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QUARTERLY REPORT ON GROUND-WATER MONITORING, WWTP, 3/89 TO 5/89 NAS PENSACOLA, FLORIDA

UH2030

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

JULY 1989

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

ecology and environment, inc.
1203 GOVERNOR'S SQUARE BOULEVARD, TALLAHASSEE, FLORIDA 32301, TEL. 904/877-1978
International Specialists in the Environment

328087

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DEPARTMENT OF THE NAW
NAVY PUBLIC WORKS CENTER
NAVAL AIR STATION
PENSACOU FLORIDA 32508-6500

IN REPLY REFER TO:
5090/1017F00625
Code 480

Mr. William E Kellenberger
Hazardous Waste Engineer, Northwest District
Florida Department of Environmental Regulation
160 Governmental Center
Pensacola, Florida 32501-5794

Re: CLOSURE PERMIT HF17-148989, CLOSE SURFACE IMPOUNDMENT

Dear Mr. Kellenberger:

Enclosed are the quarterly results, March - Hay 1989 of the water-quality analyses as required by the above-referenced permit, Specific Condition 25. The report lists the wells that were sampled from May 24' through May 26, 1989 and the analyses that were performed for the Corrective-Action (CA) monitoring and Point-of-Compliance (POC) monitoring. All analyses were performed using EPA-approved methodologies by Ecology and Environment, Inc. Analytical Services Center, Buffalo, New York.

The results of analyses for the CA and POC monitor wells are reported on DER Form 17-1.216(2).

The following is a brief summary of the analytical results.

During this quarter of sampling, the following specific conductance values were measured in ground-water samples:

- Thirteen shallow monitor wells were 700 micromhos or less per centimeter (umhos/cm); 2 shallow monitor wells were over 10,000 umhos/cm. With the exception of GM-71, and GM-72, the specific conductance values observed in shallow monitor wells were generally similar to or less than values observed during previous investigations at the site. The higher values are likely due to the low water-table elevation at the site and the proximity of these wells to the sea water.

- Intermediate monitor wells ranged from about 1,700 to 8,500 umhos/cm, with the exception of GM-84 (located adjacent to the bay) which was over 10,000 umhos/cm. The specific conductance values observed were similar to those recorded during previous investigations.

- Deep monitor wells GM-63, GM-65, and GM-68 were 2,200, 1,000, and 350 umhos/cm respectively. Again, the observed values were similar to historical data.

The concentrations of sodium and chloride corresponded well with observed' specific conductance values and were generally higher in the intermediate zone than in the shallow depth zone of the aquifer. Monitor wells GM-71, GM-72 and GM-84 contained the highest concentrations of sodium and chloride.

The pH of groundwater from the various depth wells ranged from 5.2 to 7.7. The pH in monitor well GM-66 has increased from 3.5 to 5.2, which is good.

Of the inorganic parameters analyzed in the POC wells, only manganese in monitor wells GM-8 through GM-10, GM-12R and GM-14, iron in monitor wells UG-1, GM-8, GM-9, GM12R, GM-13, and GM14, and sodium in monitor well GM-14, exceeded the groundwater guidance concentrations.

With regard to analyses for organic compounds in POC and CA monitor wells, the following observations are noted:

- Of the eight POC wells analyzed, organic compounds at levels exceeding groundwater guidance concentrations were detected in GM-8 only.

- Of the nine Corrective Action (CA) wells analyzed, organic compounds at levels exceeding groundwater guidance concentrations were detected only in the three intermediate depth wells GM-64, GM-66, and GM-69.

- 'The highest concentrations of organics occurred in the intermediate CA monitor well GM-66. No organic compounds were detected in intermediate well GM-84.

- The predominant organic compounds detected during this sampling event, and during previous investigations at the site include dichlorobenzenes, 1,1,-dichloroethene, 1,2-dichloroethene, tetrachloroethene, chlorobenzene, and trichlorethene.

- Although acetone was detected in five wells, including deep well GM-65, its presence in these samples may be due to laboratory sources since acetone is a common laboratory derived contaminant.

Point of contact for this report is Mr. E. A. Pike. Feel free to call him at (904) 452-3790 if you have any questions.

Sincerely,

T. W. BONE

Encl:
(1) Qtrly Monitoring Report

copy to:
CO SOUTHNAVFACENGCOM (115) w/o encl

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.

GMS # 1017F00625 DATE 7-17-89

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, USN, CEC — Commanding Officer
Owner or Authorized Representative's Name — Title

Method of Discharge N/A

Type of Industry Military

Report for Period 3/89 (Date) to 5/89 (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 compositions 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 — July 17, 1989
Owner or Authorized Representative's Signature — Date

328089

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

NORTHWEST DISTRICT
160 GOVERNMENTAL CENTER
PENSACOLA, FLORIDA 32501-5794

BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
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QUARTERLY REPORT ON GROUND WATER MONITORING
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TWBone — July 17, 1989
Owner or Authorized Representative's Signaturt — Date

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ATTACHMENT A

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

			pH (150.1)	Specific Conductance	Sodium (200.7)	Chlorides (300.0)	List I (624)	List II (625)	List III	List IV	Groundwater Elev
BACKG	UG-1	S	X	X			X	X	X		X
	DG-3	S									
	DG-4	S									
	DG-5	S									
/POC	GH8	S	X	X			X	X	X		X
CA/POC	OH9	S	X	X			X	X	X		X
POC	GH10	S	X	X			X	X	X		X
POC	GH11	S	X	X			X	X	X		X
POC	GH12R	S	X	X			X	X	X		X
POC	GH13	S	X	X			X	X	X		X
POC	GH14	S	X	X			X	X	X		X
CA	GH62	S					X	X			X
CA	GH63	D	X	X	X	X	X	X			X
CA	GH64	I	X	X	X	X	X	X			X
CA	GH65	D	X	X	X	X	X	X			X
CA	OH66	I	X	X	X	X	X	X			X
CA	GH67	S	X	X	X	X	X	X			X
CA	GH68	D	X	X	X	X	X	X			X
CA	GH69	I	X	X	X	X	X	X			X
	GH70	S									
CA	GH71	8	X	X	X	X					X
CA	GH72	S	X	X	X	X					X
	GH73	S									
CA	GH76	S	X	X	X	X					X
CA	GH77	S	X	X	X	X					X
CA	GH78	S	X	X	X	X					X
CA	OH79	S	X	X	X	X					X
	GH80	S									
	GH81	S									
	GH82	S									
CA	GH83	S	X	X	X	X					X
CA	GH84	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
	FB 1		X	X			X	X	X		X
	GM3		X	X	X	X			X		X

EACC = 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: E017-127026
Date of Issue:

Expiration Date: November 1, 1988

SPECIFIC CONDITIONS:

h. The following wells, as shown in Figure 2-14 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,

e, 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
Mu =	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))

PERMITTEE:

U.S. Navy Public Works

I.D. Number: 1017700625 (FL9170024567)
Permit/Certification Number: H017-127026
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	minimum detection limit
1,1-Dichloroethylene	minimum detection limit

3280-2

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:

Diethylphthalate	minimum detection limit
Dimethylphthalate	minimum detection limit
Di-n-Butyl Phthalate	minimum detection limit
2,4-Dinitrotoluene	minimum detection limit
Di-n-Octyl-Phthalate	minimum detection limit
1,2-Diphenylhydrazine	minimum detection h i t
Fluoranthene	minimum detection limit
Fluorene	minimum detection limit
Hexachlorobenzene	minimum detection limit
Hexachlorobutadiene	minimum detection limit
Hexachlorocyclopentadiene	minimum detection limit
Hexachloroethane	minimum detection limit
Indeno(1,2,3-cd)pyrene	minimum detection limit
Isophorone	minimum detection limit
Methyl napthalene	minimum detection limit
2-Methyl napthalene	minimum detection 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 detection limit
1,2,4-Trichlorobenzene	minimum detection limit

ADDITIONAL CONSTITUENTS

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

PERMITTEE:

U.S. Navy Public Works

I.D. Number: 1017F00625 (FL9170024567)
Permit/Certification Number: HO17-127026
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 U t
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

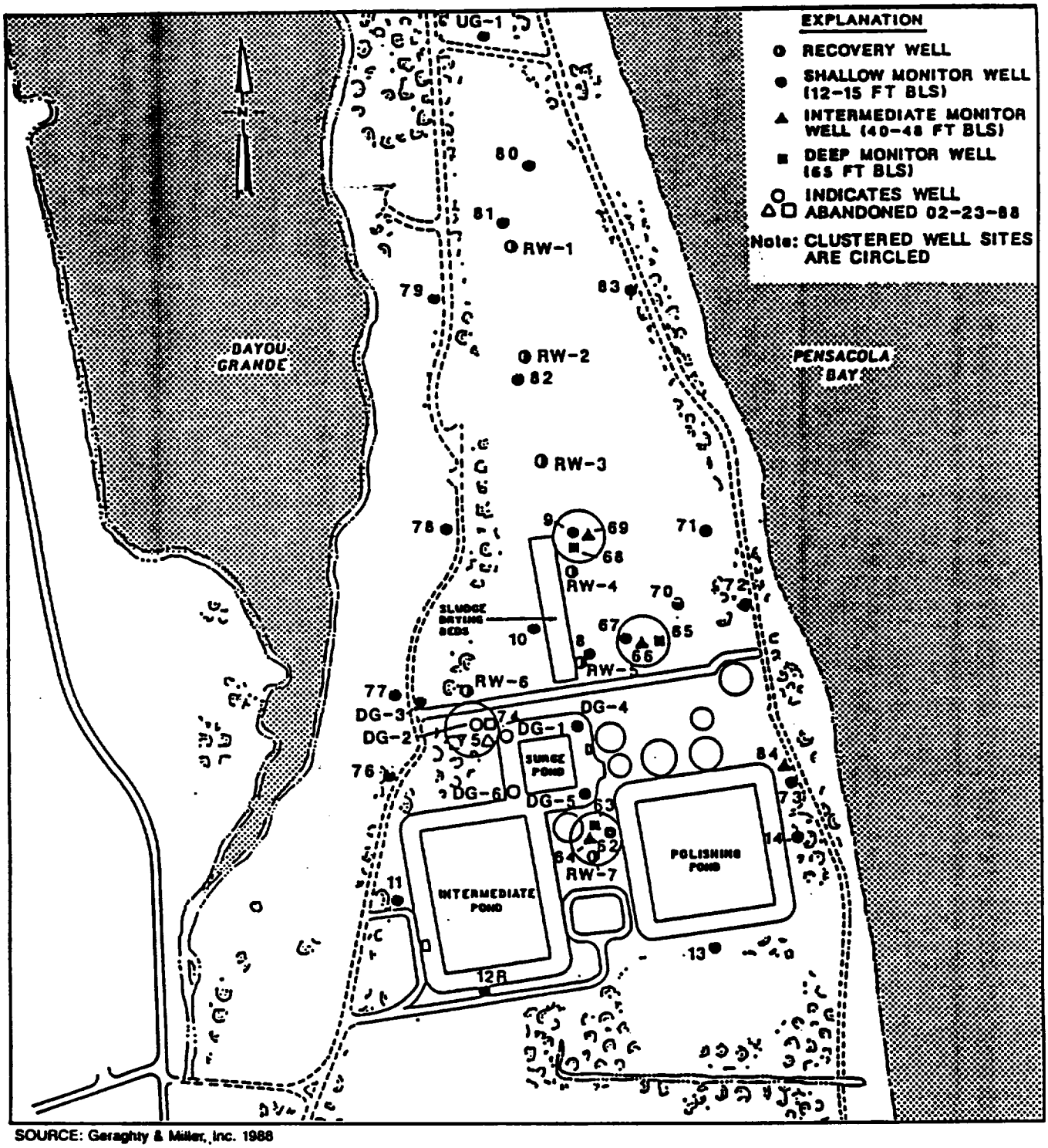
BASE NEUTRAL EXTRACTABLES

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

328094

ATTACHMENT B

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



SOURCE: Geraghty & Miller, Inc. 1988

SCALE

0 300 600 FEET

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

ATTACHMENT C

CORRECTIVE-ACTION MONITORING WELLS
GROUNDWATER SAMPLING ANALYTICAL RESULTS

ecology and environment, inc.
ANALYTICAL SERVICES CENTER. P.O. BOX D. BUFFALO. NEW YORK 14225, TEL. 716-631-0360
International Specialists in the Environment

MEMORANDUM

To: John Barksdale

FROM: Gary Hahn GHahn

DATE: June 30, 1989

SUBJECT: U.S. Navy Public Works Report

REF: 851.001 and 851.002

CC: Lab File

Attached is the laboratory report of the analysis conducted on thirty-nine samples received at the Analytical Services Center on May 26 and 27, 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.

1,2-Dichloroethene (total) values are reported for Method 8240, however only cis-1,2-dichloroethene was detected in the samples.

Dichlorobenzenes were detected in sample P32W064 in both the volatile and semi-volatile fraction, but only the levels in the sed-volatile fraction were quantitated.

Low levels of dichlorobenzenes in samples P32-W009 and P32-W010 may be due to possible carryover.

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.

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ANALYTICAL REFERENCE SUMMARY

851.001
851.002

PARAMETER	METHOD
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.
Complex Cyanide	Method 355.1 and 335.2 - 'Methods for the Chemical Analysis of Water and Wastes', EPA-600/4-79-020, March 1983.
Antimony Barium Cadmium Chromium Copper Iron Lead Manganese Nickel Silver Sodium Zinc	Method 6010 - 'Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, U.S.EPA 1986.
Arsenic Selenium Thallium	Method 7000 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, U.S. EPA 1986.
Mercury	Method 7470 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, U.S. EPA 1986.
Volatile Organics	Method 8240 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, U.S. EPA 1986.
Base Neutral/Acid Extractables	Method 8270 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Sw-846, Third Edition, 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.

