076
Well GM-77	P32W077
Well GM-78	P32W078
Well GM-79	P32W079
Well GX-83	P32W083
Well OM-84	P32084
RW1-6*	P32WR1-6

*Composite discharge from the recovery well system

Table C-2

SUMMARY ANALYTICAL RESULTS FOR
CORRECTIVE-ACTION MONITORING WELLS

(All results in ug/L unless noted)

Compound	Sample No. (Location)								
	P32W062* (GM-62)	P32W063 (GM-63)	P32W064 (GM-64)	P32W065 (GM-65)	P32W066 (GM-66)	P32W067 (GM-67)	P32W068 (GM-68)	P32W069 (GM-69)	P32W084 (GM-84)
Sodium (mg/L)	---	479	241	66.9	642	50.6	693	693	5,540
Chloride (mg/L)	---	840	310	180	S70	35	130	760	7,800
Vinyl Chlorido	---	---	---	---	180(J)	---	---	11	---
Chloroethane	---	---	---	---	---	---	---	14	---
Methylene Chlorido	6(B)	5(B)	6(B)	5(B)	340(B)	5(B)	7(B)	7(B)	9(B)
Acetone	---	---	---	19(B)	460(B)	---	---	30(B)	49(B)
Carbon Disulfide	15	---	46	---	240	64	86	---	---
1.1-Dichloroothano	---	---	---	---	---	---	---	110	---
1,1-Dichloroethene	---	---	---	---	320	---	---	---	---
Chlorobenzene	---	17	15(B)	---	59(J)	92(B)	---	120	---
Trichloroethene	2(J,B)	---	2(J,B)	---	8,400(E)	2(J,B)	4(J,B)	1(J)	---
Tetrachloroethene	---	---	---	---	---	---	---	7	---
Toluene	---	---	---	---	---	3(J)	---	4(J)	---
Total Xylenes	---	---	---	---	---	---	---	5(B)	---
1,3-Dichlorobenzene	---	---	5(J)	---	8(J)	---	---	310	---
1,4-Dichlorobenzene	---	---	8(J)	---	16	8(J)	---	250	---
1,2-Dichlorobenzene	---	---	8(J)	---	34	---	---	350	---
2-Methylphenol	---	---	---	---	6(J)	---	---	---	---
4-Methylphenol	---	---	---	---	2(J)	---	---	---	---
2,4-Dimethylphenol	---	---	---	---	64	---	---	---	---
Naphthalene	---	---	---	---	78	2(J)	---	2(J)	---
bis(2-Ethylhexyl)phthalate	3(J,B)	18(B)	2(J,B)	---	3(J,B)	---	2(J,B)	---	8(J,B)
Di-n-butylphthalate	15(B)	5(J,B)	4(J,B)	5(J,B)	10(B)	5(J,B)	4(J,B)	2(J)	4(J)
2,4-Dichlorophenol	---	---	---	---	---	---	---	5(J)	---
2,4-Dimethylphenol	---	---	---	---	63	---	---	---	---
2-Methylnaphthalene	---	---	---	---	4(J)	---	---	---	---
Acenapthene	---	---	---	---	3(J)	---	---	---	---
Dibenzofuran	---	---	---	---	1(J)	---	---	---	---
Fluorene	---	---	---	---	2(J)	---	---	---	---
Di-n-octylphthalate	---	---	---	---	1(J)	---	---	---	---

*Analyzed for VOCs and BNAs only.

J-Estimated value, compound present below detection limit

B-Compound also present in method blank at similar concentration

E-Detected concentration exceeded calibration range of analyzing instrument

A dash (---) indicates compound not detected

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Table C-2 (Continued)

SUMMARY ANALYTICAL RESULTS ?OR CORRECTIVE-ACTION MONITORING WELLS

(All results in mg/L)

Compound	Sample No. (Location)							
	P32W071 (GM-71)	P32W072 (GM-72)	P32W076 (GM-76)	P32W077 (GM-77)	P32W078 (GM-78)	P32W079 (GM-79)	P32W083 (Ox-83)	P32WR1-6 (RW1-6)
Sodium	110	21.4	136	46.5	4.24	3.73	24.7	138
Chloride	240	57	180	52	10	5.60	53	200

Note: *Those* samples analyzed for sodium and chloride only.

PARAMETER MONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GMS # 1017F00625

Sample Date: 11-30-89

Monitoring Well # GH-62

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Shallow

Classification of Groundwater G-1

Well Developed, Prior to Sample Collection (Yes/No)* YES

Groundwater Elevation (above MSL) 1.61 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	6.6		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	600	umhos/cm	Unfiltered	
	VOCs	Teflon bailer	8240	See attached		Unfiltered	HCl
	BNAs	Teflon bailer	8270	See attached		Unfiltered	

* Well development is the process of pumping the well prior to sampling in order to obtain a representative groundwater sample.

DER Form 17-1.216(2)

Effective January 1, 1983

323367

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W062

Lab Name: E & E INC: Contract: UH-4000

Cab Code: EANDE Case No.: 1046_003 SAS No.: SOG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58374

Sample wt/vol: 5.0 (g/mL) HL Lab File IC: C9461

Lave1: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. Date Analyzed: 12/09/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	15	
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	2	BJ
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

P32W062

Lab Name: E & E INC. Contract: UH-4000

Lab code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58289

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E9144

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/04/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

328363

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

P32W062

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58289

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E9144

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dcc. Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/04/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	15	B
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	13	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	3	JB
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

BJ 1/4/90

PARAMETER MONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GMS # 1017F00625

Sample Date: 11-29-89

Monitoring Well # GH-63

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Deep

Classification of Groundwater G-1

Well Developed: Prior to Sample Collection (Yes/No) YES

Groundvater Elevation (above HSL) 1.64 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Hethod	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon Bailer	150.1	7.1		Unfiltered	
	Sptcific Conductance	Teflon Bailer	120.I	3,000	umhos/ cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				
	VOCs	Teflon bailer	8240	See attached		Unfiltered	HCl
	BNAs	Teflon bailer	8270	See attached		Unfiltered	

* Well development is the process of pumping the well prior to sampling in order to obtain a representative groundvater sample.

DER Form 17-1.216(2)

Effective January 1, 1983

323369

METALS SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58290 MATRIX : WATER
SAMPLE ID CLIENT: P32W063

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Sodium	479		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.001

Ecology and Environment; Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58290 MATRIX: VATER
SAMPLE ID CLIENT: P32W063

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	840		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOV STATED DETECTION LIMIT

328370

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F32W063

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58375

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9484

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. Date Analyzed: 12/11/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (totall —	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichlorocthane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethane	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	17	
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NU.

P32W063

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58290

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 83190

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

328371

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W063

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046-001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58290

Sample ut/vol: 1000 (g/mL) ML Lab File ID: B3190

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	CORPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	5u	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	5	BJ
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	18	B
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

PARAMETER MONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GHS # 1017F00625

Sample Date: 11-29-89

Monitoring Well # GN-64

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Intermediate

Classification of Groundvater G-1

Well Developed: Prior to Sample Collection (Yes/No) YES

Groundwater Elevation (above MSL) 0.54 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon Bailer	150.1	7.0		Unfiltered	
	Specific Conductance	Teflon Bailer	120.1	2,000	umhos/ cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				
	VOCs	Teflon bailer	8240	See attached		Unfiltered	HCl
	BNAs	Teflon bailer	8270	See attached		Unfiltered	

* Well development is the process of pumping the well prior to sampling in order to obtain a representative groundwater sample.

DER Form 17-1.216(2)

Effective January 1, 1983 328373

METALS SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58291 MATRIX : WATER
SAMPLE ID CLIENT: P32W064

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Sodium	241		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58291 MTRIX: VATER
SAMPLE ID CLIENT: P32W064

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	310		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

328373

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMP.

P32W064

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58376

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9463

Level: (low/med) LOW Date Received: 12/01/89

% Roisture: not dec. Date Analyzed: 12/09/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	IU
74-83-9	Bromomethane	13	IU
75-01-4	Vinyl Chlorrde	10	IU
75-00-3	Chloroethanc	10	IU
75-09-2	Methylene Chloride	o	IB
67-64-1	Acetone	10	IU
75-15-0	Carbon Disulfide	46	I
75-35-4	1,1-Dichloroethene	5	IU
75-34-3	1,1-Dichloroethane	5	IU
540-59-0	1,2-Dichloroethene (totall	5	IU
67-66-3	Chloroform	5	[redacted]
107-06-2	1,2-Dichloroethane	5	IU
78-93-3	2-Butanone	10	IU
71-55-6	1,1,1-Trichloroethane	5	IU
56-23-5	Carbon Tetrachloride	5	[redacted]
108-05-4	Vinyl Acetate	10	IU
75-27-4	Bromodichloromethane	5	IU
78-87-5	1,2-Dichloropropane	5	IU
10061-01-5	cis-1,3-Dichloropropene	5	IU
79-01-6	Trichloroethene	2	IBJ
124-48-1	Dibromochloromethane	5	IU
79-00-5	1,1,2-Trichloroethane	5	IU
71-43-2	Benzene	5	IU
10061-02-6	trans-1,3-Dichloropropene	5	IU
75-25-2	Bromoform	5	IU
108-10-1	4-Methyl-2-Pentanone	10	IU
591-78-6	2-Hexanone	10	IU
127-18-4	Tetrachloroethcne	5	IU
79-34-5	1,1,2,2-Tetrachloroethane	5	IU
108-88-3	Toluene	5	IU
108-90-7	Chlorobenzene	15	IB
100-41-4	Ethylbenzene	5	IU
100-42-5	Styrene	5	IU
1330-20-7	Xylene (total)	5	IU

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NU.

P32W064

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Care No.: 1046_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58291

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 63191

Lev. 1: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dac. Data Extr8ctsd: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	5	J
106-46-7	1,4-Dichlorobenzene	8	J
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	8	J
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

328375

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W064

Lab Name: E & E INC. contrac:: UH-4000

Lab Code: EANDE Case No. : 1046-001 SAS No. : SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 56291

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B3191

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

CPC Cleanup: (Y/N) N pH: Dilution factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Rethylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	5u	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	4	BJ
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	2	BJ
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indano(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

PARAMETER MONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GMS # 1017F00625

Sample Date: 11-29-89

Monitoring Well # GH-65

Vell Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Deep

Classification of Groundwater G-1

Well Developed. Prior to Sample Collection* (Yes/No) YES

Groundwater Elevation (above HSL) 1.59 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon Bailer	150.1	6.4		Unfiltered	
	Specific Conductance	Teflon Bailer	120.1	800	umhos/ cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				
	VOCs	Teflon bailer	8240	See attached		Unfiltered	HCl
	BNAs	Teflon bailer	8270	See attached		Unfiltered	

*Well development is the process of pumping the well prior to sampling in order to obtain a representative groundwater sample.

DER Form 17-1.216(2)

Effective January 1, 1983

328376

METALS SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58292 MATRIX: WATER
SAMPLE ID CLIENT: P32W065

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Sodium	88.9		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58292 MATRIX: WATER
SAMPLE ID CLIENT: P32W065

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	180		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

328377

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W065

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 5,8377

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9485

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. Date Analyzed: 12/11/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	B
67-64-1	Acetone	19	S
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	ChloroForm	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W065

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58202

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 63192

Level: (low/med) LOW Data Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		a
108-95-2	Phenol	10	U	
111-44-4	bis(2-Chloroethyl)Ether	10	U	
95-57-8	2-Chlorophenol	10	U	
541-73-1	1,3-Dichlorobenzene	10	U	
106-46-7	1,4-Dichlorobenzene	10	U	
100-51-6	Benzyl Alcohol	10	U	
95-50-1	1,2-Dichlorobenzene	10	U	
95-48-7	2-Methylphenol	10	U	
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U	
106-44-5	4-Methylphenol	10	U	
621-64-7	N-Nitroso-Di-n-Propylamine	10	U	
67-72-1	Hexachloroethane	10	U	
98-95-3	Nitrobenzene	10	U	
78-59-1	Isophorone	10	U	
88-75-5	2-Nitrophenol	10	U	
105-67-9	2,4-Dimethylphenol	10	U	
65-85-0	Benzoic Acid	50	U	
111-91-1	bis(2-Chloroethoxy)Methane	10	U	
120-83-2	2,4-Dichlorophenol	10	U	
120-82-1	1,2,4-Trichlorobenzene	10	U	
91-20-3	Naphthalene	10	U	
106-47-8	4-Chloroaniline	10	U	
87-68-3	Hexachlorobutadiene	10	U	
59-50-7	4-Chloro-3-Methylphenol	10	U	
91-57-6	2-Methylnaphthalene	10	U	
77-47-4	Hexachlorocyclopentadiene	10	U	
88-06-2	2,4,6-Trichlorophenol	10	U	
95-95-4	2,4,5-Trichlorophenol	50	U	
91-58-7	2-Chloronaphthalene	10	U	
88-74-4	2-Nitroaniline	50	U	
131-11-3	Dimethyl Phthalate	10	U	
208-96-8	Acenaphthylene	10	U	
606-20-2	2,6-Dinitrotoluene	10	U	

328378

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F32W065

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SOG No.:

matrix: (soil/water) WATER Lab Sample ID: 58292

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 83192

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analysed: 01/03/90

GFC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	5	BJ
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidins	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

PARAMETER HONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GHS # 1017F00625

Sample Date: 11-29-89

Monitoring Well # GM-66

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Intermediate

Classification of Groundvater G-1

Well Developed, Prior to Sample Collection (Yes/No) * YES

Groundwater Elevation (above HSL) 0.76 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	3.1		Unfiltered	
	Spacific Conductance	Teflon bailer	120.1	>9,500	umhos/ cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				
	VOCS	Teflon bailer	8240	See attached		Unfiltered	HCl
	BNAS	Teflon bailer	8270	See attached		Unfiltered	

* Well development is the process of pumping the well prior to sampling in order to obtain a representative groundvater sample.

DER Form 17-1.216(2)
Effective January 1, 1983

328370

METALS SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58293 MATRIX : WATER
SAMPLE ID CLIENT: P32W066

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Sodium	842		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58293 MATRIX: WATER
SAMPLE ID CLIENT: P32W066

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	570		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

328330

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W066

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS NO.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 53378

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9511

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. Date Analyzed: 12/12/89

Column: (pack/cap) CAP Dilution factor: 25

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) UG/L	Q
74-87-3	Chloromethane	250	U
74-83-9	Bromomethane	250	U
75-01-4	Vinyl Chloride	18	J
75-00-3	Chloroethane	250	U
75-09-2	Methylene Chloride	340	B
67-64-1	acetone	460	B
75-15-0	Carbon Disulfide	240	
75-35-4	1,1-Dichloroethene	320	
75-34-3	1,1-Dichloroethane	120	U
540-59-0	1,2-Dichloroethene (totall	120	U
67-66-3	Chloroform	120	U
107-06-2	1,2-Dichloroethane	120	U
78-93-3	2-Butanone	250	U
71-55-6	1,1,1-Trichloroethane	120	U
56-23-5	Carbon Tetrachloride	120	U
108-05-4	Vinyl Acetate	250	U
75-27-4	Bromodichloromethane	120	U
78-87-5	1,2-Dichloropropane	120	U
10061-01-5	cis-1,3-Dichloropropene	120	U
79-01-6	Trichloroethene	8400	E
124-48-1	Dibromochloromethane	120	U
79-00-5	1,1,2-Trichloroethane	120	U
71-43-2	Benzene	120	U
10061-02-6	trans-1,3-Dichloropropene	120	U
75-25-2	Bromoform	120	U
108-10-1	4-Methyl-2-Pentanone	250	U
591-78-6	2-Hexanone	250	U
127-18-4	Tetrachloroethene	120	U
79-34-5	1,1,2,2-Tetrachloroethane	120	U
108-88-3	Toluene	120	U
108-90-7	Chlorobenzene	59	J
100-41-4	Ethylbenzene	120	U
100-42-5	Styrene	120	U
1330-20-7	Xylene (total)	120	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

P32W066

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58293

Sample wt/vol: 1000 (g/mL) ML Lab Fila ID: E9145

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/04/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	6	J
106-46-7	1,4-Dichlorobenzene	16	
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	34	
95-48-7	2-Methylphenol	6	J
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	2	J
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	63	
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	78	
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	4	J
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichloraphenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

328381

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

P32W066

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58293

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E9145

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/04/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	3	J
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	1	J
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	2	J
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	B
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	3	JB
117-84-0	Di-n-Octyl Phthalate	1	J
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

BJK 1/9/90.

