N00164.AR.000273
NSWC CRANE
5090.3a

[redacted]

Interim Measures Report

NSWC Crane, SWMU-16/16
Cast High Explosive/incinerator
Building 146
NSWC Crane, Indiana

Volume 2

Unit Identification Code: N00164
Contract No. N62467-93-D-1106

February 1997

Southern Division
Naval Facilities Engineering Command
North Charleston, South Carolina
29419-9010

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VOLUME 2

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APPENDIX D

ANALYTICAL RESULTS

APPENDIX D

ANALYTICAL RESULTS

CHAIN OF CUSTODY RECORDS . . . . . 16 PAGES

TABLES EXTRACTED FROM SAP
- TABLE 1 . . . . . 1 PAGE
- TABLE 4 . . . . . 2 PAGES
- TABLE 5 . . . . . 6 PAGES
- TABLE 6 . . . . . 1 PAGE

SAMPLE DATA:

SAMPLES 001-004 . . . . . 4 PAGES
SAMPLES 005-012 . . . . . 2 PAGES
SAMPLES 013-020 . . . . . 32 PAGES
SAMPLES 022-038 . . . . . 85 PAGES
SAMPLE 039 . . . . . 2 PAGES
SAMPLE 040 . . . . . 6 PAGES
SAMPLES 042-043 . . . . . 14 PAGES
SAMPLE 044 . . . . . 1 PAGE
SAMPLE 045 . . . . . 1 PAGE
SAMPLES 046-062 . . . . . 86 PAGE
SAMPLES 063-064 . . . . . 14 PAGES
SAMPLES 065-066 . . . . . 10 PAGES
SAMPLES 067-068 . . . . . 12 PAGES
SAMPLE 069 . . . . . 4 PAGES
SAMPLE 070 . . . . . 15 PAGES
SAMPLE 071-073 . . . . . 9 PAGES
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SAMPLES 075-076 . . . . . 12 PAGES
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SAMPLE 078 . . . . . 6 PAGES
SAMPLES 079-082 . . . . . 10 PAGES
SAMPLES 083-084 . . . . . 5 PAGES
SAMPLE 44A . . . . . 12 PAGES
SAMPLES 23A-30A . . . . . 40 PAGES
SAMPLES 32A-38A . . . . . 35 PAGES
SAMPLE RB8 . . . . . 8 PAGES
SAMPLE TB5 . . . . . 2 PAGES
SAMPLE RB10 . . . . . 5 PAGES
SAMPLE RB11 . . . . . 5 PAGES
SAMPLES TB09-TB11 . . . . . 9 PAGES
SAMPLE TB12 . . . . . 2 PAGES
SAMPLE RB13 . . . . . 15 PAGES
SAMPLE BP/BF001-006 . . . . . 68 PAGES
SAMPLES BIOF001-014 . . . . . 169 PAGES

MORRISON KNUDSEN CORPORATION

INTER-OFFICE CORRESPONDENCE

DATE: Jan. , 1996

TO: Steve Downey

FROM: Bill Kemp

LOCATION: NSWC Crane

LOCATION: NSWC Crane

SUBJECT: SWMU-16/16 Samples Numbers, type, and depth.

Numbers	Type/Depth
001	Characterization-East Sump soil sample
002	Characterization-West Sump soil sample
003	Characterization-West side soil sample, composite, surface
004	Characterization-South side soil sample, composite, surface
005 to 012	Characterization-field screening
013 to 021	Characterization-surface soil sample
022 to 038	Confirmatory-soil sample 6" to 1' below surface
039	Confirmatory-east sump rinse water
040	Characterization-surface soil under FO tanks
041	Confirmatory-soil sample 6" to 1' below surface
042 & 043	Characterization-Sludge/liquid west sump - CHAIN OF CUSTODY REMAS SOUTH
044	Characterization-sludge from FO tanks
045	Characterization-liquid from west sump REPLACED 43
046 to 062	Confirmatory-soil samples 6" to 1' below surface
23A to 30A	Confirmatory-soil samples 1' to 18" below excavated surface (2nd round)
32A to 38A	Confirmatory-soil samples 1' to 18" below excavated surface (2nd round)
063 & 064	Confirmatory-soil samples under FO tanks
065 & 066	Confirmatory-soil samples 6" to 1' below surface
067 & 068	Characterization-roll off from west sump
069	Characterization-liquid from west sump

cc: Thomas Brent
File

D- 00002

9507021

C, 21

MORRISON KNUDSEN CORPORATION

CHAIN OF CUSTODY RECORD

720 Park Blvd., P.O. Box 73
Boise, Idaho 83729
(208) 386-5000

Project No.: 4324

Project Name: NSWC Crane

Samplers: (Signature) Max Lamarque

Sampler: (Print) Wes Lamarque

Sample Type	Sampling Point Description	Sample Date	Time	Sample I.D. Number	Split Samples Yes	Split Samples No	Volatiles (Aq. Air 1x notes)	Lithium	Remarks
Soil	14/00, 1ft. dwn., over batteries	6/29/95	1014	NSWC-14/00-001	X		X	X	-001 1 Jar
Soil	14/00, 1ft dwn, background	6/29/95	1035	NSWC-14/00-002	X		X	X	-002 1 Jar
Soil	16/16, 1ft dwn, Sump	6/29/95	1625	NSWC-16/16-001		X	X		-003 1 Jar
Soil	16/16, 1ft. dwn, Sump	6/29/95	1655	NSWC-16/16-002		X	X		-004 1 Jar
Soil	16/16, 1ft dwn, Composite	6/29/95	1725	NSWC-16/16-003		X	X		-005 1 Jar
Soil	16/16, 1ft dwn, Composite	6/29/95	1800	NSWC-16/16-004		X	X		-006 1 Jar
	Last Item A.S.L.								

FED EX AIRBILL 5919918686

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time	Received By: (Signature)
Company: Morrison Knudsen	07/1 1330	Company:	Company:		Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Received for Laboratory By: (Signature) Company:	Date/Time 7/6/95	Total No. Samples This Shipping Container. Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:

D-00603

MORRISON KNUDSEN CORPORATION

CHAIN OF CUSTODY RECORD

720 Park Blvd., P.O. Box 73
Boise, Idaho 83729
(208) 386-5000

COOP

AIRCRAFT ENGINE DIVISION NEWYORK

Project No.: 4324 009-007-30 | Project Name: NSWC CRANE

Samplers: (Signature) Bill Kemp
Sampler: (Print) BILL KEMP

Sample Type	Sampling Point Description	Sample Date	Time	Sample I.D. Number	Split Samples Yes	Split Samples No	VOA 8240	TCE 8010	Explosive 8330	PCBs 8080	Metals 6010A	Mercury 7471	Cyanide 6010A	Remarks
SOIL	EAST SIDE CORNER	8-30-94	9:50	NSWC 16/16-013		✓	✓	✓	✓	✓	✓	✓	✓	
SOIL	SOUTHSIDE EAST	8-30-94	10:10	NSWC 16/16-014		✓	✓	✓	✓	✓	✓	✓	✓	
SOIL	SOUTHSIDE SOUTH	8-30-94	10:25	NSWC 16/16-015		✓	✓	✓	✓	✓	✓	✓	✓	
SOIL	SOUTHSIDE WEST	8-30-94	10:40	NSWC 16/16-016		✓	✓	✓	✓	✓	✓	✓	✓	
SOIL	WEST SIDE DITCH	8-30-94	10:50	NSWC 16/16-017		✓	✓	✓	✓	✓	✓	✓	✓	
SOIL	WEST SIDE DITCH	8-30-94	10:50	NSWC 16/16-018		✓	✓	✓	✓	✓	✓	✓	✓	
SOIL	NORTHSIDE WEST	8-30-94	11:05	NSWC 16/16-019		✓	✓	✓	✓	✓	✓	✓	✓	
SOIL	NORTH SIDE CENTER	8-30-94	11:20	NSWC 16/16-020		✓	✓	✓	✓	✓	✓	✓	✓	
SOIL	NORTHSIDE CENTER	8-30-94	1120	NSWC 16/16-021	X	✓	✓	✓	✓	✓	✓	✓	✓	MS/MSD
~~SOIL~~	~~NORTHSIDE CENTER~~	~~8-30-94~~	~~1120~~	~~NSWC~~										

7 DAY TURN AROUND REQUESTED

Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:	Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:
Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:	Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:
Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:	Received for Laboratory By: (Signature) / Company:	Date/Time	Total No. Samples This Shipping Container: / Company:
Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:	Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:

D-00004

MORRISON KNUDSEN CORPORATION

CHAIN OF CUSTODY RECORD

720 Park Blvd., P.O. Box 73
Boise, Idaho 83729
(208) 386-5000

C013

AMERICAN ENVIRONMENTAL NETWORK

Project No.: 4324 0009.007.30

Project Name: USUC CRANE

Samplers: (Signature) Bill Kemp

Sampler: (Print) Bill Kemp

Sample Type	Sampling Point Description	Sample Date	Time	Sample I.D. Number	Split Samples Yes	Split Samples No	8240	8270	8080	8150	7010	1030	8260	6010A Metals	7471 Mercury	Cyanide 9010	Remarks
Soil	Borrow Pit	10-12-95	1230	USUC BP/BF 003		X	X	X	X	X	X	X	X	X	X	X	Return Turn Board of Requested
Soil	Borrow Pit	10-12-95	1240	USUC BP/BF 004		X	X	X	X	X	X	X	X	X	X	X	

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time	Received By: (Signature)
Company: MKC	10-13-95 1715	Company:	Company:		Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Received for Laboratory By: (Signature) Company:	Date/Time	Total No. Samples This Shipping Container: Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:

D-00005

MORRISON KNUDSEN CORPORATION

CHAIN OF CUSTODY RECORD

720 Park Blvd., P.O. Box 73
Boise, Idaho 83729
(208) 386-5000

Page 1 of 3

C014

Project No.: 2009-002-30

Project Name: Cipione USWC

Samplers: (Signature)

Sampler: (Print)

Analysis Required: 8240, 8350, 8080, 6010A APP IX METALS, 7471 MERCURY, 6010A LIST, 8270, 8150, 8140, 8280, 7010, 6030, 7470 MERCURY

Sample Type	Sampling Point Description	Sample Date	Time	Sample I.D. Number	Split Samples Yes	Split Samples No	8240	8350	8080	6010A APP IX METALS	7471 MERCURY	6010A LIST	8270	8150	8140	8280	7010	6030	7470 MERCURY				Remarks
Liquid	Rinsate Blank	10-11-95	0800	USWC 16/00 028		X	X		X	X		X	X	X	X	X	X	X	X				
Soil	Sample 16/00	10-13-95	0845	USWC 16/00 022		✓	X	X	X	X	X	X											
			0850	USWC 16/00 023		✓	X	X	X	X	X	X											
			0910	USWC 16/00 024		✓	X	X	X	X	X	X											
			0915	USWC 16/00 025		✓	X	X	X	X	X	X											
			0920	USWC 16/00 026		✓	X	X	X	X	X	X											Duplicate
			0930	USWC 16/00 027		X	X	X	X	X	X	X											
			0940	USWC 16/00 028		X	X	X	X	X	X	X											
			0950	USWC 16/00 029		X	X	X	X	X	X	X											
			1000	USWC 16/00 030		X	X	X	X	X	X	X											
			1010	USWC 16/00 031		X	X	X	X	X	X	X											
			1020	USWC 16/00 032		X	X	X	X	X	X	X											
			1030	USWC 16/00 033		X	X	X	X	X	X	X											
			1035	USWC 16/00 034		X	X	X	X	X	X	X											
			1040	USWC 16/00 035		X	X	X	X	X	X	X											
			1045	USWC 16/00 036		X	X	X	X	X	X	X											
			1055	USWC 16/00 037		X	X	X	X	X	X	X											
			1100	USWC 16/00 038		X	X	X	X	X	X	X											Duplicate

Relinquished By: (Signature) [signature] Date/Time 10-13-95 1715 Received By: (Signature)
Company: MKC Company:

Relinquished By: (Signature) Date/Time Received By: (Signature)
Company: Company:

Relinquished By: (Signature) Date/Time Received By: (Signature)
Company: Company:

Relinquished By: (Signature) Date/Time Received By: (Signature)
Company: Company:

Relinquished By: (Signature) Date/Time Received for Laboratory By: (Signature) Date/Time Total No. Samples This Shipping Container:
Company: Company: Company:

Relinquished By: (Signature) Date/Time Received By: (Signature) Relinquished By: (Signature) Date/Time Received By: (Signature)
Company: Company: Company: Company:

Duplicate Chain of Custody Signature Page

90000-0

MORRISON KNUDSEN CORPORATION

CHAIN OF CUSTODY RECORD

720 Park Blvd., P.O. Box 73
Boise, Idaho 83729
(208) 386-5000

Chemical Environmental Network page 2 of 2 C014

Project No.: 4329 007-007-30

Project Name: NSWC Crane

Samplers: (Signature) [illegible]

Sampler: (Print) Bill Kemp

Analysis Required: 8020, 8240, 8260, 8270, 8310, 5335.2, 1664 HEM, 1664 SGT HEM, 1470

Sample Type	Sampling Point Description	Sample Date	Time	Sample I.D. Number	Split Samples Yes	Split Samples No	8020	8240	8260	8270	8310	5335.2	1664 HEM	1664 SGT HEM	1470							Remarks
Soil	Grab 16/07	10-13-95	1115	NSWC 16/07-039		X	X	X	X													
Liquid	Rinsewater from Sump	10-13-95	1615	NSWC 1600 040					X	X	X	X	X	X	X	X						
Liquid	Trip Blank	10-13-95	1630	NSWC 1600 T05																		

2 day Turnaround Requested

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time	Received By: (Signature)
Company: NKC	10-13-95 1715	Company:	Company:		Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Received for Laboratory By: (Signature) Company:	Date/Time	Total No. Samples This Shipping Container: Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:

D-00007

MORRISON KNUDSEN CORPORATION

CHAIN OF CUSTODY RECORD

720 Park Blvd., P.O. Box 73
Boise, Idaho 83729
(208) 386-5000

2015

AMERICAN ENVIRONMENTAL NETWORK

Project No.: 4 5221 5009-(007-30)

Project Name: USUC CRANE

Samplers: (Signature)

Sampler: (Print) BILL KEITH

Split Samples

Analysis Required

Sample Type	Sampling Point Description	Sample Date	Time	Sample I.D. Number	Yes	No	9095	1010	9045	30-Metals SC 7471A	8330	8240 TCLP	8270 TCLP	8260 TCLP	1110/1150 TCLP	1110/1170 TCLP							Remarks
Sludge	South Sump 16/16	10-16-95	1415	USUC 16/16-042		X	X	X	X	X	X	X	X	X	X	X							2 day Turnaround

THESE SAMPLES MAY BE (HOT)

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time	Received By: (Signature)
Company: MKC	10-16-95 1500	Company:	Company:		Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Received for Laboratory By: (Signature) Company:	Date/Time	Total No. Samples This Shipping Container: Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:

D-00008

MORRISON KNUDSEN CORPORATION

CHAIN OF CUSTODY RECORD

720 Park Blvd., P.O. Box 73
Boise, Idaho 83729
(208) 386-5000

C016

AMERICAN ENVIRONMENTAL NETWORK

Project No.: 4324 / 0009-007-30

Project Name: NSWC CRANE

Samplers: (Signature)

Sampler: (Print)

Split Samples

Analysis Required

Sample Type	Sampling Point Description	Sample Date	Time	Sample I.D. Number	Yes	No	1010	2040	SW-846-1311/1312	" " 7.2.1.2	E240	E270	E300	E350	1010A Metals	1470 Mercury	E330					Remarks
~~Sludge~~	~~Comp~~																					2 DAY
Liquid	Sump South 16/16	10-17-95	1115	NSWC 16/16-043		X	X	X	X	X	X	X	X	X	X	X	X					Turn
																						Around

Sample "Lost" may be

Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:	Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:
MKC	10-17-95 1600				
Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:	Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:
Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:	Received for Laboratory By: (Signature) / Company:	Date/Time	Total No. Samples This Shipping Container: / Company:
Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:	Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:

D-00009

MORRISON KNUDSEN CORPORATION

CHAIN OF CUSTODY RECORD

720 Park Blvd., P.O. Box 73
Boise, Idaho 83729
(208) 386-5000

AMERICAN ENVIRONMENTAL LANDFILL

Page 1 of 2

C018

Project No.: 4324 0009-007-30

Project Name: NSWC - CRANE

Samplers: (Signature) [illegible]

Sampler: (Print) BILL KEMP

Analysis Required: 8080 | 601/04 | 1410 | 8240 | 8270 | EPA-338.2 | 7000 series - metals | 601/04 metals | 7471 | 8330 | Total Lead

Sample Type	Sampling Point Description	Sample Date	Time	Sample I.D. Number	Split Samples Yes	Split Samples No	8080	601/04	1410	8240	8270	EPA-338.2	7000 series - metals	601/04 metals	7471	8330	Total Lead	Remarks
SLUDGE	TERL TANKS SUMP 16/16	10-18-95	0945	NSWC 16/16-044		X	X											
LIQUID	SOUTH SUMP DRAINAGE NSWC 16/16 043	10-19-95	0940	NSWC 16/16-045		X		X	X									
LIQUID	EQUIP RINSATE	10-19-95	0800	NSWC 16/16-RB10						X	X	X	X	X				
SOIL	~~[illegible]~~ WEST SIDE SUMP 16/16	10-19-95	1000	NSWC 16/16-046				X		X	X	X	X	X	X	X		
			1005	NSWC 16/16 047				X		X				X	X	X	X	
			1010	NSWC 16/16 048				X		X				X	X	X	X	
			1015	NSWC 16/16 049				X		X				X	X	X	X	
			1020	NSWC 16/16 050				X		X				X	X	X	X	
			1025	NSWC 16/16 051				X		X				X	X	X	X	
			1030	NSWC 16/16 052				X		X				X	X	X	X	Duplicate
			1035	NSWC 16/16 053				X		X				X	X	X	X	
			1040	NSWC 16/16 054				X		X				X	X	X	X	
			1045	NSWC 16/16 055				X		X				X	X	X	X	
			1050	NSWC 16/16 056				X		X				X	X	X	X	
			1055	NSWC 16/16 057				X		X				X	X	X	X	
			1055	NSWC 16/16 058				X		X				X	X	X	X	
			1100	NSWC 16/16 059				X		X				X		X	X	
			1105	NSWC 16/16 060				X		X				X		X	X	

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time	Received By: (Signature)
Company: MKC	10-19-95 1500	Company:	Company:		Company:
Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time	Received By: (Signature)
Company:		Company:	Company:		Company:
Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Received for Laboratory By: (Signature)	Date/Time	Total No. Samples This Shipping Container:
Company:		Company:	Company:		Company:
Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time	Received By: (Signature)
Company:		Company:	Company:		Company:

D-001040

MORRISON KNUDSEN CORPORATION

CHAIN OF CUSTODY RECORD

720 Park Blvd., P.O. Box 73
Boise, Idaho 83729
(208) 386-5000

CCC 018

Project No.: [illegible]
Project Name: [illegible]
Samplers: (Signature) [illegible]
Sampler: (Print) [illegible]

Analysis Required

Sample Type	Sampling Point Description	Sample Date	Time	Sample I.D. Number	Split Samples Yes	Split Samples No	8240	8080	10/10A	7471	14/mw	8330	8020	8270	Remarks
Soil	[illegible]	10-19-95	1110	[illegible] 061		X	X	X	X	X	X	X			
			1115	[illegible] 062		X	X	X	X	X	X	X			Duplicate
	FO		1120	[illegible] 063		X	X	X	X	X	X	X	X	X	"Hot"
	FO		1130	[illegible] 064		X	X	X	X	X	X	X	X	X	"Hot"
			1140	[illegible] 065		X	X	X	X	X	X	X			
Soil	[illegible]	10-19-95	1150	[illegible] 066		X	X	X	X	X	X	X			
	[illegible]														
	[illegible]														
	[illegible]														
	[illegible]														
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All Samples on COC-018
[illegible] with Personnel
[illegible] Tranship Pal

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time	Received By: (Signature)
Company: MKC	10-19-95/1500	Company:	Company:		Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Received for Laboratory By: (Signature) Company:	Date/Time	Total No. Samples This Shipping Container: Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:

D-00011

MORRISON KNUDSEN CORPORATION

CHAIN OF CUSTODY RECORD

720 Park Blvd., P.O. Box 73
Boise, Idaho 83729
(208) 386-5000

C0-C019

AMERICAN ENVIRONMENTAL

Project No.: ~~6000~~ 4324 0009 007 304

Project Name: USWC CRANE

Samplers: (Signature) [signature]

Sampler: (Print) Bill Kemp

Analysis Required: 8240, 8080, TPH 11, Lead, 8330, EPA-353.3, UPDES METALS 200, INDIVID LISTED 200, TIME CUBE 74-70

Sample Type	Sampling Point Description	Sample Date	Time	Sample I.D. Number	Split Samples Yes	Split Samples No	8240	8080	TPH 11	Lead	8330	EPA-353.3	UPDES METALS 200	INDIVID LISTED 200	TIME CUBE 74-70	Remarks
Liquid	Equip Rinsate	10-25-95	0830	USWC 16/16 RB11			X			✓	✓	✓	✓	✓		
Soil	RE-SAMPLE 1' DOWN	10-25-95	1000	USWC 16/16 23A			X	✓	✓	✓	✓					
			1010	USWC 16/16 24A			X	✓	✓	✓	✓					
			1015	USWC 16/16 25A			X	✓	✓	✓	✓					
			1030	USWC 16/16 26A			✓	✓	✓	✓	✓					Duplicate
			1050	USWC 16/16 27A			✓	✓	✓	✓	✓					
			1100	USWC 16/16 28A			✓	✓	✓	✓	✓					
			1115	USWC 16/16 29A			✓	✓	✓	✓	✓					
			1130	USWC 16/16 30A			✓	✓	✓	✓	✓					
			1140	USWC 16/16 32A			✓	✓	✓	✓	✓					
			1150	USWC 16/16 33A			✓	✓	✓	✓	✓					
			1200	USWC 16/16 34A			✓	✓	✓	✓	✓					
			1215	USWC 16/16 35A			✓	✓	✓	✓	✓					
			1230	USWC 16/16 36A			✓	✓	✓	✓	✓					
			1245	USWC 16/16 37A			✓	✓	✓	✓	✓					
↓	↓	X	1300	USWC 16/16 38A			✓	✓	✓	✓	✓					Duplicate

Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:	Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:
AIIC [signature]	10-25-95 1700				
Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:	Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:
Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:	Received for Laboratory By: (Signature) / Company:	Date/Time	Total No. Samples This Shipping Container: / Company:
Relinq[illegible] By: (Signature) / Comp.	Date/Time	Received By: (Signature) / Company:	Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signa[illegible] / Company:

D-00012

001235 001236

MORRISON KNUDSEN CORPORATION

CHAIN OF CUSTODY RECORD

720 Park Blvd., P.O. Box 73
Boise, Idaho 83729
(208) 386-5000

COC-021

AMERICAN ENVIRONMENTAL

Project No.: 4324 0009-007-30

Project Name: USWC - GRAVE

Samplers: (Signature) D. Kelly

Sampler: (Print) BILL KELLY

Sample Type	Sampling Point Description	Sample Date	Time	Sample I.D. Number	Split Samples Yes	Split Samples No	1010	9095	9095	310-846-2C	7.3.4.1.1.2.P	8270	8080-8150	6010A	7470	8240							Remarks
Soil	Roll off II ~~WEST Stamp~~	11-7-95		USWC 16/16 067		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							24 Hr Turn around Samples may be "HOT"
Soil	Roll off II ~~WEST Stamp~~	11-7-95		USWC 16/16 068		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
~~Soil~~	~~Roll off II WEST Stamp~~	~~11-7-95~~	~~CAC~~	~~USWC 16/16 069~~		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time	Received By: (Signature)
Company: AEI	11-7-95 1540	Company:	Company:		Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Received for Laboratory By: (Signature) Company:	Date/Time	Total No. Samples This Shipping Container: Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:

D-00043

MORRISON KNUDSEN CORPORATION

CHAIN OF CUSTODY RECORD

720 Park Blvd., P.O. Box 73
Boise, Idaho 83729
(208) 386-5000

COC #029

DOE-IFB-4224-25165 Contam. Material Engineering

Project No.: 0009-007-20

Project Name: WSDOC Fence Ind

Samplers: (Signature) Bill Kemp

Sampler: (Print) Bill Kemp

Analysis Required: 8240, 8270, 8080, 8150, 8140, 8270, 8010, 8020, 8015, 7470-7471, 8310, 8020, 8250

Sample Type	Sampling Point Description	Sample Date	Time	Sample I.D. Number	Split Samples Yes	Split Samples No	8240	8270	8080	8150	8140	8270	8010	8020	8015	7470-7471	8310	8020	8250			Remarks
Liquid	Surface water west side	2-6-96	1800	WSDOC-16/16 070			X	X	X	X	X	X	X	X	X	X						14 Day TAT
Soil	Under Fo Tanks	2-7-96	1245	WSDOC-16/16 071													X	X				2 Day TAT
Soil	Under Fo Tanks	2-7-96	1350	WSDOC-16/16 072													X	X				" "
Soil	Under Fo Tanks	2-7-96	1355	WSDOC-16/16 073													X	X				" "
Liquid	Equip Rinsate	2-7-96	1000	WSDOC-16/16 RB13			X	X	X	X	X	X	X	X	X	X						14 Day TAT
Soil	Out Side Fence East	2-7-96	1510	WSDOC 16/16 074			X		X					X					X			" "
Soil	Out Side Fence SSW	2-7-96	1515	WSDOC 16/16 075			X		X					X					X			" "
Soil	Out Side Fence SSW	2-7-96	1520	WSDOC 16/16 076			X		X					X					X			" "
Soil	Out Side Fence West	2-7-96	1525	WSDOC 16/16 077			X		X					X					X			" "
Soil	Out Side Fence NW	2-7-96	1530	WSDOC 16/16 078			X		X					X					X			" "
Liquid	Trip Blank	2-8-96	1107	WSDOC 16/16 TB09			X															" "
Liquid	Trip Blank	2-8-96	1107	WSDOC 16/16 TB10			X															" "
Liquid	Trip Blank	2-8-96	1115	WSDOC 16/16 TB10			X															" "
Liquid	Trip Blank	2-8-96	1120	WSDOC 16/16 TB10			X															" "
Liquid	Trip Blank	2-8-96	1205	WSDOC 16/16 TB11																		" "
Liquid	Trip Blank	2-8-96	1205	WSDOC 16/16 TB11																		" "
																						" "
																						" "

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time	Received By: (Signature)
Company: MKC	2-8-96 1300	Company:	Company:		Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Received for Laboratory By: (Signature) Company:	Date/Time	Total No. Samples This Shipping Container: Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:

D-060014

MORRISON KNUDSEN CORPORATION

CHAIN OF CUSTODY RECORD

720 Park Blvd., P.O. Box 73
Boise, Idaho 83729
(208) 386-5000

1-F6
4324-3565 CORPU CHEMICAL ENVIRONMENTAL

Project No.: 0009-007-30
Project Name: CRADLE NSWC
Samplers: (Signature) Dan Kemp
Sampler: (Print) Dan Kemp

Split Samples

Analysis Required: 8240, 8270, 8080, 8150, 8240 TCLP, 8270 TCLP, 8080 TCLP, 8150 TCLP, 8240 TCLP

Sample Type	Sampling Point Description	Sample Date	Time	Sample I.D. Number	Split Samples Yes	Split Samples No	8240	8270	8080	8150	8240 TCLP	8270 TCLP	8080 TCLP	8150 TCLP	8240 TCLP	Remarks
Liquid	Supernatant Drum	1500	2-8-96	NSWC 16/16 079			X									
Liquid	↓	1505	2-8-96	NSWC 16/16 080			X									7 DAY TAT
Liquid	↓	1510	2-8-96	NSWC 16/16 081			X									
Liquid	↓	1515	2-8-96	NSWC 16/16 082			X									
Liquid	Rinse Water Drum	1520	2-8-96	NSWC 16/16 083			X									
Liquid	Rinse Water Drum	1525	2-8-96	NSWC 16/16 084			X									
Soil	Sludge From FO Tank	1530	2-8-96	NSWC 16/16 044A				X	X	X	X	X	X	X	X	
Liquid	Trip Blank	1545	2-8-96	NSWC 16/16 TB12												
Liquid	Trip Blank	1545	2-8-96	NSWC 16/16 TB12												

Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:	Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:
Dan Kemp / MKC	2-8-96 1700				
Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:	Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:
Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:	Received for Laboratory By: (Signature) / Company:	Date/Time	Total No. Samples This Shipping Container: / Company:
Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:	Relinquished By: (Signature) / Company:	Date/Time	Received By: (Signature) / Company:

D-00015

An Environmental Services Company

"People & Technology Creating A Better Environment"

February 7, 1996

Mr. Steve Downey
Morrison Knudsen Company
P.O. Box 408
Crane Village, IN 47522

Dear Mr. Downey:

RE: Analytical Sampling For Landfill Approval

Location: Special Waste at SWMU Cast High 16/16 close to AST Site

Two soil samples were taken on Thursday, February 1, 1996, at 4:45 p.m. close to aboveground storage tanks' area at Cast High 16/16 and sent to the lab as follows:

TPH (8015)	@	$125.00
Flash Point	@	$ 45.00
	Total	$170.00

If you need further information, please call me at (812)476-2845. As always, it is a pleasure doing business with you.

Sincerely,

U.S. Tech Group, Inc.

Ramadan Abdelsalam
President/CEO

RA:pw

2626 Kuller Avenue • Evansville, Indiana 47715
(812) 474-2129 • FAX (812) 474-4791

QUALITY ENVIRONMENTAL LABORATORIES

4415 E. MORGAN AVE. • P.O. BOX 5595 • EVANSVILLE, IN 47716
BUS. (812) 471-5964 • FAX (812) 471-0852

CLIENT: Ramadan Abdelsalam
U.S. TECH
5354 Old Boonville Hwy.
Evansville, IN. 47715

PROJECT NAME:	NSWC-16/16	DATE:	2/5/96
SAMPLE SOURCE:	Soil From AST Site	SAMPLE NUMBER:	0202960014
DATE COLLECTED:	2/2/96	TIME COLLECTED:	NA
DATE RECEIVED:	2/2/96	TIME RECEIVED:	0935

PARAMETER	METHOD	RESULT	UNITS	DATE/TIME/ANALYST
TPH	8015M	< 20.00	mg/Kg	02/05/96/1030/MDC
FLASHPOINT	1010	> 140	Degrees F	02/02/96/1605/MDC

QUALITY ASSURANCE / QUALITY CONTROL

PARAMETER	CCV REC	DUP RPD	SPIKE REC
TPH	104 %	0.00 %	76.50 %
FLASHPOINT	107 %	0.00 %	NA

APPROVED BY: [signature]
W.R. PALMER
CHIEF OPERATIONS OFFICER

DATE: 2/5/96

D-00017

CHAIN OF CUSTODY

QUALITY ENVIRONMENTAL LABORATORIES
145 E. MORGAN AVE. • P.O. BOX 5395 • EVANSVILLE, IN 47716
BUS. (812) 479-5964 • FAX (812) 471-0852

REPORT ANALYSIS TO:
CLIENT: NSWC - Crane
ADDRESS: NSWC - 16/16
CONTACT: [illegible]
PHONE:

BILL TO:
CLIENT: N.S. Tech
ADDRESS: [illegible]
CONTACT:
PHONE: 475-1916

PROJECT IDENTIFICATION: Soil Samples Crane AST

PURCHASE ORDER #:

SAMPLED BY: [illegible]

MATRIX*	DATE	TIME (24hr)	SAMPLE TYPE*	SAMPLE DESCRIPTION	PRESERVED
Soil	2-7-96		Grab	Soil from AST site	[illegible]

ANALYTICAL REQUIREMENTS: Total Phosphorus ✓

SAMPLES

COMMENTS:

NOTE:

RELINQUISHED BY: (SIGNATURE)	RECEIVED BY: (SIGNATURE)	TIME:	DATE:
[illegible]	[illegible]	0935	2/7/96
RELINQUISHED BY: (SIGNATURE)	RECEIVED BY: (SIGNATURE)	TIME:	DATE:
RELINQUISHED BY: (SIGNATURE)	RECEIVED BY: (SIGNATURE)	TIME:	DATE:

TURN AROUND TIME REQUIRED:

MATRIX*
WATER-W, WASTEWATER-WW, SOLID-S, OIL-O, GROUNDWATER-GW, SLUDGE-SL

SAMPLE TYPE*
COMPOSITE-C, GRAB-G

D-00018

TOTAL P.06

TABLE 1
ANALYTICAL SUMMARY

SWMU Number	Analytical Parameters[1]	Rationale
SWMU #03/10 Ammunition Burning Ground Soils	Explosives, Sb, Se, Cr, Cu, Co, Pb, Hg, Ni, Ag, Zn, Al, Ba, Mg, Mn, Sn, Na, P, TCE, tetrachloroethene	Contaminants identified in WES reports.
SWMU #10/15 Rockeye Soils	Explosives, Method 8240 VOCs, As, Al, Ba, Cd, Cr, Cu, Fe, Pb, Mg, Ni, Zn	Contaminants identified in WES reports.
SWMU #12/14 Mine Fill A Soils	Applicable Appendix IX Metals and Explosives	History of site and nature of cleanup activities.
SWMU #13/14 Mine Fill B Soils	Applicable Appendix IX Metals, and Explosives	History of site and nature of cleanup activities.
SWMU #14/00 Sanitary Landfill and Lithium Battery Disposal Soils	Applicable Appendix IX Metals and Lithium	History of site and nature of cleanup activities.
SWMU #16/16 Cast High Explosive/Incinerator Building 146 Soils	Applicable Appendix IX Metals, PCBs and Explosives	History of site and nature of cleanup activities.
SWMU #17/04 PCB Capacitor Burial/Pole Yard Soils	Applicable Appendix IX Metals and PCBs	History of site and nature of cleanup activities.
SWMU #23/00 Battery Shop Soils	Appendix IX List	History of site and nature of cleanup activities.
SWMU #24/00 Sludge Drying Beds Sludges and Soils	Appendix IX List	Potential contaminants unknown.
SWMU #25/07D Highway 58 Dump Site A Debris and Soils	Appendix IX List	Potential contaminants unknown.
SWMU #26/08D Highway 58 Dump Site B Debris and Soils	Appendix IX List	Potential contaminants unknown.
SWMUs #13/14, #16/16 and #17/04 Excavated Soil	RCRA Characteristics[2], Paint Filter Test and PCBs	Characterization for disposal; possible presence of PCBs.
SWMUs #14/00 and #23/00 Excavated Soil	RCRA Characteristics, Only TCLP Metals and Paint Filter Test	Characterization for disposal; potential TCLP contaminants are metals only.
SWMUs #24/00, #25/07D and #26/08D Incidental Soil, if required	RCRA Characteristics and Paint Filter Test	Characterization for disposal; potential contaminants unknown.

[1] - These parameters are preliminary and are not to be used until confirmed by the Project Manager.
[2] - RCRA Characteristics includes ignitability, corrosivity, reactivity, and full TCLP.

TABLE 4
ANALYTICAL METHODS

Parameter	Method Number	Sample Size/ Container	Preservation	Holding Time
Soil Sample Analyses (SAMPLER MUST NOTE IF APPENDIX IX OR STANDARD LIST WILL BE USED)				
Volatile Organics	8260	2 x 4 oz. glass jar	Refrigerate at 4°C	14 days
Volatile Organics	8015.	2 x 4 oz. glass jar	Refrigerate at 4°C	14 days
Semivolatile Organics	8270	1 x 250 mL glass jar	Refrigerate at 4°C	14/40 days[1]
Organochlorine Pesticides/PCBs	8080	1 x 250 mL glass jar	Refrigerate at 4°C	14/40 days[1]
Organophosphate Pesticides	8140	1 x 250 mL glass jar	Refrigerate at 4°C	14/40 days[1]
Chlorinated Herbicides	8150	1 x 250 mL glass jar	Refrigerate at 4°C	14/40 days[1]
Metals	6010/7471	1 x 250 mL glass jar	Refrigerate at 4°C	6 months
Cyanide	9012	1 x 250 mL glass jar	Refrigerate at 4°C	14 days
Sulfide	9030	1 x 250 mL glass jar	Refrigerate at 4°C	7 days
Dioxins/furans	8280	1 x 250 mL glass jar	Refrigerate at 4°C	14/40 days[1]
Explosives	8330	1 x 250 mL glass jar	Refrigerate at 4°C	14/40 days[1]
Lithium	6010 or 7430	1 x 250 mL glass jar	Refrigerate at 4°C	6 months
Solid Waste Characterization Sample Analyses				
Ignitability	1010	1 X 250 mL glass jar	None	ASAP
Corrosivity - pH[1]	9040	1 x 500 mL plastic bottle	Refrigerate at 4°C	ASAP
Corrosivity - pH[1]	9045	1 x 250 mL glass jar	Refrigerate at 4°C	ASAP
Sulfide reactivity[1]	Sec.7.3.4.1	1 x 500 mL glass bottle	Refrigerate at 4°C 2 mL zinc acetate & NaOH to pH > 9	7 days
Sulfide reactivity[1]	Sec.7.3.4.1	1 x 250 mL glass jar	Refrigerate at 4°C	7 days
Cyanide reactivity[2]	Sec.7.3.3.2	1 x 1 L plastic bottle	Refrigerate at 4°C NaOH pH > 12	14 days
Cyanide reactivity[2]	Sec.7.3.3.2	1 x 250 mL glass jar	Refrigerate at 4°C	14 days

TABLE 4
ANALYTICAL METHODS

Parameter	Method Number	Sample Size/ Container	Preservation	Holding Time
TCLP - Organics[1]	8260, 8270, 8150, 8140, 8080	2 x 40 mL VOA vials (8260); 1 liter amber glass jar (8270); 1 liter amber glass jar (8080); 1 liter amber glass jar (8150/8140); 1 liter plastic (6010); 1 8-ounce jar (mercury)	Refrigerate at 4°C	14 days 7/40 days
TCLP - Metals[1]	6010, 7470	2 x 250 mL plastic bottle	HNO_3 pH < 2	180 days
Paint Filter Test	9095	1 x 250 mL glass jar	None	N/A
Water Samples (SAMPLER MUST NOTE IF STANDARD OR APPENDIX IX PARAMETER LIST WILL BE USED)				
Volatile Organics	624/8260	2 x 40 mL glass vials	HCL to pH < 2, Refrigerate at 4°C	14 days
Explosives	8330	1 x 250 mL glass or plastic	Refrigerate at 4°C	14/40 days
Total Nitrates	353.1	1 x 500 mL glass or plastic	Refrigerate at 4°C	48 hours
Metals	200 series	1 x 1 L plastic bottle	Refrigerate at 4°C	6 months

Notes:
[1] - 14 days for extraction and 40 days from extraction to analysis.
[2] - Liquid samples only.
[3] - Solid samples only.
[4] - For solid samples, submit the following jars: one 250 mL glass jar for 8260, two 500-mL (two 8-ounce jars) for 8080, 8140/ 8150 and metals. The extraction method will be EPA Method 1311.

TABLE 5
INTERIM MEASURE CLEANUP LEVELS FOR SOIL ANALYSES

Compound	Cleanup Level µg/kg	Compound	Cleanup Level µg/kg
Volatile Compounds - Methods 8260 & 8015			
Acetone	9,200,000	trans-1,3-Dichloropropene	1,000
Acetonitrile	230,000	1,4-Dioxane	32,000
Acrolein	780,000	Ethylbenzene	58,000
Acrylonitrile	260	Ethyl cyanide	100
Allyl chloride	200,000	Ethyl methacrylate	38,000
Benzene	2,700	2-Hexanone	50
Bromodichloromethane	2,900	Iodomethane	5
Bromomethane	60,000	Isobutyl alcohol	N.A.[1]
Carbon disulfide	53,000	Methacrylonitrile	56,000
Carbon tetrachloride	920	Methyl ethyl ketone	5,200,000
Chlorobenzene	300,000	Methyl methacrylate	3,200,000
2-Chloro-1,3-butadiene	5	4-Methyl-2-pentanone	2,000,000
Chlorodibromomethane	10,000	Pentachloroethane	10
Chloroethane	270,000	Styrene	13,000,000
Chloroform	960	1,1,1,2-Tetrachloroethane	10,000
Chloromethane	3,700	1,1,2,2-Tetrachloroethane	2,100
3-Chloropropene	5	Tetrachloroethylene	22,000
1,2-Dibromoethane	19	Toluene	280,000
Dibromomethane	390,000	Tribromomethane	110,000
trans-1,4-Dichloro-2-butene	15	1,1,1-Trichloroethane	300,000
Dichlorodifluoromethane	380,000	1,1,2-Trichloroethane	2,900
1,1-Dichloroethane	400,000	Trichloroethylene	14,000
1,2-Dichloroethane	840	Trichlorofluoromethane	410,000
1,1-Dichloroethylene	70	1,2,3-Trichloropropane	310,000
trans-1,2-Dichloroethylene	620,000	Vinyl acetate	39,000,000

TABLE 5
INTERIM MEASURE CLEANUP LEVELS[1] FOR SOIL ANALYSES

Compound	Cleanup Level µg/kg	Compound	Cleanup Level µg/kg
Dichloromethane	22,000	Vinyl chloride	9.7
1,2-Dichloropropane	1,300	Total xylenes	99,000
cis-1,3-Dichloropropene	1,000		
Base/Neutral Compounds - Methods 8270 & 8280			
Acenaphthene	36,000	Hexachlorocyclopentadiene	270,000
Acenaphthylene	660	Hexachlorodibenzo-p-dioxins	N.A.[2]
Acetophenone	3,900,000	Hexachlorodibenzofurans	N.A.[2]
2-Acetylaminofluorene	N.A.[2]	Hexachloroethane	39,000
4-Aminobiphenyl	N.A.[2]	Hexachlorophene	12,000
Aniline	11,000	Hexachloropropene	N.A.[2]
Anthracene	1,900	Indeno(1,2,3-c,d)pyrene	1,200
Aramite	34,000	Isophorone	900,000
Benzo(a)anthracene	660	Isosafrole	N.A.[2]
Benzo(b)fluoranthene	660	Methapyrilene	N.A.[2]
Benzo(k)fluoranthene	660	3-Methylcholanthrene	N.A.[2]
Benzo(g,h,i)perylene	660	Methyl methanesulfonate	N.A.[2]
Benzo(a)pyrene	660	2-Methylnaphthalene	660
Benzyl alcohol	12,000,000	Naphthalene	80,000
Bis(2-chloroethoxy)methane	660	1,4-Naphthoquinone	N.A.[2]
Bis(2-chloroethyl)ether	150	1-Naphthylamine	N.A.[2]
Bis(2-chloroisopropyl)ether	12,000	2-Naphthylamine	N.A.[2]
Bis(2-ethylhexyl)phthalate	61,000	m-Nitroaniline	3,300
4-Bromophenyl phenyl ether	660	o-Nitroaniline	2,300
Butyl benzyl phthalate	7,800,000	p-Nitroaniline	N.A.[2]
p-Chloroaniline	160,000	Nitrobenzene	20,000
2-Chloronaphthalene	3,100,000	4-Nitroquinoline-1-oxide	N.A.[2]

TABLE 5
INTERIM MEASURE CLEANUP LEVELS[1] FOR SOIL ANALYSES

Compound	Cleanup Level µg/kg	Compound	Cleanup Level µg/kg
4-Chlorophenyl phenyl ether	660	N-Nitrosodi-n-butylamine	160
Chrysene	800	N-nitrosodiethylamine	5.7
Dibenzo(a,h)anthracene	120	N-nitrosodimethylamine	17
Dibenzofuran	660	N-nitrosodiphenylamine	170,000
1,2-Dibromo-3-chloropropane	610	N-nitrosomethylethylamine	39
Di-n-butyl phthalate	3,900,000	N-nitrosomorpholine	N.A.[2]
m-Dichlorobenzene	280,000	N-nitrosopiperidine	N.A.[2]
o-Dichlorobenzene	230,000	N-nitrosopyrrolidine	N.A.[2]
p-Dichlorobenzene	17,000	5-nitro-o-toluidine	N.A.[2]
3,3'-Dichlorobenzidine	1,900	Pentachlorobenzene	31,000
Diethyl phthalate	31,000,000	Pentachlorodibenzo-p-dioxins	N.A.[2]
O,O-Diethyl-O-2-purazinylphosphorothioate	N.A.[2]	Pentachlorodibenzofurans	N.A.[2]
p-Dimethylaminoazobenzene	N.A.[2]	Phenacetin	N.A.[2]
7,12-Dimethylbenz(a)anthracene	N.A.[2]	Phenanthrene	660
3,3'-Dimethylbenzidine	93	p-Phenylenediamine	7,400,000
alpha,alpha-Dimethyphenethylamine	N.A.[2]	2-Picoline	N.A.[2]
Dimethyl phthalate	100,000,000	Pyrene	1,200,000
m-Dinitrobenzene	3,900	Pyridine	3,900
2,4-Dinitrotoluene	78,000	Safrole	N.A.[2]
2,6-Dinitrotoluene	1,300	1,2,4,5-Tetrachlorobenzene	12,000
Di-n-octyl phthalate	780,000	2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.0057
Diphenylamine	980,000	Tetrachlorodibenzo-p-dioxins	N.A.[2]
Di-n-propylnitrosamine	120	Tetrachlorodibenzofurans	N.A.[2]
Ethyl methanesulfonate	N.A.[2]	o-Toluidine	N.A.[2]
Fluoranthene	1,600,000	1,2,4-Trichlorobenzene	93,000
Fluorene	28,000	O,O,O-Triethylphosphorothioate	N.A.[2]

TABLE 5
INTERIM MEASURE CLEANUP LEVELS[1] FOR SOIL ANALYSES

Compound	Cleanup Level µg/kg	Compound	Cleanup Level µg/kg
Hexachlorobenzene	530	sym-Trinitrobenzene	2,000
Hexachlorobutadiene	11,000		
Acid Compounds - Method 8270			
2-sec-Butyl-4,6-dinitrophenol	39,000	4,6-Dinitro-o-cresol	3,300
p-Chloro-m-cresol	210	2,4-Dintrophenol	78,000
2-Chlorophenol	200,000	2-Nitrophenol	300
meta-Cresol	2,000,000	4-Nitrophenol	190
ortho-Cresol	2,000,000	Pentachlorophenol	7,100
para-Cresol	200,000	Phenol	23,000,000
2,4-Dichlorophenol	120,000	2,3,4,6-Tetrachlorophenol	1,200,000
2,6-Dichlorophenol	N.A.[2]	2,4,5-Trichlorophenol	930
2,4-Dimethylphenol	780,000	2,4,6-Trichlorophenol	77,000
Pesticide & PCB Compounds - Methods 8080 & 8140			
Aldrin	50	Disulfoton	1,600
Aroclor 1016	110[3]	Endosulfan sulfate	44.2
Aroclor 1221	110[3]	Endosulfan I (alpha)	2,000
Aroclor 1232	110[3]	Endosulfan II (beta)	2,000
Aroclor 1242	110[3]	Endrin	12,000
Aroclor 1248	110[3]	Endrin aldehyde	15.4
Aroclor 1254	110[3]	Famphur	N.A.[2]
Aroclor 1260	110[3]	Heptachlor	190
alpha-BHC	2.01	Heptachlor epoxide	94
beta-BHC	4.02	Isodrin	N.A.[2]
delta-BHC	6.03	Kepone	47
gamma-BHC	2.68	Methoxychlor	200,000
Chlordane	660	Methyl parathion	20

TABLE 5
INTERIM MEASURE CLEANUP LEVELS' FOR SOIL ANALYSES

Compound	Cleanup Level µg/kg	Compound	Cleanup Level µg/kg
Chlorobenzilate	3,200	Parathion	230,000
4,4'-DDD	3,500	Pentachloronitrobenzene	3,300
4,4'-DDE	2,500	Phorate	7,800
4,4'-DDT	8	Pronamide	2,900,000
Diallate	14,000	Tetraethyl dithiopyrophosphate	20,000
Dieldrin	53	Toxaphene	770
Dimethoate	7,800		
Herbicides - Method 8150			
2,4-Dichlorophenoxyacetic acid	390,000	2,4,5-T	390,000
Silvex	110		

TABLE 5
INTERIM MEASURE CLEANUP LEVELS[1] FOR SOIL ANALYSES

Compound	Cleanup Level µg/kg	Compound	Cleanup Level µg/kg
Metals - Methods 6010/7000			
Antimony	31,000	Mercury	23,000
Arsenic	970	Nickel	1,600,000
Barium	5,500,000	Selenium	390,000
Beryllium	400	Silver	390,000
Cadmium	39,000	Thallium	N.A.[2]
Chromium	940,000	Tin	47,000,000
Cobalt	100	Vanadium	550,000
Copper	2,900,000	Zinc	23,000,000
Lead	500,000		
Miscellaneous - Methods 9012 & 9030			
Cyanide	1,600,000	Sulfide	N.A.[2]

[1]Levels taken from USEPA memo *RCRA Corrective Action Guidance Human Health Data Quality Levels for RFI Projects* by Karl E. Bremer, June 18, 1994.
[2]N.A - None Available.
[3]Method 8280 for dioxins and furans only.
[4]DQL for total PCBs is 110 µg/kg.

Note: Constituents printed in bold fond are those for which the lowest practical quantitative limit (PQL) either equals or exceeds the cleanup goal. For these cases, the PQL is listed as the cleanup level, and the detection limit achieved by the laboratory should be closely monitored. The analyte list for 8260 should be reviewed to make sure all parameters are accounted for.

Equipment rinsates will be analyzed for the same parameters as the soil samples collected that day. Consult the laboratory for appropriate bottle size and preservative.

TABLE 6
CLEANUP LEVELS DETERMINED THROUGH RISK ASSESSMENT

Compound	*Abbrev*	*Cleanup Level*
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	HMX	
Hexahydro-1,3,5-trinitro-1,3,5-triazine	RDX	
1,3,5-trinitrobenzene	TNB	
Methyl-2,4,6-trinitrophenylnitramine	Tetryl	
o-nitrotoluene	2NT	
m-nitrotoluene	3NT	
p-nitrotoluene	4NT	

'Note: Cleanup levels are to be determined by bench- and pilot-scale studies. This table is being developed by another contractor. The compounds listed are those identified by EPA SW-846 Method 8330. Cleanup levels may be limited to only several of the compounds listed.

SWMU 16/16 DATA

SAMPLES 0001 THROUGH 020

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-001

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP.__
Lab Code: _____ Case No.: 95070 SAS No.: _____ SDG No.: 507021
Matrix (soil/water): SOIL_ Lab Sample ID: 950702103
Level (low/med): LOW__ Date Received: 07/06/95
% Solids: _58.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_	408	_		P_
7440-38-2	Arsenic__	18.9	_		P_
7440-39-3	Barium___	8160	_		P_
7440-41-7	Beryllium	0.35	U		P_
7440-43-9	Cadmium__	74.2	_		P_
7440-70-2	Calcium__		_		NR
7440-47-3	Chromium_	92.2	_		P_
7440-48-4	Cobalt___	2.6			P_
7440-50-8	Copper___	10800	_		P_
7439-89-6	Iron_____		_		NR
7439-92-1	Lead_____	47700	_		P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__	3.5	_		AV
7440-02-0	Nickel___	58.5	_		P_
7440-09-7	Potassium		_		NR
7782-49-2	Selenium_	0.87	U		P_
7440-22-4	Silver___	2.1	_		P_
7440-23-5	Sodium___		_		NR
7440-28-0	Thallium_	1.7	U		P_
7440-62-2	Vanadium_	2.8	U		P_
7440-66-6	Zinc_____	142000	_		P_
	Cyanide__		_		NR
7440-31-5_	Tin_____	117	_		P_
7439-93-2_	Lithium__		_		NR
			_		
			_		
			_		
			_		
			_		
			_		
			_		

Color Before: _____ Clarity Before: _____ Texture: _____
Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

Client ID: NSWC-16/16-001

FORM I - IN ILM02.1

D-00029

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-002

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP.__

Lab Code: _____ Case No.: 95070 SAS No.: _____ SDG No.: 507021

Matrix (soil/water): SOIL_ Lab Sample ID: 950702104

Level (low/med): LOW__ Date Received: 07/06/95

% Solids: _51.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_				NR
7440-36-0	Antimony_	548			P
7440-38-2	Arsenic__	36.3			P
7440-39-3	Barium___	11100			P
7440-41-7	Beryllium	0.65			P
7440-43-9	Cadmium__	200			P
7440-70-2	Calcium__				NR
7440-47-3	Chromium_	142			P
7440-48-4	Cobalt___	6.6			P
7440-50-8	Copper___	13100			P
7439-89-6	Iron____				NR
7439-92-1	Lead____	44800			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury__	13.3			AV
7440-02-0	Nickel___	104			P
7440-09-7	Potassium				NR
7782-49-2	Selenium_	1.3			P
7440-22-4	Silver___	6.9			P
7440-23-5	Sodium___				NR
7440-28-0	Thallium_	2.1	U		P
7440-62-2	Vanadium_	3.3	U		P
7440-66-6	Zinc____	158000			P
	Cyanide__				NR
7440-31-5_	Tin_____	170			P
7439-93-2_	Lithium__				NR

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

Client ID: NSWC-16/16-002

FORM I - IN ILM02.1

D-00030

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-003

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP.__
Lab Code: _____ Case No.: 95070 SAS No.: _____ SDG No.: 507021
Matrix (soil/water): SOIL_ Lab Sample ID: 950702105
Level (low/med): LOW__ Date Received: 07/06/95
% Solids: _89.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_				NR
7440-36-0	Antimony_	2.1	U		P
7440-38-2	Arsenic__	1.7			P
7440-39-3	Barium___	70.2			P
7440-41-7	Beryllium	0.23			P
7440-43-9	Cadmium__	0.43	U		P
7440-70-2	Calcium__				NR
7440-47-3	Chromium_	7.7			P
7440-48-4	Cobalt___	1.2	U		P
7440-50-8	Copper___	50.0			P
7439-89-6	Iron_____				NR
7439-92-1	Lead_____	79.8			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury__	0.11	U		AV
7440-02-0	Nickel___	3.1			P
7440-09-7	Potassium				NR
7782-49-2	Selenium_	0.53	U		P
7440-22-4	Silver___	0.85	U		P
7440-23-5	Sodium___				NR
7440-28-0	Thallium_	1.1	U		P
7440-62-2	Vanadium_	5.9			P
7440-66-6	Zinc_____	124			P
	Cyanide__				NR
7440-31-5_	Tin_____	26.7	U		P
7439-93-2_	Lithium__				NR

Color Before: _____ Clarity Before: _____ Texture: _____
Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

Client ID: NSWC-16/16-003

FORM I - IN ILM02.1

D-00031

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-004

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP.__

Lab Code: _____ Case No.: 95070 SAS No.: _____ SDG No.: 507021

Matrix (soil/water): SOIL_ Lab Sample ID: 950702106

Level (low/med): LOW__ Date Received: 07/06/95

% Solids: _87.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_	20.7	_		P_
7440-38-2	Arsenic__	24.2	_		P_
7440-39-3	Barium___	4150	_		P_
7440-41-7	Beryllium	0.30			P_
7440-43-9	Cadmium__	5.3	_		P_
7440-70-2	Calcium__		_		NR
7440-47-3	Chromium_	92.4	_		P_
7440-48-4	Cobalt___	7.5	_		P_
7440-50-8	Copper___	13800	_		P_
7439-89-6	Iron____		_		NR
7439-92-1	Lead____	2800	_		P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__	0.42	_		AV
7440-02-0	Nickel___	155	_		P_
7440-09-7	Potassium		_		NR
7782-49-2	Selenium_	0.59	U		P_
7440-22-4	Silver___	0.94	U		P_
7440-23-5	Sodium___		_		NR
7440-28-0	Thallium_	6.6	_		P_
7440-62-2	Vanadium_	1.9	U		P_
7440-66-6	Zinc____	280000	_		P_
	Cyanide__		_		NR
7440-31-5_	Tin____	303	_		P_
7439-93-2_	Lithium__		_		NR
			_		
			_		
			_		
			_		
			_		
			_		
			_		

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: GREEN Clarity After: _____ Artifacts: _____

Comments:

Client ID: NSWC-16/16-004

FORM I - IN ILM02.1

D-00032

Post-it Fax Note 7671	Date 10/8/96	# of pages ▶ 2
To JAY HOWARD	From J. LANGLOIS	
Co./Dept.	Co.	
Phone # (504) 768-8763	Phone #	
Fax # (504) 768-8784	Fax #	

Field Screening Data Sheet - NSWC Crane

TNT/RDX Tests
Extraction Kit I.D.:
Test Kit I.D.:

General Comments:

Date of Test: 7-13-95			Date of Test: 7-13-95		
Sample Source: Cast High Explosives			Sample Source: Cast High Explosives		
Sample Identification number: NSWC-16/16-005			Sample Identification number: NSWC-16/16-006		
Time measurements			Time measurements		
Begin Shake: 1720			Begin Shake: 1730		
End Shake: 1723			End Shake: 1733		
Start Solids Settling: 1723			Start Solids Settling: 1733		
	TNT	RDX		TNT	RDX
Begin Color Dev.:	1808	1856	Begin Color Dev.:	1811	1855
End Color Dev:	1815	1902	End Color Dev:	1818	1901
DTECHTOR Measurement	8	LO	DTECHTOR Measurement	LO	LO
~~PCB~~ Equivalent (ppm)	.5-1.5	<.5	PCB Equivalent (ppm)	<.5	<.5
Sample Description (odors, color, grain size): Located in same hole as NSWC-16/16-001			Sample Description (odors, color, grain size): Location is same as sample NSWC-16/16-002		

Date of Test: 7-13-95			Date of Test: 7-13-95		
Sample Source: Cast High Explosives			Sample Source: Cast High Explosive		
Sample Identification number: NSWC-16/16-007			Sample Identification number: NSWC-16/16-008		
Time measurements			Time measurements		
Begin Shake: 1649			Begin Shake: 1655		
End Shake: 1652			End Shake: 1658		
Start Solids Settling: 1652			Start Solids Settling: 1658		
	TNT	RDX		TNT	RDX
Begin Color Dev.:	1802	1845	Begin Color Dev.:	1801	1842
End Color Dev:	1810	1850	End Color Dev:	1809	1849
DTECHTOR Measurement	LO	LO	DTECHTOR Measurement	LO	2
PCB Equivalent (ppm)	<.5	<.5	PCB Equivalent (ppm)	<.5	.5-1.5
Sample Description (odors, color, grain size): Location is same as sample NSWC-16/16-003			Sample Description (odors, color, grain size): Location is same as sample NSWC-16/16-004		

TNTSCR.XLS

Field Screening Data Sheet - NSWC Crane

PCB Tests
Extraction Kit I.D.:
Test Kit I.D.:

General Comments:

Date of Test: 7-13-95		Date of Test: 7-13-95	
Sample Source: Cast High Explosives		Sample Source: Cast High Explosives	
Sample Identification number: NSWC-16/16-009		Sample Identification number: NSWC-16/16-010	
Time measurements		Time measurements	
Begin Shake:	0937	Begin Shake:	1303
End Shake:	0940	End Shake:	1306
Start Solids Settling:	0940	Start Solids Settling:	1306
Begin Color Development:	1123	Begin Color Development:	1402
End Color Development:	1130	End Color Development:	1409
DTECHTOR Measurement	Equivalent (ppm)	DTECHTOR Measurement	Equivalent (ppm)
3	<.5	4	<.5
Sample Description (odors, color, grain size): Location is same as sample NSWC-16/16-001		Sample Description (odors, color, grain size): Location is same as sample NSWC-16/16-002	
Date of Test: 7-13-95		Date of Test: 7-13-95	
Sample Source: Cast High Explosives		Sample Source: Cast High Explosive	
Sample Identification number: NSWC-16/16-011		Sample Identification number: NSWC-16/16-012	
Time measurements		Time measurements	
Begin Shake:	1322	Begin Shake:	1309
End Shake:	1325	End Shake:	1312
Start Solids Settling:	1325	Start Solids Settling:	1312
Begin Color Development:	1417	Begin Color Development:	1433
End Color Development:	1423	End Color Development:	1440
DTECHTOR Measurement	PCB Equivalent (ppm)	DTECHTOR Measurement	PCB Equivalent (ppm)
LO	<.5	LO	<.5
Sample Description (odors, color, grain size): Location is same as sample NSWC-16/16-003		Sample Description (odors, color, grain size): Location is same as sample NSWC-16/16-004	

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-013

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP___
Lab Code: _____ Case No.: 95083 SAS No.: _____ SDG No.: 508353
Matrix (soil/water): SOIL_ Lab Sample ID: 950835301
Level (low/med): LOW__ Date Received: 08/31/95
% Solids: _87.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_	32.2	_	N	P_
7440-38-2	Arsenic__	3.6	_		P_
7440-39-3	Barium___	1130	_	N*	P_
7440-41-7	Beryllium	0.69	_		P_
7440-43-9	Cadmium__	7.6	_	N	P_
7440-70-2	Calcium__		_		NR
7440-47-3	Chromium_	27.6	_	N	P_
7440-48-4	Cobalt___	4.9	_		P_
7440-50-8	Copper___	1130	_	*	P_
7439-89-6	Iron_____		_		NR
7439-92-1	Lead_____	2360	_	*	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__	0.31	_		AV
7440-02-0	Nickel___	22.4	_	*	P_
7440-09-7	Potassium		_		NR
7782-49-2	Selenium_	0.53	U	N	P_
7440-22-4	Silver___	0.84	U		P_
7440-23-5	Sodium___		_		NR
7440-28-0	Thallium_	1.1	U	N	P_
7440-62-2	Vanadium_	17.6	_		P_
7440-66-6	Zinc_____	10800	_	*	P_
	Cyanide__		_		NR
7440-31-5_	Tin_____	21.1	U		P_
7439-93-2_	Lithium__	10.6	U		P_

Color Before: _____ Clarity Before: _____ Texture: _____
Color After: _____ Clarity After: _____ Artifacts: _____

Comments:
CLIENT_ID:__NSWC-16/16-013

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC-16/16-013

Lab Name: AENI MD Contract: MKC

Project No.: 9508353 Site: NSWC Location: CRANE Group:

Matrix: (soil/water) SOIL Lab Sample ID: #001

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EI18.D

Level: (low/med) LOW Date Received: 8/31/95

% Moisture: not dec. 12 Date Analyzed: 9/5/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
79-01-6	Trichloroethene	5.7	U
127-18-4	Tetrachloroethene	5.7	U

FORM I VOA SW846

ORGANIC ANALYSIS DATA SHEET

Client: MK Corp
Project: NSWC Crane 4324-009-007-30
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC-16/16-013
Sample:

Matrix: SOIL
Sample: (ml) 2.0
Final Volume: (L) 0.02
(%) Moisture: 12.3
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9508353-001
Lab Name: AENI - MD
Contract: 9508353
Date Sampled: 08/30/95
Date Received: 08/31/95
Date Prepared: 09/07/95
Date Analyzed: 09/12/95
Time Analyzed: 11:11

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.32	U
RDX		0.39	U
TNB		0.26	U
TETRYL		0.29	U
DNB		0.22	U
4-Am-DNT		0.37	U
TNT		0.25	U
2-Am-DNT		0.37	U
NB		0.19	U
2,6-DNT		0.28	U
2,4-DNT		0.22	U
O-NT		0.29	U
P-NT		0.21	U
M-NT		0.31	U

Form I

AMERICAN ENVIRONMENTAL NETWORK, INC.
ORGANIC ANALYSIS DATA SHEET
PCBs BY 8080

Contract Number: 9508353
Client Name: MK CORP
Project: NSWC CRANE

CLIENT NUMBER: NSWC-16/16-013

Concentration: Low
Date Sampled : 08/30/95
Date Received : 08/31/95
Date Extract Prepared : 09/05/95
Date Analyzed: 09/06/95
Conc/Dil Factor: 1

AENI #: 9508353-001

GPC Cleanup: Yes[ ] No[X]
Sonication Ext: [ ]
Soxhlett Ext: [X]
Matrix SOIL
Percent Moisture: 12

	ug/Kg		
COMPOUND	CONCENTRATION	DETECTION LIMIT	QUALIFIER
AR1016		23	U
AR1221		23	U
AR1232		23	U
AR1242		23	U
AR1248		23	U
AR1254		45	U
AR1260		45	U

U-Indicates that a compound was analyzed for but not detected at or above the detection limit.

Vi - Volume of extract injected (ul) - 1

Vs - Volume of water extracted (ml) - N/A

Ws - Mass of soil extracted (g) - 30.05

Vt - Volume of total extract (ul) - 10000

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-014

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP___
Lab Code: _____ Case No.: 95083 SAS No.: _____ SDG No.: 508353
Matrix (soil/water): SOIL_ Lab Sample ID: 950835302
Level (low/med): LOW__ Date Received: 08/31/95
% Solids: _88.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	2.1	U	N	P
7440-38-2	Arsenic	0.85	U		P
7440-39-3	Barium	85.4		N*	P
7440-41-7	Beryllium	0.69			P
7440-43-9	Cadmium	1.1		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	13.6		N	P
7440-48-4	Cobalt	5.5			P
7440-50-8	Copper	35.9		*	P
7439-89-6	Iron				NR
7439-92-1	Lead	73.5		*	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.08	U		AV
7440-02-0	Nickel	88.9		*	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.53	U	N	P
7440-22-4	Silver	0.85	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.1	U	N	P
7440-62-2	Vanadium	11.5			P
7440-66-6	Zinc	286		*	P
	Cyanide				NR
7440-31-5	Tin	21.2	U		P
7439-93-2	Lithium	10.6	U		P

Color Before: _____ Clarity Before: _____ Texture: _____
Color After: _____ Clarity After: _____ Artifacts: _____

Comments:
CLIENT_ID: NSWC-16/16-014

VOLATILE ORGANICS ANALYSIS DATA SHEET

NSWC-16/16-014

Lab Name: AENI MO Contract: MKC

Project No.: 9508353 Site: NSWC Location: CRANE Group:

Matrix: (soil/water) SOIL Lab Sample ID: #002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EI19.D

Level: (low/med) LOW Date Received: 8/31/95

% Moisture: not dec. 12 Date Analyzed: 9/5/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
79-01-6	Trichloroethene	5.7	U
127-18-4	Tetrachloroethene	5.7	U

FORM I VOA SW846

D-00040

ORGANIC ANALYSIS DATA SHEET

Client: MK Corp
Project: NSWC Crane 4324-009-007-30
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC-16/16-014
Sample:

Matrix: SOIL
Sample: (ml) 2.0
Final Volume: (L) 0.02
(%) Moisture: 11.7
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9508353-002
Lab Name: AENI - MD
Contract: 9508353
Date Sampled: 08/30/95
Date Received: 08/31/95
Date Prepared: 09/07/95
Date Analyzed: 09/12/95
Time Analyzed: 12:13

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.31	U
RDX		0.38	U
TNB		0.26	U
TETRYL		0.28	U
DNB		0.21	U
4-Am-DNT		0.36	U
TNT		0.25	U
2-Am-DNT		0.36	U
NB		0.19	U
2,6-DNT		0.27	U
2,4-DNT		0.21	U
O-NT		0.28	U
P-NT		0.20	U
M-NT		0.30	U

Form I

AMERICAN ENVIRONMENTAL NETWORK, INC.
ORGANIC ANALYSIS DATA SHEET
PCBs BY 8080

Contract Number: 9508353
Client Name: MK CORP
Project: NSWC CRANE

CLIENT NUMBER: NSWC-16/16-014

AENI #: 9508353-002

Concentration: Low
Date Sampled : 08/30/95
Date Received : 08/31/95
Date Extract Prepared : 09/05/95
Date Analyzed: 09/06/95
Conc/Dil Factor: 1

GPC Cleanup: Yes[ ] No[X]
Sonication Ext: [ ]
Soxhlett Ext: [X]
Matrix SOIL
Percent Moisture: 12

	ug/Kg		
COMPOUND	CONCENTRATION	DETECTION LIMIT	QUALIFIER
AR1016		22	U
AR1221		22	U
AR1232		22	U
AR1242		22	U
AR1248		22	U
AR1254		45	U
AR1260		45	U

U-Indicates that a compound was analyzed for but not detected at or above the detection limit.

Vi - Volume of extract injected (ul) - 1

Vs - Volume of water extracted (ml) - N/A

Ws - Mass of soil extracted (g) - 30.56

Vt - Volume of total extract (ul) - 10000

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-015

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP___
Lab Code: _____ Case No.: 95083 SAS No.: _____ SDG No.: 508353
Matrix (soil/water): SOIL_ Lab Sample ID: 950835303
Level (low/med): LOW__ Date Received: 08/31/95
% Solids: _90.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_	12.1	_	N	P_
7440-38-2	Arsenic__	1.3	_		P_
7440-39-3	Barium___	409	_	N*	P_
7440-41-7	Beryllium	0.49	_		P_
7440-43-9	Cadmium__	2.9	_	N	P_
7440-70-2	Calcium__		_		NR
7440-47-3	Chromium_	11.8	_	N	P_
7440-48-4	Cobalt___	4.6	_		P_
7440-50-8	Copper___	231	_	*	P_
7439-89-6	Iron____		_		NR
7439-92-1	Lead____	937	_	*	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__	0.08	U		AV
7440-02-0	Nickel___	151	_	*	P_
7440-09-7	Potassium		_		NR
7782-49-2	Selenium_	0.53	U	N	P_
7440-22-4	Silver___	0.85	U		P_
7440-23-5	Sodium___		_		NR
7440-28-0	Thallium_	1.1	U	N	P_
7440-62-2	Vanadium_	9.5	_		P_
7440-66-6	Zinc____	2550	_	*	P_
	Cyanide__		_		NR
7440-31-5_	Tin____	21.2	U		P_
7439-93-2_	Lithium__	10.6	U		P_

Color Before: _____ Clarity Before: _____ Texture: _____
Color After: _____ Clarity After: _____ Artifacts: _____

Comments:
CLIENT_ID: __NSWC-16/16-015

FORM I - IN ILM02.1

VOLATILE ORGANICS ANALYSIS DATA SHEET

NSWC-16/16-015

Lab Name: AENI MD Contract: MKC

Project No.: 9508353 Site: NSWC Location: CRANE Group:

Matrix: (soil/water) SOIL Lab Sample ID: #003

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EI62.D

Level: (low/med) LOW Date Received: 8/31/95

% Moisture: not dec. 9 Date Analyzed: 9/8/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
79-01-6	Trichloroethene	5.5	U
127-18-4	Tetrachloroethene	5.5	U

FORM I VOA SW846

ORGANIC ANALYSIS DATA SHEET

Client: MK Corp
Project: NSWC Crane 4324-009-007-30
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC-16/16-015
Sample:

Matrix: SOIL
Sample: (ml) 2.0
Final Volume: (L) 0.02
(%) Moisture: 9.3
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9508353-003
Lab Name: AENI - MD
Contract: 9508353
Date Sampled: 08/30/95
Date Received: 08/31/95
Date Prepared: 09/07/95
Date Analyzed: 09/12/95
Time Analyzed: 13:16

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.31	U
RDX		0.37	U
TNB		0.25	U
TETRYL		0.28	U
DNB		0.21	U
4-Am-DNT		0.35	U
TNT		0.24	U
2-Am-DNT		0.35	U
NB		0.19	U
2,6-DNT		0.26	U
2,4-DNT		0.21	U
O-NT		0.28	U
P-NT		0.20	U
M-NT		0.30	U

Form I

AMERICAN ENVIRONMENTAL NETWORK, INC.
ORGANIC ANALYSIS DATA SHEET
PCBs BY 8080

Contract Number: 9508353
Client Name: MK CORP
Project: NSWC CRANE

CLIENT NUMBER: NSWC-16/16-015

AENI #: 9508353-003

Concentration: Low
Date Sampled : 08/30/95
Date Received : 08/31/95
Date Extract Prepared : 09/05/95
Date Analyzed: 09/06/95
Conc/Dil Factor: 1

GPC Cleanup: Yes[ ] No[X]
Sonication Ext: [ ]
Soxhlett Ext: [X]
Matrix SOIL
Percent Moisture: 9.3

	ug/Kg		
COMPOUND	CONCENTRATION	DETECTION LIMIT	QUALIFIER
AR1016		22	U
AR1221		22	U
AR1232		22	U
AR1242		22	U
AR1248		22	U
AR1254		43	U
AR1260		43	U

U-Indicates that a compound was analyzed for but not detected at or above the detection limit.

Vi - Volume of extract injected (ul) - 1

Vs - Volume of water extracted (ml) - N/A

Ws - Mass of soil extracted (g) - 30.42

Vt - Volume of total extract (ul) - 10000

FORM 1

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-016

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP___
Lab Code: _____ Case No.: 95083 SAS No.: _____ SDG No.: 508353
Matrix (soil/water): SOIL_ Lab Sample ID: 950835304
Level (low/med): LOW__ Date Received: 08/31/95
% Solids: _89.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_	173	_	N	P_
7440-38-2	Arsenic__	4.3	_		P_
7440-39-3	Barium___	1690	_	N*	P_
7440-41-7	Beryllium	0.43	_		P_
7440-43-9	Cadmium__	24.7	_	N	P_
7440-70-2	Calcium__		_		NR
7440-47-3	Chromium_	19.0	_	N	P_
7440-48-4	Cobalt___	3.9	_		P_
7440-50-8	Copper___	7030	_	*	P_
7439-89-6	Iron_____		_		NR
7439-92-1	Lead_____	28000	_	*	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__	0.15	_		AV
7440-02-0	Nickel___	66.9	_	*	P_
7440-09-7	Potassium		_		NR
7782-49-2	Selenium_	0.55	U	N	P_
7440-22-4	Silver___	2.7	_		P_
7440-23-5	Sodium___		_		NR
7440-28-0	Thallium_	1.1	U	N	P_
7440-62-2	Vanadium_	13.3	_		P_
7440-66-6	Zinc_____	10100	_	*	P_
	Cyanide__		_		NR
7440-31-5_	Tin_____	34.2	_		P_
7439-93-2_	Lithium__	10.9	U		P_
			_		
			_		
			_		
			_		
			_		
			_		
			_		

Color Before: _____ Clarity Before: _____ Texture: _____
Color After: _____ Clarity After: _____ Artifacts: _____

Comments:
CLIENT_ID:__NSWC-16/16-016

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC-16/16-016

Lab Name: AENI MD Contract: MKC

Project No.: 9508353 Site: NSWC Location: CRANE Group:

Matrix: (soil/water) SOIL Lab Sample ID: #004

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EI63.D

Level: (low/med) LOW Date Received: 8/31/95

% Moisture: not dec. 10 Date Analyzed: 9/8/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
79-01-6	Trichloroethene	2.3	J
127-18-4	Tetrachloroethene	5.6	U

FORM I VOA SW846

D-00048

ORGANIC ANALYSIS DATA SHEET

Client: MK Corp
Project: NSWC Crane 4324-009-007-30
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC-16/16-016
Sample:

Matrix: SOIL
Sample: (ml) 2..03
Final Volume: (L) 0.02
(%) Moisture: 10.4
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9508353-004
Lab Name: AENI - MD
Contract: 9508353
Date Sampled: 08/30/95
Date Received: 08/31/95
Date Prepared: 09/07/95
Date Analyzed: 09/12/95
Time Analyzed: 14:18

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.31	U
RDX		0.38	U
TNB		0.26	U
TETRYL		0.28	U
DNB		0.21	U
4-Am-DNT		0.36	U
TNT		0.25	U
2-Am-DNT		0.36	U
NB		0.19	U
2,6-DNT		0.27	U
2,4-DNT		0.21	U
O-NT		0.28	U
P-NT		0.20	U
M-NT		0.30	U

AMERICAN ENVIRONMENTAL NETWORK, INC.
ORGANIC ANALYSIS DATA SHEET
PCBs BY 8080

Contract Number: 9508353
Client Name: MK CORP
Project: NSWC CRANE

CLIENT NUMBER: NSWC-16/16-016

AENI #: 9508353-004

Concentration: Low
Date Sampled : 08/30/95
Date Received : 08/31/95
Date Extract Prepared : 09/05/95
Date Analyzed: 09/06/95
Conc/Dil Factor: 1

GPC Cleanup: Yes[ ] No[X]
Sonication Ext: [ ]
Soxhlett Ext: [X]
Matrix SOIL
Percent Moisture: 10

	ug/Kg		
COMPOUND	CONCENTRATION	DETECTION LIMIT	QUALIFIER
AR1016		22	U
AR1221		22	U
AR1232		22	U
AR1242		22	U
AR1248		22	U
AR1254		43	U
AR1260		43	U

U-Indicates that a compound was analyzed for but not detected at or above the detection limit.

Vi - Volume of extract injected (ul) - 1

Vs - Volume of water extracted (ml) - N/A

Ws - Mass of soil extracted (g) - 30.86

Vt - Volume of total extract (ul) - 10000

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-017

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP___
Lab Code: _____ Case No.: 95083 SAS No.: _____ SDG No.: 508353
Matrix (soil/water): SOIL_ Lab Sample ID: 950835305
Level (low/med): LOW__ Date Received: 08/31/95
% Solids: _86.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_	401	_	N	P_
7440-38-2	Arsenic__	27.8	_		P_
7440-39-3	Barium___	7370	_	N*	P_
7440-41-7	Beryllium	0.14	_		P_
7440-43-9	Cadmium__	31.6	_	N	P_
7440-70-2	Calcium__		_		NR
7440-47-3	Chromium_	142	_	N	P_
7440-48-4	Cobalt___	2.1	_		P_
7440-50-8	Copper___	142000	_	*	P_
7439-89-6	Iron_____		_		NR
7439-92-1	Lead_____	20000	_	*	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__	0.09	_		AV
7440-02-0	Nickel___	361	_	*	P_
7440-09-7	Potassium		_		NR
7782-49-2	Selenium_	7.7	_	N	P_
7440-22-4	Silver___	8.5	_		P_
7440-23-5	Sodium___		_		NR
7440-28-0	Thallium_	10.4	U	N	P_
7440-62-2	Vanadium_	3.9	_		P_
7440-66-6	Zinc_____	156000	_	*	P_
	Cyanide__		_		NR
7440-31-5_	Tin_____	107	_		P_
7439-93-2_	Lithium__	10.4	U		P_

Color Before: _____ Clarity Before: _____ Texture: _____
Color After: _____ Clarity After: _____ Artifacts: _____

Comments:
CLIENT_ID:__NSWC-16/16-017

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC-16/16-017

Lab Name: AENI MD Contract: MKC

Project No.: 9508353 Site: NSWC Location: CRANE Group:

Matrix: (soil/water) SOIL Lab Sample ID: #005

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EI64.D

Level: (low/med) LOW Date Received: 8/31/95

% Moisture: not dec. 14 Date Analyzed: 9/8/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
79-01-6	Trichloroethene	1.8	J
127-18-4	Tetrachloroethene	5.8	U

FORM I VOA SW846

ORGANIC ANALYSIS DATA SHEET

Client: MK Corp
Project: NSWC Crane 4324-009-007-30
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC-16/16-017
Sample:

Matrix: SOIL
Sample: (ml) 2.1
Final Volume: (L) 0.02
(%) Moisture: 14
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9508353-005
Lab Name: AENI - MD
Contract: 9508353
Date Sampled: 08/30/95
Date Received: 08/31/95
Date Prepared: 09/07/95
Date Analyzed: 09/12/95
Time Analyzed: 15:20

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.32	U
RDX		0.38	U
TNB		0.26	U
TETRYL		0.20	U
DNB		0.28	U
4-Am-DNT		0.21	U
TNT		0.36	U
2-Am-DNT		0.25	U
NB		0.36	U
2,6-DNT		0.19	U
2,4-DNT	6.1	0.27	
O-NT		0.21	U
P-NT		0.28	U
M-NT		0.20	U

Form I

D-00053

AMERICAN ENVIRONMENTAL NETWORK, INC.
ORGANIC ANALYSIS DATA SHEET
PCBs BY 8080

Contract Number: 9508353
Client Name: MK CORP
Project: NSWC CRANE

CLIENT NUMBER: NSWC-16/16-017

AENI #: 9508353-005

Concentration: Low
Date Sampled : 08/30/95
Date Received : 08/31/95
Date Extract Prepared : 09/05/95
Date Analyzed: 09/06/95
Conc/Dil Factor: 1

GPC Cleanup: Yes[ ] No[X]
Sonication Ext: [ ]
Soxhlett Ext: [X]
Matrix SOIL
Percent Moisture: 14

	ug/Kg		
COMPOUND	CONCENTRATION	DETECTION LIMIT	QUALIFIER
AR1016		23	U
AR1221		23	U
AR1232		23	U
AR1242		23	U
AR1248		23	U
AR1254		46	U
AR1260		46	U

U-Indicates that a compound was analyzed for but not detected at or above the detection limit.

Vi - Volume of extract injected (ul) - 1

Vs - Volume of water extracted (ml) - N/A

Ws - Mass of soil extracted (g) - 30.08

Vt - Volume of total extract (ul) - 10000

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-018

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP___
Lab Code: _____ Case No.: 95083 SAS No.: _____ SDG No.: 508353
Matrix (soil/water): SOIL_ Lab Sample ID: 950835306
Level (low/med): LOW__ Date Received: 08/31/95
% Solids: _85.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_				NR
7440-36-0	Antimony_	183		N	P_
7440-38-2	Arsenic__	27.5			P_
7440-39-3	Barium___	4520		N*	P_
7440-41-7	Beryllium	0.12			P_
7440-43-9	Cadmium__	23.1		N	P_
7440-70-2	Calcium__				NR
7440-47-3	Chromium_	124		N	P_
7440-48-4	Cobalt___	4.3			P_
7440-50-8	Copper___	67600		*	P_
7439-89-6	Iron_____				NR
7439-92-1	Lead_____	17700		*	P_
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury__	0.12			AV
7440-02-0	Nickel___	213		*	P_
7440-09-7	Potassium				NR
7782-49-2	Selenium_	5.6	U	N	P_
7440-22-4	Silver___	4.9			P_
7440-23-5	Sodium___				NR
7440-28-0	Thallium_	11.1	U	N	P_
7440-62-2	Vanadium_	4.6			P_
7440-66-6	Zinc_____	115000		*	P_
	Cyanide__				NR
7440-31-5_	Tin_____	99.7			P_
7439-93-2_	Lithium__	11.1	U		P_

Color Before: _____ Clarity Before: _____ Texture: _____
Color After: _____ Clarity After: _____ Artifacts: _____

Comments:
CLIENT_ID:__NSWC-16/16-018

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC-16/16-018

Lab Name: AENI MD Contract: MKC

Project No.: 9508353 Site: NSWC Location: CRANE Group:

Matrix: (soil/water) SOIL Lab Sample ID: #006

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EI65.D

Level: (low/med) LOW Date Received: 8/31/95

% Moisture: not dec. 14 Date Analyzed: 9/8/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
79-01-6	Trichloroethene	2.3	J
127-18-4	Tetrachloroethene	5.8	U

FORM I VOA SW846

ORGANIC ANALYSIS DATA SHEET

Client: MK Corp
Project: NSWC Crane 4324-009-007-30
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC-16/16-018
Sample:

Matrix: SOIL
Sample: (ml) 2.0
Final Volume: (L) 0.02
(%) Moisture: 14.2
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9508353-006
Lab Name: AENI - MD
Contract: 9508353
Date Sampled: 08/30/95
Date Received: 08/31/95
Date Prepared: 09/07/95
Date Analyzed: 09/12/95
Time Analyzed: 9:06

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.32	U
RDX		0.39	U
TNB		0.26	U
TETRYL		0.29	U
DNB		0.22	U
4-Am-DNT		0.37	U
TNT		0.25	U
2-Am-DNT		0.37	U
NB		0.20	U
2,6-DNT		0.28	U
2,4-DNT		0.22	U
O-NT		0.29	U
P-NT		0.21	U
M-NT		0.31	U

AMERICAN ENVIRONMENTAL NETWORK, INC.
ORGANIC ANALYSIS DATA SHEET
PCBs BY 8080

Contract Number: 9508353
Client Name: MK CORP
Project: NSWC CRANE

CLIENT NUMBER: NSWC-16/16-018

Concentration: Low
Date Sampled : 08/30/95
Date Received : 08/31/95
Date Extract Prepared : 09/05/95
Date Analyzed: 09/06/95
Conc/Dil Factor: 1

AENI #: 9508353-006

GPC Cleanup: Yes[ ] No[X]
Sonication Ext: [ ]
Soxhlett Ext: [X]
Matrix SOIL
Percent Moisture: 14

	ug/Kg		
COMPOUND	CONCENTRATION	DETECTION LIMIT	QUALIFIER
AR1016		23	U
AR1221		23	U
AR1232		23	U
AR1242		23	U
AR1248		23	U
AR1254		46	U
AR1260		46	U

U-Indicates that a compound was analyzed for but not detected at or above the detection limit.