3 - 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 rccondary 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 GM-64	P32064
Well GM-65	P32065
Well GM-66	P32066
Well GM-67	P32067
Well GM-68	P32W068
Well GM-69	P32W069
Well GM-71	P32W071
Well GH-72	P32W072
Well GM-76	P32W076
Well GM-77	P32W077
Well GM-78	P32W078
Well GM-79	P32W079
Well GM-83	P32W083
Well GM-84	P32084
RW1-6*	P32WR1-6

* Composite discharge from the recovery well system

328098

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)	P32063 (GM-63)	P32064 (GM-64)	P32065 (GM-65)	P32066 (GM-66)	P32067 (GM-67)	P32W068 (GM-68)	P32W069 (GM-69)	P32084 (GM-84)
Sodium (mg/L)	—	604	3.8	1.78	6.83	1.22	69	879	10,200
Chloride (mg/L)	—	850	520	190	560	110	120	790	7,100
Chloroethane	—	—	—	—	—	—	—	14	—
Acetone	—	—	6(J)	57	—	—	—	—	—
1,1-Dichloroethane	—	—	5	—	—	—	—	98	—
1,1-Dichloroethene		—	—	—	1,100	—	—	—	—
1,2-Dichloroethene (total)	—	—	—	—	—	—	—	1(J)	—
Chlorobenzene	—	—	11	—	—	3(J)	—	110	—
Trichloroethene	—	—	—	—	6,500	—	—	—	—
Tetrachloroethene	—	—	—	—	—	—	—	6	—
Toluene	—	—	—	—	—	—	—	3(J)	—
Total Xylenes	—	—	—	—	—	—	—	5	—
1,3-Dichlorobenzene	—	—	11	—	15	5(J)	—	480	—
1,4-Dichlorobenzene	—	—	18	—	28	8(J)	—	410	—
1,2-Dichlorobenzene	—	—	30	—	47	3(J)	—	510	—
2-Methylphenol	—	—	—	—	7(J)	—	—	—	—
2,4-Dimethylphenol	—	—	—	—	61	—	—	—	—
Naphthalene	—	—	—	—	46	—	—	3(J)	—
2-Methylnaphthalene	—	—	—	—	4(J)	—	—	—	—
Dibenzofuran	—	—	—	—	1(J)	—	—	—	—
Fluorene	—	—	—	—	1(J)	—	—	—	—
bis(2-Ethylhexyl) phthalate	—	—	3(J)	2(J)	5(J,B)	2(J)	8(J,B)	12(J,B)	24(B)

J-Estimated value, compound present below detection limit
B-Compound also present in method blank at similar concentration
*Analyzed for VOCs and BNAs only

Table C-2 (Continued)

SUMMARY ANALYTICAL RESULTS FOR
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 (GM-83)	P32WR1-6 (RW1-6)
Sodium	258	288	39.i	1.48	0.58	0.71	0.86	1.89
Chloride	4,400	1,600	41	120	5.3	6.6	47	200

Note: Thoro samples analyzed for sodium and chloride only

PARAMETER MONITORING REPORT

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

GMS # 1017F00625

Sample Date: 5-25-89

Monitoring Well # GH-62

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Shallow

Classification of Groundwater G-2

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

Groundwater Elevation (above MSL) 1.72 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	700	umhos/cm	Unfiltered	
	VOCs	Teflon bailer	8240	See attached		Unfiltered	
	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

328099

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W062

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40049

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 09579

Level: (low/med) LOW Date Received: 05/26/89

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

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	in	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	Total Xylenes	5	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NU.

P32W062

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40649

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6902

Lev. I: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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	I,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

328100

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W062

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 40649

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E0902

Level: (low/med) LOW Date Received: 05/26/89

% moisture: not dec. dac. Data Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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

CAS NO.	COMPOUND	COEICENTRATION 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	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: 5-25-89

Monitoring Well # GM-63

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Deep

Classification of Groundvater G-2

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

Groundvater Elevation (above MSL) 1.67 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Submer-sible pump	150.1	6.4		Unfiltered	
	Specific Conductance	Submer-sible pump	120.1	2,200	umhos/cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				
	VOCs	Teflon bailer	8240	See attached		Unfiltered	
	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

328101

METALS SECTION JOB NUMBER : 851.001

Ecology and Envitonment, Inc.
Analytical Services center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40650 MATRIX: WATER
SAUPLE ID CLIENT: P32-063

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Sodium	(ICP)	604000		200	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 : 151.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40650 MATRIX: HATER
SMPLE ID CLIENT: P32-063

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	850		1.0	MG/L

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

328102

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W063

Lab Name: E & E Contract: UH2000

Lab Code: EANOE Case No.: 851_001 Sa5 No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40650

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9579

Level: (low/med) LOW Date Received: 05/26/89

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

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

CAS NO.	COMPOUND	CONCEEJTRATION 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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	Total Xylenes	5	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W063

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 40650

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6903

Level: (low/medI LOU Date Received: 05/26/89

% Moisture: not dec. dac. Date Extracted: 06/01/89

Extractionr (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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

328103

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W063

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SO6 No.:

Matrix: (soil/water) WATER Lab Sample ID: 40650

Sample wt/vol: 1000 (g/mL) ML Lab File I@: E6903

Level: (low/med) LOW Date Received: 05/26/89

% moisture: not dec. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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	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: 5-25-89

Monitoring Well # GH-64

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Intermediate

Classification of Groundwater G-2

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

Groundvater Blevation (above MSL) 0.50 ft

STORET Code	Parameter Monitored	Sampling Method	BPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Submer-sible pump	150.1	6.6		Unfiltered	
	Specific Conductance	Submer-sible pump	120.1	1,700	umhos/cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				
	VOCs	Teflon bailer	8240	See attached		Unfiltcred	
	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 328104

GENERAL ANALYTICAL SECTION JOB NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40651 MATRIX: WATER
SAMPLE ID CLIENT: P32-064

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	520		1.0	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.

P32W064

Lab Name: E & E Contract : UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40651

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9580

Level: (low/med) LOW Date Received: 05/26/89

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

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	U
67-64-1	Acetone	6	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	3	U
75-35-3	1,1-Dichloroethane	5	
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	3	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	11	
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

FORM I VOA 1/87 Rev.

328105

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W064

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 40651

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6914

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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	11	
106-46-7	1,4-Dichlorobenzene	18	
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	30	
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.

P32W064

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WTER Lab Sample ID: 40651

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6914

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. doc. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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	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

328106

PARAMETER MONITORING REPORT

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

GMS # 1017F00625

Sample Date: 5-25-89

Monitoring Well # GM-65

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Deep

Classification of Groundwater G-2

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

Groundwater Elevation (above MSL) 1.69 ft

STORET Code	Parameter Monitored	Sampling Method	BPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Submer-sible pump	150.1	6.2		Unfiltered	
	Specific Conductance	Submer-sible pump	120.1	1,000	umhos/cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				
	VOCs	Teflon bailer	8240	See attached		Unfiltered	
	BNAs	Teflon bailer	8270	See attached		Unfiltered	

METALS SECTION JOB NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40652 MATRIX: WATER
SAMPLE ID CLIENT: P32-065

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Sodium	(ICP)	1780		200	UG/L

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

328107

GENERAL ANALYTICAL SECTION JOB NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40652 MATRIX: WATER
SAMPLE ID CLIENT: P32-065

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	190		1.0	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.

P32W065

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Care No.: 851-001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 10652

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9582

Lev. 1: (low/med) L W Date Received: 05/26/89

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		a
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	U	
67-64-1	Acetone	57		
75-15-0	Carbon Disulfide	5	U	
75-35-4	1,1-Dichloroethene	5	U	
75-35-3	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	Total Xylenes	5	U	

FORM I VOA 1/87 Rev.

328108

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W065

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851-001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40652

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6915

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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

CAS NO.	CUHPOUND	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

EPA SAW ~/8.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

P32W065

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDC No.:

Matrix: (soil/water) WATER Lab Sample ID: 40652

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6915

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. doc. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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	2	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

328103

PARAMETER MONITORING REPORT

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

GHS # 1017F00625

Sample Date: 5-25-89

Monitoring Well # GM-66

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Intermediate

Classification of Groundwater G-2

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

Groundwater Elevation (above MSL) 0.95 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample' Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	5.2		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	8,500	umhos/ cm	Unfiltered	
	Inorganics:	Teflon bailer.		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				
	VOCS	Teflon bailer	8240	See attached		Unfiltered	
	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 : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40653 HATRIX: WATER
SAMPLE ID CLIENT: P32-066

PARAMETER		RESULTS	Q	DET. LINIP	UNITS
Sodium	(ICP)	6830		200	UG/L

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

328110

GENERAL ANALYTICAL SECTION JOB NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40653 MATRIX: WATER
SAMPLE ID CLIENT: P32-066

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	560		1.0	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.

P32W066

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40653

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9595

Level: (low/med) LOW Date Received: 05/26/89

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

Column: (pack/cap) CAP Dilation Factor: 100

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1000	U
74-83-9	Bromomethane	1000	U
75-01-4	Vinyl Chloride	1000	U
75-00-3	Chloroethane	1000	U
75-09-2	Methylene Chloride	500	U
67-64-1	Acetone	1000	U
75-15-0	Carbon Disulfide	500	U
75-35-4	1,1-Dichloroethene	1100	
75-35-3	1,1-Dichloroethane	500	U
540-59-0	1,2-Dichloroethene (total)	500	U
67-66-3	Chloroform	500	U
107-06-2	1,2-Dichloroethane	500	U
78-93-3	2-Butanone	500	U
71-55-6	1,1,1-Trichloroethane	500	U
56-23-5	Carbon Tetrachloride	500	U
108-05-4	Vinyl Acetate	1000	U
75-27-4	Bromodichloromethane	500	U
78-87-5	1,2-Dichloropropane	500	U
10061-01-5	cis-1,3-Dichloropropene	500	U
79-01-6	Trichloroethene	6500	
124-48-1	Dibromochloromethane	500	U
79-00-5	1.1,2-Trichloroethane	500	U
71-43-2	Benzene	500	U
10061-02-6	Trans-1,3-Dichloropropene	500	U
75-25-2	Bromoform	500	U
108-10-1	4-Methyl-2-Pentanone	1000	U
591-78-6	2-Hexanone	1000	U
127-18-4	Tetrachloroethene	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U
108-88-3	Toluene	500	U
108-90-7	Chlorobenzene	500	U
100-41-4	Ethylbenzene	500	U
100-42-5	Styrene	500	U
1330-20-7	Total Xylenes	500	U

328111

SEHIUOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W066

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851-001 SAS No.: SDC No. :

Matrix: (soil/water) WATER Lab Sample ID: 40653

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6916

Level: (low/med) LOW Date Received: 05/26/59

% tloiature: not dec. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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

CAS NO.	COHPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	1.0	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	15	
106-46-7	1,4-Dichlorobenzene	28	
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	47	
95-48-7	2-Methylphenol	7	J
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	Isophoronc	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	61	
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	46	
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-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.

P32W066

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40653

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6916

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dac. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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	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	1	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	U
206-44-0	Fluoranthenr	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenrylphthalate	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

FORM 1 SV-2 1/87 Rev.

328112

PARAMETER HONITORING REPORT

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

GHS # 1017F00625

Sample Date: 5-25-89

Honitoring Well # GH-67

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Shallow

Classification of Groundwater G-2

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

Groundwater Elevation (above HSL) 1.26 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	600	umhos/ cm	Unfiltered	
	fnorganics:	Teflon bailer		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				
	vocs	Teflon bailer	8240	See attached		Unfiltered	
	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 : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EL-89-40654 MATRIX: WATER
SAMPLE ID CLIENT: P32-067

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Sodium	(ICP)	1220		200	UG/L

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

328113,

GENERAL ANALYTICAL SECTION JOB NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40654 MATRIX: WATER
SAMPLE ID CLIENT: P32-067

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W067

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.: .

Matrix: (soil/water) WATER Lab Sample ID: 40654

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9587

Level: (low/med) LOW Date Received: 05/26/89

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

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	3	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	3	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	U
108-90-7	Chlorobenzene	3	J
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

FORM I VOA 1/87 Rev.

328114

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W067

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40654

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6917

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/99

6PC 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	3	J
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-nethylphenol	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.

P32W067

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40654

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6917

Law. I: (low/med) LOU Date Received: 05/26/89

% Moisture: not dec. doc. Date Extracted: 06/01/83

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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	2	IJ
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

328115

PARAMETER HONITORING RBPORT

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

GWS # 1017F00625

Sample Date: 5-26-89

Monitoring Well # GH-68

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Deep

Classification of Groundwater G-2

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

Groundwater Elevation (above HSL) 1.71 ft

STORET Code	Parameter Honitored	Sampling Method	EPA Analysis Hethod	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Submer-sible pump	150.1	6.0		Unfiltered	
	Specific Conductance	Submer-sible pump	120.1	350	umhos/ cm	Unfiltered	
	Inorganics:	Teflon bailer		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				
	vocs	Teflon bailer	8240	See attached		Unfiltered	
	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 : 851.002

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40749 MATRIX: WATER
SAMPLE ID CLIENT: P32-W068

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Sodium	(ICP)	69000		200	=e

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

328116

GENERAL ANALYTICAL SECTION JOB NUMBER : 851.002

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40749 MATRIX: WATER
SAMPLE ID CLIENT: P32-W068

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	120	-	1.0	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.

P32W068

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40749

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9590

Level: (low/med) LOW Date Received: 05/27/89

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

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	Total Xylenes	5	U

328117

GENERAL ANALYTICAL SECTION JOB NUMBER : 851.002

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40749 MATRIX: WATER
SAMPLE ID CLIENT: P32-WO60

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	120		1.0	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.