PARAMETER MONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GHS # 1017F00625

Sample Date: 11-29-89

Honitoring Vell # GH-67

Vell Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Shallov

Classification of Groundwater G-1

Vell Developed* Prior to Sample Collection (Yes/No) YES

Groundwater Elevation (above HSL) 1.25 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	6.7		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	1,600	umhos/cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				
	VOCs	Teflon bailer	8240	See attached		Unfiltered	HCl
	BNAs	Teflon bailer	8270	See attached		Unfiltered	

* Vell development is the process of pumping the well prior to sampling in order to obtain a representative groundvater sample.

DER Form 17-1.216(2)

Effective January 1, 1983

328383

METALS SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58294 MATRIX: WATER
SAMPLE ID CLIENT: P32W067

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Sodium	50.6		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.001

Ecology and Environment,. Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58294 MATRIX: WATER
SAMPLE ID CLIENT: P32W067

PARAMETER	RESULTS	Q	DET. LIHIT	UNITS
Chloride	35		10	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

328383

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W067

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Cart No. : 1046_003 SAS No. : SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58379

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9465

Level: (low/med) LOW Date Received: 12/01/89

% moisture: not dac. Date Analyzed: 12/09/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	64	
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	2	BJ
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	3	J
108-90-7	Chlorobenzene	92	B
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W067

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58294

Sample wt/vol: 1000 (g/mL) ML Lab Fila ID: E3200

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	IU
111-44-4	bis(2-Chloroethyl)Ether	10	tu
95-57-8	2-Chlorophenol	10	IU
541-73-1	1,3-Dichlorobenzene	10	IU
106-46-7	1,4-Dichlorobenzene	8	IJ
100-51-6	Benzyl Alcohol	10	IU
95-50-1	1,2-Dichlorobenzene	10	IU
95-48-7	2-Methylphenol	10	IU
39638-32-9	bis(2-Chloroisopropyl)Ether	10	IU
106-44-5	4-Methylphenol	10	IU
621-64-7	N-Nitroso-Di-n-Propylamine	10	IU
67-72-1	Hexachloroethane	10	IU
98-95-3	Nitrobenzene	10	IU
78-59-1	Isophorone	10	IU
88-75-5	2-Nitrophenol	10	IU
105-67-9	2,4-Dimethylphenol	10	IU
65-85-0	Benzoic Acid	50	IU
111-91-1	bis(2-Chloroethoxy)Methane	10	IU
120-83-2	2,4-Dichlorophenol	10	IU
120-82-1	1,2,4-Trichlorobenzene	10	IU
91-20-3	Naphthalene	2	IJ
106-47-8	4-Chloroaniline	10	tu
87-68-3	Hexachlorobutadiens	10	IU
59-50-7	4-Chloro-3-Methylphenol	10	IU
91-57-6	2-Methylnaphthalene	10	IU
77-47-4	Hexachlorocyclopentadiene	10	IU
88-06-2	2,4,6-Trichlorophenol	10	IU
95-95-4	2,4,5-Trichlorophenol	50	IU
91-58-7	2-Chloronaphthalene	10	IU
88-74-4	2-Nitroaniline	50	IU
131-11-3	Dimethyl Phthalate	10	IU
208-96-8	Acenaphthylene	10	IU
606-20-2	2,6-Dinitrotoluene	10	IU

328384

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W067

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58294

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 63200

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/05/69

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

CPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CRS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	5	BJ
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

PARAMETER MONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GMS # 1017F00625

Sample Date: 11-28-89

Monitoring Well # GH-68

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Deep

Classification of Groundwater G-1

Well Developed, Prior to Sample Collection (Yes/No)* YES

Groundwater Elevation (above MSL) 1.67 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	kits	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon Bailer	150.1	7.2		Unfiltered	
	Specific Conductance	Teflon Bailer	120.1	620	umhos/cm	Unfiltered	
	tnorganics:	Teflon bailer		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				
	VOCs	Teflon bailer	8240	See attached		Unfiltered	HCl
	BNAs	Teflon bailer	8270	See attached		Unfiltered	

* Well development is the process of pumping the well prior to sampling in order to obtain a representative groundwater sample.

DER Form 17-1.216(2)

Effective January 1, 1983

32835

METALS SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58295 MATRIX: WATER
SAMPLE ID CLIENT: P32W068

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Sodium	77.1		1.0	MG/L

QUALIFIERS: C =.COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58295 MATRIX: WATER
SAMPLE ID CLIENT: P32W068

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	130		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

323386

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W068

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58295

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9455

Level: (low/med) LOW Date Received: 11/30/89

% moisture: not dec. Date Analyzed: 12/09/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CRS NO.	COMPOUND	CONCENTRRTION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	7	JB
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	86	
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	4	JB
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

BK 1/9/90

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W069

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58295

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B3201

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

328387

IC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W068

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58295

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B3201

Laval: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	5u	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzo Furan	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	4	BJ
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalote	2	BJ
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

PARAMETER MONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GMS # 1017F00625

Sample Date: 11-28-89

Monitoring Well # GH-69

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Intermediate

Classification of Groundwater G-1

Well Developed, Prior to Sample Collection (Yes/No)* YES

Groundwater Elevation (above HSL) 1.10 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	units	Filtered/ Unfiltered	Preservatives Added
	pH	Teflon bailer	150.1	7.4		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	3,400	umhos/cm	Unfiltered	
	Inorganics:	Teflon. bailer		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				
	VOCs	Teflon bailer	8240	See attached		Unfiltered	HCl
	BNAs	Teflon bailer	8270	See attached		Unfiltered	

* Well development is the process of pumping the well prior to sampling in order to obtain a representative groundwater sample.

DER Form 17-1.216(2)

Effective January 1, 1983

328383

METALS SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58296 MATRIX: WATER
SAMPLE ID CLIENT: P32W069

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Sodium	693		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.001

Ecology and Environment,. Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58296 MATRIX: WATER
SAMPLE ID CLIENT: P32W069

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	760		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
3 = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

328389

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W069

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No. : 1046_001 SAS No. : SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58296

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CY500

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. Date Analyzed: 12/14/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATIUN UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	11	
75-00-3	Chloroethane	14	
75-09-2	Methylene Chloride	7	B
67-64-1	Acetone	30	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	110	
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	1	IJ
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	7	
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	IJ
108-90-7	Chlorobenzene	120	
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	B

BJK 1/9/90

FORM I VOA 1/87 Rev.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NU.

P32W069

Lab Name: E & E INC. . Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58296

Sample wt/vol: 1000 (g/mL) ML Lab Fila ID: E9146

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/05/80

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/04/90'

GPC Cleanup: (Y/N) N pH: Dilution Factor: 2.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	a
108-95-2	Phenol	25	U
111-44-4	bis(2-Chloroethyl)Ether	25	U
95-57-8	2-Chlorophenol	25	U
541-73-1	1,3-Dichlorobenzene	310	~~E~~
106-46-7	1,4-Dichlorobenzene	250	~~E~~
100-51-6	Benzyl Alcohol	25	U
95-50-1	1,2-Dichlorobenzene	350	~~E~~
95-48-7	2-Methylphenol		
39638-32-9	bis(2-Chloroisopropyl)Ether	25	U
106-44-5	4-Methylphenol	25	U
621-64-7	N-Nitroso-Di-n-Propylamine	25	U
67-72-1	Hexachloroethane	25	U
98-95-3	Nitrobenzene	25	U
78-59-1	Isophorone	25	U
88-75-5	2-Nitrophenol	25	U
105-67-9	2,4-Dimethylphenol	25	U
65-85-0	Benzoic Acid	125	U
111-91-1	bis(2-Chloroethoxy)Methane	25	U
120-83-2	2,4-Dichlorophenol	5	J
120-82-1	1,2,4-Trichlorobenzene	25	U
91-20-3	Naphthalene	2	J
106-47-8	4-Chloroaniline	25	U
87-68-3	Hexachlorobutadiene	25	U
59-50-7	4-Chloro-3-Methylphenol	25	U
91-57-6	2-Methylnaphthalene	25	U
77-47-4	Hexachlorocyclopentadiene	25	U
88-06-2	2,4,6-Trichlorophenol	25	U
95-95-4	2,4,5-Trichlorophenol	125	U
91-58-7	2-Chloronaphthalene	25	U
88-74-4	2-Nitroaniline	125	U
131-11-3	Dimethyl Phthalate	25	U
208-96-8	Acenaphthylene	25	U
606-20-2	2,6-Dinitrotoluene	25	U

BJK 1/9/90

328391

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W069

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58296

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E9146

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/04/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 2.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	125	U
83-32-9	Acenaphthene	25	U
51-28-5	2,4-Dinitrophenol	125	U
100-02-7	4-Nitrophenol	125	U
132-64-9	Dibenzofuran	25	U
121-14-2	2,4-Dinitrotoluene	25	U
84-66-2	Diethylphthalate	25	U
7005-72-3	4-Chlorophenyl-phenylether	25	U
86-73-7	Fluorene	25	U
100-10-6	4-Nitroaniline	125	U
534-52-1	4,6-Dinitro-2-Methylphenol	125	U
86-30-6	N-Nitrosodiphenylamine (1)	25	U
101-55-3	4-Bromophenyl-phenylether	25	U
118-74-1	Hexachlorobenzene	25	U
87-86-5	Pentachlorophenol	125	U
85-01-8	Phenanthrene	25	U
120-12-7	Anthracene	25	U
84-74-2	Di-n-Butylphthalate	2	J
206-44-0	Fluoranthene	25	U
129-00-0	Pyrene	25	U
85-68-7	Butylbenzylphthalate	25	U
91-94-1	3,3'-Dichlorobenzidine	5u	U
56-55-3	Benzo(a)Anthracene	25	U
218-01-9	Chrysene	25	U
117-81-7	bis(2-Ethylhexyl)Phthalate	25	U
117-84-0	Di-n-Octyl Phthalate	25	U
205-99-2	Benzo(b)Fluoranthene	25	U
207-08-9	Benzo(k)Fluoranthene	25	U
50-32-8	Benzo(a)Pyrene	25	U
193-39-5	Indeno(1,2,3-cd)Pyrene	25	U
53-70-3	Dibenz(a,h)Anthracene	25	U
191-24-2	Benzo(g,h,i)Perylene	25	U

(1) - Cannot be separated from Diphenylamine

PARAMETER MONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GMS # 1017F00625

Sample Date: 11-29-89

Honitoring Well # GX-84

Vell Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Intermediate

Classification of Groundvater G-1

Well Developed: Prior to Sample Collection (Yes/No) YES

Groundwater Elevation (above HSL) 0.07 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	units	Sample Filteredl Unfiltered	Preser-vatives Added
	pH	Teflon Bailer	150.1	. . 7.0		Unfiltered	
	Specific Conductance	Teflon Bailer	120.1	>10,000	umhos/cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				
	VOCs	Teflon bailer	8240	See attached		Unfiltered	HCl
	BNAs	Teflon bailer	8270	See attached		Unfiltered	

* Vell development is the process of pumping the well prior to sampling in order to obtain a representative groundwater sample.

DER Form 17-1.216(2)

Effective January 1, 1983

328392

METALS SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58285 MATRIX : WATER
SAMPLE ID CLIENT: P32W084

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Sodium	5540		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58285 MATRIX: VATER
SAMPLE ID CLIENT: P32W084

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	7800		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = *ALSO* PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

328393

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W084

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58380

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9507

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dac. Date Analyzed: 12/12/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	9	B
67-64-1	Acetone	49	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W084

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case NO.: 1046_001 SAS NO.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58285

Sample ut/vol: 1000 (g/mL) ML Lab File ID: E3179

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/02/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	tu
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

328394

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W084

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58235

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 63179

Level: (low/med) LOW Date Received: 11/30/89

% moisture: not dsc. dec. Date Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/02/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	4	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	6	BJ
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

PARAMETER MONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GMS # 1017F00625

Sample Date: 11-28-89

Monitoring Well # GM-71

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: shallow

Classification of Groundwater G-1

Well Developed* Prior to Sample Collection (Yes/No) YES

Groundwater Elevation (above HSL) 0.69 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	6.5		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	1,000	umhos/ cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				

* Well development is the process of pumping the well prior to sampling in order to obtain a representative groundwater sample.

DER Form 17-1.216(2)

Effective January 1, 1983

328395

METALS SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58270 MATRIX: WATER
SAMPLE ID CLIENT: P32W071

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Sodium	110		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58270 MATRIX: WATER
SAMPLE ID CLIENT: P32W071

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	240		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIHATED VALUE B = ALSO PRESENT IN BUNK
L = PRESENT BELOW STATED DETECTION LIHIT

328396

PARAMETER MONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GMS # 1017F00625

Sample Date: 11-28-89

Monitoring Well # GM-72

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Shallow

Classification of Groundwater G-1

Well Developed* Prior to Sample Collection (Yes/No) YES

Groundwater Elevation (above MSL) 0.62 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preservatives Added
	pH	Teflon bailer	150.1	6.6		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	520	umhos/cm	Unfiltered	
	Inorganics	Teflon bailer		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				

* Well development is the process of pumping the well prior to sampling in order to obtain a representative groundwater sample.

DER Form 17-1.216(2)

Effective January 1, 1983

METALS SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAHPLE ID LAB : EE#89-58271 MATRIX : WATER
SAHPLE ID CLIENT: P32W072

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Sodium	27.4		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = *ALSO* PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIHIT

328397

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58271 MATRIX: WATER
SAMPLE ID CLIENT: P32W072

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	57		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

PARAMETER MONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GMS # 1017F00625

Sample Date: 11-28-89

Monitoring Well # GH-76

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Shallow

Classification of Groundwater G-1

Well Developed* Prior to Sample Collection (Yes/No) YES

Groundwater Elevation (above HSL) 1.52 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	6.6		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	1,000	umhos/ cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached.		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				

*Well development is the process of pumping the well prior to sampling in order to obtain a representative groundvater sample.