Vi - Volume of extract injected (ul) - 1

Vs - Volume of water extracted (ml) - N/A

Ws - Mass of soil extracted (g) - 30.15

Vt - Volume of total extract (ul) - 10000

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-019

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP___
Lab Code: _____ Case No.: 95083 SAS No.: _____ SDG No.: 508353
Matrix (soil/water): SOIL_ Lab Sample ID: 950835307
Level (low/med): LOW__ Date Received: 08/31/95
% Solids: _93.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	61.6		N	P
7440-38-2	Arsenic	2.0			P
7440-39-3	Barium	1700		N*	P
7440-41-7	Beryllium	0.55			P
7440-43-9	Cadmium	2.9		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	21.0		N	P
7440-48-4	Cobalt	7.3			P
7440-50-8	Copper	2520		*	P
7439-89-6	Iron				NR
7439-92-1	Lead	922		*	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.65			AV
7440-02-0	Nickel	21.7		*	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.53	U	N	P
7440-22-4	Silver	0.84	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.1	U	N	P
7440-62-2	Vanadium	11.8			P
7440-66-6	Zinc	16200		*	P
	Cyanide				NR
7440-31-5	Tin	21.1	U		P
7439-93-2	Lithium	10.5	U		P

Color Before: _____ Clarity Before: _____ Texture: _____
Color After: _____ Clarity After: _____ Artifacts: _____

Comments:
CLIENT_ID:__NSWC-16/16-019

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC-16/16-019

Lab Name: AENI MD
Contract: MKC
Project No.: 9508353
Site: NSWC
Location: CRANE
Group:
Matrix: (soil/water) SOIL
Lab Sample ID: #007
Sample wt/vol: 5.0 (g/mL) G
Lab File ID: EI66.D
Level: (low/med) LOW
Date Received: 8/31/95
% Moisture: not dec. 7
Date Analyzed: 9/8/95
GC Column: CAP.
ID: 0.53 (mm)
Dilution Factor: 1.0
Soil Extract Volume: 1 (uL)
Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
79-01-6	Trichloroethene	5.4	U
127-18-4	Tetrachloroethene	5.4	U

FORM I VOA

SW846

ORGANIC ANALYSIS DATA SHEET

Client: MK Corp
Project: NSWC Crane 4324-009-007-30
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC-16/16-019
Sample:

Matrix: SOIL
Sample: (ml) 2.0
Final Volume: (L) 0.02
(%) Moisture: 7
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9508353-007
Lab Name: AENI - MD
Contract: 9508353
Date Sampled: 08/30/95
Date Received: 08/31/95
Date Prepared: 09/07/95
Date Analyzed: 09/12/95
Time Analyzed: 10:08

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.30	U
RDX		0.36	U
TNB		0.25	U
TETRYL		0.27	U
DNB		0.20	U
4-Am-DNT		0.34	U
TNT		0.24	U
2-Am-DNT		0.34	U
NB		0.18	U
2,6-DNT		0.26	U
2,4-DNT		0.20	U
O-NT		0.27	U
P-NT		0.19	U
M-NT		0.29	U

Form I

AMERICAN ENVIRONMENTAL NETWORK, INC.
ORGANIC ANALYSIS DATA SHEET
PCBs BY 8080

Contract Number: 9508353
Client Name: MK CORP
Project: NSWC CRANE

CLIENT NUMBER: NSWC-16/16-019

AENI #: 9508353-007

Concentration: Low
Date Sampled : 08/30/95
Date Received : 08/31/95
Date Extract Prepared : 09/05/95
Date Analyzed: 09/07/95
Conc/Dil Factor: 1

GPC Cleanup: Yes[ ] No[X]
Sonication Ext: [ ]
Soxhlett Ext: [X]
Matrix SOIL
Percent Moisture: 7

	ug/Kg		
COMPOUND	CONCENTRATION	DETECTION LIMIT	QUALIFIER
AR1016		21	U
AR1221		21	U
AR1232		21	U
AR1242		21	U
AR1248		21	U
AR1254		43	U
AR1260		43	U

U-Indicates that a compound was analyzed for but not detected at or above the detection limit.

Vi - Volume of extract injected (ul) - 1

Vs - Volume of water extracted (ml) - N/A

Ws - Mass of soil extracted (g) - 30.23

Vt - Volume of total extract (ul) - 10000

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-020

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP___
Lab Code: _____ Case No.: 95083 SAS No.: _____ SDG No.: 508353
Matrix (soil/water): SOIL_ Lab Sample ID: 950835308
Level (low/med): LOW__ Date Received: 08/31/95
% Solids: _94.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_	6.5	_	N	P_
7440-38-2	Arsenic__	1.7	_		P_
7440-39-3	Barium___	191	_	N*	P_
7440-41-7	Beryllium	0.62	_		P_
7440-43-9	Cadmium__	3.6	_	N	P_
7440-70-2	Calcium__		_		NR
7440-47-3	Chromium_	12.1	_	N	P_
7440-48-4	Cobalt___	7.4	_		P_
7440-50-8	Copper___	8740	_	*	P_
7439-89-6	Iron_____		_		NR
7439-92-1	Lead_____	857	_	*	P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__	0.08	U		AV
7440-02-0	Nickel___	19.1	_	*	P_
7440-09-7	Potassium		_		NR
7782-49-2	Selenium_	0.50	U	N	P_
7440-22-4	Silver___	0.81	U		P_
7440-23-5	Sodium___		_		NR
7440-28-0	Thallium_	1.0	U	N	P_
7440-62-2	Vanadium_	10.8	_		P_
7440-66-6	Zinc_____	6910	_	*	P_
	Cyanide__		_		NR
7440-31-5_	Tin_____	20.2	U		P_
7439-93-2_	Lithium__	10.1	U		P_
			_		
			_		
			_		
			_		
			_		
			_		
			_		

Color Before: _____ Clarity Before: _____ Texture: _____
Color After: _____ Clarity After: _____ Artifacts: _____

Comments:
CLIENT_ID:__NSWC-16/16-020

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
MSWC-16/16-020

Lab Name: AENI MD
Contract: MKC
Project No.: 9508353
Site: NSWC
Location: CRANE
Group:
Matrix: (soil/water) SOIL
Lab Sample ID: #008
Sample wt/vol: 5.0 (g/mL) G
Lab File ID: EI67.D
Level: (low/med) LOW
Date Received: 8/31/95
% Moisture: not dec. 6
Date Analyzed: 9/8/95
GC Column: CAP.
ID: 0.53 (mm)
Dilution Factor: 1.0
Soil Extract Volume: 1 (uL)
Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
79-01-6	Trichloroethene	5.3	U
127-18-4	Tetrachloroethene	5.3	U

FORM I VOA

SW846

D-00064

ORGANIC ANALYSIS DATA SHEET

Client: MK Corp
Project: NSWC Crane 4324-009-007-30
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC-16/16-020
Sample:

Matrix: SOIL
Sample: (ml) 2.0
Final Volume: (L) 0.02
(%) Moisture: 5.6
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9508353-008
Lab Name: AENI - MD
Contract: 9508353
Date Sampled: 08/30/95
Date Received: 08/31/95
Date Prepared: 09/07/95
Date Analyzed: 09/12/95
Time Analyzed: 16:22

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.29	U
RDX		0.35	U
TNB		0.24	U
TETRYL		0.26	U
DNB		0.20	U
4-Am-DNT		0.33	U
TNT		0.23	U
2-Am-DNT		0.33	U
NB		0.18	U
2,6-DNT		0.25	U
2,4-DNT		0.20	U
O-NT		0.26	U
P-NT		0.19	U
M-NT		0.28	U

Form I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 022

Lab Name: AENI

Lab Code: _____ Case No.: MKC70 Contract: 9510147

Matrix (soil/water): SOIL SAS No.: _____ SDG No.: 16/16

Level (low/med): LOW Lab Sample ID: 951014702

% Solids: 79.5 Date Received: 10/14/95

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	2.4	U		P
7440-38-2	Arsenic	11.5		N	P
7440-39-3	Barium	187			P
7440-41-7	Beryllium	0.72			P
7440-43-9	Cadmium	8.0			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	29.3		N	P
7440-48-4	Cobalt	11.2			P
7440-50-8	Copper	48.5		*	P
7439-89-6	Iron				NR
7439-92-1	Lead	83.0			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.09	U		AV
7440-02-0	Nickel	16.1		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.60	U	N	P
7440-22-4	Silver	0.96	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	12.0	U	N	P
7440-62-2	Vanadium	52.2			P
7440-66-6	Zinc	937		E	P
	Cyanide				NR
7440-31-5	Tin	24.0	U		P
7439-93-2	Lithium	18.0			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

CLIENT_ID: NSWC_16/16_022

FORM I - IN

ILM02.1

D-00067

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 022

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ335.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 21 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	14	
67-64-1	Acetone	18	J
75-05-8	Acetonitrile	6.3	U
107-13-1	Acrylonitrile	1300	U
107-02-8	Acrolein	1300	U
75-69-4	Trichlorofluoromethane	6.3	U
75-15-0	Carbon Disulfide	6.3	U
75-35-4	1,1-Dichloroethene	6.3	U
75-34-4	1,1-Dichloroethane	6.3	U
540-59-0	trans-1,2-Dichloroethene	6.3	U
67-66-3	Chloroform	6.3	U
107-06-2	1,2-Dichloroethane	6.3	U
75-71-8	Dichlorodifluoromethane	6.3	U
74-88-4	Iodomethane	6.3	U
107-12-0	Propionitrile	6.3	U
107-05-1	Allyl chloride	130	U
78-93-3	2-Butanone	130	U
71-55-6	1,1,1-Trichloroethane	6.3	U
56-23-5	Carbon Tetrachloride	6.3	U
108-05-4	Vinyl Acetate	6.3	U
75-27-4	Bromodichloromethane	6.3	U
78-87-5	1,2-Dichloropropane	6.3	U
10061-01-5	cis-1,3-Dichloropropene	6.3	U
79-01-6	Trichloroethene	6.3	U
71-43-2	Benzene	6.3	U
124-48-1	Dibromochloromethane	6.3	U
10061-02-6	trans-1,3-Dichloropropene	6.3	U
79-00-5	1,1,2-Trichloroethane	6.3	U
75-25-2	Bromoform	6.3	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 022

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ335.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 21 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		6.3	U
74-95-3	Dibromomethane		6.3	U
106-93-4	1,2-Dibromoethane (EDB)		6.3	U
108-10-1	4-Methyl-2-Pentanone		63	U
591-78-6	2-Hexanone		63	U
127-18-4	Tetrachloroethene		8.2	
79-34-5	1,1,2,2-Tetrachloroethane		6.3	U
108-88-3	Toluene		6.3	U
108-90-7	Chlorobenzene		6.3	U
100-41-4	Ethylbenzene		6.3	U
100-42-5	Styrene		6.3	U
108-38-3	m + p-Xylene		6.3	U
95-47-6	o-Xylene		6.3	U
80-62-6	Methyl methacrylate		6.3	U
630-20-6	1,1,1,2-Tetrachloroethane		6.3	U
96-18-4	1,2,3-Trichloropropane		6.3	U
110-57-6	trans-1,4-Dichloro-2-butene		31	U
97-63-2	Ethyl methacrylate		6.3	U
76-01-7	Pentachloroethane		6.3	U
96-12-8	1,2-Dibromo-3-chloropropane		6.3	U
78-83-1	Isobutyl Alcohol		6.3	U
126-99-8	Chloroprene	(TIC)	6.3	UZ
	3-Chloroprene	(TIC)	6.3	U
123-91-1	1,4-Dioxane	(TIC)	1300	U
Methylene Chloride - Dichloromethane				
Methyl ethyl ketone - 2-Butanone				
Chloroprene - 2-Chloro-1,3-butadiene				
Propionitrile - Ethyl Cyanide				

FORM I VOA 8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 022
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 20.5
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510147-002
Lab Name: AENI
Contract: 9510147
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Prepared: 10/19/95
Date Analyzed: 10/20/95
Time Analyzed: 7:09

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.34	U
RDX		0.42	U
TNB		0.28	U
TETRYL		0.31	U
DNB		0.23	U
TNT		0.27	U
2,6-DNT		0.29	U
2,4-DNT		0.23	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510147
Project Name:——— CRANE NSWC
Client Name:——— MK CORP

Sample Number
NSWC 16/16 022

AENI # 9510147-002

Concentration:——— Low
Date Sampled:——— 10/13/95
Date Received:——— 10/14/95
Date Ext Prepared:— 10/18/95
Date Analyzed:——— 10/20/95
Conc/Dil Factor:——— 1
Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	20.5	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		2.1	U
319-85-7	beta-BHC		2.1	U
319-86-8	delta-BHC		2.1	U
58-89-9	gamma-BHC (Lindane)		4.2	U
75-44-8	Heptachlor		2.1	U
309-00-2	Aldrin		2.1	U
1024-57-3	Heptachlor epoxide		2.1	U
959-98-8	Endosulfan I		2.1	U
60-57-1	Dieldrin		4.2	U
75-55-9	4, 4'-DDE		4.2	U
72-20-8	Endrin		4.2	U
33213-65-9	Endosulfan II		4.2	U
72-54-8	4, 4'-DDD		4.2	U
1031-07-8	Endosulfan Sulfate		4.2	U
50-29-3	4, 4'-DDT		4.2	U
72-43-5	Methoxychlor		21	U
53494-70-5	Endrin Ketone		4.2	U
7421-36-3	Endrin aldehyde		4.2	U
57-74-9	Chlordane		42	U
8001-35-2	Toxaphene		210	U
12674-11-2	Aroclor-1016		42	U
11104-28-2	Aroclor-1221		84	U
11141-16-5	Aroclor-1232		42	U
53469-21-9	Aroclor-1242		42	U
12672-29-6	Aroclor-1248		42	U
11097-69-1	Aroclor-1254		42	U
11096-82-5	Aroclor-1260		42	U
510-15-6	Chlorobenzilate		84	U
2303-16-4	Diallate		419	U
465-73-6	Isodrin		10	U
143-50-0	Kepone		42	U
82-68-8	Pentachloronitrobenzene		8.4	U

Vi - Volume of extract injected (ul) - _____ 5
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.04
Vt - Volume of total extract (ul) - _____ 10,000

FORM I

D-00071

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 023

Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951014703

Level (low/med): LOW Date Received: 10/14/95

% Solids: 76.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	146			P
7440-38-2	Arsenic	9.3		N	P
7440-39-3	Barium	5140			P
7440-41-7	Beryllium	0.43			P
7440-43-9	Cadmium	52.6			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	33.1		N	P
7440-48-4	Cobalt	2.0			P
7440-50-8	Copper	12200		*	P
7439-89-6	Iron				NR
7439-92-1	Lead	19000			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	1.3			AV
7440-02-0	Nickel	41.6		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.61	U	N	P
7440-22-4	Silver	1.3			P
7440-23-5	Sodium				NR
7440-28-0	Thallium	12.1	U	N	P
7440-62-2	Vanadium	21.7			P
7440-66-6	Zinc	20100		E	P
	Cyanide				NR
7440-31-5	Tin	34.0			P
7439-93-2	Lithium	12.1	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_023

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 023

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #003

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ336.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 23 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	22	
67-64-1	Acetone	130	U
75-05-8	Acetonitrile	6.5	U
107-13-1	Acrylonitrile	1300	U
107-02-8	Acrolein	1300	U
75-69-4	Trichlorofluoromethane	6.5	U
75-15-0	Carbon Disulfide	6.5	U
75-35-4	1,1-Dichloroethene	6.5	U
75-34-4	1,1-Dichloroethane	6.5	U
540-59-0	trans-1,2-Dichloroethene	6.5	U
67-66-3	Chloroform	6.5	U
107-06-2	1,2-Dichloroethane	6.5	U
75-71-8	Dichlorodifluoromethane	6.5	U
74-88-4	Iodomethane	6.5	U
107-12-0	Propionitrile	6.5	U
107-05-1	Allyl chloride	130	U
78-93-3	2-Butanone	130	U
71-55-6	1,1,1-Trichloroethane	6.5	U
56-23-5	Carbon Tetrachloride	6.5	U
108-05-4	Vinyl Acetate	6.5	U
75-27-4	Bromodichloromethane	6.5	U
78-87-5	1,2-Dichloropropane	6.5	U
10061-01-5	cis-1,3-Dichloropropene	6.5	U
79-01-6	Trichloroethene	6.5	U
71-43-2	Benzene	6.5	U
124-48-1	Dibromochloromethane	6.5	U
10061-02-6	trans-1,3-Dichloropropene	6.5	U
79-00-5	1,1,2-Trichloroethane	6.5	U
75-25-2	Bromoform	6.5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 023

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #003

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ336.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 23 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	6.5	U
74-95-3	Dibromomethane	6.5	U
106-93-4	1,2-Dibromoethane (EDB)	6.5	U
108-10-1	4-Methyl-2-Pentanone	65	U
591-78-6	2-Hexanone	65	U
127-18-4	Tetrachloroethene	13	
79-34-5	1,1,2,2-Tetrachloroethane	6.5	U
108-88-3	Toluene	6.5	U
108-90-7	Chlorobenzene	6.5	U
100-41-4	Ethylbenzene	6.5	U
100-42-5	Styrene	6.5	U
108-38-3	m + p-Xylene	6.5	U
95-47-6	o-Xylene	6.5	U
80-62-6	Methyl methacrylate	6.5	U
630-20-6	1,1,1,2-Tetrachloroethane	6.5	U
96-18-4	1,2,3-Trichloropropane	6.5	U
110-57-6	trans-1,4-Dichloro-2-butene	33	U
97-63-2	Ethyl methacrylate	6.5	U
76-01-7	Pentachloroethane	6.5	U
96-12-8	1,2-Dibromo-3-chloropropane	6.5	U
78-83-1	Isobutyl Alcohol	6.5	U
126-99-8	Chloroprene (TIC)	6.5	UZ
	3-Chloroprene (TIC)	6.5	U
123-91-1	1,4-Dioxane (TIC)	1300	U
Methylene Chloride - Dichloromethane			
Methyl ethyl ketone - 2-Butanone			
Chloroprene - 2-Chloro-1,3-butadiene			
Propionitrile - Ethyl Cyanide			

FORM I VOA 8260/Appendix IX

D- 00074

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 023
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 23.2
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510147-003
Lab Name: AENI
Contract: 9510147
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Prepared: 10/19/95
Date Analyzed: 10/20/95
Time Analyzed: 7:57

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.35	U
RDX		0.43	U
TNB		0.29	U
TETRYL		0.31	U
DNB		0.24	U
TNT		0.28	U
2,6-DNT		0.30	U
2,4-DNT		0.24	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510147
Project Name:——— CRANE NSWC
Client Name:——— MK CORP

Sample Number
NSWC 16/16 023

AENI # 9510147-003

Concentration:——— Low
Date Sampled:——— 10/13/95
Date Received:——— 10/14/95
Date Ext Prepared:——— 10/18/95
Date Analyzed:——— 10/20/95
Conc/Dil Factor:——— 5
Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	23.2	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		11	U
319-85-7	beta-BHC		11	U
319-86-8	delta-BHC		11	U
58-89-9	gamma-BHC (Lindane)		21	U
75-44-8	Heptachlor		11	U
309-00-2	Aldrin		11	U
1024-57-3	Heptachlor epoxide		11	U
959-98-8	Endosulfan I		11	U
60-57-1	Dieldrin		21	U
75-55-9	4, 4'-DDE		21	U
72-20-8	Endrin		21	U
33213-65-9	Endosulfan II		21	U
72-54-8	4, 4'-DDD		21	U
1031-07-8	Endosulfan Sulfate		21	U
50-29-3	4, 4'-DDT		21	U
72-43-5	Methoxychlor		110	U
53494-70-5	Endrin Ketone		21	U
7421-36-3	Endrin aldehyde		21	U
57-74-9	Chlordane		210	U
8001-35-2	Toxaphene		1100	U
12674-11-2	Aroclor-1016		210	U
11104-28-2	Aroclor-1221		420	U
11141-16-5	Aroclor-1232		210	U
53469-21-9	Aroclor-1242		210	U
12672-29-6	Aroclor-1248		210	U
11097-69-1	Aroclor-1254		210	U
11096-82-5	Aroclor-1260		210	U
510-15-6	Chlorobenzilate		424	U
2303-16-4	Diallate		2121	U
465-73-6	Isodrin		53	U
143-50-0	Kepone		212	U
82-68-8	Pentachloronitrobenzene		42	U

Vi - Volume of extract injected (ul) - _____ 5
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.7
Vt - Volume of total extract (ul) - _____ 10,000

FORM I

D- 00076

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 024

Lab Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951014704

Level (low/med): LOW Date Received: 10/14/95

% Solids: 87.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	140			P
7440-38-2	Arsenic	8.0		N	P
7440-39-3	Barium	4550			P
7440-41-7	Beryllium	0.39			P
7440-43-9	Cadmium	52.1			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	30.0		N	P
7440-48-4	Cobalt	5.4			P
7440-50-8	Copper	5650		*	P
7439-89-6	Iron				NR
7439-92-1	Lead	24600			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.58			AV
7440-02-0	Nickel	37.1		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.53	U	N	P
7440-22-4	Silver	0.86			P
7440-23-5	Sodium				NR
7440-28-0	Thallium	10.6	U	N	P
7440-62-2	Vanadium	11.4			P
7440-66-6	Zinc	18700		E	P
	Cyanide				NR
7440-31-5	Tin	27.1			P
7439-93-2	Lithium	10.6	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_024

FORM I - IN ILM02.1

D-00077

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 024

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #004

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ337.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 12 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	18	
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.7	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.7	U
75-15-0	Carbon Disulfide	5.7	U
75-35-4	1,1-Dichloroethene	5.7	U
75-34-4	1,1-Dichloroethane	5.7	U
540-59-0	trans-1,2-Dichloroethene	5.7	U
67-66-3	Chloroform	5.7	U
107-06-2	1,2-Dichloroethane	5.7	U
75-71-8	Dichlorodifluoromethane	5.7	U
74-88-4	Iodomethane	5.7	U
107-12-0	Propionitrile	5.7	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.7	U
56-23-5	Carbon Tetrachloride	5.7	U
108-05-4	Vinyl Acetate	5.7	U
75-27-4	Bromodichloromethane	5.7	U
78-87-5	1,2-Dichloropropane	5.7	U
10061-01-5	cis-1,3-Dichloropropene	5.7	U
79-01-6	Trichloroethene	5.7	U
71-43-2	Benzene	5.7	U
124-48-1	Dibromochloromethane	5.7	U
10061-02-6	trans-1,3-Dichloropropene	5.7	U
79-00-5	1,1,2-Trichloroethane	5.7	U
75-25-2	Bromoform	5.7	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16 024

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #004

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ337.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 12 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	5.7	U
74-95-3	Dibromomethane	5.7	U
106-93-4	1,2-Dibromoethane (EDB)	5.7	U
108-10-1	4-Methyl-2-Pentanone	57	U
591-78-6	2-Hexanone	57	U
127-18-4	Tetrachloroethene	22	
79-34-5	1,1,2,2-Tetrachloroethane	5.7	U
108-88-3	Toluene	5.7	U
108-90-7	Chlorobenzene	5.7	U
100-41-4	Ethylbenzene	5.7	U
100-42-5	Styrene	5.7	U
108-38-3	m + p-Xylene	5.7	U
95-47-6	o-Xylene	5.7	U
80-62-6	Methyl methacrylate	5.7	U
630-20-6	1,1,1,2-Tetrachloroethane	5.7	U
96-18-4	1,2,3-Trichloropropane	5.7	U
110-57-6	trans-1,4-Dichloro-2-butene	29	U
97-63-2	Ethyl methacrylate	5.7	U
76-01-7	Pentachloroethane	5.7	U
96-12-8	1,2-Dibromo-3-chloropropane	5.7	U
78-83-1	Isobutyl Alcohol	5.7	U
126-99-8	Chloroprene (TIC)	5.7	UZ
	3-Chloroprene (TIC)	5.7	U
123-91-1	1,4-Dioxane (TIC)	1100	U
Methylene Chloride - Dichloromethane			
Methyl ethyl ketone - 2-Butanone			
Chloroprene - 2-Chloro-1,3-butadiene			
Propionitrile - Ethyl Cyanide			

FORM I VOA 8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 024
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 12.3
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510147-004
Lab Name: AENI
Contract: 9510147
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Prepared: 10/19/95
Date Analyzed: 10/20/95
Time Analyzed: 8:46

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.31	U
RDX		0.38	U
TNB		0.26	U
TETRYL		0.28	U
DNB		0.21	U
TNT		0.24	U
2,6-DNT		0.27	U
2,4-DNT		0.21	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510147
Project Name:——— CRANE NSWC
Client Name:——— MK CORP

Sample Number
NSWC 16/16 024

AENI # 9510147-004

Concentration:——— Low
Date Sampled:——— 10/13/95
Date Received:——— 10/14/95
Date Ext Prepared:— 10/18/95
Date Analyzed:——— 10/20/95
Conc/Dil Factor:——— 5
Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	12.3	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		9.1	U
319-85-7	beta-BHC		9.1	U
319-86-8	delta-BHC		9.1	U
58-89-9	gamma-BHC (Lindane)		18	U
75-44-8	Heptachlor		9.1	U
309-00-2	Aldrin		9.1	U
1024-57-3	Heptachlor epoxide		9.1	U
959-98-8	Endosulfan I		9.1	U
60-57-1	Dieldrin		18	U
75-55-9	4, 4'-DDE		18	U
72-20-8	Endrin		18	U
33213-65-9	Endosulfan II		18	U
72-54-8	4, 4'-DDD		18	U
1031-07-8	Endosulfan Sulfate		18	U
50-29-3	4, 4'-DDT		18	U
72-43-5	Methoxychlor		91	U
53494-70-5	Endrin Ketone		18	U
7421-36-3	Endrin aldehyde		18	U
57-74-9	Chlordane		180	U
8001-35-2	Toxaphene		910	U
12674-11-2	Aroclor-1016		180	U
11104-28-2	Aroclor-1221		370	U
11141-16-5	Aroclor-1232		180	U
53469-21-9	Aroclor-1242		180	U
12672-29-6	Aroclor-1248		180	U
11097-69-1	Aroclor-1254		180	U
11096-82-5	Aroclor-1260		180	U
510-15-6	Chlorobenzilate		365	U
2303-16-4	Diallate		1826	U
465-73-6	Isodrin		46	U
143-50-0	Kepone		183	U
82-68-8	Pentachloronitrobenzene		37	U

Vi - Volume of extract injected (ul) - _____ 5
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 31.22
Vt - Volume of total extract (ul) - _____ 10,000

FORM I

D-00081

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 025

Lab Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951014705

Level (low/med): LOW Date Received: 10/14/95

% Solids: 87.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	669			P
7440-38-2	Arsenic	16.2		N	P
7440-39-3	Barium	8200			P
7440-41-7	Beryllium	0.23			P
7440-43-9	Cadmium	38.1			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	60.9		N	P
7440-48-4	Cobalt	1.2	U		P
7440-50-8	Copper	51300		*	P
7439-89-6	Iron				NR
7439-92-1	Lead	56600			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.41			AV
7440-02-0	Nickel	93.2		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.55	U	N	P
7440-22-4	Silver	2.1			P
7440-23-5	Sodium				NR
7440-28-0	Thallium	22.0	U	N	P
7440-62-2	Vanadium	7.5			P
7440-66-6	Zinc	47800		E	P
	Cyanide				NR
7440-31-5	Tin	65.6			P
7439-93-2	Lithium	11.0	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_025

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 025

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #005

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ338.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 13 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	7.9	
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.7	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.7	U
75-15-0	Carbon Disulfide	5.7	U
75-35-4	1,1-Dichloroethene	5.7	U
75-34-4	1,1-Dichloroethane	5.7	U
540-59-0	trans-1,2-Dichloroethene	5.7	U
67-66-3	Chloroform	5.7	U
107-06-2	1,2-Dichloroethane	5.7	U
75-71-8	Dichlorodifluoromethane	5.7	U
74-88-4	Iodomethane	5.7	U
107-12-0	Propionitrile	5.7	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.7	U
56-23-5	Carbon Tetrachloride	5.7	U
108-05-4	Vinyl Acetate	5.7	U
75-27-4	Bromodichloromethane	5.7	U
78-87-5	1,2-Dichloropropane	5.7	U
10061-01-5	cis-1,3-Dichloropropene	5.7	U
79-01-6	Trichloroethene	5.7	U
71-43-2	Benzene	5.7	U
124-48-1	Dibromochloromethane	5.7	U
10061-02-6	trans-1,3-Dichloropropene	5.7	U
79-00-5	1,1,2-Trichloroethane	5.7	U
75-25-2	Bromoform	5.7	U

FORM I VOA 8260/Appendix IX

D-00083

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 025

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #005

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ338.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 13 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	5.7	U
74-95-3	Dibromomethane	5.7	U
106-93-4	1,2-Dibromoethane (EDB)	5.7	U
108-10-1	4-Methyl-2-Pentanone	57	U
591-78-6	2-Hexanone	57	U
127-18-4	Tetrachloroethene	7.6	
79-34-5	1,1,2,2-Tetrachloroethane	5.7	U
108-88-3	Toluene	5.7	U
108-90-7	Chlorobenzene	5.7	U
100-41-4	Ethylbenzene	5.7	U
100-42-5	Styrene	5.7	U
108-38-3	m + p-Xylene	5.7	U
95-47-6	o-Xylene	5.7	U
80-62-6	Methyl methacrylate	5.7	U
630-20-6	1,1,1,2-Tetrachloroethane	5.7	U
96-18-4	1,2,3-Trichloropropane	5.7	U
110-57-6	trans-1,4-Dichloro-2-butene	29	U
97-63-2	Ethyl methacrylate	5.7	U
76-01-7	Pentachloroethane	5.7	U
96-12-8	1,2-Dibromo-3-chloropropane	5.7	U
78-83-1	Isobutyl Alcohol	5.7	U
126-99-8	Chloroprene (TIC)	5.7	UZ
	3-Chloroprene (TIC)	5.7	U
123-91-1	1,4-Dioxane (TIC)	1100	U
	Methylene Chloride - Dichloromethane		
	Methyl ethyl ketone - 2-Butanone		
	Chloroprene - 2-Chloro-1,3-butadiene		
	Propionitrile - Ethyl Cyanide		

FORM I VOA 8260/Appendix IX

D-00084

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 025
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 12.6
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510147-005
Lab Name: AENI
Contract: 9510147
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Prepared: 10/19/95
Date Analyzed: 10/20/95
Time Analyzed: 9:34

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.32	U
RDX		0.39	U
TNB		0.26	U
TETRYL		0.28	U
DNB		0.22	U
TNT		0.25	U
2,6-DNT		0.27	U
2,4-DNT		0.22	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510147

Project Name:——— CRANE NSWC

Client Name:——— MK CORP

Sample Number
NSWC 16/16 025

AENI # 9510147-005

Concentration:——— Low

Date Sampled:——— 10/13/95

Date Received:——— 10/14/95

Date Ext Prepared:—— 10/18/95

Date Analyzed:——— 10/20/95

Conc/Dil Factor:——— 5

Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	12.6	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		9.2	U
319-85-7	beta-BHC		9.2	U
319-86-8	delta-BHC		9.2	U
58-89-9	gamma-BHC (Lindane)		18	U
75-44-8	Heptachlor		9.2	U
309-00-2	Aldrin		9.2	U
1024-57-3	Heptachlor epoxide		9.2	U
959-98-8	Endosulfan I		9.2	U
60-57-1	Dieldrin		18	U
75-55-9	4, 4'-DDE		18	U
72-20-8	Endrin		18	U
33213-65-9	Endosulfan II		18	U
72-54-8	4, 4'-DDD		18	U
1031-07-8	Endosulfan Sulfate		18	U
50-29-3	4, 4'-DDT		18	U
72-43-5	Methoxychlor		92	U
53494-70-5	Endrin Ketone		18	U
7421-36-3	Endrin aldehyde		18	U
57-74-9	Chlordane		180	U
8001-35-2	Toxaphene		920	U
12674-11-2	Aroclor-1016		180	U
11104-28-2	Aroclor-1221		370	U
11141-16-5	Aroclor-1232		180	U
53469-21-9	Aroclor-1242		180	U
12672-29-6	Aroclor-1248		180	U
11097-69-1	Aroclor-1254		180	U
11096-82-5	Aroclor-1260		180	U
510-15-6	Chlorobenzilate		369	U
2303-16-4	Diallate		1845	U
465-73-6	Isodrin		46	U
143-50-0	Kepone		185	U
82-68-8	Pentachloronitrobenzene		37	U

Vi - Volume of extract injected (ul) - _____ 5

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 31

Vt - Volume of total extract (ul) - _____ 10,000

FORM I

D-00086

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 026

Lab Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951014706

Level (low/med): LOW Date Received: 10/14/95

% Solids: 87.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	432			P
7440-38-2	Arsenic	11.2		N	P
7440-39-3	Barium	6880			P
7440-41-7	Beryllium	0.26			P
7440-43-9	Cadmium	162			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	46.0		N	P
7440-48-4	Cobalt	1.5			P
7440-50-8	Copper	9260		*	P
7439-89-6	Iron				NR
7439-92-1	Lead	33900			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.83			AV
7440-02-0	Nickel	59.9		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.53	U	N	P
7440-22-4	Silver	3.0			P
7440-23-5	Sodium				NR
7440-28-0	Thallium	52.7	U	N	P
7440-62-2	Vanadium	9.5			P
7440-66-6	Zinc	35300		E	P
	Cyanide				NR
7440-31-5	Tin	63.8			P
7439-93-2	Lithium	10.5	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_026

FORM I - IN ILM02.1

D-00087

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 026

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #006

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ339.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 13 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	12	
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.7	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.7	U
75-15-0	Carbon Disulfide	5.7	U
75-35-4	1,1-Dichloroethene	5.7	U
75-34-4	1,1-Dichloroethane	5.7	U
540-59-0	trans-1,2-Dichloroethene	5.7	U
67-66-3	Chloroform	5.7	U
107-06-2	1,2-Dichloroethane	5.7	U
75-71-8	Dichlorodifluoromethane	5.7	U
74-88-4	Iodomethane	5.7	U
107-12-0	Propionitrile	5.7	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.7	U
56-23-5	Carbon Tetrachloride	5.7	U
108-05-4	Vinyl Acetate	5.7	U
75-27-4	Bromodichloromethane	5.7	U
78-87-5	1,2-Dichloropropane	5.7	U
10061-01-5	cis-1,3-Dichloropropene	5.7	U
79-01-6	Trichloroethene	5.7	U
71-43-2	Benzene	5.7	U
124-48-1	Dibromochloromethane	5.7	U
10061-02-6	trans-1,3-Dichloropropene	5.7	U
79-00-5	1,1,2-Trichloroethane	5.7	U
75-25-2	Bromoform	5.7	U

FORM I VOA 8260/Appendix IX

D-00088

SAMPLE NO.

NSWC 16/16 026

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #006

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ339.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 13 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	5.7	U
74-95-3	Dibromomethane	5.7	U
106-93-4	1,2-Dibromoethane (EDB)	5.7	U
108-10-1	4-Methyl-2-Pentanone	57	U
591-78-6	2-Hexanone	57	U
127-18-4	Tetrachloroethene	8.7	
79-34-5	1,1,2,2-Tetrachloroethane	5.7	U
108-88-3	Toluene	5.7	U
108-90-7	Chlorobenzene	5.7	U
100-41-4	Ethylbenzene	5.7	U
100-42-5	Styrene	5.7	U
108-38-3	m + p-Xylene	5.7	U
95-47-6	o-Xylene	5.7	U
80-62-6	Methyl methacrylate	5.7	U
630-20-6	1,1,1,2-Tetrachloroethane	5.7	U
96-18-4	1,2,3-Trichloropropane	5.7	U
110-57-6	trans-1,4-Dichloro-2-butene	29	U
97-63-2	Ethyl methacrylate	5.7	U
76-01-7	Pentachloroethane	5.7	U
96-12-8	1,2-Dibromo-3-chloropropane	5.7	U
78-83-1	Isobutyl Alcohol	5.7	U
126-99-8	Chloroprene (TIC)	5.7	UZ
	3-Chloroprene (TIC)	5.7	U
123-91-1	1,4-Dioxane (TIC)	1100	U
	Methylene Chloride - Dichloromethane		
	Methyl ethyl ketone - 2-Butanone		
	Chloroprene - 2-Chloro-1,3-butadiene		
	Propionitrile - Ethyl Cyanide		

FORM I VOA 8260/Appendix IX

D-00089

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 026
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 13
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510147-006
Lab Name: AENI
Contract: 9510147
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Prepared: 10/19/95
Date Analyzed: 10/20/95
Time Analyzed: 10:22

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.31	U
RDX		0.38	U
TNB		0.26	U
TETRYL		0.28	U
DNB		0.21	U
TNT		0.25	U
2,6-DNT		0.27	U
2,4-DNT	210	2.1	

The value for 2,4-DNT is taken from a 10x dilution.

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510147
Project Name:——— CRANE NSWC
Client Name:——— MK CORP

Sample Number
NSWC 16/16 026

AENI # 9510147-006

Concentration:——— Low
Date Sampled:——— 10/13/95
Date Received:——— 10/14/95
Date Ext Prepared:——— 10/16/95
Date Analyzed:——— 10/20/95
Conc/Dil Factor:——— 5
Method: ——— 8080

GPC Cleanup | | Yes | X | No
Separatory Funnel Extraction | | Yes
Continuous Liquid - Liquid Extraction | | Yes
Percent Moisture 13
Matrix SOIL

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		9.4	U
319-85-7	beta-BHC		9.4	U
319-86-8	delta-BHC		9.4	U
58-89-9	gamma-BHC (Lindane)		9.4	U
75-44-8	Heptachlor		19	U
309-00-2	Aldrin		9.4	U
1024-57-3	Heptachlor epoxide		9.4	U
959-98-8	Endosulfan I		9.4	U
60-57-1	Dieldrin		9.4	U
75-55-9	4, 4'-DDE		19	U
72-20-8	Endrin		19	U
33213-65-9	Endosulfan II		19	U
72-54-8	4, 4'-DDD		19	U
1031-07-8	Endosulfan Sulfate		19	U
50-29-3	4, 4'-DDT		19	U
72-43-5	Methoxychlor		19	U
53494-70-5	Endrin Ketone		94	U
7421-36-3	Endrin aldehyde		19	U
57-74-9	Chlordane		19	U
8001-35-2	Toxaphene		190	U
12674-11-2	Aroclor-1016		940	U
11104-28-2	Aroclor-1221		190	U
11141-16-5	Aroclor-1232		380	U
53469-21-9	Aroclor-1242		190	U
12672-29-6	Aroclor-1248		190	U
11097-69-1	Aroclor-1254		190	U
11096-82-5	Aroclor-1260		190	U
510-15-6	Chlorobenzilate		190	U
2303-16-4	Diallate		375	U
465-73-6	Isodrin		1877	U
143-50-0	Kepone		47	U
82-68-8	Pentachloronitrobenzene		188	U
			38	U

Vi - Volume of extract injected (ul) - _____ 5
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.62
Vt - Volume of total extract (ul) - _____ 10,000

FORM I

D-00091

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 027

Lab Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951014707

Level (low/med): LOW Date Received: 10/14/95

% Solids: 86.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony				NR
7440-38-2	Arsenic	165			P
7440-39-3	Barium	6.6		N	P
7440-41-7	Beryllium	7170			P
7440-43-9	Cadmium	0.33			P
7440-70-2	Calcium	37.8			P
7440-47-3	Chromium				NR
7440-48-4	Cobalt	28.9		N	P
7440-50-8	Copper	9.1			P
7439-89-6	Iron	9760		*	P
7439-92-1	Lead				NR
7439-95-4	Magnesium	29300			P
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel	0.52			AV
7440-09-7	Potassium	56.5		N	P
7782-49-2	Selenium				NR
7440-22-4	Silver	0.57	U	N	P
7440-23-5	Sodium	1.3			P
7440-28-0	Thallium				NR
7440-62-2	Vanadium	11.5	U	N	P
7440-66-6	Zinc	8.1			P
	Cyanide	17500		E	P
7440-31-5	Tin				NR
7439-93-2	Lithium	24.5			P
		11.5	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_027

FORM I - IN ILM02.1

D-00092

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 027

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #007

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ340.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 14 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	13	
67-64-1	Acetone	12	J
75-05-8	Acetonitrile	5.8	U
107-13-1	Acrylonitrile	1200	U
107-02-8	Acrolein	1200	U
75-69-4	Trichlorofluoromethane	5.8	U
75-15-0	Carbon Disulfide	5.8	U
75-35-4	1,1-Dichloroethene	5.8	U
75-34-4	1,1-Dichloroethane	5.8	U
540-59-0	trans-1,2-Dichloroethene	5.8	U
67-66-3	Chloroform	5.8	U
107-06-2	1,2-Dichloroethane	5.8	U
75-71-8	Dichlorodifluoromethane	5.8	U
74-88-4	Iodomethane	5.8	U
107-12-0	Propionitrile	5.8	U
107-05-1	Allyl chloride	120	U
78-93-3	2-Butanone	120	U
71-55-6	1,1,1-Trichloroethane	5.8	U
56-23-5	Carbon Tetrachloride	5.8	U
108-05-4	Vinyl Acetate	5.8	U
75-27-4	Bromodichloromethane	5.8	U
78-87-5	1,2-Dichloropropane	5.8	U
10061-01-5	cis-1,3-Dichloropropene	5.8	U
79-01-6	Trichloroethene	5.8	U
71-43-2	Benzene	5.8	U
124-48-1	Dibromochloromethane	5.8	U
10061-02-6	trans-1,3-Dichloropropene	5.8	U
79-00-5	1,1,2-Trichloroethane	5.8	U
75-25-2	Bromoform	5.8	U

FORM I VOA 8260/Appendix IX

D-00093

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 027

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #007

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ340.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 14 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.8	U
74-95-3	Dibromomethane		5.8	U
106-93-4	1,2-Dibromoethane (EDB)		5.8	U
108-10-1	4-Methyl-2-Pentanone		58	U
591-78-6	2-Hexanone		58	U
127-18-4	Tetrachloroethene		6.1	
79-34-5	1,1,2,2-Tetrachloroethane		5.8	U
108-88-3	Toluene		5.8	U
108-90-7	Chlorobenzene		5.8	U
100-41-4	Ethylbenzene		5.8	U
100-42-5	Styrene		5.8	U
108-38-3	m + p-Xylene		5.8	U
95-47-6	o-Xylene		5.8	U
80-62-6	Methyl methacrylate		5.8	U
630-20-6	1,1,1,2-Tetrachloroethane		5.8	U
96-18-4	1,2,3-Trichloropropane		5.8	U
110-57-6	trans-1,4-Dichloro-2-butene		29	U
97-63-2	Ethyl methacrylate		5.8	U
76-01-7	Pentachloroethane		5.8	U
96-12-8	1,2-Dibromo-3-chloropropane		5.8	U
78-83-1	Isobutyl Alcohol		5.8	U
126-99-8	Chloroprene	(TIC)	5.8	UZ
	3-Chloroprene	(TIC)	5.8	U
123-91-1	1,4-Dioxane	(TIC)	1200	U
Methylene Chloride - Dichloromethane				
Methyl ethyl ketone - 2-Butanone				
Chloroprene - 2-Chloro-1,3-butadiene				
Propionitrile - Ethyl Cyanide				

FORM I VOA 8260/Appendix IX

D-00094

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 027
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 13.9
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510147-007
Lab Name: AENI
Contract: 9510147
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Prepared: 10/19/95
Date Analyzed: 10/21/95
Time Analyzed: 11:11

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.32	U
RDX		0.39	U
TNB		0.26	U
TETRYL		0.29	U
DNB		0.22	U
TNT		0.25	U
2,6-DNT		0.27	U
2,4-DNT		0.22	U

Form I

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.: 9510147
Project Name: CRANE NSWC
Client Name: MK CORP

Sample Number
NSWC 16/16 027

AENI # 9510147-007

Concentration: Low
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Ext Prepared: 10/18/95
Date Analyzed: 10/20/95
Conc/Dil Factor: 10
Method: 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	13.9	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		19	U
319-85-7	beta-BHC		19	U
319-86-8	delta-BHC		19	U
58-89-9	gamma-BHC (Lindane)		39	U
75-44-8	Heptachlor		19	U
309-00-2	Aldrin		19	U
1024-57-3	Heptachlor epoxide		19	U
959-98-8	Endosulfan I		19	U
60-57-1	Dieldrin		39	U
75-55-9	4, 4'-DDE		39	U
72-20-8	Endrin		39	U
33213-65-9	Endosulfan II		39	U
72-54-8	4, 4'-DDD		39	U
1031-07-8	Endosulfan Sulfate		39	U
50-29-3	4, 4'-DDT		39	U
72-43-5	Methoxychlor		190	U
53494-70-5	Endrin Ketone		39	U
7421-36-3	Endrin aldehyde		39	U
57-74-9	Chlordane		390	U
8001-35-2	Toxaphene		1900	U
12674-11-2	Aroclor-1016		390	U
11104-28-2	Aroclor-1221		770	U
11141-16-5	Aroclor-1232		390	U
53469-21-9	Aroclor-1242		390	U
12672-29-6	Aroclor-1248		390	U
11097-69-1	Aroclor-1254		390	U
11096-82-5	Aroclor-1260		390	U
510-15-6	Chlorobenzilate		771	U
2303-16-4	Diallate		3857	U
465-73-6	Isodrin		96	U
143-50-0	Kepone		386	U
82-68-8	Pentachloronitrobenzene		77	U

Vi - Volume of extract injected (ul) - 5
Vs - Volume of Water extracted (ml) - N/A
Ws - Weight of sample extracted (g) - 30.11
Vt - Volume of total extract (ul) - 10,000

FORM I

D-00096

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 028

Name: AENI

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16

Contract: 9510147

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids: 89.7

Lab Sample ID: 951014708

Date Received: 10/14/95

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	24.0			P
7440-38-2	Arsenic	5.6		N	P
7440-39-3	Barium	715			P
7440-41-7	Beryllium	0.29			P
7440-43-9	Cadmium	7.7			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	19.7		N	P
7440-48-4	Cobalt	5.0			P
7440-50-8	Copper	2530		*	P
7439-89-6	Iron				NR
7439-92-1	Lead	2240			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.13			AV
7440-02-0	Nickel	14.9		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.51	U	N	P
7440-22-4	Silver	0.82	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	10.2	U	N	P
7440-62-2	Vanadium	22.1			P
7440-66-6	Zinc	4720		E	P
	Cyanide				NR
7440-31-5	Tin	20.4	U		P
7439-93-2	Lithium	10.2	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

CLIENT_ID: NSWC_16/16_028

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 028

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #008

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ341.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 10 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	7.8	
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.6	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.6	U
75-15-0	Carbon Disulfide	5.6	U
75-35-4	1,1-Dichloroethene	5.6	U
75-34-4	1,1-Dichloroethane	5.6	U
540-59-0	trans-1,2-Dichloroethene	5.6	U
67-66-3	Chloroform	5.6	U
107-06-2	1,2-Dichloroethane	5.6	U
75-71-8	Dichlorodifluoromethane	5.6	U
74-88-4	Iodomethane	5.6	U
107-12-0	Propionitrile	5.6	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.6	U
56-23-5	Carbon Tetrachloride	5.6	U
108-05-4	Vinyl Acetate	5.6	U
75-27-4	Bromodichloromethane	5.6	U
78-87-5	1,2-Dichloropropane	5.6	U
10061-01-5	cis-1,3-Dichloropropene	5.6	U
79-01-6	Trichloroethene	5.6	U
71-43-2	Benzene	5.6	U
124-48-1	Dibromochloromethane	5.6	U
10061-02-6	trans-1,3-Dichloropropene	5.6	U
79-00-5	1,1,2-Trichloroethane	5.6	U
75-25-2	Bromoform	5.6	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16 028

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #008

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ341.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 10 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.6	U
74-95-3	Dibromomethane		5.6	U
106-93-4	1,2-Dibromoethane (EDB)		5.6	U
108-10-1	4-Methyl-2-Pentanone		56	U
591-78-6	2-Hexanone		56	U
127-18-4	Tetrachloroethene		3.1	J
79-34-5	1,1,2,2-Tetrachloroethane		5.6	U
108-88-3	Toluene		5.6	U
108-90-7	Chlorobenzene		5.6	U
100-41-4	Ethylbenzene		5.6	U
100-42-5	Styrene		5.6	U
108-38-3	m + p-Xylene		5.6	U
95-47-6	o-Xylene		5.6	U
80-62-6	Methyl methacrylate		5.6	U
630-20-6	1,1,1,2-Tetrachloroethane		5.6	U
96-18-4	1,2,3-Trichloropropane		5.6	U
110-57-6	trans-1,4-Dichloro-2-butene		28	U
97-63-2	Ethyl methacrylate		5.6	U
76-01-7	Pentachloroethane		5.6	U
96-12-8	1,2-Dibromo-3-chloropropane		5.6	U
78-83-1	Isobutyl Alcohol		5.6	U
126-99-8	Chloroprene	(TIC)	5.6	UZ
	3-Chloroprene	(TIC)	5.6	U
123-91-1	1,4-Dioxane	(TIC)	1100	U
Methylene Chloride - Dichloromethane				
Methyl ethyl ketone - 2-Butanone				
Chloroprene - 2-Chloro-1,3-butadiene				
Propionitrile - Ethyl Cyanide				

FORM I VOA 8260/Appendix IX

D-00099

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 028
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 10.3
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510147-008
Lab Name: AENI
Contract: 9510147
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Prepared: 10/19/95
Date Analyzed: 10/21/95
Time Analyzed: 12:47

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.30	U
RDX		0.37	U
TNB		0.25	U
TETRYL		0.27	U
DNB		0.21	U
TNT		0.24	U
2,6-DNT		0.26	U
2,4-DNT		0.21	U

Form I

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510147
Project Name:——— CRANE NSWC
Client Name:——— MK CORP

Sample Number
NSWC 16/16 028

AENI # 9510147-008

Concentration:——— Low
Date Sampled:——— 10/13/95
Date Received:——— 10/14/95
Date Ext Prepared:— 10/18/95
Date Analyzed:——— 10/20/95
Conc/Dil Factor:——— 5
Method: ——— 8080

GPC Cleanup | | Yes | X | No
Seperatory Funnel Extraction | | Yes
Continuous Liquid - Liquid Extraction | | Yes
Percent Moisture 10.3
Matrix SOIL

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		9.3	U
319-85-7	beta-BHC		9.3	U
319-86-8	delta-BHC		9.3	U
58-89-9	gamma-BHC (Lindane)		19	U
75-44-8	Heptachlor		9.3	U
309-00-2	Aldrin		9.3	U
1024-57-3	Heptachlor epoxide		9.3	U
959-98-8	Endosulfan I		9.3	U
60-57-1	Dieldrin		19	U
75-55-9	4, 4'-DDE		19	U
72-20-8	Endrin		19	U
33213-65-9	Endosulfan II		19	U
72-54-8	4, 4'-DDD		19	U
1031-07-8	Endosulfan Sulfate		19	U
50-29-3	4, 4'-DDT		19	U
72-43-5	Methoxychlor		93	U
53494-70-5	Endrin Ketone		19	U
7421-36-3	Endrin aldehyde		19	U
57-74-9	Chlordane		190	U
8001-35-2	Toxaphene		930	U
12674-11-2	Aroclor-1016		190	U
11104-28-2	Aroclor-1221		370	U
11141-16-5	Aroclor-1232		190	U
53469-21-9	Aroclor-1242		190	U
12672-29-6	Aroclor-1248		190	U
11097-69-1	Aroclor-1254		190	U
11096-82-5	Aroclor-1260		190	U
510-15-6	Chlorobenzilate		370	U
2303-16-4	Diallate		1851	U
465-73-6	Isodrin		46	U
143-50-0	Kepone		185	U
82-68-8	Pentachloronitrobenzene		37	U

Vi - Volume of extract injected (ul) - 5
Vs - Volume of Water extracted (ml) - N/A
Ws - Weight of sample extracted (g) - 30.12
Vt - Volume of total extract (ul) - 10,000

FORM I

D- 00101

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 029

L. Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951014709

Level (low/med): LOW Date Received: 10/14/95

% Solids: 96.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	8.6			P
7440-38-2	Arsenic	3.1		N	P
7440-39-3	Barium	187			P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	1.1			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	9.2		N	P
7440-48-4	Cobalt	5.3			P
7440-50-8	Copper	179		*	P
7439-89-6	Iron				NR
7439-92-1	Lead	531			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.08	U		AV
7440-02-0	Nickel	9.1		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.50	U	N	P
7440-22-4	Silver	0.81	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	10.1	U	N	P
7440-62-2	Vanadium	13.1			P
7440-66-6	Zinc	1390		E	P
	Cyanide				NR
7440-31-5	Tin	20.1	U		P
7439-93-2	Lithium	10.1	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_029

FORM I - IN

ILM02.1

A-00402

SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

NSWC 16/16 029

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #009

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ342.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 3 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	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	5.2	U
67-64-1	Acetone	100	U
75-05-8	Acetonitrile	5.2	U
107-13-1	Acrylonitrile	1000	U
107-02-8	Acrolein	1000	U
75-69-4	Trichlorofluoromethane	5.2	U
75-15-0	Carbon Disulfide	5.2	U
75-35-4	1,1-Dichloroethene	5.2	U
75-34-4	1,1-Dichloroethane	5.2	U
540-59-0	trans-1,2-Dichloroethene	5.2	U
67-66-3	Chloroform	5.2	U
107-06-2	1,2-Dichloroethane	5.2	U
75-71-8	Dichlorodifluoromethane	5.2	U
74-88-4	Iodomethane	5.2	U
107-12-0	Propionitrile	5.2	U
107-05-1	Allyl chloride	100	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5.2	U
56-23-5	Carbon Tetrachloride	5.2	U
108-05-4	Vinyl Acetate	5.2	U
75-27-4	Bromodichloromethane	5.2	U
78-87-5	1,2-Dichloropropane	5.2	U
10061-01-5	cis-1,3-Dichloropropene	5.2	U
79-01-6	Trichloroethene	5.2	U
71-43-2	Benzene	5.2	U
124-48-1	Dibromochloromethane	5.2	U
10061-02-6	trans-1,3-Dichloropropene	5.2	U
79-00-5	1,1,2-Trichloroethane	5.2	U
75-25-2	Bromoform	5.2	U

FORM I VOA 8260/Appendix IX

D-00103

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 029

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #009

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ342.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 3 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.2	U
74-95-3	Dibromomethane		5.2	U
106-93-4	1,2-Dibromoethane (EDB)		5.2	U
108-10-1	4-Methyl-2-Pentanone		52	U
591-78-6	2-Hexanone		52	U
127-18-4	Tetrachloroethene		12	
79-34-5	1,1,2,2-Tetrachloroethane		5.2	U
108-88-3	Toluene		5.2	U
108-90-7	Chlorobenzene		5.2	U
100-41-4	Ethylbenzene		5.2	U
100-42-5	Styrene		5.2	U
108-38-3	m + p-Xylene		5.2	U
95-47-6	o-Xylene		5.2	U
80-62-6	Methyl methacrylate		5.2	U
630-20-6	1,1,1,2-Tetrachloroethane		5.2	U
96-18-4	1,2,3-Trichloropropane		5.2	U
110-57-6	trans-1,4-Dichloro-2-butene		26	U
97-63-2	Ethyl methacrylate		5.2	U
76-01-7	Pentachloroethane		5.2	U
96-12-8	1,2-Dibromo-3-chloropropane		5.2	U
78-83-1	Isobutyl Alcohol		5.2	U
126-99-8	Chloroprene	(TIC)	5.2	UZ
	3-Chloroprene	(TIC)	5.2	U
123-91-1	1,4-Dioxane	(TIC)	1000	U
Methylene Chloride - Dichloromethane				
Methyl ethyl ketone - 2-Butanone				
Chloroprene - 2-Chloro-1,3-butadiene				
Propionitrile - Ethyl Cyanide				

FORM I VOA 8260/Appendix IX

D-00104

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 029
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 3.2
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510147-009
Lab Name: AENI
Contract: 9510147
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Prepared: 10/19/95
Date Analyzed: 10/21/95
Time Analyzed: 13:35

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.28	U
RDX		0.35	U
TNB		0.23	U
TETRYL		0.25	U
DNB		0.19	U
TNT		0.22	U
2,6-DNT		0.24	U
2,4-DNT		0.19	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510147
Project Name:——— CRANE NSWC
Client Name:——— MK CORP

Sample Number
NSWC 16/16 029

AENI # 9510147-009

Concentration:——— Low
Date Sampled:——— 10/13/95
Date Received:——— 10/14/95
Date Ext Prepared:— 10/18/95
Date Analyzed:——— 10/20/95
Conc/Dil Factor:——— 2
Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	3.2	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		3.3	U
319-85-7	beta-BHC		3.3	U
319-86-8	delta-BHC		3.3	U
58-89-9	gamma-BHC (Lindane)		6.6	U
75-44-8	Heptachlor		3.3	U
309-00-2	Aldrin		3.3	U
1024-57-3	Heptachlor epoxide		3.3	U
959-98-8	Endosulfan I		3.3	U
60-57-1	Dieldrin		6.6	U
75-55-9	4, 4'-DDE		6.6	U
72-20-8	Endrin		6.6	U
33213-65-9	Endosulfan II		6.6	U
72-54-8	4, 4'-DDD		6.6	U
1031-07-8	Endosulfan Sulfate		6.6	U
50-29-3	4, 4'-DDT		6.6	U
72-43-5	Methoxychlor		33	U
53494-70-5	Endrin Ketone		6.6	U
7421-36-3	Endrin aldehyde		6.6	U
57-74-9	Chlordane		66	U
8001-35-2	Toxaphene		330	U
12674-11-2	Aroclor-1016		66	U
11104-28-2	Aroclor-1221		130	U
11141-16-5	Aroclor-1232		66	U
53469-21-9	Aroclor-1242		66	U
12672-29-6	Aroclor-1248		66	U
11097-69-1	Aroclor-1254		66	U
11096-82-5	Aroclor-1260		66	U
510-15-6	Chlorobenzilate		132	U
2303-16-4	Diallate		660	U
465-73-6	Isodrin		16	U
143-50-0	Kepone		66	U
82-68-8	Pentachloronitrobenzene		13	U

Vi - Volume of extract injected (ul) - _____ 5
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 31.32
Vt - Volume of total extract (ul) - _____ 10,000

FORM I

D-00106

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 030

Name: AENI

Lab Code:

Case No.: MKC70

Contract: 9510147

SAS No.:

SDG No.: 16/16

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids: 87.6

Lab Sample ID: 951014710

Date Received: 10/14/95

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	75.5			P
7440-38-2	Arsenic	8.3		N	P
7440-39-3	Barium	3020			P
7440-41-7	Beryllium	0.52			P
7440-43-9	Cadmium	16.2			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	32.1		N	P
7440-48-4	Cobalt	3.1			P
7440-50-8	Copper	2150		*	P
7439-89-6	Iron				NR
7439-92-1	Lead	7070			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	2.7			AV
7440-02-0	Nickel	19.5		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.56	U	N	P
7440-22-4	Silver	0.89	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	5.6	U	N	P
7440-62-2	Vanadium	39.6			P
7440-66-6	Zinc	10000		E	P
	Cyanide				NR
7440-31-5	Tin	22.3	U		P
7439-93-2	Lithium	14.0			P

Color Before:

Color After:

Clarity Before:

Clarity After:

Texture:

Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_030

FORM I - IN

ILM02.1

D-00107

VOLATILE ORGANICS ANALYSIS DATA SHEET

NSWC 16/16 030

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #010

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ343.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 12 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	8.8	
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.7	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.7	U
75-15-0	Carbon Disulfide	5.7	U
75-35-4	1,1-Dichloroethene	5.7	U
75-34-4	1,1-Dichloroethane	5.7	U
540-59-0	trans-1,2-Dichloroethene	5.7	U
67-66-3	Chloroform	5.7	U
107-06-2	1,2-Dichloroethane	5.7	U
75-71-8	Dichlorodifluoromethane	5.7	U
74-88-4	Iodomethane	5.7	U
107-12-0	Propionitrile	5.7	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.7	U
56-23-5	Carbon Tetrachloride	5.7	U
108-05-4	Vinyl Acetate	5.7	U
75-27-4	Bromodichloromethane	5.7	U
78-87-5	1,2-Dichloropropane	5.7	U
10061-01-5	cis-1,3-Dichloropropene	5.7	U
79-01-6	Trichloroethene	5.7	U
71-43-2	Benzene	5.7	U
124-48-1	Dibromochloromethane	5.7	U
10061-02-6	trans-1,3-Dichloropropene	5.7	U
79-00-5	1,1,2-Trichloroethane	5.7	U
75-25-2	Bromoform	5.7	U

FORM I VOA 8260/Appendix IX

D-00108

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16 030

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #010

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ343.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 12 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.7	U
74-95-3	Dibromomethane		5.7	U
106-93-4	1,2-Dibromoethane (EDB)		5.7	U
108-10-1	4-Methyl-2-Pentanone		57	U
591-78-6	2-Hexanone		57	U
127-18-4	Tetrachloroethene		31	
79-34-5	1,1,2,2-Tetrachloroethane		5.7	U
108-88-3	Toluene		5.7	U
108-90-7	Chlorobenzene		5.7	U
100-41-4	Ethylbenzene		5.7	U
100-42-5	Styrene		5.7	U
108-38-3	m + p-Xylene		5.7	U
95-47-6	o-Xylene		5.7	U
80-62-6	Methyl methacrylate		5.7	U
630-20-6	1,1,1,2-Tetrachloroethane		5.7	U
96-18-4	1,2,3-Trichloropropane		5.7	U
110-57-6	trans-1,4-Dichloro-2-butene		29	U
97-63-2	Ethyl methacrylate		5.7	U
76-01-7	Pentachloroethane		5.7	U
96-12-8	1,2-Dibromo-3-chloropropane		5.7	U
78-83-1	Isobutyl Alcohol		5.7	U
126-99-8	Chloroprene	(TIC)	5.7	UZ
	3-Chloroprene	(TIC)	5.7	U
123-91-1	1,4-Dioxane	(TIC)	1100	U
	Methylene Chloride - Dichloromethane			
	Methyl ethyl ketone - 2-Butanone			
	Chloroprene - 2-Chloro-1,3-butadiene			
	Propionitrile - Ethyl Cyanide			

FORM I VOA 8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 030
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 12.4
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510147-010
Lab Name: AENI
Contract: 9510147
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Prepared: 10/19/95
Date Analyzed: 10/21/95
Time Analyzed: 14:24

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.31	U
RDX		0.38	U
TNB		0.25	U
TETRYL		0.28	U
DNB		0.21	U
TNT		0.24	U
2,6-DNT		0.27	U
2,4-DNT		0.21	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510147
Project Name:——— CRANE NSWC
Client Name:——— MK CORP

Sample Number
NSWC 16/16 030

AENI # 9510147-010

Concentration:——— Low
Date Sampled:——— 10/13/95
Date Received:——— 10/14/95
Date Ext Prepared:— 10/18/95
Date Analyzed:——— 10/20/95
Conc/Dil Factor:——— 5
Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	12.4	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		9.4	U
319-85-7	beta-BHC		9.4	U
319-86-8	delta-BHC		9.4	U
58-89-9	gamma-BHC (Lindane)		19	U
75-44-8	Heptachlor		9.4	U
309-00-2	Aldrin		9.4	U
1024-57-3	Heptachlor epoxide		9.4	U
959-98-8	Endosulfan I		9.4	U
60-57-1	Dieldrin		19	U
75-55-9	4, 4'-DDE		19	U
72-20-8	Endrin		19	U
33213-65-9	Endosulfan II		19	U
72-54-8	4, 4'-DDD		19	U
1031-07-8	Endosulfan Sulfate		19	U
50-29-3	4, 4'-DDT		19	U
72-43-5	Methoxychlor		94	U
53494-70-5	Endrin Ketone		19	U
7421-36-3	Endrin aldehyde		19	U
57-74-9	Chlordane		190	U
8001-35-2	Toxaphene		940	U
12674-11-2	Aroclor-1016		190	U
11104-28-2	Aroclor-1221		380	U
11141-16-5	Aroclor-1232		190	U
53469-21-9	Aroclor-1242		190	U
12672-29-6	Aroclor-1248		190	U
11097-69-1	Aroclor-1254		190	U
11096-82-5	Aroclor-1260		190	U
510-15-6	Chlorobenzilate		376	U
2303-16-4	Diallate		1879	U
465-73-6	Isodrin		47	U
143-50-0	Kepone		188	U
82-68-8	Pentachloronitrobenzene		38	U

Vi - Volume of extract injected (ul) - _____ 5
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.38
Vt - Volume of total extract (ul) - _____ 10,000

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 031

1 Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951014711

Level (low/med): LOW Date Received: 10/14/95

% Solids: 91.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	2.1	U		P
7440-38-2	Arsenic	1.7		N	P
7440-39-3	Barium	67.3			P
7440-41-7	Beryllium	0.65			P
7440-43-9	Cadmium	0.42	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	23.1		N	P
7440-48-4	Cobalt	4.0			P
7440-50-8	Copper	29.4		*	P
7439-89-6	Iron				NR
7439-92-1	Lead	101			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.09	U		AV
7440-02-0	Nickel	12.4		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.53	U	N	P
7440-22-4	Silver	0.85	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	10.6	U	N	P
7440-62-2	Vanadium	22.7			P
7440-66-6	Zinc	97.6		E	P
	Cyanide				NR
7440-31-5	Tin	21.2	U		P
7439-93-2	Lithium	10.8			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_031

FORM I - IN ILM02.1

D-00112

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 031

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #011

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ344.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 9 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	8.3	
67-64-1	Acetone	14	J
75-05-8	Acetonitrile	5.5	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.5	U
75-15-0	Carbon Disulfide	5.5	U
75-35-4	1,1-Dichloroethene	5.5	U
75-34-4	1,1-Dichloroethane	5.5	U
540-59-0	trans-1,2-Dichloroethene	5.5	U
67-66-3	Chloroform	5.5	U
107-06-2	1,2-Dichloroethane	5.5	U
75-71-8	Dichlorodifluoromethane	5.5	U
74-88-4	Iodomethane	5.5	U
107-12-0	Propionitrile	5.5	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.5	U
56-23-5	Carbon Tetrachloride	5.5	U
108-05-4	Vinyl Acetate	5.5	U
75-27-4	Bromodichloromethane	5.5	U
78-87-5	1,2-Dichloropropane	5.5	U
10061-01-5	cis-1,3-Dichloropropene	5.5	U
79-01-6	Trichloroethene	5.5	U
71-43-2	Benzene	5.5	U
124-48-1	Dibromochloromethane	5.5	U
10061-02-6	trans-1,3-Dichloropropene	5.5	U
79-00-5	1,1,2-Trichloroethane	5.5	U
75-25-2	Bromoform	5.5	U

FORM I VOA 8260/Appendix IX

D-00113

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16 031

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #011

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ344.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 9 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.5	U
74-95-3	Dibromomethane		5.5	U
106-93-4	1,2-Dibromoethane (EDB)		5.5	U
108-10-1	4-Methyl-2-Pentanone		55	U
591-78-6	2-Hexanone		55	U
127-18-4	Tetrachloroethene		5.6	
79-34-5	1,1,2,2-Tetrachloroethane		5.5	U
108-88-3	Toluene		5.5	U
108-90-7	Chlorobenzene		5.5	U
100-41-4	Ethylbenzene		5.5	U
100-42-5	Styrene		5.5	U
108-38-3	m + p-Xylene		5.5	U
95-47-6	o-Xylene		5.5	U
80-62-6	Methyl methacrylate		5.5	U
630-20-6	1,1,1,2-Tetrachloroethane		5.5	U
96-18-4	1,2,3-Trichloropropane		5.5	U
110-57-6	trans-1,4-Dichloro-2-butene		27	U
97-63-2	Ethyl methacrylate		5.5	U
76-01-7	Pentachloroethane		5.5	U
96-12-8	1,2-Dibromo-3-chloropropane		5.5	U
78-83-1	Isobutyl Alcohol		5.5	U
126-99-8	Chloroprene	(TIC)	5.5	UZ
	3-Chloroprene	(TIC)	5.5	U
123-91-1	1,4-Dioxane	(TIC)	1100	U
Methylene Chloride - Dichloromethane				
Methyl ethyl ketone - 2-Butanone				
Chloroprene - 2-Chloro-1,3-butadiene				
Propionitrile - Ethyl Cyanide				

FORM I VOA 8260/Appendix IX

D-00114

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 031
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 8.7
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510147-011
Lab Name: AENI
Contract: 9510147
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Prepared: 11/19/95
Date Analyzed: 10/21/95
Time Analyzed: 15:12

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.30	U
RDX		0.37	U
TNB		0.25	U
TETRYL		0.27	U
DNB		0.21	U
TNT		0.24	U
2,6-DNT		0.26	U
2,4-DNT		0.21	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510147
Project Name:——— CRANE NSWC
Client Name:——— MK CORP

Sample Number
NSWC 16/16 031

AENI # 9510147-011

Concentration:——— Low
Date Sampled:——— 10/13/95
Date Received:——— 10/14/95
Date Ext Prepared:—— 10/18/95
Date Analyzed:——— 10/20/95
Conc/Dil Factor:——— 1
Method: ——— 8080

GPC Cleanup		Yes	X No
Seperatory Funnel Extraction			Yes
Continuous Liquid - Liquid Extraction			Yes
Percent Moisture	8.7		
Matrix	SOIL		

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.8	U
319-85-7	beta-BHC		1.8	U
319-86-8	delta-BHC		1.8	U
58-89-9	gamma-BHC (Lindane)		1.8	U
75-44-8	Heptachlor		3.6	U
309-00-2	Aldrin		1.8	U
1024-57-3	Heptachlor epoxide		1.8	U
959-98-8	Endosulfan I		1.8	U
60-57-1	Dieldrin		1.8	U
75-55-9	4, 4'-DDE		3.6	U
72-20-8	Endrin		3.6	U
33213-65-9	Endosulfan II		3.6	U
72-54-8	4, 4'-DDD		3.6	U
1031-07-8	Endosulfan Sulfate		3.6	U
50-29-3	4, 4'-DDT		3.6	U
72-43-5	Methoxychlor		3.6	U
53494-70-5	Endrin Ketone		18	U
7421-36-3	Endrin aldehyde		3.6	U
57-74-9	Chlordane		3.6	U
8001-35-2	Toxaphene		36	U
12674-11-2	Aroclor-1016		180	U
11104-28-2	Aroclor-1221		36	U
11141-16-5	Aroclor-1232		73	U
53469-21-9	Aroclor-1242		36	U
12672-29-6	Aroclor-1248		36	U
11097-69-1	Aroclor-1254		36	U
11096-82-5	Aroclor-1260		36	U
510-15-6	Chlorobenzilate		36	U
2303-16-4	Diallate		73	U
465-73-6	Isodrin		364	U
143-50-0	Kepone		9.1	U
82-68-8	Pentachloronitrobenzene		36	U
			7.3	U

Vi - Volume of extract injected (ul) - _____ 5
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.12
Vt - Volume of total extract (ul) - _____ 10,000

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 032

Lab Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951014712

Level (low/med): LOW Date Received: 10/14/95

% Solids: 90.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony				NR
7440-38-2	Arsenic	8.4			P
7440-39-3	Barium	1.6		N	P
7440-41-7	Beryllium	236			P
7440-43-9	Cadmium	0.70			P
7440-70-2	Calcium	3.8			P
7440-47-3	Chromium				NR
7440-48-4	Cobalt	15.9		N	P
7440-50-8	Copper	6.3			P
7439-89-6	Iron	461		*	P
7439-92-1	Lead				NR
7439-95-4	Magnesium	1410			P
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel	0.07	U		AV
7440-09-7	Potassium	18.5		N	P
7782-49-2	Selenium				NR
7440-22-4	Silver	0.53	U	N	P
7440-23-5	Sodium	0.85	U		P
7440-28-0	Thallium				NR
7440-62-2	Vanadium	10.6	U	N	P
7440-66-6	Zinc	12.5			P
	Cyanide	1120		E	P
7440-31-5	Tin				NR
7439-93-2	Lithium	89.3			P
		13.0			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_032

FORM I - IN ILM02.1

D- 00117

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 032
Sample:

Matrix: SOIL
Sample: (g) 2.2
Final Volume: (L) 0.02
(%) Moisture: 9.8
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510147-012
Lab Name: AENI
Contract: 9510147
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Prepared: 10/23/95
Date Analyzed: 10/24/95
Time Analyzed: 22:24

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.29	U
RDX		0.35	U
TNB		0.24	U
TETRYL		0.26	U
DNB		0.20	U
TNT		0.23	U
2,6-DNT		0.25	U
2,4-DNT		0.20	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510147
Project Name:——— CRANE NSWC
Client Name:——— MK CORP

Sample Number
NSWC 16/16 032

AENI # 9510147-012

Concentration:——— Low
Date Sampled:——— 10/13/95
Date Received:——— 10/14/95
Date Ext Prepared:— 10/18/95
Date Analyzed:——— 10/20/95
Conc/Dil Factor:——— 1
Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	9.8	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.8	U
319-85-7	beta-BHC		1.8	U
319-86-8	delta-BHC		1.8	U
58-89-9	gamma-BHC (Lindane)		3.6	U
75-44-8	Heptachlor		1.8	U
309-00-2	Aldrin		1.8	U
1024-57-3	Heptachlor epoxide		1.8	U
959-98-8	Endosulfan I		1.8	U
60-57-1	Dieldrin		3.6	U
75-55-9	4, 4'-DDE		3.6	U
72-20-8	Endrin		3.6	U
33213-65-9	Endosulfan II		3.6	U
72-54-8	4, 4'-DDD		3.6	U
1031-07-8	Endosulfan Sulfate		3.6	U
50-29-3	4, 4'-DDT		3.6	U
72-43-5	Methoxychlor		18	U
53494-70-5	Endrin Ketone		3.6	U
7421-36-3	Endrin aldehyde		3.6	U
57-74-9	Chlordane		36	U
8001-35-2	Toxaphene		180	U
12674-11-2	Aroclor-1016		36	U
11104-28-2	Aroclor-1221		73	U
11141-16-5	Aroclor-1232		36	U
53469-21-9	Aroclor-1242		36	U
12672-29-6	Aroclor-1248		36	U
11097-69-1	Aroclor-1254		36	U
11096-82-5	Aroclor-1260		36	U
510-15-6	Chlorobenzilate		73	U
2303-16-4	Diallate		363	U
465-73-6	Isodrin		9.1	U
143-50-0	Kepone		36	U
82-68-8	Pentachloronitrobenzene		7.3	U

Vi - Volume of extract injected (ul) - _____ 5
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.53
Vt - Volume of total extract (ul) - _____ 10,000

FORM I

D-00121

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 033

Lab Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951014713

Level (low/med): LOW Date Received: 10/14/95

% Solids: 92.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	6.0			P
7440-38-2	Arsenic	1.4		N	P
7440-39-3	Barium	992			P
7440-41-7	Beryllium	0.30			P
7440-43-9	Cadmium	1.1			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	12.3		N	P
7440-48-4	Cobalt	1.1	U		P
7440-50-8	Copper	921		*	P
7439-89-6	Iron				NR
7439-92-1	Lead	562			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.07	U		AV
7440-02-0	Nickel	7.5		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.52	U	N	P
7440-22-4	Silver	0.83	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	10.4	U	N	P
7440-62-2	Vanadium	9.8			P
7440-66-6	Zinc	4690		E	P
	Cyanide				NR
7440-31-5	Tin	20.9	U		P
7439-93-2	Lithium	10.4	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_033

FORM I - IN ILM02.1

D-00122

SAMPLE NO.