P32W068

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WGTER Lab Sample ID: 40749

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9590

Level: (low/med) LOW Date Received: 05/27/89

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

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	3	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	Total Xylenes	5	U

328118

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W068

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No. : 851_002 SAS No. : SDG No. :

matrix: (soil/water) WATER Lsb Sample ID: 40149

Ssmple wt/vol: 5.0 (g/mL) HL Lab File ID: D9590

Level: (low/med) LOW Date Recaived: 05/27/89

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

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

CAS NO.	COHFOUEID	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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	Total Xylenes	5	U

1B

SEMIVOLAT LE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W068

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40749

Sample wt/vol: 1000 (g/mL) ML Lab Fila ID: E6975

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: hot dec. doc. Date Extracted: 06/02/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/24/89

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

CAS NO.	COMWUND	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

328119

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W068

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40749

Sample Wt/vol: 1000 (g/mL) ML Lab File ID: E6975

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. dec. Date Extracted: 06/02/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/24/89

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-Nitrosniline	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	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

PARAMETER MONITORING REPORT

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

GXS # 1017F00625

Sample Date: 5-26-89

Monitoring Well # GX-69

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Intermediate

Classification of Groundwater E 2

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

Groundwater Elevation (above MSL) 0.96 ft

STORET Code	Parameter Monitored	Sampling Method	BPA 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	2,100	umhos/cm	Unfiltered	
	Inorganics:	Teflon bailer.		See attached		Unfiltered	
	Sodium		6010				HNO_3
	Chloride		325.3				
	VOCs	Teflon bailer	8240	See attached		Unfiltered	
	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

328120

HETALS SECTION JOB NUMBER : 851.002

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAUPLE ID LAB:' EE-89-40750 MATRIX: WATER
SAMPLE ID CLIENT: P32-W069

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Sodium	(ICP)	879000		200	UG/L

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

GENERAL ANALYTICAL SECTION JOB NUMBER : 651.002

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40750 MATRIX: WATER
SAMPLE ID CLIENT: P32-W069

PARAMETER	RESULTS	Q	DCT. LIMIT	UNITS
Chloride	790		1.0	MG/L

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

328121

1A

EPA SAI

VOLATILE ORGANICS ANALYSIS DATA SHEET

P32W069

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SOC No.:

Matrix: (soil/water) WATER Lab Sample ID: 40750

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9591

Level: (low/med) LOW Date Received: 05/27/89

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

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	14	
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	98	
540-59-0	1,2-Dichloroethene (total)	1	J
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	6	
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	3	J
108-90-7	Chlorobenzene	110	
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5 ~~2~~ ~~J~~	U ~~J~~ cw 6.29.89

FORM I VOA 1/87 Rev.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W069

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS tk.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40750

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6976

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. dec. Date Extracted: 06/02/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/24/89

GPC Cleanup: (Y/N) N pH: Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	50	U
111-44-4	bis(2-Chloroethyl)Ether	50	U
95-57-8	2-Chlorophenol	50	U
541-73-1	1,3-Dichlorobenzene	480	
106-46-7	1,4-Dichlorobenzene	410	
100-51-6	Benzyl Alcohol	50	U
95-50-1	1,2-Dichlorobenzene	510	
95-48-7	2-Methylphenol	50	U
39638-32-9	bis(2-Chloroisopropyl)Ether	50	U
106-44-5	4-Methylphenol	50	U
621-64-7	N-Nitroso-Di-n-Propylamine	50	U
67-72-1	Hexachloroethane	50	U
98-95-3	Nitrobenzene	50	U
78-59-1	Isophorone	50	U
88-75-5	2-Nitrophenol	50	U
105-67-9	2,4-Dimethylphenol	50	U
65-85-0	Benzoic Acid	250	U
111-91-1	bis(2-Chloroethoxy)Methane	50	U
120-83-2	2,4-Dichlorophenol	50	U
120-82-1	1,2,4-Trichlorobenzene	50	U
91-20-3	Naphthalene	3	J
106-47-8	4-Chloroaniline	50	U
87-68-3	Hexachlorobutadiene	50	U
59-50-7	4-Chloro-3-Methylphenol	50	U
91-57-6	2-Methylnaphthalene	50	U
77-47-4	Hexachlorocyclopentadiene	50	U
88-06-2	2,4,6-Trichlorophenol	50	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	50	U
88-74-4	2-Nitroaniline	250	U
131-11-3	Dimethyl Phthalate	50	U
208-96-8	Acenaphthylene	50	U
606-20-2	2,6-Dinitrotoluene	50	U

328122

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W069

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40750

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E4976

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. dec. Date Extracted: 06/02/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/24/89

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	250	U
83-32-9	Acenaphthene	50	U
51-28-5	2,4-Dinitrophenol	250	U
100-02-7	4-Nitrophenol	250	U
132-64-9	Dibenzofuran	50	U
121-14-2	2,4-Dinitrotoluene	50	U
84-66-2	Diethylphthalate	50	U
7005-72-3	4-Chlorophenyl-phenylether	50	U
86-73-7	Fluorene	50	U
100-10-6	4-Nitroaniline	250	U
534-52-1	4,6-Dinitro-2-Methylphenol	250	U
86-30-6	N-Nitrosodiphenylamine (1)	50	U
101-55-3	4-Bromophenyl-phenylether	50	U
118-74-1	Hexachlorobenzene	50	U
87-86-5	Pentachlorophenol	250	U
85-01-8	Phenanthrene	50	U
120-12-7	Anthracene	50	U
84-74-2	Di-n-Butylphthalate	50	U
206-44-0	Fluoranthene	50	U
129-00-0	Pyrene	50	U
85-68-7	Butylbenzylphthalate	50	U
91-94-1	3,3'-Dichlorobenzidine	100	U
56-55-3	Benzo(a)Anthracene	50	U
218-01-9	Chrysene	50	U
117-81-7	bis(2-Ethylhexyl)Phthalate	12	BJ
117-84-0	Di-n-Octyl Phthalate	50	U
205-99-2	Benzo(b)Fluoranthene	50	U
207-08-9	Benzo(k)Fluoranthene	50	U
50-32-8	Benzo(a)Pyrene	50	U
193-39-5	Indeno(1,2,3-cd)Pyrene	50	U
53-70-3	Dibenz(a,h)Anthracene	50	U
191-24-2	Benzo(g,h,i)Perylene	50	U

(1) - Cannot be separated from Diphenylamine

PARAMETER MONITORING REPORT

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

GMS # 1017300625

Sample Date: 5-24-89

Monitoring Vell # GX-71

Well *Type:*

[X] Corrective Action

[ ] Point-of-Compliance

Vell Name: Shallov

Classification of Groundwater G-2

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

Groundwater Elevation' (above HSL) 0.71 ft

STORET Code	Parametcr Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	6.9		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				

* 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

328123

METALS SECTION JOB.NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40658 MATRIX: WATER
SAMPLE ID CLIENT: P32-W071

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Sodium	(ICP)	258000		200	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 : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: Et-89-40658
SAMPLE ID CLIENT: P32-W071

MATRIX: WATER

PARAMETER	RESULTS	Q	DE?. LIMIT	UNITS
Chloride	4400		10	MG/L

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

PARAMETER HONITORING REPORT

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

GMS # 1017300625

Sample Date: 5-24-09

Monitoring Well # GH-72

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Shallow

Classification of Groundwater G-2

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

Groundwater Elevation (above MSL) 1.00 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	7.2		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				

* 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

XETALS SECTION JOB NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: LE-89-40659 MATRIX: WATER
SAMPLE ID CLIENT: P32-W072

PARAMETER		RESULTS	Q	DET. LIXIT	UNITS
Sodiua	(ICP)	288000		200	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 : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40659 MATRIX: WATER
SAMPLE ID CLIENT: P32-W072

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	4600		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: 5-24-89

Monitoring Uell # GM-76

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Shallow

,Classificationof Groundvater G-2

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

Groundvatcr Elevation (above MSL) 1.46 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	7.4		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	Tcflon bailer	8240	See attached		Unfiltered	
	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 328126

METALS SECTION JOB NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40660 MATRIX: WATER
SAMPLE ID CLIENT: P32-W076

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Sodium	(ICP)	39100		200	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 : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40660 MATRIX: WATER
SAMPLE ID CLIENT: P32-W076

PARAMETER	RESULTS	Q	DET. LIMIT	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 LIXIT

328127

PARAMETER MONITORING REPORT

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

GHS # 1017300625

Sample Date: 5-24-89

Honitoring Well # GM-77

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Shallow

Classification of Groundwater G-2

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

Groundwater Elevation (above.HSL) 1.32 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	7.1		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	400	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 : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40661 MATRIX: WATER
SAMPLE ID CLIENT: P32-W077

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Sodium	(ICP)	1480		200	UG/L

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

328128

GENERAL ANALYTICAL SECTION JOB NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40661 MATRIX: WATER
SAMPLE ID CLIENT: P32-W077

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	120		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)

GUS # 1017F00625

Sample Date: 5-24-89

Monitoring Well # GX-78

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Shallow

Classification of Groundvatcr G Z

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

Groundwater Elevation (above HSL) 1.14 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sampled/ filtered unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	6.7		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	50	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)

Bffcctive January 1, 1983 328129

METALS SECTION JOB.NUHBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40662 MATRIX: WATER
SAMPLE ID CLIENT: P32-W078

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Sodium	(ICP)	580		200	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 : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40662 MATRIX: WATER
SAMPLE ID CLIENT: P32-W078

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	5.3		1.0	MG/L

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

328130

PARAMETER MONITORING REPORT

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

GHS # 1017F00625

Sample Date: 5-24-89

Monitoring Well # GH-79

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Shallow

Classification of Groundwater G-2

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

Groundwater Elevation (above HSL) 0.79 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	6.8		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	40	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 : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40663 MATRIX: WATER
SAMPLE ID CLIENT: P32-W079

PARAMETER		RESULTS	Q	DET. LIHIT	WITS
Sodium	(ICP)	709		200	UG/L

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

328131

GENERAL ANALYTICAL SECTION JOB NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40663 MATRIX: WATER
SAMPLE ID CLIENT: 332-W079

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	6.6		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: 5-24-89

Monitoring Well # GH-83

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Shallow

Classification of Groundwater G-2

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

Groundwater Elevation (above MSL) 0.70 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	140	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

328132

METALS SECTION JOB NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: Ed-89-40664 MATRIX: WATER
SAMPLE ID CLIENT: P32-W083

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Sodium	(ICP)	857		200	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 : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: Et-89-40664
SAMPLE ID CLIENT: P32-W083

MATRIX: WATER

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	47		1.0	MG/L

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

328133

PARAMETER HONITORING REPORT

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

GMS # 1017F00625

Sample Date: 5-26-89

Monitoring Well # GM-84

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: Intermediate

Classification of Groundwater G-2

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

Groundwater Elevation (above MSL) 0.86 ft

STORET Code	Parameter Monitored	Sampling Method	BPA Analysis Method	Analysis Result	units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Submer-sible pump	150.1	6.4		Unfiltered	
	Specific Conductance	Submer-sible pump	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	
	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 : 851,002

tcology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40751 MATRIX: WATER
SAMPLE ID CLIENT: P32-084

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Sodium	(ICP)	10200.000		200	UG/L

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

328134

GENERAL ANALYTICAL SECTION JOB NUMBER : 851.002

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40751 MATRIX: WATER
SAMPLE ID CLIENT: P32-W084

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	7100		1.0	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.

P32W084

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40751

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9594

Level: (low/med) LOW Date Received: 05/27/89

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

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	U	
67-64-1	Acetone	10	U	
75-15-0	Carbon Disulfide	5	U	
75-35-4	1,1-Dichloroethene	5	U	
75-35-3	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	3	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	Total Xylenes	5	U	

328135

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W084

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40751

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6950

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. dec. Date Extracted: 06/02/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/23/89

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.

P32W084

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40751

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6950

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. dac. Date Extracted: 06/02/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/23/89

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	24	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

328136

PARAMETER MONITORING REPORT

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

GHS # 1017F00625

Sample Date: 5-24-89

Honitoring Well # RW1-6

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Well Name: composite discharge from recovery well system

Classification of Groundwater G-2

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	6.8		Unfiltered	
	Specific Conductance	Recovery well discharge	120.1	700	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 : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40665 MATRIX: WATER
SAMPLE ID CLIENT: P32-WR1-6

PARAMETER		RESULTS	Q	DE?. LIMIT	UNITS
Sodium	(ICP)	1890		200	UG/L

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

328137

GENERAL ANALYTICAL SECTION JOB NUMBER : 851.001

Ecology and Environment, Inc.
Analytical services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40665 MATRIX: WATER
SAMPLE ID CLIENT: P32-WR1-6

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	200		1.0	MG/L

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

ATTACHMENT D

POINT-OF-COMPLIANCE MONITORING WELLS
GROUNDWATER SAMPLING ANALYTICAL RESULTS

328138

Table D-1

GROUNDWATER SAMPLE DESIGNATIONS
POINT-OF-COMPLIANCE MONITORING WELLS

Sample Location	Sample Designation
Well UG-1	P32W001
Well GM-8	P32W008
Well GH-9	P32W009
Well GM-10	P32W010
Well GM-11	P32W011
Well GM-12R	P32W012R
Well GM-13	P32W013
Well GH-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	—	[illegible]	[illegible]	[illegible]	—	46	16	22
Chromium	—	26.1	—	—	—	—	—	—
Iron	689	32,400	3,190	252	77	883	551	450
Manganese	—	115	83.7	174	17	532	31	98
Nickel	—	—	—	—	—	—	38	—
Sodium	7,380	15,500	9,210	25,300	21,600	15,200	18,000	184,000
Zinc	18.8	54.3	12.3	—	—	—	—	14.6
Chloride	9,700	1[illegible]000	8,800	31,000	35,000	14,000	29[illegible]000	240[illegible]000
Sulfate	20,000	150[illegible]000	170,000	140,000	23,000	28,000	56[illegible]000	200[illegible]000
Acetone	38	—	—	—	—	14	8(J)	—
1,1 Dichloroethane	—	170	—	—	—	—	—	—
1,2 Dichloroethene (total)	—	35	—	—	—	—	—	—
1,1,1-Trichloroethane	—	6	—	—	—	—	—	—
Trichloroethene	—	1(J)	—	—	—	—	—	—
Tetrachloroethene	—	22	—	—	—	—	—	—
Chlorobenzene	—	—	6	5	2(J)	—	—	3(J)
1,3-Dichlorobenzene	—	110	3	8(J)	—	—	—	—
1,4-Dichlorobenzene	—	130	4	11	—	—	—	—
1,2-Dichlorobenzene	—	140	4	13	—	—	—	—
2,4-Dimethylphenol	—	4(J)	—	—	—	—	—	—
2,4-Dichlorophenol	—	6(J)	—	—	—	—	—	—
1,2,4-Trichlorobenzene	—	2(J)	—	—	—	—	—	—
Naphthalene	—	8(J)	—	—	—	—	—	—
bis(2-Ethylhexyl) phthalate	—	17(B)	12(B)	13(B)	—	3(J,B)	—	—
Di-n-octyl phthalate	—	—		—	1(J)			—
Tetramethylbutyl phenol	—	—	—	21(J)	—	—	—	1(J)
Dimethyl ethyl phenol	—	—	—	—	—	—	—	1(J)
Dichlorobenzene isomer	—	—	—	—	—	—	—	2(J)

B-Compound also present in method blank at similar concentration

PARAMETER MONITORING REPORT

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

GHS # 1017F00625

Sample Date: 5-24-89

Honitoring Well # UG-1

Well Type:

[ ] Corrective Action

[X] Point-of-Compliance

Well Name: Shallow Background

Classification of Groundwater G-2

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

Groundwater Elevation (above HSL) 1.06 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	6.8		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	135	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	
	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 : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40642 MATRIX: WATER
SMILE ID CLIENT: P32-W001

PARAMETER		RESULTS	Q	DET. LIHIT	UNITS
Antirony	(ICP)	ND		60	UG/L
Arsenic	(FU)	ND		5.0	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)	689		25	UG/L
Lead	(FU)	ND		5.0	UG/L
Manganese	(ICP)	ND		5.0	UG/L
Mercury	(VAP)	ND		0.20	UG/L
Nickel	(ICP)	ND		15	UG/L
Selenium	(FU)	ND		5.0	UG/L
Silver	(ICP)	ND		10	UG/L
Sodium	(ICP)	7380		200	UG/L
Thal1ium	(FU)	ND		5.0	UG/L
Zinc	(ICP)	18.8		10	UG/L

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

328140

GENERAL ANALYTICAL SECTION JOB NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40642 MATRIX: WATER
SAMPLE ID CLIENT: P32-W001

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	9.7		1.0	MG/L
Sulfate	20		2.0	MG/L
Cyanide, complex	ND		0.01	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 Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40642

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9558

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. Data Analyzed: 06/05/89

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

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		a
74-87-3	Chloromethane	10	IU	
74-83-9	Bromomethane	10	IU	
75-01-4	Vinyl Chloride	10	IU	
75-00-3	Chloroethane	10	IU	
75-09-2	Methylene Chloride	5	IU	
67-64-1	Acetone	38		
75-15-0	Carbon Disulfide	5	IU	
75-35-4	1,1-Dichloroethene	5	IU	
75-35-3	1,1-Dichloroethane	5	IU	
540-59-0	1,2-Dichloroethene (total)	5	IU	
67-66-3	Chloroform	5	IU	
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	IU	
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	5	IU	
100-41-4	Ethylbenzene	5	IU	
100-42-5	Styrene	5	IU	
1330-20-7	Total Xylenes	5	IU	

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EPA SAMPLE NO.