DER Form 17-1.216(2)

Effective January 1, 1983

328398

METALS SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58272 MATRIX: WATER
SAMPLE ID CLIENT: P32W076

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Sodium	136		1.0	MG/L

QUALIFIERS: C = ,COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.001

Ecology and Environment; Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58272 MATRIX: WATER
SAMPLE ID CLIENT: P32W076

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	180		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

328400

PARAMETER MONITORING REPORT
(Rule 17-3.402, 17-3.404 - 17-3.406)

GMS # 1017F00625

Sample Date: 11-28-89

Monitoring Well # GM-77

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Shallow

Classification of Groundwater G-1

Well Developed* Prior to Sample Collection (Yes/No) YES

Groundwater Elevation (above MSL) 1.47 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	6.7		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	570	umhos/ cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				

*Well development is the process of pumping the well prior to sampling in order to obtain a representative groundwater sample.

DER Form 17-1.216(2)

Effective January 1, 1983

METALS SECTION JOB NUMBER : 1046.001

Ecology and Environment, 'Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58273 MATRIX: WATER
SAMPLE ID CLIENT: P32W077

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
sodium	46.5		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIHATED VALUE B = *ALSO* PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

328401

GENERAL ANALYTICAL SECTION JOB NUMBER : *1046.001*

Ecology and Environment, Inc.
Analytical' Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58273 MATRIX: WATER
SAMPLE ID CLIENT: P32W077

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	52		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

PARAMETER MONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GHS # 1017F00625

Sample Date: 11-28-89

Monitoring Well # GH-78

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Shallow

Classification of Groundwater G-1

Well Developed. Prior to Sample Collection (Yes/No)* YES

Groundwater Elevation (above HSL) 1.37 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preservatives Added
	pH	Teflon bailer	150.1	6.6		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	210	umhos/cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				

* Well development is the process of pumping the well prior to sampling in order to obtain a representative groundwater sample.

DER Form 17-1.216(2)

Effective January 1, 1983

328402

METALS SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58274 MATRIX: WATER
SAMPLE ID CLIENT: P32W078

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Sodium	4.24		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58274 MATRIX: WATER
SAMPLE ID CLIENT: P32W078

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	10		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

328403

PARAMETER MONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GMS # 1017F00625

Sample Date: 11-28-89

Monitoring Well # GM-79

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Shallow

Classification of Groundwater G-1

Well Developed Prior to Sample Collection (Yes/No)* YES

Groundwater Elevation (above MSL) 1.04 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	6.2		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	90	umhos/ cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				

* Well development is the process of pumping the well prior to sampling in order to obtain a representative groundwater sample.

DER Form 17-1.216(2)

Effective January 1, 1983

METALS SECTION JOB NUMBER : 1046.001

Ecology and Environment; Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58275 MATRIX: WATER
SAMPLE ID CLIENT: P32W079

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Sodium	3.73		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58275 MATRIX: WATER
SAMPLE ID CLIENT: P32W079

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	5.6		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

PARAMETER MONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GMS # 1017F00625

.Sample Date : 12-28-89

Monitoring Well # GH-83

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Shallow

Classification of Groundwater G-1

Well Developed* Prior to Sample Collection (Yes/No) YES

Groundwater Elevation (above MSL) 0.30 ft

STORET Code	Parameter Monitored	Sampling Method	BPA Analysis Method	Analysis Result	Units	sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	5.4		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	200	umhos/ cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				

* Well development is the process of pumping the well prior to sampling in order to obtain a representative groundwater sample.

DER Form 17-1.216(2)
Effective January 1, 1983

320405

METALS SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAHPLE ID LAB : EE#89-58276 MATRIX: WATER
SAMPLE ID CLIENT: P32W083

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Sodium	24.7		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58276 MATRIX: WATER
SAMPLE ID CLIENT: P32W083

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	53		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

328406

PARAMETER HONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GMS # 1017F00625

Sample Date: 11-30-89

Monitoring Well # RW1-6

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: composite discharge from recovery well system

Classification of Groundwater G-1

Well Developed* Prior to Sample Collection (Yes/No) YES

Groundwater Elevation (above MSL) N/A ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Recovery well discharge	150.1			Unfiltered	
	Specific Conductance	Recovery well: discharge	120.1		umhos/ cm	Unfiltered	
	Inorganics:	Recovery well discharge		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				

* Well development is the process of pumping the well prior to sampling in order to obtain a representative groundwater sample.

DER Form 17-1.216(2)

Effective January 1, 1983

METALS SECTION JOB NUMBER : 1046.001

Ecology and Environment; Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58277 MATRIX: WATER
SAMPLE ID CLIENT: P32WR1-6

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Sodium	138		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58277 MATRIX: W
SAMPLE ID CLIENT: P32WR1-6

PARAMETER	RESULTS	Q	DET.
Chloride	200		

QUALIFIERS: C = COMMENT ND = NOT DETEC'
J = ESTIMATED VALUE B = ALSO PRES
L = PRESENT BELOW STATED DETECTION LI

NUMBER : *1046.001*

TER

IMIT	UNITS
.0	MG/L

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ATTACHMENT D

POINT-OF-COMPLIANCE MONITORING WELLS
GROUNDWATER SAMPLING ANALYTICAL RESULTS

328400

Table D-1

GROUNDWATER SAMPLE DESIGNATIONS
POINT-OF-COMPLIANCE MONITORING WELLS

Sample Location	Sample Designation
Well UG-1	P32W001
Well GM-8	P32W008
Well GM-9	P32W009
Well GM-10	P32W010
Well GM-11	P32W011
Well GM-12R	P32W012R
Well GM-13	P32W013
Well GM-14	P32W014

Table D-2

SUMMARY ANALYTICAL RESULTS FOR
POINT-OF-COMPLIANCE MONITORING WELLS
(All results in ug/L)

Compound	Sample No. (Location)							
	P32W001 (UG-1)	P32W008 (GM-8)	P32W009 (GM-9)	P32W010 (GM-10)	P32W011 (GM-11)	P32W012R (GM-12R)	P32W013 (GM-13)	P32W014 (GM-14)
Barium	—	70	38	47	—	44	11	23
Iron	368	4,550	3,860	724	48	644	430	314
Lead	—	—	—	—	—	—	—	—
Manganese	—	94	72	123	21	325	44	179
Mercury	—	—	—	—	4.4	—	—	—
Sodium	9,420	6,840	2 470	5,970	27,300	8,460	3,830	164,000
Zinc	—	12	15	—	—	—	12	—
Chloride	13,000	8,300	2 600	12,000	41,000	8,700	7,000	190,000
Sulfate	18.000	40,000	13 000	37,000	38,000	31,000	38,000	18,000
Cyanide	30	80	20	100	990	20	40	220
Methylene chloride	7(B)	44(B)	8(B)	32(B)	30(B)	5(B)	6(B)	6(B)
Acetone	27(B)	45(B)	25(B)	23(B)	32(B)	—	13(B)	20(B)
Carbon disulfide	45	—	5	—	—	42	31	70
Tetrachloroethene	—	1(J)	—	—	—	—	—	—
Chlorobenzene	—	35(B)	—	2(J,B)	1(J,B)	—	—	1(J,B)
1,3-Dichlorobenzene	—	25	—	3(J)	—	—	—	—
1,4-Dichlorobenzene	—	25	—	5(J)	—	—	—	—
1,2-Dichlorobenzene	—	36	—	6(J)	—	—	—	—
bis(2-Ethylhexyl)phthalate	7(J,B)	5(J,B)	4(J,B)	3(J,B)	3(J,B)	3(J,B)	2(J,B)	14(B)
Di-n-butylphthalate	6(J)	—	—	—	—	1(J)	—	1(J)
Tetramethylbutyl phenol	—	—	—	37(J)	—	—	—	—
Carbon tetrachloride	1(J)	—	—	—	—	—	—	—
Trichloroethene	6(B)	1(J)	4(J,B)	—	—	6(B)	3(J,B)	2(J,B)
Toluene	—	3(J,B)	—	2(J,B)	—	—	—	—
Total Xylenes	—	1(J,B)	—	2(J,B)	—	—	—	—

J-Estimated value, compound present below detection limit
B-Compound also present in method blank at similar concentration
A dash (—) indicates compound not detected

328410

PARAMETER MONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GMS # 1017F00625

Sample Date: 11-28-89

Monitoring Well # UG-1

Well Type:

[ ] Corrective Action

[X] Point-of-Compliance

Well Name: Shallow Background

Classification of Groundwater G-1

Well Developed Prior to Sample Collection (Yes/No)* YES

Groundwater Elevation (above MSL) 1.10 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	6.4		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	200	umhos/ cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached		Unfiltered	
	Metals		6010				HNO_3
			7060				HNO_3
			7421				HNO_3
			7470				HNO_3
			7740				HNO_3
			7841				HNO_3
	Cyanide		335.2				NaOH
	Chloride		325.3				
	Sulfate		375.4				
	VOCs	Teflon bailer	8240	See attached		Unfiltered	HCl
	BNAs	Teflon bailer	8270	See attached		Unfiltered	

* Well development is the process of pumping the well prior to sampling in order to obtain a representative groundwater sample.

DER Form 17-1.216(2)

Effective January 1, 1983

METALS SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58279 MATRIX: VATER
SAMPLE ID CLIENT: P32W001

PARAMETER		RESULTS	Q	DET. LIHIT	UNITS
Antimony	(ICP)	ND		60	UG/L
Barium	(ICP)	ND		10	UG/L
Cadmium	(ICP)	ND		5.0	UG/L
Chromium	(ICP)	ND		10	UG/L
Copper	(ICP)	ND		10	UG/L
Iron	(ICP)	368		25	UG/L
Manganese	(ICP)	ND		5.0	UG/L
Nickel	(ICP)	ND		15	UG/L
Silver	(ICP)	ND		10	UG/L
sodium	(ICP)	9420		200	UG/L
Zinc	(ICP)	ND		10	UG/L
Arsenic	(FU)	ND		5.0	UG/L
Lead	(FU)	ND		5.0	UG/L
Mercury	(Vap)	ND		0.20	UG/L
Selenium	(FU)	ND		5.0	UG/L
Thallium	(FU)	ND		5.0	UG/L
Chloride		13000		1000	UG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

328411

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (UH4000)
SAMPLE ID LAB : EE#89-58279 MATXIX: WATER
SAMPLE ID CLIENT: P32W001

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Cyanide, complex	0.03		0.01	MG/L
Sulfate	18		2.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W001

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58279

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: c9453

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. Date Analyzed: 12/09/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	7	B
67-64-1	Acetone	27	B
75-15-0	Carbon Disulfide	45	
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	1	J
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	6	B
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

BJK 1/9/90

FORM I VOA 1/87 Rev.

328412

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

P32W001

Lab Name: E & E Contract: UH-4000

Lab Code: EANDE Case No. : 1046_001 SAS No. : SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58279

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CY453

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. Date Analyzed: 12/09/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Acrolein		ND	
2. Acrylonitrile		ND	
3. Bis(chloromethyl) ether		ND	
4. 2-Chloroethylvinyl Ether (1)		ND	
5. Dichlorodifluoromethane		NO	
6. 1,2-Dichloropropylene		NO	
7. Trichlorofluoromethana (1)		ND	
8. Tetramethylbenzene		NO	
9. "alkylated' benzene		ND	
110. Trimethyl Benzene		ND	

(1) - These compounds are included in the daily calibration standard. Quantitation is based on the standard RF rather than an RF of 1.

ND - None detected. compound searched for, detection limit not determined.

• - Total, more than one isomer present.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W001

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58279

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 83174

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/02/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

328413

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPW SAMPLE NO.

P32W001

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

matrix: (soil/water) WATER Lab Sample ID: 58279

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B3174

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/02/90

CPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	6	IJ
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	7	BJ
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

EPA SAMPLE NO.

P32W001

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58279

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B3174

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/02/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Benzidine		ND	
2. 1,2-Diphenylhydrazine (2)		ND	
3. N-Nitrosodimethylamine		ND	
4. N-Nitrosodiphenylaaide		ND	
5. Methyl Dihydro Indene		ND	
6. Hydroxyaethyl Pentanone		ND	
7. tlethyl naphthalene		ND	
8. tlethyl ethyl phenol		ND	
9. Dimethyl ethyl phenol		ND	
10. Tetramethylbutyl phenol		ND	

ND - None detected, compound searched for, detection limit not determined.

(2) - Decomposer to azobenzene during gas chromatography, reported as such.

328414

PARAMETER MONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GMS # 1017F00625

Sample Date: 11-30-89

Monitoring Well # GM8

Well Type:

[ ] Corrective Action

[X] Point-of-Compliance

Well Name: Shallow

Classification of Groundwater G-1

Well Developed* Prior to Sample Collection (Yes/No) YES

Groundwater Elevation (above MSL) 1.36 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	6.7		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	510	umhos/cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached		Unfiltered	
	Metals		6010				HNO_3
			7060				HNO_3
			7421				HNO_3
			7470				HNO_3
			7740				HNO_3
			7841				HNO_3
	Cyanide		335.2				NaOH
	Chloride		325.3				
	Sulfate		375.4				
	VOCS	Teflon bailer	8240	See attached		Unfiltered	HCl
	BNAs	Teflon bailer	8270	See attached		Unfiltered	

* Well development is the process of pumping the well prior to sampling in order to obtain a representative groundwater sample.

DER Form 17-1.216(2)

Effective January 1, 1983

METALS SECTION JOB NUMBER : 1046.003

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : U.S. Navy Southern Division (YH4000)
SAHPLE ID LAB : EE#89-58365 MATRIX: WATER
SAMPLE ID CLIENT: P32W008

PARAMETER		RESULTS	Q	DET. LIHIT	UNITS
Antimony	(ICP)	ND		60	UG/L
Barium	(ICP)	70		10	UG/L
Cadmium	(ICP)	ND		5.0	UG/L
Chromium	(ICP)	ND		10	UG/L
Copper	(ICP)	ND		10	UG/L
Iron	(ICP)	4550		25	UG/L
Manganese	(ICP)	94		5.0	UG/L
Nickel	(ICP)	ND		15	UG/L
Silver	(ICP)	ND		10	UG/L
Sodium	(ICP)	6840		200	UG/L
Zinc	(ICP)	12		10	UG/L
Arsenic	(FU)	ND		5.0	UG/L
Lead	(FU)	ND		5.0	UG/L
Harcury	(Vap)	ND		0.20	UG/L
Sclenium	(FU)	ND		5.0	UG/L
Thallium	(FU)	ND		5.0	UG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIHIT

322415

GENERAL ANALYTICAL SECTION JOB NUMBER : *1046.003*

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (YH4000)
SAMPLE ID LAB : EE#89-58365 MATRIX: WATER
SAMPLE ID CLIENT: P32W008

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	8.3		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.003

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (YH4000)
SAMPLE ID LAB : EE#89-58365 MATRIX: WATER
SAMPLE ID CLIENT: P32W008

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Cyanide, complex	0.08		0.01	MG/L
Sulfate	40		2.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED.
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIHIT

328416

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W008

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58365

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9377

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. Date Analyzed: 12/07/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	44	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (totall —	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropsne	5	U
79-01-6	Trichloroethene	1	J
124-48-1	Dibromochloromcthant	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	1	J
79-34-5	1,1,2,?-Tetrachloroethane —	E	U
108-88-3	Toluene	3	BJ
108-90-7	Chlorobenzene	35	B
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	1	BJ

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

F32W003

Lab Name: E & E Contract: UH-4000

Lab Code: ERNDE Care No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58365

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9377

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. Date Analyzed: 12/07/89

Column (pack/cap) CAP Dilution factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Acrolein		ND.	
2. Acrylonitrile		ND	
3. Bis(chloromethyl) ether		ND	
4. 2-Chloroethylvinyl Ether (1)		ND	
5. Dichlorodifluoromethane		NO	
6. 1,2-Dichloropropylene		NU	
7. Trichlorofluoromethane (1)		ND	
8. Tetramethylbenzene		NO	
9. "alkylated" benzene		ND	
10. Trimethyl Benzene		NO	

(1) - These compounds are included an the daily calibration standard. Quantitation is baaed on the standard RF rather than an RF of 1.