NSWC 16/16 033

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #013

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ346.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 7 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	5.4	U
67-64-1	Acetone	14	J
75-05-8	Acetonitrile	5.4	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.4	U
75-15-0	Carbon Disulfide	5.4	U
75-35-4	1,1-Dichloroethene	5.4	U
75-34-4	1,1-Dichloroethane	5.4	U
540-59-0	trans-1,2-Dichloroethene	5.4	U
67-66-3	Chloroform	5.4	U
107-06-2	1,2-Dichloroethane	5.4	U
75-71-8	Dichlorodifluoromethane	5.4	U
74-88-4	Iodomethane	5.4	U
107-12-0	Propionitrile	5.4	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.4	U
56-23-5	Carbon Tetrachloride	5.4	U
108-05-4	Vinyl Acetate	5.4	U
75-27-4	Bromodichloromethane	5.4	U
78-87-5	1,2-Dichloropropane	5.4	U
10061-01-5	cis-1,3-Dichloropropene	5.4	U
79-01-6	Trichloroethene	5.4	U
71-43-2	Benzene	5.4	U
124-48-1	Dibromochloromethane	5.4	U
10061-02-6	trans-1,3-Dichloropropene	5.4	U
79-00-5	1,1,2-Trichloroethane	5.4	U
75-25-2	Bromoform	5.4	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 033

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #013

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ346.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 7 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Concentration	Q
126-98-7	Methacrylonitrile		5.4	U
74-95-3	Dibromomethane		5.4	U
106-93-4	1,2-Dibromoethane (EDB)		5.4	U
108-10-1	4-Methyl-2-Pentanone		54	U
591-78-6	2-Hexanone		54	U
127-18-4	Tetrachloroethene		5.4	U
79-34-5	1,1,2,2-Tetrachloroethane		5.4	U
108-88-3	Toluene		5.4	U
108-90-7	Chlorobenzene		5.4	U
100-41-4	Ethylbenzene		5.4	U
100-42-5	Styrene		5.4	U
108-38-3	m + p-Xylene		5.4	U
95-47-6	o-Xylene		5.4	U
80-62-6	Methyl methacrylate		5.4	U
630-20-6	1,1,1,2-Tetrachloroethane		5.4	U
96-18-4	1,2,3-Trichloropropane		5.4	U
110-57-6	trans-1,4-Dichloro-2-butene		27	U
97-63-2	Ethyl methacrylate		5.4	U
76-01-7	Pentachloroethane		5.4	U
96-12-8	1,2-Dibromo-3-chloropropane		5.4	U
78-83-1	Isobutyl Alcohol		5.4	U
126-99-8	Chloroprene	(TIC)	5.4	UZ
	3-Chloroprene	(TIC)	5.4	U
123-91-1	1,4-Dioxane	(TIC)	1100	U
Methylene Chloride - Dichloromethane				
Methyl ethyl ketone - 2-Butanone				
Chloroprene - 2-Chloro-1,3-butadiene				
Propionitrile - Ethyl Cyanide				

FORM I VOA 8260/Appendix IX

D-00124

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 033
Sample:

Matrix: SOIL
Sample: (g) 2.4
Final Volume: (L) 0.02
(%) Moisture: 7.2
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510147-013
Lab Name: AENI
Contract: 9510147
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Prepared: 10/23/95
Date Analyzed: 10/24/95
Time Analyzed: 23:13

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.26	U
RDX		0.31	U
TNB		0.21	U
TETRYL		0.23	U
DNB		0.17	U
TNT		0.20	U
2,6-DNT		0.22	U
2,4-DNT		0.17	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510147

Project Name:——— CRANE NSWC

Client Name:——— MK CORP

Sample Number
NSWC 16/16 033

AENI # 9510147-013

Concentration:——— Low

Date Sampled:——— 10/13/95

Date Received:——— 10/14/95

Date Ext Prepared:—— 10/18/95

Date Analyzed:——— 10/20/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup		Yes	X	No
Seperatory Funnel Extraction				Yes
Continuous Liquid - Liquid Extraction				Yes
Percent Moisture	7.2			
Matrix	SOIL			

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.8	U
319-85-7	beta-BHC		1.8	U
319-86-8	delta-BHC		1.8	U
58-89-9	gamma-BHC (Lindane)		3.6	U
75-44-8	Heptachlor		1.8	U
309-00-2	Aldrin		1.8	U
1024-57-3	Heptachlor epoxide		1.8	U
959-98-8	Endosulfan I		1.8	U
60-57-1	Dieldrin		3.6	U
75-55-9	4, 4'-DDE		3.6	U
72-20-8	Endrin		3.6	U
33213-65-9	Endosulfan II		3.6	U
72-54-8	4, 4'-DDD		3.6	U
1031-07-8	Endosulfan Sulfate		3.6	U
50-29-3	4, 4'-DDT		3.6	U
72-43-5	Methoxychlor		18	U
53494-70-5	Endrin Ketone		3.6	U
7421-36-3	Endrin aldehyde		3.6	U
57-74-9	Chlordane		36	U
8001-35-2	Toxaphene		180	U
12674-11-2	Aroclor-1016		36	U
11104-28-2	Aroclor-1221		71	U
11141-16-5	Aroclor-1232		36	U
53469-21-9	Aroclor-1242		36	U
12672-29-6	Aroclor-1248		36	U
11097-69-1	Aroclor-1254		36	U
11096-82-5	Aroclor-1260		36	U
510-15-6	Chlorobenzilate		71	U
2303-16-4	Diallate		357	U
465-73-6	Isodrin		8.9	U
143-50-0	Kepone		36	U
82-68-8	Pentachloronitrobenzene		7.1	U

Vi - Volume of extract injected (ul) - _____ 5

Ve - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.21

Vt - Volume of total extract (ul) - _____ 10,000

FORM I

D- 00126

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 034

Name: AENI

Lab Code:

Case No.: MKC70

Contract: 9510147

SAS No.:

SDG No.: 16/16

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids: 92.7

Lab Sample ID: 951014714

Date Received: 10/14/95

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				P
7440-38-2	Arsenic	7.2			P
7440-39-3	Barium	1.2		N	P
7440-41-7	Beryllium	1470			P
7440-43-9	Cadmium	0.79			P
7440-70-2	Calcium	1.9			P
7440-47-3	Chromium				NR
7440-48-4	Cobalt	21.9		N	P
7440-50-8	Copper	15.4			P
7439-89-6	Iron	3980		*	P
7439-92-1	Lead				NR
7439-95-4	Magnesium	1160			P
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel	0.08	U		AV
7440-09-7	Potassium	31.1		N	P
7782-49-2	Selenium				NR
7440-22-4	Silver	0.53	U	N	P
7440-23-5	Sodium	0.85	U		P
7440-28-0	Thallium				NR
7440-62-2	Vanadium	10.6	U	N	P
7440-66-6	Zinc	13.6			P
	Cyanide	6940		E	P
7440-31-5	Tin				NR
7439-93-2	Lithium	21.2	U		P
		10.6	U		P

Color Before:

Color After:

Clarity Before:

Clarity After:

Texture:

Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_034

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 034

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #014

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ347.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 7 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	5.4	U
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.4	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.4	U
75-15-0	Carbon Disulfide	5.4	U
75-35-4	1,1-Dichloroethene	5.4	U
75-34-4	1,1-Dichloroethane	5.4	U
540-59-0	trans-1,2-Dichloroethene	5.4	U
67-66-3	Chloroform	5.4	U
107-06-2	1,2-Dichloroethane	5.4	U
75-71-8	Dichlorodifluoromethane	5.4	U
74-88-4	Iodomethane	5.4	U
107-12-0	Propionitrile	5.4	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.4	U
56-23-5	Carbon Tetrachloride	5.4	U
108-05-4	Vinyl Acetate	5.4	U
75-27-4	Bromodichloromethane	5.4	U
78-87-5	1,2-Dichloropropane	5.4	U
10061-01-5	cis-1,3-Dichloropropene	5.4	U
79-01-6	Trichloroethene	5.4	U
71-43-2	Benzene	5.4	U
124-48-1	Dibromochloromethane	5.4	U
10061-02-6	trans-1,3-Dichloropropene	5.4	U
79-00-5	1,1,2-Trichloroethane	5.4	U
75-25-2	Bromoform	5.4	U

FORM I VOA 8260/Appendix IX

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 034

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #014

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ347.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 7 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Concentration	Q
126-98-7	Methacrylonitrile		5.4	U
74-95-3	Dibromomethane		5.4	U
106-93-4	1,2-Dibromoethane (EDB)		5.4	U
108-10-1	4-Methyl-2-Pentanone		54	U
591-78-6	2-Hexanone		54	U
127-18-4	Tetrachloroethene		5.4	U
79-34-5	1,1,2,2-Tetrachloroethane		5.4	U
108-88-3	Toluene		5.4	U
108-90-7	Chlorobenzene		5.4	U
100-41-4	Ethylbenzene		5.4	U
100-42-5	Styrene		5.4	U
108-38-3	m + p-Xylene		5.4	U
95-47-6	o-Xylene		5.4	U
80-62-6	Methyl methacrylate		5.4	U
630-20-6	1,1,1,2-Tetrachloroethane		5.4	U
96-18-4	1,2,3-Trichloropropane		5.4	U
110-57-6	trans-1,4-Dichloro-2-butene		27	U
97-63-2	Ethyl methacrylate		5.4	U
76-01-7	Pentachloroethane		5.4	U
96-12-8	1,2-Dibromo-3-chloropropane		35	
78-83-1	Isobutyl Alcohol		5.4	U
126-99-8	Chloroprene	(TIC)	5.4	UZ
	3-Chloroprene	(TIC)	5.4	U
123-91-1	1,4-Dioxane	(TIC)	1100	U
	Methylene Chloride - Dichloromethane			
	Methyl ethyl ketone - 2-Butanone			
	Chloroprene - 2-Chloro-1,3-butadiene			
	Propionitrile - Ethyl Cyanide			

FORM I VOA 8260/Appendix IX

D-00129

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 034
Sample:

Matrix: SOIL
Sample: (g) 2.2
Final Volume: (L) 0.02
(%) Moisture: 7.3
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510147-014
Lab Name: AENI
Contract: 9510147
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Prepared: 10/23/95
Date Analyzed: 10/25/95
Time Analyzed: 0:01

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.28	U
RDX		0.34	U
TNB		0.23	U
TETRYL		0.25	U
DNB		0.19	U
TNT		0.22	U
2,6-DNT		0.24	U
2,4-DNT		0.19	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510147
Project Name:——— CRANE NSWC
Client Name:——— MK CORP

Sample Number
NSWC 16/16 034

AENI # 9510147-014

Concentration:——— Low
Date Sampled:——— 10/13/95
Date Received:——— 10/14/95
Date Ext Prepared:——— 10/18/95
Date Analyzed:——— 10/20/95
Conc/Dil Factor:——— 1
Method: ——— 8080

GPC Cleanup		Yes	X No
Seperatory Funnel Extraction			Yes
Continuous Liquid - Liquid Extraction			Yes
Percent Moisture	7.3		
Matrix	SOIL		

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.8	U
319-85-7	beta-BHC		1.8	U
319-86-8	delta-BHC		1.8	U
58-89-9	gamma-BHC (Lindane)		3.6	U
75-44-8	Heptachlor		1.8	U
309-00-2	Aldrin		1.8	U
1024-57-3	Heptachlor epoxide		1.8	U
959-98-8	Endosulfan I		1.8	U
60-57-1	Dieldrin		3.6	U
75-55-9	4, 4'-DDE		3.6	U
72-20-8	Endrin		3.6	U
33213-65-9	Endosulfan II		3.6	U
72-54-8	4, 4'-DDD		3.6	U
1031-07-8	Endosulfan Sulfate		3.6	U
50-29-3	4, 4'-DDT		3.6	U
72-43-5	Methoxychlor		18	U
53494-70-5	Endrin Ketone		3.6	U
7421-36-3	Endrin aldehyde		3.6	U
57-74-9	Chlordane		36	U
8001-35-2	Toxaphene		180	U
12674-11-2	Aroclor-1016		36	U
11104-28-2	Aroclor-1221		71	U
11141-16-5	Aroclor-1232		36	U
53469-21-9	Aroclor-1242		36	U
12672-29-6	Aroclor-1248		36	U
11097-69-1	Aroclor-1254		36	U
11096-82-5	Aroclor-1260		36	U
510-15-6	Chlorobenzilate		71	U
2303-16-4	Diallate		356	U
465-73-6	Isodrin		8.9	U
143-50-0	Kepone		36	U
82-68-8	Pentachloronitrobenzene		7.1	U

Vi - Volume of extract injected (ul) - _____ 5
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.33
Vt - Volume of total extract (ul) - _____ 10,000

FORM I

D-00131

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 035

L Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951014715

Level (low/med): LOW Date Received: 10/14/95

% Solids: 92.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	26.8			P
7440-38-2	Arsenic	6.6		N	P
7440-39-3	Barium	2740			P
7440-41-7	Beryllium	0.56			P
7440-43-9	Cadmium	3.3			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	104		N	P
7440-48-4	Cobalt	6.5			P
7440-50-8	Copper	1920		*	P
7439-89-6	Iron				NR
7439-92-1	Lead	2100			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.10			AV
7440-02-0	Nickel	19.3		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.52	U	N	P
7440-22-4	Silver	0.83	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	10.4	U	N	P
7440-62-2	Vanadium	16.4			P
7440-66-6	Zinc	10700		E	P
	Cyanide				NR
7440-31-5	Tin	20.8	U		P
7439-93-2	Lithium	10.4	U		P

olor Before: Clarity Before: Texture:

olor After: Clarity After: Artifacts:

omments:

CLIENT_ID: NSWC_16/16_035

FORM I - IN ILM02.1

D-00132

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16 035

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #015

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ348.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 7 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	4.3	J
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.4	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.4	U
75-15-0	Carbon Disulfide	5.4	U
75-35-4	1,1-Dichloroethene	5.4	U
75-34-4	1,1-Dichloroethane	5.4	U
540-59-0	trans-1,2-Dichloroethene	5.4	U
67-66-3	Chloroform	5.4	U
107-06-2	1,2-Dichloroethane	5.4	U
75-71-8	Dichlorodifluoromethane	5.4	U
74-88-4	Iodomethane	5.4	U
107-12-0	Propionitrile	5.4	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.4	U
56-23-5	Carbon Tetrachloride	5.4	U
108-05-4	Vinyl Acetate	5.4	U
75-27-4	Bromodichloromethane	5.4	U
78-87-5	1,2-Dichloropropane	5.4	U
10061-01-5	cis-1,3-Dichloropropene	5.4	U
79-01-6	Trichloroethene	5.4	U
71-43-2	Benzene	5.4	U
124-48-1	Dibromochloromethane	5.4	U
10061-02-6	trans-1,3-Dichloropropene	5.4	U
79-00-5	1,1,2-Trichloroethane	5.4	U
75-25-2	Bromoform	5.4	U

FORM I VOA 8260/Appendix IX

D- 00133

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 035

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #015

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ348.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 7 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.4	U
74-95-3	Dibromomethane		5.4	U
106-93-4	1,2-Dibromoethane (EDB)		5.4	U
108-10-1	4-Methyl-2-Pentanone		54	U
591-78-6	2-Hexanone		54	U
127-18-4	Tetrachloroethene		9	
79-34-5	1,1,2,2-Tetrachloroethane		5.4	U
108-88-3	Toluene		5.4	U
108-90-7	Chlorobenzene		5.4	U
100-41-4	Ethylbenzene		5.4	U
100-42-5	Styrene		5.4	U
108-38-3	m + p-Xylene		5.4	U
95-47-6	o-Xylene		5.4	U
80-62-6	Methyl methacrylate		5.4	U
630-20-6	1,1,1,2-Tetrachloroethane		5.4	U
96-18-4	1,2,3-Trichloropropane		5.4	U
110-57-6	trans-1,4-Dichloro-2-butene		27	U
97-63-2	Ethyl methacrylate		5.4	U
76-01-7	Pentachloroethane		5.4	U
96-12-8	1,2-Dibromo-3-chloropropane		2.8	J
78-83-1	Isobutyl Alcohol		5.4	U
126-99-8	Chloroprene	(TIC)	5.4	UZ
	3-Chloroprene	(TIC)	5.4	U
123-91-1	1,4-Dioxane	(TIC)	1100	U
Methylene Chloride - Dichloromethane				
Methyl ethyl ketone - 2-Butanone				
Chloroprene - 2-Chloro-1,3-butadiene				
Propionitrile - Ethyl Cyanide				

FORM I VOA 8260/Appendix IX

D-00134

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 035
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 7.2
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510147-015
Lab Name: AENI
Contract: 9510147
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Prepared: 10/23/95
Date Analyzed: 10/25/95
Time Analyzed: 0:49

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.30	U
RDX		0.36	U
TNB		0.24	U
TETRYL		0.27	U
DNB		0.20	U
TNT		0.23	U
2,6-DNT		0.25	U
2,4-DNT		0.20	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510147
Project Name:——— CRANE NSWC
Client Name:——— MK CORP

Sample Number
NSWC 16/16 035

AENI # 9510147-015

Concentration:——— Low
Date Sampled:——— 10/13/95
Date Received:——— 10/14/95
Date Ext Prepared:— 10/18/95
Date Analyzed:——— 10/20/95
Conc/Dil Factor:——— 5
Method: ——— 8080

GPC Cleanup | | Yes | X | No
Seperatory Funnel Extraction | | Yes
Continuous Liquid - Liquid Extraction | | Yes
Percent Moisture 7.2
Matrix: SOIL

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		8.9	U
319-85-7	beta-BHC		8.9	U
319-86-8	delta-BHC		8.9	U
58-89-9	gamma-BHC (Lindane)		18	U
75-44-8	Heptachlor		8.9	U
309-00-2	Aldrin		8.9	U
1024-57-3	Heptachlor epoxide		8.9	U
959-98-8	Endosulfan I		8.9	U
60-57-1	Dieldrin		18	U
75-55-9	4, 4'-DDE		18	U
72-20-8	Endrin		18	U
33213-65-9	Endosulfan II		18	U
72-54-8	4, 4'-DDD		18	U
1031-07-8	Endosulfan Sulfate		18	U
50-29-3	4, 4'-DDT		18	U
72-43-5	Methoxychlor		89	U
53494-70-5	Endrin Ketone		18	U
7421-36-3	Endrin aldehyde		18	U
57-74-9	Chlordane		180	U
8001-35-2	Toxaphene		890	U
12674-11-2	Aroclor-1016		180	U
11104-28-2	Aroclor-1221		360	U
11141-16-5	Aroclor-1232		180	U
53469-21-9	Aroclor-1242		180	U
12672-29-6	Aroclor-1248		180	U
11097-69-1	Aroclor-1254		180	U
11096-82-5	Aroclor-1260		180	U
510-15-6	Chlorobenzilate		356	U
2303-16-4	Diallate		1779	U
465-73-6	Isodrin		44	U
143-50-0	Kepone		178	U
82-68-8	Pentachloronitrobenzene		36	U

Vi - Volume of extract injected (ul) - _____ 5
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.29
Vt - Volume of total extract (ul) - _____ 10,000

FORM I

D-00136

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 036

Name: AENI

Contract: 9510147

Lab Code:

Case No.: MKC70

SAS No.:

SDG No.: 16/16

Matrix (soil/water): SOIL

Lab Sample ID: 951014716

Level (low/med): LOW

Date Received: 10/14/95

% Solids: 91.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	102			P
7440-38-2	Arsenic	6.5		N	P
7440-39-3	Barium	2360			P
7440-41-7	Beryllium	0.38			P
7440-43-9	Cadmium	10.5			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	24.4		N	P
7440-48-4	Cobalt	3.7			P
7440-50-8	Copper	4320		*	P
7439-89-6	Iron				NR
7439-92-1	Lead	8240			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.14			AV
7440-02-0	Nickel	34.4		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.54	U	N	P
7440-22-4	Silver	0.86	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	5.4	U	N	P
7440-62-2	Vanadium	20.2			P
7440-66-6	Zinc	15000		E	P
	Cyanide				NR
7440-31-5	Tin	21.5	U		P
7439-93-2	Lithium	10.8	U		P

Color Before:

Clarity Before:

Texture:

Color After:

Clarity After:

Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_036

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 036

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #016

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ349.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 9 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	12	
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.5	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.5	U
75-15-0	Carbon Disulfide	5.5	U
75-35-4	1,1-Dichloroethene	5.5	U
75-34-4	1,1-Dichloroethane	5.5	U
540-59-0	trans-1,2-Dichloroethene	5.5	U
67-66-3	Chloroform	5.5	U
107-06-2	1,2-Dichloroethane	5.5	U
75-71-8	Dichlorodifluoromethane	5.5	U
74-88-4	Iodomethane	5.5	U
107-12-0	Propionitrile	5.5	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.5	U
56-23-5	Carbon Tetrachloride	5.5	U
108-05-4	Vinyl Acetate	5.5	U
75-27-4	Bromodichloromethane	5.5	U
78-87-5	1,2-Dichloropropane	5.5	U
10061-01-5	cis-1,3-Dichloropropene	5.5	U
79-01-6	Trichloroethene	2.4	J
71-43-2	Benzene	5.5	U
124-48-1	Dibromochloromethane	5.5	U
10061-02-6	trans-1,3-Dichloropropene	5.5	U
79-00-5	1,1,2-Trichloroethane	5.5	U
75-25-2	Bromoform	5.5	U

FORM I VOA

8260/Appendix IX

D-00138

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 036

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #016

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ349.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 9 Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	5.5	U
74-95-3	Dibromomethane	5.5	U
106-93-4	1,2-Dibromoethane (EDB)	5.5	U
108-10-1	4-Methyl-2-Pentanone	55	U
591-78-6	2-Hexanone	55	U
127-18-4	Tetrachloroethene	18	
79-34-5	1,1,2,2-Tetrachloroethane	5.5	U
108-88-3	Toluene	19	
108-90-7	Chlorobenzene	5.5	U
100-41-4	Ethylbenzene	5.5	U
100-42-5	Styrene	5.5	U
108-38-3	m + p-Xylene	5.5	U
95-47-6	o-Xylene	5.5	U
80-62-6	Methyl methacrylate	5.5	U
630-20-6	1,1,1,2-Tetrachloroethane	5.5	U
96-18-4	1,2,3-Trichloropropane	5.5	U
110-57-6	trans-1,4-Dichloro-2-butene	27	U
97-63-2	Ethyl methacrylate	5.5	U
76-01-7	Pentachloroethane	5.5	U
96-12-8	1,2-Dibromo-3-chloropropane	5.5	U
78-83-1	Isobutyl Alcohol	5.5	U
126-99-8	Chloroprene (TIC)	5.5	UZ
	3-Chloroprene (TIC)	5.5	U
123-91-1	1,4-Dioxane (TIC)	1100	U
Methylene Chloride - Dichloromethane			
Methyl ethyl ketone - 2-Butanone			
Chloroprene - 2-Chloro-1,3-butadiene			
Propionitrile - Ethyl Cyanide			

FORM I VOA 8260/Appendix IX

D-00139

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 036
Sample:

Matrix: SOIL
Sample: (g) 2.4
Final Volume: (L) 0.02
(%) Moisture: 9
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510147-016
Lab Name: AENI
Contract: 9510147
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Prepared: 10/23/95
Date Analyzed: 10/25/95
Time Analyzed: 1:37

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.26	U
RDX		0.32	U
TNB		0.22	U
TETRYL		0.23	U
DNB		0.18	U
TNT		0.21	U
2,6-DNT		0.22	U
2,4-DNT		0.18	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.: 9510147
Project Name: CRANE NSWC
Client Name: MK CORP

Sample Number
NSWC 16/16 036

AENI # 9510147-016

Concentration: Low
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Ext Prepared: 10/18/95
Date Analyzed: 10/20/95
Conc/Dil Factor: 2
Method: 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	9	
Matrix:	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		3.6	U
319-85-7	beta-BHC		3.6	U
319-86-8	delta-BHC		3.6	U
58-89-9	gamma-BHC (Lindane)		7.2	U
75-44-8	Heptachlor		3.6	U
309-00-2	Aldrin		3.6	U
1024-57-3	Heptachlor epoxide		3.6	U
959-98-8	Endosulfan I		3.6	U
60-57-1	Dieldrin		7.2	U
75-55-9	4, 4'-DDE		7.2	U
72-20-8	Endrin		7.2	U
33213-65-9	Endosulfan II		7.2	U
72-54-8	4, 4'-DDD		7.2	U
1031-07-8	Endosulfan Sulfate		7.2	U
50-29-3	4, 4'-DDT		7.2	U
72-43-5	Methoxychlor		36	U
53494-70-5	Endrin Ketone		7.2	U
7421-36-3	Endrin aldehyde		7.2	U
57-74-9	Chlordane		72	U
8001-35-2	Toxaphene		360	U
12674-11-2	Aroclor-1016		72	U
11104-28-2	Aroclor-1221		140	U
11141-16-5	Aroclor-1232		72	U
53469-21-9	Aroclor-1242		72	U
12672-29-6	Aroclor-1248		72	U
11097-69-1	Aroclor-1254		72	U
11096-82-5	Aroclor-1260		72	U
510-15-6	Chlorobenzilate		144	U
2303-16-4	Diallate		721	U
465-73-6	Isodrin		18	U
143-50-0	Kepone		72	U
82-68-8	Pentachloronitrobenzene		14	U

Vi - Volume of extract injected (ul) - 5
Vs - Volume of Water extracted (ml) - N/A
Ws - Weight of sample extracted (g) - 30.49
Vt - Volume of total extract (ul) - 10,000

FORM I

D- 00141

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 037

L Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951014717

Level (low/med): LOW Date Received: 10/14/95

% Solids: 94.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	22.6			P
7440-38-2	Arsenic	6.5		N	P
7440-39-3	Barium	1850			P
7440-41-7	Beryllium	0.43			P
7440-43-9	Cadmium	7.2			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	29.6		N	P
7440-48-4	Cobalt	7.0			P
7440-50-8	Copper	2910		*	P
7439-89-6	Iron				NR
7439-92-1	Lead	4050			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.11	U		AV
7440-02-0	Nickel	33.1		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.52	U	N	P
7440-22-4	Silver	0.83	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	10.4	U	N	P
7440-62-2	Vanadium	13.5			P
7440-66-6	Zinc	15900		E	P
	Cyanide				NR
7440-31-5	Tin	20.8	U		P
7439-93-2	Lithium	10.4	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_037

FORM I - IN ILM02.1

D-00142

VOLATILE ORGANICS ANALYSIS DATA SHEET

NSWC 16/16 037

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #017

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ356.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 6 Date Analyzed: 10/24/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	5.7	
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.3	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.3	U
75-15-0	Carbon Disulfide	5.3	U
75-35-4	1,1-Dichloroethene	5.3	U
75-34-4	1,1-Dichloroethane	5.3	U
540-59-0	trans-1,2-Dichloroethene	5.3	U
67-66-3	Chloroform	5.3	U
107-06-2	1,2-Dichloroethane	5.3	U
75-71-8	Dichlorodifluoromethane	5.3	U
74-88-4	Iodomethane	5.3	U
107-12-0	Propionitrile	5.3	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.3	U
56-23-5	Carbon Tetrachloride	5.3	U
108-05-4	Vinyl Acetate	5.3	U
75-27-4	Bromodichloromethane	5.3	U
78-87-5	1,2-Dichloropropane	5.3	U
10061-01-5	cis-1,3-Dichloropropene	5.3	U
79-01-6	Trichloroethene	5.3	U
71-43-2	Benzene	5.3	U
124-48-1	Dibromochloromethane	5.3	U
10061-02-6	trans-1,3-Dichloropropene	5.3	U
79-00-5	1,1,2-Trichloroethane	5.3	U
75-25-2	Bromoform	5.3	U

FORM I VOA 8260/Appendix IX

SAMPLE NO.

NSWC 16/16 037

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #017

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ356.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 6 Date Analyzed: 10/24/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	5.3	U
74-95-3	Dibromomethane	5.3	U
106-93-4	1,2-Dibromoethane (EDB)	5.3	U
108-10-1	4-Methyl-2-Pentanone	53	U
591-78-6	2-Hexanone	53	U
127-18-4	Tetrachloroethene	11	
79-34-5	1,1,2,2-Tetrachloroethane	5.3	U
108-88-3	Toluene	5.3	U
108-90-7	Chlorobenzene	5.3	U
100-41-4	Ethylbenzene	5.3	U
100-42-5	Styrene	5.3	U
108-38-3	m + p-Xylene	5.3	U
95-47-6	o-Xylene	5.3	U
80-62-6	Methyl methacrylate	5.3	U
630-20-6	1,1,1,2-Tetrachloroethane	5.3	U
96-18-4	1,2,3-Trichloropropane	5.3	U
110-57-6	trans-1,4-Dichloro-2-butene	27	U
97-63-2	Ethyl methacrylate	5.3	U
76-01-7	Pentachloroethane	5.3	U
96-12-8	1,2-Dibromo-3-chloropropane	5.3	U
78-83-1	Isobutyl Alcohol	5.3	U
126-99-8	Chloroprene (TIC)	5.3	UZ
	3-Chloroprene (TIC)	5.3	U
123-91-1	1,4-Dioxane (TIC)	1100	U
	Methylene Chloride - Dichloromethane		
	Methyl ethyl ketone - 2-Butanone		
	Chloroprene - 2-Chloro-1,3-butadiene		
	Propionitrile - Ethyl Cyanide		

FORM I VOA 8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 037
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 5.8
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510147-017
Lab Name: AENI
Contract: 9510147
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Prepared: 10/23/95
Date Analyzed: 10/25/95
Time Analyzed: 2:35

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.29	U
RDX		0.36	U
TNB		0.24	U
TETRYL		0.26	U
DNB		0.20	U
TNT		0.23	U
2,6-DNT		0.25	U
2,4-DNT		0.20	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510147

Project Name:——— CRANE NSWC

Client Name:——— MK CORP

Sample Number
NSWC 16/16 037

AENI # 9510147-017

Concentration:——— Low

Date Sampled:——— 10/13/95

Date Received:——— 10/14/95

Date Ext Prepared:——— 10/18/95

Date Analyzed:——— 10/20/95

Conc/Dil Factor:——— 10

Method: ——— 8080

GPC Cleanup		Yes	X	No
Seperatory Funnel Extraction				Yes
Continuous Liquid - Liquid Extraction				Yes
Percent Moisture	5.8			
Matrix	SOIL			

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		17	U
319-85-7	beta-BHC		17	U
319-86-8	delta-BHC		17	U
58-89-9	gamma-BHC (Lindane)		34	U
75-44-8	Heptachlor		17	U
309-00-2	Aldrin		17	U
1024-57-3	Heptachlor epoxide		17	U
959-98-8	Endosulfan I		17	U
60-57-1	Dieldrin		34	U
75-55-9	4, 4'-DDE		34	U
72-20-8	Endrin		34	U
33213-65-9	Endosulfan II		34	U
72-54-8	4, 4'-DDD		34	U
1031-07-8	Endosulfan Sulfate		34	U
50-29-3	4, 4'-DDT		34	U
72-43-5	Methoxychlor		170	U
53494-70-5	Endrin Ketone		34	U
7421-36-3	Endrin aldehyde		34	U
57-74-9	Chlordane		340	U
8001-35-2	Toxaphene		1700	U
12674-11-2	Aroclor-1016		340	U
11104-28-2	Aroclor-1221		690	U
11141-16-5	Aroclor-1232		340	U
53469-21-9	Aroclor-1242		340	U
12672-29-6	Aroclor-1248		340	U
11097-69-1	Aroclor-1254		340	U
11096-82-5	Aroclor-1260		340	U
510-15-6	Chlorobenzilate		689	U
2303-16-4	Diallate		3446	U
465-73-6	Isodrin		86	U
143-50-0	Kepone		345	U
82-68-8	Pentachloronitrobenzene		69	U

Vi - Volume of extract injected (ul) - _____ 5

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.81

Vt - Volume of total extract (ul) - _____ 10,000

FORM I

D- 00146

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 038

Lab Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951014718

Level (low/med): LOW Date Received: 10/14/95

% Solids: 93.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	24.8			P
7440-38-2	Arsenic	3.2		N	P
7440-39-3	Barium	1120			P
7440-41-7	Beryllium	0.37			P
7440-43-9	Cadmium	5.3			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	25.5		N	P
7440-48-4	Cobalt	7.6			P
7440-50-8	Copper	3620		*	P
7439-89-6	Iron				NR
7439-92-1	Lead	2330			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.22			AV
7440-02-0	Nickel	24.9		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.52	U	N	P
7440-22-4	Silver	0.83	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	10.4	U	N	P
7440-62-2	Vanadium	10.9			P
7440-66-6	Zinc	12100		E	P
	Cyanide				NR
7440-31-5	Tin	20.7	U		P
7439-93-2	Lithium	10.4	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_038

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 038

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #018

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ357.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 6 Date Analyzed: 10/24/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	6.6	
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.3	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.3	U
75-15-0	Carbon Disulfide	5.3	U
75-35-4	1,1-Dichloroethene	5.3	U
75-34-4	1,1-Dichloroethane	5.3	U
540-59-0	trans-1,2-Dichloroethene	5.3	U
67-66-3	Chloroform	5.3	U
107-06-2	1,2-Dichloroethane	5.3	U
75-71-8	Dichlorodifluoromethane	5.3	U
74-88-4	Iodomethane	5.3	U
107-12-0	Propionitrile	5.3	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.3	U
56-23-5	Carbon Tetrachloride	5.3	U
108-05-4	Vinyl Acetate	5.3	U
75-27-4	Bromodichloromethane	5.3	U
78-87-5	1,2-Dichloropropane	5.3	U
10061-01-5	cis-1,3-Dichloropropene	5.3	U
79-01-6	Trichloroethene	5.3	U
71-43-2	Benzene	5.3	U
124-48-1	Dibromochloromethane	5.3	U
10061-02-6	trans-1,3-Dichloropropene	5.3	U
79-00-5	1,1,2-Trichloroethane	5.3	U
75-25-2	Bromoform	5.3	U

FORM I VOA 8260/Appendix IX

VOLATILE ORGANICS ANALYSIS DATA SHEET

NSWC 16/16 038

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #018

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ357.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 6 Date Analyzed: 10/24/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	5.3	U
74-95-3	Dibromomethane	5.3	U
106-93-4	1,2-Dibromoethane (EDB)	5.3	U
108-10-1	4-Methyl-2-Pentanone	53	U
591-78-6	2-Hexanone	53	U
127-18-4	Tetrachloroethene	15	
79-34-5	1,1,2,2-Tetrachloroethane	5.3	U
108-88-3	Toluene	5.3	U
108-90-7	Chlorobenzene	5.3	U
100-41-4	Ethylbenzene	5.3	U
100-42-5	Styrene	5.3	U
108-38-3	m + p-Xylene	5.3	U
95-47-6	o-Xylene	5.3	U
80-62-6	Methyl methacrylate	5.3	U
630-20-6	1,1,1,2-Tetrachloroethane	5.3	U
96-18-4	1,2,3-Trichloropropane	5.3	U
110-57-6	trans-1,4-Dichloro-2-butene	27	U
97-63-2	Ethyl methacrylate	5.3	U
76-01-7	Pentachloroethane	5.3	U
96-12-8	1,2-Dibromo-3-chloropropane	1.8	J
78-83-1	Isobutyl Alcohol	5.3	U
126-99-8	Chloroprene (TIC)	5.3	UZ
	3-Chloroprene (TIC)	5.3	U
123-91-1	1,4-Dioxane (TIC)	1100	U
Methylene Chloride - Dichloromethane			
Methyl ethyl ketone - 2-Butanone			
Chloroprene - 2-Chloro-1,3-butadiene			
Propionitrile - Ethyl Cyanide			

FORM I VOA 8260/Appendix IX

D-00149

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 038
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 6.3
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510147-018
Lab Name: AENI
Contract: 9510147
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Prepared: 10/23/95
Date Analyzed: 10/25/95
Time Analyzed: 3:14

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.29	U
RDX		0.35	U
TNB		0.24	U
TETRYL		0.26	U
DNB		0.20	U
TNT		0.23	U
2,6-DNT		0.25	U
2,4-DNT		0.20	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510147
Project Name:——— CRANE NSWC
Client Name:——— MK CORP

Sample Number
NSWC 16/16 038

AENI # 9510147-018

Concentration:——— Low
Date Sampled:——— 10/13/95
Date Received:——— 10/14/95
Date Ext Prepared:——— 10/18/95
Date Analyzed:——— 10/21/95
Conc/Dil Factor:——— 10
Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	6.3	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		17	U
319-85-7	beta-BHC		17	U
319-86-8	delta-BHC		17	U
58-89-9	gamma-BHC (Lindane)		34	U
75-44-8	Heptachlor		17	U
309-00-2	Aldrin		17	U
1024-57-3	Heptachlor epoxide		17	U
959-98-8	Endosulfan I		17	U
60-57-1	Dieldrin		34	U
75-55-9	4, 4'-DDE		34	U
72-20-8	Endrin		34	U
33213-65-9	Endosulfan II		34	U
72-54-8	4, 4'-DDD		34	U
1031-07-8	Endosulfan Sulfate		34	U
50-29-3	4, 4'-DDT		34	U
72-43-5	Methoxychlor		170	U
53494-70-5	Endrin Ketone		34	U
7421-36-3	Endrin aldehyde		34	U
57-74-9	Chlordane		340	U
8001-35-2	Toxaphene		1700	U
12674-11-2	Aroclor-1016		340	U
11104-28-2	Aroclor-1221		690	U
11141-16-5	Aroclor-1232		340	U
53469-21-9	Aroclor-1242		340	U
12672-29-6	Aroclor-1248		340	U
11097-69-1	Aroclor-1254		340	U
11096-82-5	Aroclor-1260		340	U
510-15-6	Chlorobenzilate		690	U
2303-16-4	Diallate		3449	U
465-73-6	Isodrin		86	U
143-50-0	Kepone		345	U
82-68-8	Pentachloronitrobenzene		69	U

Vi - Volume of extract injected (ul) - _____ 5
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.94
Vt - Volume of total extract (ul) - _____ 10,000

FORM I

D-00151

ORGANIC ANALYSIS DATA SHEET

Account #: MKC70
Analysis: BTEX
Method: 8020
Instrument: GC - L (HP5890)

NSWC 16/16 039
Sample:

Matrix: SOIL
Sample: (g) 5.0
Final Volume: (ml) 5.0
(%) Moisture: 17.8
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510147-019
Lab Name: AENI - MD
Contract: 9510147
Date Sampled: 10/13/95
Date Received: 10/14/95
Date Prepared: 10/24/95
Date Analyzed: 10/25/95
Time Analyzed: 5:28

Compound	Concentration (ug/Kg)	Detection Limit	Qualifier
Benzene		1.2	U
Toluene		1.2	U
Ethyl Benzene		1.2	U
Total Xylenes		3.6	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510147
Project Name:——— CRANE NSWC
Client Name:——— MK CORP

Sample Number
NSWC 16/16 039

AENI # 9510147-019

Concentration:——— Low
Date Sampled:——— 10/13/95
Date Received:——— 10/14/95
Date Ext Prepared:— 10/16/95
Date Analyzed:——— 10/21/95
Conc/Dil Factor:——— 20
Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	0	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		33	U
319-85-7	beta-BHC	230	33	P
319-86-8	delta-BHC		33	U
58-89-9	gamma-BHC (Lindane)		66	U
75-44-8	Heptachlor	110	33	P
309-00-2	Aldrin	230	33	P
1024-57-3	Heptachlor epoxide	78	33	P
959-98-8	Endosulfan I		33	U
60-57-1	Dieldrin		66	U
75-55-9	4, 4'-DDE		66	U
72-20-8	Endrin		66	U
33213-65-9	Endosulfan II		66	U
72-54-8	4, 4'-DDD		66	U
1031-07-8	Endosulfan Sulfate		66	U
50-29-3	4, 4'-DDT		66	U
72-43-5	Methoxychlor		330	U
53494-70-5	Endrin Ketone		66	U
7421-36-3	Endrin aldehyde		66	U
57-74-9	Chlordane		660	U
8001-35-2	Toxaphene		3300	U
12674-11-2	Aroclor-1016		660	U
11104-28-2	Aroclor-1221		1300	U
11141-16-5	Aroclor-1232		660	U
53469-21-9	Aroclor-1242		660	U
12672-29-6	Aroclor-1248		660	U
11097-69-1	Aroclor-1254		660	U
11096-82-5	Aroclor-1260		660	U
510-15-6	Chlorobenzilate		1321	U
2303-16-4	Diallate		6606	U
465-73-6	Isodrin		165	U
143-50-0	Kepone		661	U
82-68-8	Pentachloronitrobenzene		132	U

Vi - Volume of extract injected (ul) - _____ 5
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.28
Vt - Volume of total extract (ul) - _____ 10,000

FORM I D-00153

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SWC 16/16/039

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #019

Sample wt/vol: 30.6 (g/mL) G Lab File ID: DJ318.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: 18 decanted: (Y/N): N Date Extracted: 10/20/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 10/24/95

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH:

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
91-20-3	Naphthalene	20000	UD
91-57-6	2-Methylnaphthalene	20000	UD
91-58-7	2-Chloronaphthalene	20000	UD
208-96-8	Acenaphthylene	20000	UD
83-32-9	Acenaphthene	20000	UD
132-64-9	Dibenzofuran	20000	UD
86-73-7	Fluorene	20000	UD
85-01-8	Phenanthrene	16000	JD
120-12-7	Anthracene	4900	JD
206-44-0	Fluoranthene	20000	UD
129-00-0	Pyrene	3900	JD
56-55-3	Benzo[a]anthracene	20000	UD
218-01-9	Chrysene	20000	UD
205-99-2	Benzo[b]fluoranthene	20000	UD
207-08-9	Benzo[k]fluoranthene	20000	UD
50-32-8	Benzo[a]pyrene	20000	UD
193-39-5	Indeno[1,2,3-cd]pyrene	20000	UD
53-70-3	Dibenz[a,h]anthracene	20000	UD
191-24-2	Benzo[g,h,i]perylene	20000	UD

SWMU 16/16 DATA
SAMPLES 040 THROUGH 050

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 040

Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): WATER Lab Sample ID: 951014720

Level (low/med): LOW Date Received: 10/14/95

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	39.3			P
7440-38-2	Arsenic	8.0	U		P
7440-39-3	Barium	728			P
7440-41-7	Beryllium	2.0	U		P
7440-43-9	Cadmium	9.1			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	11.1			P
7440-48-4	Cobalt	11.0	U		P
7440-50-8	Copper	277			P
7439-89-6	Iron				NR
7439-92-1	Lead	1280			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.67			AV
7440-02-0	Nickel	15.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	5.0	U		P
7440-22-4	Silver	8.0	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	10.0	U		P
7440-62-2	Vanadium	16.0	U		P
7440-66-6	Zinc	2320			P
	Cyanide				NR
7440-31-5	Tin	200	U		P
7439-93-2	Lithium				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_040

AMERICAN ENVIRONMENTAL NETWORK, INC.

Client: MK CORP October 27, 1995

Project: MKC70

Contract: 9510147

Analysis: EXPLOSIVES by 8330

Client ID	Lab ID	Date Sampled	Date Received	Date Prepared	Date Analyzed
NSWC 16/16 022	L9510147-002	10/13/95	10/14/95	10/19/95	10/20/95
NSWC 16/16 023	L9510147-003	10/13/95	10/14/95	10/19/95	10/20/95
NSWC 16/16 024	L9510147-004	10/13/95	10/14/95	10/19/95	10/20/95
NSWC 16/16 025	L9510147-005	10/13/95	10/14/95	10/19/95	10/20/95
NSWC 16/16 026	L9510147-006	10/13/95	10/14/95	10/19/95	10/20/95
NSWC 16/16 027	L9510147-007	10/13/95	10/14/95	10/19/95	10/21/95
NSWC 16/16 028	L9510147-008	10/13/95	10/14/95	10/19/95	10/21/95
NSWC 16/16 029	L9510147-009	10/13/95	10/14/95	10/19/95	10/21/95
NSWC 16/16 030	L9510147-010	10/13/95	10/14/95	10/19/95	10/21/95
NSWC 16/16 031	L9510147-011	10/13/95	10/14/95	10/19/95	10/21/95
NSWC 16/16 032	L9510147-012	10/13/95	10/14/95	10/23/95	10/24/95
NSWC 16/16 033	L9510147-013	10/13/95	10/14/95	10/23/95	10/24/95
NSWC 16/16 034	L9510147-014	10/13/95	10/14/95	10/23/95	10/25/95
NSWC 16/16 035	L9510147-015	10/13/95	10/14/95	10/23/95	10/25/95
NSWC 16/16 036	L9510147-016	10/13/95	10/14/95	10/23/95	10/25/95
NSWC 16/16 037	L9510147-017	10/13/95	10/14/95	10/23/95	10/25/95
NSWC 16/16 038	L9510147-018	10/13/95	10/14/95	10/23/95	10/25/95

Seventeen soil samples were received and analyzed for HMX, RDX, TNB, TETRYL, DNB, TNT, 2,6-DNT and 2,4-DNT by method 8330.

The enclosed package contains tabulated results (Form I)'s, a surrogate recovery summary (Form II), a matrix spike/matrix spike dup recovery summary (Form III), a method blank summary (Form IV), an initial calibration summary (Form VI) and a continuing calibration summary (Form VII).

Form I (Organic Analysis Data Sheet)
The qualifier 'U' indicates that a compound was analyzed for but not detected above the specified detection limit. All samples were prepared and analyzed within the method specified holding times. Sample #NSWC 16/16 040 (AENI# 9510147-020) is not reported because of insufficient sample volume.

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.: 9510147

Project Name: CRANE NSWC

Client Name: MK CORP

Sample Number
NSWC 16/16 040

AENI # 9510147-020

Concentration: Low

Date Sampled: 10/13/95

Date Received: 10/14/95

Date Ext Prepared: 10/20/95

Date Analyzed: 10/24/95

Conc/Dil Factor: 10

Method: 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		X Yes
Continuous Liquid - Liquid Extraction		Yes

Percent Moisture: N/A

Matrix: WATER

CAS Number	Compound	Concentration ug/L	Detection Limit	Qualifier
319-84-6	alpha-BHC		0.54	U
319-85-7	beta-BHC		0.54	U
319-86-8	delta-BHC		0.54	U
58-89-9	gamma-BHC (Lindane)		1.1	U
75-44-8	Heptachlor		0.54	U
309-00-2	Aldrin		0.54	U
1024-57-3	Heptachlor epoxide		0.54	U
959-98-8	Endosulfan I		0.54	U
60-57-1	Dieldrin		1.1	U
75-55-9	4, 4'-DDE		1.1	U
72-20-8	Endrin		1.1	U
33213-65-9	Endosulfan II		1.1	U
72-54-8	4, 4'-DDD		1.1	U
1031-07-8	Endosulfan Sulfate		1.1	U
50-29-3	4, 4'-DDT		1.1	U
72-43-5	Methoxychlor		5.4	U
53494-70-5	Endrin Ketone		1.1	U
7421-36-3	Endrin aldehyde		1.1	U
57-74-9	Chlordane		11	U
8001-35-2	Toxaphene		54	U
12674-11-2	Aroclor-1016		11	U
11104-28-2	Aroclor-1221		22	U
11141-16-5	Aroclor-1232		11	U
53469-21-9	Aroclor-1242		11	U
12672-29-6	Aroclor-1248		11	U
11097-69-1	Aroclor-1254		11	U
11096-82-5	Aroclor-1260		11	U
510-15-6	Chlorobenzilate		22	U
2303-16-4	Diallate		109	U
465-73-6	Isodrin		2.7	U
143-50-0	Kepone		11	U
82-68-8	Pentachloronitrobenzene		2.2	U

Vi - Volume of extract injected (ul) - 5

Vs - Volume of Water extracted (ml) - 920

Ws - Weight of sample extracted (g) - N/A

Vt - Volume of total extract (ul) - 10,000

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510147
Report To: MK Corp
Project: Crane NSWC
Date: November 10, 1995
Sample ID: NSWC 16/16 040, dated 10/13/95

Parameter	Method	Result	Date Analyzed
Nitrate-N	EPA 353.3	<0.05	11/10/95

(1) Results reported as mg/L.

\gchem\003

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-042

Lab Name: AENI Contract: 9510172

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): WATER Lab Sample ID: 951017201

Level (low/med): LOW Date Received: 10/17/95

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	20.0	U		P
7440-39-3	Barium	756			P
7440-43-9	Cadmium	40.0	U		P
7440-47-3	Chromium	100	U		P
7440-50-8	Copper				NR
7439-92-1	Lead	1390			P
7439-97-6	Mercury	0.20	U		AV
7440-02-0	Nickel				NR
7782-49-2	Selenium	20.0	U		P
7440-22-4	Silver	50.0	U		P
7440-66-6	Zinc				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:
CLIENT_ID: NSWC_16/16-042
TCLP

FORM I - IN ILM03.0

NSWC 16.16.042

Lab Name: AENI Contract: 9510172

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #001

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: FJ298.D

Level: (low/med) Date Received: 10/17/95

% Moisture: not dec. 100 Date Analyzed: 10/19/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 100.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L of Leach	Q
75-01-4	Vinyl Chloride	450	JD
75-35-4	1,1-Dichloroethene	500	UD
67-66-3	Chloroform	500	UD
107-06-2	1,2-Dichloroethane	500	UD
78-93-3	2-Butanone	10000	UD
56-23-5	Carbon Tetrachloride	500	UD
79-01-6	Trichloroethene	18000	D
71-43-2	Benzene	500	UD
127-18-4	Tetrachloroethene	500	UD
108-90-7	Chlorobenzene	500	UD

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-042
Sample:

Lab Sample ID: L9510172-001
Lab Name: AENI
Contract: 9510172
Date Sampled: 10/16/95
Date Received: 10/17/95
Date Prepared: 10/23/95
Date Analyzed: 10/28/95
Time Analyzed: 6:27

Matrix: SOIL
Sample: (g) 2.3
Final Volume: (L) 0.02
(%) Moisture: 55
Dilution Factor: 1
Level (low/med): LOW

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX	26	5.5	
RDX	42	6.7	
TNB		0.45	U
TETRYL		0.49	U
DNB		0.37	U
TNT	9.5	0.43	
2,6-DNT		0.47	U
2,4-DNT		0.37	U

HMX & RDX are quantitated from a 10X dilution

Form I

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

TCLP PESTICIDES

Case No.:——— 9510172

Project Name:——— MKC70

Client Name:——— MK CORP

Sample Number

NSWC16/16-042

AENI # 9510172-001

Concentration:——— Low

Date Sampled:——— 10/16/95

Date Received:——— 10/17/95

Date Ext Prepared:— 10/24/95

Date Analyzed:——— 10/27/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		X Yes
Continuous Liquid - Liquid Extration		Yes

Percent Moisture N/A

Matrix LEACH

CAS Number	Compound	Concentration ug/L	Detection Limit	Qualifier
58-89-9	gamma-BHC (Lindane)		0.20	U
75-44-8	Heptachlor		0.10	U
1024-57-3	Heptachlor epoxide		0.10	U
72-20-8	Endrin		0.20	U
72-43-5	Methoxychlor		1.0	U
5103-71-9	alpha-Chlordane		0.10	U
5103-74-2	gamma-Chlordane		0.10	U
8001-35-2	Toxaphene		10	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ 500

Ws - Weight of sample extracted (g) - _____ N/A

Vt - Volume of total extract (ul) - _____ 10,000

FORM I

Lab Name: AENI Contract: 9510172

Project No.: MKC Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #001

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: DJ293.D

Level: (low/med) Date Received: 10/17/95

% Moisture: decanted: (Y/N): N Date Extracted: 10/20/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/23/95

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L of Leach	Q
110-86-1	Pyridine	40	UD
106-46-7	1,4-Dichlorobenzene	40	UD
95-48-7	2-Methylphenol	40	UD
108-39-4	3-Methylphenol	40	UD
67-72-1	Hexachloroethane	40	UD
106-44-5	4-Methylphenol	40	UD
98-95-3	Nitrobenzene	40	UD
87-68-3	Hexachlorobutadiene	40	UD
88-06-2	2,4,6-Trichlorophenol	40	UD
95-95-4	2,4,5-Trichlorophenol	200	UD
121-14-2	2,4-Dinitrotoluene	40	UD
118-74-1	Hexachlorobenzene	40	UD
87-86-5	Pentachlorophenol	200	UD

AENI
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8150

Sample Number
NSWC 16/16-042

Case No.:_____ 9510172
Client Name:_____ MK CORP
Project Name:_____ CRANE, NSWC

AENI # 9510172-001

Concentration: _____ Low
Date Sampled:_____ 10/16/95
Date Received:_____ 10/17/95
Date Extract Prepared:_ 10/19/95
Date Analyzed:_____ 10/20/95
Conc/Dil Factor:_____ 1
Matrix_____ LEACH

GPC Cleanup _____ No
Separatory Funnel Ext.: ____ Yes
Continuous Liq-Liq Ext.: ___ No
Percent Moisture (decanted)_ N/A

Compound	Concentration ug/L	Reporting Limit	Qualifier
2,4 D		0.50	U
SILVEX		0.50	U

Vi - Volume of extract injected (ul)___ 1
Vs - Volume of water extracted (ml)__ 500
Ws - Mass of soil extracted (g)_____ N/A
Vt- Volume of total extract (ul)_____ 5000

FORM I

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8325 Fax (410) 997-2586

Report Number: 9510172
Report To: MK Corp.
Project: NSWC Crane #4324-0009-000-30
Date: November 02, 1995
Sample ID: NSWC 16/16-042, dated 10/16/95

Parameter	Method	Result	Date Analyzed
Corrosivity (as pH)	SW846 9040	9.2	11/01/95
Flashpoint, °F	SW846 1010	>203	10/30/95
Reactive Cyanide, mg/Kg	(1)	<2	10/31/95
Reactive Sulfide, mg/Kg	(2)	80	10/31/95
Paintfilter	SW846 9095	(3)	10/30/95

(1) SW846 Chapter 7.3.3
(2) SW846 Chapter 7.3.4
(3) No Free Liquid.

\gchem\003

SWMU 16/16

SAMPLE 043, METALS ANALYSIS
METHODS 6010/7471

ANALYSES WERE NOT ABLE TO BE PERFORMED
DUE TO INCORRECTLY PRESERVED SAMPLE FRACTION

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16-043

Lab Name: AENI Contract: 9510203

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: #001

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: FJ512.D

Level: (low/med) Date Received: 10/18/95

% Moisture: not dec. Date Analyzed: 10/31/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 5000.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L of Leach	Q
75-01-4	Vinyl Chloride	50000	UD
75-35-4	1,1-Dichloroethene	25000	UD
67-66-3	Chloroform	25000	UD
107-06-2	1,2-Dichloroethane	25000	UD
78-93-3	2-Butanone	500000	UD
56-23-5	Carbon Tetrachloride	25000	UD
79-01-6	Trichloroethene	2600000	D
71-43-2	Benzene	25000	UD
127-18-4	Tetrachloroethene	25000	UD
108-90-7	Chlorobenzene	25000	UD

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-043
Sample:

Matrix: WATER
Sample: (ml) 214
Final Volume: (ml 25
(%) Moisture: N/A
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510203-001
Lab Name: AENI
Contract: 9510203
Date Sampled: 10/17/95
Date Received: 10/18/95
Date Prepared: 10/24/95
Date Analyzed: 10/30/95
Time Analyzed: 20:59

Compound	Concentration (ug/L)	Detection Limit	Qualifier
HMX		3.3	U
RDX		4.0	U
TNB		2.7	U
TETRYL		2.9	U
DNB		2.2	U
TNT	870,000	26,000	
2,6-DNT		2.8	U
2,4-DNT		2.2	U

The value for TNT was taken from a 10,000 dilution.

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

TCLP PESTICIDES

Case No.:——— 9510203

Project Name:——— CRANE NSWC

Client Name:——— MK CORP

Sample Number
NSWC 16/16-043

AENI # 9510203-001

Concentration:——— Low

Date Sampled:——— 10/17/95

Date Received:——— 10/18/95

Date Ext Prepared:—— 10/20/95

Date Analyzed:——— 10/24/95

Conc/Dil Factor:——— 50

Method: ——— 8080

GPC Cleanup		Yes / X No
Seperatory Funnel Extraction		X Yes
Continuous Liquid - Liquid Extration		Yes
Percent Moisture	N/A	
Matrix:	LEACH	

CAS Number	Compound	Concentration ug/L	Detection Limit	Qualifier
58-89-9	gamma-BHC (Lindane)		10	U
75-44-8	Heptachlor		5.0	U
1024-57-3	Heptachlor epoxide		5.0	U
72-20-8	Endrin		10	U
72-43-5	Methoxychlor		50	U
5103-71-9	alpha-Chlordane		5.0	U
5103-74-2	gamma-Chlordane		5.0	U
8001-35-2	Toxaphene		500	U

Vi - Volume of extract injected (ul) - _____ 5

Vs - Volume of Water extracted (ml) - _____ 500

Ws - Weight of sample extracted (g) - _____ N/A

Vt - Volume of total extract (ul) - _____ 10,000

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-043

Lab Name: AENI Contract: 9510203

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: #001

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: DJ342.D

Level: (low/med) Date Received: 10/18/95

% Moisture: decanted: (Y/N): N Date Extracted: 10/21/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/25/95

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L of Leach	Q
110-86-1	Pyridine	40	UD
106-46-7	1,4-Dichlorobenzene	40	UD
95-48-7	2-Methylphenol	40	UD
108-39-4	3-Methylphenol	40	UD
67-72-1	Hexachloroethane	40	UD
106-44-5	4-Methylphenol	45	D
98-95-3	Nitrobenzene	40	UD
87-68-3	Hexachlorobutadiene	40	UD
88-06-2	2,4,6-Trichlorophenol	40	UD
95-95-4	2,4,5-Trichlorophenol	200	UD
121-14-2	2,4-Dinitrotoluene	160	D
118-74-1	Hexachlorobenzene	40	UD
87-86-5	Pentachlorophenol	200	UD

AENI
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8150

Case No.: 9510203
Client Name: MK CORP
Project Name: MKC70

Sample Number
NSWC 16/16-043

AENI # 9510203-001

Concentration: Low
Date Sampled: 10/17/95
Date Received: 10/18/95
Date Extract Prepared: 10/23/95
Date Analyzed: 11/3/95
Conc/Dil Factor: 20
Matrix LEACH

GPC Cleanup No
Separatory Funnel Ext.: Yes
Continuous Liq-Liq Ext.: No
Percent Moisture (decanted) N/A

Compound	Concentration ug/L	Reporting Limit	Qualifier
2,4 D		5.10	U
SILVEX		5.10	U

Vi - Volume of extract injected (ul) 1
Vs - Volume of water extracted (ml) 980
Ws - Mass of soil extracted (g) N/A
Vt- Volume of total extract (ul) 5000

FORM I

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510203
Report To: MK Corp.
Project: NSWC Crane
Date: November 02, 1995
Sample ID: NSWC 16/16-043, dated 10/17/95

Parameter	Method	Result	Date Analyzed
Corrosivity (as pH)	SW846 9040	8.5	11/01/95
Flashpoint, °F	SW846 1010	>203	11/01/95
Reactive Cyanide, mg/L	(1)	<0.02	10/31/95
Reactive Sulfide, mg/L	(2)	<1	10/31/95

(1) SW846 Chapter 7.3.3
(2) SW846 Chapter 7.3.4

\gchem\003

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218
Account #:——— MKC70
Client Name:——— MK CORP

Sample Number
NSWC 16/16-044

AENI # 9510218-001

Concentration:——— Low
Date Sampled:——— 10/18/95
Date Received:——— 10/20/95
Date Ext Prepared:——— 11/10/95
Date Analyzed:——— 11/10/95
Conc/Dil Factor:——— 1
Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	0	
Matrix:	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		450	U
319-85-7	beta-BHC	2300	450	P
319-86-8	delta-BHC		450	U
58-89-9	gamma-BHC (Lindane)		910	U
75-44-8	Heptachlor		450	U
309-00-2	Aldrin		450	U
1024-57-3	Heptachlor epoxide		450	U
959-98-8	Endosulfan I		450	U
60-57-1	Dieldrin		910	U
75-55-9	4, 4'-DDE		910	U
72-20-8	Endrin		910	U
33213-65-9	Endosulfan II		910	U
72-54-8	4, 4'-DDD		910	U
1031-07-8	Endosulfan Sulfate		910	U
50-29-3	4, 4'-DDT		910	U
72-43-5	Methoxychlor		4500	U
53494-70-5	Endrin Ketone		910	U
7421-36-3	Endrin aldehyde		910	U
57-74-9	Chlordane		9100	U
8001-35-2	Toxaphene		45000	U
12674-11-2	Aroclor-1016		9100	U
11104-28-2	Aroclor-1221		18000	U
11141-16-5	Aroclor-1232		9100	U
53469-21-9	Aroclor-1242		9100	U
12672-29-6	Aroclor-1248		9100	U
11097-69-1	Aroclor-1254		9100	U
11096-82-5	Aroclor-1260		9100	U
510-15-6	Chlorobenzilate		18182	U
2303-16-4	Diallate		90909	U
465-73-6	Isodrin		2273	U
143-50-0	Kepone		9091	U
82-68-8	Pentachloronitrobenzene		1818	U

Vi - Volume of extract injected (ul) - _____ 1
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 0.11
Vt - Volume of total extract (ul) - _____ 10,000

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-045

Lab Name: AENI Contract: 9510218 SDG No.: 16/16-
Lab Code: Case No.: MKC70 SAS No.: Lab Sample ID: 951021802
Matrix (soil/water): WATER Date Received: 10/20/95
Level (low/med): LOW
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	215			P
7440-38-2	Arsenic	8.0	U		P
7440-39-3	Barium	1420			P
7440-41-7	Beryllium	2.0	U		P
7440-43-9	Cadmium	4.9			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	185			P
7440-48-4	Cobalt	11.0	U		P
7440-50-8	Copper	243			P
7439-89-6	Iron				NR
7439-92-1	Lead	1420			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.47			AV
7440-02-0	Nickel	15.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	5.0	U		P
7440-22-4	Silver	8.0	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	10.0	U		P
7440-62-2	Vanadium	16.0	U		P
7440-66-6	Zinc	4940			P
	Cyanide				NR
7440-31-5	Tin	200	U		P
7439-93-2	Lithium				NR

Color Before: Clarity Before: Texture:
Color After: Clarity After: Artifacts:

mments:
CLIENT_ID: NSWC_16/16-045

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-046

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021804

Level (low/med): LOW Date Received: 10/20/95

% Solids: 96.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	67.4		N	P
7440-38-2	Arsenic	4.4		N*	P
7440-39-3	Barium	2580			P
7440-41-7	Beryllium	0.66		N	P
7440-43-9	Cadmium	46.1		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	32.1		N	P
7440-48-4	Cobalt	6.4		N	P
7440-50-8	Copper	2980		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	8650		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.58		N	CV
7440-02-0	Nickel	33.2		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.52	U	N	P
7440-22-4	Silver	0.83	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U	N	P
7440-62-2	Vanadium	10.2		N	P
7440-66-6	Zinc	12700		N	P
	Cyanide				NR
7440-31-5	Tin	29.9			P
7439-93-2	Lithium	11.3			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16-046

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-046

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #004

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ393.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 4 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

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	5.2	U
67-64-1	Acetone	100	U
75-05-8	Acetonitrile	5.2	U
107-13-1	Acrylonitrile	1000	U
107-02-8	Acrolein	1000	U
75-69-4	Trichlorofluoromethane	5.2	U
75-15-0	Carbon Disulfide	5.2	U
75-35-4	1,1-Dichloroethene	5.2	U
75-34-4	1,1-Dichloroethane	5.2	U
540-59-0	trans-1,2-Dichloroethene	5.2	U
67-66-3	Chloroform	5.2	U
107-06-2	1,2-Dichloroethane	5.2	U
75-71-8	Dichlorodifluoromethane	5.2	U
74-88-4	Iodomethane	5.2	U
107-12-0	Propionitrile	5.2	U
107-05-1	Allyl chloride	100	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5.2	U
56-23-5	Carbon Tetrachloride	5.2	U
108-05-4	Vinyl Acetate	5.2	U
75-27-4	Bromodichloromethane	5.2	U
78-87-5	1,2-Dichloropropane	5.2	U
10061-01-5	cis-1,3-Dichloropropene	5.2	U
79-01-6	Trichloroethene	5.2	U
71-43-2	Benzene	5.2	U
124-48-1	Dibromochloromethane	5.2	U
10061-02-6	trans-1,3-Dichloropropene	5.2	U
79-00-5	1,1,2-Trichloroethane	5.2	U
75-25-2	Bromoform	5.2	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-046

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #004

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ393.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 4 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	5.2	U
74-95-3	Dibromomethane	5.2	U
106-93-4	1,2-Dibromoethane (EDB)	5.2	U
108-10-1	4-Methyl-2-Pentanone	52	U
591-78-6	2-Hexanone	52	U
127-18-4	Tetrachloroethene	5.4	
79-34-5	1,1,2,2-Tetrachloroethane	5.2	U
108-88-3	Toluene	5.2	U
108-90-7	Chlorobenzene	5.2	U
100-41-4	Ethylbenzene	5.2	U
100-42-5	Styrene	5.2	U
108-38-3	m + p-Xylene	5.2	U
95-47-6	o-Xylene	5.2	U
80-62-6	Methyl methacrylate	5.2	U
630-20-6	1,1,1,2-Tetrachloroethane	5.2	U
96-18-4	1,2,3-Trichloropropane	5.2	U
110-57-6	trans-1,4-Dichloro-2-butene	26	U
97-63-2	Ethyl methacrylate	5.2	U
76-01-7	Pentachloroethane	5.2	U
96-12-8	1,2-Dibromo-3-chloropropane	5.2	U
78-83-1	Isobutyl Alcohol	5.2	U
126-99-8	Chloroprene (TIC) *	5.2	U
	3-Chloroprene (TIC)	5.2	U
123-91-1	1,4-Dioxane (TIC)	1000	U
	Methylene Chloride - Dichloromethane		
	Methyl ethyl ketone - 2-Butanone		
	Chloroprene - 2-Chloro-1,3-butadiene		
	Propionitrile - Ethyl Cyanide		
* - Reported as semiquantitative analysis only.			

FORM I VOA

8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-046
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 3.7
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-004
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 10/23/95
Date Analyzed: 10/25/95
Time Analyzed: 12:05

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.29	U
RDX		0.35	U
TNB		0.24	U
TETRYL		0.26	U
DNB		0.20	U
TNT		0.23	U
2,6-DNT		0.25	U
2,4-DNT		0.20	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218
Account #:——— MKC70
Client Name:——— MK CORP

Concentration:——— Low
Date Sampled:——— 10/19/95
Date Received:——— 10/20/95
Date Ext Prepared:—— 10/27/95
Date Analyzed:——— 11/3/95
Conc/Dil Factor:——— 10
Method: ——— 8080

Sample Number
NSWC 16/16-046

AENI # 9510218-004

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	3.7	
Matrix:	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		17	U
319-85-7	beta-BHC		17	U
319-86-8	delta-BHC		17	U
58-89-9	gamma-BHC (Lindane)		34	U
75-44-8	Heptachlor		17	U
309-00-2	Aldrin		17	U
1024-57-3	Heptachlor epoxide		17	U
959-98-8	Endosulfan I		17	U
60-57-1	Dieldrin		34	U
75-55-9	4, 4'-DDE		34	U
72-20-8	Endrin		34	U
33213-65-9	Endosulfan II		34	U
72-54-8	4, 4'-DDD		34	U
1031-07-8	Endosulfan Sulfate		34	U
50-29-3	4, 4'-DDT		34	U
72-43-5	Methoxychlor		170	U
53494-70-5	Endrin Ketone		34	U
7421-36-3	Endrin aldehyde		34	U
57-74-9	Chlordane		340	U
8001-35-2	Toxaphene		1700	U
12674-11-2	Aroclor-1016		340	U
11104-28-2	Aroclor-1221		670	U
11141-16-5	Aroclor-1232		340	U
53469-21-9	Aroclor-1242		340	U
12672-29-6	Aroclor-1248		340	U
11097-69-1	Aroclor-1254		340	U
11096-82-5	Aroclor-1260		340	U
510-15-6	Chlorobenzilate		675	U
2303-16-4	Diallate		3373	U
465-73-6	Isodrin		84	U
143-50-0	Kepone		337	U
82-68-8	Pentachloronitrobenzene		67	U

Vi - Volume of extract injected (ul) - _____ 1
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.79
Vt - Volume of total extract (ul) - _____ 10,000

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-047

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021805

Level (low/med): LOW Date Received: 10/20/95

% Solids: 94.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	2.1	U	N	P
7440-38-2	Arsenic	0.81	U	N*	P
7440-39-3	Barium	30.0			P
7440-41-7	Beryllium	0.40		N	P
7440-43-9	Cadmium	0.42	U	N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.8		N	P
7440-48-4	Cobalt	1.3		N	P
7440-50-8	Copper	14.0		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	38.7		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.11	U	N	CV
7440-02-0	Nickel	4.6		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.51	U	N	P
7440-22-4	Silver	0.84	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U	N	P
7440-62-2	Vanadium	4.6		N	P
7440-66-6	Zinc	78.4		N	P
	Cyanide				NR
7440-31-5	Tin	21.0	U		P
7439-93-2	Lithium	10.5	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

ments:

CLIENT_ID: NSWC_16/16-047

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-047

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #005

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ394.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 6 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	5.3	U
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.3	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.3	U
75-15-0	Carbon Disulfide	5.3	U
75-35-4	1,1-Dichloroethene	5.3	U
75-34-4	1,1-Dichloroethane	5.3	U
540-59-0	trans-1,2-Dichloroethene	5.3	U
67-66-3	Chloroform	5.3	U
107-06-2	1,2-Dichloroethane	5.3	U
75-71-8	Dichlorodifluoromethane	5.3	U
74-88-4	Iodomethane	5.3	U
107-12-0	Propionitrile	5.3	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.3	U
56-23-5	Carbon Tetrachloride	5.3	U
108-05-4	Vinyl Acetate	5.3	U
75-27-4	Bromodichloromethane	5.3	U
78-87-5	1,2-Dichloropropane	5.3	U
10061-01-5	cis-1,3-Dichloropropene	5.3	U
79-01-6	Trichloroethene	5.3	U
71-43-2	Benzene	5.3	U
124-48-1	Dibromochloromethane	5.3	U
10061-02-6	trans-1,3-Dichloropropene	5.3	U
79-00-5	1,1,2-Trichloroethane	5.3	U
75-25-2	Bromoform	5.3	U

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-047
Sample:

Matrix: SOIL
Sample: (g) 2.3
Final Volume: (L) 0.02
(%) Moisture: 5.5
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-005
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 10/23/95
Date Analyzed: 10/25/95
Time Analyzed: 12:53

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.25	U
RDX		0.31	U
TNB		0.21	U
TETRYL		0.23	U
DNB		0.17	U
TNT		0.20	U
2,6-DNT		0.22	U
2,4-DNT		0.17	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218
Account #:——— MKC70
Client Name:——— MK CORP

Sample Number
NSWC 16/16-047

AENI # 9510218-005

Concentration:——— Low
Date Sampled:——— 10/19/95
Date Received:——— 10/20/95
Date Ext Prepared:— 10/27/95
Date Analyzed:——— 11/3/95
Conc/Dil Factor:——— 1
Method: ——— 8080

GPC Cleanup | | Yes | X | No
Seperatory Funnel Extraction | | Yes
Continuous Liquid - Liquid Extraction | | Yes
Percent Moisture 5.5
Matrix SOIL

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.7	U
319-85-7	beta-BHC		1.7	U
319-86-8	delta-BHC		1.7	U
58-89-9	gamma-BHC (Lindane)		3.5	U
75-44-8	Heptachlor		1.7	U
309-00-2	Aldrin		1.7	U
1024-57-3	Heptachlor epoxide		1.7	U
959-98-8	Endosulfan I		1.7	U
60-57-1	Dieldrin		3.5	U
75-55-9	4, 4'-DDE		3.5	U
72-20-8	Endrin		3.5	U
33213-65-9	Endosulfan II		3.5	U
72-54-8	4, 4'-DDD		3.5	U
1031-07-8	Endosulfan Sulfate		3.5	U
50-29-3	4, 4'-DDT		3.5	U
72-43-5	Methoxychlor		17	U
53494-70-5	Endrin Ketone		3.5	U
7421-36-3	Endrin aldehyde		3.5	U
57-74-9	Chlordane		35	U
8001-35-2	Toxaphene		170	U
12674-11-2	Aroclor-1016		35	U
11104-28-2	Aroclor-1221		69	U
11141-16-5	Aroclor-1232		35	U
53469-21-9	Aroclor-1242		35	U
12672-29-6	Aroclor-1248		35	U
11097-69-1	Aroclor-1254		35	U
11096-82-5	Aroclor-1260		35	U
510-15-6	Chlorobenzilate		69	U
2303-16-4	Diallate		345	U
465-73-6	Isodrin		8.6	U
143-50-0	Kepone		35	U
82-68-8	Pentachloronitrobenzene		6.9	U

Vi - Volume of extract injected (ul) - _____ 1
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.64
Vt - Volume of total extract (ul) - _____ 10,000

FORM I

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-048

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021806

Level (low/med): LOW Date Received: 10/20/95

% Solids: 94.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	11.5		N	P
7440-38-2	Arsenic	0.95		N*	P
7440-39-3	Barium	181			P
7440-41-7	Beryllium	0.39		N	P
7440-43-9	Cadmium	1.7		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	9.5		N	P
7440-48-4	Cobalt	3.1		N	P
7440-50-8	Copper	272		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	629		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.10	U	N	CV
7440-02-0	Nickel	7.6		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.51	U	N	P
7440-22-4	Silver	0.78	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	0.98	U	N	P
7440-62-2	Vanadium	8.7		N	P
7440-66-6	Zinc	1550		N	P
	Cyanide				NR
7440-31-5	Tin	19.6	U		P
7439-93-2	Lithium	9.8	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16-048

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16-048

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #006

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ395.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 6 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	5.3	U
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.3	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.3	U
75-15-0	Carbon Disulfide	5.3	U
75-35-4	1,1-Dichloroethene	5.3	U
75-34-4	1,1-Dichloroethane	5.3	U
540-59-0	trans-1,2-Dichloroethene	5.3	U
67-66-3	Chloroform	5.3	U
107-06-2	1,2-Dichloroethane	5.3	U
75-71-8	Dichlorodifluoromethane	5.3	U
74-88-4	Iodomethane	5.3	U
107-12-0	Propionitrile	5.3	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.3	U
56-23-5	Carbon Tetrachloride	5.3	U
108-05-4	Vinyl Acetate	5.3	U
75-27-4	Bromodichloromethane	5.3	U
78-87-5	1,2-Dichloropropane	5.3	U
10061-01-5	cis-1,3-Dichloropropene	5.3	U
79-01-6	Trichloroethene	5.3	U
71-43-2	Benzene	5.3	U
124-48-1	Dibromochloromethane	5.3	U
10061-02-6	trans-1,3-Dichloropropene	5.3	U
79-00-5	1,1,2-Trichloroethane	5.3	U
75-25-2	Bromoform	5.3	U

FORM I VOA 8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-048
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 5.9
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-006
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 10/23/95
Date Analyzed: 10/25/95
Time Analyzed: 14:29

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.29	U
RDX		0.35	U
TNB		0.24	U
TETRYL		0.26	U
DNB		0.20	U
TNT		0.23	U
2,6-DNT		0.25	U
2,4-DNT		0.20	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218

Account #:——— MKC70

Client Name:——— MK CORP

Sample Number

NSWC 16/16-048

AENI # 9510218-006

Concentration:——— Low

Date Sampled:——— 10/19/95

Date Received:——— 10/20/95

Date Ext Prepared:— 10/27/95

Date Analyzed:——— 11/3/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	5.9	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.8	U
319-85-7	beta-BHC		1.8	U
319-86-8	delta-BHC		1.8	U
58-89-9	gamma-BHC (Lindane)		3.5	U
75-44-8	Heptachlor		1.8	U
309-00-2	Aldrin		1.8	U
1024-57-3	Heptachlor epoxide		1.8	U
959-98-8	Endosulfan I		1.8	U
60-57-1	Dieldrin		3.5	U
75-55-9	4, 4'-DDE		3.5	U
72-20-8	Endrin		3.5	U
33213-65-9	Endosulfan II		3.5	U
72-54-8	4, 4'-DDD		3.5	U
1031-07-8	Endosulfan Sulfate		3.5	U
50-29-3	4, 4'-DDT		3.5	U
72-43-5	Methoxychlor		18	U
53494-70-5	Endrin Ketone		3.5	U
7421-36-3	Endrin aldehyde		3.5	U
57-74-9	Chlordane		35	U
8001-35-2	Toxaphene		180	U
12674-11-2	Aroclor-1016		35	U
11104-28-2	Aroclor-1221		70	U
11141-16-5	Aroclor-1232		35	U
53469-21-9	Aroclor-1242		35	U
12672-29-6	Aroclor-1248		35	U
11097-69-1	Aroclor-1254		35	U
11096-82-5	Aroclor-1260		35	U
510-15-6	Chlorobenzilate		70	U
2303-16-4	Diallate		350	U
465-73-6	Isodrin		8.8	U
143-50-0	Kepone		35	U
82-68-8	Pentachloronitrobenzene		7.0	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.33

Vt - Volume of total extract (ul) - _____ 10,000

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-049

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021807

Level (low/med): LOW Date Received: 10/20/95

% Solids: 94.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	12.0		N	P
7440-38-2	Arsenic	1.4		N*	P
7440-39-3	Barium	246			P
7440-41-7	Beryllium	0.48		N	P
7440-43-9	Cadmium	1.0		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	11.7		N	P
7440-48-4	Cobalt	5.0		N	P
7440-50-8	Copper	338		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	2710		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.10	U	N	CV
7440-02-0	Nickel	10.9		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.51	U	N	P
7440-22-4	Silver	0.82	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U	N	P
7440-62-2	Vanadium	10.4		N	P
7440-66-6	Zinc	563		N	P
	Cyanide				NR
7440-31-5	Tin	20.5	U		P
7439-93-2	Lithium	10.2	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

C ents:

CLIENT_ID: NSWC_16/16-049

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-049

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #007

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ396.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 5 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	5.3	U
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.3	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.3	U
75-15-0	Carbon Disulfide	5.3	U
75-35-4	1,1-Dichloroethene	5.3	U
75-34-4	1,1-Dichloroethane	5.3	U
540-59-0	trans-1,2-Dichloroethene	5.3	U
67-66-3	Chloroform	5.3	U
107-06-2	1,2-Dichloroethane	5.3	U
75-71-8	Dichlorodifluoromethane	5.3	U
74-88-4	Iodomethane	5.3	U
107-12-0	Propionitrile	5.3	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.3	U
56-23-5	Carbon Tetrachloride	5.3	U
108-05-4	Vinyl Acetate	5.3	U
75-27-4	Bromodichloromethane	5.3	U
78-87-5	1,2-Dichloropropane	5.3	U
10061-01-5	cis-1,3-Dichloropropene	5.3	U
79-01-6	Trichloroethene	5.3	U
71-43-2	Benzene	5.3	U
124-48-1	Dibromochloromethane	5.3	U
10061-02-6	trans-1,3-Dichloropropene	5.3	U
79-00-5	1,1,2-Trichloroethane	5.3	U
75-25-2	Bromoform	5.3	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-049

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #007

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ396.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 5 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	5.3	U
74-95-3	Dibromomethane	5.3	U
106-93-4	1,2-Dibromoethane (EDB)	5.3	U
108-10-1	4-Methyl-2-Pentanone	53	U
591-78-6	2-Hexanone	53	U
127-18-4	Tetrachloroethene	2.7	J
79-34-5	1,1,2,2-Tetrachloroethane	5.3	U
108-88-3	Toluene	5.3	U
108-90-7	Chlorobenzene	5.3	U
100-41-4	Ethylbenzene	5.3	U
100-42-5	Styrene	5.3	U
108-38-3	m + p-Xylene	5.3	U
95-47-6	o-Xylene	5.3	U
80-62-6	Methyl methacrylate	5.3	U
630-20-6	1,1,1,2-Tetrachloroethane	5.3	U
96-18-4	1,2,3-Trichloropropane	5.3	U
110-57-6	trans-1,4-Dichloro-2-butene	26	U
97-63-2	Ethyl methacrylate	5.3	U
76-01-7	Pentachloroethane	5.3	U
96-12-8	1,2-Dibromo-3-chloropropane	5.3	U
78-83-1	Isobutyl Alcohol	5.3	U
126-99-8	Chloroprene (TIC) *	5.3	U
	3-Chloroprene (TIC)	5.3	U
123-91-1	1,4-Dioxane (TIC)	1100	U
	Methylene Chloride - Dichloromethane		
	Methyl ethyl ketone - 2-Butanone		
	Chloroprene - 2-Chloro-1,3-butadiene		
	Propionitrile - Ethyl Cyanide		
* - Reported as semiquantitative analysis only.			

FORM I VOA

8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-049
Sample:

Matrix: SOIL
Sample: (g) 2.2
Final Volume: (L) 0.02
(%) Moisture: 5.1
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-007
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 10/23/95
Date Analyzed: 10/25/95
Time Analyzed: 15:18

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.27	U
RDX		0.33	U
TNB		0.22	U
TETRYL		0.24	U
DNB		0.18	U
TNT		0.21	U
2,6-DNT		0.23	U
2,4-DNT		0.18	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-050

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #008

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ405.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 5 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	9.4	B
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.3	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.3	U
75-15-0	Carbon Disulfide	5.3	U
75-35-4	1,1-Dichloroethene	5.3	U
75-34-4	1,1-Dichloroethane	5.3	U
540-59-0	trans-1,2-Dichloroethene	5.3	U
67-66-3	Chloroform	5.3	U
107-06-2	1,2-Dichloroethane	5.3	U
75-71-8	Dichlorodifluoromethane	5.3	U
74-88-4	Iodomethane	5.3	U
107-12-0	Propionitrile	5.3	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.3	U
56-23-5	Carbon Tetrachloride	5.3	U
108-05-4	Vinyl Acetate	5.3	U
75-27-4	Bromodichloromethane	5.3	U
78-87-5	1,2-Dichloropropane	5.3	U
10061-01-5	cis-1,3-Dichloropropene	5.3	U
79-01-6	Trichloroethene	5.3	U
71-43-2	Benzene	5.3	U
124-48-1	Dibromochloromethane	5.3	U
10061-02-6	trans-1,3-Dichloropropene	5.3	U
79-00-5	1,1,2-Trichloroethane	5.3	U
75-25-2	Bromoform	5.3	U

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-050
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 4.8
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-008
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 11/01/95
Date Analyzed: 11/07/95
Time Analyzed: 2:09

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.29	U
RDX		0.35	U
TNB		0.24	U
TETRYL		0.26	U
DNB		0.20	U
TNT		0.23	U
2,6-DNT		0.25	U
2,4-DNT		0.20	U

SWMU 16/16 DATA
SAMPLES 051 THROUGH 066

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-051

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021809

Level (low/med): LOW Date Received: 10/20/95

% Solids: 98.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	5.5		N	P
7440-38-2	Arsenic	2.0		N*	P
7440-39-3	Barium	303			P
7440-41-7	Beryllium	0.41		N	P
7440-43-9	Cadmium	2.2		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	10.9		N	P
7440-48-4	Cobalt	4.8		N	P
7440-50-8	Copper	402		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	1040		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.10	U	N	CV
7440-02-0	Nickel	10.8		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.50	U	N	P
7440-22-4	Silver	0.75	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	0.94	U	N	P
7440-62-2	Vanadium	10.2		N	P
7440-66-6	Zinc	2860		N	P
	Cyanide				NR
7440-31-5	Tin	18.8	U		P
7439-93-2	Lithium	9.4	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16-051

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-051

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #009

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ397.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 2 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

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	5.4	
67-64-1	Acetone	100	U
75-05-8	Acetonitrile	5.1	U
107-13-1	Acrylonitrile	1000	U
107-02-8	Acrolein	1000	U
75-69-4	Trichlorofluoromethane	5.1	U
75-15-0	Carbon Disulfide	5.1	U
75-35-4	1,1-Dichloroethene	5.1	U
75-34-4	1,1-Dichloroethane	5.1	U
540-59-0	trans-1,2-Dichloroethene	5.1	U
67-66-3	Chloroform	5.1	U
107-06-2	1,2-Dichloroethane	5.1	U
75-71-8	Dichlorodifluoromethane	5.1	U
74-88-4	Iodomethane	5.1	U
107-12-0	Propionitrile	5.1	U
107-05-1	Allyl chloride	100	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5.1	U
56-23-5	Carbon Tetrachloride	5.1	U
108-05-4	Vinyl Acetate	5.1	U
75-27-4	Bromodichloromethane	5.1	U
78-87-5	1,2-Dichloropropane	5.1	U
10061-01-5	cis-1,3-Dichloropropene	5.1	U
79-01-6	Trichloroethene	5.1	U
71-43-2	Benzene	5.1	U
124-48-1	Dibromochloromethane	5.1	U
10061-02-6	trans-1,3-Dichloropropene	5.1	U
79-00-5	1,1,2-Trichloroethane	5.1	U
75-25-2	Bromoform	5.1	U

FORM I VOA 8260/Appendix IX

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-051

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #009

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ397.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 2 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	5.1	U
74-95-3	Dibromomethane	5.1	U
106-93-4	1,2-Dibromoethane (EDB)	5.1	U
108-10-1	4-Methyl-2-Pentanone	51	U
591-78-6	2-Hexanone	51	U
127-18-4	Tetrachloroethene	8.1	
79-34-5	1,1,2,2-Tetrachloroethane	5.1	U
108-88-3	Toluene	5.1	U
108-90-7	Chlorobenzene	5.1	U
100-41-4	Ethylbenzene	5.1	U
100-42-5	Styrene	5.1	U
108-38-3	m + p-Xylene	5.1	U
95-47-6	o-Xylene	5.1	U
80-62-6	Methyl methacrylate	5.1	U
630-20-6	1,1,1,2-Tetrachloroethane	5.1	U
96-18-4	1,2,3-Trichloropropane	5.1	U
110-57-6	trans-1,4-Dichloro-2-butene	25	U
97-63-2	Ethyl methacrylate	5.1	U
76-01-7	Pentachloroethane	5.1	U
96-12-8	1,2-Dibromo-3-chloropropane	5.1	U
78-83-1	Isobutyl Alcohol	5.1	U
126-99-8	Chloroprene (TIC) *	5.1	U
	3-Chloroprene (TIC)	5.1	U
123-91-1	1,4-Dioxane (TIC)	1000	U
Methylene Chloride - Dichloromethane			
Methyl ethyl ketone - 2-Butanone			
Chloroprene - 2-Chloro-1,3-butadiene			
Propionitrile - Ethyl Cyanide			
* - Reported as semiquantitative analysis only.			

FORM I VOA 8260/Appendix IX

D- 00204

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-051
Sample:

Lab Sample ID: L9510218-009
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 11/01/95
Date Analyzed: 11/07/95
Time Analyzed: 3:03

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 1.8
Dilution Factor: 1
Level (low/med): LOW

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.28	U
RDX		0.34	U
TNB		0.23	U
TETRYL		0.25	U
DNB		0.19	U
TNT		0.22	U
2,6-DNT		0.24	U
2,4-DNT		0.19	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218
Account #:——— MKC70
Client Name:——— MK CORP

Sample Number
NSWC 16/16-051

AENI # 9510218-009

Concentration:——— Low
Date Sampled:——— 10/19/95
Date Received:——— 10/20/95
Date Ext Prepared:——— 10/27/95
Date Analyzed:——— 11/3/95
Conc/Dil Factor:——— 10
Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	1.8	
Matrix:	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		17	U
319-85-7	beta-BHC		17	U
319-86-8	delta-BHC		17	U
58-89-9	gamma-BHC (Lindane)		34	U
75-44-8	Heptachlor		17	U
309-00-2	Aldrin		17	U
1024-57-3	Heptachlor epoxide		17	U
959-98-8	Endosulfan I		17	U
60-57-1	Dieldrin		34	U
75-55-9	4, 4'-DDE		34	U
72-20-8	Endrin		34	U
33213-65-9	Endosulfan II		34	U
72-54-8	4, 4'-DDD		34	U
1031-07-8	Endosulfan Sulfate		34	U
50-29-3	4, 4'-DDT		34	U
72-43-5	Methoxychlor		170	U
53494-70-5	Endrin Ketone		34	U
7421-36-3	Endrin aldehyde		34	U
57-74-9	Chlordane		340	U
8001-35-2	Toxaphene		1700	U
12674-11-2	Aroclor-1016		340	U
11104-28-2	Aroclor-1221		680	U
11141-16-5	Aroclor-1232		340	U
53469-21-9	Aroclor-1242		340	U
12672-29-6	Aroclor-1248		340	U
11097-69-1	Aroclor-1254		340	U
11096-82-5	Aroclor-1260		340	U
510-15-6	Chlorobenzilate		676	U
2303-16-4	Diallate		3380	U
465-73-6	Isodrin		84	U
143-50-0	Kepone		338	U
82-68-8	Pentachloronitrobenzene		68	U

Vi - Volume of extract injected (ul) - _____ 1
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.13
Vt - Volume of total extract (ul) - _____ 10,000

L-00206

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-052

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021810

Level (low/med): LOW Date Received: 10/20/95

% Solids: 97.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	11.8		N	P
7440-38-2	Arsenic	1.8		N*	P
7440-39-3	Barium	266			P
7440-41-7	Beryllium	0.36		N	P
7440-43-9	Cadmium	1.9		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	15.6		N	P
7440-48-4	Cobalt	4.7		N	P
7440-50-8	Copper	350		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	819		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.10	U	N	CV
7440-02-0	Nickel	12.6		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.51	U	N	P
7440-22-4	Silver	0.78	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	0.97	U	N	P
7440-62-2	Vanadium	10.9		N	P
7440-66-6	Zinc	2640		N	P
	Cyanide				NR
7440-31-5	Tin	19.4	U		P
7439-93-2	Lithium	9.7	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16-052

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-052

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #010

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ398.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 2 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6.4	
67-64-1	Acetone	100	U
75-05-8	Acetonitrile	5.1	U
107-13-1	Acrylonitrile	1000	U
107-02-8	Acrolein	1000	U
75-69-4	Trichlorofluoromethane	5.1	U
75-15-0	Carbon Disulfide	5.1	U
75-35-4	1,1-Dichloroethene	5.1	U
75-34-4	1,1-Dichloroethane	5.1	U
540-59-0	trans-1,2-Dichloroethene	5.1	U
67-66-3	Chloroform	5.1	U
107-06-2	1,2-Dichloroethane	5.1	U
75-71-8	Dichlorodifluoromethane	5.1	U
74-88-4	Iodomethane	5.1	U
107-12-0	Propionitrile	5.1	U
107-05-1	Allyl chloride	100	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5.1	U
56-23-5	Carbon Tetrachloride	5.1	U
108-05-4	Vinyl Acetate	5.1	U
75-27-4	Bromodichloromethane	5.1	U
78-87-5	1,2-Dichloropropane	5.1	U
10061-01-5	cis-1,3-Dichloropropene	5.1	U
79-01-6	Trichloroethene	5.1	U
71-43-2	Benzene	5.1	U
124-48-1	Dibromochloromethane	5.1	U
10061-02-6	trans-1,3-Dichloropropene	5.1	U
79-00-5	1,1,2-Trichloroethane	5.1	U
75-25-2	Bromoform	5.1	U

FORM I VOA 8260/Appendix IX

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-052

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #010

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ398.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 2 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.1	U
74-95-3	Dibromomethane		5.1	U
106-93-4	1,2-Dibromoethane (EDB)		5.1	U
108-10-1	4-Methyl-2-Pentanone		51	U
591-78-6	2-Hexanone		51	U
127-18-4	Tetrachloroethene		7.1	
79-34-5	1,1,2,2-Tetrachloroethane		5.1	U
108-88-3	Toluene		5.1	U
108-90-7	Chlorobenzene		5.1	U
100-41-4	Ethylbenzene		5.1	U
100-42-5	Styrene		5.1	U
108-38-3	m + p-Xylene		5.1	U
95-47-6	o-Xylene		5.1	U
80-62-6	Methyl methacrylate		5.1	U
630-20-6	1,1,1,2-Tetrachloroethane		5.1	U
96-18-4	1,2,3-Trichloropropane		5.1	U
110-57-6	trans-1,4-Dichloro-2-butene		26	U
97-63-2	Ethyl methacrylate		5.1	U
76-01-7	Pentachloroethane		5.1	U
96-12-8	1,2-Dibromo-3-chloropropane		5.1	U
78-83-1	Isobutyl Alcohol		5.1	U
126-99-8	Chloroprene	(TIC) *	5.1	U
	3-Chloroprene	(TIC)	5.1	U
123-91-1	1,4-Dioxane	(TIC)	1000	U
Methylene Chloride - Dichloromethane				
Methyl ethyl ketone - 2-Butanone				
Chloroprene - 2-Chloro-1,3-butadiene				
Propionitrile - Ethyl Cyanide				
* - Reported as semiquantitative analysis only.				