P32W001

UOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 40642

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 09558

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. Date analyzed: 06/05/89

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-Chloroethyluinyl 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		ND	

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

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

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W001

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40642

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6895

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dec. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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	

328142

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W001

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_00 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40642

Sample wt/vol: 1000 (g/mL) ML Lab File ID: €6895

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dec. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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	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

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P32W001

Lab Name: E & E Contract: UH2000

L8b Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40642

Sample wt/vol: 1000 (g/mL) ML Lab File ID: €6895

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not drc. dec. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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		M	
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.

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PARAMETER HONITORING REPORT

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

GMS # 1017F00625

Sample Date: 5-25-89

Monitoring Well # GH-8

Well Type:

[ ] Corrective Action

[X] Point-of-Compliance

Well Name: Shallow

Classification of Groundwater G-2

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

Groundwater Elevation (above MSL) 1.33 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	6.0		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	480	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	
	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 : 851.002

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40744 MATRIX: WATER
SAMPLE ID CLIENT: 032-W008

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Antimony	(ICP)	ND		60	UG/L
Arsenic	(FU)	ND		5.0	UG/L
Barium	(ICP)	93.4		10	UG/L
Cadmium	(ICP)	ND		5.0	UG/L
Chromium	(ICP)	26.1		10	UG/L
Copper	(ICP)	ND		10	UG/L
Iron	(ICP)	32400		25	UG/L
Lead	(FU)	ND		5.0	UG/L
Manganese	(ICP)	115		5.0	UG/L
nercury	(VAP)	ND		0.20	UG/L
Nickel	(ICP)	ND		15	UG/L
Selenium	(FU)	ND		5.0	UG/L
Silver	(ICP)	ND		10	UG/L
sodium	(ICP)	15500		200	UG/L
Thallium	(FU)	ND		5.0	UG/L
Zinc	(ICP)	54.3		10	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 : 851.002

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40744 MATRIX: WATER
SAMPLE ID CLIENT: P32-W008

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	16		1.0	MG/L
sulfate	150		2.0	MG/L
Cyanide, complex	ND		0.01	MG/L

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W008

Name: E & E Contract: UH2000

Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40744

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9572

Level: (low/med) LOW Date Received: 05/27/89

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

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	170	
540-59-0	1,2-Dichloroethene (total)	35	
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	6	1
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,?-Dichloropropene	5	U
79-01-6	Trichloroethene	1	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	22	
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	Total Xylenes	5	U

FORM I VOA 1/87 Rev.

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P32W008

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40744

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 09572

Level: (low/med) LOW Data Received: 05/27/89

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

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 12 06/09/89 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. Dichlorodrfluoroniethanc		ND	
6. 1.2-Dichloropropylene		NO	
7. Trichlorofluoromethane (1)		ND	
8. Tetramethylbenzene		ND	
9. "alkylated' benzene		6.0013	
10. Trimethyl Benzene	21.99	8.0013	

(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.

P32W008

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Care No.: 851_002 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 40744

Sample wt/vol: 1000 (g/mL) Ih Lab File ID: E6918

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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	110		
106-46-7	1,4-Dichlorobenzene	130		
100-51-6	Benzyl Alcohol	10	U	
95-50-1	1,2-Dichlorobenzene	140		
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	4	J	
65-85-0	Benzoic Acid	50	U	
111-91-1	bis(2-Chloroethoxy)Methane	10	U	
120-83-2	2,4-Dichlorophenol	6	J	
120-82-1	1,2,4-Trichlorobenzene	2	J	
91-20-3	Naphthalene	a	J	
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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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[redacted]

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40744

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6918

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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

CAS NO.	[redacted]	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	17	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

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P32W008

lame: E & E Contract: UH2000

ode: EANDE Case No.: 851_002 SAS No.: SDG No.:

x: (soil/water) WATER Lab Sample ID: 40744

e wt/vol: 1000 (g/mL) ML Lab File ID: €6918

(low/med) LOW Date Received: 05/27/89

sture: not drc. dec. Date Extracted: 06/01/89

ction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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

r TICs found: 0

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

COMPOUND NAME	RT	EST. CONC.	Q
Benzidine		ND	
1,2-Diphenylhydrazine (2)		ND	
N-Nitrosodimethylamine		ND	
N-Nitrosodiphenylamide		ND	
Methyl Dihydro Indene		ND	
Hydroxymethyl Pentanone		ND	
Methyl naphthalene		ND	
Methyl ethyl phenol		ND	
Dimethyl ethyl phenol		ND	
Tetramethylbutyl phenol		ND	

. None detected, compound searched for, detoctron limit not determined.

. Decomposes to azobenzene during gas chromatography, reported as such.

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PARAMETER HONITORING REPORT

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

GMS # 1017F00625

Sample Date: 5-25-89

Monitoring Well # GM9

Well Type:

[ ] Corrective Action

[X] Point-of-Compliance

Well Name: Shallow

Classification of Groundwater G-2

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

Groundwater Elevation (above MSL) 1.08 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	540	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	
	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 : 851.002

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40746 MATRIX: WATER
SMILE ID CLIENT: P32-W009

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Antimony	(ICP)	ND		60	UG/L
Arsenic	(FU)	ND		5.0	UG/L
Barium	(ICP)	45.4		10	UG/L
Cadmium	(ICP)	ND		5.0	UG/L
Chromium	(ICP)	ND		10	UG/L
Coppcr	(ICP)	ND		10	UG/L
Iron	(ICP)	3190		25	UG/L
Lead	(FU)	ND		5.0	UG/L
Manganese	(ICP)	83.7		5.0	UG/L
Mercury	(Vap)	ND		0.20	UG/L
Nickel	(ICP)	ND		15	UG/L
Selenium	(FU)	ND		5.0	UG/L
Silver	(ICP)	ND		10	UG/L
Sodium	(ICP)	9210		200	UG/L
Thallium	(FU)	ND		5.0	UG/L
Zinc	(ICP)	12.3		10	UG/L

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

328143

GENERAL ANALYTICAL SECTION JOB NUMBER : 851.002

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40746 MATRIX: WATER
SAMPLE ID CLIENT: P32-W009

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	8.8		1.0	MG/L
Sulfate	170		2.0	MG/L
Cyanide, complex	ND		0.01	MG/L

QUALIFIERS8 C = COMMENT ND = NOT DETECTED
J = ESTIUATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

1A
VOLATILE ORGAEIICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W009

L4b Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40746

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9574

Level: (low/med) LOW Date Received: 05/27/89

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

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	10	IU
75-01-4	Vinyl Chloride	10	IU
75-00-3	Chloroethane	10	IU
75-09-2	Methylene Chloride	5	IU
67-64-1	Acetone	10	IU
75-15-0	Carbon Disulfide	5	IU
75-35-4	1,1-Dichloroethene	5	IU
75-35-3	1,1-Dichloroethane	5	IU
540-59-0	1,2-Dichloroethene (total)	3	IU
67-66-3	Chloroform	5	IU
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	3	IU
78-87-5	1,2-Dichloropropane	5	IU
10061-01-5	cis-1,3-Dichloropropene	5	IU
79-01-6	Trichloroethene	5	IU
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	Toluane	5	IU
108-90-7	Chlorobenzene	6	I
100-41-4	Ethylbenzene	3	IU
100-42-5	Styrene	5	IU
1330-20-7	Total Xylenes	5	IU

323143

EPA SAI

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

P32W009

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 40746

Ssrple wt/vol : 5.0 (g/mL) ML Lab File ID: 09574

Level : (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. Dote Analyzed : 06/06/89

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		ND	
4. 2-Chloroethylvinyl Ether (1)		ND	
5. Dichlorodifluoromethane		ND	
6. 1,2-Dichloropropylene		ND	
7. Trichlorofluorowthane (1)		ND	
8. Tetramethylbenzene		ND	
9. "alkylated" benzene		ND	
10. Trimethyl Benzene		ND	

(1) - These compounds are included in the daily calibration standard. Ouantitation 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 ironer present.

328150

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W009

Ltb Name: E & E Contract: UH2000

Lab Code: EAHDE Case No.: 891_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40746

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6920

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dsc. dsc. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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	3	J
106-46-7	1,4-Dichlorobenzene	4	J
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	4	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

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W009

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851-002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40746

Sample wt/vol: 1000 (g/mL) HL Lab File ID: E6920

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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	12	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

328151

EPA SAMPLE NO.

P32W009

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40746

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6920

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

CPC Cleanup: (Y/N) N pH: Dilution Factor: 1.6

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-Nitrorodimethylamine		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. Tetrrmethylbutyl phenol		ND	

ND - None 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)

GMS # 1017F00625

Sample Date: 5-25-89

Monitoring Well # GH-10

Well Type:

[ ] Corrective Action

[X] Point-of-Compliance

Well Name: Shallov

Classification of Groundvater G-2

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

Groundvater Elevation (above MSL) 1.25 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ filtered	Preser-vatives Added
	pH	Teflon bailer	150.1	6.5		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	550	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	
	BNAs	Teflon bailer	8270	See attach4		Unfiltered	

* Well development is tbe 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

328152

METALS SECTION JOB.NUMBER : 851.002

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40747 MATRIX: WATER
SAMPLE ID CLIENT: P32-W010

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Antimony	(ICP)	ND		60	UG/L
Arsenic	(FU)	ND		5.0	UG/L
Barium	(ICP)	76.2		10	UG/L
Cadmium	(ICP)	ND		5.0	UG/L
Chromium	(ICP)	ND		10	UG/L
Copper	(ICP)	ND		10	UG/L
Iron	(ICP)	252		25	UG/L
Lead	(FU)	ND		5.0	UG/L
Manganese	(ICP)	114		5.0	UG/L
Mercury	(Vap)	ND		0.20	UG/L
Nickel	(ICP)	ND		15	UG/L
Se1enium	(FU)	ND		5.0	UG/L
Silver	(ICP)	ND		10	UG/L
Sodium	(ICP)	25300		200	UG/L
Thallium	(FU)	ND		5.0	UG/L
zinc	(ICP)	ND		10	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 : 851.002

Ecology and Environment, xnc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: Et-89-40747 MATRIX: WATER
SAMPLE ID CLIENT: P32-W010

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	31		1.0	MG/L
Sulfate	140		2.0	MG/L
Cyanide, complex	ND		0.01	MG/L

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

328153

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W010

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SOG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40747

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9576

Level: (low/med) LOW Date Received: 05/27/89

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

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	E	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	E	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	E	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	Total Xylenes	5	U

EPA SAMP

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

P32W010

Lab Name: E 6 E Contract: UH2000

Lab Code: EAMDE Case No.: 851_002 SAS No.: SOG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40747

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9576

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. Data Analyzed: 06/06/89

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		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.

328154

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W010

Lab blame: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG Elo. :

Matrix: (soil/water) WATER Lab Sample ID: 40747

Sample wt/vol: 1000 (g/mL) HL Lab File ID: E6923

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dsc. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/88

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	8	J
106-46-7	1,4-Dichlorobenzene	11	
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	13	
95-48-7	2-Methylphenol	10	U
33638-32-9	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	Elitrobenzene	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-Hethylphcnol	10	U
91-57-6	2-flethylnaphthalene	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

EPFI SAMPLE NO.

P32W010

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Care No.: 851_002 SAS tk.: SDG No. :

Matrix: (soil/water) WCITER Lab Sample ID: 40747

Sample wt/vol: 1000 (g/mL) ML Lab File ID: €6923

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		P
99-09-2	3-Nitroaniline	50	U	
83-32-9	Acenaphthene	18	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	in	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	13	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

328155

EPFI SAMPLE NO.

P32W010

SEHIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851-002 SAS No.: SDG No.:

tletrix: (soil/water) WATER Lab Sample ID: 40747

Sample wt/vol: 1000 (g/mL) HL Lab File ID: €6923

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dcc. dac. Date Extracted: 06/01/83

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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

'lumber 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	
110. Tetramethylbutyl phenol	19.17	21.0	IJ

ND - None 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)

GMS # 1017F00625

Sample Date: 5-25-89

Monitoring Well # GM-11

Uell Type:

[ ] Corrective Action

[X] Point-of-Compliance

Vell Name: Shallov

Classification of Groundvater G-2

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

Groundvater Elevation (above HSL) 1.92 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	7.5		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	230	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	
	BNAs	Teflon bailer	8270	See attached		Unfiltered	

* Uell 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

328156

METALS SECTION JOB.NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40643 UATRIX: WATER
SAMPLE ID CLIENT: P32-WOll

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Antimony	(ICP)	ND		60	UG/L
Arsenic	(FU)	ND		5.0	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)	77		25	UG/L
Lead	(FU)	ND		5.0	UG/L
Manganese	(ICP)	17		5.0	UG/L
Mercury	(Vap)	ND		0.20	UG/L
Nickel	(ICP)	ND		15	UG/L
Selenium	(FU)	ND		5.0	UG/L
Silver	(ICP)	ND		10	UG/L
Sodium	(ICP)	21600		200	UG/L
Thallium	(FU)	ND		5.0	UG/L
Zinc	(ICP)	ND		10	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 : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: LE-89-40643 MATRIX: WATER
SAMPLE ID CLIENT: P32-W011

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	35		1.0	MG/L
Sulfate	23		2.0	MG/L
Cyanide, complex	ND		0.01	MG/L

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

328157

1A
VOLATILE **ORGANICS** ANALYSIS DATA SHEET

EPA SAMPLE NU.

P32W011

Lab Name: E & E Contract: UH2000

Lab Coda: EANDE Case No.: 851_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 40643

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 09559

Level: (low/med) LOW Date Received: 05/26/99

% Moisture: not dec. Date Analyzed: 06/05/89

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	2	J
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P32W011

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40643

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9559

Level: (low/med) LW Date Received: 05/26/89

% Moisture: not dec. Date Analyzed: 06/05/89

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.

323158

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NU.

P32W011

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40643

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6896

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dec. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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.