ND - None detected, compound searched for, detection limit not determined.

* - Total, more than one isomer present.

326417

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

P32W008

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58365

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B3204

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. dec. Date Extracted: 12/06/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	25	
106-46-7	1,4-Dichlorobenzene	25	
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	36	
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	5u	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B32W008

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58365

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B3204

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. dac. Data Extracted: 12/06/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	a
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	BJ
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

P32W008

Lab Name: E & E Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58365

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B3204

Level: (low/med) LOW Date Received: 12/01/89

% Hoirture: not dee. dec. Date Extracted: 12/06/89

Extraction: (SepF/Cont/Sonc) SEPF Date analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Benzidine		ND	
2. 1,2-Diphenylhydrazine (2)		ND	
3. N-Nitrosodimethylamine		ND	
4. N-Nitrosodiphenylamide		ND	
5. methyl Dihydro Indene		ND	
6. Hydroxymethyl Pentanone		ND	
7. methyl naphthalene		ND	
8. methyl ethyl phenol		ND	
9. Dimethyl ethyl phenol		ND	
110. Tetramethylbutyl phcno1		ND	

ND - Clone detected, compound searched for, detection limit not determined.

(2) - Decomposes to azobenzene during gas chromatography, reported as such.

PARAMETER MONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GHS # 1017F00625

Sample Date: 11-30-89

Honitoring Vell # GH-9

Vell Type:

[ ] Corrective Action

[X] Point-of-Compliance

Vell Name: Shallow

Classification of Groundwater G-1

Vell Developed, Prior to Sample Collection (Yes/No)* YES

Groundwater Elevation (above HSL) 1.27 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	6.5		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	430	umhos/ cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached		Unfiltered	
	Hetals		6010				HNO_3
			7060				HNO_3
			7421				HNO_3
			7470				HNO_3
			7740				HNO_3
			7841				HNO_3
	Cyanide		335.2				NaOH
	Chloride		325.3				
	Sulfate		375.4				
	VOCS	Teflon bailer	8240	See attached		Unfiltered	HCl
	BNAs	Teflon bailer	8270	See attached		Unfiltered	

* Vell development is the process of pumping the well prior to sampling in order to obtain a representative groundwater sample.

DER Form 17-1.216(2)

Effective January 1, 1983

328413

METALS SECTION JOB NUMBER : 1046.003

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : U.S. Navy Southern Division (YH4000)
SAMPLE ID LAB : EE#89-58367 MATRIX: WATER
SAMPLE ID CLIENT: P32W009

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Antimony	(ICP)	ND		60	UG/L
Barium	(ICP)	38		10	UG/L
Cadmium	(ICP)	ND		5.0	UG/L
Chromium	(ICP)	ND		10	UG/L
Copper	(ICP)	ND		10	UG/L
Iron	(ICP)	3860		25	UG/L
Manganese	(ICP)	72		5.0	UG/L
Nickel	(ICP)	ND		15	UG/L
Silver	(ICP)	ND		10	UG/L
Sodium	(ICP)	2470		200	UG/L
Zinc	(ICP)	15		10	UG/L
Arsenic	(FU)	ND		5.0	UG/L
Lead	(FU)	ND		5.0	UG/L
Mercury	(Vap)	ND		0.20	UG/L
Selenium	(FU)	ND		5.0	UG/L
Thallium	(FU)	ND		5.0	UG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.003

Ecology and Environment', Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (YH4000)
SAMPLE ID LAB : EE#89-58367 MATRIX: WATER
SAMPLE ID CLIENT: P32W009

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	2.6		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

328410

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.003

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (YH4000)
SAMPLE ID LAB : EE#89-58367 MATRIX : WATER
SAMPLE ID CLIENT: P32W009

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Cyanide, complex	0.02		0.01	MG/L
Sulfate	13		2.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W009

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58367

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9457

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. Date Analyzed: 12/09/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	8	B
67-64-1	Acetone	25	B
75-15-0	Carbon Disulfide	5	
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	4	BJ
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	E	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

FORM I VOA 1/87 Rev.

328421

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

P32W009

Lab Name: E & E Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 59367

Ssmple ut/vol: 5.0 (g/mL) ML Lab File ID: CY457

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. Date Analyzed: 12/09/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Acrolein		ND	
2. Acrylonitrile		ND	
3. Bis(chloromethyl) ether		ND	
4. 2-Chloroethylvinyl Ether (1)		ND	
5. Dichlorodifluoromethane		ND	
6. 1,2-Dichloropropylene		ND	
7. Trichlorofluoromethane (1)		ND	
8. Tetramethylbenzene		ND	
9. "alkylated" benzene		ND	
10. Trimethyl Benzene		ND	

(1) - These compounds are included in the daily calibration standard. Quantitation is based on the standard RF rather than an RF of 1.

ND - None detected, compound searched for, detection limit not determined.

* - Total, more than one isomer present.

SEMIVOLATILE ORGANICS ~~:~~L DATA SHEET

F32W009

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1006-003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58307

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B3206

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. dec. Date Extracted: 12/06/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CRS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	tu
95-95-4	2,4,5-frichlorophenol	50	U
91-58-7	2-Chloronaphthalane	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

330422

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

P32W009

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58367

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B3206

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. dec. Date Extracted: 12/06/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	5u	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	4	BJ
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

P32W009

Lab Name: E & E Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58367

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 83206

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. dec. Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Benzidine		ND	
2. 1,2-Diphenylhydrazine (2)		ND	
3. N-Nitrosodimethylamine		ND	
4. N-Nitrosodiphenylamide		ND	
5. Methyl Dihydro Indene		ND	
6. Hydroxymethyl Pentanone		ND	
7. Methyl naphthalene		ND	
8. Rethyl ethyl phenol		ND	
9. Dimethyl ethyl phenol		ND	
10. Tetramethylbutyl phenol		ND	

ND - None detected. compound searched for, detection limit not determined.

(2) - Decomposes to azobenzene during gas chromatography, reported as such.

328424

PARAMETER MONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GMS # 1017F00625

Sample Date: 11-30-89

Monitoring Well # GM-10

Well Type:

[ ] Corrective Action

[X] Point-of-Compliance

Well Name: Shallow

Classification of Groundwater G-1

Well Developed, Prior to Sample Collection (Yes/No)* YES

Groundwater Elevation (above MSL) 1.42 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	6.4		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	280	umhos/cm	Unfiltered	
	Inorganics	Teflon bailer		See attached		Unfiltered	
	Metals		6010				HNO_3
			7060				HNO_3
			7421				HNO_3
			7470				HNO_3
			7740				HNO_3
			7841				HNO_3
	Cyanide		335.2				NaOH
	Chloride		325.3				
	Sulfate		375.4				
	VOCs	Teflon bailer	8240	See attached		Unfiltered	HCl
	BNAs	Teflon bailer	8270	See attached		Unfiltered	

* Well development is the process of pumping the well prior to sampling in order to obtain a representative groundwater sample.

DER Form 17-1.216(2)

Effective January 1, 1983

METALS SECTION JOB NUMBER : 1046.003

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : U.S. Navy Southern Division (YH4000)
SAHPLE ID LAB : EE#89-58368 MATRIX: WATER
SAHPLE ID CLIENT: P32W010

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Antimony	(ICP)	ND		60	UG/L
Barium	(ICP)	47		10	UG/L
Cadmium	(ICP)	ND		5.0	UG/L
Chromium	(ICP)	ND		10	UG/L
Copper	(ICP)	ND		10	UG/L
Iron	(ICP)	724		25	UG/L
Hanganese	(ICP)	123		5.0	UG/L
Nickel	(ICP)	ND		15	UG/L
Silver	(ICP)	ND		10	UG/L
Sodium	(ICP)	5970		200	UG/L
Zinc	(ICP)	ND		10	UG/L
Arsenic	(FU)	ND		5.0	UG/L
Lead	(FU)	ND		5.0	UG/L
Hercury	(Vap)	ND		0.20	UG/L
Selenium	(FU)	ND		5.0	UG/L
Thallium	(FU)	ND		5.0	UG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

328425

GENERAL ANALYTICAL SECTION JOB NUMBER : *1046.003*

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (YH4000)
SAMPLE ID LAB : EE#89-58368 MATRIX: WATER
SAMPLE ID CLIENT: P32W010

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	12		1.0	MG/L

QUALIFIERS: C =.COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.003

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (YH4000)
SAMPLE ID LAB : EE#89-58368 MATRIX: WATER
SAMPLE ID CLIENT: P32W010

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Cyanide, complex	0.10		0.01	MG/L
Sulfate	37		2.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

328426

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W010

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANOE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58368

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9380

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dee. Date Analyzed: 12/07/89

Column: (pack/cap) CAP Dilution factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	32	B
67-64-1	Acetone	23	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethanr	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hex4nonq	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	2	BJ
108-90-7	Chlorobenzene	2	BJ
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	2	BJ

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

P32W010

Lab Name: E & E Cantract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58368

Sample wt/vol: 5.0 (g/mL) ML Lab Fila ID: C9380

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. Date Analyzed: 12/07/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Acrolein		NO'	
2. Acrylonitrile		ND	
3. Bis(chloromethyl) ether		to	
4. 2-Chloroethyluinyl Ether (1)		NO	
5. Oichlorodifluoromethane		ND	
6. 1,2-Dichloropropylene		NO	
7. Trichlorofluoromethane (1)		ND	
8. Tetramethylbenzene		ND	
9. "alkylated" benzene		ND	
110. Trimethyl Benzene		NO	

(1) - These compounds are included in the daily calibration standard. Quantitation is basad on the standard RF rather than an RF of 1.

ND - None detected, compound searched for, detection limit not determined.

* - Total, more than one isomer present.

328423

A D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

P32W010

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58363

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B3207

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. dec. Date Extracted: 12/06/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	3	J
106-46-7	1,4-Dichlorobenzene	5	J
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	6	J
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	13	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W010

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Cast No.: 1046_003 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58368

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 83207

Level: (low/med) LOW Data Received: 12/01/99

% Moisture: not dec. dec. Date Extracted: 12/06/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	3	BJ
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

326420

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

P32W010

Lab Name: E & E Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58368

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 83207

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. dec. Date Extracted: 12/06/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Benzidine		ND	
2. 1,2-Diphenylhydrazine (2)		ND	
3. N-Nitrosodimethylamine		ND	
4. N-Nitrosodiphenylamide		ND	
5. Methyl Dihydro Indene		ND	
6. Hydroxymethyl Pentanone		ND	
7. Methyl naphthalene		ND	
8. Methyl ethyl phenol		ND	
9. Dimethyl ethyl phenol		ND	
10. Tetramethylbutyl phenol	20.17	37	J

ND - None detected, compound searched for, detection limit not determined.

(2) - Decomposes to azobenzene during gas chromatography, reported as ouch.

PARAMETER HONITORING REPORT

(Rule 17-3.402, 17-3.404 - 17-3.406)

GMS # 1017F00625

Sample Date: 11-30-89

Monitoring Well # GM-11

Uell Type:

[ ] Corrective Action

[X] Point-of-Compliance

Well Name: Shallov

Classification of Groundwater G-1

Well Developed. Prior to Sample Collection (Yes/No) * YES

Groundwater Elevation (above HSL) 1.97 ft

STORET Code	Parameter Honitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	6.7		Unfiltered	
	Specific Conductanc(	Teflon bailer	120.1	420	umhos/ cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached		Unfiltered	
	Metals		6010				HNO_3
			7060				HNO_3
			7421				HNO_3
			7470				HNO_3
			7740				HNO_3
			7841				HNO_3
	Cyanide		335.2				NaOH
	Chloride		325.3				
	Sulfate		375.4				
	VOCs	Teflon bailer	8240	See attached		Unfiltered	HCl
	BNAs	Teflon bailer	8270	See attached		Unfiltered	

* Well developaent is the process of pumping the well prior to sampling in order to obtain a representative groundvater sample.

DER Form 17-1.216(2)

Effective January 1, 1983

METALS SECTION JOB NUMBER : 1046.003

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : U.S. Navy Southern Division (YH4000)
SAMPLE ID LAB : EE#89-58370 MATRIX: WATER
SAMPLE ID CLIENT: P32W011

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Antimony	(ICP)	ND		60	UG/L
Barium	(ICP)	ND		10	UG/L
Cadmium	(ICP)	ND		5.0	UG/L
Chromium	(ICP)	ND		10	UG/L
Copper	(ICP)	ND		10	UG/L
Iron	(ICP)	48		25	UG/L
Manganese	(ICP)	21		5.0	UG/L
Nickel	(ICP)	ND		15	UG/L
Silver	(ICP)	ND		10	UG/L
Sodium	(ICP)	27300		200	UG/L
Zinc	(ICP)	ND		10	UG/L
Arsenic	(FU)	ND		5.0	UG/L
Lead	(FU)	ND		5.0	UG/L
Mercury	(Vap)	4.4		0.20	UG/L
Selenium	(FU)	ND		5.0	UG/L
Thallium	(FU)	ND		5.0	UG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.003

Ecology and Environment; Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (YH4000)
SAMPLE ID LAB : EE#89-58370 MATRIX: VATER
SAMPLE ID CLIENT: P32W011

PARAMETER	RESULTS	Q	DET. LIHIT	UNITS
Chloride	41		1.0	MG/L

QUALIFIERS: C = COMMENT ND NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

328431

GENERAL ANALYTICAL SECTION JOB NUMBER : 1046.003

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. Navy Southern Division (YH4000)
SAHPLE ID LAB : EE#89-58370 MATRIX: WATER
SAHPLE ID CLIENT: P32W011

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Cyanide, complex	0.99		0.01	MG/L
Sulfate	38		2.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W011

Lab Name: E 3 E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1006-003 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58370

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CY382

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. Data Analyzed: 12/07/63

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	30	B
67-64-1	Acetone	32	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	1	BJ
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

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328432

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLKW1

Lab Name E & E Contract UH-4000

Lab Code EANOE Case No.: 1046_003 SAS No. SDG No.:

Matrix: soil/water) WATER Lab Sample ID: VBLKW1

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CY368

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/06/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Acrolein		ND	
2. Acrylonitrile		ND	
3. Bis(chloromethyl) ether		NO	
4. 2-Chloroethylvinyl Ether (1)		NO	
5. Dichlorodifluoromethane		ND	
6. 1,2-Dichloropropylene		NO	
7. Trichlorofluoromethane (1)		ND	
8. Tetramethylbenzene		NO	
9. "alkylated" benzene		NO	
110. Trimethyl Benzene		NO	

(1) - These compounds are included in the daily calibration standard. Quantitation is based on the standard RF rather than an RF of 1.

ND - None detected, compound searched for, detection limit not determined.