FORM I VOA

8260/Appendix IX

D-00205

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-052
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 2.2
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-010
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 11/01/95
Date Analyzed: 11/07/95
Time Analyzed: 3:57

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.28	U
RDX		0.34	U
TNB		0.23	U
TETRYL		0.25	U
DNB		0.19	U
TNT		0.22	U
2,6-DNT		0.24	U
2,4-DNT		0.19	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218

Account #:——— MKC70

Client Name:——— MK CORP

Sample Number
NSWC 16/16-052

AENI # 9510218-010

Concentration:——— Low

Date Sampled:——— 10/19/95

Date Received:——— 10/20/95

Date Ext Prepared:— 10/27/95

Date Analyzed:——— 11/3/95

Conc/Dil Factor:——— 20

Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	2.2	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		33	U
319-85-7	beta-BHC		33	U
319-86-8	delta-BHC		33	U
58-89-9	gamma-BHC (Lindane)		67	U
75-44-8	Heptachlor		33	U
309-00-2	Aldrin		33	U
1024-57-3	Heptachlor epoxide		33	U
959-98-8	Endosulfan I		33	U
60-57-1	Dieldrin		67	U
75-55-9	4, 4'-DDE		67	U
72-20-8	Endrin		67	U
33213-65-9	Endosulfan II		67	U
72-54-8	4, 4'-DDD		67	U
1031-07-8	Endosulfan Sulfate		67	U
50-29-3	4, 4'-DDT		67	U
72-43-5	Methoxychlor		330	U
53494-70-5	Endrin Ketone		67	U
7421-36-3	Endrin aldehyde		67	U
57-74-9	Chlordane		670	U
8001-35-2	Toxaphene		3300	U
12674-11-2	Aroclor-1016		670	U
11104-28-2	Aroclor-1221		1300	U
11141-16-5	Aroclor-1232		670	U
53469-21-9	Aroclor-1242		670	U
12672-29-6	Aroclor-1248		670	U
11097-69-1	Aroclor-1254		670	U
11096-82-5	Aroclor-1260		670	U
510-15-6	Chlorobenzilate		1338	U
2303-16-4	Diallate		6692	U
465-73-6	Isodrin		167	U
143-50-0	Kepone		669	U
82-68-8	Pentachloronitrobenzene		134	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.56

Vt - Volume of total extract (ul) - _____ 10,000

FORM I

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-053

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021811

Level (low/med): LOW Date Received: 10/20/95

% Solids: 95.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	2.0	U	N	P
7440-38-2	Arsenic	0.82	U	N*	P
7440-39-3	Barium	130			P
7440-41-7	Beryllium	0.60		N	P
7440-43-9	Cadmium	0.55		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	14.8		N	P
7440-48-4	Cobalt	18.8		N	P
7440-50-8	Copper	104		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	341		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.09	U	N	CV
7440-02-0	Nickel	11.6		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.51	U	N	P
7440-22-4	Silver	0.81	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U	N	P
7440-62-2	Vanadium	12.6		N	P
7440-66-6	Zinc	690		N	P
	Cyanide				NR
7440-31-5	Tin	20.3	U		P
7439-93-2	Lithium	11.2			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16-053

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-053

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #011

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ399.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 5 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	2.2	J
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.3	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.3	U
75-15-0	Carbon Disulfide	5.3	U
75-35-4	1,1-Dichloroethene	5.3	U
75-34-4	1,1-Dichloroethane	5.3	U
540-59-0	trans-1,2-Dichloroethene	5.3	U
67-66-3	Chloroform	5.3	U
107-06-2	1,2-Dichloroethane	5.3	U
75-71-8	Dichlorodifluoromethane	5.3	U
74-88-4	Iodomethane	5.3	U
107-12-0	Propionitrile	5.3	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.3	U
56-23-5	Carbon Tetrachloride	5.3	U
108-05-4	Vinyl Acetate	5.3	U
75-27-4	Bromodichloromethane	5.3	U
78-87-5	1,2-Dichloropropane	5.3	U
10061-01-5	cis-1,3-Dichloropropene	5.3	U
79-01-6	Trichloroethene	5.3	U
71-43-2	Benzene	5.3	U
124-48-1	Dibromochloromethane	5.3	U
10061-02-6	trans-1,3-Dichloropropene	5.3	U
79-00-5	1,1,2-Trichloroethane	5.3	U
75-25-2	Bromoform	5.3	U

D

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16-053

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #011

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ399.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 5 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.3	U
74-95-3	Dibromomethane		5.3	U
106-93-4	1,2-Dibromoethane (EDB)		5.3	U
108-10-1	4-Methyl-2-Pentanone		53	U
591-78-6	2-Hexanone		53	U
127-18-4	Tetrachloroethene		5.3	U
79-34-5	1,1,2,2-Tetrachloroethane		5.3	U
108-88-3	Toluene		5.3	U
108-90-7	Chlorobenzene		5.3	U
100-41-4	Ethylbenzene		5.3	U
100-42-5	Styrene		5.3	U
108-38-3	m + p-Xylene		5.3	U
95-47-6	o-Xylene		5.3	U
80-62-6	Methyl methacrylate		5.3	U
630-20-6	1,1,1,2-Tetrachloroethane		5.3	U
96-18-4	1,2,3-Trichloropropane		5.3	U
110-57-6	trans-1,4-Dichloro-2-butene		26	U
97-63-2	Ethyl methacrylate		5.3	U
76-01-7	Pentachloroethane		5.3	U
96-12-8	1,2-Dibromo-3-chloropropane		5.3	U
78-83-1	Isobutyl Alcohol		5.3	U
126-99-8	Chloroprene	(TIC) *	5.3	U
	3-Chloroprene	(TIC)	5.3	U
123-91-1	1,4-Dioxane	(TIC)	1100	U
Methylene Chloride - Dichloromethane				
Methyl ethyl ketone - 2-Butanone				
Chloroprene - 2-Chloro-1,3-butadiene				
Propionitrile - Ethyl Cyanide				
* - Reported as semiquantitative analysis only.				

FORM I VOA 8260/Appendix IX

D. 00214

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-053
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 5
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-011
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 11/01/95
Date Analyzed: 11/07/95
Time Analyzed: 5:46

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.29	U
RDX		0.35	U
TNB		0.24	U
TETRYL		0.26	U
DNB		0.20	U
TNT		0.23	U
2,6-DNT		0.25	U
2,4-DNT		0.20	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218

Account #:——— MKC70

Client Name:——— MK CORP

Concentration:——— Low

Date Sampled:——— 10/19/95

Date Received:——— 10/20/95

Date Ext Prepared:— 10/27/95

Date Analyzed:——— 11/3/95

Conc/Dil Factor:——— 1

Method: ——— 8080

Sample Number
NSWC 16/16-053

AENI # 9510218-011

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	5	
Matrix:	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.7	U
319-85-7	beta-BHC		1.7	U
319-86-8	delta-BHC		1.7	U
58-89-9	gamma-BHC (Lindane)		3.5	U
75-44-8	Heptachlor		1.7	U
309-00-2	Aldrin		1.7	U
1024-57-3	Heptachlor epoxide		1.7	U
959-98-8	Endosulfan I		1.7	U
60-57-1	Dieldrin		3.5	U
75-55-9	4, 4'-DDE		3.5	U
72-20-8	Endrin		3.5	U
33213-65-9	Endosulfan II		3.5	U
72-54-8	4, 4'-DDD		3.5	U
1031-07-8	Endosulfan Sulfate		3.5	U
50-29-3	4, 4'-DDT		3.5	U
72-43-5	Methoxychlor		17	U
53494-70-5	Endrin Ketone		3.5	U
7421-36-3	Endrin aldehyde		3.5	U
57-74-9	Chlordane		35	U
8001-35-2	Toxaphene		170	U
12674-11-2	Aroclor-1016		35	U
11104-28-2	Aroclor-1221		69	U
11141-16-5	Aroclor-1232		35	U
53469-21-9	Aroclor-1242		35	U
12672-29-6	Aroclor-1248		35	U
11097-69-1	Aroclor-1254		35	U
11096-82-5	Aroclor-1260		35	U
510-15-6	Chlorobenzilate		69	U
2303-16-4	Diallate		347	U
465-73-6	Isodrin		8.7	U
143-50-0	Kepone		35	U
82-68-8	Pentachloronitrobenzene		6.9	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.33

Vt - Volume of total extract (ul) - _____ 10,000

FORM I

D - 06218

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-054

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021812

Level (low/med): LOW Date Received: 10/20/95

% Solids: 96.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	6.6		N	P
7440-38-2	Arsenic	1.3		N*	P
7440-39-3	Barium	184			P
7440-41-7	Beryllium	0.40		N	P
7440-43-9	Cadmium	1.3		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	9.7		N	P
7440-48-4	Cobalt	3.9		N	P
7440-50-8	Copper	201		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	612		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.10	U	N	CV
7440-02-0	Nickel	8.9		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.51	U	N	P
7440-22-4	Silver	0.79	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	0.99	U	N	P
7440-62-2	Vanadium	8.5		N	P
7440-66-6	Zinc	1590		N	P
	Cyanide				NR
7440-31-5	Tin	19.8	U		P
7439-93-2	Lithium	9.9	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

ments:

CLIENT_ID: NSWC_16/16-054

00217

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16-054

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #012

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ406.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 3 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

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	8.8	B
67-64-1	Acetone	100	U
75-05-8	Acetonitrile	5.2	U
107-13-1	Acrylonitrile	1000	U
107-02-8	Acrolein	1000	U
75-69-4	Trichlorofluoromethane	5.2	U
75-15-0	Carbon Disulfide	5.2	U
75-35-4	1,1-Dichloroethene	5.2	U
75-34-4	1,1-Dichloroethane	5.2	U
540-59-0	trans-1,2-Dichloroethene	5.2	U
67-66-3	Chloroform	5.2	U
107-06-2	1,2-Dichloroethane	5.2	U
75-71-8	Dichlorodifluoromethane	5.2	U
74-88-4	Iodomethane	5.2	U
107-12-0	Propionitrile	5.2	U
107-05-1	Allyl chloride	100	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5.2	U
56-23-5	Carbon Tetrachloride	5.2	U
108-05-4	Vinyl Acetate	5.2	U
75-27-4	Bromodichloromethane	5.2	U
78-87-5	1,2-Dichloropropane	5.2	U
10061-01-5	cis-1,3-Dichloropropene	5.2	U
79-01-6	Trichloroethene	5.2	U
71-43-2	Benzene	5.2	U
124-48-1	Dibromochloromethane	5.2	U
10061-02-6	trans-1,3-Dichloropropene	5.2	U
79-00-5	1,1,2-Trichloroethane	5.2	U
75-25-2	Bromoform	5.2	U

FORM I VOA 8260/Appendix IX

D-00218

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16-054

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #012

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ406.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 3 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	5.2	U
74-95-3	Dibromomethane	5.2	U
106-93-4	1,2-Dibromoethane (EDB)	5.2	U
108-10-1	4-Methyl-2-Pentanone	52	U
591-78-6	2-Hexanone	52	U
127-18-4	Tetrachloroethene	4.9	J
79-34-5	1,1,2,2-Tetrachloroethane	5.2	U
108-88-3	Toluene	5.2	U
108-90-7	Chlorobenzene	5.2	U
100-41-4	Ethylbenzene	5.2	U
100-42-5	Styrene	5.2	U
108-38-3	m + p-Xylene	5.2	U
95-47-6	o-Xylene	5.2	U
80-62-6	Methyl methacrylate	5.2	U
630-20-6	1,1,1,2-Tetrachloroethane	5.2	U
96-18-4	1,2,3-Trichloropropane	5.2	U
110-57-6	trans-1,4-Dichloro-2-butene	26	U
97-63-2	Ethyl methacrylate	5.2	U
76-01-7	Pentachloroethane	5.2	U
96-12-8	1,2-Dibromo-3-chloropropane	5.2	U
78-83-1	Isobutyl Alcohol	5.2	U
126-99-8	Chloroprene (TIC) *	5.2	U
	3-Chloroprene (TIC)	5.2	U
123-91-1	1,4-Dioxane (TIC)	1000	U
	Methylene Chloride - Dichloromethane		
	Methyl ethyl ketone - 2-Butanone		
	Chloroprene - 2-Chloro-1,3-butadiene		
	Propionitrile - Ethyl Cyanide		
* - Reported as semiquantitative analysis only.			

FORM I VOA

8260/Appendix IX

1-00219

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-054
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 3.4
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-012
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 11/01/95
Date Analyzed: 11/07/95
Time Analyzed: 6:40

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.28	U
RDX		0.34	U
TNB		0.23	U
TETRYL		0.25	U
DNB		0.19	U
TNT		0.22	U
2,6-DNT		0.24	U
2,4-DNT		0.19	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218
Account #:——— MKC70
Client Name:——— MK CORP

Sample Number
NSWC 16/16-054

AENI # 9510218-012

Concentration:——— Low
Date Sampled:——— 10/19/95
Date Received:——— 10/20/95
Date Ext Prepared:——— 10/27/95
Date Analyzed:——— 11/3/95
Conc/Dil Factor:——— 10
Method: ——— 8080

GPC Cleanup		Yes	X	No
Seperatory Funnel Extraction				Yes
Continuous Liquid - Liquid Extraction				Yes
Percent Moisture	3.4			
Matrix:	SOIL			

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		17	U
319-85-7	beta-BHC		17	U
319-86-8	delta-BHC		17	U
58-89-9	gamma-BHC (Lindane)		34	U
75-44-8	Heptachlor		17	U
309-00-2	Aldrin		17	U
1024-57-3	Heptachlor epoxide		17	U
959-98-8	Endosulfan I		17	U
60-57-1	Dieldrin		34	U
75-55-9	4, 4'-DDE		34	U
72-20-8	Endrin		34	U
33213-65-9	Endosulfan II		34	U
72-54-8	4, 4'-DDD		34	U
1031-07-8	Endosulfan Sulfate		34	U
50-29-3	4, 4'-DDT		34	U
72-43-5	Methoxychlor		170	U
53494-70-5	Endrin Ketone		34	U
7421-36-3	Endrin aldehyde		34	U
57-74-9	Chlordane		340	U
8001-35-2	Toxaphene		1700	U
12674-11-2	Aroclor-1016		340	U
11104-28-2	Aroclor-1221		690	U
11141-16-5	Aroclor-1232		340	U
53469-21-9	Aroclor-1242		340	U
12672-29-6	Aroclor-1248		340	U
11097-69-1	Aroclor-1254		340	U
11096-82-5	Aroclor-1260		340	U
510-15-6	Chlorobenzilate		686	U
2303-16-4	Diallate		3429	U
465-73-6	Isodrin		86	U
143-50-0	Kepone		343	U
82-68-8	Pentachloronitrobenzene		69	U

Vi - Volume of extract injected (ul) - _____ 1
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.19
Vt - Volume of total extract (ul) - _____ 10,000

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-055

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021813

Level (low/med): LOW Date Received: 10/20/95

% Solids: 93.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	2.0	U	N	P
7440-38-2	Arsenic	0.80	U	N*	P
7440-39-3	Barium	70.0			P
7440-41-7	Beryllium	0.37		N	P
7440-43-9	Cadmium	9.3		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	7.6		N	P
7440-48-4	Cobalt	3.9		N	P
7440-50-8	Copper	37.0		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	235		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.11	U	N	CV
7440-02-0	Nickel	6.8		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.50	U	N	P
7440-22-4	Silver	0.81	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U	N	P
7440-62-2	Vanadium	6.2		N	P
7440-66-6	Zinc	290		N	P
	Cyanide				NR
7440-31-5	Tin	91.8			P
7439-93-2	Lithium	10.1	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

ments:

CLIENT_ID: NSWC_16/16-055

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-055

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #013

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ426.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 7 Date Analyzed: 10/26/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	5.4	U
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.4	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.4	U
75-15-0	Carbon Disulfide	5.4	U
75-35-4	1,1-Dichloroethene	5.4	U
75-34-4	1,1-Dichloroethane	5.4	U
540-59-0	trans-1,2-Dichloroethene	5.4	U
67-66-3	Chloroform	5.4	U
107-06-2	1,2-Dichloroethane	5.4	U
75-71-8	Dichlorodifluoromethane	5.4	U
74-88-4	Iodomethane	5.4	U
107-12-0	Propionitrile	5.4	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.4	U
56-23-5	Carbon Tetrachloride	5.4	U
108-05-4	Vinyl Acetate	5.4	U
75-27-4	Bromodichloromethane	5.4	U
78-87-5	1,2-Dichloropropane	5.4	U
10061-01-5	cis-1,3-Dichloropropene	5.4	U
79-01-6	Trichloroethene	5.4	U
71-43-2	Benzene	5.4	U
124-48-1	Dibromochloromethane	5.4	U
10061-02-6	trans-1,3-Dichloropropene	5.4	U
79-00-5	1,1,2-Trichloroethane	5.4	U
75-25-2	Bromoform	5.4	U

FORM I VOA

8260/Appendix IX

D-00225

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16-055

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #013

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ426.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 7 Date Analyzed: 10/26/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	5.4	U
74-95-3	Dibromomethane	5.4	U
106-93-4	1,2-Dibromoethane (EDB)	5.4	U
108-10-1	4-Methyl-2-Pentanone	54	U
591-78-6	2-Hexanone	54	U
127-18-4	Tetrachloroethene	5.4	U
79-34-5	1,1,2,2-Tetrachloroethane	5.4	U
108-88-3	Toluene	5.4	U
108-90-7	Chlorobenzene	5.4	U
100-41-4	Ethylbenzene	5.4	U
100-42-5	Styrene	5.4	U
108-38-3	m + p-Xylene	5.4	U
95-47-6	o-Xylene	5.4	U
80-62-6	Methyl methacrylate	5.4	U
630-20-6	1,1,1,2-Tetrachloroethane	5.4	U
96-18-4	1,2,3-Trichloropropane	5.4	U
110-57-6	trans-1,4-Dichloro-2-butene	27	U
97-63-2	Ethyl methacrylate	5.4	U
76-01-7	Pentachloroethane	5.4	U
96-12-8	1,2-Dibromo-3-chloropropane	5.4	U
78-83-1	Isobutyl Alcohol	5.4	U
126-99-8	Chloroprene (TIC) *	5.4	U
	3-Chloroprene (TIC)	5.4	U
123-91-1	1,4-Dioxane (TIC)	1100	U
	Methylene Chloride - Dichloromethane		
	Methyl ethyl ketone - 2-Butanone		
	Chloroprene - 2-Chloro-1,3-butadiene		
	Propionitrile - Ethyl Cyanide		
* - Reported as semiquantitative analysis only.			

FORM I VOA 8260/Appendix IX

D-00224

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-055
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 6.6
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-013
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 11/01/95
Date Analyzed: 11/07/95
Time Analyzed: 7:34

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.29	U
RDX		0.36	U
TNB		0.24	U
TETRYL		0.26	U
DNB		0.20	U
TNT		0.23	U
2,6-DNT		0.25	U
2,4-DNT		0.20	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218
Account #:——— MKC70
Client Name:——— MK CORP

Concentration:——— Low
Date Sampled:——— 10/19/95
Date Received:——— 10/20/95
Date Ext Prepared:— 11/2/95
Date Analyzed:——— 11/7/95
Conc/Dil Factor:——— 1
Method: ——— 8080

Sample Number
NSWC 16/16-055

AENI # 9510218-013

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	6.6	
Matrix:	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.8	U
319-85-7	beta-BHC		1.8	U
319-86-8	delta-BHC		1.8	U
58-89-9	gamma-BHC (Lindane)		3.6	U
75-44-8	Heptachlor		1.8	U
309-00-2	Aldrin		1.8	U
1024-57-3	Heptachlor epoxide		1.8	U
959-98-8	Endosulfan I		1.8	U
60-57-1	Dieldrin		3.6	U
75-55-9	4, 4'-DDE		3.6	U
72-20-8	Endrin		3.6	U
33213-65-9	Endosulfan II		3.6	U
72-54-8	4, 4'-DDD		3.6	U
1031-07-8	Endosulfan Sulfate		3.6	U
50-29-3	4, 4'-DDT		3.6	U
72-43-5	Methoxychlor		18	U
53494-70-5	Endrin Ketone		3.6	U
7421-36-3	Endrin aldehyde		3.6	U
57-74-9	Chlordane		36	U
8001-35-2	Toxaphene		180	U
12674-11-2	Aroclor-1016		36	U
11104-28-2	Aroclor-1221		71	U
11141-16-5	Aroclor-1232		36	U
53469-21-9	Aroclor-1242		36	U
12672-29-6	Aroclor-1248		36	U
11097-69-1	Aroclor-1254		36	U
11096-82-5	Aroclor-1260		36	U
510-15-6	Chlorobenzilate		71	U
2303-16-4	Diallate		355	U
465-73-6	Isodrin		8.9	U
143-50-0	Kepone		36	U
82-68-8	Pentachloronitrobenzene		7.1	U

Vi - Volume of extract injected (ul) - _____ 1
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.13
Vt - Volume of total extract (ul) - _____ 10,000

D 00228

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-056

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021814

Level (low/med): LOW Date Received: 10/20/95

% Solids: 93.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	16.0		N	P
7440-38-2	Arsenic	1.5		N*	P
7440-39-3	Barium	743			P
7440-41-7	Beryllium	0.65		N	P
7440-43-9	Cadmium	10.6		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	15.3		N	P
7440-48-4	Cobalt	7.3		N	P
7440-50-8	Copper	549		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	2980		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.11	U	N	CV
7440-02-0	Nickel	14.6		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.50	U	N	P
7440-22-4	Silver	0.84	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.1	U	N	P
7440-62-2	Vanadium	12.0		N	P
7440-66-6	Zinc	4090		N	P
	Cyanide				NR
7440-31-5	Tin	21.0	U		P
7439-93-2	Lithium	10.5	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16-056

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-056

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #014

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ408.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 6 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	8	B
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.3	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.3	U
75-15-0	Carbon Disulfide	5.3	U
75-35-4	1,1-Dichloroethene	5.3	U
75-34-4	1,1-Dichloroethane	5.3	U
540-59-0	trans-1,2-Dichloroethene	5.3	U
67-66-3	Chloroform	5.3	U
107-06-2	1,2-Dichloroethane	5.3	U
75-71-8	Dichlorodifluoromethane	5.3	U
74-88-4	Iodomethane	5.3	U
107-12-0	Propionitrile	5.3	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.3	U
56-23-5	Carbon Tetrachloride	5.3	U
108-05-4	Vinyl Acetate	5.3	U
75-27-4	Bromodichloromethane	5.3	U
78-87-5	1,2-Dichloropropane	5.3	U
10061-01-5	cis-1,3-Dichloropropene	5.3	U
79-01-6	Trichloroethene	5.3	U
71-43-2	Benzene	5.3	U
124-48-1	Dibromochloromethane	5.3	U
10061-02-6	trans-1,3-Dichloropropene	5.3	U
79-00-5	1,1,2-Trichloroethane	5.3	U
75-25-2	Bromoform	5.3	U

FORM I VOA 8260/Appendix IX

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-056

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #014

Sample wt/vol: 5.0 (g/mL) 6 Lab File ID: FJ408.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 6 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.3	U
74-95-3	Dibromomethane		5.3	U
106-93-4	1,2-Dibromoethane (EDB)		5.3	U
108-10-1	4-Methyl-2-Pentanone		53	U
591-78-6	2-Hexanone		53	U
127-18-4	Tetrachloroethene		5.3	U
79-34-5	1,1,2,2-Tetrachloroethane		5.3	U
108-88-3	Toluene		5.3	U
108-90-7	Chlorobenzene		5.3	U
100-41-4	Ethylbenzene		5.3	U
100-42-5	Styrene		5.3	U
108-38-3	m + p-Xylene		5.3	U
95-47-6	o-Xylene		5.3	U
80-62-6	Methyl methacrylate		5.3	U
630-20-6	1,1,1,2-Tetrachloroethane		5.3	U
96-18-4	1,2,3-Trichloropropane		5.3	U
110-57-6	trans-1,4-Dichloro-2-butene		27	U
97-63-2	Ethyl methacrylate		5.3	U
76-01-7	Pentachloroethane		5.3	U
96-12-8	1,2-Dibromo-3-chloropropane		5.3	U
78-83-1	Isobutyl Alcohol		5.3	U
126-99-8	Chloroprene	(TIC) *	5.3	U
	3-Chloroprene	(TIC)	5.3	U
123-91-1	1,4-Dioxane	(TIC)	1100	U
Methylene Chloride - Dichloromethane				
Methyl ethyl ketone - 2-Butanone				
Chloroprene - 2-Chloro-1,3-butadiene				
Propionitrile - Ethyl Cyanide				
* - Reported as semiquantitative analysis only.				

FORM I VOA

8260/Appendix IX

00229

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-056
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 6.2
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-014
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 11/01/95
Date Analyzed: 11/07/95
Time Analyzed: 8:29

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.29	U
RDX		0.35	U
TNB		0.24	U
TETRYL		0.26	U
DNB		0.20	U
TNT		0.23	U
2,6-DNT		0.25	U
2,4-DNT		0.20	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218
Account #:——— MKC70
Client Name:——— MK CORP

Sample Number
NSWC 16/16-056

AENI # 9510218-014

Concentration:——— Low
Date Sampled:——— 10/19/95
Date Received:——— 10/20/95
Date Ext Prepared:——— 10/27/95
Date Analyzed:——— 11/3/95
Conc/Dil Factor:——— 10
Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	6.2	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		18	U
319-85-7	beta-BHC		18	U
319-86-8	delta-BHC		18	U
58-89-9	gamma-BHC (Lindane)		35	U
75-44-8	Heptachlor		18	U
309-00-2	Aldrin		18	U
1024-57-3	Heptachlor epoxide		18	U
959-98-8	Endosulfan I		18	U
60-57-1	Dieldrin		35	U
75-55-9	4, 4'-DDE		35	U
72-20-8	Endrin		35	U
33213-65-9	Endosulfan II		35	U
72-54-8	4, 4'-DDD		35	U
1031-07-8	Endosulfan Sulfate		35	U
50-29-3	4, 4'-DDT		35	U
72-43-5	Methoxychlor		180	U
53494-70-5	Endrin Ketone		35	U
7421-36-3	Endrin aldehyde		35	U
57-74-9	Chlordane		350	U
8001-35-2	Toxaphene		1800	U
12674-11-2	Aroclor-1016		350	U
11104-28-2	Aroclor-1221		700	U
11141-16-5	Aroclor-1232		350	U
53469-21-9	Aroclor-1242		350	U
12672-29-6	Aroclor-1248		350	U
11097-69-1	Aroclor-1254		350	U
11096-82-5	Aroclor-1260		350	U
510-15-6	Chlorobenzilate		702	U
2303-16-4	Diallate		3512	U
465-73-6	Isodrin		88	U
143-50-0	Kepone		351	U
82-68-8	Pentachloronitrobenzene		70	U

Vi - Volume of extract injected (ul) - _____ 1
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.36
Vt - Volume of total extract (ul) - _____ 10,000

FORM I

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-057

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021815

Level (low/med): LOW Date Received: 10/20/95

% Solids: 97.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	12.4		N	P
7440-38-2	Arsenic	2.9		N*	P
7440-39-3	Barium	336			P
7440-41-7	Beryllium	0.41		N	P
7440-43-9	Cadmium	2.7		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	11.8		N	P
7440-48-4	Cobalt	4.6		N	P
7440-50-8	Copper	318		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	888		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.12		N	CV
7440-02-0	Nickel	9.9		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.51	U	N	P
7440-22-4	Silver	0.77	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	0.96	U	N	P
7440-62-2	Vanadium	11.7		N	P
7440-66-6	Zinc	2810		N	P
	Cyanide				NR
7440-31-5	Tin	19.3	U		P
7439-93-2	Lithium	9.6	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16-057

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-057

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #015

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ411.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 2 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

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	19	B
67-64-1	Acetone	100	U
75-05-8	Acetonitrile	5.1	U
107-13-1	Acrylonitrile	1000	U
107-02-8	Acrolein	1000	U
75-69-4	Trichlorofluoromethane	5.1	U
75-15-0	Carbon Disulfide	5.1	U
75-35-4	1,1-Dichloroethene	5.1	U
75-34-4	1,1-Dichloroethane	5.1	U
540-59-0	trans-1,2-Dichloroethene	5.1	U
67-66-3	Chloroform	5.1	U
107-06-2	1,2-Dichloroethane	5.1	U
75-71-8	Dichlorodifluoromethane	5.1	U
74-88-4	Iodomethane	5.1	U
107-12-0	Propionitrile	5.1	U
107-05-1	Allyl chloride	100	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5.1	U
56-23-5	Carbon Tetrachloride	5.1	U
108-05-4	Vinyl Acetate	5.1	U
75-27-4	Bromodichloromethane	5.1	U
78-87-5	1,2-Dichloropropane	5.1	U
10061-01-5	cis-1,3-Dichloropropene	5.1	U
79-01-6	Trichloroethene	5.1	U
71-43-2	Benzene	5.1	U
124-48-1	Dibromochloromethane	5.1	U
10061-02-6	trans-1,3-Dichloropropene	5.1	U
79-00-5	1,1,2-Trichloroethane	5.1	U
75-25-2	Bromoform	5.1	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16-057

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #015

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ411.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 2 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	5.1	U
74-95-3	Dibromomethane	5.1	U
106-93-4	1,2-Dibromoethane (EDB)	5.1	U
108-10-1	4-Methyl-2-Pentanone	51	U
591-78-6	2-Hexanone	51	U
127-18-4	Tetrachloroethene	30	
79-34-5	1,1,2,2-Tetrachloroethane	5.1	U
108-88-3	Toluene	3.7	J
108-90-7	Chlorobenzene	5.1	U
100-41-4	Ethylbenzene	5.1	U
100-42-5	Styrene	5.1	U
108-38-3	m + p-Xylene	5.1	U
95-47-6	o-Xylene	5.1	U
80-62-6	Methyl methacrylate	5.1	U
630-20-6	1,1,1,2-Tetrachloroethane	5.1	U
96-18-4	1,2,3-Trichloropropane	5.1	U
110-57-6	trans-1,4-Dichloro-2-butene	26	U
97-63-2	Ethyl methacrylate	5.1	U
76-01-7	Pentachloroethane	5.1	U
96-12-8	1,2-Dibromo-3-chloropropane	5.1	U
78-83-1	Isobutyl Alcohol	5.1	U
126-99-8	Chloroprene (TIC) *	5.1	U
	3-Chloroprene (TIC)	5.1	U
123-91-1	1,4-Dioxane (TIC)	1000	U
	Methylene Chloride - Dichloromethane		
	Methyl ethyl ketone - 2-Butanone		
	Chloroprene - 2-Chloro-1,3-butadiene		
	Propionitrile - Ethyl Cyanide		
* - Reported as semiquantitative analysis only.			

FORM I VOA

8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-057
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 2.1
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-015
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 11/01/95
Date Analyzed: 11/07/95
Time Analyzed: 9:23

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.28	U
RDX		0.34	U
TNB		0.23	U
TETRYL		0.25	U
DNB		0.19	U
TNT		0.22	U
2,6-DNT		0.24	U
2,4-DNT		0.19	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218

Account #:——— MKC70

Client Name:——— MK CORP

Concentration:——— Low

Date Sampled:——— 10/19/95

Date Received:——— 10/20/95

Date Ext Prepared:—— 10/27/95

Date Analyzed:——— 11/4/95

Conc/Dil Factor:——— 100

Method: ——— 8080

Sample Number
NSWC 16/16-057

AENI # 9510218-015

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	2.1	
Matrix:	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		170	U
319-85-7	beta-BHC		170	U
319-86-8	delta-BHC		170	U
58-89-9	gamma-BHC (Lindane)		340	U
75-44-8	Heptachlor		170	U
309-00-2	Aldrin		170	U
1024-57-3	Heptachlor epoxide		170	U
959-98-8	Endosulfan I		170	U
60-57-1	Dieldrin		340	U
75-55-9	4, 4'-DDE		340	U
72-20-8	Endrin		340	U
33213-65-9	Endosulfan II		340	U
72-54-8	4, 4'-DDD		340	U
1031-07-8	Endosulfan Sulfate		340	U
50-29-3	4, 4'-DDT		340	U
72-43-5	Methoxychlor		1700	U
53494-70-5	Endrin Ketone		340	U
7421-36-3	Endrin aldehyde		340	U
57-74-9	Chlordane		3400	U
8001-35-2	Toxaphene		17000	U
12674-11-2	Aroclor-1016		3400	U
11104-28-2	Aroclor-1221		6800	U
11141-16-5	Aroclor-1232		3400	U
53469-21-9	Aroclor-1242		3400	U
12672-29-6	Aroclor-1248		3400	U
11097-69-1	Aroclor-1254		3400	U
11096-82-5	Aroclor-1260		3400	U
510-15-6	Chlorobenzilate		6756	U
2303-16-4	Diallate		33778	U
465-73-6	Isodrin		844	U
143-50-0	Kepone		3378	U
82-68-8	Pentachloronitrobenzene		676	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.24

Vt - Volume of total extract (ul) - _____ 10,000

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-058

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021816

Level (low/med): LOW Date Received: 10/20/95

% Solids: 98.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	8.8		N	P
7440-38-2	Arsenic	3.9		N*	P
7440-39-3	Barium	359			P
7440-41-7	Beryllium	0.39		N	P
7440-43-9	Cadmium	2.5		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	14.8		N	P
7440-48-4	Cobalt	4.4		N	P
7440-50-8	Copper	340		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	821		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.10	U	N	CV
7440-02-0	Nickel	10.6		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.49	U	N	P
7440-22-4	Silver	0.79	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	0.99	U	N	P
7440-62-2	Vanadium	17.3		N	P
7440-66-6	Zinc	3070		N	P
	Cyanide				NR
7440-31-5	Tin	19.7	U		P
7439-93-2	Lithium	9.9	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16-058

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16-058

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #016

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ412.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 1 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	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	23	B
67-64-1	Acetone	100	U
75-05-8	Acetonitrile	5.1	U
107-13-1	Acrylonitrile	1000	U
107-02-8	Acrolein	1000	U
75-69-4	Trichlorofluoromethane	5.1	U
75-15-0	Carbon Disulfide	5.1	U
75-35-4	1,1-Dichloroethene	5.1	U
75-34-4	1,1-Dichloroethane	5.1	U
540-59-0	trans-1,2-Dichloroethene	5.1	U
67-66-3	Chloroform	5.1	U
107-06-2	1,2-Dichloroethane	5.1	U
75-71-8	Dichlorodifluoromethane	5.1	U
74-88-4	Iodomethane	5.1	U
107-12-0	Propionitrile	5.1	U
107-05-1	Allyl chloride	100	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5.1	U
56-23-5	Carbon Tetrachloride	5.1	U
108-05-4	Vinyl Acetate	5.1	U
75-27-4	Bromodichloromethane	5.1	U
78-87-5	1,2-Dichloropropane	5.1	U
10061-01-5	cis-1,3-Dichloropropene	5.1	U
79-01-6	Trichloroethene	5.1	U
71-43-2	Benzene	5.1	U
124-48-1	Dibromochloromethane	5.1	U
10061-02-6	trans-1,3-Dichloropropene	5.1	U
79-00-5	1,1,2-Trichloroethane	5.1	U
75-25-2	Bromoform	5.1	U

FORM I VOA 8260/Appendix IX

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-058

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #016

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ412.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 1 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	5.1	U
74-95-3	Dibromomethane	5.1	U
106-93-4	1,2-Dibromoethane (EDB)	5.1	U
108-10-1	4-Methyl-2-Pentanone	51	U
591-78-6	2-Hexanone	51	U
127-18-4	Tetrachloroethene	10	
79-34-5	1,1,2,2-Tetrachloroethane	5.1	U
108-88-3	Toluene	5.1	U
108-90-7	Chlorobenzene	5.1	U
100-41-4	Ethylbenzene	5.1	U
100-42-5	Styrene	5.1	U
108-38-3	m + p-Xylene	5.1	U
95-47-6	o-Xylene	5.1	U
80-62-6	Methyl methacrylate	5.1	U
630-20-6	1,1,1,2-Tetrachloroethane	5.1	U
96-18-4	1,2,3-Trichloropropane	5.1	U
110-57-6	trans-1,4-Dichloro-2-butene	25	U
97-63-2	Ethyl methacrylate	5.1	U
76-01-7	Pentachloroethane	5.1	U
96-12-8	1,2-Dibromo-3-chloropropane	5.1	U
78-83-1	Isobutyl Alcohol	5.1	U
126-99-8	Chloroprene (TIC) *	5.1	U
	3-Chloroprene (TIC)	5.1	U
123-91-1	1,4-Dioxane (TIC)	1000	U
Methylene Chloride - Dichloromethane			
Methyl ethyl ketone - 2-Butanone			
Chloroprene - 2-Chloro-1,3-butadiene			
Propionitrile - Ethyl Cyanide			
* - Reported as semiquantitative analysis only.			

FORM I VOA

8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-058
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 1.2
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-016
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 11/01/95
Date Analyzed: 11/07/95
Time Analyzed: 10:17

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.28	U
RDX		0.34	U
TNB		0.23	U
TETRYL		0.25	U
DNB		0.19	U
TNT		0.22	U
2,6-DNT		0.24	U
2,4-DNT		0.19	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218

Account #:——— MKC70

Client Name:——— MK CORP

Concentration:——— Low

Date Sampled:——— 10/19/95

Date Received:——— 10/20/95

Date Ext Prepared:——— 10/27/95

Date Analyzed:——— 11/4/95

Conc/Dil Factor:——— 100

Method: ——— 8080

Sample Number
NSWC 16/16-058

AENI # 9510218-016

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	1.2	
Matrix:	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		170	U
319-85-7	beta-BHC		170	U
319-86-8	delta-BHC		170	U
58-89-9	gamma-BHC (Lindane)		340	U
75-44-8	Heptachlor		170	U
309-00-2	Aldrin		170	U
1024-57-3	Heptachlor epoxide		170	U
959-98-8	Endosulfan I		170	U
60-57-1	Dieldrin		340	U
75-55-9	4, 4'-DDE		340	U
72-20-8	Endrin		340	U
33213-65-9	Endosulfan II		340	U
72-54-8	4, 4'-DDD		340	U
1031-07-8	Endosulfan Sulfate		340	U
50-29-3	4, 4'-DDT		340	U
72-43-5	Methoxychlor		1700	U
53494-70-5	Endrin Ketone		340	U
7421-36-3	Endrin aldehyde		340	U
57-74-9	Chlordane		3400	U
8001-35-2	Toxaphene		17000	U
12674-11-2	Aroclor-1016		3400	U
11104-28-2	Aroclor-1221		6700	U
11141-16-5	Aroclor-1232		3400	U
53469-21-9	Aroclor-1242		3400	U
12672-29-6	Aroclor-1248		3400	U
11097-69-1	Aroclor-1254		3400	U
11096-82-5	Aroclor-1260		3400	U
510-15-6	Chlorobenzilate		6701	U
2303-16-4	Diallate		33504	U
465-73-6	Isodrin		838	U
143-50-0	Kepone		3350	U
82-68-8	Pentachloronitrobenzene		670	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.21

Vt - Volume of total extract (ul) - _____ 10,000

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-059

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021817

Level (low/med): LOW Date Received: 10/20/95

% Solids: 96.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	19.5		N	P
7440-38-2	Arsenic	3.3		N*	P
7440-39-3	Barium	569			P
7440-41-7	Beryllium	0.23		N	P
7440-43-9	Cadmium	4.1		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	10.7		N	P
7440-48-4	Cobalt	4.5		N	P
7440-50-8	Copper	570		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	1280		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel	9.8		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.51	U	N	P
7440-22-4	Silver	0.76	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	0.95	U	N	P
7440-62-2	Vanadium	11.7		N	P
7440-66-6	Zinc	5730		N	P
	Cyanide				NR
7440-31-5	Tin	19.0	U		P
7439-93-2	Lithium	9.5	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16-059

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-059

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #017

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ413.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 4 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

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	21	B
67-64-1	Acetone	100	U
75-05-8	Acetonitrile	5.2	U
107-13-1	Acrylonitrile	1000	U
107-02-8	Acrolein	1000	U
75-69-4	Trichlorofluoromethane	5.2	U
75-15-0	Carbon Disulfide	5.2	U
75-35-4	1,1-Dichloroethene	5.2	U
75-34-4	1,1-Dichloroethane	5.2	U
540-59-0	trans-1,2-Dichloroethene	5.2	U
67-66-3	Chloroform	5.2	U
107-06-2	1,2-Dichloroethane	5.2	U
75-71-8	Dichlorodifluoromethane	5.2	U
74-88-4	Iodomethane	5.2	U
107-12-0	Propionitrile	5.2	U
107-05-1	Allyl chloride	100	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5.2	U
56-23-5	Carbon Tetrachloride	5.2	U
108-05-4	Vinyl Acetate	5.2	U
75-27-4	Bromodichloromethane	5.2	U
78-87-5	1,2-Dichloropropane	5.2	U
10061-01-5	cis-1,3-Dichloropropene	5.2	U
79-01-6	Trichloroethene	5.2	U
71-43-2	Benzene	5.2	U
124-48-1	Dibromochloromethane	5.2	U
10061-02-6	trans-1,3-Dichloropropene	5.2	U
79-00-5	1,1,2-Trichloroethane	5.2	U
75-25-2	Bromoform	5.2	U

FORM I VOA 8260/Appendix IX

D-00243

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16-059

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #017

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ413.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 4 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	5.2	U
74-95-3	Dibromomethane	5.2	U
106-93-4	1,2-Dibromoethane (EDB)	5.2	U
108-10-1	4-Methyl-2 Pentanone	52	U
591-78-6	2-Hexanone	52	U
127-18-4	Tetrachloroethene	12	
79-34-5	1,1,2,2-Tetrachloroethane	5.2	U
108-88-3	Toluene	5.2	U
108-90-7	Chlorobenzene	5.2	U
100-41-4	Ethylbenzene	5.2	U
100-42-5	Styrene	5.2	U
108-38-3	m + p-Xylene	5.2	U
95-47-6	o-Xylene	5.2	U
80-62-6	Methyl methacrylate	5.2	U
630-20-6	1,1,1,2-Tetrachloroethane	5.2	U
96-18-4	1,2,3-Trichloropropane	5.2	U
110-57-6	trans-1,4-Dichloro-2-butene	26	U
97-63-2	Ethyl methacrylate	5.2	U
76-01-7	Pentachloroethane	5.2	U
96-12-8	1,2-Dibromo-3-chloropropane	5.2	U
78-83-1	Isobutyl Alcohol	5.2	U
126-99-8	Chloroprene (TIC) *	5.2	U
	3-Chloroprene (TIC)	5.2	U
123-91-1	1,4-Dioxane (TIC)	1000	U
Methylene Chloride - Dichloromethane			
Methyl ethyl ketone - 2-Butanone			
Chloroprene - 2-Chloro-1,3-butadiene			
Propionitrile - Ethyl Cyanide			
* - Reported as semiquantitative analysis only.			

FORM I VOA 8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-059
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 3.5
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-017
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 11/01/95
Date Analyzed: 11/07/95
Time Analyzed: 11:11

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.29	U
RDX		0.35	U
TNB		0.24	U
TETRYL		0.26	U
DNB		0.20	U
TNT		0.23	U
2,6-DNT		0.25	U
2,4-DNT		0.20	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218
Account #:——— MKC70
Client Name:——— MK CORP

Sample Number
NSWC 16/16-059

AENI # 9510218-017

Concentration:——— Low
Date Sampled:——— 10/19/95
Date Received:——— 10/20/95
Date Ext Prepared:— 10/27/95
Date Analyzed:——— 11/4/95
Conc/Dil Factor:——— 20
Method: ——— 8080

GPC Cleanup | | Yes | X | No
Seperatory Funnel Extraction | | Yes
Continuous Liquid - Liquid Extraction | | Yes
Percent Moisture 3.5
Matrix: SOIL

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		34	U
319-85-7	beta-BHC		34	U
319-86-8	delta-BHC		34	U
58-89-9	gamma-BHC (Lindane)		68	U
75-44-8	Heptachlor		34	U
309-00-2	Aldrin		34	U
1024-57-3	Heptachlor epoxide		34	U
959-98-8	Endosulfan I		34	U
60-57-1	Dieldrin		68	U
75-55-9	4, 4'-DDE		68	U
72-20-8	Endrin		68	U
33213-65-9	Endosulfan II		68	U
72-54-8	4, 4'-DDD		68	U
1031-07-8	Endosulfan Sulfate		68	U
50-29-3	4, 4'-DDT		68	U
72-43-5	Methoxychlor		340	U
53494-70-5	Endrin Ketone		68	U
7421-36-3	Endrin aldehyde		68	U
57-74-9	Chlordane		680	U
8001-35-2	Toxaphene		3400	U
12674-11-2	Aroclor-1016		680	U
11104-28-2	Aroclor-1221		1400	U
11141-16-5	Aroclor-1232		680	U
53469-21-9	Aroclor-1242		680	U
12672-29-6	Aroclor-1248		680	U
11097-69-1	Aroclor-1254		680	U
11096-82-5	Aroclor-1260		680	U
510-15-6	Chlorobenzilate		1352	U
2303-16-4	Diallate		6760	U
465-73-6	Isodrin		169	U
143-50-0	Kepone		676	U
82-68-8	Pentachloronitrobenzene		135	U

Vi - Volume of extract injected (ul) - 1
Vs - Volume of Water extracted (ml) - N/A
Ws - Weight of sample extracted (g) - 30.66
Vt - Volume of total extract (ul) - 10,000

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-060

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021818

Level (low/med): LOW Date Received: 10/20/95

% Solids: 97.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	10.7		N	P
7440-38-2	Arsenic	1.9		N*	P
7440-39-3	Barium	540			P
7440-41-7	Beryllium	0.40		N	P
7440-43-9	Cadmium	3.4		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	15.7		N	P
7440-48-4	Cobalt	3.9		N	P
7440-50-8	Copper	783		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	738		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel	13.8		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.50	U	N	P
7440-22-4	Silver	0.80	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U	N	P
7440-62-2	Vanadium	10.9		N	P
7440-66-6	Zinc	6350		N	P
	Cyanide				NR
7440-31-5	Tin	20.0	U		P
7439-93-2	Lithium	10.0	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16-060

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-060

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #018

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ414.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 3 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	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	15	B
67-64-1	Acetone	100	U
75-05-8	Acetonitrile	5.1	U
107-13-1	Acrylonitrile	1000	U
107-02-8	Acrolein	1000	U
75-69-4	Trichlorofluoromethane	5.1	U
75-15-0	Carbon Disulfide	5.1	U
75-35-4	1,1-Dichloroethene	5.1	U
75-34-4	1,1-Dichloroethane	5.1	U
540-59-0	trans-1,2-Dichloroethene	5.1	U
67-66-3	Chloroform	5.1	U
107-06-2	1,2-Dichloroethane	5.1	U
75-71-8	Dichlorodifluoromethane	5.1	U
74-88-4	Iodomethane	5.1	U
107-12-0	Propionitrile	5.1	U
107-05-1	Allyl chloride	100	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5.1	U
56-23-5	Carbon Tetrachloride	5.1	U
108-05-4	Vinyl Acetate	5.1	U
75-27-4	Bromodichloromethane	5.1	U
78-87-5	1,2-Dichloropropane	5.1	U
10061-01-5	cis-1,3-Dichloropropene	5.1	U
79-01-6	Trichloroethene	5.1	U
71-43-2	Benzene	5.1	U
124-48-1	Dibromochloromethane	5.1	U
10061-02-6	trans-1,3-Dichloropropene	5.1	U
79-00-5	1,1,2-Trichloroethane	5.1	U
75-25-2	Bromoform	5.1	U

FORM I VOA 8260/Appendix IX

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-060

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #018

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ414.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 3 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.1	U
74-95-3	Dibromomethane		5.1	U
106-93-4	1,2-Dibromoethane (EDB)		5.1	U
108-10-1	4-Methyl-2-Pentanone		51	U
591-78-6	2-Hexanone		51	U
127-18-4	Tetrachloroethene		4.3	J
79-34-5	1,1,2,2-Tetrachloroethane		5.1	U
108-88-3	Toluene		5.1	U
108-90-7	Chlorobenzene		5.1	U
100-41-4	Ethylbenzene		5.1	U
100-42-5	Styrene		5.1	U
108-38-3	m + p-Xylene		5.1	U
95-47-6	o-Xylene		5.1	U
80-62-6	Methyl methacrylate		5.1	U
630-20-6	1,1,1,2-Tetrachloroethane		5.1	U
96-18-4	1,2,3-Trichloropropane		5.1	U
110-57-6	trans-1,4-Dichloro-2-butene		26	U
97-63-2	Ethyl methacrylate		5.1	U
76-01-7	Pentachloroethane		5.1	U
96-12-8	1,2-Dibromo-3-chloropropane		5.1	U
78-83-1	Isobutyl Alcohol		5.1	U
126-99-8	Chloroprene	(TIC) *	5.1	U
	3-Chloroprene	(TIC)	5.1	U
123-91-1	1,4-Dioxane	(TIC)	1000	U
Methylene Chloride - Dichloromethane				
Methyl ethyl ketone - 2-Butanone				
Chloroprene - 2-Chloro-1,3-butadiene				
Propionitrile - Ethyl Cyanide				
* - Reported as semiquantitative analysis only.				

FORM I VOA

8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-060
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 2.5
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-018
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 11/01/95
Date Analyzed: 11/07/95
Time Analyzed: 12:06

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.28	U
RDX		0.34	U
TNB		0.23	U
TETRYL		0.25	U
DNB		0.19	U
TNT		0.22	U
2,6-DNT		0.24	U
2,4-DNT		0.19	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218
Account #:——— MKC70
Client Name:——— MK CORP

Sample Number
NSWC 16/16-060

AENI # 9510218-018

Concentration:——— Low
Date Sampled:——— 10/19/95
Date Received:——— 10/20/95
Date Ext Prepared:— 10/27/95
Date Analyzed:——— 11/4/95
Conc/Dil Factor:——— 20
Method: ——— 8080

GPC Cleanup | | Yes | X | No
Seperatory Funnel Extraction | | Yes
Continuous Liquid - Liquid Extraction | | Yes
Percent Moisture 2.5
Matrix: SOIL

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		33	U
319-85-7	beta-BHC		33	U
319-86-8	delta-BHC		33	U
58-89-9	gamma-BHC (Lindane)		67	U
75-44-8	Heptachlor		33	U
309-00-2	Aldrin		33	U
1024-57-3	Heptachlor epoxide		33	U
959-98-8	Endosulfan I		33	U
60-57-1	Dieldrin		67	U
75-55-9	4, 4'-DDE		67	U
72-20-8	Endrin		67	U
33213-65-9	Endosulfan II		67	U
72-54-8	4, 4'-DDD		67	U
1031-07-8	Endosulfan Sulfate		67	U
50-29-3	4, 4'-DDT		67	U
72-43-5	Methoxychlor		330	U
53494-70-5	Endrin Ketone		67	U
7421-36-3	Endrin aldehyde		67	U
57-74-9	Chlordane		670	U
8001-35-2	Toxaphene		3300	U
12674-11-2	Aroclor-1016		670	U
11104-28-2	Aroclor-1221		1300	U
11141-16-5	Aroclor-1232		670	U
53469-21-9	Aroclor-1242		670	U
12672-29-6	Aroclor-1248		670	U
11097-69-1	Aroclor-1254		670	U
11096-82-5	Aroclor-1260		670	U
510-15-6	Chlorobenzilate		1337	U
2303-16-4	Diallate		6684	U
465-73-6	Isodrin		167	U
143-50-0	Kepone		668	U
82-68-8	Pentachloronitrobenzene		134	U

Vi - Volume of extract injected (ul) - _____ 1
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.69
Vt - Volume of total extract (ul) - _____ 10,000

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-061

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021819

Level (low/med): LOW Date Received: 10/20/95

% Solids: 91.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	8.4		N	P
7440-38-2	Arsenic	1.1		N*	P
7440-39-3	Barium	350			P
7440-41-7	Beryllium	0.68		N	P
7440-43-9	Cadmium	1.8		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	17.5		N	P
7440-48-4	Cobalt	4.2		N	P
7440-50-8	Copper	285		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	867		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.09	U	N	CV
7440-02-0	Nickel	14.5		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.52	U	N	P
7440-22-4	Silver	0.87	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.1	U	N	P
7440-62-2	Vanadium	14.7		N	P
7440-66-6	Zinc	2350		N	P
	Cyanide				NR
7440-31-5	Tin	21.7	U		P
7439-93-2	Lithium	12.1			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16-061

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-061

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #019

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ415.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 9 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	22	B
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.5	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.5	U
75-15-0	Carbon Disulfide	5.5	U
75-35-4	1,1-Dichloroethene	5.5	U
75-34-4	1,1-Dichloroethane	5.5	U
540-59-0	trans-1,2-Dichloroethene	5.5	U
67-66-3	Chloroform	5.5	U
107-06-2	1,2-Dichloroethane	5.5	U
75-71-8	Dichlorodifluoromethane	5.5	U
74-88-4	Iodomethane	5.5	U
107-12-0	Propionitrile	5.5	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.5	U
56-23-5	Carbon Tetrachloride	5.5	U
108-05-4	Vinyl Acetate	5.5	U
75-27-4	Bromodichloromethane	5.5	U
78-87-5	1,2-Dichloropropane	5.5	U
10061-01-5	cis-1,3-Dichloropropene	5.5	U
79-01-6	Trichloroethene	5.5	U
71-43-2	Benzene	5.5	U
124-48-1	Dibromochloromethane	5.5	U
10061-02-6	trans-1,3-Dichloropropene	5.5	U
79-00-5	1,1,2-Trichloroethane	5.5	U
75-25-2	Bromoform	5.5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-061

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #019

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ415.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 9 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	5.5	U
74-95-3	Dibromomethane	5.5	U
106-93-4	1,2-Dibromoethane (EDB)	5.5	U
108-10-1	4-Methyl-2-Pentanone	55	U
591-78-6	2-Hexanone	55	U
127-18-4	Tetrachloroethene	5.6	
79-34-5	1,1,2,2-Tetrachloroethane	5.5	U
108-88-3	Toluene	5.5	U
108-90-7	Chlorobenzene	5.5	U
100-41-4	Ethylbenzene	5.5	U
100-42-5	Styrene	5.5	U
108-38-3	m + p-Xylene	5.5	U
95-47-6	o-Xylene	5.5	U
80-62-6	Methyl methacrylate	5.5	U
630-20-6	1,1,1,2-Tetrachloroethane	5.5	U
96-18-4	1,2,3-Trichloropropane	5.5	U
110-57-6	trans-1,4-Dichloro-2-butene	27	U
97-63-2	Ethyl methacrylate	5.5	U
76-01-7	Pentachloroethane	5.5	U
96-12-8	1,2-Dibromo-3-chloropropane	5.5	U
78-83-1	Isobutyl Alcohol	5.5	U
126-99-8	Chloroprene (TIC) *	5.5	U
	3-Chloroprene (TIC)	5.5	U
123-91-1	1,4-Dioxane (TIC)	1100	U
	Methylene Chloride - Dichloromethane		
	Methyl ethyl ketone - 2-Butanone		
	Chloroprene - 2-Chloro-1,3-butadiene		
	Propionitrile - Ethyl Cyanide		
* - Reported as semiquantitative analysis only.			

FORM I VOA

8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-061
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 8.7
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-019
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 11/01/95
Date Analyzed: 11/07/95
Time Analyzed: 13:00

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.30	U
RDX		0.37	U
TNB		0.25	U
TETRYL		0.27	U
DNB		0.21	U
TNT		0.24	U
2,6-DNT		0.26	U
2,4-DNT		0.21	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218
Account #:——— MKC70
Client Name:——— MK CORP

Sample Number
NSWC 16/16-061

AENI # 9510218-019

Concentration:——— Low
Date Sampled:——— 10/19/95
Date Received:——— 10/20/95
Date Ext Prepared:— 10/27/95
Date Analyzed:——— 11/4/95
Conc/Dil Factor:——— 1
Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	8.7	
Matrix:	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.8	U
319-85-7	beta-BHC		1.8	U
319-86-8	delta-BHC		1.8	U
58-89-9	gamma-BHC (Lindane)		3.6	U
75-44-8	Heptachlor		1.8	U
309-00-2	Aldrin		1.8	U
1024-57-3	Heptachlor epoxide		1.8	U
959-98-8	Endosulfan I		1.8	U
60-57-1	Dieldrin		3.6	U
75-55-9	4, 4'-DDE		3.6	U
72-20-8	Endrin		3.6	U
33213-65-9	Endosulfan II		3.6	U
72-54-8	4, 4'-DDD		3.6	U
1031-07-8	Endosulfan Sulfate		3.6	U
50-29-3	4, 4'-DDT		3.6	U
72-43-5	Methoxychlor		18	U
53494-70-5	Endrin Ketone		3.6	U
7421-36-3	Endrin aldehyde		3.6	U
57-74-9	Chlordane		36	U
8001-35-2	Toxaphene		180	U
12674-11-2	Aroclor-1016		36	U
11104-28-2	Aroclor-1221		71	U
11141-16-5	Aroclor-1232		36	U
53469-21-9	Aroclor-1242		36	U
12672-29-6	Aroclor-1248		36	U
11097-69-1	Aroclor-1254		36	U
11096-82-5	Aroclor-1260		36	U
510-15-6	Chlorobenzilate		71	U
2303-16-4	Diallate		357	U
465-73-6	Isodrin		8.9	U
143-50-0	Kepone		36	U
82-68-8	Pentachloronitrobenzene		7.1	U

Vi - Volume of extract injected (ul) - _____ 1
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.68
Vt - Volume of total extract (ul) - _____ 10,000

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-062

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021820

Level (low/med): LOW Date Received: 10/20/95

% Solids: 75.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	2.6	U	N	P
7440-38-2	Arsenic	1.8		N*	P
7440-39-3	Barium	85.2			P
7440-41-7	Beryllium	0.60		N	P
7440-43-9	Cadmium	0.53	U	N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	17.8		N	P
7440-48-4	Cobalt	4.5		N	P
7440-50-8	Copper	38.5		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	856		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.13	U	N	CV
7440-02-0	Nickel	13.1		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.64	U	N	P
7440-22-4	Silver	1.1	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.3	U	N	P
7440-62-2	Vanadium	12.0		N	P
7440-66-6	Zinc	358		N	P
	Cyanide				NR
7440-31-5	Tin	26.3	U		P
7439-93-2	Lithium	13.1	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16-062

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16-062

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #020

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ416.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 24 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	29	B
67-64-1	Acetone	130	U
75-05-8	Acetonitrile	6.6	U
107-13-1	Acrylonitrile	1300	U
107-02-8	Acrolein	1300	U
75-69-4	Trichlorofluoromethane	6.6	U
75-15-0	Carbon Disulfide	6.6	U
75-35-4	1,1-Dichloroethene	6.6	U
75-34-4	1,1-Dichloroethane	6.6	U
540-59-0	trans-1,2-Dichloroethene	6.6	U
67-66-3	Chloroform	6.6	U
107-06-2	1,2-Dichloroethane	6.6	U
75-71-8	Dichlorodifluoromethane	6.6	U
74-88-4	Iodomethane	6.6	U
107-12-0	Propionitrile	6.6	U
107-05-1	Allyl chloride	130	U
78-93-3	2-Butanone	130	U
71-55-6	1,1,1-Trichloroethane	6.6	U
56-23-5	Carbon Tetrachloride	6.6	U
108-05-4	Vinyl Acetate	6.6	U
75-27-4	Bromodichloromethane	6.6	U
78-87-5	1,2-Dichloropropane	6.6	U
10061-01-5	cis-1,3-Dichloropropene	6.6	U
79-01-6	Trichloroethene	6.6	U
71-43-2	Benzene	6.6	U
124-48-1	Dibromochloromethane	6.6	U
10061-02-6	trans-1,3-Dichloropropene	6.6	U
79-00-5	1,1,2-Trichloroethane	6.6	U
75-25-2	Bromoform	6.6	U

FORM I VOA 8260/Appendix IX

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16-062

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #020

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ416.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 24 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		6.6	U
74-95-3	Dibromomethane		6.6	U
106-93-4	1,2-Dibromoethane (EDB)		6.6	U
108-10-1	4-Methyl-2-Pentanone		66	U
591-78-6	2-Hexanone		66	U
127-18-4	Tetrachloroethene		5.9	J
79-34-5	1,1,2,2-Tetrachloroethane		6.6	U
108-88-3	Toluene		6.6	U
108-90-7	Chlorobenzene		6.6	U
100-41-4	Ethylbenzene		6.6	U
100-42-5	Styrene		6.6	U
108-38-3	m + p-Xylene		6.6	U
95-47-6	o-Xylene		6.6	U
80-62-6	Methyl methacrylate		6.6	U
630-20-6	1,1,1,2-Tetrachloroethane		6.6	U
96-18-4	1,2,3-Trichloropropane		6.6	U
110-57-6	trans-1,4-Dichloro-2-butene		33	U
97-63-2	Ethyl methacrylate		6.6	U
76-01-7	Pentachloroethane		6.6	U
96-12-8	1,2-Dibromo-3-chloropropane		6.6	U
78-83-1	Isobutyl Alcohol		6.6	U
126-99-8	Chloroprene	(TIC) *	6.6	U
	3-Chloroprene	(TIC)	6.6	U
123-91-1	1,4-Dioxane	(TIC)	1300	U
Methylene Chloride - Dichloromethane				
Methyl ethyl ketone - 2-Butanone				
Chloroprene - 2-Chloro-1,3-butadiene				
Propionitrile - Ethyl Cyanide				
* - Reported as semiquantitative analysis only.				

FORM I VOA

8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-062
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 24.1
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-020
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 11/01/95
Date Analyzed: 11/07/95
Time Analyzed: 13:54

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.35	U
RDX		0.43	U
TNB		0.29	U
TETRYL		0.32	U
DNB		0.24	U
TNT		0.28	U
2,6-DNT		0.30	U
2,4-DNT		0.24	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218

Account #:——— MKC70

Client Name:——— MK CORP

Sample Number

NSWC 16/16-062

AENI # 9510218-020

Concentration:——— Low

Date Sampled:——— 10/19/95

Date Received:——— 10/20/95

Date Ext Prepared:——— 10/27/95

Date Analyzed:——— 11/4/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	24.1	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		2.2	U
319-85-7	beta-BHC		2.2	U
319-86-8	delta-BHC		2.2	U
58-89-9	gamma-BHC (Lindane)		4.4	U
75-44-8	Heptachlor		2.2	U
309-00-2	Aldrin		2.2	U
1024-57-3	Heptachlor epoxide		2.2	U
959-98-8	Endosulfan I		2.2	U
60-57-1	Dieldrin		4.4	U
75-55-9	4, 4'-DDE		4.4	U
72-20-8	Endrin		4.4	U
33213-65-9	Endosulfan II		4.4	U
72-54-8	4, 4'-DDD		4.4	U
1031-07-8	Endosulfan Sulfate		4.4	U
50-29-3	4, 4'-DDT		4.4	U
72-43-5	Methoxychlor		22	U
53494-70-5	Endrin Ketone		4.4	U
7421-36-3	Endrin aldehyde		4.4	U
57-74-9	Chlordane		44	U
8001-35-2	Toxaphene		220	U
12674-11-2	Aroclor-1016		44	U
11104-28-2	Aroclor-1221		87	U
11141-16-5	Aroclor-1232		44	U
53469-21-9	Aroclor-1242		44	U
12672-29-6	Aroclor-1248		44	U
11097-69-1	Aroclor-1254		44	U
11096-82-5	Aroclor-1260		44	U
510-15-6	Chlorobenzilate		87	U
2303-16-4	Diallate		436	U
465-73-6	Isodrin		11	U
143-50-0	Kepone		44	U
82-68-8	Pentachloronitrobenzene		8.7	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.2

Vt - Volume of total extract (ul) - _____ 10,000

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-063

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021821

Level (low/med): LOW Date Received: 10/20/95

% Solids: 84.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	2.2	U	N	P
7440-38-2	Arsenic	41.3		N*	P
7440-39-3	Barium	142			P
7440-41-7	Beryllium	1.6		N	P
7440-43-9	Cadmium	0.44	U	N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	24.0		N	P
7440-48-4	Cobalt	33.4		N	P
7440-50-8	Copper	27.1		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	11.1		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.12	U	N	CV
7440-02-0	Nickel	56.4		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.55	U	N	P
7440-22-4	Silver	0.88	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.1	U	N	P
7440-62-2	Vanadium	18.7		N	P
7440-66-6	Zinc	165		N	P
	Cyanide				NR
7440-31-5	Tin	23.4	U		P
7439-93-2	Lithium	12.0			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16-063

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-063

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #021

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ417.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 15 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	59	UD
74-83-9	Bromomethane	59	UD
75-01-4	Vinyl Chloride	59	UD
75-00-3	Chloroethane	59	UD
75-09-2	Methylene Chloride	110	BD
67-64-1	Acetone	96	JD
75-05-8	Acetonitrile	29	UD
107-13-1	Acrylonitrile	5900	UD
107-02-8	Acrolein	5900	UD
75-69-4	Trichlorofluoromethane	29	UD
75-15-0	Carbon Disulfide	29	UD
75-35-4	1,1-Dichloroethene	29	UD
75-34-4	1,1-Dichloroethane	29	UD
540-59-0	trans-1,2-Dichloroethene	29	UD
67-66-3	Chloroform	29	UD
107-06-2	1,2-Dichloroethane	29	UD
75-71-8	Dichlorodifluoromethane	29	UD
74-88-4	Iodomethane	29	UD
107-12-0	Propionitrile	29	UD
107-05-1	Allyl chloride	590	UD
78-93-3	2-Butanone	590	UD
71-55-6	1,1,1-Trichloroethane	29	UD
56-23-5	Carbon Tetrachloride	29	UD
108-05-4	Vinyl Acetate	29	UD
75-27-4	Bromodichloromethane	29	UD
78-87-5	1,2-Dichloropropane	29	UD
10061-01-5	cis-1,3-Dichloropropene	29	UD
79-01-6	Trichloroethene	29	UD
71-43-2	Benzene	29	UD
124-48-1	Dibromochloromethane	29	UD
10061-02-6	trans-1,3-Dichloropropene	29	UD
79-00-5	1,1,2-Trichloroethane	29	UD
75-25-2	Bromoform	29	UD

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16-063

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #021

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ417.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 15 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		29	UD
74-95-3	Dibromomethane		29	UD
106-93-4	1,2-Dibromoethane (EDB)		29	UD
108-10-1	4-Methyl-2-Pentanone		290	UD
591-78-6	2-Hexanone		290	UD
127-18-4	Tetrachloroethene		29	UD
79-34-5	1,1,2,2-Tetrachloroethane		29	UD
108-88-3	Toluene		29	UD
108-90-7	Chlorobenzene		29	UD
100-41-4	Ethylbenzene		29	UD
100-42-5	Styrene		29	UD
108-38-3	m + p-Xylene		29	UD
95-47-6	o-Xylene		29	UD
80-62-6	Methyl methacrylate		29	UD
630-20-6	1,1,1,2-Tetrachloroethane		29	UD
96-18-4	1,2,3-Trichloropropane		29	UD
110-57-6	trans-1,4-Dichloro-2-butene		150	UD
97-63-2	Ethyl methacrylate		29	UD
76-01-7	Pentachloroethane		29	UD
96-12-8	1,2-Dibromo-3-chloropropane		29	UD
78-83-1	Isobutyl Alcohol		29	UD
126-99-8	Chloroprene	(TIC) *	29	UD
	3-Chloroprene	(TIC)	29	UD
123-91-1	1,4-Dioxane	(TIC)	5900	UD
	Methylene Chloride - Dichloromethane			
	Methyl ethyl ketone - 2-Butanone			
	Chloroprene - 2-Chloro-1,3-butadiene			
	Propionitrile - Ethyl Cyanide			
* - Reported as semiquantitative analysis only.				

FORM I VOA 8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Account #: MKC70
Analysis: BTEX
Method: 8020
Instrument: GC - L (HP5890)

NSWC 16/16-063
Sample:

Matrix: SOIL
Sample: (g) 5.0
Final Volume: (ml) 5.0
(%) Moisture: 15.2
Dilution Factor: 5
Level (low/med): LOW

Lab Sample ID: L9510218-021
Lab Name: AENI - MD
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 10/24/95
Date Analyzed: 10/25/95
Time Analyzed: 6:53

Compound	Concentration (ug/Kg)	Detection Limit	Qualifier
Benzene		5.9	U
Toluene		5.9	U
Ethyl Benzene	39	5.9	
Total Xylenes	510	18	

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-063
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 15.2
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-021
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 11/01/95
Date Analyzed: 11/07/95
Time Analyzed: 15:43

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.32	U
RDX		0.38	U
TNB		0.26	U
TETRYL		0.28	U
DNB		0.21	U
TNT		0.25	U
2,6-DNT		0.27	U
2,4-DNT		0.21	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218

Account #:——— MKC70

Client Name:——— MK CORP

Sample Number
NSWC 16/16-063

AENI # 9510218-021

Concentration:——— Low

Date Sampled:——— 10/19/95

Date Received:——— 10/20/95

Date Ext Prepared:— 11/2/95

Date Analyzed:——— 11/8/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	15.2	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.9	U
319-85-7	beta-BHC		1.9	U
319-86-8	delta-BHC		1.9	U
58-89-9	gamma-BHC (Lindane)		3.8	U
75-44-8	Heptachlor		1.9	U
309-00-2	Aldrin		1.9	U
1024-57-3	Heptachlor epoxide		1.9	U
959-98-8	Endosulfan I		1.9	U
60-57-1	Dieldrin		3.8	U
75-55-9	4, 4'-DDE		3.8	U
72-20-8	Endrin		3.8	U
33213-65-9	Endosulfan II		3.8	U
72-54-8	4, 4'-DDD		3.8	U
1031-07-8	Endosulfan Sulfate		3.8	U
50-29-3	4, 4'-DDT		3.8	U
72-43-5	Methoxychlor		19	U
53494-70-5	Endrin Ketone		3.8	U
7421-36-3	Endrin aldehyde		3.8	U
57-74-9	Chlordane		38	U
8001-35-2	Toxaphene		190	U
12674-11-2	Aroclor-1016		38	U
11104-28-2	Aroclor-1221		76	U
11141-16-5	Aroclor-1232		38	U
53469-21-9	Aroclor-1242		38	U
12672-29-6	Aroclor-1248		38	U
11097-69-1	Aroclor-1254		38	U
11096-82-5	Aroclor-1260		38	U
510-15-6	Chlorobenzilate		76	U
2303-16-4	Diallate		382	U
465-73-6	Isodrin		9.5	U
143-50-0	Kepone		38	U
82-68-8	Pentachloronitrobenzene		7.6	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.88

Vt - Volume of total extract (ul) - _____ 10,000

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-063

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #021

Sample wt/vol: 30.5 (g/mL) G Lab File ID: DK024.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: 15 decanted: (Y/N): N Date Extracted: 10/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/2/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
91-20-3	Naphthalene	390	U
91-57-6	2-Methylnaphthalene	160	J
91-58-7	2-Chloronaphthalene	390	U
208-96-8	Acenaphthylene	390	U
83-32-9	Acenaphthene	390	U
132-64-9	Dibenzofuran	390	U
86-73-7	Fluorene	200	J
85-01-8	Phenanthrene	420	
120-12-7	Anthracene	390	U
206-44-0	Fluoranthene	390	U
129-00-0	Pyrene	390	U
56-55-3	Benzo[a]anthracene	390	U
218-01-9	Chrysene	390	U
205-99-2	Benzo[b]fluoranthene	390	U
207-08-9	Benzo[k]fluoranthene	390	U
50-32-8	Benzo[a]pyrene	390	U
193-39-5	Indeno[1,2,3-cd]pyrene	390	U
53-70-3	Dibenz[a,h]anthracene	390	U
191-24-2	Benzo[g,h,i]perylene	390	U

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-064

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021822

Level (low/med): LOW Date Received: 10/20/95

% Solids: 85.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	2.3	U	N	P
7440-38-2	Arsenic	0.92	U	N*	P
7440-39-3	Barium	99.9			P
7440-41-7	Beryllium	1.1		N	P
7440-43-9	Cadmium	0.46	U	N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	14.6		N	P
7440-48-4	Cobalt	14.6		N	P
7440-50-8	Copper	26.3		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	69.1		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.11	U	N	CV
7440-02-0	Nickel	25.0		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.58	U	N	P
7440-22-4	Silver	0.92	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.2	U	N	P
7440-62-2	Vanadium	16.7		N	P
7440-66-6	Zinc	185		N	P
	Cyanide				NR
7440-31-5	Tin	23.0	U		P
7439-93-2	Lithium	11.5	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16-064

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-064

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #022

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ418.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 15 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	59	UD
74-83-9	Bromomethane	59	UD
75-01-4	Vinyl Chloride	59	UD
75-00-3	Chloroethane	59	UD
75-09-2	Methylene Chloride	110	BD
67-64-1	Acetone	110	JD
75-05-8	Acetonitrile	29	UD
107-13-1	Acrylonitrile	5900	UD
107-02-8	Acrolein	5900	UD
75-69-4	Trichlorofluoromethane	29	UD
75-15-0	Carbon Disulfide	29	UD
75-35-4	1,1-Dichloroethene	29	UD
75-34-4	1,1-Dichloroethane	29	UD
540-59-0	trans-1,2-Dichloroethene	29	UD
67-66-3	Chloroform	29	UD
107-06-2	1,2-Dichloroethane	29	UD
75-71-8	Dichlorodifluoromethane	29	UD
74-88-4	Iodomethane	29	UD
107-12-0	Propionitrile	29	UD
107-05-1	Allyl chloride	590	UD
78-93-3	2-Butanone	590	UD
71-55-6	1,1,1-Trichloroethane	29	UD
56-23-5	Carbon Tetrachloride	29	UD
108-05-4	Vinyl Acetate	29	UD
75-27-4	Bromodichloromethane	29	UD
78-87-5	1,2-Dichloropropane	29	UD
10061-01-5	cis-1,3-Dichloropropene	29	UD
79-01-6	Trichloroethene	29	UD
71-43-2	Benzene	29	UD
124-48-1	Dibromochloromethane	29	UD
10061-02-6	trans-1,3-Dichloropropene	29	UD
79-00-5	1,1,2-Trichloroethane	29	UD
75-25-2	Bromoform	29	UD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-064

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #022

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ418.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 15 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		29	UD
74-95-3	Dibromomethane		29	UD
106-93-4	1,2-Dibromoethane (EDB)		29	UD
108-10-1	4-Methyl-2-Pentanone		290	UD
591-78-6	2-Hexanone		290	UD
127-18-4	Tetrachloroethene		29	UD
79-34-5	1,1,2,2-Tetrachloroethane		29	UD
108-88-3	Toluene		29	UD
108-90-7	Chlorobenzene		29	UD
100-41-4	Ethylbenzene		29	UD
100-42-5	Styrene		29	UD
108-38-3	m + p-Xylene		29	UD
95-47-6	o-Xylene		29	UD
80-62-6	Methyl methacrylate		29	UD
630-20-6	1,1,1,2-Tetrachloroethane		29	UD
96-18-4	1,2,3-Trichloropropane		29	UD
110-57-6	trans-1,4-Dichloro-2-butene		150	UD
97-63-2	Ethyl methacrylate		29	UD
76-01-7	Pentachloroethane		29	UD
96-12-8	1,2-Dibromo-3-chloropropane		29	UD
78-83-1	Isobutyl Alcohol		29	UD
126-99-8	Chloroprene	(TIC) *	29	UD
	3-Chloroprene	(TIC)	29	UD
123-91-1	1,4-Dioxane	(TIC)	5900	UD
Methylene Chloride - Dichloromethane				
Methyl ethyl ketone - 2-Butanone				
Chloroprene - 2-Chloro-1,3-butadiene				
Propionitrile - Ethyl Cyanide				
* - Reported as semiquantitative analysis only.				

FORM I VOA

8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-064
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 14.6
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-022
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 11/01/95
Date Analyzed: 11/07/95
Time Analyzed: 16:37

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.32	U
RDX		0.39	U
TNB		0.27	U
TETRYL		0.29	U
DNB		0.22	U
TNT		0.25	U
2,6-DNT		0.28	U
2,4-DNT		0.22	U

Form I

D-00272

ORGANIC ANALYSIS DATA SHEET

Account #: MKC70
Analysis: BTEX
Method: 8020
Instrument: GC - L (HP5890)

NSWC 16/16-064
Sample:

Matrix: SOIL
Sample: (g) 5.0
Final Volume: (ml) 5.0
(%) Moisture: 14.6
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-022
Lab Name: AENI - MD
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 10/24/95
Date Analyzed: 10/25/95
Time Analyzed: 13:13

Compound	Concentration (ug/Kg)	Detection Limit	Qualifier
Benzene	1.4	1.2	
Toluene	5.4	1.2	
Ethyl Benzene	4.0	1.2	
Total Xylenes	73	3.5	

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218
Account #:——— MKC70
Client Name:——— MK CORP

Sample Number
NSWC 16/16-064

AENI # 9510218-022

Concentration:——— Low
Date Sampled:——— 10/19/95
Date Received:——— 10/20/95
Date Ext Prepared:— 10/27/95
Date Analyzed:——— 11/4/95
Conc/Dil Factor:——— 1
Method: ——— 8080

GPC Cleanup | | Yes | X | No
Seperatory Funnel Extraction | | Yes
Continuous Liquid - Liquid Extraction | | Yes
Percent Moisture 14.6
Matrix: SOIL

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.9	U
319-85-7	beta-BHC		1.9	U
319-86-8	delta-BHC		1.9	U
58-89-9	gamma-BHC (Lindane)		1.9	U
75-44-8	Heptachlor		3.8	U
309-00-2	Aldrin		1.9	U
1024-57-3	Heptachlor epoxide		1.9	U
959-98-8	Endosulfan I		1.9	U
60-57-1	Dieldrin		1.9	U
75-55-9	4, 4'-DDE		3.8	U
72-20-8	Endrin		3.8	U
33213-65-9	Endosulfan II		3.8	U
72-54-8	4, 4'-DDD		3.8	U
1031-07-8	Endosulfan Sulfate		3.8	U
50-29-3	4, 4'-DDT		3.8	U
72-43-5	Methoxychlor		3.8	U
53494-70-5	Endrin Ketone		19	U
7421-36-3	Endrin aldehyde		3.8	U
57-74-9	Chlordane		3.8	U
8001-35-2	Toxaphene		38	U
12674-11-2	Aroclor-1016		190	U
11104-28-2	Aroclor-1221		38	U
11141-16-5	Aroclor-1232		76	U
53469-21-9	Aroclor-1242		38	U
12672-29-6	Aroclor-1248		38	U
11097-69-1	Aroclor-1254		38	U
11096-82-5	Aroclor-1260		38	U
510-15-6	Chlorobenzilate		38	U
2303-16-4	Diallate		76	U
465-73-6	Isodrin		380	U
143-50-0	Kepone		9.5	U
82-68-8	Pentachloronitrobenzene		38	U
			7.6	U

Vi - Volume of extract injected (ul) - _____ 1
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.85
Vt - Volume of total extract (ul) - _____ 10,000

FORM I

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16-064

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #022

Sample wt/vol: 30.4 (g/mL) G Lab File ID: DK025.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: 15 decanted: (Y/N): N Date Extracted: 10/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/2/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
91-20-3	Naphthalene	390	U
91-57-6	2-Methylnaphthalene	260	J
91-58-7	2-Chloronaphthalene	390	U
208-96-8	Acenaphthylene	390	U
83-32-9	Acenaphthene	390	U
132-64-9	Dibenzofuran	390	U
86-73-7	Fluorene	600	
85-01-8	Phenanthrene	1100	
120-12-7	Anthracene	390	U
206-44-0	Fluoranthene	390	U
129-00-0	Pyrene	390	U
56-55-3	Benzo[a]anthracene	390	U
218-01-9	Chrysene	390	U
205-99-2	Benzo[b]fluoranthene	390	U
207-08-9	Benzo[k]fluoranthene	390	U
50-32-8	Benzo[a]pyrene	390	U
193-39-5	Indeno[1,2,3-cd]pyrene	390	U
53-70-3	Dibenz[a,h]anthracene	390	U
191-24-2	Benzo[g,h,i]perylene	390	U

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-065

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021823

Level (low/med): LOW Date Received: 10/20/95

% Solids: 95.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	19.9		N	P
7440-38-2	Arsenic	2.6		N*	P
7440-39-3	Barium	569			P
7440-41-7	Beryllium	0.50		N	P
7440-43-9	Cadmium	4.5		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	17.1		N	P
7440-48-4	Cobalt	5.8		N	P
7440-50-8	Copper	515		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	2270		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.15		N	CV
7440-02-0	Nickel	13.4		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.50	U	N	P
7440-22-4	Silver	0.81	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U	N	P
7440-62-2	Vanadium	16.1		N	P
7440-66-6	Zinc	4830		N	P
	Cyanide				NR
7440-31-5	Tin	20.9	U		P
7439-93-2	Lithium	10.4	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16-065

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-065

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #023

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ419.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 4 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

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	24	B
67-64-1	Acetone	100	U
75-05-8	Acetonitrile	5.2	U
107-13-1	Acrylonitrile	1000	U
107-02-8	Acrolein	1000	U
75-69-4	Trichlorofluoromethane	5.2	U
75-15-0	Carbon Disulfide	5.2	U
75-35-4	1,1-Dichloroethene	5.2	U
75-34-4	1,1-Dichloroethane	5.2	U
540-59-0	trans-1,2-Dichloroethene	5.2	U
67-66-3	Chloroform	5.2	U
107-06-2	1,2-Dichloroethane	5.2	U
75-71-8	Dichlorodifluoromethane	5.2	U
74-88-4	Iodomethane	5.2	U
107-12-0	Propionitrile	5.2	U
107-05-1	Allyl chloride	100	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5.2	U
56-23-5	Carbon Tetrachloride	5.2	U
108-05-4	Vinyl Acetate	5.2	U
75-27-4	Bromodichloromethane	5.2	U
78-87-5	1,2-Dichloropropane	5.2	U
10061-01-5	cis-1,3-Dichloropropene	5.2	U
79-01-6	Trichloroethene	5.2	U
71-43-2	Benzene	5.2	U
124-48-1	Dibromochloromethane	5.2	U
10061-02-6	trans-1,3-Dichloropropene	5.2	U
79-00-5	1,1,2-Trichloroethane	5.2	U
75-25-2	Bromoform	5.2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16-065

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #023

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ419.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 4 Date Analyzed: 10/25/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.2	U
74-95-3	Dibromomethane		5.2	U
106-93-4	1,2-Dibromoethane (EDB)		5.2	U
108-10-1	4-Methyl-2-Pentanone		52	U
591-78-6	2-Hexanone		52	U
127-18-4	Tetrachloroethene		14	
79-34-5	1,1,2,2-Tetrachloroethane		5.2	U
108-88-3	Toluene		2.1	J
108-90-7	Chlorobenzene		5.2	U
100-41-4	Ethylbenzene		5.2	U
100-42-5	Styrene		5.2	U
108-38-3	m + p-Xylene		5.2	U
95-47-6	o-Xylene		5.2	U
80-62-6	Methyl methacrylate		5.2	U
630-20-6	1,1,1,2-Tetrachloroethane		5.2	U
96-18-4	1,2,3-Trichloropropane		5.2	U
110-57-6	trans-1,4-Dichloro-2-butene		26	U
97-63-2	Ethyl methacrylate		5.2	U
76-01-7	Pentachloroethane		5.2	U
96-12-8	1,2-Dibromo-3-chloropropane		5.2	U
78-83-1	Isobutyl Alcohol		5.2	U
126-99-8	Chloroprene	(TIC) *	5.2	U
	3-Chloroprene	(TIC)	5.2	U
123-91-1	1,4-Dioxane	(TIC)	1000	U
	Methylene Chloride - Dichloromethane			
	Methyl ethyl ketone - 2-Butanone			
	Chloroprene - 2-Chloro-1,3-butadiene			
	Propionitrile - Ethyl Cyanide			
* - Reported as semiquantitative analysis only.				