P32W011

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40643

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6896

Level: (low/med) LOW Date Received: 05/26/19

% Moisture: not dec. dec. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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	10	U
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

328159

PARAMETER HONITORING REPORT

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

GMS # 1017F00625

Sample Date: 5-25-89

Monitoring Well # GM-12R

Well Type:

[ ] Corrective Action

[X] Point-of-Compliance

Well Name: Shallow

Classification of Groundwater G-2

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

Groundwater Elevation (above HSL) 2.10 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	7.7		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	380	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	
	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

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P32W011

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40643

Sample wt/vol: 1000 (g/mL) ML Lab File ID: €6896

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dac. dec. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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. Hathyl Dihydro Indene		ND	
6. Hydroxymethyl Pantanone		ND	
7. Methyl naphthalene		ND	
8. Hathyl 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.

328160

METALS SECTION JOB NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40644 MATRIX: WATER
SAMPLE ID CLIENT: P32-W012R

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Antimony	(ICP)	ND		60	UG/L
Arsenic	(FU)	ND		5.0	UG/L
Barium	(ICP)	46		10	UG/L
Cadmium	(ICP)	ND		5.0	UG/L
Chcomium	(ICP)	ND		10	UG/L
Copper	(ICP)	ND		10	UG/L
Iron	(ICP)	883		25	UG/L
Lead	(FU)	ND		5.0	UG/L
Manganese	(ICP)	532		5.0	UG/L
Mercury	(Vap)	ND		0.20	UG/L
Nickel	(ICP)	ND		15	UG/L
Se1enium	(FU)	ND		5.0	UG/L
Silver	(ICP)	ND		10	UG/L
Sodium	(ICP)	15200		200	UG/L
Thallium	(FU)	ND		5.0	UG/L
Zinc	(ICP)	ND		10	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 : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40644 MATRIX: WATER
SAMPLE ID CLIENT: P32-W012R

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chlorida	14		1.0	MG/L
Sulfate	28		2.0	MG/L
Cyanide, complex	ND		0.01	MG/L

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

328161

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W01ZR

Lab flame: E 8 E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 40644

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 09660

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. Date Analysed: 06/05/89

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	U
67-64-1	Acetone	14	I
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	Total Xylenes	5	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P32W01ZR

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 10644

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9660

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. Date Analyzed: 06/05/89

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)		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 bared on the standard RF rather than 8n RF of 1.

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

328162

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W01ZR

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40644

Sample wt/vol: 1000 (g/mL) HL Lab File ID: E6897

Level: (low/med) LOW Date Received: 05/26/89

% moisture: not dec. dec. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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.

P32W01ZR

Lab Name: E 6 E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 40644

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6897

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dtc. Data Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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

328163

EPA SAMPLE NO.

P32W01ZR

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851-001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 40644

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6897

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dec. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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-Nitrosodiphcnylamide		ND	
5. Methyl Oihydro 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.

PARAMETER MONITORING REPORT

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

GMS # 1017F00625

Sample Date: 5-25-89

Monitoring Well # GM-13

Well Type:

[ ] Corrective Action

[X] Point-of-Compliance

Well Name: Shallow

Classification of Groundwater G-2

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

Groundwater Elevation (above HSL) 1.48 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	7.4		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	300	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	
	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

328164

METALS SECTION JOB NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Canter

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAHPLE ID LAB: EE-89-40645 MATRIX: WATER
SAHPLE ID CLIENT: P32-W013

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Antimony	(ICP)	ND		60	UG/L
Arsenic	(FU)	ND		5.0	UG/L
Barium	(ICP)	16		10	UG/L
Cadmium	(ICP)	ND		5.0	UG/L
Chromium	(ICP)	ND		10	UG/L
Copper	(ICP)	ND		10	UG/L
Iron	(ICP)	551		25	UG/L
Lead	(FU)	ND		5.0	UG/L
Manganese	(ICP)	31		5.0	UG/L
Mercury	(Vap)	ND		0.20	UG/L
Nickel	(ICP)	38		15	UG/L
Selenium	(FU)	ND		5.0	UG/L
Silver	(ICP)	ND		10	UG/L
Sodium	(ICP)	18000		200	UG/L
Thal1ium	(FU)	ND		5.0	UG/L
Zinc	(ICP)	ND		10	UG/L

QUALIFIERS: C = COMNENT NO = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

GENERAL ANALYTICAL SECTION JOB NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40645 MATRIX: WATER
SAMPLE ID CLIENT: P32-W013

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	29		1.0	MG/L
Sulfate	56		2.0	MG/L
Cyanide, corplex	ND		0.01	MG/L

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

328165

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NU.

P32W013

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 40645

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9561

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. Date Analyzed: 06/05/89

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	U
67-64-1	Acetone	8	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	Bromodichloromrthane	5	U
78-87-5	1,2-Dichloropropanr	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethenr	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	Total Xylenes	5	U

EPA SAMPLE NO.

P32W013

VOLATILE OPGRNICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 40645

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9561

Level: (low/med) LOU Date Received: 05/26/89

% Moisture: not dec. Date Analyzed: 06/05/89

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		M	I
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.

328166

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W013

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40645

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6898

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dec. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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.

P32W013

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 40645

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6898

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dac. dec. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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	59	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	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

328167

EPA SAMPLE NO.

P32W013

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH2000

Lab Code: EANOE Case No.: 851-001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40645

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6898

Level: (low/med) LOW Date Received: 05/26/99

% Moisture: not dec. dec. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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. 14-Nitrosodimethylamine		ND	
4. N-Nitrosodiphenylamide		ND	
E. 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.

PARAMETER MONITORING REPORT

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

GXS # 1017F00625

Sample Date: 5-24-89

Monitoring Well # GM-14

Well Type:

[ ] Corrective Action

[X] Point-of-Compliance

Well Name: Shallov

Classification of Groundwater G-2

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

Groundwater Elevation (above XSL) 1.06 ft

STORET Code	Parameter Monitored	Sampling Method	BPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	7.4		Unfiltered	
	Specific Conductance	Tcflon bailer	120.1	1,000	umhos/cm	Unfiltered	
	tnorganics:	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	
	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 329168

METALS SECTION JOB.NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB? EE-89-40646 MATRIX: WATER
SAMPLE ID CLIENT: P32-W014

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Antimony	(ICP)	ND		60	UG/L
Arsenic	(FU)	ND		5.0	UG/L
Barium	(ICP)	22		10	UG/L
Cadmium	(ICP)	ND		5.0	UG/L
Chromium	(ICP)	ND		10	UG/L
Copper	(ICP)	ND		10	UG/L
Iron	(ICP)	450		25	UG/L
Lead	(FU)	ND		5.0	UG/L
Manganese	(ICP)	98		5.0	UG/L
Mercury	(Vap)	ND		0.20	UG/L
Nickel	(ICP)	ND		15	UG/L
Selenium	(FU)	ND		5.0	UG/L
Silver	(ICP)	ND		10	UG/L
Sodium	(ICP)	184000		200	UG/L
Thallium	(FU)	ND		5.0	UG/L
Zinc	(ICP)	14.6		10	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 : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40646 MATRIX: WATER
SAMPLE ID CLIENT: P32-W014

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	240		10	MG/L
Sulfate	200		2.0	MG/L
Cyanide, complex	ND		0.01	MG/L

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

328163

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W014

Lab Name: E & E Cuntract: UH2000

Lab Code: EANOE Case No.: 851_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 40646

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9562

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. Date Analyzed: 06/05/89

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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-Tetrschloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	3	J
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

VOLATILE ORGANICS ANALYSIS DATA SWEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P32W014

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40646

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9562

Level: (low/med) LOW Date Received: 05/26/89

E Moisture: not dec. Date Analyzed: 06/05/89

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.	0
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)		NO	
8. Tetramethylbenzene		ND	
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.

328170

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W014

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40646

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6899

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dac. dcc. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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

CAS NU.	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.

P32W014

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40646

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6899

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dec. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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	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

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EPA SAMPLE NO.

P32W014

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH2000

Lab Code: EANOE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40646

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E0899

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dec. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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

Number TICs found: 2

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-Nitrosodiphenylsmide		ND	
5. Methyl Dihydro Indene		ND	
6. Hydroxymethyl Pentanone		ND	
7. Methyl naphthalene		NO	
8. Methyl ethyl phenol		ND	
9. Dimethyl ethyl phenol	14.32	1	J
10. Tetramethylbutyl phenol	19.26	1	J

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

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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P32W014

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40646

Sample ut/vol: 5.0 (g/mL) ML Lab File ID: D9562

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. Date Analyzed: 06/05/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION WITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Dichlorobenzene isomer	23.49	2.0	J

not reported in semivolatile's, < 1 µg/L

FORM I VOA-TIC 1/87 Rev.

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ATTACHMENT E

FIELD AND LABORATORY QA/QC SAMPLE ANALYTICAL RESULTS

Table E-1

SAMPLE DESIGNATIONS
FIELD QA/QC SAMPLES

Sample Type	Sample Designation
Groundwater Duplicate	P32W008D
Trip bottle blank[a]	P32ASCWTB01
Trip bottle blank[b]	P32WTB02
sampling equipment rinsate[c]	P32WRB01
Sampling equipment rinsate[d]	P32WRB02
Field blank	P32WFB01
Preservative blank[e]	P32WPB01

[a]Prepared in laboratory and shipped to field, analyzed for volatile organic corpounds (VOCs) only

[b]Prepared in field, analyzed for VOCs only

'Collected 5-24-89

[d]Collected 5-25-89

[e]Analyzed for metals and cyanide only

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Table E-2
SUMMARY ANALYTICAL RESULTS
FOR FIELD QA/QC SAMPLES
(All results in ug/L)

Compound	Sample No. (Location)							
	P32W008 (GM-8)	P32W008D[a] (GM-8)	P32ASCWTB01[b]	P32WTB02[b]	P32WRB01	P32WRB02	P32WFB01	P32WPB01[c]
Barium	93.4	93.0	—	—	—	—	—	—
Copper	—	—	—	—	—	—	25.0	—
Chromium	25.1	25.5	—	—	—	—	—	—
Iron	32,400	32,000	—	—	—	—	—	46
Manganese	115	113	—	—	—	—	—	—
Sodium	15,550	15,500	—	—	226	61.8	—	399
Zinc	54.3	61.3	—	—	10.1	—	31.2	27
Chloride	16,000	17,000	—	—	—	—	—	—
Sulfate	150,000	140,000	—	—	—	—	—	—
1,1 Dichloroethane	170	170	—	—	—	—	—	—
1,2 Dichloroethene (total)	35	37	—	—	—	—	—	—
1,1,1-Trichloroethane	6	6	—	—	—	—	—	—
Chloroethane	—	9(J)	—	—	—	—	—	—
Trichloroethene	1(J)	1(J)	—	—	—	—	—	—
Total Xylenes	—	1(J)	—	—	—	—	—	—
Tetrachloroethene	22	21	—	—	—	—	—	—
Trichloroflouromethane		—	—	—	1.13	—	—	—
Trimethyl benzene	8(J)	8(J)	—	—	—	—	—	—
"alkylated" benzene	6(J)	6(J)	—	—	—	—	—	—
1,3-Dichlorobenzene	110	130	—	—	—	—	—	—
1,4-Dichlorobenzene	130	140	—	—	—	—	—	—
1,2-Dichlorobenzene	140	170	—	—	—	—	—	—
2,4-Dimethylphenol	4(J)	4(J)	—	—	—	—	—	—
2,4-Dichlorophenol	6(J)	7(J)	—	—	—	—	—	—
1,2,4-Trichlorobenzene	2(J)	2(J)	—	—	—	—	—	—
Naphthalene	8(J)	9(J)	—	—	—	—	—	—
bis(2-Ethylhexyl) phthalate	17(B)	13(B)	—	—	—	20(B)	—	—
Di-n-octyl phthalate	—	—	—	—	31	19	—	—

[a]Duplicate sample of P32W008
[b]Analyzed for VOCs only
[c]Analyzed for metals and cyanide only

J-Estimated value, compound present below detection limit
B-Compound also present in method blank at similar concentration

METALS SECTION JOB NUMBER : 851.002

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40745 MATRIX: WATER
SAMPLE ID CLIENT: P32-W008D

PARAMETER		RESULTS	Q	DET. LIAIT	UNITS
Antimony	(ICP)	ND		60	UG/L
Arsenic	(FU)	ND		5.0	UG/L
Barium	(ICP)	93.0		10	UG/L
Cadmium	(ICP)	ND		5.0	UG/L
Chromium	(ICP)	25.6		10	UG/L
Copper	(ICP)	ND		10	UG/L
Iron	(ICP)	32000		25	UG/L
Lead	(FU)	ND		5.0	UG/L
Manganese	(ICP)	115		5.0	UG/L
Mercury	(Vap)	ND		0.20	UG/L
Nickel	(ICP)	ND		15	UG/L
Salenium	(FU)	ND		5.0	UG/L
Silver	(ICP)	ND		10	UG/L
Sodium	(ICP)	15500		200	UG/L
Thallium	(FU)	ND		5.0	UG/L
zinc	(ICP)	61.9		10	UG/L

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

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GENERAL ANALYTICAL SECTION JOB NUMBER : 851.002

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S. NAVY-SMITHERN DIVISION
SAMPLE ID LAB: EE-89-40745 MATRIX: WATER
SAMPLE ID CLIENT: P32-W008D

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	17		1.0	MG/L
Sulfate	140		2.0	MG/L
Cyanide, complex	ND		0.01	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.

P32W008D

Lab Name: E & E Contract: UH2000

Lab Code: EAMDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40745

Sample wt/vol: 5.0 (g/mL) ML Lab Fils ID: 09573

Level: (low/med) LOW Date Received: 05/27/89

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

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
74-83-3	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	9	J
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	170	
540-59-0	1,2-Dichloroethene (total)	37	
67-66-3	Chloroform	3	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	6	
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	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	Tetrachloroethrnc	21	
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	Total Xylenes	1	J

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EPA SA

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

P32W003D

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDC No.:

Matrix: (soil/water) WATER Lab Sample ID: 40745

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9573

Level: (low/med) LOW Date Received: 05/27/89

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

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 2 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		11.0	IJ
10. Trimethyl Benzene	21.05	8.00	J

(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 ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W008D

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 891_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40745

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6919

Level: (low/med) Low Date Received: 05/27/89

% Moisture: not dec. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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	170	
106-46-7	1,4-Dichlorobenzene	140	
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	170	E
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	4	J
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	7	J
120-82-1	1,2,4-Trichlorobenzene	2	J
91-20-3	Naphthalene	9	J
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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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W008D

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40745

Sample wt/vol: 1000 (g/mL) ML Lab File I@: E6919

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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	EO	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	13	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

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P32W003D

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40745

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6919

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. dec. Data Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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 Pantsnone		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.

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32ASCWTB01

Lab Name: E & E Contract: UHZOOO

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40655

Sample wt/vol: 5.0 (g/mL) HL Lab File ID: D9588

Level: (low/med) LOW Date Received: 05/26/89

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

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	Total Xylenes	5	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P32ASCWTB01

Lab Name: E & E Contract: UH2000

Lab Code: E W E Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40655

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9588

Level: (low/med) LOW Date Received: 05/26/89

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

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) ethar		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.