* - Total, more than one isomer present.'

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKW1

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: VBLKW1

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9427

Level: (low/med) LOW Date Received:

% Moisture: not dac. Date Analyzed: 12/08/09

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	13	
67-64-1	Acetone	15	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	1	J
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

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328433

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLKW1

Lab Name: E & E Contract: UH-4000

Lab Code: EANDE Case No.: 1046-001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: VBLKW1

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9427

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/08/89

Column (pack/cap) CRP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRRTION UNITS:
(ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Acrolein		ND	
2. Acrylonitrile		ND	
3. Bis(chloromethyl) ether		ND	
4. 2-Chloroethyluinyl Ether (1)		ND	
5. Dichlorodifluoromethane		NO	
6. 1,2-Dichloropropylene		ND	
7. Trichlorofluoromethana (1)		ND	
8. Tetramethylbenzene		ND	
9. "alkylated" benzene		ND	
10. Trimethyl Benzene		ND	

(1) - These compounds are included in the daily calibration standard. Quantitation is based on the standard RF rather than an RF of 1.

ND - None detected, compound searched for, detection limit not determined.

• - Total, more than one isomer present.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKW2

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: VBLKW2

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9452

Law1: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/09/89

Column: (pack/cap) CAP Dilution Factor:' 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	2	IJ
74-83-9	Bromomethane	10	IU
75-01-4	Vinyl Chloride	10	IU
75-00-3	Chloroethane	10	IU
75-09-2	Methylene Chloride	8	I
67-64-1	Acetone	23	I
75-15-0	Carbon Disulfide	5	IU
75-35-4	1,1-Dichloroethene	5	IU
75-34-3	1,1-Dichloroethane	5	IU
540-59-0	1,2-Dichloroethene (total)	5	IU
67-66-3	Chloroform	2	IJ
107-06-2	1,2-Dichloroethane	5	IU
78-93-3	2-Butanone	10	IU
71-55-6	1,1,1-Trichloroethane	5	IU
56-23-5	Carbon Tetrachloride	5	IU
108-05-4	Vinyl Acetate	10	IU
75-27-4	Bromodichloromethane	5	IU
78-87-5	1,2-Dichloropropane	5	IU
10061-01-5	cis-1,3-Dichloropropene	5	IU
79-01-6	Trichloroethene	5	1
124-48-1	Dibromochloromethane	5	IU
79-00-5	1,1,2-Trichloroethane	5	IU
71-43-2	Benzene	5	IU
10061-02-6	trans-1,3-Dichloropropene	5	IU
75-25-2	Bromoform	5	IU
108-10-1	4-Methyl-2-Pentanone	10	IU
591-78-6	2-Hexanone	10	IU
127-18-4	Tetrachloroethene	5	IU
79-34-5	1,1,2,2-Tetrachloroethane	5	IU
108-88-3	Toluene	5	IU
108-90-7	Chlorobenzene	1	IJ
100-41-4	Ethylbenzene	5	IU
100-42-5	Styrene	5	IU
1330-20-7	Xylene (total)	1	IJ

326434

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLKW2

Lab Name: E & E Contract: UH-4000

Lab Code: EANDE Case No.: 1046-001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: VBLKW2

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9452

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/09/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Acrolein		ND	
2. acrylonitrile		ND	
3. Bis(chloromethyl) ether		ND	
4. 2-Chloroethylvinyl Ether (1)		NO	
5. Dichlorodifluoromethane		ND	
6. 1,2-Dichloropropylene		ND	
7. Trichlorofluoromethane (1)		ND	
8. Tetramethylbenzene		ND	
9. "alkylated" benzene		ND	
10. Trimethyl Benzene		ND	

(1) - These compound8 are included in the daily calibration standard. Quantitation is based on the standard RF rather than an RF of 1.

ND - None detected, compound searched for, detection limit not determined.

• - Total,, more than one isomer present.

328435

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKW2

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: VBLKW2

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9452

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/09/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	2	UJ
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	8	J
67-64-1	Acetone	23	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
(57-66-3	Chloroform	2	UJ
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	UJ
79-01-6	Trichloroethene	5	J
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	1	UJ
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	1	UJ

EPA SAMPLE NU-

VOLATILE ORGANICS ANALYSIS DATA SHEET-
TENTATIVELY IDENTIFIED COMPOUNDS

VBLKW2

Lab Name: E & E Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: VBLKW2

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CY452

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/09/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Acrolein		ND	
2. Acrylonitrile		ND	
3. Bis(chloromethyl) ether		ND	
4. 2-Chloroethylvinyl Ether (1)		ND	
5. Dichlorodifluoromethane		ND	
6. 1,2-Dichloropropylene		ND	
7. Trichlorofluoromethane (1)		ND	
8. Tetramethylbenzene		ND	
9. "alkylated" benzene		ND	
110. Trimethyl Benzene		ND	

(1) - These comoounds are included in the daily calibration btandard. Quantitation is basad on the standard RF rather than an RF of 1.

ND - None detected, compound searched for, detection limit not determined.

* - Total, more than one isomer present.

328437

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKW3

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046-001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: VBLKW3

Sample wt/vol: 5.0 (g/mL) HL Lab File ID: C9368

true1: (low/med) LOW Data Received:

% Moisture: not dcc. Date Analyzed: 12/06/89

Column: (pack/cap) CAP Oilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	11	
67-64-1	Acetone	15	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	3	J
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Haxanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	3	J
108-90-7	Chlorobenzene	5	
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	2	J

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLKW3

Lab Name: E & E Contract: UM-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: VBLKW3

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CY368

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/06/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Acrolein		NO'	
2. Acrylonitrile		ND	
3. Bis(chloromethyl) ether		ND	
4. 2-Chloroethylvinyl Ether (1)		ND	
5. Dichlorodifluoromethane		ND	
6. 1,2-Dichloropropylene		ND	
7. Trichlorofluoromethane (1)		NO	
8. Tetramethylbenzene		ND	
9. "alkylated" benzene		ND	
10. Trimethyl Benzene		NO	

(1) - These compounds are included in the daily calibration standard. Quantitation is based on the standard RF rather than an RF of 1.

ND - None detected, compound searched for, detection limit not determined.

• - Total, more than one isomer present.

326433

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKW3

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: VBLKW3

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9483

Level: (low/med) LOW Date Received:

% Moisture: not dcc. Date Analyzed: 12/11/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CRS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	14	
67-64-1	Acetone	24	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	2	J
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLKW3

Lab Name: E & E Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SOG No. :

Matrix: (soil/water) WATER Lab Sample ID: VBLKW3

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9483

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/11/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs founa: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Acrolein		NO'	
2. Acrylonitrile		ND	
3. Bis(chloromethyl) ether		NO	
4. 2-Chloroethyluinyl Ether (1)		NO	
5. Dichlorodifluoromethane		ND	
6. 1,2-Dichloropropylene		NO	
7. Trichlorofluoromethane (1)		NO	
8. Tetramethylbenzene		ND	
9. "alkylated" benzene		ND	
110. Trimethyl Benzene		ND	

(1) - These compounds are included in the daily calibration standard. Quantitation is basad on the standard RF rather than an RF of 1.

ND - None detected, compound searched for, detection limit not determined.

• - Total, more than one isomer present.

@

328439

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKW4

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EFINCE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: VBLKW4

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9518

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/12/89

Column: (pack/cap) CAP Dilation Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6	J
67-64-1	Acetone	31	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	18	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	3	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLKW4

Lab Name: E & E Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: VBLKW4

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9518

Lewl: (low/med) L W Oate Reteived:

% Moisture: not dec. Date Analyzed: 12/12/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Acrolein		ND	
2. Acrylonitrile		ND	
3. Bis(chloromethyl) ether		ND	
4. 2-Chloroethylvinyl Ether (1)		ND	
5. Dichlorodifluoromethane		NO	
6. 1,2-Dichloropropylene		ND	
7. Trichlorofluoromethane (1)		ND	
8. Tetramethylbenzene		ND	
9. "alkylated" benzene		ND	
10. Trimethyl Benzene		NO	

(1) - These compounds are included in the daily calibration standard. Quantitation is basad on the standard RF rather than an RF of 1.

NO - None detected, compound searched for, detection limit not determined.

• - Total, more than one isomer present.

328441

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKW4

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: VBLKW4

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: c9507

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/14/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6	
67-64-1	Acetone	31	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	3	J
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	1	J

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLKW4

Lab Name: E & E Contract: UW-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: VBLKW4

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CY567

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/14/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	a
1. Acrolein		NO'	
2. Acrylonitrile		ND	
3. Bis(chloromethyl) ether		ND	1
4. 2-Chloroethyluinyl Ether (1)		NO	
5. Dichlorodifluoromethane		ND	
6. 1,2-Dichloropropylene		ND	
7. Trichlorofluoromethane (1)		ND	
8. Tetramethylbenzene		ND	
9. "alkylated" benzene		NO	
10. Trimethyl Benzene		NO	

(1) - These compounds are included in the daily calibration standard. Quantitation is based on the standard RF rather than an RF of 1.

NO - None detected, compound searched for, detection limit not determined.

• - Total, more than one isomer present.

328443

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKW5

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: VBLKW5

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9556

Level: (low/med) LOW Date Received:

% Moisture: not dcc. Date Analyzed: 12/13/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	11	
67-64-1	Acetone	15	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene [total]	5	U
67-66-3	Chloroform	2	J
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-73-6	2-Wexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	2	J

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLKW5

Lab Name: E & E Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: VBLKW5

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9556

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 12/13/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Acrolein		ND	
2. Acrylonitrile		ND	
3. Bis(chloromethyl) ether		ND	
4. 2-Chloroethyluinyl Ether (1)		NO	
5. Dichlorodifluoromethane		NO	
6. 1,2-Dichloropropylene		NO	
7. Trichlorofluoromethane (1)		ND	
8. Tetramethylbenzene		NO	
9. "alkylated" benzene		ND	
10. Trimethyl Benzene		NO	

(1) - These compounds are included in the daily calibration standard. Quantitation is basad on the standard RF rather than an RF of 1.

ND - None detected, compound searched for, detection limit not determined.

• - Total, more than one isomer present.

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NU.

P32W068MS

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58295

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9375

Level: (low/med) LOW Date Received: 11/30/89

% Roisture: not dec. Date Rnalyzed: 12/07/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	62	
67-64-1	Acetone	21	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	E	U

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: E & E INC. . Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix Spike - EPFI Sample No.: P32W068

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.0	0	39.2	78	61-145
Trichloroethene	50.0	4.29	16.3	84	71-120
Benzene	50.0	0	47.4	95	76-127
Toluene	50.0	0	46.9	94	76-125
Chlorobenzene	50.0	0	46.4	93	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.0	39.3	79	-1	14	61-145
Trichloroethene	50.0	45.7	83	1	14	71-120
Benzene	50.0	06.5	93	2	11	76-127
Toluene	50.0	48.0	96	-2	13	76-125
Chlorobenzene	50.0	47.6	95	-2	13	75-130

column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W068MSD

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046-001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58295

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9376

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. Date Analyzed: 12/07/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CGS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	51	
67-64-1	Acetone	28	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W084MS

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58380

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9558

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. Date Analyzed: 12/14/89

column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	12	B
67-64-1	Acetone	42	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

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3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: P32W084

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.0	0	44.7	89	161-145
Trichloroethene	50.0	0	52.9	106	171-120
Benzene	50.0	0	50.9	102	176-127
Toluene	50.0	0	47.6	95	176-125
Chlorobenzene	50.0	0	49.0	98	175-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.0	44.5	83	0	14	161-145
Trichloroethene	50.0	52.3	105	1	14	171-120
Benzene	50.0	49.9	100	2	11	176-127
Toluene	50.0	47.5	95	0	13	176-125
Chlorobenzene	50.0	49.6	9"	-1	13	175-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F32W084MSD

Lab Name: E & E INC. Contract: UM-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab sample ID: 58380

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C9559

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. Date Analyzed: 12/14/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	11	B
67-64-1	Acetone	58	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	3	U
1330-20-7	Xylene (total)	5	U

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2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: E & E INC. Contract: CH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

	EPA SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
01	IP32W008	102	88	102	0	0
112	IP32W008D	98	88	99	0	0
03	IP32W009	93	86	94	0	0
04	IP32W010	101	87	96	0	0
05	IP32W010ØD	103	Y0	95	0	0
06	IP32W011	98	32	93	0	0
07	IP32W012R	101	90	104	0	0
08	IP32W013	92	89	94	0	0
09	IP32W014	90	38	99	0	0
10	IP32W062	91	89	101	0	0
11	IP32W063	102	100	97	0	0
12	IP32W064	94	90	102	0	0
13	IP32W065	104	101	97	0	0
14	IP32W066	100	90	92	0	0
15	IP32W067	94	93	98	0	0
16	IP32W084	90	92	96	0	0
17	IP32WRB02	98	90	94	0	0
18	IP32WRB03	103	94	112	0	0
19	IP32WTB02	105	105	107	0	0
20	IP32W084MS	101	91	109	0	0
21	IP32W084MSD	95	91	102	0	0
22	IVBLKW1	102	91	99	0	0
23	IVBLKW2	94	38	103	0	0
24	IVBLKW3	109	102	104	0	0
25	IVBLKW4	95	e3	94	0	0
26	IVBLKW5	94	92	109	0	0

AM 1/9/90

	QC LIMITS
S1 (TOL) = Toluene-d8	(88-110)
S2 (BFB) = Bromofluorobenzene	(86-115)
S3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

4 Column to be used to flag recovery values

• Values outside of contract required GI limits

D Surrogates diluted out

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2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: E & E INC. . Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SOG No. :

	EPA SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
01	P32W001	94	92	100	0	0
02	P32W068	100	90	105	0	0
03	P32W069	97	86	96	0	0
04	P32WFB01	106	91	104	0	0
05	P32WPB01	100	91	100	0	0
06	P32WRB01	95	95	105	0	1 0 1
07	P32WTB01	103	9 2	90	0	0
08	P32W068MS	104	88	95	0	0
09	P32W068MSD	102	91	95	0	0
10	IVBLKW1	98	89	98	0	0
11	IVBLKW2	94	8 8	103	0	0
12	IVBLKW3	102	91	99	0	0
13	IVBLKW4	99	91	96	0	0

		ac LIMITS
S1 (TOL)	= Toluene-d8	(88-110)
S2 (BFB)	= Bromofluorobenzene	(86-115)
53 (DCE)	= 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag *recovery* valuer

• Values outside of contract required QC limits

D Surrogates diluted out

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKW1

Cab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: BLK(12-4)

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B3173

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/02/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COUPOUNO	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	a
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S3LKW1

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANOE Case No.: 1046_001 SAS No.: SDG No.:

tlatrix: (soil/water) WATER Lab Sample ID: BLK(12-4)

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 83173

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/02/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	4	J
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benro(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

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EPA SAMPLE NO.

SBLKW1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH-4000

Lab Code: EFINDE Case No.: 1046_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: BLK(12-4)

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 83173

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/02/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Benzidine		ND	
2. 1,2-Diphenylhydrazine (2)		NO	
3. N-Nitrosodimethylamine		NO	
4. N-Nitrosodiphenylamide		NO	
5. Methyl Dihydro Indene		NO	
6. Hydroxymethyl Pentanone		ND	
7. Rethyl naphthalene		NO	
8. Methyl ethyl phenol		ND	
9. Dimethyl ethyl phenol		ND	
10. Tetramethylbutyl phenol		ND	

ND - None detected, compound searched for, detection limit not determined.