FORM I VOA 8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-065
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 4.1
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-023
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 11/01/95
Date Analyzed: 11/07/95
Time Analyzed: 17:31

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.29	U
RDX		0.35	U
TNB		0.24	U
TETRYL		0.26	U
DNB		0.20	U
TNT		0.23	U
2,6-DNT		0.25	U
2,4-DNT		0.20	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218
Account #:——— MKC70
Client Name:——— MK CORP

Concentration:——— Low
Date Sampled:——— 10/19/95
Date Received:——— 10/20/95
Date Ext Prepared:——— 10/27/95
Date Analyzed:——— 11/4/95
Conc/Dil Factor:——— 100
Method: ——— 8080

Sample Number
NSWC 16/16-065

AENI # 9510218-023

GPC Cleanup | | Yes | X | No
Seperatory Funnel Extraction | | Yes
Continuous Liquid - Liquid Extraction | | Yes
Percent Moisture 4.1
Matrix: SOIL

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		170	U
319-85-7	beta-BHC		170	U
319-86-8	delta-BHC		170	U
58-89-9	gamma-BHC (Lindane)		350	U
75-44-8	Heptachlor		170	U
309-00-2	Aldrin		170	U
1024-57-3	Heptachlor epoxide		170	U
959-98-8	Endosulfan I		170	U
60-57-1	Dieldrin		350	U
75-55-9	4, 4'-DDE		350	U
72-20-8	Endrin		350	U
33213-65-9	Endosulfan II		350	U
72-54-8	4, 4'-DDD		350	U
1031-07-8	Endosulfan Sulfate		350	U
50-29-3	4, 4'-DDT		350	U
72-43-5	Methoxychlor		1700	U
53494-70-5	Endrin Ketone		350	U
7421-36-3	Endrin aldehyde		350	U
57-74-9	Chlordane		3500	U
8001-35-2	Toxaphene		17000	U
12674-11-2	Aroclor-1016		3500	U
11104-28-2	Aroclor-1221		6900	U
11141-16-5	Aroclor-1232		3500	U
53469-21-9	Aroclor-1242		3500	U
12672-29-6	Aroclor-1248		3500	U
11097-69-1	Aroclor-1254		3500	U
11096-82-5	Aroclor-1260		3500	U
510-15-6	Chlorobenzilate		6949	U
2303-16-4	Diallate		34747	U
465-73-6	Isodrin		869	U
143-50-0	Kepone		3475	U
82-68-8	Pentachloronitrobenzene		695	U

Vi - Volume of extract injected (ul) - _____ 1
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.01
Vt - Volume of total extract (ul) - _____ 10,000

D 00280

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-066

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Lab Sample ID: 951021824

Level (low/med): LOW Date Received: 10/20/95

% Solids: 79.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	2.5	U	N	P
7440-38-2	Arsenic	12.4		N*	P
7440-39-3	Barium	200			P
7440-41-7	Beryllium	0.74		N	P
7440-43-9	Cadmium	1.2		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	33.0		N	P
7440-48-4	Cobalt	7.2		N	P
7440-50-8	Copper	23.9		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	20.3		N	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.07	U	N	CV
7440-02-0	Nickel	19.3		N	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.63	U	N	P
7440-22-4	Silver	1.0	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.3	U	N	P
7440-62-2	Vanadium	61.5		N	P
7440-66-6	Zinc	87.4		N	P
	Cyanide				NR
7440-31-5	Tin	22.2	U		P
7439-93-2	Lithium	19.8			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16-066

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16-066

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #024

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ420.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 21 Date Analyzed: 10/26/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	27	B
67-64-1	Acetone	19	J
75-05-8	Acetonitrile	6.3	U
107-13-1	Acrylonitrile	1300	U
107-02-8	Acrolein	1300	U
75-69-4	Trichlorofluoromethane	6.3	U
75-15-0	Carbon Disulfide	6.3	U
75-35-4	1,1-Dichloroethene	6.3	U
75-34-4	1,1-Dichloroethane	6.3	U
540-59-0	trans-1,2-Dichloroethene	6.3	U
67-66-3	Chloroform	6.3	U
107-06-2	1,2-Dichloroethane	6.3	U
75-71-8	Dichlorodifluoromethane	6.3	U
74-88-4	Iodomethane	6.3	U
107-12-0	Propionitrile	6.3	U
107-05-1	Allyl chloride	130	U
78-93-3	2-Butanone	130	U
71-55-6	1,1,1-Trichloroethane	6.3	U
56-23-5	Carbon Tetrachloride	6.3	U
108-05-4	Vinyl Acetate	6.3	U
75-27-4	Bromodichloromethane	6.3	U
78-87-5	1,2-Dichloropropane	6.3	U
10061-01-5	cis-1,3-Dichloropropene	6.3	U
79-01-6	Trichloroethene	6.3	U
71-43-2	Benzene	6.3	U
124-48-1	Dibromochloromethane	6.3	U
10061-02-6	trans-1,3-Dichloropropene	6.3	U
79-00-5	1,1,2-Trichloroethane	6.3	U
75-25-2	Bromoform	6.3	U

FORM I VOA 8260/Appendix IX

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16-066

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #024

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ420.D

Level: (low/med) LOW Date Received: 10/20/95

% Moisture: not dec. 21 Date Analyzed: 10/26/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		6.3	U
74-95-3	Dibromomethane		6.3	U
106-93-4	1,2-Dibromoethane (EDB)		6.3	U
108-10-1	4-Methyl-2-Pentanone		63	U
591-78-6	2-Hexanone		63	U
127-18-4	Tetrachloroethene		8.4	
79-34-5	1,1,2,2-Tetrachloroethane		6.3	U
108-88-3	Toluene		6.3	U
108-90-7	Chlorobenzene		6.3	U
100-41-4	Ethylbenzene		6.3	U
100-42-5	Styrene		6.3	U
108-38-3	m + p-Xylene		6.3	U
95-47-6	o-Xylene		6.3	U
80-62-6	Methyl methacrylate		6.3	U
630-20-6	1,1,1,2-Tetrachloroethane		6.3	U
96-18-4	1,2,3-Trichloropropane		6.3	U
110-57-6	trans-1,4-Dichloro-2-butene		32	U
97-63-2	Ethyl methacrylate		6.3	U
76-01-7	Pentachloroethane		6.3	U
96-12-8	1,2-Dibromo-3-chloropropane		6.3	U
78-83-1	Isobutyl Alcohol		6.3	U
126-99-8	Chloroprene	(TIC) *	6.3	U
	3-Chloroprene	(TIC)	6.3	U
123-91-1	1,4-Dioxane	(TIC)	1300	U
Methylene Chloride - Dichloromethane				
Methyl ethyl ketone - 2-Butanone				
Chloroprene - 2-Chloro-1,3-butadiene				
Propionitrile - Ethyl Cyanide				
* - Reported as semiquantitative analysis only.				

FORM I VOA

8260/Appendix IX

D-

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-066
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 20.8
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-024
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 11/01/95
Date Analyzed: 11/07/95
Time Analyzed: 20:14

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.35	U
RDX		0.43	U
TNB		0.29	U
TETRYL		0.31	U
DNB		0.24	U
TNT		0.28	U
2,6-DNT		0.30	U
2,4-DNT		0.24	U

D-00296

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218
Account #:——— MKC70
Client Name:——— MK CORP

Sample Number
NSWC 16/16-066

AENI # 9510218-024

Concentration:——— Low
Date Sampled:——— 10/19/95
Date Received:——— 10/20/95
Date Ext Prepared:— 10/27/95
Date Analyzed:——— 11/4/95
Conc/Dil Factor:——— 1
Method: ——— 8080

GPC Cleanup		Yes	X No
Seperatory Funnel Extraction			Yes
Continuous Liquid - Liquid Extraction			Yes
Percent Moisture	20.8		
Matrix	SOIL		

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		2.1	U
319-85-7	beta-BHC		2.1	U
319-86-8	delta-BHC		2.1	U
58-89-9	gamma-BHC (Lindane)		4.2	U
75-44-8	Heptachlor		2.1	U
309-00-2	Aldrin		2.1	U
1024-57-3	Heptachlor epoxide		2.1	U
959-98-8	Endosulfan I		2.1	U
60-57-1	Dieldrin		4.2	U
75-55-9	4, 4'-DDE		4.2	U
72-20-8	Endrin		4.2	U
33213-65-9	Endosulfan II		4.2	U
72-54-8	4, 4'-DDD		4.2	U
1031-07-8	Endosulfan Sulfate		4.2	U
50-29-3	4, 4'-DDT		4.2	U
72-43-5	Methoxychlor		21	U
53494-70-5	Endrin Ketone		4.2	U
7421-36-3	Endrin aldehyde		4.2	U
57-74-9	Chlordane		42	U
8001-35-2	Toxaphene		210	U
12674-11-2	Aroclor-1016		42	U
11104-28-2	Aroclor-1221		83	U
11141-16-5	Aroclor-1232		42	U
53469-21-9	Aroclor-1242		42	U
12672-29-6	Aroclor-1248		42	U
11097-69-1	Aroclor-1254		42	U
11096-82-5	Aroclor-1260		42	U
510-15-6	Chlorobenzilate		83	U
2303-16-4	Diallate		415	U
465-73-6	Isodrin		10	U
143-50-0	Kepone		42	U
82-68-8	Pentachloronitrobenzene		8.3	U

Vi - Volume of extract injected (ul) - _____ 1
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.4
Vt - Volume of total extract (ul) - _____ 10,000

FORM I

SWMU 16/16 DATA
SAMPLES 067 THROUGH 084 AND 44A

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 067

Lab Name: AENI Contract: 9511072

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): WATER Lab Sample ID: 951107201

Level (low/med): LOW Date Received: 11/08/95

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	20.0	U		P
7440-39-3	Barium	4300			P
7440-43-9	Cadmium	172			P
7440-47-3	Chromium	100	U		P
7440-50-8	Copper				NR
7439-92-1	Lead	89200			P
7439-97-6	Mercury	0.20	U		AV
7440-02-0	Nickel				NR
7782-49-2	Selenium	20.0	U		P
7440-22-4	Silver	50.0	U		P
7440-66-6	Zinc				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_067

TCLP

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 067

Lab Name: AENI Contract: 9511072

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) LEACH Lab Sample ID: #001

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: FK336.D

Level: (low/med) Date Received: 11/8/95

% Moisture: not dec. 100 Date Analyzed: 11/18/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
75-01-4	Vinyl Chloride	100	UD
75-35-4	1,1-Dichloroethene	50	UD
67-66-3	Chloroform	50	UD
107-06-2	1,2-Dichloroethane	50	UD
78-93-3	2-Butanone	1000	UD
56-23-5	Carbon Tetrachloride	50	UD
79-01-6	Trichloroethene	23000	E
71-43-2	Benzene	50	UD
127-18-4	Tetrachloroethene	50	UD
108-90-7	Chlorobenzene	50	UD

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BSWC 18/18 D07

Lab Name: AENI Contract: 9511072

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) LEACH Lab Sample ID: 7001

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: DK264.D

Level: (low/med) Date Received: 11/8/95

% Moisture: decanted: (Y/N): N Date Extracted: 11/11/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/17/95

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
110-86-1	Pyridine	40	UD
106-46-7	1,4-Dichlorobenzene	40	UD
95-48-7	2-Methylphenol	40	UD
108-39-4	3-Methylphenol	40	UD
67-72-1	Hexachloroethane	40	UD
106-44-5	4-Methylphenol	40	UD
98-95-3	Nitrobenzene	40	UD
87-68-3	Hexachlorobutadiene	40	UD
88-06-2	2,4,6-Trichlorophenol	40	UD
95-95-4	2,4,5-Trichlorophenol	200	UD
121-14-2	2,4-Dinitrotoluene	40	UD
118-74-1	Hexachlorobenzene	40	UD
87-86-5	Pentachlorophenol	200	UD

AENI
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8150

Case No.: 9511072
Client Name: MK CORP
Project Name: MKCC70

Sample Number
NSWC 16/16 067

AENI # 9511072-001

Concentration: Low
Date Sampled: 11/7/95
Date Received: 11/8/95
Date Extract Prepared: 11/15/95
Date Analyzed: 11/17/95
Conc/Dil Factor: 100
Matrix LEACH

GPC Cleanup No
Separatory Funnel Ext.: Yes
Continuous Liq-Liq Ext.: No
Percent Moisture (decanted) N/A

Compound	Concentration ug/L	Reporting Limit	Qualifier
2,4 D		50	U
SILVEX		50	U

Vi - Volume of extract injected (ul) 1
Vs - Volume of water extracted (ml) 500
Ws - Mass of soil extracted (g) N/A
Vt- Volume of total extract (ul) 5000

FORM I

D-01289

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

TCLP PESTICIDES

Case No.:——— 9511072

Account #:——— MKC70

Client Name:——— MK CORP

Sample Number
N8WC 16/16 067

AEN # 9511072-001

Concentration:——— Low

Date Sampled:——— 11/7/95

Date Received:——— 11/8/95

Date Ext Prepared:——— 11/13/95

Date Analyzed:——— 11/17/95

Conc/Dil Factor:——— 100

Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		X Yes
Continuous Liquid - Liquid Extration		Yes

Percent Moisture ——— N/A

Matrix ——— LEACH

CAS Number	Compound	Concentration ug/L	Detection Limit	Qualifier
58-89-9	gamma-BHC (Lindane)		20	U
76-44-8	Heptachlor		10	U
1024-57-3	Heptachlor epoxide		10	U
72-20-8	Endrin		20	U
72-43-5	Methoxychlor		100	U
5103-71-9	alpha-Chlordane		10	U
5103-74-2	gamma-Chlordane		10	U
8001-35-2	Toxaphene		1000	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ 500

Ws - Weight of sample extracted (g) - _____ N/A

Vt - Volume of total extract (ul) - _____ 10,000

FORM I

D-00250

AMERICAN ENVIRONMENTAL NETWORK, INC
9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9511072
Report To: MK Corp
Project: NSWC Crane
Date: November 22, 1995
Sample ID: NSWC 16/16 067, dated 11/07/95

Parameter	Method	Result	Date Analyzed
Corrosivity (as pH)	SW846 9045	8.4	11/22/95
Flashpoint, °F	SW846 1010	>203	11/21/95
Paintfilter	SW846 9095	(3)	11/22/95
Reactive Cyanide, mg/Kg	(1)	<2	11/21/95
Reactive Sulfide, mg/Kg	(2)	64	11/21/95

(1) SW846 Chapter 7.3.3
(2) SW846 Chapter 7.3.4
(3) No Free Liquid.

\gchem\003

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 068

Lab Name: AENI Contract: 9511072

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): WATER Lab Sample ID: 951107202

Level (low/med): LOW Date Received: 11/08/95

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	20.0	U		P
7440-39-3	Barium	3230			P
7440-43-9	Cadmium	274			P
7440-47-3	Chromium	100	U		P
7440-50-8	Copper				NR
7439-92-1	Lead	173000			P
7439-97-6	Mercury	0.20	U		AV
7440-02-0	Nickel				NR
7782-49-2	Selenium	20.0	U		P
7440-22-4	Silver	50.0	U		P
7440-66-6	Zinc				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:
CLIENT_ID: NSWC_16/16_068
TCLP

VOLATILE ORGANICS ANALYSIS DATA SHEET

NSWC 16/16 068

Lab Name: AENI Contract: 9511072

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) LEACH Lab Sample ID: 1002

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: FK337.D

Level: (low/med) Date Received: 11/8/95

% Moisture: not dec. 100 Date Analyzed: 11/18/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
75-01-4	Vinyl Chloride	100	UD
75-35-4	1,1-Dichloroethene	50	UD
67-66-3	Chloroform	50	UD
107-06-2	1,2-Dichloroethane	50	UD
78-93-3	2-Butanone	1000	UD
56-23-5	Carbon Tetrachloride	50	UD
79-01-6	Trichloroethene	80000	E
71-43-2	Benzene	50	UD
127-18-4	Tetrachloroethene	50	UD
108-90-7	Chlorobenzene	50	UD

FORM I VOA 8240/TCLP

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BSWC 18/16 008

Lab Name: AENI Contract: 9511072

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) LEACH Lab Sample ID: 0002

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: DK265.D

Level: (low/med) Date Received: 11/8/95

% Moisture: decanted: (Y/N): N Date Extracted: 11/11/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/17/95

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
110-86-1	Pyridine	40	UD
106-46-7	1,4-Dichlorobenzene	40	UD
95-48-7	2-Methylphenol	40	UD
108-39-4	3-Methylphenol	40	UD
67-72-1	Hexachloroethane	40	UD
106-44-5	4-Methylphenol	40	UD
98-95-3	Nitrobenzene	40	UD
87-68-3	Hexachlorobutadiene	40	UD
88-06-2	2,4,6-Trichlorophenol	40	UD
95-95-4	2,4,5-Trichlorophenol	200	UD
121-14-2	2,4-Dinitrotoluene	40	UD
118-74-1	Hexachlorobenzene	40	UD
87-86-5	Pentachlorophenol	200	UD

FORM I SV SW846

D-01.254

AENI
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8150

Sample Number
NSWC 16/18 068

Case No.:_____ 9511072
Client Name:_____ MK CORP
Project Name:_____ MKC70

AENI # 9511072-002

Concentration: _____ Low
Date Sampled:_____ 11/7/95
Date Received:_____ 11/8/95
Date Extract Prepared:_ 11/15/95
Date Analyzed:_____ 11/17/95
Conc/Dil Factor:_____ 100
Matrix_____ LEACH

GPC Cleanup _____ No
Separatory Funnel Ext.: ____ Yes
Continuous Liq-Liq Ext.: ____ No
Percent Moisture (decanted)_ N/A

Compound	Concentration ug/L	Reporting Limit	Qualifier
2,4 D		50	U
SILVEX		50	U

Vi - Volume of extract injected (ul)___ 1
Vs - Volume of water extracted (ml)__ 500
Ws - Mass of soil extracted (g)_____ N/A
Vt- Volume of total extract (ul)_____ 5000

FORM I

D-91295

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

TCLP PESTICIDES

Case No.:——— 9511072

Account #:——— MKC70

Client Name:——— MK CORP

Concentration:——— Low

Date Sampled:——— 11/7/95

Date Received:——— 11/8/95

Date Ext Prepared:——— 11/13/95

Date Analyzed:——— 11/17/95

Conc/Dil Factor:——— 100

Method: ——— 8080

Sample Number
NSWC 16/16 088

AENI # 9511072-002

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		X Yes
Continuous Liquid - Liquid Extration		Yes

Percent Moisture ——— N/A

Matrix ——— LEACH

CAS Number	Compound	Concentration ug/L	Detection Limit	Qualifier
58-89-9	gamma-BHC (Lindane)		20	U
75-44-8	Heptachlor		10	U
1024-57-3	Heptachlor epoxide		10	U
72-20-8	Endrin		20	U
72-43-5	Methoxychlor		100	U
5103-71-9	alpha-Chlordane		10	U
5103-74-2	gamma-Chlordane		10	U
8001-35-2	Toxaphene		1000	U

Vi - Volume of extract injected (ul) - ——— 1

Vs - Volume of Water extracted (ml) - ——— 500

Ws - Weight of sample extracted (g) - ——— N/A

Vt - Volume of total extract (ul) - ——— 10,000

FORM I

D- 6 286

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9511072
Report To: MK Corp
Project: NSWC Crane
Date: November 22, 1995
Sample ID: NSWC 16/16 068, dated 11/07/95

Parameter	Method	Result	Date Analyzed
Corrosivity (as pH)	SW846 9045	8.5	11/22/95
Flashpoint, °F	SW846 1010	>203	11/21/95
Paintfilter	SW846 9095	(3)	11/22/95
Reactive Cyanide, mg/Kg	(1)	<2	11/21/95
Reactive Sulfide, mg/Kg	(2)	<40	11/21/95

(1) SW846 Chapter 7.3.3
(2) SW846 Chapter 7.3.4
(3) No Free Liquid.

\gchem\003

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/18 063

Lab Name: AENI Contract: 9512145

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: #001

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: FL306.D

Level: (low/med) Date Received: 12/21/95

% Moisture: not dec. 100 Date Analyzed: 12/22/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

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	6.9	J
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	100	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-4	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	110	
156-60-5	trans-1,2-Dichloroethene	7.3	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	7.8	
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	50	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	4000	E
71-43-2	Benzene	5	U
124-48-1	Dibromochloromethane	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	4.9	J
110-75-8	2-Chloroethylvinylether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	50	U
591-78-6	2-Hexanone	50	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

FORM I VOA

8240/METHOD LIST

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
[illegible]SWC 16/16 003

Lab Name: AEMI Contract: 9512145

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: [illegible]001

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: FL306.D

Level: (low/med) Date Received: 12/21/95

% Moisture: not dec. 100 Date Analyzed: 12/22/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
100-41-4	Ethylbenzene	5	U
108-38-3	m + p-Xylene	5	U
95-47-6	o-Xylene	5	U
100-42-5	Styrene	5	U

FORM I VOA 8240/METHOD LIST

D [illegible]

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
MSWC 18/18 0690L

Lab Name: AENI Contract: 9512145

Project No.: MXC70 Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: #001DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: FL337.D

Level: (low/med) Date Received: 12/21/95

% Moisture: not dec. 100 Date Analyzed: 12/28/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 50.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	500	UD
74-83-9	Bromomethane	500	UD
75-01-4	Vinyl Chloride	500	UD
75-00-3	Chloroethane	500	UD
75-09-2	Methylene Chloride	250	UD
67-64-1	Acetone	5000	UD
75-15-0	Carbon Disulfide	250	UD
75-35-4	1,1-Dichloroethene	250	UD
75-34-4	1,1-Dichloroethane	250	UD
156-59-2	cis-1,2-Dichloroethene	250	UD
156-60-5	trans-1,2-Dichloroethene	250	UD
67-66-3	Chloroform	250	UD
107-06-2	1,2-Dichloroethane	250	UD
78-93-3	2-Butanone	5000	UD
71-55-6	1,1,1-Trichloroethane	250	UD
56-23-5	Carbon Tetrachloride	250	UD
108-05-4	Vinyl Acetate	2500	UD
75-27-4	Bromodichloromethane	250	UD
78-87-5	1,2-Dichloropropane	250	UD
10061-01-5	cis-1,3-Dichloropropene	250	UD
79-01-6	Trichloroethene	5100	D
71-43-2	Benzene	250	UD
124-48-1	Dibromochloromethane	250	UD
10061-02-6	trans-1,3-Dichloropropene	250	UD
79-00-5	1,1,2-Trichloroethane	250	UD
110-75-8	2-Chloroethylvinylether	500	UD
75-25-2	Bromoform	250	UD
108-10-1	4-Methyl-2-Pentanone	2500	UD
591-78-6	2-Hexanone	2500	UD
127-18-4	Tetrachloroethene	250	UD
79-34-5	1,1,2,2-Tetrachloroethane	250	UD
108-88-3	Toluene	250	UD
108-90-7	Chlorobenzene	250	UD

FORM I VOA 8240/METHOD LIST

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BSWC 18/18 069DL

Lab Name: AENI Contract: 9512145

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 0001DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: FL337.D

Level: (low/med) Date Received: 12/21/95

% Moisture: not dec. 100 Date Analyzed: 12/28/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 50.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
100-41-4	Ethylbenzene	250	UD
108-38-3	m + p-Xylene	250	UD
95-47-6	o-Xylene	250	UD
100-42-5	Styrene	250	UD

FORM I VOA

8240/METHOD LIST

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16-16-070

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 92C___

Matrix (soil/water): WATER Lab Sample ID: 782557

Level (low/med): LOW__ Date Received: 02/09/96

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony_	4.1	B		P
7440-38-2	Arsenic__	3.0	U		P
7440-39-3	Barium___	182	B		P
7440-41-7	Beryllium	0.34	B		P
7440-43-9	Cadmium__	0.20	U		P
7440-47-3	Chromium_	25.3			P
7440-48-4	Cobalt___	0.50	U		P
7440-50-8	Copper___	43.2			P
7439-92-1	Lead____	202			P
7440-02-0	Nickel___	1.9	B		P
7782-49-2	Selenium_	2.6	U		P
7440-22-4	Silver___	0.70	U		P
7440-28-0	Thallium_	3.5	U		P
7440-62-2	Vanadium_	0.60	U		P
7440-66-6	Zinc____	581			P
7440-31-5	Tin_____	4.2	U		P

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS_ Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16-16-070

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 94C___

Matrix (soil/water): WATER Lab Sample ID: 782558

Level (low/med): LOW__ Date Received: 02/09/96

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7439-97-6	Mercury__	0.20	U		CV

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: VIOLET___ Clarity After: _____ Artifacts: _____

Comments:

FORM I - IN ILM03.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-070

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782356

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082356A52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 100.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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	140	JB
67-64-1	Acetone	1000	U
75-15-0	Carbon Disulfide	1000	U
75-35-4	1,1-Dichloroethene	1000	U
75-34-3	1,1-Dichloroethane	1000	U
67-66-3	Chloroform	1000	U
107-06-2	1,2-Dichloroethane	1000	U
78-93-3	2-Butanone	1000	U
71-55-6	1,1,1-Trichloroethane	1000	U
56-23-5	Carbon Tetrachloride	1000	U
75-27-4	Bromodichloromethane	1000	U
78-87-5	1,2-Dichloropropane	1000	U
10061-01-5	cis-1,3-Dichloropropene	1000	U
79-01-6	Trichloroethene	18000	
124-48-1	Dibromochloromethane	1000	U
79-00-5	1,1,2-Trichloroethane	1000	U
71-43-2	Benzene	1000	U
10061-02-6	trans-1,3-Dichloropropene	1000	U
75-25-2	Bromoform	1000	U
108-10-1	4-Methyl-2-Pentanone	1000	U
591-78-6	2-Hexanone	1000	U
127-18-4	Tetrachloroethene	1000	U
79-34-5	1,1,2,2-Tetrachloroethane	1000	U
108-88-3	Toluene	110	J
108-90-7	Chlorobenzene	1000	U
100-41-4	Ethylbenzene	1000	U
100-42-5	Styrene	1000	U
1330-20-7	Xylene (Total)	1000	U
75-05-8	acetonitrile	6000	U

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-0

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782356

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082356A52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 100.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	acrolein	9000	U
107-05-1	3-chloropropene	1500	U
106-93-4	1,2-dibromoethane	1000	U
74-95-3	dibromomethane	1000	U
110-57-6	trans-1,4-dichloro-2-butene	1000	U
75-71-8	dichlorodifluoromethane	1000	U
123-91-1	1,4-dioxane	370000	U
107-12-0	propionitrile(ethylcyanide)	22000	U
97-63-2	ethyl methacrylate	1000	U
74-88-4	iodomethane	500	U
78-83-1	isobutyl alcohol	280000	U
126-98-7	methacrylonitrile	2000	U
80-62-6	methyl methacrylate	2000	U
630-20-6	1,1,1,2-tetrachloroethane	1000	U
96-18-4	1,2,3-trichloropropane	1000	U
108-05-4	vinyl acetate	1000	U
96-12-8	1,2-dibromo-3-chloropropane	1000	U
75-69-4	trichlorofluoromethane	1000	U
107-13-1	acrylonitrile	9500	U
156-60-5	trans-1,2-Dichloroethene	1000	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

16-16-070

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782356

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082356A52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 100.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	1.21	2600	J
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FORM I VOA-TIC

1D

ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

16-16-070

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0084C

Matrix: (soil/water) WATER Lab Sample ID: 782559

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

% Moisture: decanted: (Y/N) Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 02/13/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/14/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
58-89-9	gamma-BHC (Lindane)	0.030	U
76-44-8	Heptachlor	0.016	JPB
309-00-2	Aldrin	0.030	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.030	U
33213-65-9	Endosulfan II	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.0078	JPB
319-84-6	alpha-BHC	0.0012	JP
319-85-7	beta-BHC	0.030	U
319-86-8	delta-BHC	0.030	U
1024-57-3	Heptachlor epoxide	0.030	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.0028	JP
72-54-8	4,4'-DDD	0.10	U
7421-93-4	Endrin aldehyde	0.012	JP
1031-07-8	Endosulfan sulfate	0.050	U
11096-82-5	Aroclor-1260	0.50	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	0.50	U
8001-35-2	Toxaphene	1.0	U
57-74-9	Chlordane (Technical)	0.12	U

FORM I 8080

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16-16-070

Lab Name: COMPUCHEM_ENV._CORP. Contract: SW-846

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 90C

Matrix (soil/water): WATER Lab Sample ID: 782556

Level (low/med): LOW Date Received: 02/09/96

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
	Cyanide	10.0	U		AS

Color Before: TAN Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

Duplicate (16-16-070D)

FORM I - IN

ILM03.0

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
16-16-070

Lab Name: CompuChem Env. Corp. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0082C

Matrix: (soil/water) WATER Lab Sample ID: 782560

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH082560C60

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/15/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-Nitrosodimethylamine	5	U
110-86-1	Pyridine	20	U
109-06-8	2-Picoline	45	U
10595-95-6	Nitrosomethylethylamine	15	U
66-27-3	Methyl Methanesulfonate	20	U
55-18-5	N-Nitrosodiethylamine	5	U
62-50-0	Ethyl Methanesulfonate	20	U
108-95-2	Phenol	15	U
62-53-3	Aniline	15	U
111-44-4	Bis(2-chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	15	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	20	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	20	U
39638-32-9	bis(2-Chloroisopropyl)ether	15	U
108-39-4	3-Methylphenol	35	U
106-44-5	4-Methylphenol	35	U
930-55-2	N-Nitrosopyrrolidine	15	U
621-64-7	N-Nitroso-di-N-propylamine	5	U
98-86-2	Acetophenone	20	U
59-89-2	N-Nitrosomorpholine	10	U
636-21-5	o-Toluidine hydrochloride	25	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
100-75-4	N-Nitrosopiperidine	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	35	U
126-68-1	o,o,o-Triethylphosphorothioa	110	U
111-91-1	Bis(2-chloroethoxy)methane	15	U
120-83-2	2,4-Dichlorophenol	15	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

16-16-070

Lab Name: CompuChem Env. Corp. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0082C

Matrix: (soil/water) WATER Lab Sample ID: 782560

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH082560C60

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/15/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	2	J
106-47-8	4-Chloroaniline	5	U
87-65-0	2,6-Dichlorophenol	25	U
1888-71-7	Hexachloropropene	20	U
87-68-3	Hexachlorobutadiene	5	U
924-16-3	N-Nitroso-di-n-butylamine	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
94-59-7	Safrole	5	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	25	U
95-94-3	1,2,4,5-Tetrachlorobenzene	15	U
88-06-2	2,4,6-Trichlorophenol	25	U
95-95-4	2,4,5-Trichlorophenol	25	U
120-58-1	Isosafrole	10	U
91-58-7	2-Chloronaphthalene	15	U
88-74-4	2-Nitroaniline	20	U
130-15-4	1,4-Napthoquinone	35	U
131-11-3	Dimethylphthalate	10	U
99-65-0	1,3-Dinitrobenzene	15	U
606-20-2	2,6-Dinitrotoluene	15	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	30	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	75	U
100-02-7	4-Nitrophenol	15	U
608-93-5	Pentachlorobenzene	10	U
121-14-2	2,4-Dinitrotoluene	1	J
132-64-9	Dibenzofuran	10	U
91-59-8	2-Naphthylamine	20	U
58-90-2	2,3,4,6-Tetrachlorophenol	35	U
134-32-7	1-Naphthylamine	35	U
84-66-2	Diethylphthalate	15	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

16-16-070

Lab Name: CompuChem Env. Corp. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0082C

Matrix: (soil/water) WATER Lab Sample ID: 782560

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH082560C60

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/15/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
7005-72-3	4-Chlorophenyl-phenylether	10	U
99-55-8	5-Nitro-o-toluidine	30	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	35	U
534-52-1	4,6-Dinitro-2-methylphenol	45	U
86-30-6	N-Nitrosodiphenylamine (1)	30	U
122-39-4	Diphenylamine	30	U
99-35-4	1,3,5-Trinitrobenzene	45	U
2303-16-4	Diallate (trans isomer)	20	U
62-44-2	Phenacetin	20	U
2303-16-4	Diallate (cis isomer)	20	U
101-55-3	4-Bromophenyl-phenylether	15	U
118-74-1	Hexachlorobenzene	15	U
92-67-1	4-Aminobiphenyl	10	U
87-86-5	Pentachlorophenol	55	U
23950-58-5	Pronamide	15	U
85-01-8	Phenanthrene	15	U
120-12-7	Anthracene	15	U
84-74-2	Di-n-butylphthalate	15	U
56-57-5	4-Nitroquinoline-1-oxide	75	U
91-80-5	Methapyrilene	30	U
465-73-6	Isodrin	15	U
206-44-0	Fluoranthene	20	U
129-00-0	Pyrene	1	J
140-57-8	Aramite	20	U
60-11-7	p-Dimethylaminoazobenzene	10	U
510-15-6	Chlorobenzilate	10	U
85-68-7	Butylbenzylphthalate	10	U
119-93-7	3,3'-Dimethylbenzidine	10	U
117-81-7	bis(2-ethylhexyl)Phthalate	2	J
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	15	U

(1) - Cannot be separated from Diphenylamine

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

16-16-070

Lab Name: CompuChem Env. Corp. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0082C

Matrix: (soil/water) WATER Lab Sample ID: 782560

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH082560C60

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/15/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
117-84-0	Di-n-octylphthalate	20	U
57-97-6	7,12-Dimethylbenz(a)anthrace	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	20	U
193-39-5	Indeno(1,2,3-c,d)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	10	U
122-09-08	a,a-Dimethylphenethylamine	25	U
106-50-3	p-Phenylenediamine	80	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

16-16-070

Lab Name: CompuChem Env. Corp. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0082C

Matrix: (soil/water) WATER Lab Sample ID: 782560

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH082560C60

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 02/15/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 10

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	108-88-3	TOLUENE	3.87	22	NJ
2.	100-41-4	ETHYLBENZENE	4.74	5	NJ
3.		DIMETHYLBENZENE	4.83	16	J
4.		DIMETHYLBENZENE	5.07	8	J
5.		SURROGATE COMPOUND	6.09	23	J
6.		SURROGATE COMPOUND	6.66	22	J
7.		UNKNOWN	12.89	4	J
8.	118-96-7	BENZENE, 2-METHYL-1,3,5-TRIN	14.94	130	NJ
9.		UNKNOWN	17.95	6	J
10.		UNKNOWN	24.89	6	J
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1D

ORGANOPHOSPHORUS PESTICIDES ANALYSIS DATA SHEET

SAMPLE NO.

16-16-070

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0086C

Matrix: (soil/water) WATER Lab Sample ID: 782561

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

% Moisture: decanted: (Y/N) Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 02/13/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/14/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
298-02-2	Phorate	0.50	U
3689-24-5	Sulfotepp	0.030	JB
298-04-4	Disulfoton	0.50	U
60-51-5	Dimethoate	0.50	U
298-00-0	Methyl-Parathion	0.50	U
56-38-2	Ethyl-Parathion	0.50	U
52-85-7	Famphur	0.025	J

FORM I 8140

1D
HERBICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-070

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0088C

Matrix: (soil/water) WATER Lab Sample ID: 782562

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

% Moisture: decanted: (Y/N) Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 02/13/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/14/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
94-75-7	2,4-D	4.0	U
93-72-1	2,4,5-TP (Silvex)	1.0	U
93-76-5	2,4,5-T	0.057	JP

FORM I HERB

D- 00015

CompuChem Environmental Corporation

TLI Project: 36136A
Client Sample: 16-16-070
Client Project: Crane

Method 8280 PCDD/PCDF Analysis (b)
Analysis File: B960683
Matrix: WATER

PCDD/PCDF SUMMARY REPORT

Specific Analytes	Conc. (ppt)	DL (ppt)	Blank (ppt)
2,3,7,8-TCDD	ND	0.697	ND

Definitions:

Conc. - The concentration of the specific analyte in the units shown.

DL - The detection limit of the specific analyte in the units shown.

Blank - The concentration of the method blank.

ND - (Non-Detect) The concentration of the analyte is less than the detection limit.

Total Analytes	Conc. (ppt)	DL (ppt)
Total TCDD	ND	0.697
Total PeCDD	ND	4.38
Total HxCDD	ND	7
Total TCDF	ND	0.607
Total PeCDF	ND	7.25
Total HxCDF	ND	7.87

8280_PSR v2.07, LARS 6.03.09

Triangle Laboratories, Inc.®
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Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 00:05 02/15/96

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-071

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0046C

Matrix: (soil/water) SOIL Lab Sample ID: 782508

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH082508C55.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. 11 Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	Benzene	11	U
108-88-3	Toluene	11	U
100-41-4	Ethylbenzene	2	J
1330-20-7	Xylene (Total)	9	J

FORM 1
8310 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

16-16-071

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0049C

Matrix: (soil/water) SOIL Lab Sample ID: 782518

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 11 decanted: (Y/N) N Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/10/96

Concentrated Extract Volume: 5000(ul) Date Analyzed: 02/13/96

Injection Volume: 25.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	Naphthalene	780	C
208-96-8	Acenaphthylene	250	C
83-32-9	Acenaphthene	460	C
86-73-7	Fluorene	1400	C

FORM 1
8310 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

16-16-071

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0049C

Matrix: (soil/water) SOIL Lab Sample ID: 782518

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 11 decanted: (Y/N) N Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/10/96

Concentrated Extract Volume: 5000(ul) Date Analyzed: 02/13/96

Injection Volume: 25.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
85-01-8	Phenanthrene	3600	C
120-12-7	Anthracene	56	U
206-44-0	Fluoranthene	400	C
129-00-0	Pyrene	840	C
56-55-3	Benzo(a)anthracene	29	
218-01-9	Chrysene	110	C
205-99-2	Benzo(b)fluoranthene	15	J
207-08-9	Benzo(k)fluoranthene	7.4	J
50-32-8	Benzo(a)pyrene	12	BJ
53-70-3	Dibenzo(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	6.8	BJ
193-39-5	Indeno(1,2,3-cd)pyrene	56	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-072

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0046C

Matrix: (soil/water) SOIL Lab Sample ID: 782513

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH082513C55.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. 12 Date Analyzed: 02/12/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	Benzene	11	U
108-88-3	Toluene	11	U
100-41-4	Ethylbenzene	3	J
1330-20-7	Xylene (Total)	7	J

FORM I VOA

FORM 1
8310 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

16-16-072

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0049C

Matrix: (soil/water) SOIL Lab Sample ID: 782519

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 12 decanted: (Y/N) N Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/10/96

Concentrated Extract Volume: 5000(ul) Date Analyzed: 02/13/96

Injection Volume: 25.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	Naphthalene	220	C
208-96-8	Acenaphthylene	160	C
83-32-9	Acenaphthene	200	C
86-73-7	Fluorene	740	C

FORM 1
8310 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

16-16-072

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0049C

Matrix: (soil/water) SOIL Lab Sample ID: 782519

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 12 decanted: (Y/N) N Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/10/96

Concentrated Extract Volume: 5000(ul) Date Analyzed: 02/13/96

Injection Volume: 25.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
85-01-8	Phenanthrene	1900	C
120-12-7	Anthracene	57	U
206-44-0	Fluoranthene	200	C
129-00-0	Pyrene	410	C
56-55-3	Benzo(a)anthracene	25	C
218-01-9	Chrysene	80	C
205-99-2	Benzo(b)fluoranthene	24	C
207-08-9	Benzo(k)fluoranthene	10	JC
50-32-8	Benzo(a)pyrene	17	BJ
53-70-3	Dibenzo(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	57	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-073

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0046C

Matrix: (soil/water) SOIL Lab Sample ID: 782514

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH082514C55.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. 14 Date Analyzed: 02/12/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	Benzene	12	U
108-88-3	Toluene	12	U
100-41-4	Ethylbenzene	12	U
1330-20-7	Xylene (Total)	9	J

FORM I VOA

FORM 1
8310 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

16-16-073

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0049C

Matrix: (soil/water) SOIL Lab Sample ID: 782515

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 14 decanted: (Y/N) N Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/10/96

Concentrated Extract Volume: 5000(ul) Date Analyzed: 02/13/96

Injection Volume: 25.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	Naphthalene	340	C
208-96-8	Acenaphthylene	200	C
83-32-9	Acenaphthene	370	C
86-73-7	Fluorene	1100	C

FORM 1
8310 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

16-16-073

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0049C

Matrix: (soil/water) SOIL Lab Sample ID: 782515

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 14 decanted: (Y/N) N Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/10/96

Concentrated Extract Volume: 5000(ul) Date Analyzed: 02/13/96

Injection Volume: 25.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
85-01-8	Phenanthrene	3100	C
120-12-7	Anthracene	58	U
206-44-0	Fluoranthene	920	C
129-00-0	Pyrene	1200	C
56-55-3	Benzo(a)anthracene	220	C
218-01-9	Chrysene	270	C
205-99-2	Benzo(b)fluoranthene	270	C
207-08-9	Benzo(k)fluoranthene	100	C
50-32-8	Benzo(a)pyrene	260	BC
53-70-3	Dibenzo(a,h)anthracene	24	BC
191-24-2	Benzo(g,h,i)perylene	89	BC
193-39-5	Indeno(1,2,3-cd)pyrene	140	C

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16-16-074

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 70C___

Matrix (soil/water): SOIL_ Lab Sample ID: 782676

Level (low/med): LOW__ Date Received: 02/09/96

% Solids: _64.6

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony_	109000	B	N*	P
7440-38-2	Arsenic__	7520			P
7440-39-3	Barium___	6900000		E	P
7440-41-7	Beryllium	364	B		P
7440-43-9	Cadmium__	145000		E	P
7440-47-3	Chromium_	30700		E	P
7440-48-4	Cobalt___	3750	B		P
7440-50-8	Copper___	5170000		E	P
7439-92-1	Lead____	15300000		E	P
7440-02-0	Nickel___	25800		E	P
7782-49-2	Selenium_	760	B		P
7440-22-4	Silver___	1290	B		P
7440-28-0	Thallium_	542	U		P
7440-62-2	Vanadium_	9850		E	P
7440-66-6	Zinc_____	48700000		E	P
7440-31-5	Tin_____	58400		E	P

Color Before: BLACK____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-074

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0096C

Matrix: (soil/water) SOIL Lab Sample ID: 782671

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH082671B54.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. 35 Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	15	U
74-83-9	Bromomethane	15	U
75-01-4	Vinyl Chloride	15	U
75-00-3	Chloroethane	15	U
75-09-2	Methylene Chloride	6	JB
67-64-1	Acetone	15	U
75-15-0	Carbon Disulfide	15	U
75-35-4	1,1-Dichloroethene	15	U
75-34-3	1,1-Dichloroethane	15	U
67-66-3	Chloroform	15	U
107-06-2	1,2-Dichloroethane	15	U
78-93-3	2-Butanone	15	U
71-55-6	1,1,1-Trichloroethane	15	U
56-23-5	Carbon Tetrachloride	15	U
75-27-4	Bromodichloromethane	15	U
78-87-5	1,2-Dichloropropane	15	U
10061-01-5	cis-1,3-Dichloropropene	15	U
79-01-6	Trichloroethene	15	U
124-48-1	Dibromochloromethane	15	U
79-00-5	1,1,2-Trichloroethane	15	U
71-43-2	Benzene	15	U
10061-02-6	trans-1,3-Dichloropropene	15	U
75-25-2	Bromoform	15	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	15	U
79-34-5	1,1,2,2-Tetrachloroethane	15	U
108-88-3	Toluene	15	U
108-90-7	Chlorobenzene	15	U
100-41-4	Ethylbenzene	15	U
100-42-5	Styrene	15	U
1330-20-7	Xylene (Total)	15	U
75-05-8	acetonitrile	310	U

FORM I VOA

D- 04327

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-074

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0096C

Matrix: (soil/water) SOIL Lab Sample ID: 782671

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH082671B54.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. 35 Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107-02-8	acrolein	350	U
107-05-1	3-chloropropene	23	U
106-93-4	1,2-dibromoethane	23	U
74-95-3	dibromomethane	31	U
110-57-6	trans-1,4-dichloro-2-butene	23	U
75-71-8	dichlorodifluoromethane	31	U
123-91-1	1,4-dioxane	78000	U
107-12-0	propionitrile(ethylcyanide)	910	U
97-63-2	ethyl methacrylate	38	U
74-88-4	iodomethane	15	U
78-83-1	isobutyl alcohol	20000	U
126-98-7	methacrylonitrile	31	U
80-62-6	methyl methacrylate	77	U
630-20-6	1,1,1,2-tetrachloroethane	31	U
96-18-4	1,2,3-trichloropropane	31	U
108-05-4	vinyl acetate	31	U
96-12-8	1,2-dibromo-3-chloropropane	77	U
75-69-4	trichlorofluoromethane	31	U
107-13-1	acrylonitrile	320	U
156-60-5	trans-1,2-Dichloroethene	15	U

FORM I VOA

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

16-16-074

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0096C

Matrix: (soil/water) SOIL Lab Sample ID: 782671

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH082671B54.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. 35 Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	0.56	950	JB
2.				
3.				
4.				
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FORM I VOA-TIC

FORM 1
8330 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

16-16-074

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0065C

Matrix: (soil/water) SOIL Lab Sample ID: 782685

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: 35 decanted: (Y/N) N Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/15/96

Concentrated Extract Volume: 10000(ul) Date Analyzed: 02/16/96

Injection Volume: 25.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.86	U
121-82-4	RDX	2.8	U
98-95-3	Nitrobenzene	0.55	U
99-65-0	1,3-Dinitrobenzene	0.49	U
99-35-4	1,3,5-Trinitrobenzene	0.98	U
121-14-2	2,4-Dinitrotoluene	35	
606-20-2	2,6-Dinitrotoluene	1.1	P
118-96-7	2,4,6-Trinitrotoluene	0.43	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.92	U
479-45-8	Tetryl	1.6	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.74	U
88-72-2	2-Nitrotoluene	7.3	U
99-99-0	4-Nitrotoluene	7.3	U
99-08-1	3-Nitrotoluene	1.8	U

1D

ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

16-16-074

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0101C

Matrix: (soil/water) SOIL Lab Sample ID: 782666

Sample wt/vol: 30.00 (g/ml) G Lab File ID:

% Moisture: 35 decanted: (Y/N) N Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/19/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 02/22/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
58-89-9	gamma-BHC (Lindane)	0.11	JP
76-44-8	Heptachlor	0.43	JP
309-00-2	Aldrin	0.34	JP
959-98-8	Endosulfan I	0.94	BJP
60-57-1	Dieldrin	0.24	JP
33213-65-9	Endosulfan II	2.3	JP
50-29-3	4,4'-DDT	7.0	P
72-43-5	Methoxychlor	1.5	JP
319-84-6	alpha-BHC	1.5	U
319-85-7	beta-BHC	1.5	U
319-86-8	delta-BHC	1.5	U
1024-57-3	Heptachlor epoxide	0.57	JP
72-55-9	4,4'-DDE	0.53	JP
72-20-8	Endrin	1.2	JP
72-54-8	4,4'-DDD	8.9	
7421-93-4	Endrin aldehyde	25	P
1031-07-8	Endosulfan sulfate	2.1	JP
11096-82-5	Aroclor-1260	31	U
12674-11-2	Aroclor-1016	31	U
11104-28-2	Aroclor-1221	31	U
11141-16-5	Aroclor-1232	31	U
53469-21-9	Aroclor-1242	31	U
12672-29-6	Aroclor-1248	31	U
11097-69-1	Aroclor-1254	31	U
8001-35-2	Toxaphene	31	U
57-74-9	Chlordane (Technical)	6.2	U

FORM I 8080

FORM I - IN
U.S. EPA - CLP

3/90

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16-16-075

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____
Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 70C___
Matrix (soil/water): SOIL_ Lab Sample ID: 782681
Level (low/med): LOW__ Date Received: 02/09/96
% Solids: _80.1

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony_	306	B	N*	P
7440-38-2	Arsenic__	3720			P
7440-39-3	Barium___	208000		E	P
7440-41-7	Beryllium	497	B		P
7440-43-9	Cadmium__	25.0	U	E	P
7440-47-3	Chromium_	13000		E	P
7440-48-4	Cobalt___	4350	B		P
7440-50-8	Copper___	24200		E	P
7439-92-1	Lead____	22800		E	P
7440-02-0	Nickel___	9540		E	P
7782-49-2	Selenium_	474	B		P
7440-22-4	Silver___	87.4	U		P
7440-28-0	Thallium_	437	U		P
7440-62-2	Vanadium_	18100		E	P
7440-66-6	Zinc_____	478000		E	P
7440-31-5	Tin_____	2520	B	E	P

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-075

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0096C

Matrix: (soil/water) SOIL Lab Sample ID: 782672

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH082672B54.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. 20 Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	3	JB
67-64-1	Acetone	12	U
75-15-0	Carbon Disulfide	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon Tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	12	U
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U
1330-20-7	Xylene (Total)	250	U
75-05-8	acetonitrile		

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-075

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0096C

Matrix: (soil/water) SOIL Lab Sample ID: 782672

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH082672B54.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. 20 Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107-02-8	acrolein	290	U
107-05-1	3-chloropropene	19	U
106-93-4	1,2-dibromoethane	19	U
74-95-3	dibromomethane	25	U
110-57-6	trans-1,4-dichloro-2-butene	19	U
75-71-8	dichlorodifluoromethane	25	U
123-91-1	1,4-dioxane	64000	U
107-12-0	propionitrile(ethylcyanide)	740	U
97-63-2	ethyl methacrylate	31	U
74-88-4	iodomethane	12	U
78-83-1	isobutyl alcohol	16000	U
126-98-7	methacrylonitrile	25	U
80-62-6	methyl methacrylate	62	U
630-20-6	1,1,1,2-tetrachloroethane	25	U
96-18-4	1,2,3-trichloropropane	25	U
108-05-4	vinyl acetate	25	U
96-12-8	1,2-dibromo-3-chloropropane	62	U
75-69-4	trichlorofluoromethane	25	U
107-13-1	acrylonitrile	260	U
156-60-5	trans-1,2-Dichloroethene	12	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

16-16-075

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0096C

Matrix: (soil/water) SOIL Lab Sample ID: 782672

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH082672B54.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. 20 Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	0.60	1000	JB
2.	LABORATORY ARTIFACT	14.16	7	JB
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FORM I VOA-TIC

FORM 1
8330 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

16-16-075

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0065C

Matrix: (soil/water) SOIL Lab Sample ID: 782689

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: 20 decanted: (Y/N) N Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/15/96

Concentrated Extract Volume: 10000(ul) Date Analyzed: 02/16/96

Injection Volume: 25.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.70	U
121-82-4	RDX	2.2	U
98-95-3	Nitrobenzene	0.45	U
99-65-0	1,3-Dinitrobenzene	0.40	U
99-35-4	1,3,5-Trinitrobenzene	0.80	U
121-14-2	2,4-Dinitrotoluene	1.0	U
606-20-2	2,6-Dinitrotoluene	0.75	U
118-96-7	2,4,6-Trinitrotoluene	0.35	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.75	U
479-45-8	Tetryl	1.3	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.60	U
88-72-2	2-Nitrotoluene	6.0	U
99-99-0	4-Nitrotoluene	6.0	U
99-08-1	3-Nitrotoluene	1.4	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

16-16-076

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0096C

Matrix: (soil/water) SOIL Lab Sample ID: 782673

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH082673B54.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. 21 Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	0.57	1100	JB
2.	LABORATORY ARTIFACT	14.13	9	JB
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FORM 1
8330 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

16-16-076

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0065C

Matrix: (soil/water) SOIL Lab Sample ID: 782690

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: 21 decanted: (Y/N) N Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/15/96

Concentrated Extract Volume: 10000(ul) Date Analyzed: 02/16/96

Injection Volume: 25.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.71	U
121-82-4	RDX	2.3	U
98-95-3	Nitrobenzene	0.46	U
99-65-0	1,3-Dinitrobenzene	0.40	U
99-35-4	1,3,5-Trinitrobenzene	0.81	U
121-14-2	2,4-Dinitrotoluene	1.0	U
606-20-2	2,6-Dinitrotoluene	0.76	U
118-96-7	2,4,6-Trinitrotoluene	0.35	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.76	U
479-45-8	Tetryl	1.3	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.61	U
88-72-2	2-Nitrotoluene	6.0	U
99-99-0	4-Nitrotoluene	6.0	U
99-08-1	3-Nitrotoluene	1.5	U

1D

ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

16-16-076

Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0101C

Matrix: (soil/water) SOIL Lab Sample ID: 782668

Sample wt/vol: 30.00 (g/ml) G Lab File ID:

% Moisture: 21 decanted: (Y/N) N Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/19/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 02/22/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	1.3	U
309-00-2	Aldrin	1.3	U
959-98-8	Endosulfan I	0.077	JBP
60-57-1	Dieldrin	1.9	U
33213-65-9	Endosulfan II	4.4	U
50-29-3	4,4'-DDT	4.4	U
72-43-5	Methoxychlor	4.4	U
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	1.3	U
1024-57-3	Heptachlor epoxide	1.3	U
72-55-9	4,4'-DDE	0.11	JP
72-20-8	Endrin	3.2	U
72-54-8	4,4'-DDD	0.14	JP
7421-93-4	Endrin aldehyde	1.3	U
1031-07-8	Endosulfan sulfate	2.5	U
11096-82-5	Aroclor-1260	25	U
12674-11-2	Aroclor-1016	25	U
11104-28-2	Aroclor-1221	25	U
11141-16-5	Aroclor-1232	25	U
53469-21-9	Aroclor-1242	25	U
12672-29-6	Aroclor-1248	25	U
11097-69-1	Aroclor-1254	25	U
8001-35-2	Toxaphene	25	U
57-74-9	Chlordane (Technical)	5.1	U

FORM I - IN
U.S. EPA - CLP

3/90

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16-16-077

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____
Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 70C___
Matrix (soil/water): SOIL_ Lab Sample ID: 782683
Level (low/med): LOW__ Date Received: 02/09/96
% Solids: _78.7

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony_	55300	_	N*	P_
7440-38-2	Arsenic__	40000	_		P_
7440-39-3	Barium___	1120000	_	E	P_
7440-41-7	Beryllium	394	B		P_
7440-43-9	Cadmium__	24.2	U	E	P_
7440-47-3	Chromium_	17700	_	E	P_
7440-48-4	Cobalt___	3430	B		P_
7440-50-8	Copper___	3980000	_	E	P_
7439-92-1	Lead____	14900000	_	E	P_
7440-02-0	Nickel___	11700	_	E	P_
7782-49-2	Selenium_	319	B		P_
7440-22-4	Silver___	457	B		P_
7440-28-0	Thallium_	424	U		P_
7440-62-2	Vanadium_	26100	_	E	P_
7440-66-6	Zinc____	2450000	_	E	P_
7440-31-5	Tin_____	2650	B	E	P_

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-077

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0096C

Matrix: (soil/water) SOIL Lab Sample ID: 782674

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH082674B54.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. 21 Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	5	JB
67-64-1	Acetone	13	U
75-15-0	Carbon Disulfide	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon Tetrachloride	13	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroechene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
108-88-3	Toluene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
100-42-5	Styrene	13	U
1330-20-7	Xylene (Total)	13	U
75-05-8	acetonitrile	250	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-077

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0096C

Matrix: (soil/water) SOIL Lab Sample ID: 782674

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH082674B54.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. 21 Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107-02-8	acrolein	290	U
107-05-1	3-chloropropene	19	U
106-93-4	1,2-dibromoethane	19	U
74-95-3	dibromomethane	25	U
110-57-6	trans-1,4-dichloro-2-butene	19	U
75-71-8	dichlorodifluoromethane	25	U
123-91-1	1,4-dioxane	65000	U
107-12-0	propionitrile(ethylcyanide)	750	U
97-63-2	ethyl methacrylate	32	U
74-88-4	iodomethane	13	U
78-83-1	isobutyl alcohol	16000	U
126-98-7	methacrylonitrile	25	U
80-62-6	methyl methacrylate	63	U
630-20-6	1,1,1,2-tetrachloroethane	25	U
96-18-4	1,2,3-trichloropropane	25	U
108-05-4	vinyl acetate	25	U
96-12-8	1,2-dibromo-3-chloropropane	63	U
75-69-4	trichlorofluoromethane	25	U
107-13-1	acrylonitrile	270	U
156-60-5	trans-1,2-Dichloroethene	13	U

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

16-16-077

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0096C

Matrix: (soil/water) SOIL Lab Sample ID: 782674

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH082674B54.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. 21 Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	0.60	820	JB
2.	LABORATORY ARTIFACT	14.14	8	JB
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FORM 1
8330 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

16-16-077

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0065C

Matrix: (soil/water) SOIL Lab Sample ID: 782691

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: 21 decanted: (Y/N) N Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/15/96

Concentrated Extract Volume: 10000(ul) Date Analyzed: 02/16/96

Injection Volume: 25.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.71	U
121-82-4	RDX	2.3	U
98-95-3	Nitrobenzene	0.46	U
99-65-0	1,3-Dinitrobenzene	0.40	U
99-35-4	1,3,5-Trinitrobenzene	0.81	U
121-14-2	2,4-Dinitrotoluene	1.0	U
606-20-2	2,6-Dinitrotoluene	0.76	U
118-96-7	2,4,6-Trinitrotoluene	0.35	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.76	U
479-45-8	Tetryl	1.3	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.61	U
88-72-2	2-Nitrotoluene	6.0	U
99-99-0	4-Nitrotoluene	6.0	U
99-08-1	3-Nitrotoluene	1.5	U

1D

ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

16-16-077

b Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0101C

Matrix: (soil/water) SOIL Lab Sample ID: 782669

Sample wt/vol: 30.00 (g/ml) G Lab File ID:

% Moisture: 21 decanted: (Y/N) N Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/19/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 02/22/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
58-89-9	gamma-BHC (Lindane)	0.11	JP
76-44-8	Heptachlor	0.24	JP
309-00-2	Aldrin	1.3	U
959-98-8	Endosulfan I	0.18	JBP
60-57-1	Dieldrin	1.9	U
33213-65-9	Endosulfan II	0.31	JP
50-29-3	4,4'-DDT	4.4	U
72-43-5	Methoxychlor	0.98	J
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	1.3	U
1024-57-3	Heptachlor epoxide	0.092	JP
72-55-9	4,4'-DDE	4.4	U
72-20-8	Endrin	3.2	U
72-54-8	4,4'-DDD	0.42	JP
7421-93-4	Endrin aldehyde	0.95	JP
1031-07-8	Endosulfan sulfate	2.5	U
11096-82-5	Aroclor-1260	25	U
12674-11-2	Aroclor-1016	25	U
11104-28-2	Aroclor-1221	25	U
11141-16-5	Aroclor-1232	25	U
53469-21-9	Aroclor-1242	25	U
12672-29-6	Aroclor-1248	25	U
11097-69-1	Aroclor-1254	25	U
8001-35-2	Toxaphene	25	U
57-74-9	Chlordane (Technical)	5.1	U

FORM I 8080

FORM I - IN 3/90
U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16-16-078

Lab Name: COMPUCHEM_SN CORP._____ Contract: SW-846____
Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 70C___
Matrix (soil/water): SOIL Lab Sample ID: 782684
Level (low/med): LOW Date Received: 02/09/96
% Solids: 9

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-36	Antimony	1440	B	N*	P
7440-38	Arsenic	11800			P
7440-39	Barium	312000		E	P
7440-41	Beryllium	623	B		P
7440-43	Cadmium	25.7	U	E	P
7440-47	Chromium	22100		E	P
7440-48	Cobalt	8700			P
7440-50	Copper	32400		E	P
7439-92	Lead	73800		E	P
7440-02	Nickel	14600		E	P
7782-49	Selenium	1070			P
7440-22	Silver	89.9	U		P
7440-28	Thallium	449	U		P
7440-62	Vanadium	37300		E	P
7440-66	Zinc	123000		E	P
7440-31	Tin	2120	B	E	P

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-078

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0096C

Matrix: (soil/water) SOIL Lab Sample ID: 782675

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH082675B54.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. 22 Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	4	JB
67-64-1	Acetone	13	U
75-15-0	Carbon Disulfide	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon Tetrachloride	13	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
108-88-3	Toluene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
100-42-5	Styrene	13	U
1330-20-7	Xylene (Total)	13	U
75-05-8	acetonitrile	260	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-078

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0096C

Matrix: (soil/water) SOIL Lab Sample ID: 782675

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH082675B54.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. 22 Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107-02-8	acrolein	290	U
107-05-1	3-chloropropene	19	U
106-93-4	1,2-dibromoethane	19	U
74-95-3	dibromomethane	26	U
110-57-6	trans-1,4-dichloro-2-butene	19	U
75-71-8	dichlorodifluoromethane	26	U
123-91-1	1,4-dioxane	65000	U
107-12-0	propionitrile(ethylcyanide)	760	U
97-63-2	ethyl methacrylate	32	U
74-88-4	iodomethane	13	U
78-83-1	isobutyl alcohol	17000	U
126-98-7	methacrylonitrile	26	U
80-62-6	methyl methacrylate	64	U
630-20-6	1,1,1,2-tetrachloroethane	26	U
96-18-4	1,2,3-trichloropropane	26	U
108-05-4	vinyl acetate	26	U
96-12-8	1,2-dibromo-3-chloropropane	64	U
75-69-4	trichlorofluoromethane	26	U
107-13-1	acrylonitrile	270	U
156-60-5	trans-1,2-Dichloroethene	13	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

16-16-078

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0096C

Matrix: (soil/water) SOIL Lab Sample ID: 782675

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH082675B54.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. 22 Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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

Number TICs found: 1

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	0.60	800	JB
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FORM I VOA-TIC

FORM 1
8330 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

16-16-078

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0065C

Matrix: (soil/water) SOIL Lab Sample ID: 782692

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: 22 decanted: (Y/N) N Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/15/96

Concentrated Extract Volume: 10000(ul) Date Analyzed: 02/16/96

Injection Volume: 25.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.72	U
121-82-4	RDX	2.3	U
98-95-3	Nitrobenzene	0.46	U
99-65-0	1,3-Dinitrobenzene	0.41	U
99-35-4	1,3,5-Trinitrobenzene	0.82	U
121-14-2	2,4-Dinitrotoluene	1.0	U
606-20-2	2,6-Dinitrotoluene	0.77	U
118-96-7	2,4,6-Trinitrotoluene	0.36	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.77	U
479-45-8	Tetryl	1.3	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.62	U
88-72-2	2-Nitrotoluene	6.1	U
99-99-0	4-Nitrotoluene	6.1	U
99-08-1	3-Nitrotoluene	1.5	U

1D

ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

16-16-078

1 Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0101C

Matrix: (soil/water) SOIL Lab Sample ID: 782670

Sample wt/vol: 30.50 (g/ml) G Lab File ID:

% Moisture: 22 decanted: (Y/N) N Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/19/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 02/22/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 0.0 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	1.3	U
309-00-2	Aldrin	1.3	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	0.22	JP
33213-65-9	Endosulfan II	4.4	U
50-29-3	4,4'-DDT	4.4	U
72-43-5	Methoxychlor	4.4	U
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	1.3	U
1024-57-3	Heptachlor epoxide	1.3	U
72-55-9	4,4'-DDE	0.21	JP
72-20-8	Endrin	0.14	J
72-54-8	4,4'-DDD	0.19	JP
7421-93-4	Endrin aldehyde	1.3	U
1031-07-8	Endosulfan sulfate	2.5	U
11096-82-5	Aroclor-1260	25	U
12674-11-2	Aroclor-1016	25	U
11104-28-2	Aroclor-1221	25	U
11141-16-5	Aroclor-1232	25	U
53469-21-9	Aroclor-1242	25	U
12672-29-6	Aroclor-1248	25	U
11097-69-1	Aroclor-1254	25	U
8001-35-2	Toxaphene	25	U
57-74-9	Chlordane (Technical)	5.0	U

D 01355

FORM I 8080

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-079

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782361

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C2R82361B52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 5000.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50000	U
74-83-9	Bromomethane	50000	U
75-01-4	Vinyl Chloride	50000	U
75-00-3	Chloroethane	50000	U
75-09-2	Methylene Chloride	50000	U
67-64-1	Acetone	50000	U
75-15-0	Carbon Disulfide	50000	U
75-35-4	1,1-Dichloroethene	50000	U
75-34-3	1,1-Dichloroethane	50000	U
67-66-3	Chloroform	50000	U
107-06-2	1,2-Dichloroethane	50000	U
78-93-3	2-Butanone	50000	U
71-55-6	1,1,1-Trichloroethane	50000	U
56-23-5	Carbon Tetrachloride	50000	U
75-27-4	Bromodichloromethane	50000	U
78-87-5	1,2-Dichloropropane	50000	U
10061-01-5	cis-1,3-Dichloropropene	50000	U
79-01-6	Trichloroethene	860000	
124-48-1	Dibromochloromethane	50000	U
79-00-5	1,1,2-Trichloroethane	50000	U
71-43-2	Benzene	50000	U
10061-02-6	trans-1,3-Dichloropropene	50000	U
75-25-2	Bromoform	50000	U
108-10-1	4-Methyl-2-Pentanone	50000	U
591-78-6	2-Hexanone	50000	U
127-18-4	Tetrachloroethene	50000	U
79-34-5	1,1,2,2-Tetrachloroethane	50000	U
108-88-3	Toluene	50000	U
108-90-7	Chlorobenzene	50000	U
100-41-4	Ethylbenzene	50000	U
100-42-5	Styrene	50000	U
1330-20-7	Xylene (Total)	50000	U
75-05-8	acetonitrile	300000	U

D0356

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-079

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782361

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C2R82361B52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 5000.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	acrolein	450000	U
107-05-1	3-chloropropene	75000	U
106-93-4	1,2-dibromoethane	50000	U
74-95-3	dibromomethane	50000	U
110-57-6	trans-1,4-dichloro-2-butene	50000	U
75-71-8	dichlorodifluoromethane	50000	U
123-91-1	1,4-dioxane	18000000	U
107-12-0	propionitrile(ethylcyanide)	1100000	U
97-63-2	ethyl methacrylate	50000	U
74-88-4	iodomethane	25000	U
78-83-1	isobutyl alcohol	14000000	U
126-98-7	methacrylonitrile	100000	U
80-62-6	methyl methacrylate	100000	U
630-20-6	1,1,1,2-tetrachloroethane	50000	U
96-18-4	1,2,3-trichloropropane	50000	U
108-05-4	vinyl acetate	50000	U
96-12-8	1,2-dibromo-3-chloropropane	50000	U
75-69-4	trichlorofluoromethane	50000	U
107-13-1	acrylonitrile	480000	U
156-60-5	trans-1,2-Dichloroethene	50000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-080

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782362

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CR082362B52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 500.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5000	U
74-83-9	Bromomethane	5000	U
75-01-4	Vinyl Chloride	5000	U
75-00-3	Chloroethane	5000	U
75-09-2	Methylene Chloride	5000	U
67-64-1	Acetone	5000	U
75-15-0	Carbon Disulfide	5000	U
75-35-4	1,1-Dichloroethene	5000	U
75-34-3	1,1-Dichloroethane	5000	U
67-66-3	Chloroform	5000	U
107-06-2	1,2-Dichloroethane	5000	U
78-93-3	2-Butanone	5000	U
71-55-6	1,1,1-Trichloroethane	5000	U
56-23-5	Carbon Tetrachloride	5000	U
75-27-4	Bromodichloromethane	5000	U
78-87-5	1,2-Dichloropropane	5000	U
10061-01-5	cis-1,3-Dichloropropene	5000	U
79-01-6	Trichloroethene	63000	
124-48-1	Dibromochloromethane	5000	U
79-00-5	1,1,2-Trichloroethane	5000	U
71-43-2	Benzene	5000	U
10061-02-6	trans-1,3-Dichloropropene	5000	U
75-25-2	Bromoform	5000	U
108-10-1	4-Methyl-2-Pentanone	5000	U
591-78-6	2-Hexanone	5000	U
127-18-4	Tetrachloroethene	5000	U
79-34-5	1,1,2,2-Tetrachloroethane	5000	U
108-88-3	Toluene	5000	U
108-90-7	Chlorobenzene	5000	U
100-41-4	Ethylbenzene	5000	U
100-42-5	Styrene	5000	U
1330-20-7	Xylene (Total)	5000	U
75-05-8	acetonitrile	30000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-080

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782362

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CR082362B52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 500.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	acrolein	45000	U
107-05-1	3-chloropropene	7500	U
106-93-4	1,2-dibromoethane	5000	U
74-95-3	dibromomethane	5000	U
110-57-6	trans-1,4-dichloro-2-butene	5000	U
75-71-8	dichlorodifluoromethane	5000	U
123-91-1	1,4-dioxane	1800000	U
107-12-0	propionitrile(ethylcyanide)	110000	U
97-63-2	ethyl methacrylate	5000	U
74-88-4	iodomethane	2500	U
78-83-1	isobutyl alcohol	1400000	U
126-98-7	methacrylonitrile	10000	U
80-62-6	methyl methacrylate	10000	U
630-20-6	1,1,1,2-tetrachloroethane	5000	U
96-18-4	1,2,3-trichloropropane	5000	U
108-05-4	vinyl acetate	5000	U
96-12-8	1,2-dibromo-3-chloropropane	5000	U
75-69-4	trichlorofluoromethane	5000	U
107-13-1	acrylonitrile	48000	U
156-60-5	trans-1,2-Dichloroethene	5000	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

16-16-080

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782362

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CR082362B52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 500.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	1.27	23000	J
2.				
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FORM I VOA-TIC

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-081

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782363

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CR082363C52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/12/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 625.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	6200	U
74-83-9	Bromomethane	6200	U
75-01-4	Vinyl Chloride	6200	U
75-00-3	Chloroethane	6200	U
75-09-2	Methylene Chloride	820	JB
67-64-1	Acetone	6200	U
75-15-0	Carbon Disulfide	6200	U
75-35-4	1,1-Dichloroethene	6200	U
75-34-3	1,1-Dichloroethane	6200	U
67-66-3	Chloroform	6200	U
107-06-2	1,2-Dichloroethane	6200	U
78-93-3	2-Butanone	6200	U
71-55-6	1,1,1-Trichloroethane	6200	U
56-23-5	Carbon Tetrachloride	6200	U
75-27-4	Bromodichloromethane	6200	U
78-87-5	1,2-Dichloropropane	6200	U
10061-01-5	cis-1,3-Dichloropropene	6200	U
79-01-6	Trichloroethene	82000	
124-48-1	Dibromochloromethane	6200	U
79-00-5	1,1,2-Trichloroethane	6200	U
71-43-2	Benzene	6200	U
10061-02-6	trans-1,3-Dichloropropene	6200	U
75-25-2	Bromoform	6200	U
108-10-1	4-Methyl-2-Pentanone	6200	U
591-78-6	2-Hexanone	6200	U
127-18-4	Tetrachloroethene	6200	U
79-34-5	1,1,2,2-Tetrachloroethane	6200	U
108-88-3	Toluene	6200	U
108-90-7	Chlorobenzene	6200	U
100-41-4	Ethylbenzene	6200	U
100-42-5	Styrene	6200	U
1330-20-7	Xylene (Total)	6200	U
75-05-8	acetonitrile	38000	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-081

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782363

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CR082363C52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/12/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 625.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	acrolein	56000	U
107-05-1	3-chloropropene	9400	U
106-93-4	1,2-dibromoethane	6200	U
74-95-3	dibromomethane	6200	U
110-57-6	trans-1,4-dichloro-2-butene	6200	U
75-71-8	dichlorodifluoromethane	6200	U
123-91-1	1,4-dioxane	2300000	U
107-12-0	propionitrile(ethylcyanide)	140000	U
97-63-2	ethyl methacrylate	6200	U
74-88-4	iodomethane	3100	U
78-83-1	isobutyl alcohol	1800000	U
126-98-7	methacrylonitrile	12000	U
80-62-6	methyl methacrylate	12000	U
630-20-6	1,1,1,2-tetrachloroethane	6200	U
96-18-4	1,2,3-trichloropropane	6200	U
108-05-4	vinyl acetate	6200	U
96-12-8	1,2-dibromo-3-chloropropane	6200	U
75-69-4	trichlorofluoromethane	6200	U
107-13-1	acrylonitrile	59000	U
156-60-5	trans-1,2-Dichloroethene	6200	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-082

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782358

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082358B52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 500.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5000	U
74-83-9	Bromomethane	5000	U
75-01-4	Vinyl Chloride	5000	U
75-00-3	Chloroethane	5000	U
75-09-2	Methylene Chloride	5000	U
67-64-1	Acetone	5000	U
75-15-0	Carbon Disulfide	5000	U
75-35-4	1,1-Dichloroethene	5000	U
75-34-3	1,1-Dichloroethane	5000	U
67-66-3	Chloroform	5000	U
107-06-2	1,2-Dichloroethane	5000	U
78-93-3	2-Butanone	5000	U
71-55-6	1,1,1-Trichloroethane	5000	U
56-23-5	Carbon Tetrachloride	5000	U
75-27-4	Bromodichloromethane	5000	U
78-87-5	1,2-Dichloropropane	5000	U
10061-01-5	cis-1,3-Dichloropropene	5000	U
79-01-6	Trichloroethene	120000	E
124-48-1	Dibromochloromethane	5000	U
79-00-5	1,1,2-Trichloroethane	5000	U
71-43-2	Benzene	5000	U
10061-02-6	trans-1,3-Dichloropropene	5000	U
75-25-2	Bromoform	5000	U
108-10-1	4-Methyl-2-Pentanone	5000	U
591-78-6	2-Hexanone	5000	U
127-18-4	Tetrachloroethene	5000	U
79-34-5	1,1,2,2-Tetrachloroethane	5000	U
108-88-3	Toluene	3600	J
108-90-7	Chlorobenzene	5000	U
100-41-4	Ethylbenzene	5000	U
100-42-5	Styrene	5000	U
1330-20-7	Xylene (Total)	1200	J
75-05-8	acetonitrile	30000	U

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-082

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782358

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082358B52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 500.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	acrolein	45000	U
107-05-1	3-chloropropene	7500	U
106-93-4	1,2-dibromoethane	5000	U
74-95-3	dibromomethane	5000	U
110-57-6	trans-1,4-dichloro-2-butene	5000	U
75-71-8	dichlorodifluoromethane	5000	U
123-91-1	1,4-dioxane	1800000	U
107-12-0	propionitrile(ethylcyanide)	110000	U
97-63-2	ethyl methacrylate	5000	U
74-88-4	iodomethane	2500	U
78-83-1	isobutyl alcohol	1400000	U
126-98-7	methacrylonitrile	10000	U
80-62-6	methyl methacrylate	10000	U
630-20-6	1,1,1,2-tetrachloroethane	5000	U
96-18-4	1,2,3-trichloropropane	5000	U
108-05-4	vinyl acetate	5000	U
96-12-8	1,2-dibromo-3-chloropropane	5000	U
75-69-4	trichlorofluoromethane	5000	U
107-13-1	acrylonitrile	48000	U
156-60-5	trans-1,2-Dichloroethene	5000	U

FORM I VOA

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

16-16-082

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782358

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082358B52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 500.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	1.18	13000	J
2.				
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FORM I VOA-TIC

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-083

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782359

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C2R82359C52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/12/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 5000.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50000	U
74-83-9	Bromomethane	50000	U
75-01-4	Vinyl Chloride	50000	U
75-00-3	Chloroethane	50000	U
75-09-2	Methylene Chloride	8200	JB
67-64-1	Acetone	50000	U
75-15-0	Carbon Disulfide	50000	U
75-35-4	1,1-Dichloroethene	50000	U
75-34-3	1,1-Dichloroethane	50000	U
67-66-3	Chloroform	50000	U
107-06-2	1,2-Dichloroethane	50000	U
78-93-3	2-Butanone	50000	U
71-55-6	1,1,1-Trichloroethane	50000	U
56-23-5	Carbon Tetrachloride	50000	U
75-27-4	Bromodichloromethane	50000	U
78-87-5	1,2-Dichloropropane	50000	U
10061-01-5	cis-1,3-Dichloropropene	50000	U
79-01-6	Trichloroethene	770000	.
124-48-1	Dibromochloromethane	50000	U
79-00-5	1,1,2-Trichloroethane	50000	U
71-43-2	Benzene	50000	U
10061-02-6	trans-1,3-Dichloropropene	50000	U
75-25-2	Bromoform	50000	U
108-10-1	4-Methyl-2-Pentanone	50000	U
591-78-6	2-Hexanone	50000	U
127-18-4	Tetrachloroethene	50000	U
79-34-5	1,1,2,2-Tetrachloroethane	50000	U
108-88-3	Toluene	50000	U
108-90-7	Chlorobenzene	50000	U
100-41-4	Ethylbenzene	50000	U
100-42-5	Styrene	50000	U
1330-20-7	Xylene (Total)	50000	U
75-05-8	acetonitrile	300000	U

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-083

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782359

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C2R82359C52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/12/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 5000.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	acrolein	450000	U
107-05-1	3-chloropropene	75000	U
106-93-4	1,2-dibromoethane	50000	U
74-95-3	dibromomethane	50000	U
110-57-6	trans-1,4-dichloro-2-butene	50000	U
75-71-8	dichlorodifluoromethane	50000	U
123-91-1	1,4-dioxane	18000000	U
107-12-0	propionitrile(ethylcyanide)	1100000	U
97-63-2	ethyl methacrylate	50000	U
74-88-4	iodomethane	25000	U
78-83-1	isobutyl alcohol	14000000	U
126-98-7	methacrylonitrile	100000	U
80-62-6	methyl methacrylate	100000	U
630-20-6	1,1,1,2-tetrachloroethane	50000	U
96-18-4	1,2,3-trichloropropane	50000	U
108-05-4	vinyl acetate	50000	U
96-12-8	1,2-dibromo-3-chloropropane	50000	U
75-69-4	trichlorofluoromethane	50000	U
107-13-1	acrylonitrile	480000	U
156-60-5	trans-1,2-Dichloroethene	50000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-084

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782360

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082360B52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 100.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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	1000	U
67-64-1	Acetone	1000	U
75-15-0	Carbon Disulfide	1000	U
75-35-4	1,1-Dichloroethene	1000	U
75-34-3	1,1-Dichloroethane	1000	U
67-66-3	Chloroform	1000	U
107-06-2	1,2-Dichloroethane	1000	U
78-93-3	2-Butanone	1000	U
71-55-6	1,1,1-Trichloroethane	1000	U
56-23-5	Carbon Tetrachloride	1000	U
75-27-4	Bromodichloromethane	1000	U
78-87-5	1,2-Dichloropropane	1000	U
10061-01-5	cis-1,3-Dichloropropene	1000	U
79-01-6	Trichloroethene	250000	E
124-48-1	Dibromochloromethane	1000	U
79-00-5	1,1,2-Trichloroethane	1400	
71-43-2	Benzene	1000	U
10061-02-6	trans-1,3-Dichloropropene	1000	U
75-25-2	Bromoform	1000	U
108-10-1	4-Methyl-2-Pentanone	1000	U
591-78-6	2-Hexanone	1000	U
127-18-4	Tetrachloroethene	1000	U
79-34-5	1,1,2,2-Tetrachloroethane	1000	U
108-88-3	Toluene	260	J
108-90-7	Chlorobenzene	1000	U
100-41-4	Ethylbenzene	1000	U
100-42-5	Styrene	1000	U
1330-20-7	Xylene (Total)	1000	U
75-05-8	acetonitrile	6000	U

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-084

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782360

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082360B52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 100.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	acrolein	9000	U
107-05-1	3-chloropropene	1500	U
106-93-4	1,2-dibromoethane	1000	U
74-95-3	dibromomethane	1000	U
110-57-6	trans-1,4-dichloro-2-butene	1000	U
75-71-8	dichlorodifluoromethane	1000	U
123-91-1	1,4-dioxane	370000	U
107-12-0	propionitrile(ethylcyanide)	22000	U
97-63-2	ethyl methacrylate	1000	U
74-88-4	iodomethane	500	U
78-83-1	isobutyl alcohol	280000	U
126-98-7	methacrylonitrile	2000	U
80-62-6	methyl methacrylate	2000	U
630-20-6	1,1,1,2-tetrachloroethane	1000	U
96-18-4	1,2,3-trichloropropane	1000	U
108-05-4	vinyl acetate	1000	U
96-12-8	1,2-dibromo-3-chloropropane	1000	U
75-69-4	trichlorofluoromethane	1000	U
107-13-1	acrylonitrile	9500	U
156-60-5	trans-1,2-Dichloroethene	310	J

FORM I VOA

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

16-16-084

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782360

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082360B52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 100.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 2

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		CO2 (NOT IN TIC TOTAL)	1.18	43000	J
2.		SUBSTITUTED DICHLOROETHENE	7.67	4900	J
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FORM I VOA-TIC

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16-16-44A

Lab Name: COMPUCHEM_ENV._CORP. Contract: SW-846

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 38C

Matrix (soil/water): WATER Lab Sample ID: 782664

Level (low/med): LOW Date Received: 02/09/96

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	38600			P
7440-39-3	Barium	100	B		P
7440-43-9	Cadmium	6.7			P
7440-47-3	Chromium	8.4	B		P
7439-92-1	Lead	114			P
7782-49-2	Selenium	15.9			P
7440-22-4	Silver	0.70	U		P

Color Before: YELLOW Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16-16-44A

Lab Name: COMPUCHEM_ENV._CORP. Contract: SW-846

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 39C

Matrix (soil/water): WATER Lab Sample ID: 782665

Level (low/med): LOW Date Received: 02/09/96

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: YELLOW Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16-44A

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0034C

Matrix: (soil/water) WATER Lab Sample ID: 782498

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082498B57.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/13/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl Chloride	50	U
75-35-4	1,1-Dichloroethene	6	J
67-66-3	Chloroform	25	U
107-06-2	1,2-Dichloroethane	25	U
78-93-3	2-Butanone	50	U
56-23-5	Carbon Tetrachloride	25	U
79-01-6	Trichloroethene	6	J
71-43-2	Benzene	25	U
127-18-4	Tetrachloroethene	7	J
108-90-7	Chlorobenzene	7	J

FORM I VOA

HERBICIDE METHOD TCLP
REPORTED (NON-BIAS CORRECTED) RESULTS
VERSION 1.0

DATE SAMPLED : 02/08/96
DATE RECEIVED : 02/09/96
DATE LEACHED : 02/09/96 (TCLP ROTATION STARTED)
DATE EXTRACTED: 02/13/96
DATE ANALYZED : 02/14/96

COMPUCHEM SAMPLE # 782663 MS# 782636
CLIENT I.D. #16-16-44A MSD# 782637
DILUTION FACTOR : 5 *

COMPOUND	A COMP CONC (MG/L)	B COMPU REPORT AMOUNT (MG/L)	C DIL-ADJ REPORT LIMITS (MG/L)	D COMPU REPORT LIMITS (MG/L)	E REG LEVEL (MG/L)
2,4-D	BRL	BRL	0.020	5.000	10.00
2,4,5-TP (SILVEX)	0.003	BRL	0.005	0.500	1.000

* = Refer to CompuChem's "Plan and Policies".
BRL = Below Reporting Limits

A = COMPOUND CONCENTRATION (MG/L) =
A = (Quantitation Amount X Dilution Factor) / 1000
B = COMPUCHEM REPORTING AMOUNT (MG/L) =
B = At or Above One Half of Regulatory Level
C = DIL-ADJ REPORT LIMITS=Dilution-Adjusted Reporting Limits
C = Method Detection Limits X Dilution Factor
D = COMPUCHEM REPORTING LIMITS (MG/L)=One Half of Regulatory Level
E = REG LEVEL = REGULATORY LEVEL (MG/L)

PESTICIDE METHOD TCLP
REPORTED (NON-BIAS CORRECTED) RESULTS
VERSION 1.0

DATE SAMPLED : 02/08/96
DATE RECEIVED : 02/09/96
DATE LEACHED : 02/09/96 (TCLP ROTATION STARTED)
DATE EXTRACTED: 02/12/96
DATE ANALYZED : 02/13/96

COMPUCHEM SAMPLE # 782662 MS# 782632
CLIENT I. D. # 16-16-44A MSD# 782633
DILUTION FACTOR : 5 @

COMPOUND	A COMP CONC (MG/L)	B COMPU REPORT AMOUNT (MG/L)	C DIL-ADJ REPORT LIMITS (MG/L)	D COMPU REPORT LIMITS (MG/L)	E REG LEVEL (MG/L)
HEPTACHLOR	0.0001	BRL	0.0002	0.0040	0.0080
HEPTACHLOR EPOXIDE	0.0001	BRL	0.0002	0.0040	0.0080
TOXAPHENE	BRL	BRL	0.0050	0.2500	0.5000
GAMMA-BHC (LINDANE)	0.0002	BRL	0.0002	0.2000	0.4000
CHLORDANE *	BRL	BRL	0.0006	0.0150	0.0300
ENDRIN *	BRL	BRL	0.0003	0.0100	0.0200
P,P'METHOXYCHLOR *	BRL	BRL	0.0015	5.0000	10.000

@ = Refer to CompuChem's "Plan and Policies".
BRL = Below Reporting Limits
* = Not Spiked in Associated MS and MSD

A = COMPOUND CONCENTRATION (MG/L) =
A = (Quantitation Amount X Dilution Factor) / 1000
B = COMPUCHEM REPORTING AMOUNT (MG/L) =
B = At or Above One Half of Regulatory Level
C = DIL-ADJ REPORT LIMITS = Dilution-Adjected Reporting Limits
C = Method Detection Limits X Dilution Factor
D = COMPUCHEM REPORTING LIMITS (MG/L)=One Half of Regulatory Level
E = REG LEVEL = REGULATORY LEVEL (MG/L)

11

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0035C

Matrix: (soil/water) WATER Lab Sample ID: 782507

Sample wt/vol: 200 (g/mL) ML Lab File ID: GDJ82507C60.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/13/96

Injection Volume: 1.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH:____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
110-86-1	Pyridine	500	U
106-46-7	1,4-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	500	U
108-39-4	3-Methylphenol	880	U
106-44-5	4-Methylphenol	880	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
87-68-3	Hexachlorobutadiene	120	U
88-06-2	2,4,6-Trichlorophenol	620	U
95-95-4	2,4,5-Trichlorophenol	620	U
121-14-2	2,4-Dinitrotoluene	250	U
118-74-1	Hexachlorobenzene	380	U
87-86-5	Pentachlorophenol	1400	U

FORM I SV-1

REACTIVE CYANIDE ANALYSIS

SUMMARY REPORT

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM NUMBER	CONCENTRATION (mg/kg)	REPORTING LIMIT (PPM)
1.	2608D-006	782649	BRL	250
2.	16-16-44A	782661	BRL	250

BRL = BELOW REPORTING LIMIT

Reviewed by/ID#: [illegible] / 1785 Date: 2/13/96

Reviewed by/ID#: [illegible] / 1990 Date: 2/13/96

REACTIVE SULFIDE ANALYSIS

SUMMARY REPORT

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM NUMBER	CONCENTRATION (mg/kg)	REPORTING LIMIT (PPM)
1.	2608D-006	782649	BRL	500
2.	16-16-44A	782661	BRL	500

BRL = BELOW REPORTING LIMIT

Reviewed by/ID# [illegible] / 785 Date: 2/13/96

Reviewed by/ID#: Martin Ross / 1990 Date: 2/13/96

IGNITABILITY ANALYSIS

SUMMARY REPORT

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM NUMBER	CONCENTRATION (F)	REPORTING LIMIT (F)
1.	2608D-006	782652	AUL	<140
2.	16-16-44A	782660	AUL	<140
3.				