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32WTB02

Lab Name: E & E Contract: UH2000

Lsb Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40752

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9593

Level: (low/med) LOW Date Received: 05/27/39

% Moisture: not dac. Date Analyzed: 06/06/69

Column: (pack/cap) CAF 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	10	IU
75-01-4	Vinyl Chloride	10	IU
75-00-3	Chloroethane	10	IU
75-09-2	Methylene Chloride	5	IU
67-64-1	Acetone	10	IU
75-15-0	Carbon Disulfide	E	IU
75-35-4	1,1-Dichloroethene	E	IU
75-35-3	1,1-Dichloroethane	5	IU
540-59-0	1,2-Dichloroethene (total)	5	IU
67-66-3	Chloroform	5	IU
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	IU
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	5	IU
100-41-4	Ethylbenzene	5	IU
100-42-5	Styrene	5	IU
1330-20-7	Total Xylenes	5	IU

EPA SAMPLE NO.

P32WTB02

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E 8 E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40752

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9593

Level: (low/med) LOW Date Received: 03/27/89

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

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.	a
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	
e. "alkylated" benzene		ND	
110. Trimethyl Benzene		NO	

(1) - These compounds are included in the drily 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.

328173

METALS SECTION JOB NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: E€-89-40647 MATRIX: WATER
SAMPLE ID CLIENT: P32-WRB01

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Antimony	(ICP)	ND		60	UG/L
Arsenic	(FU)	ND		5.0	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)	ND		25	UG/L
Lead	(FU)	ND		5.0	UG/L
Manganese	(ICP)	ND		5.0	UG/L
Mercury	(Vap)	ND		0.20	UG/L
Nickel	(ICP)	ND		15	UG/L
Sclenium	(FU)	ND		5.0	UG/L
Silver	(ICP)	ND		10	UG/L
Sodium	(ICP)	226		200	UG/L
Thallium	(FU)	ND		5.0	UG/L
Zinc	(ICP)	10.1		10	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 : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40647 MATRIX: WATER
SAMPLE ID CLIENT: P32-WRB01

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	ND		1.0	MG/L
Sulfate	ND		2.0	MG/L
Cyanide, complex	ND		0.01	MG/L

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

328160

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32WRB01

Lab Name: E 8 E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40647

Sample wt/vol: 5.0 ...(g/mL) ML Lab File ID: D9589

Level: (low/med) LOW Date Received: 05/26/39

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

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	Total Xylenes	5	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P32WRB01

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40647

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9589

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dsc. Date Analyzed: 06/06/89

Column (pack/cap) CAP Dilution Factor: 1.0

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

Number TICs found: 21 06/07/89 CH

COMPOUND NAME	RT	EST. CONC.	Q
1. Acrolein		NO	
2. Acrylonitrile		NO	
3. Bis(chloromethyl) ether		NO	
4. 2-Chloroethylvinyl Ether (1)		NO	
5. Dichlorodifluoromethane		NO	
6. 1,2-Dichloropropylene		NO	
7. Trichlorofluoromethane (1)	2.16	1.131	
8. Tetramethylbenzene		NO	
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.

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

328181

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F32WRB01

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 891_001 SAS No.: EDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40647

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6900

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dsc. dcc. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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.

P32WRB01

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 40647

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6900

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dec. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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	10	U
117-84-0	Di-n-Octyl Phthalate	31	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

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EPA SAMPLE NO.

P32WRB01

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40647

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6900

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dec. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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	PT	EST. CONC.	Q
1. Benzidine		ND	
2. 1,2-Diphenylhydrazine (2)		ND	
3. N-Nitrosodimethylamine		ND	
4. 14-14Nitrosodiphenylamide		ND	
5. Methyl Dihydro Indene		ND	
6. Hydroxymethyl Pentanone		ND	
7. Methyl naphthalene		ND	
8. Methyl ethyl phenol		ND	
9. Dimethyl ethyl phenol		NO	
110. fetramethylbutyl phenol		NO	

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

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

METALS SECTION JOB NUMBER : 851.002

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40748 MATRIX: WATER
SAMPLE ID CLIENT: P32-WRB02

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Antimony	(ICP)	ND		60	UG/L
Arsenic	(FU)	ND		5.0	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)	ND		25	UG/L
Lead	(FU)	ND		5.0	UG/L
Manganese	(ICP)	ND		5.0	UG/L
ncrcury	(Vap)	ND		0.20	UG/L
Nickel	(ICP)	ND		15	UG/L
Selenium	(FU)	ND		5.0	UG/L
Silver	(ICP)	ND		10	UG/L
Sodium	(ICP)	61.8		200	UG/L
Thallium	(FU)	ND		5.0	UG/L
Zinc	(ICP)	ND		10	UG/L

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

328183

GENERAL ANALYTICAL SECTION

JOB NUMBER : 851.002

tcology and Environment, Inc.
Analytical Services Centsr

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40748
SAMPLE ID CLIENT: P32-WRB02

MATRIX: WATER

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	ND		1.0	MG/L
Sulfate	ND		2.0	MG/L
Cyanide, complex	ND		0.01	MG/L

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

328184

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32WRB02

Lsb Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 861_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40748

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9577

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dac. Date Analyzed: 06/06/89

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	E	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	E	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	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	Total Xylenes	5	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P32WRB02

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case no.: 851_002 SAS No.: SDC No.:

Matrix: (soil/water) WATER Lab Sample ID: 40748

Sample wt/vol: 5.0 (g/mL) ML Lab file ID: D9577

Level: (low/med) LOW Date Received: 05/27/89

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

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		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.

328185

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32WRB02

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40748

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6938

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/22/89

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.

P32WRB02

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40748

Sample wt/vol: 1000 (g/mL) ML Lab File ID: €6938

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/22/89

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	20	B
117-84-0	Di-n-Octyl Phthalate	19	I
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

328186

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P32WRB02

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40748

Sample wt/vol: 1000 (g/mL) ML Lab File I@: E6958

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dcc. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/22/89

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 phenol		ND	

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

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

METALS SECTION JOE NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Canter

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40648 MATRIX: WATER
SMILE ID CLIENT: P32-WFB01

PARAMETER		RESULTS	Q	DM. LIIIT	UNITS
Antimony	(ICP)	ND		60	UG/L
Arsenic	(FU)	ND		5.0	UG/L
Barium	(ICP)	ND		10	UG/L
Cadaium	(ICP)	ND		5.0	UG/L
Chromium	(ICP)	ND		10	UG/L
coppsr	(ICP)	25.0		10	UG/L
Iron	(ICP)	ND		25	UG/L
Lead	(FU)	ND		5.0	UG/L
Manganese	(ICP)	ND		5.0	UG/L
Mercury	(Vap)	ND		0.20	UG/L
Nickel	(ICP)	ND		15	UG/L
Selenium	(FU)	ND		5.0	UG/L
Silver	(ICP)	ND		10	UG/L
Sodiua	(ICP)	ND		200	UG/L
Thallium	(FU)	ND		5.0	UG/L
Zinc	(ICP)	31.2		10	UG/L

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

328187

GENERAL ANALYTICAL 'SECTION

JOB NUMBER : 851.001

Ecology and Environment, fnc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: EE-89-40648
SAMPLE ID CLIENT: P32-WFB01

MATRIX: WATER

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	ND		1.0	MG/L
Sulfate	ND		2.0	MG/L
Cyanide, complex	ND		0.01	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.

P32WFB01

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40648

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9566

Level: (low/med) LW Date Received: 05/26/89

% Moisture: not dsc. Date Analyzed: 06/05/89

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

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

CAS NO.	COMPOUND		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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	3	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	Total Xylenes	5	U

328188

EPA SAMPLE NU.

P32WFB01

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIUELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No. :

flatrix: (soil/water) WATER Lab Sample ID: 40648

Sample wt/vol: 5.0 (g/mL) ML Lab File IO: D9566

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. Date Analyzed: 06/05/89

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		NO	
7. Trichlorofluoromethane (1)		ND	
S. Tetramethylbenzene		ND	
9. "alkylated" benzene		ND	
110. Trimethyl Benzene		ND	

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

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

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32WFB01

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40648

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6901

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dec. Data Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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

328183

IC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32WFB01

Lab Flame: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40648

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6901

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dec. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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	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

EPA SAMPLE NO.

P32WFB01

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40648

Sample wt/vol: 1000 (g/mL) ML Lab File ID: €6901

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dec. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPP Date Analyzed: 06/20/89

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.

328100

METALS SECTION JOB NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB :EE-89-40657 MATRIX: WATER
SAMPLE ID CLIENT: P32W-PB01

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Antimony	(ICP)	ND		60	UG/L
Arsenic	(FU)	ND		5.0	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)	46		25	UG/L
Lead	(FU)	ND		5.0	UG/L
Manganese	(ICP)	ND		5.0	UG/L
nercury	(Vap)	ND		0.20	UG/L
Nickel	(ICP)	ND		15	UG/L
Selenium	(FU)	ND		5.0	UG/L
Silver	(ICP)	ND		10	UG/L
Sodium	(ICP)	399		200	UG/L
Thallium	(FU)	ND		5.0	UG/L
Zinc	(ICP)	27		10	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 : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB :EE-89-40657 MATRIX: WATER
SAMPLE ID CLIENT: P32W-PB01

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Cyanide, complex	ND		0.01	MG/L

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

328191

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_00 SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: P32W008D

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	200	0	60.8	30	112- 86
2-Chlorophenol	200	0	101	51	127-123
1,4-Dichlorobenzene	100	140	138	-2 *	136 97
N-Nitroso-di-n-prop.(1)	100	0	62.3	62	141 116
1,2,4-Trichlorobenzene	100	2.00	42.2	40	139 98
4-Chloro-3-methylphenol	200	0	180	90	123 97
Acenaphthene	100	0	48.8	49	144-118
4-Nitrophenol	200	0	10.0	5 *	110- 80
2,4-Dinitrotoluene	100	0	60.4	60	124- 96
Pentachlorophenol	200	0	84.0	42	9-103
Pyrene	100	0	66.0	66	126-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	200	89.0	45	-40	42	112- 86
2-Chlorophenol	200	145	73	-35	40	127-123
1,4-Dichlorobenzene	100	129	-11 *	-138 *	28	136 97
N-Nitroso-di-n-prop.(1)	100	63.7	64	-3	38	141 116
1,2,4-Trichlorobenzene	100	40.5	39	3	28	139 98
4-Chloro-3-methylphenol	200	193	97	-7	42	123 97
Acenaphthene	100	51.3	51	-4	31	146-118
4-Nitrophenol	200	65.2	33	-147 *	50	110- 80
2,4-Dinitrotoluene	100	69.7	70	-15	38	124- 96
Pentachlorophenol	200	199	95	-77 *	50	9-103
Pyrene	100	65.0	65	2	31	126-127

(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: 4 out of 11 outside limits
Spike Recovery: 3 out of 22 outside limits

COMMENTS: 851.002 40745.03
7002E 06/21/89 08 2

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W008DMS

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40745MS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6921

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. Jac. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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	94	
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	120	
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	3	J
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	6	J
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	7	J
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	11	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

328192

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W008DMS

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40745MS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6921

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. dcc. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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	EO	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	13	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

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W008DMSD

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40745MSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6912

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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	91	
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	110	
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	4	J
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	9	J
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	6	J
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

328193

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F32W008DMSD

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40745MSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6922

Level: (low/med) LOW Date Received: 05/27/89

% Moisture: not dec. dcc. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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	tu
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	6	IRJ
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

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: E & E Contract: UH2000

Lab Code: EAHDE Case No.: 851_002 SAS No.: SOG No. :

Matrix Spike - EPA Sample No.: P32W010

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.0	0	50.1	100	161-145
Trichloroethene	50.0	0	34.4	69 *	171-120
Benzene	50.0	0	37.9	76	176-127
Toluene	50.0	0	44.4	89	176-125
Chlorobenzene	50.0	5.47	54.4	93	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	58.7	117	-16 *	14	161-1451
Trichloroethene	50.0	40.3	81	-16 *	14	171-120
Benzene	50.0	44.3	89	-16 *	11	176-127
Toluene	50.0	43.9	88	1	13	176-125
Chlorobenzene	50.0	54.8	99	1	13	175-130

Column to be used to flag recouery and RPD values with an asterisk

* Values outside of QC limits

RPD: 3 out of 5 outside limits
Spike Recovery: 1 out of 10 outside limits

COMMENTS: 851.002 40747.01
70010 06/05/89MEI 5

328194

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W010MS

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: S@G No.:

Matrix: (soil/water) WATER Lab Sample ID: 40747MS

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9581

Level: (low/med) LOW Date Received: 05/27/39

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

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	E	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	Total Xylenes	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W010MSD

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40747MSD

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9598

Level: (low/med) LOW Date Received: 05/27/89

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	a
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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	Total Xylenes	5	U

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328195

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: P32WFB01

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.0	0	70.3	141	61-145
Trichloroethene	50.0	0	44.9	90	71-120
Benzene	50.0	0	40.5	81	76-127
Toluene	50.0	0	48.2	96	76-125
Chlorobenzene	50.0	0	53.5	107	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	60.8	122	14	14	61-145
Trichloroethene	50.0	54.8	110	-20 *	14	71-120
Benzene	50.0	56.2	116	-36 *	11	76-127
Toluene	50.0	64.8	130 *	-30 *	13	76-125
Chlorobenzene	50.0	55.9	112	-5	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 3 out of 5 outside limits
Spike Recovery: 1 out of 10 outside limits

COMMENTS: 851.001 40648.01
7001D 06/05/89MEI 5

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32WFB01MS

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40648MS

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9567

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dsc. Date Analyzed: 06/05/89

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	Total Xylenes	5	U

3281913

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32WFB01MSD

Lab Name: E & E Contract: UH2000

Lab Code: EANDE No.: 851_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 40648MSD

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9597

Level: (low/med) LOW Date Received: 05/26/89

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

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	Total Xylenes	5	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W066RE

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 40653RE

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BO546

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dcc. Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/28/89

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	2	J
541-73-1	1,3-Dichlorobenzene	18	
106-46-7	1,4-Dichlorobenzene	35	
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	57	
95-48-7	2-Methylphenol	10	
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	69	
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	64	
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-Trichlorophenol	30	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

328197

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P32W066RE

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 40653RE

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E0546

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dec. Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/28/89

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		0
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	2	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	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	6	BJ	
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

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P32W066RE

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: 40653RE

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B0546

Level: (low/med) LOW Date Received: 05/26/89

% Moisture: not dec. dec. Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/28/89

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 Oihydro Indene		ND	
6. Hydroxymethyl Pantanona		ND	
7. Methyl naphthalene		ND	
8. Methyl ethyl phenol		ND	
9. Dimethyl ethyl phenol	15.76	12.0	J
10. Tetramethylbutyl phenol		ND	

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

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

328198

GENERAL ANALYTICAL SECTION JOB NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: METHOD BLANK MATRIX: WATER
SAMPLE ID CLIENT:

PARAHETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	ND		1.0	MG/L
Cyanide, complex	ND		0.01	MG/L

.....