(2) - Decomposes to azobenzene during gas chromatography, reported as such.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLKW1

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: BLK(12-6)

Sample wt/vol: .1000 (g/mL) ML Lab File ID: E5203

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 12/06/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Rethylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLKW1

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SGG No.:

Matrix: (soil/water) WATER Lab Sample ID: BLK(12-6)

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 63203

Level: (low/med) LOW Date Received:

% Moisture: not dec. dac. Date Extracted: 12/06/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	4	J
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluocanthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SBLKW1

Lab Name: E & E Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: BLK(12-6)

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B3203

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 12/06/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

COMPOUND NAME	RT	EST. CONC.	Q
1. Benzidine		ND	
2. 1,2-Diphenylhydrazine (2)		ND	
3. N-Nitrosodimethylamine		ND	
4. N-Nitrosodiphenylamide		ND	
5. Methyl Dihydro Indene		ND	
6. Hydroxymethyl Pentanone		ND	
7. Methyl naphthalene		ND	
8. Methyl ethyl phanol		ND	
9. Dimethyl ethyl phenol		NO	
10. Tetramethylbutyl phenol		NO	

ND - None detected, compound searched for, detection limit not determined.

(2) - Decomposes to azobenzene during gas chromatography, reported as such.

328451

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKW2

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: BLK(12-5)

Sample wt/vol: 1000 (g/mL) ML Lab File ID: e3182

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/02/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKW2

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANOE Case No.: 1046_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: BLK(12-5)

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 83182

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/02/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CRS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Oi-n-Butylphthalate	4	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	7	J
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

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EPA SAMPLE NO.

SBLKW2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH-4000

Lab Code: EANOE Care No.: 1046-001 SAS No.: SDG Nu.:

Matrix: (soil/water) WATER Lab Sample ID: BLK(12-5)

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 63182

Level: (low/med) LOW Oatc Received:

% Moisture: not dec. dec. Date Extracted: 12/05/83

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/02/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Benzidine		NO	
2. 1,2-Diphenylhydrazine (2)		ND	
3. N-Nitrosodimethylamine		ND	
4. N-Nitrosodiphenylamide		ND	
5. Methyl Oihydro Indene		NO	
6. Hydroxymethyl Pentanone		ND	
7. Methyl naphthalene		NO	
8. Methyl ethyl phenol		ND	
9. Dimethyl ethyl phenol		NO	
110. Tetramethylbutyl phenol		ND	

ND - None detected, compound searched for, detection limit not determined.

(2) - Decomposes to azobenzene during gas chromatography, reported as such.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKW3

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046-001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: BLK12-5

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E9161

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	a
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKW3

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: BLK12-5

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E9161

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/90

CPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		a
99-09-2	3-Nitroaniline	50	U	
83-32-9	Acenaphthene	10	U	
51-28-5	2,4-Dinitrophenol	50	U	
100-02-7	4-Nitrophenol	50	U	
132-64-9	Dibenzofuran	10	U	
121-14-2	2,4-Dinitrotoluene	10	U	
84-66-2	Diethylphthalate	10	U	
7005-72-3	4-Chlorophenyl-phenylether	10	U	
86-73-7	Fluorene	10	U	
100-10-6	4-Nitroaniline	50	U	
534-52-1	4,6-Dinitro-2-Methylphenol	50	U	
86-30-6	N-Nitrosodiphenylamine (1)	10	U	
101-55-3	4-Bromophenyl-phenylether	10	U	
118-74-1	Hexachlorobenzene	10	U	
87-86-5	Pentachlorophenol	50	U	
85-01-8	Phenanthrene	10	U	
120-12-7	Anthracene	10	U	
84-74-2	Di-n-Butylphthalate	3	IJ	
206-44-0	Fluoranthene	10	U	
129-00-0	Pyrene	10	U	
85-68-7	Butylbenzylphthalate	10	U	
91-94-1	3,3'-Dichlorobenzidine	20	U	
56-55-3	Benzo(a)Anthracene	10	U	
218-01-9	Chrysene	10	U	
117-81-7	bis(2-Ethylhexyl)Phthalate	4	J	
117-84-0	Di-n-Octyl Phthalate	10	U	
205-99-2	Benzo(b)Fluoranthene	10	U	
207-08-9	Benzo(k)Fluoranthene	10	U	
50-32-8	Benzo(a)Pyrene	10	U	
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U	
53-70-3	Dibenz(a,h)Anthracene	10	U	
191-24-2	Benzo(g,h,i)Perylene	10	U	

(1) - Cannot be separated from Diphenylamine

EPA SAMPLE NO.

SBLKW3

SEM VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: BLK12-5

Sample wt/vol: 1000 (g/mL) ML Lab File ID: €9161

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Benzidine		NO	
2. 1,2-Diphenylhydrazine (2)		ND	
3. N-Nitrosodimethylamine		ND	
4. N-Nitrosodiphenylamide		ND	
5. Methyl Dihydro Indene		ND	
6. Hydroxymethyl Pentanone		ND	
7. Methyl naphthalene		ND	
8. methyl ethyl phenol		ND	
9. Dimethyl ethyl phenol		ND	
10. Tetramethylbutyl phenol		ND	

ND - None detected, compound searched for, detection limit not determined.

(2) - Decomposes to azobenzene during gas chromatography, reported as such.

328455

The semi-volatile fraction for P32W066 was re-extracted beyond hold time due to poor surrogate recoveries. Similar recoveries were obtained for the re-analysis indicating a matrix effect. Of the contaminants detected, some loss is recorded in the re-extraction.

The semi-volatile method blank extracted on 12/5/89 had no phenol-d5 recovery. Since all samples associated with this blank had acceptable recoveries, no re-extraction was performed and data quality has not been affected.

The semi-volatile fractions of P32W001 and P32W012R were re-injected due to internal standard area responses. Similar responses were recorded for both injections, indicating a possible matrix effect.

P32W014 was extracted for semi-volatiles on 1/4/90 beyond method hold time due to a scheduling error.

In my judgment, the overall data quality is good and technically valid. Only two analyses are under question, those being the cyanide results for P32W010 and the semi-volatile results for P32W014.

'HEHORANDUH

TO: John Barksdale

FROM: Barb Krajewski

DATE: January 9, 1990

RE: U.S. Navy Southern Division Report

I have reviewed the data issued for the U.S. Navy Southern Division RCRA Monitoring under E & E, Inc. Job Nos. 1049.001 and 1048.003 for overall quality and validity.

All general chemistry and metals analyses are acceptable except for the cyanide results for P32W010. Cyanide vas reported at 0.10 mg/L in the sample but none was detected in the field duplicate. The duplicate sample was re-analyzed with similar results.

Sufficient batch QC analyses were performed in support of the inorganic data vith acceptable recoveries and RPD values. Method blank analyses vere acceptable for all inorganic parameters.

Mercury vas detected in a rinsate blank at 0.89 ug/L. Since all method blanks were acceptable, there is no indication of laboratory contamination problem.

The volatile analysis for P32W069 was performed 15 days after sample collection. All other volatile analyses were performed within hold times under acceptable calibrations. Volatile matrix spike and surrogate recoveries were also acceptable.

Methylene chloride was detected in the preservative blank and a rinsate at concentrations which exceeded the calibrated range of the instrument. Laboratory blanks contained methylene chloride at the detection limit level. The high methylene chloride values may be attributed to the bottles used to ship organic-free water. Normal procedure calls for a bake-out of the container prior to filling in order to remove solvent residue. This step may have been omitted.

Volatile method blanks contained several contaminants but all were at trace levels, at or below the quantitation limit.

328456

ATTACHMENT F

DATA VALIDATION SUMMARY

32845 - 3

ecology and environment, inc.
195 SUGG ROAD, P.O. BOX D, BUFFALO, N.Y., 14226, TEL. 716-632-4491
International Specialists in the Environment

Analyze all parameters according to site-specific QAP for this project (see Marcia Meredith)

CHAIN-OF-CUSTODY RECORD

Project No.: VH4000
Project Name: NASP RCRA Sampling - November
Project Manager: John Bauldale
Samplers: (Signatures) B2 Caldwell / Hal Davis
Field Team Leader: Caldwell / Davis

	STATION NUMBER	DATE 1989	TIME	SAMPLE TYPE COMP	GRAB	AIR	SAMPLE INFORMATION / EXPECTED COMPOUNDS (Concentration)*		STATION LOCATION	NUMBER OF CONTAINERS	EPA 8240 *	EPA 8240 + TICs *					REMARKS
P32	W067	11-29	0845		x		Low Level	58379	GM-67	2	1						
P32	W084	11-29	1345		x		" "	80	GM-84	2	1						* EPA 8240 and
P32	WTB02	11-29	0700		x		" "	81	Trip blank 2 **	2		1					EPA 8240 + TICs
P32	WRB02	11-29	0700		x		" "	82	Rinsate blank 2	2		1					preserved with HCl
P32	WRB03	11-29	1430		x		" "	83	Rinsate blank 3	2		1					
																	** P32WTB02 (Trip blank 2)
																	is not preserved with
																	HCl

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Ship Via:
B2 Caldwell	11-30/1300	FED. EXP				Federal Express
Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	BL/Airbill Number: 4045810403
Relinquished By: (Signature) FED. EXP	Date/Time: 12/1/89	Received For Laboratory By: (Signature) R. Marsh	Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)	Date: 11-30-89

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CHAIN-OF-CUSTODY RECORD

Project No.: UH4000
Project Name: NASP RCRA Sampling - November
Project Manager: John Barkodale
Samplers: (Signatures) BECaldwell / Hal Davis
Field Team Leader: Caldwell / Davis

STATION NUMBER	DATE 1989	TIME	SAMPLE TYPE COMP	GRAB	AIR	SAMPLE INFORMATION EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	Chloride + Sulfate	List III Metals *	Cyanide **	EPA 8240 ***	EPA 8240 + TICs ***	REMARKS
P32 W008	11-30	0815		X		Low Level 58365	GM-8	2					1	*List III Metals: As, Ag, Antimony, Be,
P32 W008D	11-30	0815		X		" " 66	GM-8 (duplicate)	2					1	Cd, Cr, Pb, Hg, Se, Cu, Zn, Fe, Mn, Th,
P32 W009	11-30	0745		X		" " 67	GM-9	2					1	Ni, Na
P32 W010	11-30	0700		X		" " 68	GM-10	5	1	1	1		1	* Metals preserved with HNO_3
P32 W010D	11-30	0700		X		" " 69	GM-10 (duplicate)	5	1	1	1		1	
P32 W011	11-30	0845		X		" " 70	GM-11	2					1	** Cyanide preserved with NaOH
P32 W012R	11-29	1545		X		" " 71	GM-12R	2					1	
P32 W013	11-29	1515		X		" " 72	GM-13	2					1	*** EPA 8240 and 8240 + TICs
P32 W014	11-29	1430		X		" " 73	GM-14	2					1	preserved with HCl
P32 W062	11-29	1015		X		" " 74	GM-62	2				1		
P32 W063	11-29	0915		X		" " 75	GM-63	2				1		
P32 W064	11-29	0930		X		" " 76	GM-64	2				1		
P32 W065	11-29	0700		X		" " 77	GM-65	2				1		
P32 W066	11-29	0730		X		" " 78	GM-66	2				1		

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)
BECaldwell	11-30/1300	FED. EXP.			
Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)
Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)
FED. EXP	12/1/90	R. Marsh			

Ship Via: Federal Express
BL/Airbill Number: 4045810403
Date: 11-30-89

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International Specialists in the Environment

Analyze all parameters for this project according to site-specific QAP (see Marcia Meredith)

CHAIN-OF-CUSTODY RECORD

Project No.: UH4000
Project Name: NASP RCRA Sampling - November
Project Manager: John Barksdale
Samplers: (Signature) BECaldwell / Ideal Davis
Field Team Leader: Caldwell / Davis

	STATION NUMBER	DATE 1989	TIME	SAMPLE TYPE COMP	GRAB	AIR	SAMPLE INFORMATION / EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	Chloride + Sulfate	List III Metals*	Cyanide**	8270 + TICs			REMARKS
P32	W008	11-30	0815		X		Low Level 583165	GM-8	4	1	1	1	1			* List III Metals:
P32	W008D	11-30	0815		X		" " 66	GM-8 (duplicate)	4	1	1	1	1			As, Ag, Antimony, Ba, Cd, Cr,
P32	W009	11-30	0745		X		" " 67	GM-9	4	1	1	1	1			Pb, Hg, Se, Cu, Zn, Fe, Mn,
P32	W010	11-30	0700		X		" " 68	GM-10	1				1			Th, Ni, Na —
P32	W010D	11-30	0700		X		" " 69	GM-10 (duplicate)	1				1			* Metals preserved with HNO_3
P32	W011	11-30	0845		X		" " 70	GM-11		1	1	1	1			
																** Cyanide preserved with NaOH

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)
BECaldwell	11-30/1300				
Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)
Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)

Ship Via: Federal Express
BL/Airbill Number: 4045810403
Date: 11-30-89

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Analyze all parameters accord. site-specific QAP for this P (see Marcia Meredith)

CHAIN-OF-CUSTODY RECORD

Page 1 o

Project No.: UH4000
Project Name: NASP RCRA Sampling
Project Manager: John Barksdale
Samplers: (Signatures) BECaldwell / Hal Davis
Field Team Leader: Caldwell / Davis

	STATION NUMBER	DATE 1989	TIME	SAMPLE TYPE COMP	GRAB	AIR	SAMPLE INFORMATION EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	Sodium	Chloride	Chloride + Sulfate	List III Metals*	Cyanide**	EPA 8270	EPA 8270 + TICs	REMARKS
P32	W012R	11.29	1545		X		Low Level	58286 GM-12R	4			1	1	1		1	*List III Metals:
P32	W013	11.29	1515		X		" "	87 GM-13	4			1	1	1		1	As, Ag, Antimony, Ba
P32	W014	11.29	1430		X		" "	88 GM-14	4			1	1	1		1	Cd, Cr, Pb, Hg, Se,
P32	WRB03	11.29	1430		X		" "	58284 Rinsate blank	4			1	1	1		1	Zn, Fe, Mn, Th, Ni,
P32	W084	11.29	1400		X		" "	58285 GM-84	3	1	1				1		
																	*Metals preserved with HNO_3
																	**Cyanide preserved w/ NaOH

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Ship Via:
BECaldwell	11.29/1800					Federal Express
Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	BL/Airbill Number: 404581 0392
Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)	Date: 11.2

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Analyze all parameters accordi
site-specific QAP for this project
(see Maurice Mesolith)

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CHAIN-OF-CUSTODY RECORD

Page 1

Project No.: UH4000
Project Name: NASP RCRA Sampling - November
Project Manager: John Bauksdale
Samplers: (Signatures) BE Caldwell / H. Davis
Field Team Leader: Caldwell / Davis