AUL = ABOVE UPPER LIMIT

Reviewed by/ID# [illegible] / 785 Date: 2/12/96

Reviewed by/ID#: [illegible] / 1490 Date: 2/12/96

CORROSIVITY BY PH ANALYSIS

SUMMARY REPORT

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM NUMBER	CONCENTRATION (units)	REPORTING LIMIT (units)
1.	2608D-006	782655	8.90	0.01
2.	16-16-44A	782659	6.00	0.01

BRL = BELOW REPORTING LIMIT

Reviewed by/ID# [illegible] /185 Date: 2/13/96

Reviewed by/ID#: [illegible] / 1990 Date: 2/13/96

PAINT FILTER FREE LIQUIDS TEST ANALYSIS

SUMMARY REPORT

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM NUMBER	FREE LIQUIDS PRESENT (YES or NO)
1.	2608D-006	782657	NO
2.	16-16-44A	782658	YES

BRL = BELOW REPORTING LIMIT

Reviewed by/ID#: [illegible] / 785 Date: 2/14/96

Reviewed by/ID#: [illegible] / 1990 Date: 2/14/96

SAMPLES 16/16 DATA
SAMPLES 23A THROUGH 30A
AND
32A THROUGH 38A

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 23A

Name: ARN

Code:

Contract: 9510285

Case No.: MKC70 SAS No.: SDG No.: 16/16

ix (soil er): SOIL Lab Sample ID: 951028502

el (low/med): LOW Date Received: 10/26/95

olids: 70.3

entration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
429-90-5	Aluminum				NR
440-36-0	Antimony				NR
440-38-2	Arsenic				NR
440-39-3	Barium				NR
440-41-7	Beryllium				NR
440-43-9	Cadmium				NR
440-70-2	Calcium				NR
440-47-3	Chromium				NR
440-48-4	Cobalt				NR
440-50-8	Copper				NR
439-89-6	Iron				NR
439-92-1	Lead				NR
439-95-4	Magnesium				NR
439-96-5	Manganese				NR
439-97-6	Mercury	0.14	U		AV
440-02-0	Nickel				NR
440-09-7	Potassium				NR
82-49-2	Selenium				NR
440-22-4	Silver				NR
440-23-5	Sodium				NR
440-28-0	Thallium				NR
440-62-2	Vanadium				NR
440-66-6	Zinc				NR
	Cyanide				NR
440-31-5	Tin				NR
439-93-2	Lithium	13.1	U	N	P

Before:

After:

Clarity Before:

Clarity After:

Texture:

Artifacts:

nt

I ID: SWC_16/16_23A

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16 23A

Lab Name: AENI
Contract: 9510285
Project No: MKC70
Site:
Location:
Group:
Matrix: (soil/water) SOIL
Lab Sample ID: #002
Sample wt/vol: 5.0 (g/mL) G
Lab File ID: FK124.D
Level: (low/med) LOW
Date Received: 10/26/95
% Moisture not dec. 30
Date Analyzed: 11/8/95
GC Column: CAP
ID: 0.53 (mm)
Dilution Factor: 1.0
Soil Extract Volume: 1 (uL)
Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	26	B
67-64-1	Acetone	37	JB
75-05-8	Acetonitrile	7.1	U
107-13-1	Acrylonitrile	1400	U
107-02-8	Acrolein	1400	U
75-69-4	Trichlorofluoromethane	7.1	U
75-15-0	Carbon Disulfide	7.1	U
75-35-4	1,1-Dichloroethene	7.1	U
75-34-4	1,1-Dichloroethane	7.1	U
540-59-0	trans-1,2-Dichloroethene	7.1	U
67-66-3	Chloroform	7.1	U
107-06-2	1,2-Dichloroethane	7.1	U
75-71-8	Dichlorodifluoromethane	7.1	U
74-88-4	Iodomethane	7.1	U
107-12-0	Propionitrile	7.1	U
107-05-1	Allyl chloride	140	U
78-93-3	2-Butanone	18	JB
71-55-6	1,1,1-Trichloroethane	7.1	U
56-23-5	Carbon Tetrachloride	7.1	U
108-05-4	Vinyl Acetate	7.1	U
75-27-4	Bromodichloromethane	7.1	U
78-87-5	1,2-Dichloropropane	7.1	U
10061-01-5	cis-1,3-Dichloropropene	7.1	U
79-01-6	Trichloroethene	7.1	U
71-43-2	Benzene	7.1	U
124-48-1	Dibromochloromethane	7.1	U
10061-02-6	trans-1,3-Dichloropropene	7.1	U
79-00-5	1,1,2-Trichloroethane	7.1	U
75-25-2	Bromoform	7.1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 23A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK124.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 30 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		7.1	U
74-95-3	Dibromomethane		7.1	U
106-93-4	1,2-Dibromoethane (EDB)		7.1	U
108-10-1	4-Methyl-2-Pentanone		71	U
591-78-6	2-Hexanone		71	U
127-18-4	Tetrachloroethene		7.1	U
79-34-5	1,1,2,2-Tetrachloroethane		7.1	U
108-88-3	Toluene		7.1	U
108-90-7	Chlorobenzene		7.1	U
100-41-4	Ethylbenzene		7.1	U
100-42-5	Styrene		7.1	U
108-38-3	m + p-Xylene		7.1	U
95-47-6	o-Xylene		7.1	U
80-62-6	Methyl methacrylate		7.1	U
630-20-6	1,1,1,2-Tetrachloroethane		7.1	U
96-18-4	1,2,3-Trichloropropane		7.1	U
110-57-6	trans-1,4-Dichloro-2-butene		36	U
97-63-2	Ethyl methacrylate		7.1	U
76-01-7	Pentachloroethane		7.1	U
96-12-8	1,2-Dibromo-3-chloropropane		7.1	U
78-83-1	Isobutyl Alcohol		7.1	U
126-99-8	Chloroprene	(TIC) *	7.1	U
	3-Chloroprene	(TIC)	7.1	U
123-91-1	1,4-Dioxane	(TIC)	1400	U
	Methylene Chloride - Dichloromethane			
	Methyl ethyl ketone - 2-Butanone			
	Chloroprene - 2-Chloro-1,3-butadiene			
	Propionitrile - Ethyl Cyanide			
* - Reported as semiquantitative analysis only.				

FORM I VOA

8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 23A
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 29.7
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510285-002
Lab Name: AENI
Contract: 9510285
Date Sampled: 10/25/95
Date Received: 10/26/95
Date Prepared: 11/02/95
Date Analyzed: 11/09/95
Time Analyzed: 21:18

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.40	U
RDX		0.48	U
TNB		0.33	U
TETRYL		0.35	U
DNB		0.27	U
TNT		0.31	U
2,6-DNT		0.34	U
2,4-DNT		0.27	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510285

Account #:——— MKC70

Client Name:——— MK CORP

Concentration:——— Low

Date Sampled:——— 10/25/95

Date Received:——— 10/26/95

Date Ext Prepared:— 11/2/95

Date Analyzed:——— 11/8/95

Conc/Dil Factor:——— 1

Method: ——— 8080

Sample Number
NSWC 16/16 23A

AENI # 9510285-002

GPC Cleanup | | Yes | X | No

Seperatory Funnel Extraction | | Yes

Continuous Liquid - Liquid Extraction | | Yes

Percent Moisture 29.7

Matric: SOIL

CAS Number	Co..pound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		2.4	U
319-85-7	beta-BHC		2.4	U
319-86-8	delta-BHC		2.4	U
58-89-9	gamma-BHC (Lindane)		4.7	U
75-44-8	Heptachlor		2.4	U
309-00-2	Aldrin		2.4	U
1024-57-3	Heptachlor epoxide		2.4	U
959-98-8	Endosulfan I		2.4	U
60-57-1	Dieldrin		4.7	U
75-55-9	4, 4'-DDE		4.7	U
72-20-8	Endrin		4.7	U
33213-65-9	Endosulfan II		4.7	U
72-54-8	4, 4'-DDD		4.7	U
1031-07-8	Endosulfan Sulfate		4.7	U
50-29-3	4, 4'-DDT	5.4	4.7	P
72-43-5	Methoxychlor		24	U
53494-70-5	Endrin Ketone		4.7	U
7421-36-3	Endrin aldehyde		4.7	U
57-74-9	Chlordane		47	U
8001-35-2	Toxaphene		240	U
12674-11-2	Aroclor-1016		47	U
11104-28-2	Aroclor-1221		94	U
11141-16-5	Aroclor-1232		47	U
53469-21-9	Aroclor-1242		47	U
12672-29-6	Aroclor-1248		47	U
11097-69-1	Aroclor-1254		47	U
11096-82-5	Aroclor-1260		47	U
510-15-6	Chlorobenzilate		94	U
2303-16-4	Diallate		471	U
465-73-6	Isodrin		12	U
143-50-0	Kepone		47	U
82-68-8	Pentachloronitrobenzene		9.4	U

Vi - Volume of extract injected (ul) - 1

Vs - Volume of Water extracted (ml) - N/A

Ws - Weight of sample extracted (g) - 30.2

Vt - Volume of total extract (ul) - 10,000

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U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 24A

Lab Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951028503

Level (low/med): LOW Date Received: 10/26/95

% Solids: 81.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.14			AV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7440-31-5	Tin				NR
7439-93-2	Lithium	11.4	U	N	P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

mments:

CLIENT_ID: NSWC_16/16_24A

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16 24A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #003

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK125.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 19 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	24	B
67-64-1	Acetone	38	JB
75-05-8	Acetonitrile	6.2	U
107-13-1	Acrylonitrile	1200	U
107-02-8	Acrolein	1200	U
75-69-4	Trichlorofluoromethane	6.2	U
75-15-0	Carbon Disulfide	6.2	U
75-35-4	1,1-Dichloroethene	6.2	U
75-34-4	1,1-Dichloroethane	6.2	U
540-59-0	trans-1,2-Dichloroethene	6.2	U
67-66-3	Chloroform	6.2	U
107-06-2	1,2-Dichloroethane	6.2	U
75-71-8	Dichlorodifluoromethane	6.2	U
74-88-4	Iodomethane	6.2	U
107-12-0	Propionitrile	6.2	U
107-05-1	Allyl chloride	120	U
78-93-3	2-Butanone	23	JB
71-55-6	1,1,1-Trichloroethane	6.2	U
56-23-5	Carbon Tetrachloride	6.2	U
108-05-4	Vinyl Acetate	6.2	U
75-27-4	Bromodichloromethane	6.2	U
78-87-5	1,2-Dichloropropane	6.2	U
10061-01-5	cis-1,3-Dichloropropene	6.2	U
79-01-6	Trichloroethene	6.2	U
71-43-2	Benzene	6.2	U
124-48-1	Dibromochloromethane	6.2	U
10061-02-6	trans-1,3-Dichloropropene	6.2	U
79-00-5	1,1,2-Trichloroethane	6.2	U
75-25-2	Bromoform	6.2	U

FORM I VOA 8260/Appendix IX

D-01885

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 24A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #003

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK125.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 19 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		6.2	U
74-95-3	Dibromomethane		6.2	U
106-93-4	1,2-Dibromoethane (EDB)		6.2	U
108-10-1	4-Methyl-2-Pentanone		62	U
591-78-6	2-Hexanone		62	U
127-18-4	Tetrachloroethene		4.7	J
79-34-5	1,1,2,2-Tetrachloroethane		6.2	U
108-88-3	Toluene		6.2	U
108-90-7	Chlorobenzene		6.2	U
100-41-4	Ethylbenzene		6.2	U
100-42-5	Styrene		6.2	U
108-38-3	m + p-Xylene		2.5	J
95-47-6	o-Xylene		6.2	U
80-62-6	Methyl methacrylate		6.2	U
630-20-6	1,1,1,2-Tetrachloroethane		6.2	U
96-18-4	1,2,3-Trichloropropane		6.2	U
110-57-6	trans-1,4-Dichloro-2-butene		31	U
97-63-2	Ethyl methacrylate		6.2	U
76-01-7	Pentachloroethane		6.2	U
96-12-8	1,2-Dibromo-3-chloropropane		6.2	U
78-83-1	Isobutyl Alcohol		6.2	U
126-99-8	Chloroprene	(TIC) *	6.2	U
	3-Chloroprene	(TIC)	6.2	U
123-91-1	1,4-Dioxane	(TIC)	1200	U
	Methylene Chloride - Dichloromethane			
	Methyl ethyl ketone - 2-Butanone			
	Chloroprene - 2-Chloro-1,3-butadiene			
	Propionitrile - Ethyl Cyanide			
* - Reported as semiquantitative analysis only.				

FORM I VOA 8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 24A
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 18.6
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510285-003
Lab Name: AENI
Contract: 9510285
Date Sampled: 10/25/95
Date Received: 10/26/95
Date Prepared: 11/02/95
Date Analyzed: 11/09/95
Time Analyzed: 22:12

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.33	U
RDX		0.41	U
TNB		0.27	U
TETRYL		0.30	U
DNB		0.23	U
TNT		0.26	U
2,6-DNT		0.29	U
2,4-DNT		0.23	U

00391

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510285

Account #:——— MKC70

Client Name:——— MK CORP

Sample Number
NSWC 16/16 24A

AENI # 9510285-003

Concentration:——— Low

Date Sampled:——— 10/25/95

Date Received:——— 10/26/95

Date Ext Prepared:— 11/2/95

Date Analyzed:——— 11/8/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	18.6	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		2.0	U
319-85-7	beta-BHC		2.0	U
319-86-8	delta-BHC		2.0	U
58-89-9	gamma-BHC (Lindane)		4.0	U
75-44-8	Heptachlor		2.0	U
309-00-2	Aldrin		2.0	U
1024-57-3	Heptachlor epoxide		2.0	U
959-98-8	Endosulfan I		2.0	U
60-57-1	Dieldrin		4.0	U
75-55-9	4, 4'-DDE		4.0	U
72-20-8	Endrin		4.0	U
33213-65-9	Endosulfan II		4.0	U
72-54-8	4, 4'-DDD		4.0	U
1031-07-8	Endosulfan Sulfate		4.0	U
50-29-3	4, 4'-DDT		4.0	U
72-43-5	Methoxychlor		20	U
53494-70-5	Endrin Ketone		4.0	U
7421-36-3	Endrin aldehyde		4.0	U
57-74-9	Chlordane		40	U
8001-35-2	Toxaphene		200	U
12674-11-2	Aroclor-1016		40	U
11104-28-2	Aroclor-1221		80	U
11141-16-5	Aroclor-1232		40	U
53469-21-9	Aroclor-1242		40	U
12672-29-6	Aroclor-1248		40	U
11097-69-1	Aroclor-1254		40	U
11096-82-5	Aroclor-1260		40	U
510-15-6	Chlorobenzilate		80	U
2303-16-4	Diallate		399	U
465-73-6	Isodrin		10.0	U
143-50-0	Kepone		40	U
82-68-8	Pentachloronitrobenzene		8.0	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.82

Vt - Volume of total extract (ul) - _____ 10,000

00392

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 25A

Lab Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951028504

Level (low/med): LOW Date Received: 10/26/95

% Solids: 81.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.10			AV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7440-31-5	Tin				NR
7439-93-2	Lithium	11.6	U	N	P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_25A

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MSWC 16/16 25A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #004

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK126.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 18 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	19	B
67-64-1	Acetone	11	JB
75-05-8	Acetonitrile	6.1	U
107-13-1	Acrylonitrile	1200	U
107-02-8	Acrolein	1200	U
75-69-4	Trichlorofluoromethane	6.1	U
75-15-0	Carbon Disulfide	6.1	U
75-35-4	1,1-Dichloroethene	6.1	U
75-34-4	1,1-Dichloroethane	6.1	U
540-59-0	trans-1,2-Dichloroethene	6.1	U
67-66-3	Chloroform	6.1	U
107-06-2	1,2-Dichloroethane	6.1	U
75-71-8	Dichlorodifluoromethane	6.1	U
74-88-4	Iodomethane	6.1	U
107-12-0	Propionitrile	6.1	U
107-05-1	Allyl chloride	120	U
78-93-3	2-Butanone	5.4	JB
71-55-6	1,1,1-Trichloroethane	6.1	U
56-23-5	Carbon Tetrachloride	6.1	U
108-05-4	Vinyl Acetate	6.1	U
75-27-4	Bromodichloromethane	6.1	U
78-87-5	1,2-Dichloropropane	6.1	U
10061-01-5	cis-1,3-Dichloropropene	6.1	U
79-01-6	Trichloroethene	6.1	U
71-43-2	Benzene	6.1	U
124-48-1	Dibromochloromethane	6.1	U
10061-02-6	trans-1,3-Dichloropropene	6.1	U
79-00-5	1,1,2-Trichloroethane	6.1	U
75-25-2	Bromoform	6.1	U

00834

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 25A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #004

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK126.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 18 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		6.1	U
74-95-3	Dibromomethane		6.1	U
106-93-4	1,2-Dibromoethane (EDB)		6.1	U
108-10-1	4-Methyl-2-Pentanone		61	U
591-78-6	2-Hexanone		61	U
127-18-4	Tetrachloroethene		6.1	U
79-34-5	1,1,2,2-Tetrachloroethane		6.1	U
108-88-3	Toluene		2.5	J
108-90-7	Chlorobenzene		6.1	U
100-41-4	Ethylbenzene		6.1	U
100-42-5	Styrene		6.1	U
108-38-3	m + p-Xylene		6.1	U
95-47-6	o-Xylene		6.1	U
80-62-6	Methyl methacrylate		6.1	U
630-20-6	1,1,1,2-Tetrachloroethane		6.1	U
96-18-4	1,2,3-Trichloropropane		6.1	U
110-57-6	trans-1,4-Dichloro-2-butene		30	U
97-63-2	Ethyl methacrylate		6.1	U
76-01-7	Pentachloroethane		6.1	U
96-12-8	1,2-Dibromo-3-chloropropane		6.1	U
78-83-1	Isobutyl Alcohol		6.1	U
126-99-8	Chloroprene	(TIC) *	6.1	U
	3-Chloroprene	(TIC)	6.1	U
123-91-1	1,4-Dioxane	(TIC)	1200	U
Methylene Chloride - Dichloromethane				
Methyl ethyl ketone - 2-Butanone				
Chloroprene - 2-Chloro-1,3-butadiene				
Propionitrile - Ethyl Cyanide				
* - Reported as semiquantitative analysis only.				

FORM I VOA 8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 25A
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 18.5
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510285-004
Lab Name: AENI
Contract: 9510285
Date Sampled: 10/25/95
Date Received: 10/26/95
Date Prepared: 11/02/95
Date Analyzed: 11/09/95
Time Analyzed: 23:05

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.34	U
RDX		0.41	U
TNB		0.28	U
TETRYL		0.30	U
DNB		0.23	U
TNT		0.27	U
2,6-DNT		0.29	U
2,4-DNT		0.23	U

D- 00396

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510285

Account #:——— MKC70

Client Name:——— MK CORP

Sample Number
NSWC 16/16 25A

AENI # 9510285-004

Concentration:——— Low

Date Sampled:——— 10/25/95

Date Received:——— 10/26/95

Date Ext Prepared:— 11/2/95

Date Analyzed:——— 11/8/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	18.5	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		2.0	U
319-85-7	beta-BHC		2.0	U
319-86-8	delta-BHC		2.0	U
58-89-9	gamma-BHC (Lindane)		4.0	U
75-44-8	Heptachlor		2.0	U
309-00-2	Aldrin		2.0	U
1024-57-3	Heptachlor epoxide		2.0	U
959-98-8	Endosulfan I		2.0	U
60-57-1	Dieldrin		4.0	U
75-55-9	4, 4'-DDE		4.0	U
72-20-8	Endrin		4.0	U
33213-65-9	Endosulfan II		4.0	U
72-54-8	4, 4'-DDD		4.0	U
1031-07-8	Endosulfan Sulfate		4.0	U
50-29-3	4, 4'-DDT		4.0	U
72-43-5	Methoxychlor		20	U
53494-70-5	Endrin Ketone		4.0	U
7421-36-3	Endrin aldehyde		4.0	U
57-74-9	Chlordane		40	U
8001-35-2	Toxaphene		200	U
12674-11-2	Aroclor-1016		40	U
11104-28-2	Aroclor-1221		80	U
11141-16-5	Aroclor-1232		40	U
53469-21-9	Aroclor-1242		40	U
12672-29-6	Aroclor-1248		40	U
11097-69-1	Aroclor-1254		40	U
11096-82-5	Aroclor-1260		40	U
510-15-6	Chlorobenzilate		80	U
2303-16-4	Diallate		400	U
465-73-6	Isodrin		10.0	U
143-50-0	Kepone		40	U
82-68-8	Pentachloronitrobenzene		8.0	U

Vi - Volume of extract injected (ul) - 1

Vs - Volume of Water extracted (ml) - N/A

Ws - Weight of sample extracted (g) - 30.71

Vt - Volume of total extract (ul) - 10,000

D- 00397

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 26A

Lab Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951028505

Level (low/med): LOW Date Received: 10/26/95

% Solids: 84.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.13			AV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7440-31-5	Tin				NR
7439-93-2	Lithium	11.4	U	N	P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

ments:

CLIENT_ID: NSWC_16/16_26A

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 26A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #005

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK127.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 16 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	19	B
67-64-1	Acetone	27	JB
75-05-8	Acetonitrile	6	U
107-13-1	Acrylonitrile	1200	U
107-02-8	Acrolein	1200	U
75-69-4	Trichlorofluoromethane	6	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-4	1,1-Dichloroethane	6	U
540-59-0	trans-1,2-Dichloroethene	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
75-71-8	Dichlorodifluoromethane	6	U
74-88-4	Iodomethane	6	U
107-12-0	Propionitrile	6	U
107-05-1	Allyl chloride	120	U
78-93-3	2-Butanone	15	JB
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	6	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
71-43-2	Benzene	6	U
124-48-1	Dibromochloromethane	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-00-5	1,1,2-Trichloroethane	6	U
75-25-2	Bromoform	6	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16 26A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #005

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK127.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 16 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		6	U
74-95-3	Dibromomethane		6	U
106-93-4	1,2-Dibromoethane (EDB)		6	U
108-10-1	4-Methyl-2-Pentanone		60	U
591-78-6	2-Hexanone		60	U
127-18-4	Tetrachloroethene		6	U
79-34-5	1,1,2,2-Tetrachloroethane		6	U
108-88-3	Toluene		6	U
108-90-7	Chlorobenzene		6	U
100-41-4	Ethylbenzene		6	U
100-42-5	Styrene		6	U
108-38-3	m + p-Xylene		6	U
95-47-6	o-Xylene		6	U
80-62-6	Methyl methacrylate		6	U
630-20-6	1,1,1,2-Tetrachloroethane		6	U
96-18-4	1,2,3-Trichloropropane		6	U
110-57-6	trans-1,4-Dichloro-2-butene		30	U
97-63-2	Ethyl methacrylate		6	U
76-01-7	Pentachloroethane		6	U
96-12-8	1,2-Dibromo-3-chloropropane		6	U
78-83-1	Isobutyl Alcohol		6	U
126-99-8	Chloroprene	(TIC) *	6	U
	3-Chloroprene	(TIC)	6	U
123-91-1	1,4-Dioxane	(TIC)	1200	U
	Methylene Chloride = Dichloromethane			
	Methyl ethyl ketone = 2-Butanone			
	Chloroprene = 2-Chloro-1,3-butadiene			
	Propionitrile = Ethyl Cyanide			
* = Reported as semiquantitative analysis only.				

FORM I VOA 8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 26A
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 15.5
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510285-005
Lab Name: AENI
Contract: 9510285
Date Sampled: 10/25/95
Date Received: 10/26/95
Date Prepared: 11/02/95
Date Analyzed: 11/10/95
Time Analyzed: 23:58

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.32	U
RDX		0.39	U
TNB		0.26	U
TETRYL		0.28	U
DNB		0.22	U
TNT		0.25	U
2,6-DNT		0.27	U
2,4-DNT		0.22	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510285

Account #:——— MKC70

Client Name:——— MK CORP

Sample Number
NSWC 16/16 26A

AENI # 9510285-005

Concentration:——— Low

Date Sampled:——— 10/25/95

Date Received:——— 10/26/95

Date Ext Prepared:— 11/2/95

Date Analyzed:——— 11/8/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	15.5	
Matrix:	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.9	U
319-85-7	beta-BHC		1.9	U
319-86-8	delta-BHC		1.9	U
58-89-9	gamma-BHC (Lindane)		3.9	U
76-44-8	Heptachlor		1.9	U
309-00-2	Aldrin		1.9	U
1024-57-3	Heptachlor epoxide		1.9	U
959-98-8	Endosulfan I		1.9	U
60-57-1	Dieldrin		3.9	U
75-55-9	4, 4'-DDE		3.9	U
72-20-8	Endrin		3.9	U
33213-65-9	Endosulfan II		3.9	U
72-54-8	4, 4'-DDD	4.1	3.9	
1031-07-8	Endosulfan Sulfate		3.9	U
50-29-3	4, 4'-DDT		3.9	U
72-43-5	Methoxychlor		19	U
53494-70-5	Endrin Ketone		3.9	U
7421-36-3	Endrin aldehyde		3.9	U
57-74-9	Chlordane		39	U
8001-35-2	Toxaphene		190	U
12674-11-2	Aroclor-1016		39	U
11104-28-2	Aroclor-1221		77	U
11141-16-5	Aroclor-1232		39	U
53469-21-9	Aroclor-1242		39	U
12672-29-6	Aroclor-1248		39	U
11097-69-1	Aroclor-1254		39	U
11096-82-5	Aroclor-1260		39	U
510-15-6	Chlorobenzilate		77	U
2303-16-4	Diallate		386	U
465-73-6	Isodrin		9.7	U
143-50-0	Kepone		39	U
82-68-8	Pentachloronitrobenzene		7.7	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.84

Vt - Volume of total extract (ul) - _____ 10,000

D- 04402

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 27A

Lab Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951028506

Level (low/med): LOW Date Received: 10/26/95

% Solids: 80.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.12	U		AV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7440-31-5	Tin				NR
7439-93-2	Lithium	12.4	U	N	P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_27A

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 27A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #006

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK128.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 20 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	18	B
67-64-1	Acetone	22	JB
75-05-8	Acetonitrile	6.3	U
107-13-1	Acrylonitrile	1300	U
107-02-8	Acrolein	1300	U
75-69-4	Trichlorofluoromethane	6.3	U
75-15-0	Carbon Disulfide	6.3	U
75-35-4	1,1-Dichloroethene	6.3	U
75-34-4	1,1-Dichloroethane	6.3	U
540-59-0	trans-1,2-Dichloroethene	6.3	U
67-66-3	Chloroform	6.3	U
107-06-2	1,2-Dichloroethane	6.3	U
75-71-8	Dichlorodifluoromethane	6.3	U
74-88-4	Iodomethane	6.3	U
107-12-0	Propionitrile	6.3	U
107-05-1	Allyl chloride	130	U
78-93-3	2-Butanone	15	JB
71-55-6	1,1,1-Trichloroethane	6.3	U
56-23-5	Carbon Tetrachloride	6.3	U
108-05-4	Vinyl Acetate	6.3	U
75-27-4	Bromodichloromethane	6.3	U
78-87-5	1,2-Dichloropropane	6.3	U
10061-01-5	cis-1,3-Dichloropropene	6.3	U
79-01-6	Trichloroethene	6.3	U
71-43-2	Benzene	6.3	U
124-48-1	Dibromochloromethane	6.3	U
10061-02-6	trans-1,3-Dichloropropene	6.3	U
79-00-5	1,1,2-Trichloroethane	6.3	U
75-25-2	Bromoform	6.3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
[redacted]SWC 16/16 27A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: [redacted]006

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK128.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 20 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	6.3	U
74-95-3	Dibromomethane	6.3	U
106-93-4	1,2-Dibromoethane (EDB)	6.3	U
108-10-1	4-Methyl-2-Pentanone	63	U
591-78-6	2-Hexanone	63	U
127-18-4	Tetrachloroethene	6.3	U
79-34-5	1,1,2,2-Tetrachloroethane	6.3	U
108-88-3	Toluene	6.3	U
108-90-7	Chlorobenzene	6.3	U
100-41-4	Ethylbenzene	6.3	U
100-42-5	Styrene	6.3	U
108-38-3	m + p-Xylene	6.3	U
95-47-6	o-Xylene	6.3	U
80-62-6	Methyl methacrylate	6.3	U
630-20-6	1,1,1,2-Tetrachloroethane	6.3	U
96-18-4	1,2,3-Trichloropropane	6.3	U
110-57-6	trans-1,4-Dichloro-2-butene	31	U
97-63-2	Ethyl methacrylate	6.3	U
76-01-7	Pentachloroethane	6.3	U
96-12-8	1,2-Dibromo-3-chloropropane	6.3	U
78-83-1	Isobutyl Alcohol	6.3	U
126-99-8	Chloroprene (TIC) *	6.3	U
	3-Chloroprene (TIC)	6.3	U
123-91-1	1,4-Dioxane (TIC)	1300	U
	Methylene Chloride - Dichloromethane		
	Methyl ethyl ketone - 2-Butanone		
	Chloroprene - 2-Chloro-1,3-butadiene		
	Propionitrile - Ethyl Cyanide		
	* - Reported as semiquantitative analysis only.		

FORM I VOA 8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 27A
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 19.6
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510285-006
Lab Name: AENI
Contract: 9510285
Date Sampled: 10/25/95
Date Received: 10/26/95
Date Prepared: 11/02/95
Date Analyzed: 11/10/95
Time Analyzed: 0:51

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.33	U
RDX		0.40	U
TNB		0.27	U
TETRYL		0.30	U
DNB		0.23	U
TNT		0.26	U
2,6-DNT		0.29	U
2,4-DNT		0.23	U

D- 00406

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510285
Account #:——— MKC70
Client Name:——— MK CORP

Sample Number
NSWC 16/16 27A

AENI # 9510285-006

Concentration:——— Low
Date Sampled:——— 10/25/95
Date Received:——— 10/26/95
Date Ext Prepared:——— 11/2/95
Date Analyzed:——— 11/8/95
Conc/Dil Factor:——— 1
Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	19.6	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		2.0	U
319-85-7	beta-BHC		2.0	U
319-86-8	delta-BHC		2.0	U
58-89-9	gamma-BHC (Lindane)		4.1	U
76-44-8	Heptachlor		2.0	U
309-00-2	Aldrin		2.0	U
1024-57-3	Heptachlor epoxide		2.0	U
959-98-8	Endosulfan I		2.0	U
60-57-1	Dieldrin		4.1	U
75-55-9	4, 4'-DDE		4.1	U
72-20-8	Endrin		4.1	U
33213-65-9	Endosulfan II		4.1	U
72-54-8	4, 4'-DDD		4.1	U
1031-07-8	Endosulfan Sulfate		4.1	U
50-29-3	4, 4'-DDT		4.1	U
72-43-5	Methoxychlor		20	U
53494-70-5	Endrin Ketone		4.1	U
7421-36-3	Endrin aldehyde		4.1	U
57-74-9	Chlordane		41	U
8001-35-2	Toxaphene		200	U
12674-11-2	Aroclor-1016		41	U
11104-28-2	Aroclor-1221		82	U
11141-16-5	Aroclor-1232		41	U
53469-21-9	Aroclor-1242		41	U
12672-29-6	Aroclor-1248		41	U
11097-69-1	Aroclor-1254		41	U
11096-82-5	Aroclor-1260		41	U
510-15-6	Chlorobenzilate		82	U
2303-16-4	Diallate		408	U
465-73-6	Isodrin		10	U
143-50-0	Kepone		41	U
82-68-8	Pentachloronitrobenzene		8.2	U

Vi - Volume of extract injected (ul) - _____ 1
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.46
Vt - Volume of total extract (ul) - _____ 10,000

L-00407

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 28A

Lab Name: AENI

Lab Code:

Case No.: MKC70

Contract: 9510285

SAS No.:

SDG No.: 16/16

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids: 87.

Lab Sample ID: 951028507

Date Received: 10/26/95

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.11	U		NR
7440-02-0	Nickel				AV
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7440-31-5	Tin				NR
7439-93-2	Lithium	10.8	U	N	P

Color Before:

Color After:

Clarity Before:

Clarity After:

Texture:

Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_28A

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 28A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #007

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK129.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 13 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	21	B
67-64-1	Acetone	13	JB
75-05-8	Acetonitrile	5.7	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.7	U
75-15-0	Carbon Disulfide	5.7	U
75-35-4	1,1-Dichloroethene	5.7	U
75-34-4	1,1-Dichloroethane	5.7	U
540-59-0	trans-1,2-Dichloroethene	5.7	U
67-66-3	Chloroform	5.7	U
107-06-2	1,2-Dichloroethane	5.7	U
75-71-8	Dichlorodifluoromethane	5.7	U
74-88-4	Iodomethane	5.7	U
107-12-0	Propionitrile	5.7	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	9.8	JB
71-55-6	1,1,1-Trichloroethane	5.7	U
56-23-5	Carbon Tetrachloride	5.7	U
108-05-4	Vinyl Acetate	5.7	U
75-27-4	Bromodichloromethane	5.7	U
78-87-5	1,2-Dichloropropane	5.7	U
10061-01-5	cis-1,3-Dichloropropene	5.7	U
79-01-6	Trichloroethene	5.7	U
71-43-2	Benzene	5.7	U
124-48-1	Dibromochloromethane	5.7	U
10061-02-6	trans-1,3-Dichloropropene	5.7	U
79-00-5	1,1,2-Trichloroethane	5.7	U
75-25-2	Bromoform	5.7	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MSWC 16/16 28A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #007

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK129.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 13 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	5.7	U
74-95-3	Dibromomethane	5.7	U
106-93-4	1,2-Dibromoethane (EDB)	5.7	U
108-10-1	4-Methyl-2-Pentanone	57	U
591-78-6	2-Hexanone	57	U
127-18-4	Tetrachloroethene	5.7	U
79-34-5	1,1,2,2-Tetrachloroethane	5.7	U
108-88-3	Toluene	5.7	U
108-90-7	Chlorobenzene	5.7	U
100-41-4	Ethylbenzene	5.7	U
100-42-5	Styrene	5.7	U
108-38-3	m + p-Xylene	2.3	J
95-47-6	o-Xylene	5.7	U
80-62-6	Methyl methacrylate	5.7	U
630-20-6	1,1,1,2-Tetrachloroethane	5.7	U
96-18-4	1,2,3-Trichloropropane	5.7	U
110-57-6	trans-1,4-Dichloro-2-butene	29	U
97-63-2	Ethyl methacrylate	5.7	U
76-01-7	Pentachloroethane	5.7	U
96-12-8	1,2-Dibromo-3-chloropropane	5.7	U
78-83-1	Isobutyl Alcohol	5.7	U
126-99-8	Chloroprene (TIC) *	5.7	U
	3-Chloroprene (TIC)	5.7	U
123-91-1	1,4-Dioxane (TIC)	1100	U
	Methylene Chloride - Dichloromethane		
	Methyl ethyl ketone - 2-Butanone		
	Chloroprene - 2-Chloro-1,3-butadiene		
	Propionitrile - Ethyl Cyanide		
* - Reported as semiquantitative analysis only.			

FORM I VOA

8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 28A
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 13
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510285-007
Lab Name: AENI
Contract: 9510285
Date Sampled: 10/25/95
Date Received: 10/26/95
Date Prepared: 11/02/95
Date Analyzed: 11/10/95
Time Analyzed: 1:45

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.32	U
RDX		0.39	U
TNB		0.26	U
TETRYL		0.28	U
DNB		0.22	U
TNT		0.25	U
2,6-DNT		0.27	U
2,4-DNT		0.22	U

2-00411

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Sample Number
NSWC 16/16 28A

Case No.:——— 9510285

Account #:——— MKC70

Client Name:——— MK CORP

AENI # 9510285-007

Concentration:——— Low

Date Sampled:——— 10/25/95

Date Received:——— 10/26/95

Date Ext Prepared:—— 11/2/95

Date Analyzed:——— 11/8/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup | | Yes | X | No

Seperatory Funnel Extraction | | Yes

Continuous Liquid - Liquid Extraction | | Yes

Percent Moisture 13

Matrix: SOIL

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.9	U
319-85-7	beta-BHC		1.9	U
319-86-8	delta-BHC		1.9	U
58-89-9	gamma-BHC (Lindane)		3.8	U
75-44-8	Heptachlor	2.3	1.9	P
309-00-2	Aldrin		1.9	U
1024-57-3	Heptachlor epoxide		1.9	U
959-98-8	Endosulfan I		1.9	U
60-57-1	Dieldrin	12	3.8	P
75-55-9	4, 4'-DDE		3.8	U
72-20-8	Endrin	5.5	3.8	
33213-65-9	Endosulfan II		3.8	U
72-54-8	4, 4'-DDD		3.8	U
1031-07-8	Endosulfan Sulfate		3.8	U
50-29-3	4, 4'-DDT		3.8	U
72-43-5	Methoxychlor		19	U
53494-70-5	Endrin Ketone		3.8	U
7421-36-3	Endrin aldehyde		3.8	U
57-74-9	Chlordane		38	U
8001-35-2	Toxaphene		190	U
12674-11-2	Aroclor-1016		38	U
11104-28-2	Aroclor-1221		76	U
11141-16-5	Aroclor-1232		38	U
53469-21-9	Aroclor-1242		38	U
12672-29-6	Aroclor-1248		38	U
11097-69-1	Aroclor-1254		38	U
11096-82-5	Aroclor-1260		38	U
510-15-6	Chlorobenzilate		76	U
2303-16-4	Diallate		378	U
465-73-6	Isodrin		9.4	U
143-50-0	Kepone		38	U
82-68-8	Pentachloronitrobenzene		7.6	U

Vi - Volume of extract injected (ul) - 1

Vs - Volume of Water extracted (ml) - N/A

Ws - Weight of sample extracted (g) - 30.43

Vt - Volume of total extract (ul) - 10,000

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 29A

Lab Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951028508

Level (low/med): LOW Date Received: 10/26/95

% Solids: 84.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.12	U		AV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7440-31-5	Tin				NR
7439-93-2	Lithium	10.9	U	N	P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_29A

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16 29A

Lab Name: AENI
Contract: 9510285
Project No.: MKC70
Site:
Location:
Group:
Matrix: (soil/water) SOIL
Lab Sample ID: #008
Sample wt/vol: 5.0 (g/mL) G
Lab File ID: FK130.D
Level: (low/med) LOW
Date Received: 10/26/95
% Moisture: not dec. 16
Date Analyzed: 11/8/95
GC Column: CAP
ID: 0.53 (mm)
Dilution Factor: 1.0
Soil Extract Volume: 1 (uL)
Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	25	B
67-64-1	Acetone	27	JB
75-05-8	Acetonitrile	6	U
107-13-1	Acrylonitrile	1200	U
107-02-8	Acrolein	1200	U
75-69-4	Trichlorofluoromethane	6	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-4	1,1-Dichloroethane	6	U
540-59-0	trans-1,2-Dichloroethene	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
75-71-8	Dichlorodifluoromethane	6	U
74-88-4	Iodomethane	6	U
107-12-0	Propionitrile	6	U
107-05-1	Allyl chloride	120	U
78-93-3	2-Butanone	24	JB
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	6	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
71-43-2	Benzene	6	U
124-48-1	Dibromochloromethane	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-00-5	1,1,2-Trichloroethane	6	U
75-25-2	Bromoform	6	U

FORM I VOA
8260/Appendix IX

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 29A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #008

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK130.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 16 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	6	U
74-95-3	Dibromomethane	6	U
106-93-4	1,2-Dibromoethane (EDB)	6	U
108-10-1	4-Methyl-2-Pentanone	60	U
591-78-6	2-Hexanone	60	U
127-18-4	Tetrachloroethene	4.5	J
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
108-38-3	m + p-Xylene	5.2	J
95-47-6	o-Xylene	6	U
80-62-6	Methyl methacrylate	6	U
630-20-6	1,1,1,2-Tetrachloroethane	6	U
96-18-4	1,2,3-Trichloropropane	6	U
110-57-6	trans-1,4-Dichloro-2-butene	30	U
97-63-2	Ethyl methacrylate	6	U
76-01-7	Pentachloroethane	6	U
96-12-8	1,2-Dibromo-3-chloropropane	6	U
78-83-1	Isobutyl Alcohol	6	U
126-99-8	Chloroprene (TIC) *	6	U
	3-Chloroprene (TIC)	6	U
123-91-1	1,4-Dioxane (TIC)	1200	U
	Methylene Chloride - Dichloromethane		
	Methyl ethyl ketone - 2-Butanone		
	Chloroprene - 2-Chloro-1,3-butadiene		
	Propionitrile - Ethyl Cyanide		
	* - Reported as semiquantitative analysis only.		

FORM I VOA 8260/Appendix IX

D 00445

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 29A
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 15.6
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510285-008
Lab Name: AENI
Contract: 9510285
Date Sampled: 10/25/95
Date Received: 10/26/95
Date Prepared: 11/02/95
Date Analyzed: 11/10/95
Time Analyzed: 2:38

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.33	U
RDX		0.40	U
TNB		0.27	U
TETRYL		0.29	U
DNB		0.22	U
TNT		0.26	U
2,6-DNT		0.28	U
2,4-DNT		0.22	U

D 00416

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510285

Account #:——— MKC70

Client Name:——— MK CORP

Sample Number
NSWC 16/16 29A

AENI # 9510285-008

Concentration:——— Low

Date Sampled:——— 10/25/95

Date Received:——— 10/26/95

Date Ext Prepared:——— 11/2/95

Date Analyzed:——— 11/8/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	15.6	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		2.0	U
319-85-7	beta-BHC		2.0	U
319-86-8	delta-BHC		2.0	U
58-89-9	gamma-BHC (Lindane)		3.9	U
75-44-8	Heptachlor		2.0	U
309-00-2	Aldrin		2.0	U
1024-57-3	Heptachlor epoxide		2.0	U
959-98-8	Endosulfan I		2.0	U
60-57-1	Dieldrin		3.9	U
75-55-9	4, 4'-DDE		3.9	U
72-20-8	Endrin		3.9	U
33213-65-9	Endosulfan II		3.9	U
72-54-8	4, 4'-DDD		3.9	U
1031-07-8	Endosulfan Sulfate		3.9	U
50-29-3	4, 4'-DDT		3.9	U
72-43-5	Methoxychlor		20	U
53494-70-5	Endrin Ketone		3.9	U
7421-36-3	Endrin aldehyde		3.9	U
57-74-9	Chlordane		39	U
8001-35-2	Toxaphene		200	U
12674-11-2	Aroclor-1016		39	U
11104-28-2	Aroclor-1221		79	U
11141-16-5	Aroclor-1232		39	U
53469-21-9	Aroclor-1242		39	U
12672-29-6	Aroclor-1248		39	U
11097-69-1	Aroclor-1254		39	U
11096-82-5	Aroclor-1260		39	U
510-15-6	Chlorobenzilate		79	U
2303-16-4	Diallate		393	U
465-73-6	Isodrin		9.8	U
143-50-0	Kepone		39	U
82-68-8	Pentachloronitrobenzene		7.9	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.15

Vt - Volume of total extract (ul) - _____ 10,000

D-00477

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 30A

Lab Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951028509

Level (low/med): LOW Date Received: 10/26/95

% Solids: 68.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7440-31-5	Tin				NR
7439-93-2	Lithium	14.0	U	N	P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

mments:

CLIENT_ID: NSWC_16/16_30A

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16 30A

Contract: 9510285

Lab Name: [illegible]

Project No.: [illegible]70 Site: Location: Group:

Matrix: SOIL Lab Sample ID: #009

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK131.D

Level: LOW Date Received: 10/26/95

% Moisture: dec. 32 Date Analyzed: 11/8/95

GC Column: ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Vol.: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS #	Compound		Q
74 [illegible]	Chloromethane	15	U
74 [illegible]	Bromomethane	15	U
75 [illegible]	Vinyl Chloride	15	U
75 [illegible]	Chloroethane	15	U
75 [illegible]	Methylene Chloride	36	B
75 [illegible]	Acetone	28	JB
5[illegible]	Acetonitrile	7.4	U
75 [illegible]	Acrylonitrile	1500	U
10[illegible]	Acrolein	1500	U
10[illegible]	Trichlorofluoromethane	7.4	U
75 [illegible]	Carbon Disulfide	7.4	U
[illegible]	1,1-Dichloroethene	7.4	U
[illegible]	1,1-Dichloroethane	7.4	U
[illegible]	trans-1,2-Dichloroethene	7.4	U
5[illegible]	Chloroform	7.4	U
[illegible]	1,2-Dichloroethane	7.4	U
[illegible]	Dichlorodifluoromethane	7.4	U
[illegible]	Iodomethane	7.4	U
[illegible]	Propionitrile	7.4	U
[illegible]	Allyl chloride	150	U
[illegible]	2-Butanone	13	JB
[illegible]	1,1,1-Trichloroethane	7.4	U
[illegible]	Carbon Tetrachloride	7.4	U
5[illegible]	Vinyl Acetate	7.4	U
[illegible]	Bromodichloromethane	7.4	U
[illegible]	1,2-Dichloropropane	7.4	U
[illegible]1-5	cis-1,3-Dichloropropene	7.4	U
[illegible]	Trichloroethene	7.4	U
[illegible]	Benzene	7.4	U
[illegible]	Dibromochloromethane	7.4	U
[illegible]2-6	trans-1,3-Dichloropropene	7.4	U
[illegible]	1,1,2-Trichloroethane	7.4	U
[illegible]	Bromoform	7.4	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SWC 18/16 30A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix (soil/water) SOIL Lab Sample ID: #009

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK131.D

Level (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 32 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		7.4	U
74-95-3	Dibromomethane		7.4	U
106-93-4	1,2-Dibromoethane (EDB)		7.4	U
108-10-1	4-Methyl-2-Pentanone		74	U
591-78-6	2-Hexanone		74	U
127-18-4	Tetrachloroethene		7.4	U
79-34-5	1,1,2,2-Tetrachloroethane		7.4	U
108-88-3	Toluene		7.4	U
108-90-7	Chlorobenzene		7.4	U
100-41-4	Ethylbenzene		7.4	U
100-42-5	Styrene		7.4	U
108-38-3	m + p-Xylene		5.2	J
95-47-6	o-Xylene		7.4	U
80-62-6	Methyl methacrylate		7.4	U
630-20-6	1,1,1,2-Tetrachloroethane		7.4	U
96-18-4	1,2,3-Trichloropropane		7.4	U
110-57-6	trans-1,4-Dichloro-2-butene		37	U
97-63-2	Ethyl methacrylate		7.4	U
76-01-7	Pentachloroethane		7.4	U
96-12-8	1,2-Dibromo-3-chloropropane		7.4	U
78-83-1	Isobutyl Alcohol		7.4	U
126-99-8	Chloroprene	(TIC) *	7.4	U
	3-Chloroprene	(TIC)	7.4	U
123-91-1	1,4-Dioxane	(TIC)	1500	U
	Methylene Chloride - Dichloromethane			
	Methyl ethyl ketone - 2-Butanone			
	Chloroprene - 2-Chloro-1,3-butadiene			
	Propionitrile - Ethyl Cyanide			
* - Reported as semiquantitative analysis only.				

FORM I VOA

8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 30A
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 31.7
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510285-009
Lab Name: AENI
Contract: 9510285
Date Sampled: 10/25/95
Date Received: 10/26/95
Date Prepared: 11/02/95
Date Analyzed: 11/10/95
Time Analyzed: 3:31

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.39	U
RDX		0.47	U
TNB		0.32	U
TETRYL		0.35	U
DNB		0.26	U
TNT		0.31	U
2,6-DNT		0.33	U
2,4-DNT		0.26	U

D-06421

Form I

AMERICAN ENVIRONMENTAL NETWORK

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510285

Account #:——— MKC70

Client Name:——— MK CORP

Sample Number
NSWC 16/16 30A

AENI # 9510285-009

Concentration:——— Low

Date Sampled:——— 10/25/95

Date Received:——— 10/26/95

Date Ext Prepared:——— 11/2/95

Date Analyzed:——— 11/8/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC [illegible] | | Yes | X | No

Sepe[illegible] Funnel Extraction | | Yes

Contin[illegible] Liquid - Liquid Extraction | | Yes

Percent[illegible]ture 31.7

Matrix SOIL

CAS Number	Compound	Concentration ug/Kg	[illegible]tion [illegible]	Qualifier
319-84-6	alpha-BHC		2.4	U
319-85-7	beta-BHC		2.4	U
319-86-8	delta-BHC		2.4	U
58-89-9	gamma-BHC (Lindane)		4.8	U
76-44-8	Heptachlor		2.4	U
309-00-2	Aldrin		2.4	U
1024-57-3	Heptachlor epoxide		2.4	U
959-98-8	Endosulfan I		2.4	U
60-57-1	Dieldrin		4.8	U
72-55-9	4, 4'-DDE		4.8	U
72-20-8	Endrin		4.8	U
33213-65-9	Endosulfan II		4.8	U
72-54-8	4, 4'-DDD		4.8	U
1031-07-8	Endosulfan Sulfate		4.8	U
50-29-3	4, 4'-DDT		4.8	U
72-43-5	Methoxychlor		24	U
53494-70-5	Endrin Ketone		4.8	U
7421-36-3	Endrin aldehyde		4.8	U
57-74-9	Chlordane		48	U
8001-35-2	Toxaphene		240	U
12674-11-2	Aroclor-1016		48	U
11104-28-2	Aroclor-1221		48	U
11141-16-5	Aroclor-1232		48	U
53469-21-9	Aroclor-1242		48	U
12672-29-6	Aroclor-1248		48	U
11097-69-1	Aroclor-1254		48	U
11096-82-5	Aroclor-1260		48	U
510-15-6	Chlorobenzilate		48	U
2303-16-4	Diallate		478	U
465-73-6	Isodrin		12	U
143-50-0	Kepone		48	U
82-68-8	Pentachloronitrobenzene		9.5	U

Vi - Volume of extract injected (ul) - 1

Vs - Volume of Water extracted (ml) - N/A

Ws - Weight of sample extracted (g) - 30.61

Vt - Volume of total extract (ul) - 10,000

D- 00422

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 32A

Lab Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951028510

Level (low/med): LOW Date Received: 10/26/95

% Solids: 70.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.14	U		AV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7440-31-5	Tin				NR
7439-93-2	Lithium	16.3		N	P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_32A

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 32A

Lab Name: AENI

Contract: 9510285

Project No.: MKC70

Site:

Location:

Group:

Matrix: (soil/water) SOIL

Lab Sample ID: #010

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: FK132.D

Level: (low/med) LOW

Date Received: 10/26/95

% Moisture: not dec. 30

Date Analyzed: 11/8/95

GC Column: CAP

ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: 1 (uL)

Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	16	B
67-64-1	Acetone	19	JB
75-05-8	Acetonitrile	7.1	U
107-13-1	Acrylonitrile	1400	U
107-02-8	Acrolein	1400	U
75-69-4	Trichlorofluoromethane	7.1	U
75-15-0	Carbon Disulfide	7.1	U
75-35-4	1,1-Dichloroethene	7.1	U
75-34-4	1,1-Dichloroethane	7.1	U
540-59-0	trans-1,2-Dichloroethene	7.1	U
67-66-3	Chloroform	7.1	U
107-06-2	1,2-Dichloroethane	7.1	U
75-71-8	Dichlorodifluoromethane	7.1	U
74-88-4	Iodomethane	7.1	U
107-12-0	Propionitrile	7.1	U
107-05-1	Allyl chloride	140	U
78-93-3	2-Butanone	11	JB
71-55-6	1,1,1-Trichloroethane	7.1	U
56-23-5	Carbon Tetrachloride	7.1	U
108-05-4	Vinyl Acetate	7.1	U
75-27-4	Bromodichloromethane	7.1	U
78-87-5	1,2-Dichloropropane	7.1	U
10061-01-5	cis-1,3-Dichloropropene	7.1	U
79-01-6	Trichloroethene	7.1	U
71-43-2	Benzene	7.1	U
124-48-1	Dibromochloromethane	7.1	U
10061-02-6	trans-1,3-Dichloropropene	7.1	U
79-00-5	1,1,2-Trichloroethane	7.1	U
75-25-2	Bromoform	7.1	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
MSWC 16/16 32A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #010

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK132.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 30 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	7.1	U
74-95-3	Dibromomethane	7.1	U
106-93-4	1,2-Dibromoethane (EDB)	7.1	U
108-10-1	4-Methyl-2-Pentanone	71	U
591-78-6	2-Hexanone	71	U
127-18-4	Tetrachloroethene	7.1	U
79-34-5	1,1,2,2-Tetrachloroethane	7.1	U
108-88-3	Toluene	7.1	U
108-90-7	Chlorobenzene	7.1	U
100-41-4	Ethylbenzene	7.1	U
100-42-5	Styrene	7.1	U
108-38-3	m + p-Xylene	9.9	
95-47-6	o-Xylene	3.6	J
80-62-6	Methyl methacrylate	7.1	U
630-20-6	1,1,1,2-Tetrachloroethane	7.1	U
96-18-4	1,2,3-Trichloropropane	7.1	U
110-57-6	trans-1,4-Dichloro-2-butene	36	U
97-63-2	Ethyl methacrylate	7.1	U
76-01-7	Pentachloroethane	7.1	U
96-12-8	1,2-Dibromo-3-chloropropane	7.1	U
78-83-1	Isobutyl Alcohol	7.1	U
126-99-8	Chloroprene (TIC) *	7.1	U
	3-Chloroprene (TIC)	7.1	U
123-91-1	1,4-Dioxane (TIC)	1400	U
	Methylene Chloride = Dichloromethane		
	Methyl ethyl ketone = 2-Butanone		
	Chloroprene = 2-Chloro-1,3-butadiene		
	Propionitrile = Ethyl Cyanide		
	* = Reported as semiquantitative analysis only.		

FORM I VOA

8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 32A
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 29.8
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510285-010
Lab Name: AENI
Contract: 9510285
Date Sampled: 10/25/95
Date Received: 10/26/95
Date Prepared: 11/02/95
Date Analyzed: 11/10/95
Time Analyzed: 5:18

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.39	U
RDX		0.47	U
TNB		0.32	U
TETRYL		0.35	U
DNB		0.26	U
TNT		0.31	U
2,6-DNT		0.33	U
2,4-DNT		0.26	U

D-00426

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510285

Account #:——— MKC70

Client Name:——— MK CORP

Sample Number
NSWC 16/16 32A

AENI # 9510285-010

Concentration:——— Low

Date Sampled:——— 10/25/95

Date Received:——— 10/26/95

Date Ext Prepared:——— 11/2/95

Date Analyzed:——— 11/8/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	29.8	
Matrix:	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		2.4	U
319-85-7	beta-BHC		2.4	U
319-86-8	delta-BHC		2.4	U
58-89-9	gamma-BHC (Lindane)		4.7	U
76-44-8	Heptachlor		2.4	U
309-00-2	Aldrin		2.4	U
1024-57-3	Heptachlor epoxide		2.4	U
959-98-8	Endosulfan I		2.4	U
60-57-1	Dieldrin		4.7	U
72-55-9	4, 4'-DDE		4.7	U
72-20-8	Endrin		4.7	U
33213-65-9	Endosulfan II		4.7	U
72-54-8	4, 4'-DDD		4.7	U
1031-07-8	Endosulfan Sulfate		4.7	U
50-29-3	4, 4'-DDT		4.7	U
72-43-5	Methoxychlor		24	U
53494-70-5	Endrin Ketone		4.7	U
7421-36-3	Endrin aldehyde		4.7	U
57-74-9	Chlordane		47	U
8001-35-2	Toxaphene		240	U
12674-11-2	Aroclor-1016		47	U
11104-28-2	Aroclor-1221		94	U
11141-16-5	Aroclor-1232		47	U
53469-21-9	Aroclor-1242		47	U
12672-29-6	Aroclor-1248		47	U
11097-69-1	Aroclor-1254		47	U
11096-82-5	Aroclor-1260		47	U
510-15-6	Chlorobenzilate		94	U
2303-16-4	Diallate		472	U
465-73-6	Isodrin		12	U
143-50-0	Kepone		47	U
82-68-8	Pentachloronitrobenzene		9.4	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.17

Vt - Volume of total extract (ul) - _____ 10,000

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 33A

Lab Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951028511

Level (low/med): LOW Date Received: 10/26/95

% Solids: 84.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.12	U		AV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7440-31-5	Tin				NR
7439-93-2	Lithium	11.2	U	N	P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

mments:

CLIENT_ID: NSWC_16/16_33A

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
MSWC 16/16 33A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #011

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK133.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 16 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	22	B
67-64-1	Acetone	26	JB
75-05-8	Acetonitrile	6	U
107-13-1	Acrylonitrile	1200	U
107-02-8	Acrolein	1200	U
75-69-4	Trichlorofluoromethane	6	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-4	1,1-Dichloroethane	6	U
540-59-0	trans-1,2-Dichloroethene	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
75-71-8	Dichlorodifluoromethane	6	U
74-88-4	Iodomethane	6	U
107-12-0	Propionitrile	6	U
107-05-1	Allyl chloride	120	U
78-93-3	2-Butanone	10	JB
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	6	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
71-43-2	Benzene	6	U
124-48-1	Dibromochloromethane	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-00-5	1,1,2-Trichloroethane	6	U
75-25-2	Bromoform	6	U

FORM I VOA 8260/Appendix IX

D. 00425

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 33A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #011

Sample wt/vol: 5.0 (g/mL) 6 Lab File ID: FK133.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 16 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	6	U
74-95-3	Dibromomethane	6	U
106-93-4	1,2-Dibromoethane (EDB)	6	U
108-10-1	4-Methyl-2-Pentanone	60	U
591-78-6	2-Hexanone	60	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	3.2	J
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
108-38-3	m + p-Xylene	11	
95-47-6	o-Xylene	3.5	J
80-62-6	Methyl methacrylate	6	U
630-20-6	1,1,1,2-Tetrachloroethane	6	U
96-18-4	1,2,3-Trichloropropane	6	U
110-57-6	trans-1,4-Dichloro-2-butene	30	U
97-63-2	Ethyl methacrylate	6	U
76-01-7	Pentachloroethane	6	U
96-12-8	1,2-Dibromo-3-chloropropane	6	U
78-83-1	Isobutyl Alcohol	6	U
126-99-8	Chloroprene (TIC) *	6	U
	3-Chloroprene (TIC)	6	U
123-91-1	1,4-Dioxane (TIC)	1200	U
	Methylene Chloride - Dichloromethane		
	Methyl ethyl ketone - 2-Butanone		
	Chloroprene - 2-Chloro-1,3-butadiene		
	Propionitrile - Ethyl Cyanide		
* - Reported as semiquantitative analysis only.			

FORM I VOA 8260/Appendix IX

D- 00430

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 33A
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 15.9
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510285-011
Lab Name: AENI
Contract: 9510285
Date Sampled: 10/25/95
Date Received: 10/26/95
Date Prepared: 11/02/95
Date Analyzed: 11/10/95
Time Analyzed: 6:11

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.32	U
RDX		0.39	U
TNB		0.26	U
TETRYL		0.28	U
DNB		0.22	U
TNT		0.25	U
2,6-DNT		0.27	U
2,4-DNT		0.22	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510285
Account #:——— MKC70
Client Name:——— MK CORP

Sample Number
NSWC 16/16 33A

AENI # 9510285-011

Concentration:——— Low
Date Sampled:——— 10/25/95
Date Received:——— 10/26/95
Date Ext Prepared:——— 11/2/95
Date Analyzed:——— 11/8/95
Conc/Dil Factor:——— 1
Method: ——— 8080

GPC Cleanup	Yes	X No
Separatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	15.9	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.9	U
319-85-7	beta-BHC		1.9	U
319-86-8	delta-BHC		1.9	U
58-89-9	gamma-BHC (Lindane)		3.9	U
75-44-8	Heptachlor		1.9	U
309-00-2	Aldrin		1.9	U
1024-57-3	Heptachlor epoxide		1.9	U
959-98-8	Endosulfan I		1.9	U
60-57-1	Dieldrin		3.9	U
75-55-9	4, 4'-DDE		3.9	U
72-20-8	Endrin		3.9	U
33213-65-9	Endosulfan II		3.9	U
72-54-8	4, 4'-DDD		3.9	U
1031-07-8	Endosulfan Sulfate		3.9	U
50-29-3	4, 4'-DDT		3.9	U
72-43-5	Methoxychlor		19	U
53494-70-5	Endrin Ketone		3.9	U
7421-36-3	Endrin aldehyde		3.9	U
57-74-9	Chlordane		39	U
8001-35-2	Toxaphene		190	U
12674-11-2	Aroclor-1016		39	U
11104-28-2	Aroclor-1221		78	U
11141-16-5	Aroclor-1232		39	U
53469-21-9	Aroclor-1242		39	U
12672-29-6	Aroclor-1248		39	U
11097-69-1	Aroclor-1254		39	U
11096-82-5	Aroclor-1260		39	U
510-15-6	Chlorobenzilate		78	U
2303-16-4	Diallate		388	U
465-73-6	Isodrin		9.7	U
143-50-0	Kepone		39	U
82-68-8	Pentachloronitrobenzene		7.8	U

Vi - Volume of extract injected (ul) - _____ 1
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 30.64
Vt - Volume of total extract (ul) - _____ 10,000

D. 04432

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 34A

Lab Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951028512

Level (low/med): LOW Date Received: 10/26/95

% Solids: 92.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.11	U		AV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7440-31-5	Tin				NR
7439-93-2	Lithium	10.2	U	N	P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_34A

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
MSWC 16/16 34A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #012

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK134.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 8 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	18	B
67-64-1	Acetone	28	JB
75-05-8	Acetonitrile	5.4	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.4	U
75-15-0	Carbon Disulfide	5.4	U
75-35-4	1,1-Dichloroethene	5.4	U
75-34-4	1,1-Dichloroethane	5.4	U
540-59-0	trans-1,2-Dichloroethene	5.4	U
67-66-3	Chloroform	5.4	U
107-06-2	1,2-Dichloroethane	5.4	U
75-71-8	Dichlorodifluoromethane	5.4	U
74-88-4	Iodomethane	5.4	U
107-12-0	Propionitrile	5.4	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	16	JB
71-55-6	1,1,1-Trichloroethane	5.4	U
56-23-5	Carbon Tetrachloride	5.4	U
108-05-4	Vinyl Acetate	5.4	U
75-27-4	Bromodichloromethane	5.4	U
78-87-5	1,2-Dichloropropane	5.4	U
10061-01-5	cis-1,3-Dichloropropene	5.4	U
79-01-6	Trichloroethene	5.4	U
71-43-2	Benzene	5.4	U
124-48-1	Dibromochloromethane	5.4	U
10061-02-6	trans-1,3-Dichloropropene	5.4	U
79-00-5	1,1,2-Trichloroethane	5.4	U
75-25-2	Bromoform	5.4	U

FORM I VOA

8260/Appendix IX

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SWC 16/16 34A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #012

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK134.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 8 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.4	U
74-95-3	Dibromomethane		5.4	U
106-93-4	1,2 Dibromoethane (EDB)		5.4	U
108-10-1	4-Methyl-2-Pentanone		54	U
591-78-6	2 Hexanone		54	U
127-18-4	Tetrachloroethene		5.4	U
79-34-5	1,1,2,2-Tetrachloroethane		5.4	U
108-88-3	Toluene		5.4	U
108-90-7	Chlorobenzene		5.4	U
100-41-4	Ethylbenzene		5.4	U
100-42-5	Styrene		5.4	U
108-38-3	m + p-Xylene		5.4	U
95-47-6	o-Xylene		5.4	U
80-62-6	Methyl methacrylate		5.4	U
630-20-6	1,1,1,2-Tetrachloroethane		5.4	U
96-18-4	1,2,3-Trichloropropane		5.4	U
110-57-6	trans-1,4-Dichloro-2-butene		27	U
97-63-2	Ethyl methacrylate		5.4	U
75-01-7	Pentachloroethane		5.4	U
96-12-8	1,2 Dibromo-3-chloropropane		5.4	U
78-83-1	Isobutyl Alcohol		5.4	U
126-99-8	Chloroprene	(TIC) *	5.4	U
	3-Chloroprene	(TIC)	5.4	U
123-91-1	1,4 Dioxane	(TIC)	1100	U
	Methylene Chloride - Dichloromethane			
	Methyl ethyl ketone - 2-Butanone			
	Chloroprene - 2 Chloro-1,3-butadiene			
	Propionitrile - Ethyl Cyanide			
* - Reported as semiquantitative analysis only.				

FORM I VOA

8260/Appendix IX

D-00435

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 34A
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 8
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510285-012
Lab Name: AENI
Contract: 9510285
Date Sampled: 10/25/95
Date Received: 10/26/95
Date Prepared: 11/02/95
Date Analyzed: 11/10/95
Time Analyzed: 7:04

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.29	U
RDX		0.35	U
TNB		0.24	U
TETRYL		0.26	U
DNB		0.20	U
TNT		0.23	U
2,6-DNT		0.25	U
2,4-DNT		0.20	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510285

Account #:——— MKC70

Client Name:——— MK CORP

Sample Number
NSWC 16/16 34A

AENI # 9510285-012

Concentration:——— Low

Date Sampled:——— 10/25/95

Date Received:——— 10/26/95

Date Ext Prepared:— 11/2/95

Date Analyzed:——— 11/8/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	8	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.8	U
319-85-7	beta-BHC		1.8	U
319-86-8	delta-BHC		1.8	U
58-89-9	gamma-BHC (Lindane)		3.6	U
75-44-8	Heptachlor		1.8	U
309-00-2	Aldrin		1.8	U
1024-57-3	Heptachlor epoxide		1.8	U
959-98-8	Endosulfan I		1.8	U
60-57-1	Dieldrin		3.6	U
75-55-9	4, 4'-DDE		3.6	U
72-20-8	Endrin		3.6	U
33213-65-9	Endosulfan II		3.6	U
72-54-8	4, 4'-DDD		3.6	U
1031-07-8	Endosulfan Sulfate		3.6	U
50-29-3	4, 4'-DDT		3.6	U
72-43-5	Methoxychlor		18	U
53494-70-5	Endrin Ketone		3.6	U
7421-36-3	Endrin aldehyde		3.6	U
57-74-9	Chlordane		36	U
8001-35-2	Toxaphene		180	U
12674-11-2	Aroclor-1016		36	U
11104-28-2	Aroclor-1221		71	U
11141-16-5	Aroclor-1232		36	U
53469-21-9	Aroclor-1242		36	U
12672-29-6	Aroclor-1248		36	U
11097-69-1	Aroclor-1254		36	U
11096-82-5	Aroclor-1260		36	U
510-15-6	Chlorobenzilate		71	U
2303-16-4	Diallate		356	U
465-73-6	Isodrin		8.9	U
143-50-0	Kepone		36	U
82-68-8	Pentachloronitrobenzene		7.1	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.57

Vt - Volume of total extract (ul) - _____ 10,000

A- 00437

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 35A

Lab Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951028513

Level (low/med): LOW Date Received: 10/26/95

% Solids: 87.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.10	U		AV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7440-31-5	Tin				NR
7439-93-2	Lithium	11.0	U	N	P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_35A

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 35A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #013

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK135.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 12 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	21	B
67-64-1	Acetone	61	JB
75-05-8	Acetonitrile	5.7	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.7	U
75-15-0	Carbon Disulfide	5.7	U
75-35-4	1,1-Dichloroethene	5.7	U
75-34-4	1,1-Dichloroethane	5.7	U
540-59-0	trans-1,2-Dichloroethene	5.7	U
67-66-3	Chloroform	5.7	U
107-06-2	1,2-Dichloroethane	5.7	U
75-71-8	Dichlorodifluoromethane	5.7	U
74-88-4	Iodomethane	5.7	U
107-12-0	Propionitrile	5.7	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	24	JB
71-55-6	1,1,1-Trichloroethane	5.7	U
56-23-5	Carbon Tetrachloride	5.7	U
108-05-4	Vinyl Acetate	5.7	U
75-27-4	Bromodichloromethane	5.7	U
78-87-5	1,2-Dichloropropane	5.7	U
10061-01-5	cis-1,3-Dichloropropene	5.7	U
79-01-6	Trichloroethene	5.7	U
71-43-2	Benzene	5.7	U
124-48-1	Dibromochloromethane	5.7	U
10061-02-6	trans-1,3-Dichloropropene	5.7	U
79-00-5	1,1,2-Trichloroethane	5.7	U
75-25-2	Bromoform	5.7	U

FORM I VOA 8260/Appendix IX

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16 35A

Lab Name: AEM Contract: 9510285

Project No.: MW170 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #013

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK135.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 12 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.7	U
74-95-3	Dibromomethane		5.7	U
106-93-4	1,2-Dibromoethane (EDB)		5.7	U
108-10-1	4-Methyl-2-Pentanone		57	U
591-78-6	2-Hexanone		57	U
127-18-4	Tetrachloroethene		5.7	U
79-34-5	1,1,2,2-Tetrachloroethane		5.7	U
108-88-3	Toluene		5.7	U
108-90-7	Chlorobenzene		5.7	U
100-41-4	Ethylbenzene		5.7	U
100-42-5	Styrene		5.7	U
108-38-3	m + p-Xylene		5.7	U
95-47-6	o-Xylene		5.7	U
80-62-6	Methyl methacrylate		5.7	U
630-20-6	1,1,1,2-Tetrachloroethane		5.7	U
96-18-4	1,2,3-Trichloropropane		5.7	U
110-57-6	trans-1,4-Dichloro-2-butene		28	U
97-63-2	Ethyl methacrylate		5.7	U
76-01-7	Pentachloroethane		5.7	U
96-12-8	1,2-Dibromo-3-chloropropane		5.7	U
78-83-1	Isobutyl Alcohol		5.7	U
126-99-8	Chloroprene	(TIC) *	5.7	U
	3-Chloroprene	(TIC)	5.7	U
123-91-1	1,4-Dioxane	(TIC)	1100	U
Methylene Chloride - Dichloromethane				
Methyl ethyl ketone - 2-Butanone				
Chloroprene - 2-Chloro-1,3-butadiene				
Propionitrile - Ethyl Cyanide				
* - Reported as semiquantitative analysis only.				

FORM I VOA

8260/Appendix IX

D 00440

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 35A
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 12.1
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510285-013
Lab Name: AENI
Contract: 9510285
Date Sampled: 10/25/95
Date Received: 10/26/95
Date Prepared: 11/02/95
Date Analyzed: 11/10/95
Time Analyzed: 9:44

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.30	U
RDX		0.37	U
TNB		0.25	U
TETRYL		0.27	U
DNB		0.21	U
TNT		0.24	U
2,6-DNT		0.26	U
2,4-DNT		0.21	U

D- 00441

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510285

Account #:——— MKC70

Client Name:——— MK CORP

Concentration:——— Low

Date Sampled:——— 10/25/95

Date Received:——— 10/26/95

Date Ext Prepared:— 11/2/95

Date Analyzed:——— 11/8/95

Conc/Dil Factor:——— 1

Method: ——— 8080

Sample Number

NSWC 16/16 35A

AENI # 9510285-013

GPC Cleanup | | Yes | X | No

Seperatory Funnel Extraction | | Yes

Continuous Liquid - Liquid Extraction | | Yes

Percent Moisture 12.1

Matrix SOIL

CAS Number	Compound	Concentration ug/kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.9	U
319-85-7	beta-BHC		1.9	U
319-86-8	delta-BHC		1.9	U
58-89-9	gamma-BHC (Lindane)		3.7	U
76-44-8	Heptachlor		1.9	U
309-00-2	Aldrin		1.9	U
1024-57-3	Heptachlor epoxide		1.9	U
959-98-8	Endosulfan I		1.9	U
60-57-1	Dieldrin		3.7	U
72-55-9	4, 4'-DDE		3.7	U
72-20-8	Endrin		3.7	U
33213-65-9	Endosulfan II		3.7	U
72-54-8	4, 4'-DDD		3.7	U
1031-07-8	Endosulfan Sulfate		3.7	U
50-29-3	4, 4'-DDT		3.7	U
72-43-5	Methoxychlor		19	U
53494-70-5	Endrin Ketone		3.7	U
7421-36-3	Endrin aldehyde		3.7	U
57-74-9	Chlordane		37	U
8001-35-2	Toxaphene		190	U
12674-11-2	Aroclor-1016		37	U
11104-28-2	Aroclor-1221		74	U
11141-16-5	Aroclor-1232		37	U
53469-21-9	Aroclor-1242		37	U
12672-29-6	Aroclor-1248		37	U
11097-69-1	Aroclor-1254		37	U
11096-82-5	Aroclor-1260		37	U
510-15-6	Chlorobenzilate		74	U
2303-16-4	Diallate		371	U
465-73-6	Isodrin		9.3	U
143-50-0	Kepone		37	U
82-68-8	Pentachloronitrobenzene		7.4	U

Vi - Volume of extract injected (ul) - 1

Vs - Volume of Water extracted (ml) - N/A

Ws - Weight of sample extracted (g) - 30.63

Vt - Volume of total extract (ul) - 10,000

00442

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 36A

Lab Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951028514

Level (low/med): LOW Date Received: 10/26/95

% Solids: 89.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.11	U		AV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7440-31-5	Tin				NR
7439-93-2	Lithium	10.7	U	N	P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_36A

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16 36A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #014

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK136.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 11 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	15	B
67-64-1	Acetone	28	JB
75-05-8	Acetonitrile	5.6	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.6	U
75-15-0	Carbon Disulfide	5.6	U
75-35-4	1,1-Dichloroethene	5.6	U
75-34-4	1,1-Dichloroethane	5.6	U
540-59-0	trans-1,2-Dichloroethene	5.6	U
67-66-3	Chloroform	5.6	U
107-06-2	1,2-Dichloroethane	5.6	U
75-71-8	Dichlorodifluoromethane	5.6	U
74-88-4	Iodomethane	5.6	U
107-12-0	Propionitrile	5.6	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	14	JB
71-55-6	1,1,1-Trichloroethane	5.6	U
56-23-5	Carbon Tetrachloride	5.6	U
108-05-4	Vinyl Acetate	5.6	U
75-27-4	Bromodichloromethane	5.6	U
78-87-5	1,2-Dichloropropane	5.6	U
10061-01-5	cis-1,3-Dichloropropene	5.6	U
79-01-6	Trichloroethene	5.6	U
71-43-2	Benzene	5.6	U
124-48-1	Dibromochloromethane	5.6	U
10061-02-6	trans-1,3-Dichloropropene	5.6	U
79-00-5	1,1,2-Trichloroethane	5.6	U
75-25-2	Bromoform	5.6	U

FORM I VOA 8260/Appendix IX

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC 16/16 36A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #014

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK136.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 11 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	5.6	U
74-95-3	Dibromomethane	5.6	U
106-93-4	1,2-Dibromoethane (EDB)	5.6	U
108-10-1	4-Methyl-2-Pentanone	56	U
591-78-6	2-Hexanone	56	U
127-18-4	Tetrachloroethene	5.6	U
79-34-5	1,1,2,2-Tetrachloroethane	5.6	U
108-88-3	Toluene	5.6	U
108-90-7	Chlorobenzene	5.6	U
100-41-4	Ethylbenzene	5.6	U
100-42-5	Styrene	5.6	U
108-38-3	m + p-Xylene	5.6	U
95-47-6	o-Xylene	5.6	U
80-62-6	Methyl methacrylate	5.6	U
630-20-6	1,1,1,2-Tetrachloroethane	5.6	U
96-18-4	1,2,3-Trichloropropane	5.6	U
110-57-6	trans-1,4-Dichloro-2-butene	28	U
97-63-2	Ethyl methacrylate	5.6	U
76-01-7	Pentachloroethane	5.6	U
96-12-8	1,2-Dibromo-3-chloropropane	5.6	U
78-83-1	Isobutyl Alcohol	5.6	U
126-99-8	Chloroprene (TIC) *	5.6	U
	3-Chloroprene (TIC)	5.6	U
123-91-1	1,4-Dioxane (TIC)	1100	U
	Methylene Chloride - Dichloromethane		
	Methyl ethyl ketone - 2-Butanone		
	Chloroprene - 2-Chloro-1,3-butadiene		
	Propionitrile - Ethyl Cyanide		
* - Reported as semiquantitative analysis only.			

FORM I VOA 8260/Appendix IX

D 00445

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 36A
Sample:

Lab Sample ID: L9510285-014
Lab Name: AENI
Contract: 9510285
Date Sampled: 10/25/95
Date Received: 10/26/95
Date Prepared: 11/02/95
Date Analyzed: 11/10/95
Time Analyzed: 10:37

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 10.6
Dilution Factor: 1
Level (low/med): LOW

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.30	U
RDX		0.37	U
TNB		0.25	U
TETRYL		0.27	U
DNB		0.21	U
TNT		0.24	U
2,6-DNT		0.26	U
2,4-DNT		0.21	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510285

Account #:——— MKC70

Client Name:——— MK CORP

Sample Number

NSWC 16/16 36A

AENI # 9510285-014

Concentration:——— Low

Date Sampled:——— 10/25/95

Date Received:——— 10/26/95

Date Ext Prepared:— 11/2/95

Date Analyzed:——— 11/8/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup | | Yes | X | No

Seperatory Funnel Extraction | | Yes

Continuous Liquid - Liquid Extraction | | Yes

Percent Moisture 10.6

Matrix SOIL

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.8	U
319-85-7	beta-BHC		1.8	U
319-86-8	delta-BHC		1.8	U
58-89-9	gamma-BHC (Lindane)		1.8	U
75-44-8	Heptachlor		3.7	U
309-00-2	Aldrin		1.8	U
1024-57-3	Heptachlor epoxide		1.8	U
959-98-8	Endosulfan I		1.8	U
60-57-1	Dieldrin		1.8	U
75-55-9	4, 4'-DDE		3.7	U
72-20-8	Endrin		3.7	U
33213-65-9	Endosulfan II		3.7	U
72-54-8	4, 4'-DDD		3.7	U
1031-07-8	Endosulfan Sulfate		3.7	U
50-29-3	4, 4'-DDT		3.7	U
72-43-5	Methoxychlor		3.7	U
53494-70-5	Endrin Ketone		18	U
7421-36-3	Endrin aldehyde		3.7	U
57-74-9	Chlordane		3.7	U
8001-35-2	Toxaphene		37	U
12674-11-2	Aroclor-1016		180	U
11104-28-2	Aroclor-1221		37	U
11141-16-5	Aroclor-1232		73	U
53469-21-9	Aroclor-1242		37	U
12672-29-6	Aroclor-1248		37	U
11097-69-1	Aroclor-1254		37	U
11096-82-5	Aroclor-1260		37	U
510-15-6	Chlorobenzilate		37	U
2303-16-4	Diallate		73	U
465-73-6	Isodrin		365	U
143-50-0	Kepone		9.1	U
82-68-8	Pentachloronitrobenzene		37	U
			7.3	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.61

Vt - Volume of total extract (ul) - _____ 10,000

D- 00447

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 37A

Lab Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951028515

Level (low/med): LOW Date Received: 10/26/95

% Solids: 89.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.11	U		AV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7440-31-5	Tin				NR
7439-93-2	Lithium	10.5	U	N	P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

(ments:

CLIENT_ID: NSWC_16/16_37A

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MSWC 16/16 37A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #015

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK137.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 11 Date Analyzed: 11/3/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	18	B
67-64-1	Acetone	30	JB
75-05-8	Acetonitrile	5.6	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.6	U
75-15-0	Carbon Disulfide	5.6	U
75-35-4	1,1-Dichloroethene	5.6	U
75-34-4	1,1-Dichloroethane	5.6	U
540-59-0	trans-1,2-Dichloroethene	5.6	U
67-66-3	Chloroform	5.6	U
107-06-2	1,2-Dichloroethane	5.6	U
75-71-8	Dichlorodifluoromethane	5.6	U
74-88-4	Iodomethane	5.6	U
107-12-0	Propionitrile	5.6	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	13	JB
71-55-6	1,1,1-Trichloroethane	5.6	U
56-23-5	Carbon Tetrachloride	5.6	U
108-05-4	Vinyl Acetate	5.6	U
75-27-4	Bromodichloromethane	5.6	U
78-87-5	1,2-Dichloropropane	5.6	U
10061-01-5	cis-1,3-Dichloropropene	5.6	U
79-01-6	Trichloroethene	5.6	U
71-43-2	Benzene	5.6	U
124-48-1	Dibromochloromethane	5.6	U
10061-02-6	trans-1,3-Dichloropropene	5.6	U
79-00-5	1,1,2-Trichloroethane	5.6	U
75-25-2	Bromoform	5.6	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MSWC 16/16 37A

Lab Name: AENI

Contract: 9510285

Project No.: MKC70

Site:

Location:

Group:

Matrix: (soil/water) SOIL

Lab Sample ID: #015

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: FK137.D

Level: (low/med) LOW

Date Received: 10/26/95

% Moisture: not dec. 11

Date Analyzed: 11/8/95

GC Column: CAP

ID. 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: 1 (uL)

Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.6	U
74-95-3	Dibromomethane		5.6	U
106-93-4	1,2-Dibromoethane (EDB)		5.6	U
108-10-1	4-Methyl-2-Pentanone		56	U
591-78-6	2-Hexanone		56	U
127-18-4	Tetrachloroethene		5.6	U
79-34-5	1,1,2,2-Tetrachloroethane		5.6	U
108-88-3	Toluene		5.6	U
108-90-7	Chlorobenzene		5.6	U
100-41-4	Ethylbenzene		5.6	U
100-42-5	Styrene		5.6	U
108-38-3	m + p-Xylene		5.6	U
95-47-6	o-Xylene		5.6	U
80-62-6	Methyl methacrylate		5.6	U
630-20-6	1,1,1,2-Tetrachloroethane		5.6	U
96-18-4	1,2,3-Trichloropropane		28	U
110-57-6	trans-1,4-Dichloro-2-butene		5.6	U
97-63-2	Ethyl methacrylate		5.6	U
76-01-7	Pentachloroethane		2.6	J
96-12-8	1,2-Dibromo-3-chloropropane		5.6	U
78-83-1	Isobutyl Alcohol		5.6	U
126-99-8	Chloroprene	(TIC) *	5.6	U
	3-Chloroprene	(TIC)	1100	U
123-91-1	1,4-Dioxane	(TIC)		
	Methylene Chloride = Dichloromethane			
	Methyl ethyl ketone = 2-Butanone			
	Chloroprene = 2-Chloro-1,3-butadiene			
	Propionitrile = Ethyl Cyanide			
* = Reported as semiquantitative analysis only.				

FORM I VOA

8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 37A
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 10.9
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510285-015
Lab Name: AENI
Contract: 9510285
Date Sampled: 10/25/95
Date Received: 10/26/95
Date Prepared: 11/02/95
Date Analyzed: 11/10/95
Time Analyzed: 11:30

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.30	U
RDX		0.37	U
TNB		0.25	U
TETRYL		0.27	U
DNB		0.20	U
TNT		0.24	U
2,6-DNT		0.26	U
2,4-DNT		0.20	U

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510285

Account #:——— MKC70

Client Name:——— MK CORP

Sample Number
NSWC 16/16 37A

AENI # 9510285-015

Concentration:——— Low

Date Sampled:——— 10/25/95

Date Received:——— 10/26/95

Date Ext Prepared:—— 11/2/95

Date Analyzed:——— 11/8/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup	Yes	X No
Separatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	10.9	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.9	U
319-85-7	beta-BHC		1.9	U
319-86-8	delta-BHC		1.9	U
58-89-9	gamma-BHC (Lindane)		3.7	U
75-44-8	Heptachlor		1.9	U
309-00-2	Aldrin		1.9	U
1024-57-3	Heptachlor epoxide		1.9	U
959-98-8	Endosulfan I		1.9	U
60-57-1	Dieldrin		3.7	U
75-55-9	4, 4'-DDE		3.7	U
72-20-8	Endrin		3.7	U
33213-65-9	Endosulfan II		3.7	U
72-54-8	4, 4'-DDD		3.7	U
1031-07-8	Endosulfan Sulfate		3.7	U
50-29-3	4, 4'-DDT		3.7	U
72-43-5	Methoxychlor		19	U
53494-70-5	Endrin Ketone		3.7	U
7421-36-3	Endrin aldehyde		3.7	U
57-74-9	Chlordane		37	U
8001-35-2	Toxaphene		190	U
12674-11-2	Aroclor-1016		37	U
11104-28-2	Aroclor-1221		75	U
11141-16-5	Aroclor-1232		37	U
53469-21-9	Aroclor-1242		37	U
12672-29-6	Aroclor-1248		37	U
11097-69-1	Aroclor-1254		37	U
11096-82-5	Aroclor-1260		37	U
510-15-6	Chlorobenzilate		75	U
2303-16-4	Diallate		373	U
465-73-6	Isodrin		9.3	U
143-50-0	Kepone		37	U
82-68-8	Pentachloronitrobenzene		7.5	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.09

Vt - Volume of total extract (ul) - _____ 10,000

00452

FORM I

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 38A

Lab Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Lab Sample ID: 951028516

Level (low/med): LOW Date Received: 10/26/95

% Solids: 87.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.09	U		AV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7440-31-5	Tin				NR
7439-93-2	Lithium	11.3	U	N	P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16_38A

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MSWC 18/18 38A

Lab Name: AENI

Contract: 9510285

Project No.: MKC70

Site: _____

Location: _____

Group: _____

Matrix: (soil/water) SOIL

Lab Sample ID: #016

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: FK138.D

Level: (low/med) LOW

Date Received: 10/26/95

% Moisture: not dec. 12

Date Analyzed: 11/8/95

GC Column: CAP

ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: 1 (uL)

Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	14	B
67-64-1	Acetone	33	JB
75-05-8	Acetonitrile	5.7	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.7	U
75-15-0	Carbon Disulfide	5.7	U
75-35-4	1,1-Dichloroethene	5.7	U
75-34-4	1,1-Dichloroethane	5.7	U
540-59-0	trans-1,2-Dichloroethene	5.7	U
67-66-3	Chloroform	5.7	U
107-06-2	1,2-Dichloroethane	5.7	U
75-71-8	Dichlorodifluoromethane	5.7	U
74-88-4	Iodomethane	5.7	U
107-12-0	Propionitrile	5.7	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	19	JB
71-55-6	1,1,1-Trichloroethane	5.7	U
56-23-5	Carbon Tetrachloride	5.7	U
108-05-4	Vinyl Acetate	5.7	U
75-27-4	Bromodichloromethane	5.7	U
78-87-5	1,2-Dichloropropane	5.7	U
10061-01-5	cis-1,3-Dichloropropene	5.7	U
79-01-6	Trichloroethene	5.7	U
71-43-2	Benzene	5.7	U
124-48-1	Dibromochloromethane	5.7	U
10061-02-6	trans-1,3-Dichloropropene	5.7	U
79-00-5	1,1,2-Trichloroethane	5.7	U
75-25-2	Bromoform	5.7	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MSWC 16/16 38A

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Case: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #016

Sample wt/vol: 5.0 (g/ml) G Lab File ID: FK138.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 12 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.7	U
74-95-3	Dibromomethane		5.7	U
106-93-4	1,2-Dibromoethane (EDB)		5.7	U
108-10-1	4-Methyl-2-Pentanone		57	U
591-78-6	2-Hexanone		57	U
127-18-4	Tetrachloroethene		5.7	U
79-34-5	1,1,2,2-Tetrachloroethane		5.7	U
108-88-3	Toluene		5.7	U
108-90-7	Chlorobenzene		5.7	U
100-41-4	Ethylbenzene		5.7	U
100-42-5	Styrene		5.7	U
108-38-3	m + p-Xylene		5.7	U
95-47-6	o-Xylene		5.7	U
80-62-6	Methyl methacrylate		5.7	U
630-20-6	1,1,1,2-Tetrachloroethane		5.7	U
96-18-4	1,2,3-Trichloropropane		5.7	U
110-57-6	trans-1,4-Dichloro-2-butene		28	U
97-63-2	Ethyl methacrylate		5.7	U
76-01-7	Pentachloroethane		5.7	U
96-12-8	1,2-Dibromo-3-chloropropane		5.7	U
78-83-1	Isobutyl Alcohol		5.7	U
126-99-8	Chloroprene	(TIC) *	5.7	U
	3-Chloroprene	(TIC)	5.7	U
123-91-1	1,4-Dioxane	(TIC)	1100	U
	Methylene Chloride - Dichloromethane			
	Methyl ethyl ketone - 2-Butanone			
	Chloroprene - 2-Chloro-1,3-butadiene			
	Propionitrile - Ethyl Cyanide			
* - Reported as semiquantitative analysis only.				