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

GENERAL ANALYTICAL SECTION

JOB NUMBER : 851.002

Ecology and Environrant, Inc.
Analytical Services Center

CLIENT: U.S. NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: METHOD BLANK
MATRIX: WATER
SMILE ID CLIENT:

PARAMETER	RESULTS	Q	DET. LIMIT	UNITS
Chloride	ND		1.0	MG/L
Cyanide, complex	ND		0.01	MG/L

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

328199

METALS SECTION JOB NUMBER : 851.001

Ecology and Environment, Inc.
Analytical Services Center

CLIENT: U.S.NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: METHOD BLANK MATRIX: WATER
SAMPLE ID CLIENT:

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Antimony	(ICP)	ND		60	UG/L
Arsenic	(FU)	ND		5.0	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)	ND		25	UG/L
Lead	(FU)	ND		5.0	UG/L
Manganese	(ICP)	ND		5.0	UG/L
Mercury	(VAP)	ND		0.20	UG/L
Nickel	(ICP)	ND		15	UG/L
Selenium	(FU)	ND		5.0	UG/L
Silver	(ICP)	ND		10	UG/L
Sodium	(ICP)	ND		200	UG/L
Thallium	(FU)	ND		5.0	UG/L
Zinc	(ICP)	ND		10	UG/L

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

METALS SECTION JOB NUMBER : 851.002

Ecology and Environment, Inc.
Analytical services Center

CLIENT: U.S. NAVY-SOUTHERN DIVISION
SAMPLE ID LAB: METHOD BLANK IUTRIX: WATER
SAMPLE ID CLIENT:

PARAMETER		RESULTS	Q	DET. LIMIT	UNITS
Antimony	(ICP)	ND		60	UG/L
Arsenic	(FU)	ND		5.0	UG/L
Barium	(ICP)	ND		10	UG/L
Cadmium	(ICP)	ND		5.0	UG/L
Chronium	(ICP)	ND		10	UG/L
Copper	(ICP)	ND		10	UG/L
Iion	(ICP)	ND		25	UG/L
Lead	(FU)	ND		5.0	UG/L
Manganese	(ICP)	ND		5.0	UG/L
Mercury	(Vap)	ND		0.20	UG/L
Nickel	(ICP)	ND		15	UG/L
Selenium	(FU)	ND		5.0	UG/L
Silver	(ICP)	ND		10	UG/L
Sodium	(ICP)	ND		200	UG/L
Thal1ium	(FU)	ND		5.0	UG/L
Zinc	(ICP)	ND		10	UG/L

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

328200

1A

UOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS Nu.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: VBLK1

Sample wt/vol: 5.0 ...(g/mL) ML Lab File ID: D9564

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/05/80

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

CAS NO.	COMPOUND	CONCENTRWTION 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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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-Hethy1-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tatrachloroethene	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	Total Xylenes	5	U

EPA SAMPLE NO.

VBLK1

VOLATILE ORGANICS ANALYSIS DATA SWEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No. : 851_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: VBLK1

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9564

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/05/89

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.

328201

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK2

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: VBLK2

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9571

Level: (low/med) LOW Date Received:

% Moisture: not dac. Data Analyzed: 06/06/89

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	Total Xylenes	5	U

VOLATILE ORGANICS ANALYS S DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK2

b Name: E & E Contract: UH2000

ab Code: EANDE Case No. : 851_002 SAS No. : SDG No.:

atrix: (soil/water) WATER Lab Sample ID: VBLK2

ample wt/vol: 5.0 (g/mL) ML Lab File ID: D9571

evel: (low/med) LOW Date Received:

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

olumn (pack/cap) CAP Dilution Factor: 1.0

umber 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-Oiehloropropylene		ND	
7. Trichlorofluoronethane (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 bared 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.

328202

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK3

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: VBLK3

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 09596

Level: (low/med) LOW Date Received:

% Moisture: not dsc. Date Analyzed: 06/06/99

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	Total Xylenes	5	U

EPA SAMPLE NU.

VBLK3

UOLATILE OPGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: VBLK3

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9586

Level: (low/med) LOW Date Received:

% Moisture: not dac. Date Analyzed: 06/06/89

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		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.

328203

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK2

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: VBLK2

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9571

Level: (low/med) LOW Date Received:

% Moisture: not dac. Date Analyzed: 06/06/89

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	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	Total Xylenes	5	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK2

b Name: E & E Contract: UH2000

b Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

trix: (soil/water) WATER Lab Sample ID: VBLK2

sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9571

evel: (low/med) LOW Date Received:

Moisture: not dec. Date Analyzed: 06/06/69

olumn (pack/cap) CAP Dilution Factor: 1.0

umber 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 iscmcr present.

323204

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK3

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: VBLK3

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 09586

Level: (low/med) LOW Date Received:

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

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	E	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	Total Xylenes	5	U

EPA SAMPLE NO.

VBLK3

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: VBLK3

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D9586

Level: (low/med) LOW Date Received:

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

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		ND	
4. 2-Chloroethylvinyl Ether (1)		to	
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.

323205

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKW1

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: SBLK5_31

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6894

Level: (low/med) LOW Date Received:

% Moisture: not dcc. dcc. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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.

SBLKW1

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: SBLK5_31

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6894

Level: (low/med) LOW Date Received:

% Moisture: not dtc. dec. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	
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	tu
117-81-7	bis(2-Ethylhexyl)Phthalate	2	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

328206

EPA SAMPLE NO.

SBLKW1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: SBLK5_31

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6894

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 05/31/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/20/89

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-Nitrosodiphcnylamide		ND	
E. Methyl Dihydro Indene		NO	
6. Hydroxymethyl Pentanone		ND	
7. tlethyl naphthalene		ND	
8. Methyl ethyl phenol		NO	
9. Dimethyl ethyl phenol		ED	
110. Tctramcthylbutyl phenol		NO	

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.

SBLKW2

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SOG Nu.:

Matrix: (soil/water) WATER Lab Sample ID: SBLKW2

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6913

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Data Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Data Analyzed: 06/21/89

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

328207

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKW2

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: SBLKW2

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6913

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/39

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	2	IJ
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.

SBLKW2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: SBLKW2

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6913

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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 chroutography, reported as such.

328206

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKW3

Lab Name: E & E Contract: UHZOOO

Lab Code: EANOE Case No.: 851-001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: SBLKW3

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BO545

Level: (low/med) LOW Date Rcceiwcd:

% Hoisture: not dac. dec. Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/27/89

GPC Cleanup: (Y/N) B 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	I,?-Dichlorobenzene	10	U
95-48-7	2-Nethylphenol	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	Hexschlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,S-Trichlorophcnol	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.

SBLKW3

Lsb Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No. :

Matrix: (soil/water) WATER Lab Sample ID: SBLKW3

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 80545

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/27/89

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	D:-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	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

328209

EPA SAMPLE NO.

SBLKW3

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_001 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: SBLKW3

Sample wt/vol: 1000 (g/mL) ML Lab File ID: B0545

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 06/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/27/39

CPC 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		ED	
5. Methyl Dihydro Indene		ND	
4. Hydroxymethyl Pentanone		ND	
7. Methyl naphthalene		ND	
3. Methyl ethyl phenol		ND	
9. Dimethyl ethyl phenol		ED	
10. 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.

SBLKW2

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDC No.:

Matrix: (soil/water) WATER Lab Sample ID: SBLKW2

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E4913

Level: (low/med) LOW Date Received:

% Moisture: not dsc. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/89

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

328210

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKW2

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: SBLKW2

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6913

Level: (low/med) LOW Date Received:

% Moisture: not dac. dec. Date Extracted: 06/01/89

Extraction: (SepF/Cont/Sonc) SEFF Date Analyzed: 06/21/89

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	2	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
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKW2

Lab Name: E & E Contract: UH2000

Lab Code: EAHDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: SBLKW2

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6913

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 06/01/83

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/11/89

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.

328211

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKW3

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: SBLKW3

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6947

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 06/02/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/23/89

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.

SBLKW3

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: SBLKW3

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6947

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 06/02/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/23/89

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	8	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

328212

EPA SAMPLE NO.

SBLKW3

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: E & E Contract: UH2000

Lab Code: EANDE Case No.: 851_002 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: SBLKW3

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E6947

Level: (low/med) LOW Date Received:

% Moisture: not dec. dcc. Date Extracted: 06/02/89

Extraction: (SepF/Cont/Sonc) SEFF Date Analyzed: 06/23/89

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 phenol		ND	

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

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

QUALITY CONTROL FOR PRECISION
RESULTS OF ANALYSIS OF REPLICATE
ANALYSES OF WATER SAMPLES

PARAMETER	E & E LABORATORY NO. 89-40747	ORIGINAL ANALYSIS (ug/L)	REPLICATE ANALYSIS (ug/L)	RELATIVE PERCENT DIFFERENCE (RPD)
Antimony		ND	ND	
Arsenic		ND	ND	--
Barium		76.2	77.2	1.3
Cadmium		ND	ND	--
Chromium		ND	ND	--
Copper		ND	ND	--
Iron		252	265	5.0
Lead		ND	ND	--
Manganese		174	177	1.7
Nickel		ND	ND	--
Selenium		ND	ND	--
Silver		ND	ND	--
Sodium		25300	25400	<1
Thallium		ND	ND	--
Zinc		ND	ND	--

328213

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY

FOR SPIKED WATER SAMPLES

PARAMETER	E & E LABORATORY NO. 89-40747	ORIGINAL VALUE (ug/L)	AMOUNT ADDED (ug/L)	AMOUNT DETERMINED (ug/L)	PERCENT RECOVERY
Antimony		ND	500	510	102
Arsenic		ND	40	39.6	99
Barium		76.2	2000	2070	100
Cadmium		ND	50	47.2	94
Chromium		ND	200	212	106
Copper		ND	250	249	100
Iron		252	1000	1300	105
Lead		ND	500	479	96
Manganese		174	500	697	105
Nickel		ND	500	496	99
Selenium		ND	10	ND	*
Silver		ND	50	44.1	89
Thallium		ND	50	45.1	90
Zinc		ND	500	504	101

* matrix interference prevents recovery.

QUALITY CONTROL FOR PRECISION
RESULTS OF ANALYSIS OF REPLICATE
ANALYSES OF HATER SAMPLES

851.001

Parameter	E & E Laboratory NO. 89-	original Analysis	Replicate Analysis	Relative Percent Difference (RPD)
		(mg/L)		
chloride	40661	120	120	0

8

328214

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY
FOR SPIKED WATER SAMPLES

851.001

Parameter	E C E Laboratory NO. 89-	original Value	Amount Added	Amount Determined	Percent Recovery
		(mg/L)			
Chloride	40654	110	89	190	92
Cyanide, complex	40648	<0.01	0.100	0.100	100

DATE Of ANALYSIS SUMMARY

SAMPLE IDENTIFICATION	40642	40643	40644	40645	40646	40647	40648	40649	40650	40651	40652	40653	40654
SEMI VOLATILES, BNA	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/21/89	6/21/89	6/21/89	6/21/89	6/21/89
EXTRACTED	5/31/89	5/31/89	5/31/89	5/31/89	5/31/89	5/31/89	5/51/89	6/1/89	6/1/89	6/1/89	6/1/89	6/1/89	6/1/89
REEXTRACTED	....	....	....	....	....	....	a	....	....	....	....	6/26/89	....
REANALYZED	....	....	....	....	....	....	....	....	....	....	....	6/28/89	....
VOLATILE ORGANICS	6/5/89	6/5/89	6/5/89	6/5/89	6/5/89	6/6/89	6/6/89	6/6/89	6/6/89	6/6/89	6/6/89	6/6/89	6/6/89
METALS													
ANTIMONY	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89						
ARSENIC	6/27/89	6/27/89	6/27/89	6/27/89	6/27/89	6/27/89	6/27/89						
BARIUM	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89						
CADMIUM	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89						
CHROMIUM	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89						
COPPER	6/25/89	6/25/89	6/25/89	6/25/89	6/25/89	6/25/89	6/25/89						
IRON	6/25/89	6/25/89	6/25/89	6/25/89	6/25/89	6/25/89	6/25/89						
LEAD	6/25/89	6/25/89	6/25/89	6/25/89	6/25/89	6/25/89	6/25/69						
MANGANESE	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89						
MERCURY	6/22/89	6/22/89	6/22/89	6/22/89	6/22/89	6/22/89	6/22/89						
NICKEL	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89						
SELENIUM	6/27/89	6/27/89	6/27/89	6/27/89	6/27/89	6/27/89	6/27/89						
SILVER	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89						
SODIUM	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/21/89	6/21/89	6/21/89	6/21/89	6/21/89
SULFATE	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89	6/20/89						
THALLIUM	6/27/89	6/27/89	6/27/89	6/27/89	6/27/89	6/27/89	6/27/89						
ZINC	6/25/89	6/25/89	6/25/89	6/25/89	6/25/89	6/25/89	6/25/89						
CHLORIDE	5/30/89	5/30/89	5/30/89	5/30/89	5/30/89	5/30/89	5/30/89	5/30/89	5/30/89	5/30/89	5/30/89	5/30/89	5/30/89
SULFATE	6/13/89	6/13/89	6/13/89	6/13/69	6/13/89	6/13/89	6/13/89	....	....	....	....	....	....
COMPLEX CYANIDE	6/2/89	6/2/89	6/2/89	6/5/89	6/5/89	6/5/89	6/5/89	....	....	....	....	....	....