	STATION NUMBER	DATE 1989	TIME	SAMPLE TYPE COMP	GRAB	AIR	SAMPLE INFORMATION EXPECTED COMPOUNDS (Concentration)*		STATION LOCATION	NUMBER OF CONTAINERS	Sodium	Calcium	Chloride	Chloride	Sulfate	List III Metals**	Cyanide**	EPA 8270	EPA 8270+TIC	REMARKS
P32	WRB02	11-29	0700		X		Low Level	58283	Rinsate blank	4			1	1	1			1		* List III Metals:
P32	W062	11-29	1015		X		"	58289	GM-62	1						1				As, Ag, Antimony,
P32	W063	11-29	0900		X		"	58290	GM-63	3	1	1				1				Cd, Cr, Pb, Hg, Se,
P32	W064	11-29	0930		X		"	" 91	GM-64	3	1	1				1				Zn, Fe, Mn, Th,
P32	W065	11-29	0700		X		"	" 92	GM-65	3	1	1				1				Na -
P32	W066	11-29	0730		X		"	" 93	GM-66	3	1	1				1				* Metals preserved wi
P32	W067	11-29	0840		X		"	" 94	GM-67	3	1	1				1				HNO3
																				** Cyanide preserve
																				NaOH

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Ship Via:
BE Caldwell	11-29/1800					Federal Express
Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	BL/AirBill Number: 4045810392
Relinquished By: (Signature) Fed. Express	Date/Time: 11-30-89/0730	Received For Laboratory By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)	Date: 11-2

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CHAIN-OF-CUSTODY RECORD

Project No.: UH4000
Project Name: NASP ACRM Sampling - November
Project Manager: John Baulsdale
Samplers: (Signatures) Ed Davis / BE Caldwell
Field Team Leader: Davis / Caldwell

	STATION NUMBER	DATE	TIME	SAMPLE TYPE COMP	GRAB	AIR	SAMPLE INFORMATION EXPECTED COMPOUNDS (Concentration)*		STATION LOCATION	NUMBER OF CONTAINERS	8240 + TICS (EPA)	8270 + TICS (EPA)	Chloride	Sulfate + Chloride	List III Metals +	Cyanide	Sodium	EPA 8240	EPA 8270	REMARKS
P32	W001	11/29	1010		X		Low Level	58279	UG-1	2	1									List III Metals:
P32	F001	11/28	1000		X		"	58281	Field Blank	6	1	1	3	1	1	1				As, Sb, Antimony, Ba, Cd, Cr, Pb
P32	TB01	11/28			X		"	58282	Trip Blank	2	1									Hg, Se, Ag, Zn, Fe, Mn, Th,
P32	PB01	11/28	1000		X		"	58278	Preservative Blank	2	1									Ni, Na
P32	RB01	11/28	1000		X		"	58280	Rinsate Blank	6	1	1	3	1	1	1				+ Metal preserved with HNO3
P32	W069	11/28	1600		X		"	58296	FM69	5			1				1	1	1	
P32	W068	11/28	1600		X		"	58295	FM68	5			1				1	1	1	** Cyanide preserved with NaOH

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Ship Via:
BE Caldwell	11-29/1800					Federal Express
Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	
	/					BL/Airbill Number: 4045810392 — Date: 11-29-89
Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)	
Fed Express	11-30-89/0930	William H. Howard				

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Analyze all parameters according to site-specific QAP for this project (see Marcia Meredith)

CHAIN-OF-CUSTODY RECORD

Page 1

Project No.: UH4000
Project Name: NASP RCRA Sampling - November
Project Manager: John Barksdale
Samplers: (Signatures) BECaldwell / Hal Davis
Field Team Leader: Caldwell / Davis

	STATION NUMBER	DATE 1989	TIME	SAMPLE TYPE COMP	GRAB	AIR	SAMPLE INFORMATION EXPECTED COMPOUNDS (Concentration)*		STATION LOCATION	NUMBER OF CONTAINERS	Sodium	Chloride	Sulfate + Chloride	List III Metals**	Cyanide**	EPA 8240 + TICs	EPA 8270 + TICs	REMARKS
P32	W071	11-28	1245		X		Low Level	58270	GM-71	2	1	1						* List III Metals:
P32	W072	11-28	1230		X		"	58271	GM-72	2	1	1						As, Ag, Antimony,
P32	W076	11-28	1210		X		"	58272	GM-76	2	1	1						Cd, Cr, Pb, Hg, Se,
P32	W077	11-28	1200		X		"	58273	GM-77	2	1	1						Zn, Fe, Mn, Th,
P32	W078	11-28	1140		X		"	58274	GM-78	2	1	1						Na -
P32	W079	11-28	1110		X		"	58275	GM-79	2	1	1						* Metals preserved w/
P32	W083	11-28	1100		X		"	58276	GM-83	2	1	1						HNO_3
P32	WR1-6	11-28	1300	X			"	58277	RW1-6	2	1	1						
P32	W001	11-28	1010		X		"	58279	UG-1	4			1	1	1		1	** Cyanide preserved
P32	PB01				X		"	58278	Preservative blank	2				1	1			$NaOH$

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)
BECaldwell	11-29/1800				
Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)
Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)
Fed. Express	11-30-89 1010	William H. Hamel			

Ship Via: Federal Express
BL/Airbill Number: 704581 0392
Date: 11-2

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WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	P32W008	69	73	88	35	45	78	0	0
02	P32W008D	57	61	67	26	40	59	0	0
03	P32W009	53	62	69	33	47	80	0	0
04	P32W010	58	67	81	40	55	90	0	0
05	P32W010MD	63	58	88	32	38	70	0	0
06	P32W011	73	75	86	36	47	82	0	0
07	P32W0100MS	79	75	95	58	68	94	0	0
08	P32W0100MSD	78	75	105	36	41	75	0	0
09	SBLKW1	66	70	107	33	46	79	0	0

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl	(33-141)
S4 (PHL)	= Phenol-d5	(10-94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
Sir (TBP)	= 2,4,6-Tribromophenol	(10-123)

B/M 1/9/90

Column to be used to flsg recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

FORM II SV-1 1/87 Rev.

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	P32W001	67	105	134	21	38	133 *	0	1
02	P32W001RE	80	101	167 *	28	42	112	0	1
03	P32W012R	72	77	102	33	51	96	0	0
04	P32W012RRE	77	93	120	38	57	88	0	0
05	P32W013	65	74	93	41	51	9J	0	0
06	P32W014	60	52	108	37	49	61	0	0
07	P32W062	69	59	76	35	41	84	0	0
08	P32W063	63	65	92	32	46	55	0	0
09	P32W064	48	40 *	84	35	47	80	0	1
10	P32W065	57	58	95	29	39	74	0	0
11	P32W066	0 *	52	106	37	41	96	0	1
12	P32W066RE	0 *	9 *	18 *	33	38	62	0	3
13	P32W067	67	63	68	39	54	81	0	0
14	P32W068	51	52	95	28	30	82	0	0
15	P32W069	40	37 *	40	22	29	42	0	1
16	P32W084	66	58	42	36	45	52	0	0
17	P32WFB01	68	67	101	35	46	82	0	0
18	P32WRB01	67	77	98	35	51	102	0	0
19	P32WRB02	65	70	110	41	55	88	0	0
20	P32WRB03	72	72	97	40	50	79	0	0
21	P32W014MS	52	49	101	26	31	45	0	0
22	P32W065MS	63	75	96	34	46	66	0	0
23	P32WRB01MS	65	70	98	31	45	96	0	0
24	SBLKW1	76	71	113	29	50	74	0	0
25	SBLKW2	46	55	117	0 *	45	9u	0	1
26	SBLKW3	54	53	116	0 *	45	67	0	1
27	SBLKW4	66	59	134	41	55	79	0	0
28	SBLKW5	54	56	114	26	34	72	0	0

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl	(33-141)
S4 (PHL)	= Phenol-d5	(10-94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

Column to be used to flag recovery values
* Values outside of contract required QC limits
0 Surrogates diluted out

FORM 1I SU-1 1/87 Rev.

328461

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: E & E INC. . Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No. :

Matrix Spike - EPA Sample No.: P32W065

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	200	0	60.6	30	112- 861
2-Chloropheno1	200	0	130	65	127-1231
1,4-Dichlorobenzene	100	0	40.6	41	136 971
N-Nitroso-di-n-prop.(1)	100	0	49.5	50	141 1161
1,2,4-Trichlorobenzene	100	0	43.5	44	139 981
4-Chloro-3-methylphenol	200	0	143	72	123 971
Acenaphthene	100	0	73.4	73	146-1181
4-Nitrophenol	200	0	55.6	28	110- 801
2.4-Dinitrotoluene	100	0	61.9	62	124- 961
Pentachlorophenol	200	0	40.6	20	9-1031
Pyrene	100	0	104	104	126-1271

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol					42	112- 861
2-Chloropheno1					40	127-1231
1,4-Dichlorobenzene					28	136 971
N-Nitroso-di-n-prop.(1)					38	141 1161
1,2,4-Trichlorobenzene					28	139 981
4-Chloro-3-methylphenol					42	123 971
Acenaphthene					31	146-1181
4-Nitrophenol					50	110- 801
2,4-Dinitrotoluene					38	124- 961
PentachLorophenol					50	9-1031
Pyrene					31	126-1271

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery snd RPD values with an asterisk
* Values outside of QC limits

RPO: out of outride limits
Spike Recovery: 0 out of 11 outside limits.

COMMENTS:

1C

SEMIVOLATILE ORGFINICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W065MS

La8 Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58292

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B3193

Laval: (low/med) LOW Date Received: 11/30/89

% Moisture: not dac. dac. Data Extractad: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Data Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	a
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalata	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	tu	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthenc	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenyl-amine

320462

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W065MS

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EFINDE Case No.: 1046_001 SAS No.: SDC No. :

Matrix: (soil/water) WATER Lab Sample ID: 58292

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B3193

Leval: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CFIS NO.	COMPOUND	CONCENTRRTION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-I'lethylnaphthalenc	10	U
77-47-4	Haxachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Flame: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: P32W014

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	200	0	46.4	23	12- 86
2-Chlorophenol	200	0	97.3	44	127-1231
1,4-Dichlorobenzene	100	0	27.3	27	* 36 97
N-Nitroso-di-n-prop.(1)	100	0	45.8	46	41 116
1,2,4-Trichlorobenzene	100	0	27.3	28	39 98
4-Chloro-3-methylphenol	200	0	117	58	23 97
Acenaphthene	100	0	47.6	48	146-1181
4-Nitrophenol	200	0	17.4	Y	* 10- 80
2.4-Dinitrotoluene	100	0	51.1	51	24- 96
Pentachlorophenol	200	0	43.1	22	9-1031
Pyrene	100	0	81.4	84	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION1 (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPO	QC LIMITS REC.
Phenol					42	12- 86
2-Chlorophenol					40	127-1231
1,4-Dichlorobenzene					28	36 97
N-Nitroso-di-n-prop.(1)					38	41 116
1,2,4-Trichlorobenzene					28	39 98
4-Chloro-3-methylphenol					42	23 97
Acenaphthene					31	146-1181
4-Nitrophenol					50	10- 80
2,4-Dinitrotoluene					38	24- 90
Pentachlorophenol					50	9-1031
Pyrene					31	26-127

(1) N-Nitroso-di-n-propylamine

\# Column to be used to flag recovery and RPD values with an asterisk
* Uslues outside of QC limits

RPD: out of outside limits
Spike Recovery: 2 out of 11 outside limits

COMMENTS:

328463

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W014MS

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SOG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58288

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E9165

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 01/04/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	9	BJ
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W014MS

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58288

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E9165

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 01/04/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	16	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

328464

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: P32W010/D BJM 1/9/90

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS PI REC.
Phenol	400	0	206	52	112- 861
2-Chlorophenol	400	0	300	75	127-1231
1,4-Dichlorobenzene	200	4.73	121	58	136 3?1
N-Nitroso-di-n-prop.(1)	200	0	136	68	141 116
1,2,4-Trichlorobenzene	200	0	12*	62	139 98
4-Chloro-3-methylphenol	400	0	322	80	123 971
Acenaphthene	200	0	148	74	146-1131
4-Nitrophenol	400	0	200	50	110- 80
2,4-Dinitrotoluene	200	0	136	68	124- 96
Pentachlorophenol	400	0	306	76	9-103
Pyrene	200	0	200	100	126-1271

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
Phenol	400	134	34	42	42	112- 861
2-Chlorophenol	400	204	51	38	40	127-123
1,4-Dichlorobenzene	200	95.8	46	23	28	136 971
N-Nitroso-di-n-prop.(1)	200	149	74	-8	33	141 116
1,2,4-Trichlorobenzene	200	94.2	47	.28	28	139 981
4-Chloro-3-methylphenol	400	250	62	25	42	123 971
Acenaphthene	200	140	70	6 1 3 1		146-118
4-Nitrophenol	400	132	33	41	50	110- 80
2,4-Dinitrotoluene	200	155	78	-14	38	124- 90
Pentachlorophenol	400	218	54	34	50	9-103
Pyrene	200	216	108	-8	31	126-1271

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits

COMMENTS: 1046.003 53369.03
7002B 01/03/90PBM

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

P32W01UMSD

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58369

Sample wt/vol: 500 (g/mL) ML Lab File ID: B3214

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. dec. Date Extracted: 12/06/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/04/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		a
108-95-2	Phenol	20	U	
111-44-4	bis(2-Chloroethyl)Ether	20	U	
95-57-8	2-Chlorophenol	20	U	
541-73-1	1,3-Dichlorobenzene	4	J	
106-46-7	1,4-Dichlorobenzene	20	U	
100-51-6	Benzyl Alcohol	20	U	
95-50-1	1,2-Dichlorobenzene	8	J	
95-48-7	2-Methylphenol	20	U	
39638-32-9	bis(2-Chloroisopropyl)Ether	20	U	
106-44-5	4-Methylphenol	20	U	
621-64-7	N-Nitroso-Di-n-Propylamine	20	U	
67-72-1	Hexachloroethane	20	U	
98-95-3	Nitrobenzene	20	U	
78-59-1	Isophorone	20	U	
88-75-5	2-Nitrophenol	20	U	
105-67-9	2,4-Dimethylphenol	20	U	
65-85-0	Benzoic Acid	100	U	
111-91-1	bis(2-Chloroethoxy)Methane	20	U	
120-83-2	2,4-Dichlorophenol	20	U	
120-82-1	1,2,4-Trichlorobenzene	20	U	
91-20-3	Naphthalene	20	U	
106-47-8	4-Chloroaniline	20	U	
87-68-3	Hexachlorobutadiene	20	U	
59-50-7	4-Chloro-3-Methylphenol	20	U	
91-57-6	2-Methylnaphthalene	20	U	
77-47-4	Hexachlorocyclopentadiene	20	U	
88-06-2	2,4,6-Trichlorophenol	20	U	
95-95-4	2,4,5-Trichlorophenol	100	U	
91-58-7	2-Chloronaphthalene	20	U	
88-74-4	2-Nitroaniline	100	U	
131-11-3	Dimethyl Phthalate	20	U	
208-96-8	Acenaphthylene	20	U	
606-20-2	2,6-Dinitrotoluene	20	U	