FORM I VOA

8260/Appendix IX

SWMU 16/16 DATA
RINSE AND TRIP BLANK SAMPLES:
RB8, TB5, RB10, RB11, TB09, TB10, TB11, TB12 AND RB13

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 RB8

ab Name: AENI Contract: 9510147

ab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

atrix (soil/water): WATER Lab Sample ID: 951014701

evel (low/med): LOW Date Received: 10/14/95

Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	8.0	U		P
7440-39-3	Barium	100	U		P
7440-41-7	Beryllium	2.0	U		P
7440-43-9	Cadmium	4.0	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	10.0	U		P
7440-48-4	Cobalt	11.0	U		P
7440-50-8	Copper	25.0	U		P
7439-89-6	Iron				NR
7439-92-1	Lead	10.0	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.20	U		AV
7440-02-0	Nickel	15.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	5.0	U		P
7440-22-4	Silver	8.0	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	10.0	U		P
7440-62-2	Vanadium	16.0	U		P
7440-66-6	Zinc	20.0	U		P
	Cyanide				NR
7440-31-5	Tin	200	U		P
7439-93-2	Lithium	100	U		P

olor Before: Clarity Before: Texture:

olor After: Clarity After: Artifacts:

omments:

IENT_ID: NSWC_16/16_RB8

VOLATILE ORGANICS ANALYSIS DATA SHEET

NSWC 16/16 RB8

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: #001

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: FJ334.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

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	46	J
75-05-8	Acetonitrile	5	U
107-13-1	Acrylonitrile	1000	U
107-02-8	Acrolein	1000	U
75-69-4	Trichlorofluoromethane	5	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-4	1,1-Dichloroethane	5	U
540-59-0	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
75-71-8	Dichlorodifluoromethane	5	U
74-88-4	Iodomethane	5	U
107-12-0	Propionitrile	5	U
107-05-1	Allyl chloride	100	U
78-93-3	2-Butanone	45	J
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	5	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
71-43-2	Benzene	5	U
124-48-1	Dibromochloromethane	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
75-25-2	Bromoform	5	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 RB8

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: #001

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: FJ334.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. Date Analyzed: 10/23/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
126-98-7	Methacrylonitrile	5	U
74-95-3	Dibromomethane	5	U
106-93-4	1,2-Dibromoethane (EDB)	5	U
108-10-1	4-Methyl-2-Pentanone	50	U
591-78-6	2-Hexanone	50	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
108-38-3	m + p-Xylene	5	U
95-47-6	o-Xylene	5	U
80-62-6	Methyl methacrylate	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
110-57-6	trans-1,4-Dichloro-2-butene	25	U
97-63-2	Ethyl methacrylate	5	U
76-01-7	Pentachloroethane	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
78-83-1	Isobutyl Alcohol	5	U
126-99-8	Chloroprene (TIC)	5	UZ
	3-Chloroprene (TIC)	5	U
123-91-1	1,4-Dioxane (TIC)	1000	U
Methylene Chloride = Dichloromethane			
Methyl ethyl ketone = 2-Butanone			
Chloroprene = 2-Chloro-1,3-butadiene			
Propionitrile = Ethyl Cyanide			

FORM I VOA 8260/Appendix IX

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.: 9510147
Project Name: CRANE NSWC
Client Name: MK CORP

Sample Number
NSWC 16/16 RB8

AENI # 9510147-001

Concentration: Low
Date Sampled: 10/11/95
Date Received: 10/14/95
Date Ext Prepared: 10/17/95
Date Analyzed: 10/20/95
Conc/Dil Factor: 1
Method: 8080

GPC Cleanup | | Yes | X | No
Seperatory Funnel Extraction | X | Yes
Continuous Liquid - Liquid Extraction | | Yes
Percent Moisture N/A
Matrix: WATER

CAS Number	Compound	Concentration ug/L	Detection Limit	Qualifier
319-84-6	alpha-BHC		0.05	U
319-85-7	beta-BHC		0.05	U
319-86-8	delta-BHC		0.05	U
58-89-9	gamma-BHC (Lindane)		0.10	U
75-44-8	Heptachlor		0.05	U
309-00-2	Aldrin		0.05	U
1024-57-3	Heptachlor epoxide		0.05	U
959-98-8	Endosulfan I		0.05	U
60-57-1	Dieldrin		0.10	U
75-55-9	4, 4'-DDE		0.10	U
72-20-8	Endrin		0.10	U
33213-65-9	Endosulfan II		0.10	U
72-54-8	4, 4'-DDD		0.10	U
1031-07-8	Endosulfan Sulfate		0.10	U
50-29-3	4, 4'-DDT		0.10	U
72-43-5	Methoxychlor		0.50	U
53494-70-5	Endrin Ketone		0.10	U
7421-36-3	Endrin aldehyde		0.10	U
57-74-9	Chlordane		1.0	U
8001-35-2	Toxaphene		5.0	U
12674-11-2	Aroclor-1016		1.0	U
11104-28-2	Aroclor-1221		2.0	U
11141-16-5	Aroclor-1232		1.0	U
53469-21-9	Aroclor-1242		1.0	U
12672-29-6	Aroclor-1248		1.0	U
11097-69-1	Aroclor-1254		1.0	U
11096-82-5	Aroclor-1260		1.0	U
510-15-6	Chlorobenzilate		2.0	U
2303-16-4	Diallate		10	U
465-73-6	Isodrin		0.25	U
143-50-0	Kepone		1.0	U
82-68-8	Pentachloronitrobenzene		0.20	U

Vi - Volume of extract injected (ul) - 5
Vs - Volume of Water extracted (ml) - 1000
Ws - Weight of sample extracted (g) - N/A
Vt - Volume of total extract (ul) - 10,000

FORM I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NSWC 16/16 RB8

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: #001

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: DJ272.D

Level: (low/med) Date Received: 10/14/95

% Moisture: decanted: (Y/N): N Date Extracted: 10/17/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/22/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	U
91-58-7	2-Chloronaphthalene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
132-64-9	Dibenzofuran	10	U
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo[a]anthracene	10	U
218-01-9	Chrysene	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

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Organophosphorus

Sample Number
NSWC 16/16 RB8

Case No.:——— 9510147

Project Name:——— CRANE NSWC

Client Name:——— MK CORP

AENI # 9510147-001

Concentration:——— Low

Date Sampled:——— 10/11/95

Date Received:——— 10/14/95

Date Ext Prepared:—— 10/20/95

Date Analyzed:——— 10/30/95

Conc/Dil Factor:——— 1

Method: ——— 8140

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		X Yes
Continuous Liquid - Liquid Extration		Yes
Percent Solid	N/A	
Matrix	WATER	

CAS Number	Compound	Concentration ug/L	Detection Limit	Qualifier
298-02-2	Phorate		0.05	U
60-51-5	Dimethoate		0.11	U
23950-58-5	Pronamide		0.05	U
298-04-4	Disulfoton		0.05	U
298-00-0	Methyl Parathion		0.05	U
56-38-2	Ethyl Parathion		0.05	U
52-85-7	Famphur		0.05	U
3689-24-5	Tetraethyl dithiopyrophosphate		5.3	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ 950

Ws - Weight of sample extracted (g) - _____ N/A

Vt - Volume of total extract (ul) - _____ 1,000

FORM I

D-00466

AENI
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8150

Sample Number
NSWC 16/16 RB8

Case No.:_____ 9510147
Client Name:_____ MK CORP
Project Name:_____ NSWC, CRANE

AENI # 9510147-001

Concentration: _____ Low
Date Sampled:_____ 10/11/95
Date Received:_____ 10/14/95
Date Extract Prepared:_ 10/19/95
Date Analyzed:_____ 10/20/95
Conc/Dil Factor:_____ 1
Matrix_____ WATER

GPC Cleanup _____ No
Separatory Funnel Ext.: _____ Yes
Continuous Liq-Liq Ext.: ____ No
Percent Moisture (decanted)_ N/A

Compound	Concentration ug/L	Reporting Limit	Qualifier
2,4 D		0.26	U
SILVEX		0.26	U
2,4,5-T		0.26	U

Vi - Volume of extract injected (ul)___ 1
Vs - Volume of water extracted (ml)__ 980
Ws - Mass of soil extracted (g)_____ N/A
Vt- Volume of total extract (ul)_____ 5000

FORM I

TL-RTP Project: 34600A
Client Sample: NSWC 16/16 RB8
Client Project: Indiana Navy Project

Method 8280 PCDD/PCDF Analysis (b)
Analysis File: B951292
Matrix: WA

PCDD/PCDF SUMMARY REPORT

Specific Analytes	Conc. (ppt)	DL (ppt)	Blank (ppt)
2,3,7,8-TCDD	ND	0.633	ND
1,2,3,7,8-PeCDD	ND	3.98	ND
1,2,3,4,7,8-HxCDD	ND	4.59	ND
1,2,3,6,7,8-HxCDD	ND	2.86	ND
1,2,3,7,8,9-HxCDD	ND	11.6	ND
1,2,3,4,6,7,8-HpCDD	ND	4.08	ND
1,2,3,4,6,7,8,9-OCDD	ND	4.9	ND
2,3,7,8-TCDF	ND	0.551	ND
1,2,3,7,8-PeCDF	ND	6.02	ND
2,3,4,7,8-PeCDF	ND	7.14	ND
1,2,3,4,7,8-HxCDF	ND	7.65	ND
1,2,3,6,7,8-HxCDF	ND	7.76	ND
2,3,4,6,7,8-HxCDF	ND	6.53	ND
1,2,3,7,8,9-HxCDF	ND	6.63	ND
1,2,3,4,6,7,8-HpCDF	ND	2.45	ND
1,2,3,4,7,8,9-HpCDF	ND	5.2	ND
1,2,3,4,6,7,8,9-OCDF	ND	5	ND

Definitions:

Conc. - The concentration of the specific analyte in the units shown.

DL - The detection limit of the specific analyte in the units shown.

Blank - The concentration of the method blank.

ND - (Non-Detect) The concentration of the analyte is less than the detection limit.

Total Analytes	Conc. (ppt)	DL (ppt)
Total TCDD	ND	0.633
Total PeCDD	ND	3.98
Total HxCDD	ND	11.6
Total HpCDD	ND	4.08
Total TCDF	ND	0.551
Total PeCDF	ND	7.14
Total HxCDF	ND	6.63
Total HpCDF	ND	5.2

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 TB5

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: #021

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: FJ370.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. Date Analyzed: 10/24/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

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	100	U
75-05-8	Acetonitrile	5	U
107-13-1	Acrylonitrile	1000	U
107-02-8	Acrolein	1000	U
75-69-4	Trichlorofluoromethane	5	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-4	1,1-Dichloroethane	5	U
540-59-0	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
75-71-8	Dichlorodifluoromethane	5	U
74-88-4	Iodomethane	5	U
107-12-0	Propionitrile	5	U
107-05-1	Allyl chloride	100	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	5	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
71-43-2	Benzene	5	U
124-48-1	Dibromochloromethane	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
75-25-2	Bromoform	5	U

FORM I VOA 8260/Appendix IX

D- 04466

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 TB5

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: #021

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: FJ370.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. Date Analyzed: 10/24/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5	U
74-95-3	Dibromomethane		5	U
106-93-4	1,2-Dibromoethane (EDB)		5	U
108-10-1	4-Methyl-2-Pentanone		50	U
591-78-6	2-Hexanone		50	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
108-38-3	m + p-Xylene		5	U
95-47-6	o-Xylene		5	U
80-62-6	Methyl methacrylate		5	U
630-20-6	1,1,1,2-Tetrachloroethane		5	U
96-18-4	1,2,3-Trichloropropane		5	U
110-57-6	trans-1,4-Dichloro-2-butene		25	U
97-63-2	Ethyl methacrylate		5	U
76-01-7	Pentachloroethane		5	U
96-12-8	1,2-Dibromo-3-chloropropane		5	U
78-83-1	Isobutyl Alcohol		5	U
126-99-8	Chloroprene	(TIC)	5	UZ
	3-Chloroprene	(TIC)	5	U
123-91-1	1,4-Dioxane	(TIC)	1000	U
Methylene Chloride = Dichloromethane				
Methyl ethyl ketone = 2-Butanone				
Chloroprene = 2-Chloro-1,3-butadiene				
Propionitrile = Ethyl Cyanide				

FORM I VOA 8260/Appendix IX

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16-RB10

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): WATER Lab Sample ID: 951021803

Level (low/med): LOW Date Received: 10/20/95

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	8.0	U		P
7440-39-3	Barium				NR
7440-41-7	Beryllium	2.0	U		P
7440-43-9	Cadmium	11.2			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	10.0	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	25.0	U		P
7439-89-6	Iron				NR
7439-92-1	Lead	10.0	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.20	U		AV
7440-02-0	Nickel	15.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	5.0	U		P
7440-22-4	Silver	8.0	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	10.0	U		P
7440-62-2	Vanadium				NR
7440-66-6	Zinc	20.0	U		P
	Cyanide				NR
7440-31-5	Tin				NR
7439-93-2	Lithium				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_16/16-RB10

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16-RB10
Sample:

Matrix: WATER
Sample: (ml) 226
Final Volume: (ml) 1.0
(%) Moisture: N/A
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510218-003
Lab Name: AENI
Contract: 9510218
Date Sampled: 10/19/95
Date Received: 10/20/95
Date Prepared: 10/20/95
Date Analyzed: 10/28/95
Time Analyzed: 19:16

Compound	Concentration (ug/L)	Detection Limit	Qualifier
HMX		0.13	U
RDX		0.16	U
TNB		0.11	U
TETRYL		0.12	U
DNB		0.09	U
TNT		0.10	U
2,6-DNT		0.11	U
2,4-DNT		0.09	U

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510218
Report To: MK Corp
Project: NSWC Crane
Date: November 10, 1995
Analysis: Nitrate-N, EPA 353.3

Client ID	AENI ID	Result	Date Analyzed
NSWC 16/16-RB10	9510218-003	<0.05	11/10/95

(1) Result reported as mg/L.

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U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16/16 RB11

Lab Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): WATER Lab Sample ID: 951028501

Level (low/med): LOW Date Received: 10/26/95

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	8.0	U		P
7440-39-3	Barium				NR
7440-41-7	Beryllium	2.0	U		P
7440-43-9	Cadmium	4.0	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	10.0	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	25.0	U		P
7439-89-6	Iron				NR
7439-92-1	Lead	10.0	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.20	U		AV
7440-02-0	Nickel	15.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	5.0	U		P
7440-22-4	Silver	8.0	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	10.0	U		P
7440-62-2	Vanadium				NR
7440-66-6	Zinc	20.0	U		P
	Cyanide				NR
7440-31-5	Tin				NR
7439-93-2	Lithium				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

ments:

CLIENT_ID: NSWC_16/16_RB11

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 RB11

Lab Name: AENI Contract: 9510285

Project No.: MKC/0 Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: #001

Sample wt/vol: 5.0 (g/mL) mL Lab File ID: FK123.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 0 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

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	5.4	B
67-64-1	Acetone	42	JB
75-05-8	Acetonitrile	5	U
107-13-1	Acrylonitrile	1000	U
107-02-8	Acrolein	1000	U
75-69-4	Trichlorofluoromethane	5	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-4	1,1-Dichloroethane	5	U
540-59-0	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
75-71-8	Dichlorodifluoromethane	5	U
74-88-4	Iodomethane	5	U
107-12-0	Propionitrile	5	U
107-05-1	Allyl chloride	100	U
78-93-3	2-Butanone	23	JB
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	5	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
71-43-2	Benzene	5	U
124-48-1	Dibromochloromethane	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
75-25-2	Bromoform	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC 16/16 RB11

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: #001

Sample wt/vol: 5.0 (g/mL) mL Lab File ID: FK123.D

Level: (low/med) LOW Date Received: 10/26/95

% Moisture: not dec. 0 Date Analyzed: 11/8/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5	U
74-95-3	Dibromomethane		5	U
106-93-4	1,2-Dibromoethane (EDB)		5	U
108-10-1	4-Methyl-2-Pentanone		50	U
591-78-6	2-Hexanone		50	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
108-38-3	m + p-Xylene		5	U
95-47-6	o-Xylene		5	U
80-62-6	Methyl methacrylate		5	U
630-20-6	1,1,1,2-Tetrachloroethane		5	U
96-18-4	1,2,3-Trichloropropane		5	U
110-57-6	trans-1,4-Dichloro-2-butene		25	U
97-63-2	Ethyl methacrylate		5	U
76-01-7	Pentachloroethane		5	U
96-12-8	1,2-Dibromo-3-chloropropane		5	U
78-83-1	Isobutyl Alcohol		5	U
126-99-8	Chloroprene	(TIC) *	5	U
	3-Chloroprene	(TIC)	5	U
123-91-1	1,4-Dioxane	(TIC)	1000	U
	Methylene Chloride - Dichloromethane			
	Methyl ethyl ketone - 2-Butanone			
	Chloroprene - 2-Chloro-1,3-butadiene			
	Propionitrile - Ethyl Cyanide			
* - Reported as semiquantitative analysis only.				

FORM I VOA

8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC 16/16 RB11
Sample:

Matrix: WATER
Sample: (ml) 770
Final Volume: (L) 10.0
(%) Moisture: N/A
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510285-001
Lab Name: AENI
Contract: 9510285
Date Sampled: 10/25/95
Date Received: 10/26/95
Date Prepared: 11/01/95
Date Analyzed: 11/09/95
Time Analyzed: 14:55

Compound	Concentration (ug/L)	Detection Limit	Qualifier
HMX		0.36	U
RDX		0.44	U
TNB		0.30	U
TETRYL		0.32	U
DNB		0.25	U
TNT		0.29	U
2,6-DNT		0.31	U
2,4-DNT		0.25	U

D-00376

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510285
Report To: MK Corp
Project: NSWC Crane
Date: November 10, 1995
Analysis: Nitrate EPA 353.3

Client ID	AENI ID	Result	Date Analyzed
NSWC 16/16 RB11	9510285-001	<0.05	11/10/95

(1) Result reported as mg/L.

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D. 00477

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16TB09

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782348

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082348A52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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	3	JB
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (Total)	10	U
75-05-8	acetonitrile	60	U

D-06378

SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-16TB09

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782348

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082348A52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	acrolein	90	U
107-05-1	3-chloropropene	15	U
106-93-4	1,2-dibromoethane	10	U
74-95-3	dibromomethane	10	U
110-57-6	trans-1,4-dichloro-2-butene	10	U
75-71-8	dichlorodifluoromethane	10	U
123-91-1	1,4-dioxane	3700	U
107-12-0	propionitrile(ethylcyanide)	220	U
97-63-2	ethyl methacrylate	10	U
74-88-4	iodomethane	5	U
78-83-1	isobutyl alcohol	2800	U
126-98-7	methacrylonitrile	20	U
80-62-6	methyl methacrylate	20	U
630-20-6	1,1,1,2-tetrachloroethane	10	U
96-18-4	1,2,3-trichloropropane	10	U
108-05-4	vinyl acetate	10	U
96-12-8	1,2-dibromo-3-chloropropane	10	U
75-69-4	trichlorofluoromethane	10	U
107-13-1	acrylonitrile	95	U
156-60-5	trans-1,2-Dichloroethene	10	U

D 00175

SAMPLE NO.

16-16TB09

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782348

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082348A52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	1.18	91	J
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
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19.				
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27.				
28.				
29.				
30.				

FORM I VOA-TIC

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16TB10

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782353

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082353A52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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	1	JB
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	2	J
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (Total)	10	U
75-05-8	acetonitrile	60	U

D-00481

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-16TB10

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782353

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082353A52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	acrolein	90	U
107-05-1	3-chloropropene	15	U
106-93-4	1,2-dibromoethane	10	U
74-95-3	dibromomethane	10	U
110-57-6	trans-1,4-dichloro-2-butene	10	U
75-71-8	dichlorodifluoromethane	10	U
123-91-1	1,4-dioxane	3700	U
107-12-0	propionitrile(ethylcyanide)	220	U
97-63-2	ethyl methacrylate	10	U
74-88-4	iodomethane	5	U
78-83-1	isobutyl alcohol	2800	U
126-98-7	methacrylonitrile	20	U
80-62-6	methyl methacrylate	20	U
630-20-6	1,1,1,2-tetrachloroethane	10	U
96-18-4	1,2,3-trichloropropane	10	U
108-05-4	vinyl acetate	10	U
96-12-8	1,2-dibromo-3-chloropropane	10	U
75-69-4	trichlorofluoromethane	10	U
107-13-1	acrylonitrile	95	U
156-60-5	trans-1,2-Dichloroethene	10	U

1E

SAMPLE NO.

16-16TB10

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782353

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082353A52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		CO2 (NOT IN TIC TOTAL)	1.18	100	J
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FORM I VOA-TIC

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16TB11

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782354

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082354A52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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	1	JB
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (Total)	10	U
75-05-8	acetonitrile	60	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16TB11

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782354

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082354A52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	acrolein	90	U
107-05-1	3-chloropropene	15	U
106-93-4	1,2-dibromoethane	10	U
74-95-3	dibromomethane	10	U
110-57-6	trans-1,4-dichloro-2-butene	10	U
75-71-8	dichlorodifluoromethane	10	U
123-91-1	1,4-dioxane	3700	U
107-12-0	propionitrile(ethylcyanide)	220	U
97-63-2	ethyl methacrylate	10	U
74-88-4	iodomethane	5	U
78-83-1	isobutyl alcohol	2800	U
126-98-7	methacrylonitrile	20	U
80-62-6	methyl methacrylate	20	U
630-20-6	1,1,1,2-tetrachloroethane	10	U
96-18-4	1,2,3-trichloropropane	10	U
108-05-4	vinyl acetate	10	U
96-12-8	1,2-dibromo-3-chloropropane	10	U
75-69-4	trichlorofluoromethane	10	U
107-13-1	acrylonitrile	95	U
156-60-5	trans-1,2-Dichloroethene	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

16-16TB11

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782354

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082354A52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	1.20	46	J
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FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

16-16TB12

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782357

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082357B52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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	1	JB
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (Total)	10	U
75-05-8	acetonitrile	60	U

FORM I VOA

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16TB12

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782357

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082357B52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	acrolein	90	U
107-05-1	3-chloropropene	15	U
106-93-4	1,2-dibromoethane	10	U
74-95-3	dibromomethane	10	U
110-57-6	trans-1,4-dichloro-2-butene	10	U
75-71-8	dichlorodifluoromethane	10	U
123-91-1	1,4-dioxane	3700	U
107-12-0	propionitrile(ethylcyanide)	220	U
97-63-2	ethyl methacrylate	10	U
74-88-4	iodomethane	5	U
78-83-1	isobutyl alcohol	2800	U
126-98-7	methacrylonitrile	20	U
80-62-6	methyl methacrylate	20	U
630-20-6	1,1,1,2-tetrachloroethane	10	U
96-18-4	1,2,3-trichloropropane	10	U
108-05-4	vinyl acetate	10	U
96-12-8	1,2-dibromo-3-chloropropane	10	U
75-69-4	trichlorofluoromethane	10	U
107-13-1	acrylonitrile	95	U
156-60-5	trans-1,2-Dichloroethene	10	U

D 00488

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16-16RB13

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 92C___

Matrix (soil/water): WATER Lab Sample ID: 782534

Level (low/med): LOW__ Date Received: 02/09/96

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony_	1.8	U		P
7440-38-2	Arsenic__	3.0	U		P
7440-39-3	Barium___	23.2	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium__	0.20	U		P
7440-47-3	Chromium_	0.97	B		P
7440-48-4	Cobalt___	0.50	U		P
7440-50-8	Copper___	5.1	B		P
7439-92-1	Lead____	1.9	B		P
7440-02-0	Nickel___	2.3	B		P
7782-49-2	Selenium_	2.6	U		P
7440-22-4	Silver___	0.70	U		P
7440-28-0	Thallium_	3.5	U		P
7440-62-2	Vanadium_	0.60	U		P
7440-66-6	Zinc____	35.4			P
7440-31-5	Tin_____	4.2	U		P

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16-16RB13

Lab Name: COMPUCHEM_ENV._CORP. Contract: SW-846

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 94C

Matrix (soil/water): WATER Lab Sample ID: 782539

Level (low/med): LOW Date Received: 02/09/96

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-97-6	Mercury	0.20	U		CV

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: VIOLET Clarity After: _____ Artifacts: _____

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16RB13

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782355

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082355A52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
67-66-3	Chloroform	2	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (Total)	10	U
75-05-8	acetonitrile	60	U

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

16-16RB13

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782355

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082355A52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
107-02-8	acrolein	90	U
107-05-1	3-chloropropene	15	U
106-93-4	1,2-dibromoethane	10	U
74-95-3	dibromomethane	10	U
110-57-6	trans-1,4-dichloro-2-butene	10	U
75-71-8	dichlorodifluoromethane	10	U
123-91-1	1,4-dioxane	3700	U
107-12-0	propionitrile(ethylcyanide)	220	U
97-63-2	ethyl methacrylate	10	U
74-88-4	iodomethane	5	U
78-83-1	isobutyl alcohol	2800	U
126-98-7	methacrylonitrile	20	U
80-62-6	methyl methacrylate	20	U
630-20-6	1,1,1,2-tetrachloroethane	10	U
96-18-4	1,2,3-trichloropropane	10	U
108-05-4	vinyl acetate	10	U
96-12-8	1,2-dibromo-3-chloropropane	10	U
75-69-4	trichlorofluoromethane	10	U
107-13-1	acrylonitrile	95	U
156-60-5	trans-1,2-Dichloroethene	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

16-16RB13

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0001C

Matrix: (soil/water) WATER Lab Sample ID: 782355

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082355A52.D

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: not dec. _____ Date Analyzed: 02/09/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	1.17	940	J
2.				
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FORM I VOA-TIC

1D

ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

16-16RB13

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0084C

Matrix: (soil/water) WATER Lab Sample ID: 782542

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

% Moisture: decanted: (Y/N) Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 02/13/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/14/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
58-89-9	gamma-BHC (Lindane)	0.030	U
76-44-8	Heptachlor	0.0010	JB
309-00-2	Aldrin	0.029	JP
959-98-8	Endosulfan I	0.0034	JB
60-57-1	Dieldrin	0.030	U
33213-65-9	Endosulfan II	0.10	U
50-29-3	4,4'-DDT	0.0054	JPB
72-43-5	Methoxychlor	0.30	U
319-84-6	alpha-BHC	0.030	U
319-85-7	beta-BHC	0.030	U
319-86-8	delta-BHC	0.030	U
1024-57-3	Heptachlor epoxide	0.030	U
72-55-9	4,4'-DDE	0.0048	JP
72-20-8	Endrin	0.0048	J
72-54-8	4,4'-DDD	0.10	U
7421-93-4	Endrin aldehyde	0.030	U
1031-07-8	Endosulfan sulfate	0.050	U
11096-82-5	Aroclor-1260	0.50	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	0.50	U
8001-35-2	Toxaphene	1.0	U
57-74-9	Chlordane (Technical)	0.12	U

FORM I 8080

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

16-16RB13

Lab Name: CompuChem Env. Corp. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0082C

Matrix: (soil/water) WATER Lab Sample ID: 782545

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH082545C60

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/15/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-Nitrosodimethylamine	5	U
110-86-1	Pyridine	20	U
109-06-8	2-Picoline	45	U
10595-95-6	Nitrosomethylethylamine	15	U
66-27-3	Methyl Methanesulfonate	20	U
55-18-5	N-Nitrosodiethylamine	5	U
62-50-0	Ethyl Methanesulfonate	20	U
108-95-2	Phenol	15	U
62-53-3	Aniline	15	U
111-44-4	Bis(2-chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	15	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	20	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	20	U
39638-32-9	bis(2-Chloroisopropyl)ether	15	U
108-39-4	3-Methylphenol	35	U
106-44-5	4-Methylphenol	35	U
930-55-2	N-Nitrosopyrrolidine	15	U
621-64-7	N-Nitroso-di-N-propylamine	5	U
98-86-2	Acetophenone	20	U
59-89-2	N-Nitrosomorpholine	10	U
636-21-5	o-Toluidine hydrochloride	25	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
100-75-4	N-Nitrosopiperidine	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	35	U
126-68-1	o,o,o-Triethylphosphorothioa	110	U
111-91-1	Bis(2-chloroethoxy)methane	15	U
120-83-2	2,4-Dichlorophenol	15	U

D 06395

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

16-16RB13

Lab Name: CompuChem Env. Corp. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0082C

Matrix: (soil/water) WATER Lab Sample ID: 782545

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH082545C60

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/15/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-65-0	2,6-Dichlorophenol	25	U
1888-71-7	Hexachloropropene	20	U
87-68-3	Hexachlorobutadiene	5	U
924-16-3	N-Nitroso-di-n-butylamine	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
94-59-7	Safrole	5	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	25	U
95-94-3	1,2,4,5-Tetrachlorobenzene	15	U
88-06-2	2,4,6-Trichlorophenol	25	U
95-95-4	2,4,5-Trichlorophenol	25	U
120-58-1	Isosafrole	10	U
91-58-7	2-Chloronaphthalene	15	U
88-74-4	2-Nitroaniline	20	U
130-15-4	1,4-Napthoquinone	35	U
131-11-3	Dimethylphthalate	10	U
99-65-0	1,3-Dinitrobenzene	15	U
606-20-2	2,6-Dinitrotoluene	15	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	30	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	75	U
100-02-7	4-Nitrophenol	15	U
608-93-5	Pentachlorobenzene	10	U
121-14-2	2,4-Dinitrotoluene	10	U
132-64-9	Dibenzofuran	10	U
91-59-8	2-Naphthylamine	20	U
58-90-2	2,3,4,6-Tetrachlorophenol	35	U
134-32-7	1-Naphthylamine	35	U
84-66-2	Diethylphthalate	15	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

16-16RB13

Lab Name: CompuChem Env. Corp. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0082C

Matrix: (soil/water) WATER Lab Sample ID: 782545

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH082545C60

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/15/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
7005-72-3	4-Chlorophenyl-phenylether	10	U
99-55-8	5-Nitro-o-toluidine	30	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	35	U
534-52-1	4,6-Dinitro-2-methylphenol	45	U
86-30-6	N-Nitrosodiphenylamine (1)	30	U
122-39-4	Diphenylamine	30	U
99-35-4	1,3,5-Trinitrobenzene	45	U
2303-16-4	Diallate (trans isomer)	20	U
62-44-2	Phenacetin	20	U
2303-16-4	Diallate (cis isomer)	20	U
101-55-3	4-Bromophenyl-phenylether	15	U
118-74-1	Hexachlorobenzene	15	U
92-67-1	4-Aminobiphenyl	10	U
87-86-5	Pentachlorophenol	55	U
23950-58-5	Pronamide	15	U
85-01-8	Phenanthrene	15	U
120-12-7	Anthracene	15	U
84-74-2	Di-n-butylphthalate	15	U
56-57-5	4-Nitroquinoline-1-oxide	75	U
91-80-5	Methapyrilene	30	U
465-73-6	Isodrin	15	U
206-44-0	Fluoranthene	20	U
129-00-0	Pyrene	10	U
140-57-8	Aramite	20	U
60-11-7	p-Dimethylaminoazobenzene	10	U
510-15-6	Chlorobenzilate	10	U
85-68-7	Butylbenzylphthalate	10	U
119-93-7	3,3'-Dimethylbenzidine	10	U
117-81-7	bis(2-ethylhexyl)Phthalate	25	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	15	U

(1) - Cannot be separated from Diphenylamine

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

16-16RB13

Lab Name: CompuChem Env. Corp. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0082C

Matrix: (soil/water) WATER Lab Sample ID: 782545

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH082545C60

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/15/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
117-84-0	Di-n-octylphthalate	20	U
57-97-6	7,12-Dimethylbenz(a)anthrace	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	20	U
193-39-5	Indeno(1,2,3-c,d)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	10	U
122-09-08	a,a-Dimethylphenethylamine	25	U
106-50-3	p-Phenylenediamine	80	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

16-16RB13

Lab Name: CompuChem Env. Corp. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0082C

Matrix: (soil/water) WATER Lab Sample ID: 782545

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH082545C60

Level: (low/med) LOW Date Received: 02/09/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/15/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 3

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		CYCLOHEXENOL	4.99	4	J
2.		SURROGATE COMPOUND	6.09	42	J
3.		SURROGATE COMPOUND	6.66	35	J
4.					
5.					
6.					
7.					
8.					
9.					
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27.					
28.					
29.					
30.					

D-

1D
ORGANOPHOSPHORUS PESTICIDES ANALYSIS DATA SHEET

SAMPLE NO.
16-16RB13

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0086C

Matrix: (soil/water) WATER Lab Sample ID: 782548

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

% Moisture: decanted: (Y/N) Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 02/13/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/14/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
298-02-2	Phorate	0.50	U
3689-24-5	Sulfotepp	0.50	U
298-04-4	Disulfoton	0.15	J
60-51-5	Dimethoate	0.50	U
298-00-0	Methyl-Parathion	0.19	JB
56-38-2	Ethyl-Parathion	0.20	J
52-85-7	Famphur	0.50	U

D- 0150

1D
HERBICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
16-16RB13

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0088C

Matrix: (soil/water) WATER Lab Sample ID: 782552

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

% Moisture: decanted: (Y/N) Date Received: 02/09/96

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 02/13/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/14/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
94-75-7	2,4-D	4.0	U
93-72-1	2,4,5-TP (Silvex)	0.015	JBP
93-76-5	2,4,5-T	1.0	U

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

16-16RB13

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 90C___

Matrix (soil/water): WATER Lab Sample ID: 782529

Level (low/med): LOW__ Date Received: 02/09/96

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
	Cyanide__	10.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

CompuChem Environmental Corporation

TLI Project: 36136A
Client Sample: 16-16RB13
Client Project: Crane

Method 8280 PCDD/PCDF Analysis (b)
Analysis File: B960682
Matrix: WAT

PCDD/PCDF SUMMARY REPORT

Specific Analytes	Conc. (ppt)	DL (ppt)	Blank (ppt)
2,3,7,8-TCDD	ND	0.62	ND

Definitions:

Conc. - The concentration of the specific analyte in the units shown.

DL - The detection limit of the specific analyte in the units shown.

Blank - The concentration of the method blank.

ND - (Non-Detect) The concentration of the analyte is less than the detection limit.

Total Analytes	Conc. (ppt)	DL (ppt)
Total TCDD	ND	0.62
Total PeCDD	ND	3.9
Total HxCDD	ND	6.23
Total TCDF	ND	0.54
Total PeCDF	ND	6.45
Total HxCDF	ND	7

8280_PSR v2.07, LARS 6.03.09

Triangle Laboratories, Inc.®
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

D-06506

Printed: 00:05 02/15/96

5

SWMU 16/16 DATA
Background/Backfill Sample Data

MORRISON KNUDSEN CORPORATION

CHAIN OF CUSTODY RECORD

720 Park Blvd., P.O. Box 73
Boise, Idaho 83729
(208) 386-5000

AMERICAN ENVIRONMENTAL NETWORK INC

Project No.: 1324-009-009-30

Project Name: NSWC-CRANE

Samplers: (Signature)

Sampler: (Print) ERIC

Split Samples

Analysis Required

Sample Type	Sampling Point Description	Sample Date	Time	Sample I.D. Number	Split Yes	Split No	8240	8270	8260	8100	4010	8250	6010A	1-Hydrin TPH							Remarks
SOIL		3-16-95		NSWC-HP/BF-01		X	X	X	X	X	X	X	X	X	X	✓					2 day
SOIL		3-16-95		NSWC-EP/BF-002	X		X	X	X	X	X	X	X	X	X						TURNAROUND

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time	R C
Company: OMKemp	3-16-95 1500	Company:	Company:		
Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time	R C
Company:		Company:	Company:		
Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Received for Laboratory By (Signature)	Date/Time	Te C
Company:		Company:	Company:		
Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time	R C
Company:		Company:	Company:		

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Date 6/30/96 # of pages ▶ 2

To Dylan Corelli From Peter Chevalier

Co./Dept. MK-ENV. Co. MK Crane

Phone # Phone #

Fax # Fax #

Container:

MORRISON KNUDSEN CORPORATION

CHAIN OF CUSTODY RECORD

720 Park Blvd., P.O. Box 73
Boise, Idaho 83729
(208) 386-5000

C013

AMERICAN ENVIRONMENTAL NETWORK

Project No.: 4324 0009.007.30

Project Name: USWC CRANE

Samplers: (Signature) Bill Kemp

Sampler: (Print) Bill Kemp

Analysis Required

Sample Type	Sampling Point Description	Sample Date	Time	Sample I.D. Number	Split Samples Yes	Split Samples No	8240	8270	8080	8150	8010	8020	8260	8100	14-21 Metals	8330	8250	Remarks
Soil	Borrow Pit	10-12-95	1230	USWC BP/BF 003		X	X	X	X	X	X	X	X	X	X	X	X	Sample Lines Placed of Requested
Soil	Borrow Pit	10-12-95	1240	USWC BP/BF 004		X	X		X	X	X	X	X	X	X	X	X	

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time	Received By: (Signature)
Company: AICC	10-13-95 1715	Company:	Company:		Company:
Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time	Received By: (Signature)
Company:		Company:	Company:		Company:
Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Received for Laboratory By: (Signature)	Date/Time	Total No. Samples This Shipping Container:
Company:		Company:	Company:		Company:
Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time	Received By: (Signature)
Company:		Company:	Company:		Company:

MORRISON KNUDSEN CORPORATION

CHAIN OF CUSTODY RECORD

720 Park Blvd., P.O. Box 73
Boise, Idaho 83729
(208) 386-5000

AMERICAN ENVIRONMENTAL NETWORK

Project No.: 4324 009-007-301
Project Name: CRANE NAVSC
Samplers: (Signature) Bill Kemp
Sampler: (Print) Bill Kemp

Sample Type	Sampling Point Description	Sample Date	Time	Sample I.D. Number	Split Samples Yes	Split Samples No	8240	8260	8270	8080	8130	8140	9010	8270	1631B	7471	1610A						Remarks
SOIL	offsite BF - EAST SIDE	10-27-95	1410	NAVSC BHBF-005		X	X	X	X	X	X	X	X	X	X	X							10 day TAT
SOIL	" " BF WESTSIDE	10-27-95	1415	NAVSC BP/BF 006		X	X	X	X	X	X	X	X	X	X	X							Regulated

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time	Received By: (Signature)
Company: MK	10-27-1500	Company:	Company:		Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Received for Laboratory By: (Signature) Company:	Date/Time	Total No. Samples This Shipping Container: Company:
Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:	Relinquished By: (Signature) Company:	Date/Time	Received By: (Signature) Company:

TOTAL P.02

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9508204
Report To: MK Corp
Project: NSWC-Crane #4324-009-008-30
Date: August 25, 1995
Analysis: Total Cyanide, SW846 9010

Client ID	AENI ID	Result	Date Analyzed
NSWC-BP/BF-001	9508204-001	<1.2	08/22/95
NSWC-BP/BF-002	9508204-002	<1.2	08/22/95

(1) Results reported as mg/kg on a dry weight basis.

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9508204
Report To: MK Corp
Project: NSWC-Crane #4324-009-008-30
Date: August 25, 1995
Analysis: Total Sulfide, SW846 9030M

Client ID	AENI ID	Result	Date Analyzed
NSWC-BP/BF-001	9508204-001	<49	08/22/95
NSWC-BP/BF-002	9508204-002	<49	08/22/95

(1) Results reported as mg/kg on a dry weight basis.

lgchem1002

TL-RTP Project: 33852
Client Sample: NSWC-BP/BF-001
Client Project: Indiana-Navy Project

Method 8280 PCDD/PCDF Analysis (b)
Analysis File: E95[illegible]17
Matrix: SOIL

PCDD/PCDF SUMMARY REPORT

Specific Analytes	Conc. (ppb)	DL (ppb)	Blank (ppb)
2,3,7,8-TCDD	ND	0.0503	ND
1,2,3,7,8-PeCDD	ND	0.528	ND
1,2,3,4,7,8-HxCDD	ND	0.478	ND
1,2,3,6,7,8-HxCDD	ND	0.289	ND
1,2,3,7,8,9-HxCDD	ND	0.277	ND
1,2,3,4,6,7,8-HpCDD	ND	0.717	ND
1,2,3,4,6,7,8,9-OCDD	3.97	0.39	ND
2,3,7,8-TCDF	ND	0.0629	ND
1,2,3,7,8-PeCDF	ND	0.491	ND
2,3,4,7,8-PeCDF	ND	0.616	ND
1,2,3,4,7,8-HxCDF	ND	0.616	ND
1,2,3,6,7,8-HxCDF	ND	0.365	ND
2,3,4,6,7,8-HxCDF	ND	0.503	ND
1,2,3,7,8,9-HxCDF	ND	0.428	ND
1,2,3,4,6,7,8-HpCDF	ND	0.0813	ND
1,2,3,4,7,8,9-HpCDF	ND	0.176	ND
1,2,3,4,6,7,8,9-OCDF	ND	0.34	ND

Definitions:

Conc. - The concentration of the specific analyte in the units shown.

DL - The detection limit of the specific analyte in the units shown.

Blank - The concentration of the method blank.

ND - (Non-Detect) The concentration of the analyte is less than the detection limit.

Total Analytes	Conc. (ppb)	DL (ppb)
Total TCDD	ND	0.0503
Total PeCDD	ND	0.528
Total HxCDD	ND	0.277
Total HpCDD	ND	0.717
Total TCDF	ND	0.0629
Total PeCDF	ND	0.616
Total HxCDF	ND	0.428
Total HpCDF	ND	0.176

8280_PSR v2.07, LARS 6.01.02

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713

Printed: 23:42 08/24/95

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC-BP/BF-001

Lab Name: AENI MD
Contract: MKC
Project No.: 9508204
Site: NSWC
Location: CRANE
Group:
Matrix: (soil/water) SOIL
Lab Sample ID: #001
Sample wt/vol: 5.0 (g/mL) G
Lab File ID: EH310.D
Level: (low/med) LOW
Date Received: 8/17/95
% Moisture: not dec. 19
Date Analyzed: 8/22/95
GC Column: CAP
ID: 0.53 (mm)
Dilution Factor: 1.0
Soil Extract Volume: 1 (uL)
Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	21	
67-64-1	Acetone	11	J
75-05-8	Acetonitrile	6.2	U
107-13-1	Acrylonitrile	1200	U
107-02-8	Acrolein	1200	U
75-69-4	Trichlorofluoromethane	6.2	U
75-15-0	Carbon Disulfide	6.2	U
75-35-4	1,1-Dichloroethene	6.2	U
75-34-4	1,1-Dichloroethane	6.2	U
540-59-0	trans-1,2-Dichloroethene	6.2	U
67-66-3	Chloroform	6.2	U
107-06-2	1,2-Dichloroethane	6.2	U
75-71-8	Dichlorodifluoromethane	6.2	U
74-88-4	Iodomethane	6.2	U
107-12-0	Propionitrile	6.2	U
107-05-1	Allyl chloride	120	U
78-93-3	2-Butanone	120	U
71-55-6	1,1,1-Trichloroethane	6.2	U
56-23-5	Carbon Tetrachloride	6.2	U
108-05-4	Vinyl Acetate	6.2	U
75-27-4	Bromodichloromethane	6.2	U
78-87-5	1,2-Dichloropropane	6.2	U
10061-01-5	cis-1,3-Dichloropropene	6.2	U
79-01-6	Trichloroethene	6.2	U
71-43-2	Benzene	6.2	U
124-48-1	Dibromochloromethane	6.2	U
10061-02-6	trans-1,3-Dichloropropene	6.2	U
79-00-5	1,1,2-Trichloroethane	6.2	U
75-25-2	Bromoform	6.2	U

FORM I VOA

8260/Appendix IX

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC-BP/BF-001

Lab Name: AENI MD Contract: MKC

Project No.: 9508204 Site: NSWC Location: CRANE Group:

Matrix: (soil/water) SOIL Lab Sample ID: #001

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EH310.D

Level: (low/med) LOW Date Received: 8/17/95

% Moisture: not dec. 19 Date Analyzed: 8/22/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		6.2	U
74-95-3	Dibromomethane		6.2	U
106-93-4	1,2-Dibromoethane (EDB)		6.2	U
108-10-1	4-Metnyl-2-Pentanone		62	U
591-78-6	2-Hexanone		62	U
127-18-4	Tetrachloroethene		6.2	U
79-34-5	1,1,2,2-Tetrachloroethane		6.2	U
108-88-3	Toluene		6.2	U
108-90-7	Chlorobenzene		6.2	U
100-41-4	Ethylbenzene		6.2	U
100-42-5	Styrene		6.2	U
108-38-3	m + p-Xylene		6.2	U
95-47-6	o-Xylene		6.2	U
80-62-6	Methyl methacrylate		6.2	U
630-20-6	1,1,1,2-Tetrachloroethane		6.2	U
96-18-4	1,2,3-Trichloropropane		6.2	U
110-57-6	trans-1,4-Dichloro-2-butene		6.2	U
97-63-2	Ethyl methacrylate		6.2	U
76-01-7	Pentachloroethane		6.2	U
96-12-8	1,2-Dibromo-3-chloropropane		6.2	U
126-99-8	Chloroprene		5	UZ
123-91-1	1,4-Dioxane	(TIC)	1000	U
78-83-1	Isobutyl Alcohol	(TIC)	1000	U
	3-Chloroprene	(TIC)	5	U

FORM I VOA 8260/Appendix IX

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC-BP/BF-001

Lab Name: AENI MD

Contract: MKC

Project No.: 9508204

Site:

Location:

Group:

Matrix: (soil/water) SOIL

Lab Sample ID: #001

Sample wt/vol: 31.0 (g/mL) G

Lab File ID: DH263.D

Level: (low/med) LOW

Date Received: 8/17/95

% Moisture: 19

decanted: (Y/N): N

Date Extracted: 8/20/95

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 8/21/95

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-Nitroso-Di-Methylamine	400	U
111-44-4	bis(2-Chloroethyl)ether	400	U
108-95-2	Phenol	400	U
95-57-8	2-Chlorophenol	400	U
541-73-1	1,3-Dichlorobenzene	400	U
106-46-7	1,4-Dichlorobenzene	400	U
95-50-1	1,2-Dichlorobenzene	400	U
100-51-6	Benzyl alcohol	400	U
108-60-1	bis(2-chloroisopropyl)ether	800	U
95-48-7	2-Methylphenol	400	U
67-72-1	Hexachloroethane	400	U
621-64-7	N-Nitroso-di-n-propylamine	400	U
106-44-5	4-Methylphenol	400	U
110-86-1	Pyridine	400	U
109-06-8	2-Picoline	400	U
62-53-3	Aniline	400	U
10595-95-6	N-Nitrosomethylethylamine	400	U
66-27-3	Methyl methanesulfonate	400	U
55-18-5	N-Nitrosodiethylamine	400	U
62-50-0	Ethyl methanesulfonate	400	U
108-39-4	3-Methylphenol	400	U
930-55-2	N-Nitrosopyrrolidine	400	U
95-53-4	o-Toluidine	400	U
59-89-2	N-Nitrosomorpholine	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
111-91-1	bis(2-Chloroethoxy)methane	400	U
120-83-2	2,4-Dichlorophenol	400	U
120-82-1	1,2,4-Trichlorobenzene	400	U
91-20-3	Naphthalene	400	U
106-47-8	4-Chloroaniline	800	U

FORM I SV

SW846

L-00512

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC-BP/BF-001

Lab Name: AENI MD Contract: MKC

Project No.: 9508204 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: #001

Sample wt/vol: 31.0 (g/mL) G Lab File ID: DH263.D

Level: (low/med) LOW Date Received: 8/17/95

% Moisture: 19 decanted: (Y/N): N Date Extracted: 8/20/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/21/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
87-68-3	Hexachlorobutadiene	400	U
59-50-7	4-Chloro-3-methylphenol	400	U
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U
98-86-2	Acetophenone	400	U
122-09-8	a,a,a-Dimethylphenethylamine	400	U
1888-71-7	Hexachloropropene	400	U
87-65-0	2,6-Dichlorophenol	400	U
924-16-3	N-Nitrosodibutylamine	400	U
100-75-4	N-Nitrosopiperidine	400	U
130-15-4	1,4-Naphthoquinone	400	U
126-68-1	o,o,o-Triethyl phosphorothioate	400	U
120-58-1	Isosafrole	400	U
106-50-3	p-Phenylenediamine	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	400	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	2000	U
208-96-8	Acenaphthylene	400	U
131-11-3	Dimethylphthalate	400	U
606-20-2	2,6-Dinitrotoluene	400	U
83-32-9	Acenaphthene	400	U
99-09-2	3-Nitroaniline	2000	U
51-28-5	2,4-Dinitrophenol	2000	U
132-64-9	Dibenzofuran	400	U
121-14-2	2,4-Dinitrotoluene	400	U
100-02-7	4-Nitrophenol	400	U
86-73-7	Fluorene	400	U
7005-72-3	4-Chlorophenyl-phenylether	400	U
84-66-2	Diethylphthalate	400	U
100-01-6	4-Nitroaniline	2000	U
95-94-3	1,2,4,5-Tetrachlorobenzene	400	U
99-65-0	1,3-Dinitrobenzene	400	U

FORM I SV

SW846

D-0515

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC-BP/BF-001

Lab Name: AENI MD
Contract: MKC
Project No.: 9508204
Site:
Location:
Group:
Matrix: (soil/water) SOIL
Lab Sample ID: #001
Sample wt/vol: 31.0 (g/mL) G
Lab File ID: DH263.0
Level: (low/med) LOW
Date Received: 8/17/95
% Moisture: 19
decanted: (Y/N): N
Date Extracted: 8/20/95
Concentrated Extract Volume: 1000 (uL)
Date Analyzed: 8/21/95
Injection Volume: 1.0 (uL)
Dilution Factor: 1.0
GPC Cleanup: (Y/N) N
pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
608-93-5	Pentachlorobenzene	400	U
91-59-8	2-Naphthylamine	400	U
134-32-7	1-Naphthylamine	400	U
58-90-2	2,3,4,6-Tetrachlorophenol	400	U
297-97-2	Thionazin	400	U
99-55-8	5-Nitro-o-toluidine	400	U
94-59-7	Safrole	400	U
56-57-5	4-Nitroquinoline 1-oxide	400	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
86-30-6	n-Nitrosodiphenylamine	400	U
101-55-3	4-Bromophenyl-phenylether	400	U
118-74-1	Hexachlorobenzene	400	U
87-86-5	Pentachlorophenol	2000	U
85-01-8	Phenanthrene	400	U
120-12-7	Anthracene	400	U
84-74-2	Di-n-butylphthalate	400	U
206-44-0	Fluoranthene	400	U
122-39-4	Diphenylamine	400	U
99-35-4	sym-Trinitrobenzene	400	U
62-44-2	Phenacetin	400	U
92-67-1	4-Aminobiphenyl	400	U
91-80-5	Methapyrilene	400	U
129-00-0	Pyrene	400	U
85-68-7	Butylbenzylphthalate	400	U
91-94-1	3,3'-Dichlorobenzidine	800	U
56-55-3	Benzo(a)anthracene	400	U
218-01-9	Chrysene	400	U
117-81-7	bis(2-Ethylhexyl)phthalate	400	U
60-11-7	p-Dimethylaminoazobenzene	400	U
140-57-8	Aramite	400	U
119-93-7	3,3'-Dimethylbenzidine	400	U
53-96-3	2-Acetylaminofluorene	400	U
117-84-0	Di-n-octylphthalate	400	U

FORM I SV

SW846

D-00514

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC-BP/BF-001

Lab Name: AENI MD Contract: MKC

Project No.: 9508204 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #001

Sample wt/vol: 31.0 (g/mL) G Lab File ID: DH263.D

Level: (low/med) LOW Date Received: 8/17/95

% Moisture: 19 decanted: (Y/N): N Date Extracted: 8/20/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/21/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
205-99-2	Benzo(b)fluoranthene	400	U
207-08-9	Benzo(k)fluoranthene	400	U
50-32-8	Benzo(a)pyrene	400	U
193-39-5	Indeno(1,2,3-cd)pyrene	400	U
53-70-3	Dibenz(a,h)anthracene	400	U
191-24-2	Benzo(g,h,i)perylene	400	U
57-97-6	7,12-Dimethylbenz(a)anthracene	400	U
56-49-5	3-Methylcholanthrene	400	U

FORM I SV

SW846

D- 00515

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BP/BF-001

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP___

Lab Code: _____ Case No.: 95082 SAS No.: _____ SDG No.: 508204

Matrix (soil/water): SOIL_ Lab Sample ID: 950820401

Level (low/med): LOW__ Date Received: 08/17/95

% Solids: _81.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_	2.6	U		P_
7440-38-2	Arsenic__	9.4	_		P_
7440-39-3	Barium___	62.4	_		P_
7440-41-7	Beryllium	0.57	_		P_
7440-43-9	Cadmium__	0.52	U		P_
7440-70-2	Calcium__		_		NR
7440-47-3	Chromium_	15.8	_		P_
7440-48-4	Cobalt___	3.9	_		P_
7440-50-8	Copper___	15.3	_		P_
7439-89-6	Iron_____		_		NR
7439-92-1	Lead_____	13.8	_		P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__	0.12	U		AV
7440-02-0	Nickel___	10	_		P_
7440-09-7	Potassium		_		NR
7782-49-2	Selenium_	0.65	U		P_
7440-22-4	Silver___	1.0	U		P_
7440-23-5	Sodium___		_		NR
7440-28-0	Thallium_	1.3	U		P_
7440-62-2	Vanadium_	31.2	_		P_
7440-66-6	Zinc_____	39.5	_		P_
	Cyanide__		_		NR
7440-31-5_	Tin_____	32.4	U		P_
7439-93-2_	Lithium__	12.8	_		P_
			_		
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Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

ments:

LIENT_ID: __NSWC-BP/BF-001

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9508204

Project Name:——— NSWC-CRANE

Client Name:——— MK CORP

Sample Number
NSWC-BP/BF-001

AENI # 9508204-001

Concentration:——— Low

Date Sampled:——— 8/16/95

Date Received:——— 8/17/95

Date Ext Prepared:——— 8/21/95

Date Analyzed:——— 8/22/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup		Yes	X	No
Seperatory Funnel Extraction				Yes
Continuous Liquid - Liquid Extraction				Yes
Percent Moisture	18.8			
Matrix:	SOIL			

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		2.0	U
319-85-7	beta-BHC		2.0	U
319-86-8	delta-BHC		2.0	U
58-89-9	gamma-BHC (Lindane)		4.1	U
75-44-8	Heptachlor		2.0	U
309-00-2	Aldrin		2.0	U
1024-57-3	Heptachlor epoxide		2.0	U
959-98-8	Endosulfan I		2.0	U
60-57-1	Dieldrin		4.1	U
75-55-9	4, 4'-DDE		4.1	U
72-20-8	Endrin		4.1	U
33213-65-9	Endosulfan II		4.1	U
72-54-8	4, 4'-DDD		4.1	U
1031-07-8	Endosulfan Sulfate		4.1	U
50-29-3	4, 4'-DDT		8.2	U
72-43-5	Methoxychlor		20	U
53494-70-5	Endrin Ketone		4.1	U
7421-36-3	Endrin aldehyde		4.1	U
57-74-9	Chlordane		41	U
8001-35-2	Toxaphene		200	U
12674-11-2	Aroclor-1016		41	U
11104-28-2	Aroclor-1221		82	U
11141-16-5	Aroclor-1232		41	U
53469-21-9	Aroclor-1242		41	U
12672-29-6	Aroclor-1248		41	U
11097-69-1	Aroclor-1254		41	U
11096-82-5	Aroclor-1260		41	U
510-15-6	Chlorobenzilate		82	U
2303-16-4	Diallate		409	U
465-73-6	Isodrin		10	U
143-50-0	Kepone		41	U
82-68-8	Pentachloronitrobenzene		8.2	U

Vi - Volume of extract injected (ul) - _____ 5

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.09

Vt - Volume of total extract (ul) - _____ 10,000

D- 0649

FORM I

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Organophosphorus

Case No.:——— 9508204

Project Name:——— NSWC-CRANE #4324-009-008-30

Client Name:——— MK CORP

Sample Number
NSWC-BP/BF-001

AENI # 9508204-001

Concentration:——— Low

Date Sampled:——— 8/16/95

Date Received:——— 8/17/95

Date Ext Prepared:——— 8/21/95

Date Analyzed:——— 8/26/95

Conc/Dil Factor:——— 1

Method: ——— 8140

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extration		Yes
Percent Solid	81.2	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
298-02-2	Phorate		2.0	U
60-51-5	Dimethoate		4.0	U
23950-58-5	Pronamide		2.0	U
298-04-4	Disulfoton		2.0	U
298-00-0	Methyl Parathion		2.0	U
56-38-2	Ethyl Parathion		2.0	U
52-85-7	Famphur		2.0	U
3689-24-5	Tetraethyl dithiopyrophosphate		202	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.42

Vt - Volume of total extract (ul) - _____ 1,000

AMERICAN ENVIRONMENTAL NETWORK INC.
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8150

Case No.: 9508204
Client Name: MK CORP
Project Name: NSWC-CRANE # 4324-009-008-30

Sample Number
NSWC-BP/BF-001

AENI # 9508204-001

Concentration: Low
Date Sampled: 8/16/95
Date Received: 8/17/95
Date Extract Prepared: 8/22/95
Date Analyzed: 8/25/95
Conc/Dil Factor: 10
Matrix SOIL

GPC Cleanup No
Shaker: Yes
Continuous Liq-Liq Ext.: No
Percent Solid 81.2

Compound	Concentration ug/kg	Reporting Limit	Qualifier
2,4 D		61	U
SILVEX		61	U
2,4,5-T		61	U

Vi - Volume of extract injected (ul) 1
Vs - Volume of water extracted (ml) N/A
Ws - Mass of soil extracted (g) 50.31
Vt- Volume of total extract (ul) 5000

FORM I

D-00519

TL-RTP Project: 33852
Client Sample: NSWC-BP/BF-002
Client Project: Indiana-Navy Project

Method 8280 PCDD/PCDF Analysis (b)
Analysis File: E9[illegible]18
Matrix: SOIL

PCDD/PCDF SUMMARY REPORT

Specific Analytes	Conc. (ppb)	DL (ppb)	Blank (ppb)
2,3,7,8-TCDD	ND	0.0497	ND
1,2,3,7,8-PeCDD	ND	0.522	ND
1,2,3,4,7,8-HxCDD	ND	0.472	ND
1,2,3,6,7,8-HxCDD	ND	0.286	ND
1,2,3,7,8,9-HxCDD	ND	0.273	ND
1,2,3,4,6,7,8-HpCDD	ND	0.708	ND
1,2,3,4,6,7,8,9-OCDD	4.45	0.385	ND
2,3,7,8-TCDF	ND	0.0621	ND
1,2,3,7,8-PeCDF	ND	0.484	ND
2,3,4,7,8-PeCDF	ND	0.609	ND
1,2,3,4,7,8-HxCDF	ND	0.609	ND
1,2,3,6,7,8-HxCDF	ND	0.36	ND
2,3,4,6,7,8-HxCDF	ND	0.497	ND
1,2,3,7,8,9-HxCDF	ND	0.422	ND
1,2,3,4,6,7,8-HpCDF	ND	0.0802	ND
1,2,3,4,7,8,9-HpCDF	ND	0.174	ND
1,2,3,4,6,7,8,9-OCDF	ND	0.335	ND

Definitions:

Conc. - The concentration of the specific analyte in the units shown.

DL - The detection limit of the specific analyte in the units shown.

Blank - The concentration of the method blank.

ND - (Non-Detect) The concentration of the analyte is less than the detection limit.

Total Analytes	Conc. (ppb)	DL (ppb)
Total TCDD	ND	0.0497
Total PeCDD	ND	0.522
Total HxCDD	ND	0.273
Total HpCDD	ND	0.708
Total TCDF	ND	0.0621
Total PeCDF	ND	0.609
Total HxCDF	ND	0.422
Total HpCDF	ND	0.174

8280_PSR v2.07, LARS 6.01.07

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

D 00521

Printed: 23:43 08/24/95

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC-BP/BF-002

Lab Name: AENI MO
Contract: MKC
Project No.: 9508204
Site: NSWC
Location: CRANE
Group:
Matrix: (soil/water) SOIL
Lab Sample ID: #002
Sample wt/vol: 5.0 (g/mL) G
Lab File ID: EH311.D
Level: (low/med) LOW
Date Received: 8/17/95
% Moisture: not dec. 18
Date Analyzed: 8/22/95
GC Column: CAP
ID: 0.53 (mm)
Dilution Factor: 1.0
Soil Extract Volume: 1 (uL)
Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	16	
67-64-1	Acetone	7.7	J
75-05-8	Acetonitrile	6.1	U
107-13-1	Acrylonitrile	1200	U
107-02-8	Acrolein	1200	U
75-69-4	Trichlorofluoromethane	6.1	U
75-15-0	Carbon Disulfide	6.1	U
75-35-4	1,1-Dichloroethene	6.1	U
75-34-4	1,1-Dichloroethane	6.1	U
540-59-0	trans-1,2-Dichloroethene	6.1	U
67-66-3	Chloroform	6.1	U
107-06-2	1,2-Dichloroethane	6.1	U
75-71-8	Dichlorodifluoromethane	6.1	U
74-88-4	Iodomethane	6.1	U
107-12-0	Propionitrile	6.1	U
107-05-1	Allyl chloride	120	U
78-93-3	2-Butanone	120	U
71-55-6	1,1,1-Trichloroethane	6.1	U
56-23-5	Carbon Tetrachloride	6.1	U
108-05-4	Vinyl Acetate	6.1	U
75-27-4	Bromodichloromethane	6.1	U
78-87-5	1,2-Dichloropropane	6.1	U
10061-01-5	cis-1,3-Dichloropropene	6.1	U
79-01-6	Trichloroethene	6.1	U
71-43-2	Benzene	6.1	U
124-48-1	Dibromochloromethane	6.1	U
10061-02-6	trans-1,3-Dichloropropene	6.1	U
79-00-5	1,1,2-Trichloroethane	6.1	U
75-25-2	Bromoform	6.1	U

FORM I VOA

8260/Appendix IX

D- 01522

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC-BP/BF-002

Lab Name: AENI MD Contract: MKC

Project No.: 9508204 Site: NSWC Location: CRANE Group:

Matrix: (soil/water) SOIL Lab Sample ID: #002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EH311.D

Level: (low/med) LOW Date Received: 8/17/95

% Moisture: not dec. 18 Date Analyzed: 8/22/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
126-98-7	Methacrylonitrile	6.1	U
74-95-3	Dibromomethane	6.1	U
106-93-4	1,2-Dibromoethane (EDB)	6.1	U
108-10-1	4-Methyl-2-Pentanone	61	U
591-78-6	2-Hexanone	61	U
127-18-4	Tetrachloroethene	6.1	U
79-34-5	1,1,2,2-Tetrachloroethane	6.1	U
108-88-3	Toluene	6.1	U
108-90-7	Chlorobenzene	6.1	U
100-41-4	Ethylbenzene	6.1	U
100-42-5	Styrene	6.1	U
108-38-3	m + p-Xylene	6.1	U
95-47-6	o-Xylene	6.1	U
80-62-6	Methyl methacrylate	6.1	U
630-20-6	1,1,1,2-Tetrachloroethane	6.1	U
96-18-4	1,2,3-Trichloropropane	6.1	U
110-57-6	trans-1,4-Dichloro-2-butene	6.1	U
97-63-2	Ethyl methacrylate	6.1	U
76-01-7	Pentachloroethane	6.1	U
96-12-8	1,2-Dibromo-3-chloropropane	6.1	U
126-99-8	Chloroprene	5	UZ
123-91-1	1,4-Dioxane (TIC)	1000	U
78-83-1	Isobutyl Alcohol (TIC)	1000	U
	3-Chloroprene (TIC)	5	U

FORM I VOA 8260/Appendix IX

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC-BP/BF-002

Lab Name: AENI MD

Contract: MKC

Project No.: 9508204

Site:

Location:

Group:

Matrix: (soil/water) SOIL

Lab Sample ID: #002

Sample wt/vol: 30.2 (g/mL) G

Lab File ID: DH264.D

Level: (low/med) LOW

Date Received: 8/17/95

% Moisture: 18

decanted: (Y/N): N

Date Extracted: 8/20/95

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 8/21/95

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-Nitroso-Di-Methylamine	400	U
111-44-4	bis(2-Chloroethyl)ether	400	U
108-95-2	Phenol	400	U
95-57-8	2-Chlorophenol	400	U
541-73-1	1,3-Dichlorobenzene	400	U
106-46-7	1,4-Dichlorobenzene	400	U
95-50-1	1,2-Dichlorobenzene	400	U
100-51-6	Benzyl alcohol	810	U
108-60-1	bis(2-chloroisopropyl)ether	400	U
95-48-7	2-Methylphenol	400	U
67-72-1	Hexachloroethane	400	U
621-64-7	N-Nitroso-di-n-propylamine	400	U
106-44-5	4-Methylphenol	400	U
110-86-1	Pyridine	400	U
109-06-8	2-Picoline	400	U
62-53-3	Aniline	400	U
10595-95-6	N-Nitrosomethylethylamine	400	U
66-27-3	Methyl methanesulfonate	400	U
55-18-5	N-Nitrosodiethylamine	400	U
62-50-0	Ethyl methanesulfonate	400	U
108-39-4	3-Methylphenol	400	U
930-55-2	N-Nitrosopyrrolidine	400	U
95-53-4	o-Toluidine	400	U
59-89-2	N-Nitrosomorpholine	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
111-91-1	bis(2-Chloroethoxy)methane	400	U
120-83-2	2,4-Dichlorophenol	400	U
120-82-1	1,2,4-Trichlorobenzene	400	U
91-20-3	Naphthalene	400	U
106-47-8	4-Chloroaniline	810	U

FORM I SV

SW846

D- 06524

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC-BP/BF-002

Lab Name: AENI MD Contract: MKC

Project No.: 9508204 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: #002

Sample wt/vol: 30.2 (g/mL) G Lab File ID: DH264.D

Level: (low/med) LOW Date Received: 8/17/95

% Moisture: 18 decanted: (Y/N): N Date Extracted: 8/20/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/21/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
87-68-3	Hexachlorobutadiene	400	U
59-50-7	4-Chloro-3-methylphenol	400	U
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U
98-86-2	Acetophenone	400	U
122-09-8	a,a,a-Dimethylphenethylamine	400	U
1888-71-7	Hexachloropropene	400	U
87-65-0	2,6-Dichlorophenol	400	U
924-16-3	N-Nitrosodibutylamine	400	U
100-75-4	N-Nitrosopiperidine	400	U
130-15-4	1,4-Naphthoquinone	400	U
126-68-1	o,o,o-Triethyl phosphorothioate	400	U
120-58-1	Isosafrole	400	U
106-50-3	p-Phenylenediamine	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	400	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	2000	U
208-96-8	Acenaphthylene	400	U
131-11-3	Dimethylphthalate	400	U
606-20-2	2,6-Dinitrotoluene	400	U
83-32-9	Acenaphthene	400	U
99-09-2	3-Nitroaniline	2000	U
51-28-5	2,4-Dinitrophenol	2000	U
132-64-9	Dibenzofuran	400	U
121-14-2	2,4-Dinitrotoluene	400	U
100-02-7	4-Nitrophenol	400	U
86-73-7	Fluorene	400	U
7005-72-3	4-Chlorophenyl-phenylether	400	U
84-66-2	Diethylphthalate	400	U
100-01-6	4-Nitroaniline	2000	U
95-94-3	1,2,4,5-Tetrachlorobenzene	400	U
99-65-0	1,3-Dinitrobenzene	400	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC-BP/BF-002

Lab Name: AENI MD

Contract: MKC

Project No.: 9508204

Site:

Location:

Group:

Matrix: (soil/water) SOIL

Lab Sample ID: #002

Sample wt/vol: 30.2 (g/mL) G

Lab File ID: DH264.D

Level: (low/med) LOW

Date Received: 8/17/95

% Moisture: 18

decanted: (Y/N): N

Date Extracted: 8/20/95

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 8/21/95

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
608-93-5	Pentachlorobenzene	400	U
91-59-8	2-Naphthylamine	400	U
134-32-7	1-Naphthylamine	400	U
58-90-2	2,3,4,6-Tetrachlorophenol	400	U
297-97-2	Thionazin	400	U
99-55-8	5-Nitro-o-toluidine	400	U
94-59-7	Safrole	400	U
56-57-5	4-Nitroquinoline 1-oxide	400	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
86-30-6	n-Nitrosodiphenylamine	400	U
101-55-3	4-Bromophenyl-phenylether	400	U
118-74-1	Hexachlorobenzene	400	U
87-86-5	Pentachlorophenol	2000	U
85-01-8	Phenanthrene	400	U
120-12-7	Anthracene	400	U
84-74-2	Di-n-butylphthalate	400	U
206-44-0	Fluoranthene	400	U
122-39-4	Diphenylamine	400	U
99-35-4	sym-Trinitrobenzene	400	U
62-44-2	Phenacetin	400	U
92-67-1	4-Aminobiphenyl	400	U
91-80-5	Methapyrilene	400	U
129-00-0	Pyrene	400	U
85-68-7	Butylbenzylphthalate	400	U
91-94-1	3,3'-Dichlorobenzidine	810	U
56-55-3	Benzo(a)anthracene	400	U
218-01-9	Chrysene	400	U
117-81-7	bis(2-Ethylhexyl)phthalate	400	U
60-11-7	p-Dimethylaminoazobenzene	400	U
140-57-8	Aramite	400	U
119-93-7	3,3'-Dimethylbenzidine	400	U
53-96-3	2-Acetylaminofluorene	400	U
117-84-0	Di-n-octylphthalate	400	U

FORM I SV

SW846

D-00526

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC-BP/BF-002

Lab Name: AENI MD Contract: MKC

Project No.: 9508204 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #002

Sample wt/vol: 30.2 (g/mL) G Lab File ID: DH264.D

Level: (low/med) LOW Date Received: 8/17/95

% Moisture: 18 decanted: (Y/N): N Date Extracted: 8/20/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/21/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
205-99-2	Benzo(b)fluoranthene	400	U
207-08-9	Benzo(k)fluoranthene	400	U
50-32-8	Benzo(a)pyrene	400	U
193-39-5	Indeno(1,2,3-cd)pyrene	400	U
53-70-3	Dibenz(a,h)anthracene	400	U
191-24-2	Benzo(g,h,i)perylene	400	U
57-97-6	7,12-Dimethylbenz(a)anthracene	400	U
56-49-5	3-Methylcholanthrene	400	U

FORM I SV

SW846

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BP/BF-002

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP___
Lab Code: _____ Case No.: 95082 SAS No.: _____ SDG No.: 508204
Matrix (soil/water): SOIL_ Lab Sample ID: 950820402
Level (low/med): LOW__ Date Received: 08/17/95
% Solids: _82.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_	2.4	U		P_
7440-38-2	Arsenic__	9.0	_		P_
7440-39-3	Barium___	65.1	_		P_
7440-41-7	Beryllium	0.56	_		P_
7440-43-9	Cadmium__	0.48	U		P_
7440-70-2	Calcium__		_		NR
7440-47-3	Chromium_	16.9	_		P_
7440-48-4	Cobalt___	4.6	_		P_
7440-50-8	Copper___	16.1	_		P_
7439-89-6	Iron_____		_		NR
7439-92-1	Lead_____	14.9	_		P_
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury__	0.10	U		AV
7440-02-0	Nickel___	10.8	_		P_
7440-09-7	Potassium		_		NR
7782-49-2	Selenium_	0.60	U		P_
7440-22-4	Silver___	0.96	U		P_
7440-23-5	Sodium___		_		NR
7440-28-0	Thallium_	1.2	U		P_
7440-62-2	Vanadium_	30.8	_		P_
7440-66-6	Zinc_____	41.9	_		P_
	Cyanide__		_		NR
7440-31-5_	Tin_____	30.0	U		P_
7439-93-2_	Lithium__	11.7	_		P_
			_		
			_		
			_		
			_		
			_		
			_		
			_		

Color Before: _____ Clarity Before: _____ Texture: _____
Color After: _____ Clarity After: _____ Artifacts: _____

Comments:
CLIENT_ID:__NSWC-BP/BF-002

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9508204

Project Name:——— NSWC-CRANE

Client Name:——— MK CORP

Sample Number
NSWC-BP/BF-002

AENI # 9508204-002

Concentration:——— Low

Date Sampled:——— 8/16/95

Date Received:——— 8/17/95

Date Ext Prepared:——— 8/21/95

Date Analyzed:——— 8/22/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup		Yes	X	No
Seperatory Funnel Extraction				Yes
Continuous Liquid - Liquid Extraction				Yes
Percent Moisture	17.6			
Matrix:	SOIL			

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		2.0	U
319-85-7	beta-BHC		2.0	U
319-86-8	delta-BHC		2.0	U
58-89-9	gamma-BHC (Lindane)		4.0	U
75-44-8	Heptachlor		2.0	U
309-00-2	Aldrin		2.0	U
1024-57-3	Heptachlor epoxide		2.0	U
959-98-8	Endosulfan I		2.0	U
60-57-1	Dieldrin		4.0	U
75-55-9	4, 4'-DDE		4.0	U
72-20-8	Endrin		4.0	U
33213-65-9	Endosulfan II		4.0	U
72-54-8	4, 4'-DDD		4.0	U
1031-07-8	Endosulfan Sulfate		4.0	U
50-29-3	4, 4'-DDT		8.1	U
72-43-5	Methoxychlor		20	U
53494-70-5	Endrin Ketone		4.0	U
7421-36-3	Endrin aldehyde		4.0	U
57-74-9	Chlordane		40	U
8001-35-2	Toxaphene		200	U
12674-11-2	Aroclor-1016		40	U
11104-28-2	Aroclor-1221		81	U
11141-16-5	Aroclor-1232		40	U
53469-21-9	Aroclor-1242		40	U
12672-29-6	Aroclor-1248		40	U
11097-69-1	Aroclor-1254		40	U
11096-82-5	Aroclor-1260		40	U
510-15-6	Chlorobenzilate		81	U
2303-16-4	Diallate		403	U
465-73-6	Isodrin		10	U
143-50-0	Kepone		40	U
82-68-8	Pentachloronitrobenzene		8.1	U

Vi - Volume of extract injected (ul) - _____ 5

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.11

Vt - Volume of total extract (ul) - _____ 10,000

L 00529

FORM I

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Organophosphorus

Case No.: 9508204

Project Name: NSWC-CRANE #4324-009-006-30

Client Name: MK CORP

Sample Number
NSWC-BP/BF-002

AENI # 9508204-002

Concentration: Low

Date Sampled: 8/16/95

Date Received: 8/17/95

Date Ext Prepared: 8/21/95

Date Analyzed: 8/26/95

Conc/Dil Factor: 1

Method: 8140

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extration		Yes
Percent Solid	82.4	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
298-02-2	Phorate		2.0	U
60-51-5	Dimethoate		4.0	U
23950-58-5	Pronamide		2.0	U
298-04-4	Disulfoton		2.0	U
298-00-0	Methyl Parathion		2.0	U
56-38-2	Ethyl Parathion		2.0	U
52-85-7	Famphur		2.0	U
3689-24-5	Tetraethyl dithiopyrophosphate		200	U

Vi - Volume of extract injected (ul) - 1

Ve - Volume of Water extracted (ml) - N/A

Ws - Weight of sample extracted (g) - 30.35

Vt - Volume of total extract (ul) - 1,000

FORM I

D 01532

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510148
Report To: MK Corp.
Project: Crane NSWC
Date: October 26, 1995
Analysis: Total Cyanide, SW846 9010

Client ID	AENI ID	%Solids	Result, mg/Kg
NSWC BP/BF 003	9510148-001	85.6	<1.2
NSWC BP/BF 004	9510148-002	87.5	<1.1

(1) Results reported on a dry weight basis.

lgchem1007

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510148
Report To: MK Corp.
Project: Crane NSWC
Date: October 26, 1995
Analysis: Total Sulfide, SW846 9030M

Client ID	AENI ID	%Solids	Result, mg/Kg
NSWC BP/BF 003	9510148-001	85.6	<58
NSWC BP/BF 004	9510148-002	87.5	<58

(1) Results reported on a dry weight basis.

lgchem1007

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510148

Project Name:——— CRANE NSWC

Client Name:——— MK CORP

Sample Number
NSWC BP/BF 003

AENI # 9510148-001

Concentration:——— Low

Date Sampled:——— 10/11/95

Date Received:——— 10/14/95

Date Ext Prepared:——— 10/18/95

Date Analyzed:——— 10/21/95

Conc/Dil Factor:——— 2

Method: ——— 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	14.4	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		3.8	U
319-85-7	beta-BHC		3.8	U
319-86-8	delta-BHC		3.8	U
58-89-9	gamma-BHC (Lindane)		7.7	U
75-44-8	Heptachlor		3.8	U
309-00-2	Aldrin		3.8	U
1024-57-3	Heptachlor epoxide		3.8	U
959-98-8	Endosulfan I		3.8	U
60-57-1	Dieldrin		7.7	U
75-55-9	4, 4'-DDE		7.7	U
72-20-8	Endrin		7.7	U
33213-65-9	Endosulfan II		7.7	U
72-54-8	4, 4'-DDD		7.7	U
1031-07-8	Endosulfan Sulfate		7.7	U
50-29-3	4, 4'-DDT		7.7	U
72-43-5	Methoxychlor		38	U
53494-70-5	Endrin Ketone		7.7	U
7421-36-3	Endrin aldehyde		7.7	U
57-74-9	Chlordane		77	U
8001-35-2	Toxaphene		380	U
12674-11-2	Aroclor-1016		77	U
11104-28-2	Aroclor-1221		150	U
11141-16-5	Aroclor-1232		77	U
53469-21-9	Aroclor-1242		77	U
12672-29-6	Aroclor-1248		77	U
11097-69-1	Aroclor-1254		77	U
11096-82-5	Aroclor-1260		77	U
510-15-6	Chlorobenzilate		154	U
2303-16-4	Diallate		768	U
465-73-6	Isodrin		19	U
143-50-0	Kepone		77	U
82-68-8	Pentachloronitrobenzene		15	U

Vi - Volume of extract injected (ul) - _____ 5

Ve - Volume of Water extracted (ml) - _____ N/A

We - Weight of sample extracted (g) - _____ 30.41

Vt - Volume of total extract (ul) - _____ 10,000

FORM I

AENI
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8150

Case No.: 9510148
Client Name: MK CORP
Project Name: CRANE NSWC

Sample Number
NSWC BP/BF 003

AENI # 9510148-001

Concentration: Low
Date Sampled: 10/11/95
Date Received: 10/14/95
Date Extract Prepared: 10/19/95
Date Analyzed: 10/25/95
Conc/Dil Factor: 1
Matrix SOIL

GPC Cleanup No
Shaker: Yes
Continuous Liq-Liq Ext.: No
Percent Solid 85.6

Compound	Concentration ug/kg	Reporting Limit	Qualifier
2,4 D		57	U
SILVEX		57	U
2,4,5-T		57	U

Vi - Volume of extract injected (ul) 1
Vs - Volume of water extracted (ml) N/A
Ws - Mass of soil extracted (g) 10.25
Vt- Volume of total extract (ul) 10000

FORM I

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC BP/BF 003

Lab Name: AENI Contract: 9510148

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #001

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ371.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 14 Date Analyzed: 10/24/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	5.8	U
67-64-1	Acetone	120	U
75-05-8	Acetonitrile	5.8	U
107-13-1	Acrylonitrile	1200	U
107-02-8	Acrolein	1200	U
75-69-4	Trichlorofluoromethane	5.8	U
75-15-0	Carbon Disulfide	5.8	U
75-35-4	1,1-Dichloroethene	5.8	U
75-34-4	1,1-Dichloroethane	5.8	U
540-59-0	trans-1,2-Dichloroethene	5.8	U
67-66-3	Chloroform	5.8	U
107-06-2	1,2-Dichloroethane	5.8	U
75-71-8	Dichlorodifluoromethane	5.8	U
74-88-4	Iodomethane	5.8	U
107-12-0	Propionitrile	5.8	U
107-05-1	Allyl chloride	120	U
78-93-3	2-Butanone	120	U
71-55-6	1,1,1-Trichloroethane	5.8	U
56-23-5	Carbon Tetrachloride	5.8	U
108-05-4	Vinyl Acetate	5.8	U
75-27-4	Bromodichloromethane	5.8	U
78-87-5	1,2-Dichloropropane	5.8	U
10061-01-5	cis-1,3-Dichloropropene	5.8	U
79-01-6	Trichloroethene	5.8	U
71-43-2	Benzene	5.8	U
124-48-1	Dibromochloromethane	5.8	U
10061-02-6	trans-1,3-Dichloropropene	5.8	U
79-00-5	1,1,2-Trichloroethane	5.8	U
75-25-2	Bromoform	5.8	U

FORM I VOA

8260/Appendix IX

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC BP/BF 003

Lab Name: AENI Contract: 9510148

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #001

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ371.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 14 Date Analyzed: 10/24/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.8	U
74-95-3	Dibromomethane		5.8	U
106-93-4	1,2-Dibromoethane (EDB)		5.8	U
108-10-1	4-Methyl-2-Pentanone		58	U
591-78-6	2-Hexanone		58	U
127-18-4	Tetrachloroethene		5.8	U
79-34-5	1,1,2,2-Tetrachloroethane		5.8	U
108-88-3	Toluene		5.8	U
108-90-7	Chlorobenzene		5.8	U
100-41-4	Ethylbenzene		5.8	U
100-42-5	Styrene		5.8	U
108-38-3	m + p-Xylene		5.8	U
95-47-6	o-Xylene		5.8	U
80-62-6	Methyl methacrylate		5.8	U
630-20-6	1,1,1,2-Tetrachloroethane		5.8	U
96-18-4	1,2,3-Trichloropropane		5.8	U
110-57-6	trans-1,4-Dichloro-2-butene		29	U
97-63-2	Ethyl methacrylate		5.8	U
76-01-7	Pentachloroethane		5.8	U
96-12-8	1,2-Dibromo-3-chloropropane		5.8	U
78-83-1	Isobutyl Alcohol		5.8	U
126-99-8	Chloroprene	(TIC)	5.8	UZ
	3-Chloroprene	(TIC)	5.8	U
123-91-1	1,4-Dioxane	(TIC)	1200	U
Methylene Chloride - Dichloromethane				
Methyl ethyl ketone - 2-Butanone				
Chloroprene - 2-Chloro-1,3-butadiene				
Propionitrile - Ethyl Cyanide				

FORM I VOA 8260/Appendix IX

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC BP/BF 003

Lab Name: AENI Contract: 9510148

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #001

Sample wt/vol: 30.9 (g/mL) G Lab File ID: DJ288.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: 14 decanted: (Y/N): N Date Extracted: 10/20/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/23/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
91-20-3	Naphthalene	380	U
91-57-6	2-Methylnaphthalene	380	U
91-58-7	2-Chloronaphthalene	380	U
208-96-8	Acenaphthylene	380	U
83-32-9	Acenaphthene	380	U
132-64-9	Dibenzofuran	380	U
86-73-7	Fluorene	380	U
85-01-8	Phenanthrene	380	U
120-12-7	Anthracene	380	U
206-44-0	Fluoranthene	380	U
129-00-0	Pyrene	380	U
56-55-3	Benzo(a)anthracene	380	U
218-01-9	Chrysene	380	U
205-99-2	Benzo(b)fluoranthene	380	U
207-08-9	Benzo(k)fluoranthene	380	U
50-32-8	Benzo(a)pyrene	380	U
193-39-5	Indeno(1,2,3-cd)pyrene	380	U
53-70-3	Dibenz(a,h)anthracene	380	U
191-24-2	Benzo(g,h,i)perylene	380	U

D 001535

TL-RTP Project: 34600B
Client Sample: NSWC BP/BF 003
Client Project: Indiana Navy Project

Method 8280 PCDD/PCDF Analysis (b)
Analysis File: B951306
Matrix: SOIL

PCDD/PCDF SUMMARY REPORT

Specific Analytes	Conc. (ppb)	DL (ppb)	Blank (ppb)
2,3,7,8-TCDD	ND	0.151	ND
1,2,3,7,8-PeCDD	ND	1.04	ND
1,2,3,4,7,8-HxCDD	ND	0.0754	ND
1,2,3,6,7,8-HxCDD	ND	0.226	ND
1,2,3,7,8,9-HxCDD	ND	0.226	ND
1,2,3,4,6,7,8-HpCDD	ND	0.301	ND
1,2,3,4,6,7,8,9-OCDD	10.7	0.388	ND
2,3,7,8-TCDF	ND	0.129	ND
1,2,3,7,8-PeCDF	ND	0.506	ND
2,3,4,7,8-PeCDF	ND	0.614	ND
1,2,3,4,7,8-HxCDF	ND	0.108	ND
1,2,3,6,7,8-HxCDF	ND	0.108	ND
2,3,4,6,7,8-HxCDF	ND	0.269	ND
1,2,3,7,8,9-HxCDF	ND	0.172	ND
1,2,3,4,6,7,8-HpCDF	ND	0.205	ND
1,2,3,4,7,8,9-HpCDF	ND	0.0323	ND
1,2,3,4,6,7,8,9-OCDF	ND	0.237	ND

Definitions:

Conc. - The concentration of the specific analyte in the units shown.