320215

DATE OF ANALYSIS SUMMARY

SAMPLE IDENTIFICATION	40655	40656	40657	40658	40659	40660	40661	40662	40663	40664	40665
SEMI VOLATILES, BNA	----	----	----	----	----	----	----	----	----	----	----
EXTRACTED	----	----	----	----	----	----	----	----	----	----	----
REEXTRACTED	----	----	----	----	----	----	----	----	----	----	----
REANALYZED	----	----	----	----	----	----	----	----	----	----	----
VOLATILE ORGANICS	6/6/89	----	----	----	----	----	----	----	----	----	----
METALS											
ANTIMONY			6/20/89								
ARSENIC			6/27/89								
BARIUM			6/20/89								
CADMIUM			6/20/89								
CHROMIUM			6/20/89								
COPPER			6/25/89								
IRON			6/25/89								
LEAD			6/25/89								
MANGANESE			6/20/89								
MERCURY			6/22/89								
NICKEL			6/20/89								
SELENIUM			6/27/89								
SILVER			6/20/89								
SODIUM	6/20/89	6/20/89	6/25/89	6/20/89	6/20/89	6/20/89	6/21/89	6/21/89	6/21/89	6/21/89	6/21/89
SULFATE			6/20/89								
THALLIUM			6/27/89								
ZINC			6/25/89								
CHLORIDE	5/30/89	5/30/89	5/30/89	5/30/89	5/30/89	5/30/89	5/30/89	5/30/89	5/30/89	5/30/89	5/36/89
SULFATE	----	----	----	----	----	----	----	----	----	----	----
COMPLEX CYANIDE	----	----	6/5/89	----	----	----	----	----	----	----	----

DATE Of ANALYSIS SUMMARY

SAMPLE IDENTIFICATION	40744	40145	40746	40747	40748	40149	40750	40751	40752
SEMI VOLATILES, BNA	6/21/89	6/21/89	6/21/89	6/21/89	6/22/89	6/24/89	6/24/89	6/23/89	....
EXTRACTED	6/2/89	6/2/89	6/2/89	6/2/89	6/2/89	6/2/89	6/2/89	6/2/89	....
VOLATILE ORGANICS	6/6/89	6/6/89	6/6/89	6/6/89	6/6/89	....	....	....	6/6/69
METALS									
ANTIMONY	6/24/89	6/24/89	6/24/89	6/24/89	6/24/89				
ARSENIC	6/27/89	6/27/89	6/27/89	6/27/89	6/21/89				
BARIUM	6/24/89	6/24/89	6/24/89	6/24/89	6/24/89				
CADMIUM	6/24/89	6/24/89	6/24/89	6/24/89	6/24/89				
CHROMIUM	6/24/89	6/24/89	6/24/89	6/24/89	6/24/89				
COPPER	6/24/89	6/24/89	6/24/89	6/24/89	6/24/89				
IRON	6/24/89	6/24/89	6/24/89	6/24/89	6/24/89				
LEAD	6/24/89	6/24/89	6/24/89	6/24/89	6/24/89				
MANGANESE	6/24/89	6/24/89	6/24/89	6/24/89	6/24/89				
MERCURY	6/22/89	6/22/89	6/22/89	6/22/89	6/22/89				
NICKEL	6/24/89	6/24/89	6/24/89	6/24/89	6/24/89				
SELENIUM	6/27/89	6/27/89	6/27/89	6/27/89	6/21/89				
SILVER	6/24/89	6/24/89	6/24/89	6/24/89	6/24/89				
SODIUM	6/24/89	6/24/89	6/24/69	6/24/89	6/24/89	6/24/89	6/24/89	6/24/89	
SULFATE	6/24/89	6/24/89	6/24/89	6/24/89	6/24/89				
THALLIUM	6/27/89	6/27/89	6/27/89	6/27/89	6/27/89				
ZINC	6/24/89	6/24/89	6/24/89	6/24/89	6/24/89				
CHLORIDE	6/6/89	6/6/89	6/6/89	6/6/89	6/6/89	6/6/89	6/6/89.	6/6/89	
SULFATE	6/13/89	6/13/89	6/13/89	6/13/89	6/13/89	....	....	....	
COMPLEX CYANIDE	6/5/89	6/5/89	6/5/89	6/6/89	6/7/89	....	....	....	

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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.: UH2000
Project Name: NASP RCRA Sampling May 89
Project Manager: John Barksdale
Samplers: (Signatures) John A. Barksdale
Field Team Leader: Jon Schmidt

	STATION NUMBER	DATE 1989	TIME	SAMPLE TYPE COMP	GRAB	AIR	SAMPLE INFORMATION EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	EPA 8240 + TICs	EPA 8270 + TICs	Metals	Cyanide-Complexed	Sulfide + Chloride		REMARKS
P32	W011	5-24	1745		X		Low Level	GM-11	6	2	1	1	1	1		Metals: As, Ba, Cd, Cr,
P32	W012R	5-24	1800		X		" "	GM-12R	6	2	1	1	1	1		Pb, Hg, Se, Ag, Cu, Zn
P32	W013	5-24	1730		X		" "	GM-13	6	2	1	1	1	1		Fe, Mn, Antimony, Th,
P32	WR001	5-24	1600		·		" "	Runoff	6	2	1	1	1	1		Ni, Na
																Metals preserved w/ HNO_3
																Cyanide preserved w/ NaOH

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Ship Via:
John Barksdale	5-25-89/1000					Federal Express
Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	BL/Airbill Number: 3616 309734 — Date: 5-25-89
Relinquished By: (Signature) Fed. Express	Date/Time: 5-25-89/0900	Received For Laboratory By: (Signature) Walter W. Wharmby	Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

*See CONCENTRATION RANGE on back of form.

23

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Perform analyses according to site-specific QAPP for this project (see Marcia Meredith)

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Project No.: UH2000
Project Name: NASP RCRA Sampling May 1989
Project Manager: John Barksdale
Samplers: (Signatures) John D. Barksdale, Kyle Davis
Field Team Leader: Jon Schmidt

	STATION NUMBER	DATE 1989	TIME	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE TYPE AIR	SAMPLE INFORMATION / EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	EPA 8270 + TICS	EPA 8240 + TICS	Metals	Cyanide & Ammonia	Chloride + Sulfate	EPA 8240		REMARKS
P32	WTB01	5-24	1030		X		Low level	Trip blank	2					2			Metals: As, Ba, Cd, Cr
P32	ASCWTB01	5-22	—		X		" "	Trip blank	2					2			Pb, Hg, Se, Ag, Cu,
P32	WFB01	5-24	1030		X		" "	Field Blank	6	1	2	1	1	1			Zn, Fe, Mn, Antimony
P32	WPB01	5-24	1500		X		" "	Preservation Blank	2			1	1				Th, Ni + Na
P32	W001	5-24	1150		X		" "	UG-1	6	1	2	1	1	1			
P32	W014	5-24	1925		X		" "	GM-14	6	1	2	1	1	1			
																	Metals preserved w/ HNO_3
																	Cyanide preserved w/ NaOH

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Ship Via:
John D. Barksdale	5-25-89/1800					Federal Express
Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	BL/Airbill Number: 3616309734 — Date: 5-25-89
Relinquished By: (Signature) Fed. Express	Date/Time: 5-26-89/0900	Received For Laboratory By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files
*See CONCENTRATION RANGE on back of form.

23406

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(3)

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International Specialists in the Environment

Perform analyses according to site-specific QAPP for this project (see Marcia Meredith)

Page 1 of 1

CHAIN-OF-CUSTODY RECORD

Project No.: UH2000
Project Name: NASP RCRA Sampling May 1989
Project Manager: John Barkdoll
Samplers: (Signatures) John D. Barkdoll, Hal Jones
Field Team Leader: Jon. Schmidt

	STATION NUMBER	DATE 1989	TIME	SAMPLE TYPE COMP	GRAB	AIR	SAMPLE INFORMATION / EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	Sodium	Chloride	EPA 8240	EPA 8270			REMARKS
P32	W083	5-24	1220		X		Low Level	GM-83	2	1	1					~~Metals: As, Ba, Cd, Pb, Hg, Se, Ag, Cu, Zn, Fe, Mn, Antimony, Th, Ni+Na~~ YAB
P32	W071	5-24	1400		X		" "	GM-71	2	1	1					
P32	W077	5-24	1334		X		" "	GM-77	2	1	1					
P32	W078	5-24	1248		X		" "	GM-78	2	1	1					
P32	W079	5-24	1309		X		" "	GM-79	2	1	1					
P32	W076	5-24	1723		X		" "	GM-76	2	1	1					Sodium preserved w/ HNO3
P32	W072	5-24	1955		X		" "	GM-72	2	1	1					
P32	WR1-6	5-24	1555		X		" "	R1-6 Discharge pipe	2	1	1					YAB
P32	W062	5-25	1010		X		" "	GM-62	3			2	1			~~Metals preserved w/ HNO3~~
P32	W063	5-25	1036		X		" "	GM-63	5	1	1	2	1			
																~~Cyanide preserved w/ NaOH~~ YAB

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John D. Barkdoll	5-25-89 / 1800				
Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)
	/				
Relinquished By: (Signature) Fed. Express	Date/Time: 5-26-89 / 0900	Received For Laboratory By: (Signature) William H. Hand	Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)

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BL/Airbill Number: 3616309734
Date: 5-25-89

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Perform analyses according to site-specific QAPP for this project (see Marcia Meredith)

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Project No.: UH2000
Project Name: NASP RCRA Sampling May 1989
Project Manager: John Barksdale
Samplers: (Signatures) Jeffrey D. Barksdale, Hal Davis
Field Team Leader: Jon Schmidt

	STATION NUMBER	DATE 1989	TIME	SAMPLE TYPE COMP	GRAB	AIR	SAMPLE INFORMATION / EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	EPA 8240	EPA 8270	Sodium Chloride			REMARKS
P32	W064	5-25	1110		X		Medium Level	GM-64	5	2	1	1	1		~~Metals: As, Ba, Cd, Pb, Hg, Se, Ag, Cu, Zn, Fe, Mn, Antimony, Cr, Ni + Al~~ ~~Be~~
P32	W065	5-25	1235		X		" "	GM-65	5	2	1	1	1		
P32	W066	5-25	1315		X		" "	GM-66	5	2	1	1	1		
P32	W067	5-25	1150		X		" "	GM-67	5	2	1	1	1		
															Metals (sodium) preserved w/ HNO_3

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Ship Via:
John D. Barksdale	5-25-89/1800					Federal Express
Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	BL/Airbill Number: 3616309734 — Date: 5-25-89
Relinquished By: (Signature) Fed Express	Date/Time: 5-26-89/0800	Received For Laboratory By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)	

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Perform Analyses according to site-specific QAPP for this project

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CHAIN-OF-CUSTODY RECORD

Project No.: UH2000
Project Name: NASP RCRA Sampling May 1989
Project Manager: John Barksdale
Samplers: (Signatures) Jon A. [illegible] / J. Hal Davis
Field Team Leader: Jon Schmidt

STATION NUMBER	DATE	TIME	SAMPLE TYPE COMP	GRAB	AIR	SAMPLE INFORMATION / EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	8240 + tics	8270 + tics	Metals	cyanide	chlorides + sulfides	8240	8270	Sodium chloride	REMARKS
P32 W009	5/25/89	1754		X		Low Levels	GM-9	6	2	1	1	1	1				
P32 RB002	5/25/89	1715		X		Low Levels	Equipment Rinsate	6	2	1	1	1	1				
P32 WD84	5/24/89	1022		X		Low Levels	GM-84	5						2	1	1	1

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Jon A. [illegible]	5/26/89 1630				
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	5/27/89 1030	[illegible]			

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Date: 5/26/89

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CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Project No.: 4H2000
Project Name: NASP RCRA Sampling MAY 1989
Project Manager: John Banksdale
Samplers: (Signature) Jon C. Schmidt, M. Ideal Davis
Field Team Leader: Jon Schmidt

STATION NUMBER	DATE	TIME	SAMPLE TYPE: COMP	SAMPLE TYPE: GRAB	SAMPLE TYPE: AIR	SAMPLE INFORMATION / EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	8270 + TICs	8270 + TICs	Metals	CYANIDE	Chlorides + Sulfides	REMARKS
P32W008	5/25/89	1847		X		Low Levels	GM-8	6	1	2	1	1	1	
P32W00D	5/25/89	1847		X		Low Levels	Duplicate GM-8	7	2*	2	1	1	1	*includes 8270 lab QA Sam
P32W010	5/25/89	1822		X		Low Levels	GM-10	6	1	2	1	1	1	
P32WTB02	5/26/89	0815		X		Low Levels	Trip Blank	2		2				

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Jon C. Schmidt	5/26/89 1640				
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	5-27-89/0910	[illegible] (2/2/89)			

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322313

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CHAIN-OF-CUSTODY RECORD

Project No.: UH2000
Project Name: NASP RCRA Sampling MAY 1989
Project Manager: John Barksdale
Samplers: (Signatures) Jon Schmidt, D. Hal Ham
Field Team Leader: Jon Schmidt

STATION NUMBER	DATE	TIME	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE TYPE AIR	SAMPLE INFORMATION / EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	8240 (EPA)	8270 (EPA)	Lead/Vny Chloride	8080 + Herb	8330 + Dig	Mercury	Cyanide	Chloride + sulfide	REMARKS
P32W0068	5/26/89	1140		X		Low Levels	GM-68	5	2	1	1	1				1	
P32W0069	5/26/89	1134		X		" "	GM-69	5	2	1	1	1					

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)
Jon Schmidt	5/26/89 1700				
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	5-27-89/0930	John Shed (2242)			

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BL/Airbill Number: 3616309723
Date: 5/26/89

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234055

ATTACHMENT F

DATA VALIDATION **SUMMARY**

MEMORANDUM

TO: John Barksdale

FROM: B. Krajewski, QA Chemist

DATE: July 6, 1989

RE: U.S. Navy Public Works Report, NAS Pensacola

I have reviewed the data issued for the U.S. Navy Public Works RCRA Monitoring under E & E Job nos. 851.001 and 851.002 for overall quality and validity.

All general chemistry and metals analyses are acceptable. Sufficient QC analyses were performed in support of the data with acceptable recoveries and RPD values. Method blank analyses were also acceptable.

Although samples were not preserved, all volatile analyses were performed within 14 days of sampling.

Due to a scheduling error, P32WTB01 was not analyzed for volatile compounds. Since this sample is a trip blank and two other trip blanks were analyzed, this oversight had no effect upon the data.

The 1,2-dichlorobenzene value reported for P32W008D was flagged "E" indicating the instrument's calibration range was exceeded. Historically, the instrument's linearity exceeds the confines of the highest calibration standard. Since the level of 1,2-dichlorobenzene was at 170 ug/L, just above the high standard of 160 ug/L, the concentration reported can be considered reliable.

Semi-volatile samples for job 851.001 were analyzed under a check standard in which the response of di-n-octyl phthalate did not meet protocol. Since all phthalates reported were probably introduced at the laboratory and all response factors were sufficient for detecting all compounds of interest if present, data generated under this standard can be considered valid.

Surrogate recoveries were acceptable for all volatile and semi-volatile samples except for the semi-volatile fraction of P32W006. This sample was re-extracted and re-analyzed with similar results, indicating a matrix effect.

The semi-volatile blank extracted on 6/1/89 had one surrogate outside of acceptable limits. Since all samples had acceptable recoveries, the analyses can be considered valid. All other method blanks vere acceptable.

Acetone vas present at low concentrations in samples P32W001, P32W012R, P32W013, P32W064, and P32W065 (38, 14, 8, 6, and 57 ug/L, respectively). Hovever, with the exception of sample P32W064, no other volatile organic compounds vere detected in these samples. Acetone is a common laboratory derived contaminant, and although not detected in any of the associated method blanks, its presence in these samples may be due to laboratory sources.

Tvo chain-of-custody records indicated that sulfide analysis vas required, while the site-specific QAP called for sulfate. The site-specific QAP vas followed.

In ay judgement, some procedural error vas uncovered but they are minor vith little effect on overall data quality, vhich is good.