328466

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

D
P32W010/MSD

Lab Name: E E E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.: BH 1/9/90

Matrix: (soil/water) WATER Lab Sample ID: 58369

Sample wt/vol: 500 (g/mL) ML Lab File ID: B3214

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dcc. dec. Date Extracted: 12/06/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/04/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	100	U
83-32-9	Acenaphthene	20	U
51-28-5	2,4-Dinitrophenol	100	U
100-02-7	4-Nitrophenol	100	U
132-64-9	Dibenzofuran	20	U
121-14-2	2,4-Dinitrotoluene	20	U
84-66-2	Diethylphthalate	20	U
7005-72-3	4-Chlorophenyl-phenylether	20	U
86-73-7	Fluorene	20	U
100-10-6	4-Nitroaniline	100	U
534-52-1	4,6-Dinitro-2-Methylphenol	100	U
86-30-6	N-Nitrosodiphenylamine (1)	20	U
101-55-3	4-Bromophenyl-phenylether	20	U
118-74-1	Hexachlorobenzene	20	U
87-86-5	Pentachlorophenol	100	U
85-01-8	Phenanthrene	20	U
120-12-7	Anthracene	20	U
84-74-2	Di-n-Butylphthalate	20	U
206-44-0	Fluoranthene	20	U
129-00-0	Pyrene	20	U
85-68-7	Butylbenzylphthalate	20	U
91-94-1	3,3'-Dichlorobenzidine	40	U
56-55-3	Benzo(a)Anthracene	20	U
218-01-9	Chrysene	20	U
117-81-7	bis(2-Ethylhexyl)Phthalate	11	BJ
117-84-0	Di-n-Octyl Phthalate	20	U
205-99-2	Benzo(b)Fluoranthene	20	U
207-08-9	Benzo(k)Fluoranthene	20	U
50-32-8	Benzo(a)Pyrene	20	U
193-39-5	Indeno(1,2,3-cd)Pyrene	20	U
53-70-3	Dibenz(a,h)Anthracene	20	U
191-24-2	Benzo(g,h,i)Perylene	20	U

(1) - Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

D
P32W010MS

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE. Case No.: 1046_003 SAS No.: SDG No.: 5/1/90

Matrix: (soil/water) WATER Lab Sample ID: 58369

Sample wt/vol: 500 (g/mL) ML Lab File ID: 63213

Lave1: low/med) LOW Date Received: 12/01/89

% Moisture: not dec. dac. Date Extracted: 12/06/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/04/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	a
108-95-2	Phenol	20	U
111-44-4	bis(2-Chloroethyl)Ether	20	U
95-57-8	2-Chlorophenol	20	U
541-73-1	1,3-Dichlorobenzene	4	J
106-46-7	1,4-Dichlorobenzene	2u	U
100-51-6	Benzyl Alcohol	20	U
95-50-1	1,2-Dichlorobenzene	8	J
95-48-7	2-Methylphenol	20	U
39638-32-9	bis(2-Chloroiropropyl)Ether	20	U
106-44-5	4-Methylphenol	20	U
621-64-7	N-Nitroso-Di-n-Propylamine	20	U
67-72-1	Hexachloroethane	20	U
98-95-3	Nitrobenzene	20	U
78-59-1	Isophorona	20	U
88-75-5	2-Nitrophenol	20	U
105-67-9	2,4-Dimethylphenol	20	U
65-85-0	Benzoic Acid	100	U
111-91-1	bis(2-Chloroethoxy)Methane	20	U
120-83-2	2,4-Dichlorophenol	20	U
120-82-1	1,2,4-Trichlorobenzene	20	U
91-20-3	Naphthalene	20	U
106-47-8	4-Chloroaniline	20	U
87-68-3	Hexachlorobutadiene	20	U
59-50-7	4-Chloro-3-Methylphenol	20	U
91-57-6	2-Methylnaphthalene	20	U
77-47-4	Hexachlorocyclopentadiene	20	U
88-06-2	2,4,6-Trichlorophenol	20	U
95-95-4	2,4,5-Trichlorophenol	100	U
91-58-7	2-Chloronaphthalene	20	U
88-74-4	2-Nitroaniline	100	U
131-11-3	Dimethyl Phthalate	20	U
208-96-8	Acenaphthylene	20	U
606-20-2	2,6-Dinitrotoluene	20	U

FORM I SV-1 1/87 Rev.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

F32W010 D MS

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_003 SAS No.: SDG No.: 8/1/1/90

Matrix: (soil/water) WATER Lab Sample ID: 58369

Sample wt/vol: 500 (g/mL) ML Lab File ID: 63213

Level: (low/med) LOW Date Received: 12/01/89

% Moisture: not dec. dec. Date Extracted: 12/06/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/04/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	100	U
83-32-9	Acenaphthene	20	U
51-28-5	2,4-Dinitrophenol	100	U
100-02-7	4-Nitrophenol	100	U
132-64-9	Dibenzofuran	2u	U
121-14-2	2,4-Dinitrotoluene	20	U
84-66-2	Diethylphthalate	20	U
7005-72-3	4-Chlorophenyl-phenylether	20	U
86-73-7	Fluorene	20	U
100-10-6	4-Nitroaniline	100	U
534-52-1	4,6-Dinitro-2-Methylphenol	100	U
86-30-6	N-Nitrosodiphenylamine (1)	20	U
101-55-3	4-Bromophenyl-phenylether	20	U
118-74-1	Hexachlorobenzene	20	U
87-86-5	Pentachlorophenol	100	U
85-01-8	Phenanthrene	20	U
120-12-7	Anthracene	20	U
84-74-2	Di-n-Butylphthalate	20	U
206-44-0	Fluoranthene	20	U
129-00-0	Pyrene	20	U
85-68-7	Butylbenzylphthalate	20	U
91-94-1	3,3'-Dichlorobenzidine	40	U
56-55-3	Benzo(a)Anthracene	20	U
218-01-9	Chrysene	20	U
117-81-7	bis(2-Ethylhexyl)Phthalate	a	BJ
117-84-0	Di-n-Octyl Phthalate	20	U
205-99-2	Benzo(b)Fluoranthene	20	U
207-08-9	Benzo(k)Fluoranthene	20	U
50-32-8	Benzo(a)Pyrene	20	U
193-39-5	Indeno(1,2,3-cd)Pyrene	20	U
53-70-3	Dibenz(a,h)Anthracene	20	U
191-24-2	Benzo(g,h,i)Perylene	20	U

(1) - Cannot be separated from Diphenylamine

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SOG No.:

Matrix Spike - EPA Sample No.: P32WR801

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	200	0	58.1	29	112- 86
2-Chlorophenol	200	0	128	64	27-123
1,4-Dichlorobenzene	100	0	39.7	40	36 97
N-Nitroso-di-n-prop.(1)	100	0	56.2	56	41 116
1,2,0-Trichlorobenzene	100	0	40.2	40	39 98
4-Chloro-3-methylphenol	200	0	142	71	23 97
Acenaphthenc	100	0	62.8	63	46-118
4-Nitrophenol	200	0	106	53	110- 80
2,4-Dinitrotoluene	100	0	70.8	71	24- 96
Pentachlorophenol	200	0	166	83	9-103
Pyrene	100	0	94.U	94	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPO #	QC LIMITS RPO	QC LIMITS REC.
Phenol					42	112- 86
2-Chlorophenol					40	27-123
1,4-Dichlorobenzene					28	36 97
N-Nitroso-di-n-prop.(1)					38	41 116
1,2,4-Trichlorobenzene					28	39 98
4-Chloro-3-nrthylphenol					42	23 97
Acenaphthene					31	46-118
4-Nitrophenol					50	110- 80
2,4-Dinitrotoluene					38	24- 96
Pentachlorophenol					50	9-103
Pyrene					31	26-127

(1) N-Nitroso-di-n-propylamine

$ Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: out of outside limits
Spike Recovery: 0 out of 11 outside limits

COMMENTS:

328463

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NU.

P32RB01MS

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58280

Sample wt/vol: 1000 (g/mL) ML lab File ID: E3183

Lavel: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/02/90

GPC Cleanup: (Y/N) N pH: Dilution factor: 1.0

CAS NU.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chryrane	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	2	BJ
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32RB01MS

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046-001 SAS No.: SOG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58280

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 83183

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/02/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

328469

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W066RE

Lab Name: E & E INC. Contract: UH-4000

Lab Code: ERNOE Case NO. : 1046_001 SAS No. : SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58293

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E9170

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 01/05/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NU.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	2	BJ
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

P A SAMPLE NO.

P32W066PE

Lab Name: E & E INC. Contract: UH-4000

L8b Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER L8b Sample ID: 58293

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E9170

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 01/05/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	1	J
106-46-7	1,4-Dichlorobenzene	3	J
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	6	J
95-48-7	2-Methylphenol	5	J
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	2	J
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	50	
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	14	
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

328470

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH-4000

Lab Code: EANOE Case No.: 1046_001 SAS No.: E

Matrix: (soil/water) WATER Lab Sample I

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

Level: (low/med) LOW Date Receive

% Moisture: not dec. dec. Date Extract

Extraction: (SepF/Cont/Sonc) SEPF Date Analyze

GPC Cleanup: (Y/N) N pH: Dilution Fac

CONCENTRATION UNIT
(ug/L or ug/Kg) UG

Number TICs found: 0

COMPOUND NAME	RT	E
1. Benzidine		
2. 1.2-Diphenylhydrazine (2)		
3. N-Nitrosodimethylamine		
4. N-Nitrosodiphenylamide		
5. Methyl Dihydro Indene		
6. Hydroxymethyl Pentanone		
7. Methyl naphthalene		
8. methyl ethyl phenol		
9. Dimethyl ethyl phenol		
110. Tetramethylbutyl phenol		

ND - None detected, compound searched for, detection limit

(2) - Decomposes to azobenzene during gas chromatography, r

EPA SAMPLE NO.

P32W012RRE

3 No.:

: 58286

B3188

: 11/30/89

d: 12/04/89

: 01/03/90

or: 1.0

L

T. CONC.	Q
ND	
ND	
ND	
ND	
ND	
ND	
NO	
no	
ND	
ND	

not determined.

ported as such.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W012RRE

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58286

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 83188

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	1	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	2	BJ
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

328473

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W012RRE

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Hetrix: (soil/water) WATER Lab Sample ID: 582'36

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B3188

Leval: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthelene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P32W001RE

Lsb Name: E & E Contract: UM-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58279

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 63167

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dac. Date Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC,	Q
1. Benzidine		ND	
2. 1,2-Diphenylhydrazine (2)		ND	
3. N-Nitrosodimethylamine		ND	
4. N-Nitrosodiphenylamide		ND	
5. Methyl Dihydro Indene		ND	
6. Hydroxymethyl Pentanone		ND	
7. Methyl naphthalene		ND	
8. Methyl ethyl phenol		ND	
9. Dimethyl ethyl phenol		ND	
10. Tetramethylbutyl phenol		ND	

ND - None detected, compound searched for, detection limit not determined.

(2) - Decomposes to azobenzene during gas chromatography, reported as such.

328473

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W001RE

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANOE Case No.: 1046_001 SAS No.: SOG No. :

Matrix: (soil/water) WATER Lab Sample ID: 58179

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B3187

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. dec. Date Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRRTION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	6	IJ
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	8	BJ
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W001RE

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 58279

Sanple wt/vo1: 1000 (g/mL) ML Lab Fila ID: B3187

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dac. dec. Oate Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	IU
111-44-4	bis(2-Chloroethyl)Ether	10	IU
95-57-8	2-Chlorophenol	10	IU
541-73-1	1,3-Dichlorobenzene	10	IU
106-46-7	1,4-Dichlorobenzene	10	IU
100-51-6	Benzyl Alcohol	10	IU
95-50-1	1,Z-Dichlorobenzene	10	IU
95-48-7	2-Methylphenol	10	IU
39638-32-9	bis(2-Chloroisopropyl)Ether	10	IU
106-44-5	4-Methylphenol	10	IU
621-64-7	N-Nitroso-Di-n-Propylamine	10	IU
67-72-1	Hexachloroethane	10	IU
98-95-3	Nitrobenzene	10	IU
78-59-1	Isophorone	10	IU
88-75-5	2-Nitrophenol	10	IU
105-67-9	2,4-Dimethylphenol	10	IU
65-85-0	Benzoic Acid	50	IU
111-91-1	bis(2-Chloroethoxy)Methane	10	IU
120-83-2	2,4-Dichlorophenol	10	IU
120-82-1	1,2,4-Trichlorobenzene	10	IU
91-20-3	Naphthalene	10	IU
106-47-8	4-Chloroaniline	10	IU
87-68-3	Hexachlorobutadiene	10	IU
59-50-7	4-Chloro-3-Methylphenol	10	IU
91-57-6	2-Methylnaphthalene	10	IU
77-47-4	Hexachlorocyclopentadiene	10	IU
88-06-2	2,4,6-Trichlorophenol	10	IU
95-95-4	2,4,5-Trichlorophenol	50	IU
91-58-7	2-Chloronaphthalene	10	IU
88-74-4	2-Nitroaniline	50	IU
131-11-3	Dimethyl Phthalate	10	IU
208-96-8	Acenaphthylene	10	IU
606-20-2	2,6-Dinitrotoluene	10	IU

328474

EPA SAMPLE NO.

SBLKW5

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS Nu.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: BLK1-5

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E9169

Level: (low/med) LOW Date Received:

% tloisture: not dec. dec. Date Extracted: 01/05/90

Ertraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Benzidine		ND	
2. 1,2-Diphenylhydrazine (2)		ND	
3. N-Nitrosodimethylamine		ND	
4. N-Nitroaodiphenylamide		ND	
5. Methyl Dihydro Indene		NO	
6. Hydroxymethyl Pentanone		ND	
7. Methyl naphthalene		ND	
8. Methyl ethyl phenol		ND	
9. Dimethyl ethyl phenol		ND	
10. Tetramethylbutyl phenol		ND	

ND - None detected, compound searched for, detection limit not determined.

(2) - Decomposer to azobenzene during gar chromatography, reported as such.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKW5

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No. : 1046_001 SAS No. : SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: BLK1-5

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E9169

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 01/05/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophmnol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	14	
117-84-0	Di-n-Octyl Phthalate	5	J
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot b4 separated from Diphenylamine

FORM I SU-2 1/87 Rev.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKW5

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No.:

matrix: (soil/water) WATER Lab Sample ID: BLK1-5

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E9169

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 01/05/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	CORPOUND	CONCENTRFITION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

EPA SAMPLE NO.

SBLKW4

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: BLK1-4

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E9162

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 01/04/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

COMPOUND NAME	RT	EST. CONC.	Q
1. Benzidine		NO	
2. 1,2-Diphenylhydrazine (2)		NO	
3. N-Nitrosodimethylamine		NO	
4. N-Mitrosodiphenylamide		ND	
5. Methyl Dihydro Indene		NO	
6. Hydroxymethyl Pentanone		NO	
7. Methyl naphthalene		NO	
8. methyl ethyl phenol		ND	
9. Dimethyl ethyl phenol		ND	
10. Tetramethylbutyl phenol		NO	

ND - None detected, compound searched for, detection limit not determined.

(2) - Decomposes to azobenzene Curing gas chromatography, reported as such.

328477

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKW4

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046-001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: BLK1-4

Sample ut/vol: 1000 (g/mL) ML Lab File ID: E9162

Level: (low/med) LOW Date Received:

% moisture: not doc. dtc. Oate Extracted: 01/04/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	9	J
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S3LKW4

Lab Name: E & E INC. Contract: UH-4000

Lab Code: EANDE Case No.: 1046_001 SAS No.: SOG No.:

Matrix: (soil/water) WATER Lab Sample ID: BLK1-4

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E9162

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 01/04/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

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