DL - The detection limit of the specific analyte in the units shown.

Blank - The concentration of the method blank.

ND - (Non-Detect) The concentration of the analyte is less than the detection limit.

Total Analytes	Conc. (ppb)	DL (ppb)
Total TCDD	ND	0.151
Total PeCDD	ND	1.04
Total HxCDD	ND	0.226
Total HpCDD	ND	0.301
Total TCDF	ND	0.129
Total PeCDF	ND	0.614
Total HxCDF	ND	0.172
Total HpCDF	ND	0.0323

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC BP/BF 003
Sample:

Matrix: SOIL
Sample: (g) 2.1
Final Volume: (L) 0.02
(%) Moisture: 14.4
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510148-001
Lab Name: AENI
Contract: 9510148
Date Sampled: 10/12/95
Date Received: 10/14/95
Date Prepared: 10/23/95
Date Analyzed: 10/25/95
Time Analyzed: 4:02

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.32	U
RDX		0.38	U
TNB		0.26	U
TETRYL		0.28	U
DNB		0.21	U
TNT		0.25	U
2,6-DNT		0.27	U
2,4-DNT		0.21	U

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BP/BF 003

Lab Name: AENI Contract: 9510148

Lab Code: Case No.: MKC70 SAS No.: SDG No.: BP/BF

Matrix (soil/water): SOIL Lab Sample ID: 951014801

Level (low/med): LOW Date Received: 10/14/95

% Solids: 85.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	2.3	U	N	P
7440-38-2	Arsenic	7.8		N*	P
7440-39-3	Barium	92.1			P
7440-41-7	Beryllium	0.74			P
7440-43-9	Cadmium	0.45	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	22.1			P
7440-48-4	Cobalt	8.6			P
7440-50-8	Copper	15.1			P
7439-89-6	Iron				NR
7439-92-1	Lead	14.2		*	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.12	U		AV
7440-02-0	Nickel	14.5			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.57	U	N	P
7440-22-4	Silver	0.91	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.1	U	N	P
7440-62-2	Vanadium	39.0			P
7440-66-6	Zinc	40.8			P
	Cyanide				NR
7440-31-5	Tin	22.7	U		P
7439-93-2	Lithium	14.9			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_BP/BF_003

AENI
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8150

Case No.: 9510148
Client Name: MK CORP
Project Name: CRANE NSWC

Sample Number
NSWC BP/BF 004

AENI # 9510148-002

Concentration: Low
Date Sampled: 10/11/95
Date Received: 10/14/95
Date Extract Prepared: 10/19/95
Date Analyzed: 10/25/95
Conc/Dil Factor: 1
Matrix SOIL

GPC Cleanup No
Shaker: Yes
Continuous Liq-Liq Ext.: No
Percent Solid 87.5

Compound	Concentration ug/kg	Reporting Limit	Qualifier
2,4 D		57	U
SILVEX		57	U
2,4,5-T		57	U

Vi - Volume of extract injected (ul) 1
Vs - Volume of water extracted (ml) N/A
Ws - Mass of soil extracted (g) 10.09
Vt- Volume of total extract (ul) 10000

FORM I

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC BP/BF 004

Lab Name: AENI Contract: 9510148

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ359.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 12 Date Analyzed: 10/24/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	10	
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.7	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.7	U
75-15-0	Carbon Disulfide	5.7	U
75-35-4	1,1-Dichloroethene	5.7	U
75-34-4	1,1-Dichloroethane	5.7	U
540-59-0	trans-1,2-Dichloroethene	5.7	U
67-66-3	Chloroform	5.7	U
107-06-2	1,2-Dichloroethane	5.7	U
75-71-8	Dichlorodifluoromethane	5.7	U
74-88-4	Iodomethane	5.7	U
107-12-0	Propionitrile	5.7	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.7	U
56-23-5	Carbon Tetrachloride	5.7	U
108-05-4	Vinyl Acetate	5.7	U
75-27-4	Bromodichloromethane	5.7	U
78-87-5	1,2-Dichloropropane	5.7	U
10061-01-5	cis-1,3-Dichloropropene	5.7	U
79-01-6	Trichloroethene	5.7	U
71-43-2	Benzene	5.7	U
124-48-1	Dibromochloromethane	5.7	U
10061-02-6	trans-1,3-Dichloropropene	5.7	U
79-00-5	1,1,2-Trichloroethane	5.7	U
75-25-2	Bromoform	5.7	U

FORM I VOA

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC BP/BF 004

Lab Name: AENI Contract: 9510148

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FJ359.D

Level: (low/med) LOW Date Received: 10/14/95

% Moisture: not dec. 12 Date Analyzed: 10/24/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.7	U
74-95-3	Dibromomethane		5.7	U
106-93-4	1,2-Dibromoethane (EDB)		5.7	U
108-10-1	4-Methyl-2-Pentanone		57	U
591-78-6	2-Hexanone		57	U
127-18-4	Tetrachloroethene		34	
79-34-5	1,1,2,2-Tetrachloroethane		5.7	U
108-88-3	Toluene		16	
108-90-7	Chlorobenzene		5.7	U
100-41-4	Ethylbenzene		5.7	U
100-42-5	Styrene		5.7	U
108-38-3	m + p-Xylene		4.7	J
95-47-6	o-Xylene		5.7	U
80-62-6	Methyl methacrylate		5.7	U
630-20-6	1,1,1,2-Tetrachloroethane		5.7	U
96-18-4	1,2,3-Trichloropropane		5.7	U
110-57-6	trans-1,4-Dichloro-2-butene		28	U
97-63-2	Ethyl methacrylate		5.7	U
76-01-7	Pentachloroethane		5.7	U
96-12-8	1,2-Dibromo-3-chloropropane		5.7	U
78-83-1	Isobutyl Alcohol		5.7	U
126-99-8	Chloroprene	(TIC)	5.7	UZ
	3-Chloroprene	(TIC)	5.7	U
123-91-1	1,4-Dioxane	(TIC)	1100	U
Methylene Chloride - Dichloromethane				
Methyl ethyl ketone - 2-Butanone				
Chloroprene - 2-Chloro-1,3-butadiene				
Propionitrile - Ethyl Cyanide				

FORM I VOA

8260/Appendix IX

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

NSWC BP/BF 004
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: 12.5
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: L9510148-002
Lab Name: AENI
Contract: 9510148
Date Sampled: 10/12/95
Date Received: 10/14/95
Date Prepared: 10/23/95
Date Analyzed: 10/25/95
Time Analyzed: 5:38

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.32	U
RDX		0.39	U
TNB		0.26	U
TETRYL		0.29	U
DNB		0.22	U
TNT		0.25	U
2,6-DNT		0.28	U
2,4-DNT		0.22	U

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BP/BF 004

Lab Name: AENI Contract: 9510148

Lab Code: Case No.: MKC70 SAS No.: SDG No.: BP/BF

Matrix (soil/water): SOIL Lab Sample ID: 951014802

Level (low/med): LOW Date Received: 10/14/95

% Solids: 87.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	2.2	U	N	P
7440-38-2	Arsenic	6.3		N*	P
7440-39-3	Barium	83.9			P
7440-41-7	Beryllium	0.81			P
7440-43-9	Cadmium	0.44	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	22.8			P
7440-48-4	Cobalt	7.0			P
7440-50-8	Copper	13.9			P
7439-89-6	Iron				NR
7439-92-1	Lead	13.7		*	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.08	U		AV
7440-02-0	Nickel	13.5			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.55	U	N	P
7440-22-4	Silver	0.89	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.1	U	N	P
7440-62-2	Vanadium	38.2			P
7440-66-6	Zinc	40.1			P
	Cyanide				NR
7440-31-5	Tin	22.2	U		P
7439-93-2	Lithium	14.7			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_BP/BF_004

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510322
Report To: MK Corp
Project: Crane NSWC
Date: November 15, 1995
Analysis: Total Cyanide, SW846 9010

Client ID	AENI ID	Result	Date Analyzed
NSWC BF/BF-005	9510322-001	<1.1	11/14/95
NSWC BF/BF-006	9510322-002	<1.1	11/14/95

(1) Results reported as mg/Kg on a dry weight basis.

(2) Distillation Date: 11/09/95

lgchem\002

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510322

Account #:——— MKC70

Client Name:——— MK CORP

Sample Number

NSWC DF/BF-005

AENI # 9510322-001

Concentration:——— Low

Date Sampled:——— 10/27/95

Date Received:——— 10/31/95

Date Ext Prepared:——— 11/8/95

Date Analyzed:——— 11/10/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup | | Yes | X | No

Seperatory Funnel Extraction | | Yes

Continuous Liquid - Liquid Extraction | | Yes

Percent Moisture 6.3

Matrix SOIL

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.8	U
319-85-7	beta-BHC		1.8	U
319-86-8	delta-BHC		1.8	U
58-89-9	gamma-BHC (Lindane)		3.5	U
76-44-8	Heptachlor		1.8	U
309-00-2	Aldrin		1.8	U
1024-57-3	Heptachlor epoxide		1.8	U
959-98-8	Endosulfan I		1.8	U
60-57-1	Dieldrin		3.5	U
72-55-9	4, 4'-DDE		3.5	U
72-20-8	Endrin		3.5	U
33213-65-9	Endosulfan II		3.5	U
72-54-8	4, 4'-DDD		3.5	U
1031-07-8	Endosulfan Sulfate		3.5	U
50-29-3	4, 4'-DDT		3.5	U
72-43-5	Methoxychlor		18	U
53494-70-5	Endrin Ketone		3.5	U
7421-36-3	Endrin aldehyde		3.5	U
57-74-9	Chlordane		35	U
8001-35-2	Toxaphene		180	U
12674-11-2	Aroclor-1016		35	U
11104-28-2	Aroclor-1221		70	U
11141-16-5	Aroclor-1232		35	U
53469-21-9	Aroclor-1242		35	U
12672-29-6	Aroclor-1248		35	U
11097-69-1	Aroclor-1254		35	U
11096-82-5	Aroclor-1260		35	U
510-15-6	Chlorobenzilate		70	U
2303-16-4	Diallate		350	U
465-73-6	Isodrin		8.8	U
143-50-0	Kepone		35	U
82-68-8	Pentachloronitrobenzene		7.0	U

Vi - Volume of extract injected (ul) - _____ 1

Ve - Volume of Water extracted (ml) - _____ N/A

We - Weight of sample extracted (g) - _____ 30.47

Vt - Volume of total extract (ul) - _____ 10,000

FORM I

AENI
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8150

Sample Number
NSWC BF/BF-005

Case No.: 9510322
Client Name: MK CORP
Account #: MKC70

AENI # 9510322-001

Concentration: Low
Date Sampled: 10/27/95
Date Received: 10/31/95
Date Extract Prepared: 11/3/95
Date Analyzed: 11/15/95
Conc/Dil Factor: 1
Matrix: SOIL

GPC Cleanup: No
Shaker: Yes
Continuous Liq-Liq Ext.: No
Percent Solid: 93.7

Compound	Concentration ug/kg	Reporting Limit	Qualifier
2,4 D		51	U
SILVEX		51	U
2,4,5-T		51	U

Vi - Volume of extract injected (ul) 1
Vs - Volume of water extracted (ml) N/A
Ws - Mass of soil extracted (g) 10.43
Vt - Volume of total extract (ul) 10000

FORM I

AENI

Organic Analysis Data Sheet

Organophosphorus

Case No.:——— 9510322

Project Name:——— MKC70

Client Name:——— MK CORP

Sample Number
NSWC BF/BF-005

Concentration:——— Low

Date Sampled:——— 10/27/95

Date Received:——— 10/31/95

Date Ext Prepared:——— 11/9/95

Date Analyzed:——— 11/16/95

Conc/Dil Factor:——— 1

Method: ——— 8140

AENI # 9510322-001

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extration		Yes
Percent Solid	93.7	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
298-02-2	Phorate		8.9	U
60-51-5	Dimethoate		8.9	U
23950-58-5	Pronamide		0.89	U
298-04-4	Disulfoton		8.9	U
298-00-0	Methyl Parathion		0.89	U
56-38-2	Ethyl Parathion	1.1	0.89	P
52-85-7	Famphur		3.6	U
3689-24-5	Tetraethyl dithiopyrophosphate		89	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30.06

Vt - Volume of total extract (ul) - _____ 1,000

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC BP/BF-005

Lab Name: AENI
Contract: 9510322
Project No.: MKC70
Site:
Location:
Group:
Matrix: (soil/water) SOIL
Lab Sample ID: #001
Sample wt/vol: 5.0 (g/mL) G
Lab File ID: FK139 0
Level: (low/med) LOW
Date Received: 10/31/95
% Moisture: not dec. 6
Date Analyzed: 11/8/95
GC Column: CAP.
ID: 0.53 (mm)
Dilution Factor: 1.0
Soil Extract Volume: 1 (uL)
Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	41	B
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.3	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.3	U
75-15-0	Carbon Disulfide	5.3	U
75-35-4	1,1-Dichloroethene	5.3	U
75-34-4	1,1-Dichloroethane	5.3	U
540-59-0	trans-1,2-Dichloroethene	5.3	U
67-66-3	Chloroform	5.3	U
107-06-2	1,2-Dichloroethane	5.3	U
75-71-8	Dichlorodifluoromethane	5.3	U
74-88-4	Iodomethane	5.3	U
107-12-0	Propionitrile	5.3	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.3	U
56-23-5	Carbon Tetrachloride	5.3	U
108-05-4	Vinyl Acetate	5.3	U
75-27-4	Bromodichloromethane	5.3	U
78-87-5	1,2-Dichloropropane	5.3	U
10061-01-5	cis-1,3-Dichloropropene	5.3	U
79-01-6	Trichloroethene	5.3	U
71-43-2	Benzene	5.3	U
124-48-1	Dibromochloromethane	5.3	U
10061-02-6	trans-1,3-Dichloropropene	5.3	U
79-00-5	1,1,2-Trichloroethane	5.3	U
75-25-2	Bromoform	5.3	U

FORM I VOA

8260/Appendix IX

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
NSWC BP/BF-005

Lab Name: AENI Contract: 9510322

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #001

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK139.D

Level: (low/med) LOW Date Received: 10/31/95

% Moisture: not dec. 6 Date Analyzed: 11/8/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.3	U
74-95-3	Dibromomethane		5.3	U
106-93-4	1,2-Dibromoethane (EDB)		5.3	U
108-10-1	4-Methyl-2-Pentanone		53	U
591-78-6	2-Hexanone		53	U
127-18-4	Tetrachloroethene		5.3	U
79-34-5	1,1,2,2-Tetrachloroethane		5.3	U
108-88-3	Toluene		5.3	U
108-90-7	Chlorobenzene		5.3	U
100-41-4	Ethylbenzene		5.3	U
100-42-5	Styrene		5.3	U
108-38-3	m + p-Xylene		5.3	U
95-47-6	o-Xylene		5.3	U
80-62-6	Methyl methacrylate		5.3	U
630-20-6	1,1,1,2-Tetrachloroethane		5.3	U
96-18-4	1,2,3-Trichloropropane		5.3	U
110-57-6	trans-1,4-Dichloro-2-butene		27	U
97-63-2	Ethyl methacrylate		5.3	U
76-01-7	Pentachloroethane		5.3	U
96-12-8	1,2-Dibromo-3-chloropropane		5.3	U
78-83-1	Isobutyl Alcohol		5.3	U
126-99-8	Chloroprene	(TIC) *	5.3	U
	3-Chloroprene	(TIC)	5.3	U
123-91-1	1,4-Dioxane	(TIC)	1100	U
	Methylene Chloride – Dichloromethane			
	Methyl ethyl ketone – 2-Butanone			
	Chloroprene – 2-Chloro-1,3-butadiene			
	Propionitrile – Ethyl Cyanide			
* – Reported as semiquantitative analysis only.				

FORM I VOA

8260/Appendix IX

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC BP/BF-005RE

Lab Name: AENI

Contract: 9510322

Project No.: MKC70

Site:

Location:

Group:

Matrix: (soil/water) SOIL

Lab Sample ID: #001RE

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: FK190.D

Level: (low/med) LOW

Date Received: 10/31/95

% Moisture: not dec. 6

Date Analyzed: 11/10/95

GC Column: CAP.

ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: 1 (uL)

Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	9	B
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.3	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.3	U
75-15-0	Carbon Disulfide	5.3	U
75-35-4	1,1-Dichloroethene	5.3	U
75-34-4	1,1-Dichloroethane	5.3	U
540-59-0	trans-1,2-Dichloroethene	5.3	U
67-66-3	Chloroform	5.3	U
107-06-2	1,2-Dichloroethane	5.3	U
75-71-8	Dichlorodifluoromethane	5.3	U
74-88-4	Iodomethane	5.3	U
107-12-0	Propionitrile	5.3	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.3	U
56-23-5	Carbon Tetrachloride	5.3	U
108-05-4	Vinyl Acetate	5.3	U
75-27-4	Bromodichloromethane	5.3	U
78-87-5	1,2-Dichloropropane	5.3	U
10061-01-5	cis-1,3-Dichloropropene	5.3	U
79-01-6	Trichloroethene	2	J
71-43-2	Benzene	5.3	U
124-48-1	Dibromochloromethane	5.3	U
10061-02-6	trans-1,3-Dichloropropene	5.3	U
79-00-5	1,1,2-Trichloroethane	5.3	U
75-25-2	Bromoform	5.3	U

FORM I VOA

8260/Appendix IX

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC BP/BF-005RE

Lab Name: AENI Contract: 9510322

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #001RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK190.D

Level: (low/med) LOW Date Received: 10/31/95

% Moisture: not dec. 6 Date Analyzed: 11/10/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.3	U
74-95-3	Dibromomethane		5.3	U
106-93-4	1,2-Dibromoethane (EDB)		5.3	U
108-10-1	4-Methyl-2-Pentanone		53	U
591-78-6	2-Hexanone		53	U
127-18-4	Tetrachloroethene		1.4	J
79-34-5	1,1,2,2-Tetrachloroethane		5.3	U
108-88-3	Toluene		5.3	U
108-90-7	Chlorobenzene		5.3	U
100-41-4	Ethylbenzene		5.3	U
100-42-5	Styrene		5.3	U
108-38-3	m + p-Xylene		3.3	J
95-47-6	o-Xylene		1.3	J
80-62-6	Methyl methacrylate		5.3	U
630-20-6	1,1,1,2-Tetrachloroethane		5.3	U
96-18-4	1,2,3-Trichloropropane		5.3	U
110-57-6	trans-1,4-Dichloro-2-butene		27	U
97-63-2	Ethyl methacrylate		5.3	U
76-01-7	Pentachloroethane		5.3	U
96-12-8	1,2-Dibromo-3-chloropropane		5.3	U
78-83-1	Isobutyl Alcohol		5.3	U
126-99-8	Chloroprene	(TIC) *	5.3	U
	3-Chloroprene	(TIC)	5.3	U
123-91-1	1,4-Dioxane	(TIC)	1100	U
	Methylene Chloride – Dichloromethane			
	Methyl ethyl ketone – 2-Butanone			
	Chloroprene – 2-Chloro-1,3-butadiene			
	Propionitrile – Ethyl Cyanide			
* – Reported as semiquantitative analysis only.				

FORM I VOA 8260/Appendix IX

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BF/BF-005

Lab Name: AENI Contract: 9510322

Lab Code: Case No.: MKC70 SAS No.: SDG No.: BF/BF-

Matrix (soil/water): SOIL Lab Sample ID: 951032201

Level (low/med): LOW Date Received: 10/31/95

% Solids: 93.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	2.1	U	N	P
7440-38-2	Arsenic	1.9		N	P
7440-39-3	Barium	20.6			P
7440-41-7	Beryllium	0.21	U		P
7440-43-9	Cadmium	0.42	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.6		N	P
7440-48-4	Cobalt	2.4			P
7440-50-8	Copper	4.3		E	P
7439-89-6	Iron				NR
7439-92-1	Lead	3.5		E	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.07	U	N	AV
7440-02-0	Nickel	6.2			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.53	U	N	P
7440-22-4	Silver	0.84	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.1	U	N	P
7440-62-2	Vanadium	7.3			P
7440-66-6	Zinc	16.0		EN	P
	Cyanide				NR
7440-31-5	Tin	21.2	U		P
7439-93-2	Lithium				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_BF/BF-005

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC BP/BF-005

Lab Name: AENI Contract: 9510322

Project No.: MKC10322 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #001

Sample wt/vol: 30.9 (g/mL) G Lab File ID: CK083.D

Level: (low/med) LOW Date Received: 10/31/95

% Moisture: 6 decanted: (Y/N): N Date Extracted: 11/3/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/8/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
91-20-3	Naphthalene	340	U
91-57-6	2-Methylnaphthalene	340	U
91-58-7	2-Chloronaphthalene	340	U
208-96-8	Acenaphthylene	340	U
83-32-9	Acenaphthene	340	U
132-64-9	Dibenzofuran	340	U
86-73-7	Fluorene	340	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenz(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

TL-RTP Project: 34871
Client Sample: NSWC BP/BF-005
Client Project: Indiana - Navy Project

Method 8280 PCDD/PCDF Analysis (b)
Analysis File: B951476
Matrix: Soil

PCDD/PCDF SUMMARY REPORT

Specific Analytes	Conc. (ppb)	DL (ppb)	Blank (ppb)
2,3,7,8-TCDD	ND	0.149	ND
1,2,3,7,8-PeCDD	ND	1.03	ND
1,2,3,4,7,8-HxCDD	ND	0.0745	ND
1,2,3,6,7,8-HxCDD	ND	0.223	ND
1,2,3,7,8,9-HxCDD	ND	0.223	ND
1,2,3,4,6,7,8-HpCDD	ND	0.298	ND
1,2,3,4,6,7,8,9-OCDD	ND	0.383	ND
2,3,7,8-TCDF	ND	0.128	ND
1,2,3,7,8-PeCDF	ND	0.5	ND
2,3,4,7,8-PeCDF	ND	0.607	ND
1,2,3,4,7,8-HxCDF	ND	0.106	ND
1,2,3,6,7,8-HxCDF	ND	0.106	ND
2,3,4,6,7,8-HxCDF	ND	0.266	ND
1,2,3,7,8,9-HxCDF	ND	0.17	ND
1,2,3,4,6,7,8-HpCDF	ND	0.202	ND
2,3,4,7,8,9-HpCDF	ND	0.0319	ND
1,2,3,4,6,7,8,9-OCDF	ND	0.234	ND

Definitions:

Conc. - The concentration of the specific analyte in the units shown.

DL - The detection limit of the specific analyte in the units shown.

Blank - The concentration of the method blank.

ND - (Non-Detect) The concentration of the analyte is less than the detection limit.

Total Analytes	Conc. (ppb)	DL (ppb)
Total TCDD	ND	0.149
Total PeCDD	ND	1.03
Total HxCDD	ND	0.223
Total HpCDD	ND	0.298
Total TCDF	ND	0.128
Total PeCDF	ND	0.607
Total HxCDF	ND	0.17
Total HpCDF	ND	0.0319

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 14:46 11/20/95

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.: 9510322

Account #: MKC70

Client Name: MK CORP

Sample Number
NSWC BF/BF-006

Concentration: Low

Date Sampled: 10/27/95

Date Received: 10/31/95

Date Ext Prepared: 11/8/95

Date Analyzed: 11/10/95

Conc/Dil Factor: 1

Method: 8080

AENI # 9510322-002

GPC Cleanup | | Yes | X | No

Separatory Funnel Extraction | | Yes

Continuous Liquid - Liquid Extraction | | Yes

Percent Moisture 10.5

Matrix SOIL

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.8	U
319-85-7	beta-BHC		1.8	U
319-86-8	delta-BHC		1.8	U
58-89-9	gamma-BHC (Lindane)		3.7	U
76-44-8	Heptachlor		1.8	U
309-00-2	Aldrin		1.8	U
1024-57-3	Heptachlor epoxide		1.8	U
959-98-8	Endosulfan I		1.8	U
60-57-1	Dieldrin		3.7	U
72-55-9	4, 4'-DDE		3.7	U
72-20-8	Endrin		3.7	U
33213-65-9	Endosulfan II		3.7	U
72-54-8	4, 4'-DDD		3.7	U
1031-07-8	Endosulfan Sulfate		3.7	U
50-29-3	4, 4'-DDT		3.7	U
72-43-5	Methoxychlor		18	U
53494-70-5	Endrin Ketone		3.7	U
7421-36-3	Endrin aldehyde		3.7	U
57-74-9	Chlordane		37	U
8001-35-2	Toxaphene		180	U
12674-11-2	Aroclor-1016		37	U
11104-28-2	Aroclor-1221		73	U
11141-16-5	Aroclor-1232		37	U
53469-21-9	Aroclor-1242		37	U
12672-29-6	Aroclor-1248		37	U
11097-69-1	Aroclor-1254		37	U
11096-82-5	Aroclor-1260		37	U
510-15-6	Chlorobenzilate		73	U
2303-16-4	Diallate		367	U
465-73-6	Isodrin		9.2	U
143-50-0	Kepone		37	U
82-68-8	Pentachloronitrobenzene		7.3	U

Vi - Volume of extract injected (ul) - 1

Ve - Volume of Water extracted (ml) - N/A

We - Weight of sample extracted (g) - 30.46

Vt - Volume of total extract (ul) - 10,000

D- 01584

AENI
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8150

Case No.: 9510322
Client Name: MK CORP
Account #: MKC70

Sample Number
NSWC BF/BF-006

AENI # 9510322-002

Concentration: Low
Date Sampled: 10/27/95
Date Received: 10/31/95
Date Extract Prepared: 11/3/95
Date Analyzed: 11/15/95
Conc/Dil Factor: 1
Matrix SOIL

GPC Cleanup No
Shaker: Yes
Continuous Liq-Liq Ext.: No
Percent Solid 80.5

Compound	Concentration ug/kg	Reporting Limit	Qualifier
2,4 D		55	U
SILVEX		55	U
2,4,5-T		55	U

Vi - Volume of extract injected (ul) 1
Vs - Volume of water extracted (ml) N/A
Ws - Mass of soil extracted (g) 10.25
Vt- Volume of total extract (ul) 10000

FORM I

AENI

Organic Analysis Data Sheet

Organophosphorus

Case No.:——— 9510322

Project Name:——— MKC70

Client Name:——— MK CORP

Sample Number
NSWC BF/BF-006

AENI # 9510322-002

Concentration:——— Low

Date Sampled:——— 10/27/95

Date Received:——— 10/31/95

Date Ext Prepared:——— 11/9/95

Date Analyzed:——— 11/16/95

Conc/Dil Factor:——— 1

Method: ——— 8140

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extration		Yes
Percent Solid	89.5	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
298-02-2	Phorate		9.1	U
60-51-5	Dimethoate		9.1	U
23950-58-5	Pronamide		0.91	U
298-04-4	Disulfoton		9.1	U
298-00-0	Methyl Parathion	1.5	0.91	P
56-38-2	Ethyl Parathion		0.91	U
52-85-7	Famphur		3.6	U
3689-24-5	Tetraethyl dithiopyrophosphate		91	U

Vi - Volume of extract injected (ul) - ——— 1

Ve - Volume of Water extracted (ml) - ——— N/A

We - Weight of sample extracted (g) - ——— 30.64

Vt - Volume of total extract (ul) - ——— 1,000

FORM I

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC BP/BF-006

Lab Name: AENI

Contract: 9510322

Project No.: MKC70

Site:

Location:

Group:

Matrix: (soil/water) SOIL

Lab Sample ID: #002

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: FK140.D

Level: (low/med) LOW

Date Received: 10/31/95

% Moisture: not dec. 11

Date Analyzed: 11/8/95

GC Column: CAP.

ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: 1 (uL)

Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	19	B
67-64-1	Acetone	110	U
75-05-8	Acetonitrile	5.6	U
107-13-1	Acrylonitrile	1100	U
107-02-8	Acrolein	1100	U
75-69-4	Trichlorofluoromethane	5.6	U
75-15-0	Carbon Disulfide	5.6	U
75-35-4	1,1-Dichloroethene	5.6	U
75-34-4	1,1-Dichloroethane	5.6	U
540-59-0	trans-1,2-Dichloroethene	5.6	U
67-66-3	Chloroform	5.6	U
107-06-2	1,2-Dichloroethane	5.6	U
75-71-8	Dichlorodifluoromethane	5.6	U
74-88-4	Iodomethane	5.6	U
107-12-0	Propionitrile	5.6	U
107-05-1	Allyl chloride	110	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	5.6	U
56-23-5	Carbon Tetrachloride	5.6	U
108-05-4	Vinyl Acetate	5.6	U
75-27-4	Bromodichloromethane	5.6	U
78-87-5	1,2-Dichloropropane	5.6	U
10061-01-5	cis-1,3-Dichloropropene	5.6	U
79-01-6	Trichloroethene	5.6	U
71-43-2	Benzene	5.6	U
124-48-1	Dibromochloromethane	5.6	U
10061-02-6	trans-1,3-Dichloropropene	5.6	U
79-00-5	1,1,2-Trichloroethane	5.6	U
75-25-2	Bromoform	5.6	U

FORM I VOA

8260/Appendix IX

D-[illegible]

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MSWC BP/BF-006

Lab Name: AENI Contract: 9510322

Project No.: MKC70 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FK140.D

Level: (low/med) LOW Date Received: 10/31/95

% Moisture: not dec. 11 Date Analyzed: 11/8/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound			Q
126-98-7	Methacrylonitrile		5.6	U
74-95-3	Dibromomethane		5.6	U
106-93-4	1,2-Dibromoethane (EDB)		5.6	U
108-10-1	4-Methyl-2-Pentanone		56	U
591-78-6	2-Hexanone		56	U
127-18-4	Tetrachloroethene		5.6	U
79-34-5	1,1,2,2-Tetrachloroethane		5.6	U
108-88-3	Toluene		5.6	U
108-90-7	Chlorobenzene		5.6	U
100-41-4	Ethylbenzene		5.6	U
100-42-5	Styrene		5.6	U
108-38-3	m + p-Xylene		5.6	U
95-47-6	o-Xylene		5.6	U
80-62-6	Methyl methacrylate		5.6	U
630-20-6	1,1,1,2-Tetrachloroethane		5.6	U
96-18-4	1,2,3-Trichloropropane		5.6	U
110-57-6	trans-1,4-Dichloro-2-butene		28	U
97-63-2	Ethyl methacrylate		5.6	U
76-01-7	Pentachloroethane		5.6	U
96-12-8	1,2-Dibromo-3-chloropropane		5.6	U
78-83-1	Isobutyl Alcohol		5.6	U
126-99-8	Chloroprene	(TIC) *	5.6	U
	3-Chloroprene	(TIC)	5.6	U
123-91-1	1,4-Dioxane	(TIC)	1100	U
	Methylene Chloride - Dichloromethane			
	Methyl ethyl ketone - 2-Butanone			
	Chloroprene - 2-Chloro-1,3-butadiene			
	Propionitrile - Ethyl Cyanide			
	* - Reported as semiquantitative analysis only.			

FORM I VOA

8260/Appendix IX

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BF/BF-006

Lab Name: AENI Contract: 9510322

Lab Code: Case No.: MKC70 SAS No.: SDG No.: BF/BF-

Matrix (soil/water): SOIL Lab Sample ID: 951032202

Level (low/med): LOW Date Received: 10/31/95

% Solids: 89.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	2.2	U	N	P
7440-38-2	Arsenic	1.8		N	P
7440-39-3	Barium	26.7			P
7440-41-7	Beryllium	0.22	U		P
7440-43-9	Cadmium	0.45	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	5.6		N	P
7440-48-4	Cobalt	3.2			P
7440-50-8	Copper	4.8		E	P
7439-89-6	Iron				NR
7439-92-1	Lead	3.9		E	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.00	U	N	AV
7440-02-0	Nickel	6.6			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.56	U	N	P
7440-22-4	Silver	0.89	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.1	U	N	P
7440-62-2	Vanadium	8.6			P
7440-66-6	Zinc	17.7		EN	P
	Cyanide				NR
7440-31-5	Tin	21.5	U		P
7439-93-2	Lithium				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

CLIENT_ID: NSWC_BF/BF-006

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NSWC BP/BF-006

Lab Name: AENI Contract: 9510322

Project No.: MKC10322 Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: #002

Sample wt/vol: 30.4 (g/mL) G Lab File ID: CK084.D

Level: (low/med) LOW Date Received: 10/31/95

% Moisture: 10 decanted: (Y/N): N Date Extracted: 11/3/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/8/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
91-20-3	Naphthalene	370	U
91-57-6	2-Methylnaphthalene	370	U
91-58-7	2-Chloronaphthalene	370	U
208-96-8	Acenaphthylene	370	U
83-32-9	Acenaphthene	370	U
132-64-9	Dibenzofuran	370	U
86-73-7	Fluorene	370	U
85-01-8	Phenanthrene	370	U
120-12-7	Anthracene	370	U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	370	U
56-55-3	Benzo(a)anthracene	370	U
218-01-9	Chrysene	370	U
205-99-2	Benzo(b)fluoranthene	370	U
207-08-9	Benzo(k)fluoranthene	370	U
50-32-8	Benzo(a)pyrene	370	U
193-39-5	Indeno(1,2,3-cd)pyrene	370	U
53-70-3	Dibenz(a,h)anthracene	370	U
191-24-2	Benzo(g,h,i)perylene	370	U

American Environmental Network

TL-RTP Project: 34871
Client Sample: NSWC BP/BF-006
Client Project: Indiana - Navy Project

Method 8280 PCDD/PCDF Anal
Analysis File: B95147
Matrix: So

PCDD/PCDF SUMMARY REPORT

Specific Analytes	Conc. (ppb)	DL (ppb)	Blank (ppb)
2,3,7,8-TCDD	ND	0.156	ND
1,2,3,7,8-PeCDD	ND	1.08	ND
1,2,3,4,7,8-HxCDD	ND	0.0778	ND
1,2,3,6,7,8-HxCDD	ND	0.233	ND
1,2,3,7,8,9-HxCDD	ND	0.233	ND
1,2,3,4,6,7,8-HpCDD	ND	0.311	ND
1,2,3,4,6,7,8,9-OCDD	ND	0.4	ND
2,3,7,8-TCDF	ND	0.133	ND
1,2,3,7,8-PeCDF	ND	0.522	ND
2,3,4,7,8-PeCDF	ND	0.633	ND
1,2,3,4,7,8-HxCDF	ND	0.111	ND
1,2,3,6,7,8-HxCDF	ND	0.111	ND
2,3,4,6,7,8-HxCDF	ND	0.278	ND
1,2,3,7,8,9-HxCDF	ND	0.178	ND
2,3,4,6,7,8-HpCDF	ND	0.211	ND
1,2,3,4,7,8,9-HpCDF	ND	0.0333	ND
1,2,3,4,6,7,8,9-OCDF	ND	0.244	ND

Definitions:

Conc. – The concentration of the specific analyte in the units shown.

DL – The detection limit of the specific analyte in the units shown.

Blank – The concentration of the method blank.

ND – (Non-Detect) The concentration of the analyte is less than the detection limit.

Total Analytes	Conc. (ppb)	DL (ppb)
Total TCDD	ND	0.156
Total PeCDD	ND	1.08
Total HxCDD	ND	0.233
Total HpCDD	ND	0.311
Total TCDF	ND	0.133
Total PeCDF	ND	0.633
Total HxCDF	ND	0.178
Total HpCDF	ND	0.0333

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729

SWMU 16/16 DATA
BACKFILL - SAMPLES BIOF - 001 THROUGH 007

BIOF001

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0333C

Matrix: (soil/water) SOIL Lab Sample ID: 789014

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: 27 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/14/96

Concentrated Extract Volume: 10000(ul) Date Analyzed: 03/15/96

Injection Volume: 25.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.77	U
121-82-4	RDX	2.5	U
98-95-3	Nitrobenzene	0.49	U
99-65-0	1,3-Dinitrobenzene	0.44	U
99-35-4	1,3,5-Trinitrobenzene	0.88	U
121-14-2	2,4-Dinitrotoluene	1.1	U
606-20-2	2,6-Dinitrotoluene	0.82	U
118-96-7	2,4,6-Trinitrotoluene	0.38	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.82	U
479-45-8	Tetryl	1.4	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.66	U
88-72-2	2-Nitrotoluene	6.5	U
99-99-0	4-Nitrotoluene	6.5	U
99-08-1	3-Nitrotoluene	1.6	U

D. 00572

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF001

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 398C__

Matrix (soil/water): SOIL_ Lab Sample ID: 789165

Level (low/med): LOW__ Date Received: 03/07/96

% Solids: _72.6

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7439-97-6	Mercury__	138	U		CV

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: VIOLET___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:0.82g__Wet:5.86g__Dry:4.48g_____

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF001

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789181

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089181C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 27 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
62-75-9	N-Nitrosodimethylamine	360	U
110-86-1	Pyridine	750	U
123-63-7	Paraldehyde	490	U
97-63-2	Ethylmethacrylate	810	U
109-06-8	2-Picoline	1600	U
10595-95-6	Nitrosomethylethylamine	330	U
66-27-3	Methyl Methanesulfonate	960	U
55-18-5	N-Nitrosodiethylamine	310	U
62-50-0	Ethyl Methanesulfonate	820	U
108-95-2	Phenol	780	U
62-53-3	Aniline	770	U
111-44-4	Bis(2-chloroethyl)ether	380	U
76-01-7	Pentachloroethane	1100	U
95-57-8	2-Chlorophenol	860	U
541-73-1	1,3-Dichlorobenzene	700	U
100-44-7	Benzyl Chloride	790	U
106-46-7	1,4-Dichlorobenzene	710	U
100-51-6	Benzyl Alcohol	750	U
95-50-1	1,2-Dichlorobenzene	810	U
95-48-7	2-Methylphenol	890	U
39638-32-9	bis(2-Chloroisopropyl)ether	890	U
108-39-4	3-Methylphenol	1800	U
106-44-5	4-Methylphenol	1800	U
930-55-2	N-Nitrosopyrrolidine	730	U
621-64-7	N-Nitroso-di-N-propylamine	330	U
98-86-2	Acetophenone	900	U
59-89-2	N-Nitrosomorpholine	1000	U
636-21-5	o-Toluidine hydrochloride	2700	U
67-72-1	Hexachloroethane	820	U
98-95-3	Nitrobenzene	930	U
100-75-4	N-Nitrosopiperidine	1000	U
78-59-1	Isophorone	930	U
88-75-5	2-Nitrophenol	850	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF001

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789181

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089181C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 27 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
105-67-9	2,4-Dimethylphenol	840	U
108-70-3	1,3,5-Trichlorobenzene	840	U
98-87-3	Benzal chloride	730	U
126-68-1	o,o,o-Triethylphosphorothioa	7300	U
65-85-0	Benzoic Acid	2600	U
111-91-1	Bis(2-chloroethoxy)methane	920	U
120-83-2	2,4-Dichlorophenol	750	U
120-82-1	1,2,4-Trichlorobenzene	750	U
91-20-3	Naphthalene	900	U
106-47-8	4-Chloroaniline	950	U
87-65-0	2,6-Dichlorophenol	1600	U
1888-71-7	Hexachloropropene	780	U
87-68-3	Hexachlorobutadiene	770	U
87-61-6	1,2,3-Trichlorobenzene	820	U
98-07-7	Benzotrichloride	850	U
924-16-3	N-Nitroso-di-n-butylamine	210	U
59-50-7	4-Chloro-3-methylphenol	260	U
94-59-7	Safrole	790	U
91-57-6	2-Methylnaphthalene	1200	U
90-12-0	1-Methylnaphthalene	1500	U
77-47-4	Hexachlorocyclopentadiene	900	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1800	U
634-90-2	1,2,3,5-Tetrachlorobenzene	1800	U
88-06-2	2,4,6-Trichlorophenol	1800	U
95-95-4	2,4,5-Trichlorophenol	1800	U
120-58-1	Isosafrole	1800	U
634-66-2	1,2,3,4-Tetrachlorobenzene	880	U
91-58-7	2-Chloronaphthalene	1300	U
90-13-1	1-Chloronaphthalene	1600	U
88-74-4	2-Nitroaniline	1500	U
130-15-4	1,4-Napthoquinone	2200	U
131-11-3	Dimethylphthalate	1300	U
99-65-0	1,3-Dinitrobenzene	770	U

FORM I SV-2

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF001

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789181

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089181C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 27 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
606-20-2	2,6-Dinitrotoluene	1000	U
208-96-8	Acenaphthylene	920	U
99-09-2	3-Nitroaniline	950	U
83-32-9	Acenaphthene	900	U
51-28-5	2,4-Dinitrophenol	2300	U
100-02-7	4-Nitrophenol	950	U
608-93-5	Pentachlorobenzene	900	U
121-14-2	2,4-Dinitrotoluene	900	U
132-64-9	Dibenzofuran	950	U
91-59-8	2-Naphthylamine	1200	U
58-90-2	2,3,4,6-Tetrachlorophenol	1900	U
134-32-7	1-Naphthylamine	1900	U
84-66-2	Diethylphthalate	990	U
297-97-2	Zinophos	920	U
7005-72-3	4-Chlorophenyl-phenylether	820	U
99-55-8	5-Nitro-o-toluidine	1400	U
86-73-7	Fluorene	950	U
100-01-6	4-Nitroaniline	1500	U
534-52-1	4,6-Dinitro-2-methylphenol	2500	U
86-30-6	N-Nitrosodiphenylamine (1)	1900	U
122-39-4	Diphenylamine	1900	U
122-66-7	1,2-Diphenylhydrazine	950	U
99-35-4	1,3,5-Trinitrobenzene	1200	U
2303-16-4	Diallate (trans isomer)	900	U
62-44-2	Phenacetin	840	U
2303-16-4	Diallate (cis isomer)	900	U
101-55-3	4-Bromophenyl-phenylether	1000	U
118-74-1	Hexachlorobenzene	1100	U
60-51-5	Dimethoate	900	U
92-67-1	4-Aminobiphenyl	560	U
87-86-5	Pentachlorophenol	1900	U
23950-58-5	Pronamide	890	U
82-68-8	Pentachloronitrobenzene	880	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF001

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789181

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089181C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 27 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
85-01-8	Phenanthrene	850	U
120-12-7	Anthracene	1000	U
84-74-2	Di-n-butylphthalate	1100	U
56-57-5	4-Nitroquinoline-1-oxide	6600	U
91-80-5	Methapyrilene	1800	U
6055-19-2	Cyclophosphamide	860	U
465-73-6	Isodrin	1300	U
206-44-0	Fluoranthene	1300	U
92-87-5	Benzidine	2200	U
129-00-0	Pyrene	1000	U
140-57-8	Aramite	900	U
60-11-7	p-Dimethylaminoazobenzene	920	U
510-15-6	Chlorobenzilate	970	U
52-85-7	Famfur	2700	U
85-68-7	Butylbenzylphthalate	930	U
119-93-7	3,3'-Dimethylbenzidine	620	U
53-96-3	2-Acetylamino fluorene	970	U
119-90-4	3,3'-Dimethoxybenzidine	1300	U
117-81-7	bis(2-ethylhexyl)Phthalate	270	J
101-14-4	4,4'-Methylene-bis(2-chloroa	620	U
91-94-1	3,3'-Dichlorobenzidine	680	U
56-55-3	Benzo(a)Anthracene	900	U
218-01-9	Chrysene	740	U
117-84-0	Di-n-octylphthalate	660	U
57-97-6	7,12-Dimethylbenz(a)anthrace	560	U
205-99-2	Benzo(b)fluoranthene	1100	U
207-08-9	Benzo(k)fluoranthene	850	U
50-32-8	Benzo(a)pyrene	900	U
56-49-5	3-Methylcholanthrene	840	U
224-42-0	Dibenzo(a,j)acridine	560	U
193-39-5	Indeno(1,2,3-c,d)pyrene	630	U
53-70-3	Dibenzo(a,h)anthracene	250	U
191-24-2	Benzo(g,h,i)perylene	850	U

D. 00577

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF001

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789181

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089181C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 27 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
298-02-2	Phorate	900	U
298-00-0	Methyl Parathion	900	U
298-04-4	Disulfoton	900	U
56-38-2	Parathion	900	U
122-09-08	a,a-Dimethylphenethylamine	900	U
106-50-3	p-Phenylenediamine	900	U

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

BIOF001

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789181

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089181C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 27 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7

Number TICs found: 8

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	3.86	270	JB
2.		ALDOL (BC)	4.07	5500	JAB
3.		ADVISORY SURROGATE COMPOUND	5.47	1500	JB
4.		ADVISORY SURROGATE COMPOUND	5.98	1100	JB
5.		UNKNOWN CARBOXYLIC ACID	16.73	270	J
6.		UNKNOWN	18.42	260	J
7.		UNKNOWN	18.70	310	J
8.		UNKNOWN	19.84	470	J
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FORM I SV-TIC

1D

ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

BIOF001

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0347C

Matrix: (soil/water) SOIL Lab Sample ID: 789208

Sample wt/vol: 30.00 (g/ml) G Lab File ID:

% Moisture: 27 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/19/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 03/24/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
58-89-9	gamma-BHC (Lindane)	1.4	U
76-44-8	Heptachlor	0.067	JP
309-00-2	Aldrin	1.4	U
959-98-8	Endosulfan I	0.090	JBP
60-57-1	Dieldrin	0.10	JB
33213-65-9	Endosulfan II	4.8	U
50-29-3	4,4'-DDT	0.26	J
72-43-5	Methoxychlor	0.59	JP
319-84-6	alpha-BHC	1.4	U
319-85-7	beta-BHC	1.4	U
319-86-8	delta-BHC	0.30	JBP
1024-57-3	Heptachlor epoxide	0.26	JBP
72-55-9	4,4'-DDE	4.8	U
72-20-8	Endrin	0.083	JP
72-54-8	4,4'-DDD	4.8	U
7421-93-4	Endrin aldehyde	1.4	U
1031-07-8	Endosulfan sulfate	0.15	JBP
11096-82-5	Aroclor-1260	27	U
12674-11-2	Aroclor-1016	27	U
11104-28-2	Aroclor-1221	27	U
11141-16-5	Aroclor-1232	27	U
53469-21-9	Aroclor-1242	27	U
12672-29-6	Aroclor-1248	27	U
11097-69-1	Aroclor-1254	27	U
8001-35-2	Toxaphene	27	U
57-74-9	Chlordane (Technical)	5.5	U

FORM I 8080

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE

BIOF001

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788962

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088962B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 27 Date Analyzed: 03/13/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	13	JB
67-64-1	Acetone	17	B
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
100-42-5	Styrene	14	U
1330-20-7	Xylene (Total)	14	U
75-05-8	acetonitrile	270	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF001

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788962

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088962B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 27 Date Analyzed: 03/13/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107-02-8	acrolein	320	U
107-05-1	3-chloropropene	21	U
106-93-4	1,2-dibromoethane	21	U
74-95-3	dibromomethane	27	U
110-57-6	trans-1,4-dichloro-2-butene	21	U
75-71-8	dichlorodifluoromethane	27	U
123-91-1	1,4-dioxane	70000	U
107-12-0	propionitrile(ethylcyanide)	810	U
97-63-2	ethyl methacrylate	34	U
74-88-4	iodomethane	14	U
78-83-1	isobutyl alcohol	18000	U
126-98-7	methacrylonitrile	27	U
80-62-6	methyl methacrylate	68	U
630-20-6	1,1,1,2-tetrachloroethane	27	U
96-18-4	1,2,3-trichloropropane	27	U
108-05-4	vinyl acetate	27	U
96-12-8	1,2-dibromo-3-chloropropane	68	U
75-69-4	trichlorofluoromethane	27	U
107-13-1	acrylonitrile	290	U
156-60-5	trans-1,2-Dichloroethene	14	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE

BIOF001

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788962

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088962B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 27 Date Analyzed: 03/13/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	3.53	80	JB
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FORM I VOA-TIC

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF001

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____
Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 375C__
Matrix (soil/water): SOIL_ Lab Sample ID: 788912
Level (low/med): LOW__ Date Received: 03/07/96
% Solids: _72.6

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony_	410	B	N	P
7440-38-2	Arsenic__	9200			P
7440-39-3	Barium___	86300			P
7440-41-7	Beryllium	627	B		P
7440-43-9	Cadmium__	27.5	U	N	P
7440-47-3	Chromium_	17700			P
7440-48-4	Cobalt___	9200			P
7440-50-8	Copper___	14600			P
7439-92-1	Lead____	15900			P
7440-02-0	Nickel___	11100			P
7782-49-2	Selenium_	1060		N	P
7440-22-4	Silver___	96.4	U		P
7440-28-0	Thallium_	482	U		P
7440-62-2	Vanadium_	30200			P
7440-66-6	Zinc____	34000			P
7439-93-2	Lithium__	7440	B		P
7440-31-5	Tin_____	1730	B		P

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:0.82g__Wet:5.86g__Dry:4.48g_____
Duplicate_(BIOF001D)_____

L. 00584

BIOF002

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0333C

Matrix: (soil/water) SOIL Lab Sample ID: 789016

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: 29 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/14/96

Concentrated Extract Volume: 10000(ul) Date Analyzed: 03/15/96

Injection Volume: 25.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.79	U
121-82-4	RDX	2.5	U
98-95-3	Nitrobenzene	0.51	U
99-65-0	1,3-Dinitrobenzene	0.45	U
99-35-4	1,3,5-Trinitrobenzene	0.90	U
121-14-2	2,4-Dinitrotoluene	1.1	U
606-20-2	2,6-Dinitrotoluene	0.84	U
118-96-7	2,4,6-Trinitrotoluene	0.39	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.84	U
479-45-8	Tetryl	1.5	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.68	U
88-72-2	2-Nitrotoluene	6.7	U
99-99-0	4-Nitrotoluene	6.7	U
99-08-1	3-Nitrotoluene	1.6	U

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF002

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 398C__

Matrix (soil/water): SOIL_ Lab Sample ID: 789168

Level (low/med): LOW__ Date Received: 03/07/96

% Solids: _71.2

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7439-97-6	Mercury	140	U		CV

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: VIOLET___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:0.67g__Wet:5.67g__Dry:4.23g_____

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF002

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789184

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089184C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 29 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
62-75-9	N-Nitrosodimethylamine	360	U
110-86-1	Pyridine	770	U
109-06-8	2-Picoline	1700	U
10595-95-6	Nitrosomethylethylamine	340	U
66-27-3	Methyl Methanesulfonate	980	U
55-18-5	N-Nitrosodiethylamine	320	U
62-50-0	Ethyl Methanesulfonate	840	U
108-95-2	Phenol	800	U
62-53-3	Aniline	790	U
111-44-4	Bis(2-chloroethyl)ether	390	U
95-57-8	2-Chlorophenol	880	U
541-73-1	1,3-Dichlorobenzene	720	U
106-46-7	1,4-Dichlorobenzene	730	U
100-51-6	Benzyl Alcohol	770	U
95-50-1	1,2-Dichlorobenzene	830	U
95-48-7	2-Methylphenol	910	U
39638-32-9	bis(2-Chloroisopropyl)ether	910	U
108-39-4	3-Methylphenol	1800	U
106-44-5	4-Methylphenol	1800	U
930-55-2	N-Nitrosopyrrolidine	740	U
621-64-7	N-Nitroso-di-N-propylamine	340	U
98-86-2	Acetophenone	930	U
59-89-2	N-Nitrosomorpholine	1100	U
636-21-5	o-Toluidine hydrochloride	2800	U
67-72-1	Hexachloroethane	840	U
98-95-3	Nitrobenzene	950	U
100-75-4	N-Nitrosopiperidine	1000	U
78-59-1	Isophorone	950	U
88-75-5	2-Nitrophenol	870	U
105-67-9	2,4-Dimethylphenol	860	U
126-68-1	o,o,o-Triethylphosphorothioa	7400	U
111-91-1	Bis(2-chloroethoxy)methane	940	U
120-83-2	2,4-Dichlorophenol	770	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF002

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789184

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089184C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 29 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
120-82-1	1,2,4-Trichlorobenzene	770	U
91-20-3	Naphthalene	930	U
106-47-8	4-Chloroaniline	970	U
87-65-0	2,6-Dichlorophenol	1700	U
1888-71-7	Hexachloropropene	800	U
87-68-3	Hexachlorobutadiene	790	U
924-16-3	N-Nitroso-di-n-butylamine	210	U
59-50-7	4-Chloro-3-methylphenol	270	U
94-59-7	Safrole	810	U
91-57-6	2-Methylnaphthalene	1200	U
77-47-4	Hexachlorocyclopentadiene	930	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1800	U
88-06-2	2,4,6-Trichlorophenol	1800	U
95-95-4	2,4,5-Trichlorophenol	1800	U
120-58-1	Isosafrole	1800	U
91-58-7	2-Chloronaphthalene	1400	U
88-74-4	2-Nitroaniline	1500	U
130-15-4	1,4-Napthoquinone	2200	U
131-11-3	Dimethylphthalate	1400	U
99-65-0	1,3-Dinitrobenzene	790	U
606-20-2	2,6-Dinitrotoluene	1100	U
208-96-8	Acenaphthylene	940	U
99-09-2	3-Nitroaniline	970	U
83-32-9	Acenaphthene	930	U
51-28-5	2,4-Dinitrophenol	2400	U
100-02-7	4-Nitrophenol	970	U
608-93-5	Pentachlorobenzene	930	U
121-14-2	2,4-Dinitrotoluene	930	U
132-64-9	Dibenzofuran	970	U
91-59-8	2-Naphthylamine	1200	U
58-90-2	2,3,4,6-Tetrachlorophenol	2000	U
134-32-7	1-Naphthylamine	2000	U
84-66-2	Diethylphthalate	1000	U

FORM I SV-2

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF002

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789184

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089184C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 29 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
7005-72-3	4-Chlorophenyl-phenylether	840	U
99-55-8	5-Nitro-o-toluidine	1400	U
86-73-7	Fluorene	970	U
100-01-6	4-Nitroaniline	1500	U
534-52-1	4,6-Dinitro-2-methylphenol	2500	U
86-30-6	N-Nitrosodiphenylamine (1)	2000	U
122-39-4	Diphenylamine	2000	U
99-35-4	1,3,5-Trinitrobenzene	1300	U
2303-16-4	Diallate (trans isomer)	930	U
62-44-2	Phenacetin	860	U
2303-16-4	Diallate (cis isomer)	930	U
101-55-3	4-Bromophenyl-phenylether	1100	U
118-74-1	Hexachlorobenzene	1100	U
92-67-1	4-Aminobiphenyl	580	U
87-86-5	Pentachlorophenol	2000	U
23950-58-5	Pronamide	910	U
85-01-8	Phenanthrene	870	U
120-12-7	Anthracene	1000	U
84-74-2	Di-n-butylphthalate	1100	U
56-57-5	4-Nitroquinoline-1-oxide	6700	U
91-80-5	Methapyrilene	1800	U
465-73-6	Isodrin	1300	U
206-44-0	Fluoranthene	1300	U
129-00-0	Pyrene	1000	U
140-57-8	Aramite	930	U
60-11-7	p-Dimethylaminoazobenzene	940	U
510-15-6	Chlorobenzilate	1000	U
85-68-7	Butylbenzylphthalate	950	U
119-93-7	3,3'-Dimethylbenzidine	630	U
117-81-7	bis(2-ethylhexyl)Phthalate	1100	U
91-94-1	3,3'-Dichlorobenzidine	700	U
56-55-3	Benzo(a)Anthracene	930	U
218-01-9	Chrysene	760	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF002

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789184

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089184C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 29 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
117-84-0	Di-n-octylphthalate	670	U
57-97-6	7,12-Dimethylbenz(a)anthrace	580	U
205-99-2	Benzo(b)fluoranthene	1100	U
207-08-9	Benzo(k)fluoranthene	870	U
193-39-5	Indeno(1,2,3-c,d)pyrene	650	U
53-70-3	Dibenzo(a,h)anthracene	250	U
191-24-2	Benzo(g,h,i)perylene	870	U
122-09-08	a,a-Dimethylphenethylamine	930	U
106-50-3	p-Phenylenediamine	930	U

FORM I SV-4

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
BIOF002

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789184

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089184C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 29 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL (BC)	3.69	190	JAB
2.	UNKNOWN (BC)	3.86	320	JB
3.	ALDOL (BC)	4.06	7000	JAB
4.	UNKNOWN	4.23	200	J
5.	UNKNOWN	4.70	230	J
6.	ADVISORY SURROGATE COMPOUND	5.47	1700	JB
7.	ADVISORY SURROGATE COMPOUND	5.97	1300	JB
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FORM I SV-TIC

1D

ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

BIOF002

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0347C

Matrix: (soil/water) SOIL Lab Sample ID: 789211

Sample wt/vol: 30.00 (g/ml) G Lab File ID:

% Moisture: 29 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/19/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 03/24/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
58-89-9	gamma-BHC (Lindane)	1.4	U
76-44-8	Heptachlor	0.067	J
309-00-2	Aldrin	1.4	U
959-98-8	Endosulfan I	0.079	JBP
60-57-1	Dieldrin	2.1	U
33213-65-9	Endosulfan II	4.9	U
50-29-3	4,4'-DDT	4.9	U
72-43-5	Methoxychlor	4.9	U
319-84-6	alpha-BHC	1.4	U
319-85-7	beta-BHC	1.4	U
319-86-8	delta-BHC	0.060	JBP
1024-57-3	Heptachlor epoxide	1.4	U
72-55-9	4,4'-DDE	0.11	JP
72-20-8	Endrin	3.5	U
72-54-8	4,4'-DDD	4.9	U
7421-93-4	Endrin aldehyde	0.11	JP
1031-07-8	Endosulfan sulfate	2.8	U
11096-82-5	Aroclor-1260	28	U
12674-11-2	Aroclor-1016	28	U
11104-28-2	Aroclor-1221	28	U
11141-16-5	Aroclor-1232	28	U
53469-21-9	Aroclor-1242	28	U
12672-29-6	Aroclor-1248	28	U
11097-69-1	Aroclor-1254	28	U
8001-35-2	Toxaphene	28	U
57-74-9	Chlordane (Technical)	5.6	U

FORM I 8080

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE

BIOF002

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788963

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088963B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 29 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	9	JB
67-64-1	Acetone	14	B
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
100-42-5	Styrene	14	U
1330-20-7	Xylene (Total)	14	U
75-05-8	acetonitrile	280	U

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF002

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788963

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088963B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 29 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107-02-8	acrolein	320	U
107-05-1	3-chloropropene	21	U
106-93-4	1,2-dibromoethane	21	U
74-95-3	dibromomethane	28	U
110-57-6	trans-1,4-dichloro-2-butene	21	U
75-71-8	dichlorodifluoromethane	28	U
123-91-1	1,4-dioxane	72000	U
107-12-0	propionitrile(ethylcyanide)	830	U
97-63-2	ethyl methacrylate	35	U
74-88-4	iodomethane	14	U
78-83-1	isobutyl alcohol	18000	U
126-98-7	methacrylonitrile	28	U
80-62-6	methyl methacrylate	70	U
630-20-6	1,1,1,2-tetrachloroethane	28	U
96-18-4	1,2,3-trichloropropane	28	U
108-05-4	vinyl acetate	28	U
96-12-8	1,2-dibromo-3-chloropropane	70	U
75-69-4	trichlorofluoromethane	28	U
107-13-1	acrylonitrile	300	U
156-60-5	trans-1,2-Dichloroethene	14	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE

BIOF002

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788963

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088963B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 29 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	3.54	340	JB
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FORM I VOA-TIC

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF002

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____
Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 375C__
Matrix (soil/water): SOIL_ Lab Sample ID: 788915
Level (low/med): LOW__ Date Received: 03/07/96
% Solids: _71.2

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony_	303	B	N	P
7440-38-2	Arsenic__	6210			P
7440-39-3	Barium___	82000			P
7440-41-7	Beryllium	557	B		P
7440-43-9	Cadmium__	25.1	U	N	P
7440-47-3	Chromium_	11100			P
7440-48-4	Cobalt___	10700			P
7440-50-8	Copper___	9190			P
7439-92-1	Lead____	16200			P
7440-02-0	Nickel___	8540			P
7782-49-2	Selenium_	1210		N	P
7440-22-4	Silver___	87.8	U		P
7440-28-0	Thallium_	439	U		P
7440-62-2	Vanadium_	20100			P
7440-66-6	Zinc____	24300			P
7439-93-2	Lithium__	4690	B		P
7440-31-5	Tin_____	1390	B		P

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:0.67g__Wet:5.67g__Dry:4.23g_____

BIOF003

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0333C

Matrix: (soil/water) SOIL Lab Sample ID: 789027

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: 20 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/14/96

Concentrated Extract Volume: 10000(ul) Date Analyzed: 03/15/96

Injection Volume: 25.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.15	J
121-82-4	RDX	2.2	U
98-95-3	Nitrobenzene	0.45	U
99-65-0	1,3-Dinitrobenzene	0.40	U
99-35-4	1,3,5-Trinitrobenzene	0.80	U
121-14-2	2,4-Dinitrotoluene	1.0	U
606-20-2	2,6-Dinitrotoluene	0.75	U
118-96-7	2,4,6-Trinitrotoluene	0.35	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.75	U
479-45-8	Tetryl	1.3	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.60	U
88-72-2	2-Nitrotoluene	6.0	U
99-99-0	4-Nitrotoluene	6.0	U
99-08-1	3-Nitrotoluene	1.4	U

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF003

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 398C__

Matrix (soil/water): SOIL_ Lab Sample ID: 789169

Level (low/med): LOW__ Date Received: 03/07/96

% Solids: _80.3

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7439-97-6	Mercury__	92.2	U		CV

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: VIOLET___ Clarity After: _____ Artifacts: _____

Comments:

Undecanted_Dry_Weights____Container:0.83g__Wet:5.85g__Dry:4.86g_____

FORM I - IN ILM03.0

D-01598

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF003

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789185

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089185C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 1 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
62-75-9	N-Nitrosodimethylamine	260	U
110-86-1	Pyridine	550	U
109-06-8	2-Picoline	1200	U
10595-95-6	Nitrosomethylethylamine	240	U
66-27-3	Methyl Methanesulfonate	700	U
55-18-5	N-Nitrosodiethylamine	230	U
62-50-0	Ethyl Methanesulfonate	600	U
108-95-2	Phenol	570	U
62-53-3	Aniline	560	U
111-44-4	Bis(2-chloroethyl)ether	280	U
95-57-8	2-Chlorophenol	630	U
541-73-1	1,3-Dichlorobenzene	510	U
106-46-7	1,4-Dichlorobenzene	520	U
100-51-6	Benzyl Alcohol	550	U
95-50-1	1,2-Dichlorobenzene	590	U
95-48-7	2-Methylphenol	650	U
39638-32-9	bis(2-Chloroisopropyl)ether	650	U
108-39-4	3-Methylphenol	1300	U
106-44-5	4-Methylphenol	1300	U
930-55-2	N-Nitrosopyrrolidine	530	U
621-64-7	N-Nitroso-di-N-propylamine	240	U
98-86-2	Acetophenone	660	U
59-89-2	N-Nitrosomorpholine	760	U
636-21-5	o-Toluidine hydrochloride	2000	U
67-72-1	Hexachloroethane	600	U
98-95-3	Nitrobenzene	680	U
100-75-4	N-Nitrosopiperidine	740	U
78-59-1	Isophorone	680	U
88-75-5	2-Nitrophenol	620	U
105-67-9	2,4-Dimethylphenol	610	U
126-68-1	o,o,o-Triethylphosphorothioa	5300	U
111-91-1	Bis(2-chloroethoxy)methane	670	U
120-83-2	2,4-Dichlorophenol	550	U

D- 01599

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF003

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789185

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089185C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 1 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
120-82-1	1,2,4-Trichlorobenzene	550	U
91-20-3	Naphthalene	660	U
106-47-8	4-Chloroaniline	690	U
87-65-0	2,6-Dichlorophenol	1200	U
1888-71-7	Hexachloropropene	570	U
87-68-3	Hexachlorobutadiene	560	U
924-16-3	N-Nitroso-di-n-butylamine	150	U
59-50-7	4-Chloro-3-methylphenol	190	U
94-59-7	Safrole	580	U
91-57-6	2-Methylnaphthalene	850	U
77-47-4	Hexachlorocyclopentadiene	660	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1300	U
88-06-2	2,4,6-Trichlorophenol	1300	U
95-95-4	2,4,5-Trichlorophenol	1300	U
120-58-1	Isosafrole	1300	U
91-58-7	2-Chloronaphthalene	980	U
88-74-4	2-Nitroaniline	1100	U
130-15-4	1,4-Napthoquinone	1600	U
131-11-3	Dimethylphthalate	980	U
99-65-0	1,3-Dinitrobenzene	560	U
606-20-2	2,6-Dinitrotoluene	760	U
208-96-8	Acenaphthylene	670	U
99-09-2	3-Nitroaniline	690	U
83-32-9	Acenaphthene	660	U
51-28-5	2,4-Dinitrophenol	1700	U
100-02-7	4-Nitrophenol	690	U
608-93-5	Pentachlorobenzene	660	U
121-14-2	2,4-Dinitrotoluene	660	U
132-64-9	Dibenzofuran	690	U
91-59-8	2-Naphthylamine	870	U
58-90-2	2,3,4,6-Tetrachlorophenol	1400	U
134-32-7	1-Naphthylamine	1400	U
84-66-2	Diethylphthalate	720	U

FORM I SV-2

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF003

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789185

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089185C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 1 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
7005-72-3	4-Chlorophenyl-phenylether	600	U
99-55-8	5-Nitro-o-toluidine	1000	U
86-73-7	Fluorene	690	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1800	U
86-30-6	N-Nitrosodiphenylamine (1)	1400	U
122-39-4	Diphenylamine	1400	U
99-35-4	1,3,5-Trinitrobenzene	920	U
2303-16-4	Diallate (trans isomer)	660	U
62-44-2	Phenacetin	610	U
2303-16-4	Diallate (cis isomer)	660	U
101-55-3	4-Bromophenyl-phenylether	760	U
118-74-1	Hexachlorobenzene	780	U
92-67-1	4-Aminobiphenyl	410	U
87-86-5	Pentachlorophenol	1400	U
23950-58-5	Pronamide	650	U
85-01-8	Phenanthrene	620	U
120-12-7	Anthracene	740	U
84-74-2	Di-n-butylphthalate	780	U
56-57-5	4-Nitroquinoline-1-oxide	4800	U
91-80-5	Methapyrilene	1300	U
465-73-6	Isodrin	930	U
206-44-0	Fluoranthene	930	U
129-00-0	Pyrene	730	U
140-57-8	Aramite	660	U
60-11-7	p-Dimethylaminoazobenzene	670	U
510-15-6	Chlorobenzilate	710	U
85-68-7	Butylbenzylphthalate	680	U
119-93-7	3,3'-Dimethylbenzidine	450	U
117-81-7	bis(2-ethylhexyl)Phthalate	760	U
91-94-1	3,3'-Dichlorobenzidine	500	U
56-55-3	Benzo(a)Anthracene	660	U
218-01-9	Chrysene	540	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF003

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789185

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089185C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 1 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
117-84-0	Di-n-octylphthalate	480	U
57-97-6	7,12-Dimethylbenz(a)anthrace	410	U
205-99-2	Benzo(b)fluoranthene	780	U
207-08-9	Benzo(k)fluoranthene	620	U
193-39-5	Indeno(1,2,3-c,d)pyrene	460	U
53-70-3	Dibenzo(a,h)anthracene	180	U
191-24-2	Benzo(g,h,i)perylene	620	U
122-09-08	a,a-Dimethylphenethylamine	660	U
106-50-3	p-Phenylenediamine	660	U

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

BIOF003

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789185

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089185C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 1 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	3.85	170	JB
2.	ALDOL (BC)	4.06	3800	JAB
3.	ADVISORY SURROGATE COMPOUND	5.46	1100	JB
4.	ADVISORY SURROGATE COMPOUND	5.98	820	JB
5.	UNKNOWN	18.43	160	J
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FORM I SV-TIC

1D

ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

BIOF003

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0347C

Matrix: (soil/water) SOIL Lab Sample ID: 789212

Sample wt/vol: 30.20 (g/ml) G Lab File ID:

% Moisture: 1 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/19/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 03/24/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
58-89-9	gamma-BHC (Lindane)	1.0	U
76-44-8	Heptachlor	0.060	JP
309-00-2	Aldrin	0.037	JP
959-98-8	Endosulfan I	1.5	U
60-57-1	Dieldrin	0.068	JBP
33213-65-9	Endosulfan II	3.5	U
50-29-3	4,4'-DDT	3.5	U
72-43-5	Methoxychlor	0.48	JP
319-84-6	alpha-BHC	0.047	JP
319-85-7	beta-BHC	0.23	JBP
319-86-8	delta-BHC	0.10	JBP
1024-57-3	Heptachlor epoxide	0.036	JBP
72-55-9	4,4'-DDE	0.12	JP
72-20-8	Endrin	0.33	JP
72-54-8	4,4'-DDD	3.5	U
7421-93-4	Endrin aldehyde	1.0	U
1031-07-8	Endosulfan sulfate	2.0	U
11096-82-5	Aroclor-1260	20	U
12674-11-2	Aroclor-1016	20	U
11104-28-2	Aroclor-1221	20	U
11141-16-5	Aroclor-1232	20	U
53469-21-9	Aroclor-1242	20	U
12672-29-6	Aroclor-1248	20	U
11097-69-1	Aroclor-1254	20	U
8001-35-2	Toxaphene	20	U
57-74-9	Chlordane (Technical)	4.0	U

FORM I 8080

D-00604

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE

BIOF003

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788964

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GR088964A55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 20 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	15	B
67-64-1	Acetone	25	B
75-15-0	Carbon Disulfide	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon Tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	12	U
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U
1330-20-7	Xylene (Total)	12	U
75-05-8	acetonitrile	250	U

FORM I VOA

D 0065

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF003

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788964

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GR088964A55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 20 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107-02-8	acrolein	290	U
107-05-1	3-chloropropene	19	U
106-93-4	1,2-dibromoethane	19	U
74-95-3	dibromomethane	25	U
110-57-6	trans-1,4-dichloro-2-butene	19	U
75-71-8	dichlorodifluoromethane	25	U
123-91-1	1,4-dioxane	64000	U
107-12-0	propionitrile(ethylcyanide)	740	U
97-63-2	ethyl methacrylate	31	U
74-88-4	iodomethane	12	U
78-83-1	isobutyl alcohol	16000	U
126-98-7	methacrylonitrile	25	U
80-62-6	methyl methacrylate	62	U
630-20-6	1,1,1,2-tetrachloroethane	25	U
96-18-4	1,2,3-trichloropropane	25	U
108-05-4	vinyl acetate	25	U
96-12-8	1,2-dibromo-3-chloropropane	62	U
75-69-4	trichlorofluoromethane	25	U
107-13-1	acrylonitrile	260	U
156-60-5	trans-1,2-Dichloroethene	12	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

BIOF003

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788964

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GR088964A55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 20 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	3.54	170	JB
2.	LABORATORY ARTIFACT	22.86	13	J
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FORM I VOA-TIC

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF003

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____
Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 375C__
Matrix (soil/water): SOIL_ Lab Sample ID: 788918
Level (low/med): LOW__ Date Received: 03/07/96
% Solids: _80.3

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony_	363	B	N	P
7440-38-2	Arsenic__	8200			P
7440-39-3	Barium___	61200			P
7440-41-7	Beryllium	417	B		P
7440-43-9	Cadmium__	24.7	U	N	P
7440-47-3	Chromium_	15900			P
7440-48-4	Cobalt___	10800			P
7440-50-8	Copper___	9910			P
7439-92-1	Lead____	13500			P
7440-02-0	Nickel___	9500			P
7782-49-2	Selenium_	1060		N	P
7440-22-4	Silver___	86.3	U		P
7440-28-0	Thallium_	432	U		P
7440-62-2	Vanadium_	27100			P
7440-66-6	Zinc____	27000			P
7439-93-2	Lithium__	6960	B		P
7440-31-5	Tin_____	1310	B		P

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:0.83g__Wet:5.85g__Dry:4.86g_____

BIOF004

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0333C

Matrix: (soil/water) SOIL Lab Sample ID: 789197

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: 33 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/14/96

Concentrated Extract Volume: 10000(ul) Date Analyzed: 03/15/96

Injection Volume: 25.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.84	U
121-82-4	RDX	2.7	U
98-95-3	Nitrobenzene	0.54	U
99-65-0	1,3-Dinitrobenzene	0.48	U
99-35-4	1,3,5-Trinitrobenzene	0.96	U
121-14-2	2,4-Dinitrotoluene	1.2	U
606-20-2	2,6-Dinitrotoluene	0.90	U
118-96-7	2,4,6-Trinitrotoluene	0.42	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.90	U
479-45-8	Tetryl	1.6	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.72	U
88-72-2	2-Nitrotoluene	7.1	U
99-99-0	4-Nitrotoluene	7.1	U
99-08-1	3-Nitrotoluene	1.7	U

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF004

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 398C__

Matrix (soil/water): SOIL_ Lab Sample ID: 789170

Level (low/med): LOW__ Date Received: 03/07/96

% Solids: _67.2

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7439-97-6	Mercury__	135	U		CV

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: VIOLET___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:0.79g__Wet:5.82g__Dry:4.17g_____

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF004

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789186

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089186C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 33 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
62-75-9	N-Nitrosodimethylamine	390	U
110-86-1	Pyridine	820	U
109-06-8	2-Picoline	1800	U
10595-95-6	Nitrosomethylethylamine	360	U
66-27-3	Methyl Methanesulfonate	1000	U
55-18-5	N-Nitrosodiethylamine	330	U
62-50-0	Ethyl Methanesulfonate	890	U
108-95-2	Phenol	850	U
62-53-3	Aniline	830	U
111-44-4	Bis(2-chloroethyl)ether	420	U
95-57-8	2-Chlorophenol	940	U
541-73-1	1,3-Dichlorobenzene	760	U
106-46-7	1,4-Dichlorobenzene	770	U
100-51-6	Benzyl Alcohol	820	U
95-50-1	1,2-Dichlorobenzene	880	U
95-48-7	2-Methylphenol	970	U
39638-32-9	bis(2-Chloroisopropyl)ether	970	U
108-39-4	3-Methylphenol	1900	U
106-44-5	4-Methylphenol	1900	U
930-55-2	N-Nitrosopyrrolidine	790	U
621-64-7	N-Nitroso-di-N-propylamine	360	U
98-86-2	Acetophenone	980	U
59-89-2	N-Nitrosomorpholine	1100	U
636-21-5	o-Toluidine hydrochloride	3000	U
67-72-1	Hexachloroethane	890	U
98-95-3	Nitrobenzene	1000	U
100-75-4	N-Nitrosopiperidine	1100	U
78-59-1	Isophorone	1000	U
88-75-5	2-Nitrophenol	920	U
105-67-9	2,4-Dimethylphenol	910	U
126-68-1	o,o,o-Triethylphosphorothioa	7900	U
111-91-1	Bis(2-chloroethoxy)methane	1000	U
120-83-2	2,4-Dichlorophenol	820	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF004

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789186

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089186C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 33 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
120-82-1	1,2,4-Trichlorobenzene	820	U
91-20-3	Naphthalene	980	U
106-47-8	4-Chloroaniline	1000	U
87-65-0	2,6-Dichlorophenol	1800	U
1888-71-7	Hexachloropropene	850	U
87-68-3	Hexachlorobutadiene	830	U
924-16-3	N-Nitroso-di-n-butylamine	220	U
59-50-7	4-Chloro-3-methylphenol	280	U
94-59-7	Safrole	860	U
91-57-6	2-Methylnaphthalene	1200	U
77-47-4	Hexachlorocyclopentadiene	980	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1900	U
88-06-2	2,4,6-Trichlorophenol	1900	U
95-95-4	2,4,5-Trichlorophenol	1900	U
120-58-1	Isosafrole	1900	U
91-58-7	2-Chloronaphthalene	1400	U
88-74-4	2-Nitroaniline	1600	U
130-15-4	1,4-Napthoquinone	2400	U
131-11-3	Dimethylphthalate	1400	U
99-65-0	1,3-Dinitrobenzene	830	U
606-20-2	2,6-Dinitrotoluene	1100	U
208-96-8	Acenaphthylene	1000	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	980	U
51-28-5	2,4-Dinitrophenol	2500	U
100-02-7	4-Nitrophenol	1000	U
608-93-5	Pentachlorobenzene	980	U
121-14-2	2,4-Dinitrotoluene	980	U
132-64-9	Dibenzofuran	1000	U
91-59-8	2-Naphthylamine	1300	U
58-90-2	2,3,4,6-Tetrachlorophenol	2100	U
134-32-7	1-Naphthylamine	2100	U
84-66-2	Diethylphthalate	1100	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF004

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789186

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089186C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 33 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
7005-72-3	4-Chlorophenyl-phenylether	890	U
99-55-8	5-Nitro-o-toluidine	1500	U
86-73-7	Fluorene	1000	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	2700	U
86-30-6	N-Nitrosodiphenylamine (1)	2100	U
122-39-4	Diphenylamine	2100	U
99-35-4	1,3,5-Trinitrobenzene	1400	U
2303-16-4	Diallate (trans isomer)	980	U
62-44-2	Phenacetin	910	U
2303-16-4	Diallate (cis isomer)	980	U
101-55-3	4-Bromophenyl-phenylether	1100	U
118-74-1	Hexachlorobenzene	1100	U
92-67-1	4-Aminobiphenyl	610	U
87-86-5	Pentachlorophenol	2100	U
23950-58-5	Pronamide	970	U
85-01-8	Phenanthrene	920	U
120-12-7	Anthracene	1100	U
84-74-2	Di-n-butylphthalate	1100	U
56-57-5	4-Nitroquinoline-1-oxide	7100	U
91-80-5	Methapyrilene	1900	U
465-73-6	Isodrin	1400	U
206-44-0	Fluoranthene	1400	U
129-00-0	Pyrene	1100	U
140-57-8	Aramite	980	U
60-11-7	p-Dimethylaminoazobenzene	1000	U
510-15-6	Chlorobenzilate	1100	U
85-68-7	Butylbenzylphthalate	1000	U
119-93-7	3,3'-Dimethylbenzidine	670	U
117-81-7	bis(2-ethylhexyl)Phthalate	1100	U
91-94-1	3,3'-Dichlorobenzidine	740	U
56-55-3	Benzo(a)Anthracene	980	U
218-01-9	Chrysene	800	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF004

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789186

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089186C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 33 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
117-84-0	Di-n-octylphthalate	710	U
57-97-6	7,12-Dimethylbenz(a)anthrace	610	U
205-99-2	Benzo(b)fluoranthene	1100	U
207-08-9	Benzo(k)fluoranthene	920	U
193-39-5	Indeno(1,2,3-c,d)pyrene	680	U
53-70-3	Dibenzo(a,h)anthracene	270	U
191-24-2	Benzo(g,h,i)perylene	920	U
122-09-08	a,a-Dimethylphenethylamine	980	U
106-50-3	p-Phenylenediamine	980	U

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

BIOF004

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789186

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089186C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 33 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL (BC)	3.69	200	JAB
2.	UNKNOWN (BC)	3.86	280	JB
3.	ALDOL (BC)	4.07	6000	JAB
4.	ADVISORY SURROGATE COMPOUND	5.47	1700	JB
5.	ADVISORY SURROGATE COMPOUND	5.98	1200	JB
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FORM I SV-TIC

1D

ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

BIOF004

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0347C

Matrix: (soil/water) SOIL Lab Sample ID: 789213

Sample wt/vol: 30.00 (g/ml) G Lab File ID:

% Moisture: 33 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/19/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 03/24/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
58-89-9	gamma-BHC (Lindane)	1.5	U
76-44-8	Heptachlor	0.053	JP
309-00-2	Aldrin	0.17	J
959-98-8	Endosulfan I	0.25	JBP
60-57-1	Dieldrin	0.100	JBP
33213-65-9	Endosulfan II	5.2	U
50-29-3	4,4'-DDT	5.2	U
72-43-5	Methoxychlor	0.77	JP
319-84-6	alpha-BHC	1.5	U
319-85-7	beta-BHC	1.5	U
319-86-8	delta-BHC	0.100	JBP
1024-57-3	Heptachlor epoxide	1.5	U
72-55-9	4,4'-DDE	5.2	U
72-20-8	Endrin	0.088	JP
72-54-8	4,4'-DDD	5.2	U
7421-93-4	Endrin aldehyde	0.15	JP
1031-07-8	Endosulfan sulfate	0.16	JBP
11096-82-5	Aroclor-1260	30	U
12674-11-2	Aroclor-1016	30	U
11104-28-2	Aroclor-1221	30	U
11141-16-5	Aroclor-1232	30	U
53469-21-9	Aroclor-1242	30	U
12672-29-6	Aroclor-1248	30	U
11097-69-1	Aroclor-1254	30	U
8001-35-2	Toxaphene	30	U
57-74-9	Chlordane (Technical)	6.0	U

FORM I 8080

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
BIOF004

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788965

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GR088965A55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 33 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	15	U
74-83-9	Bromomethane	15	U
75-01-4	Vinyl Chloride	15	U
75-00-3	Chloroethane	15	U
75-09-2	Methylene Chloride	19	B
67-64-1	Acetone	51	B
75-15-0	Carbon Disulfide	15	U
75-35-4	1,1-Dichloroethene	15	U
75-34-3	1,1-Dichloroethane	15	U
67-66-3	Chloroform	15	U
107-06-2	1,2-Dichloroethane	15	U
78-93-3	2-Butanone	15	U
71-55-6	1,1,1-Trichloroethane	15	U
56-23-5	Carbon Tetrachloride	15	U
75-27-4	Bromodichloromethane	15	U
78-87-5	1,2-Dichloropropane	15	U
10061-01-5	cis-1,3-Dichloropropene	15	U
79-01-6	Trichloroethene	15	U
124-48-1	Dibromochloromethane	15	U
79-00-5	1,1,2-Trichloroethane	15	U
71-43-2	Benzene	15	U
10061-02-6	trans-1,3-Dichloropropene	15	U
75-25-2	Bromoform	15	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	15	U
79-34-5	1,1,2,2-Tetrachloroethane	15	U
108-88-3	Toluene	15	U
108-90-7	Chlorobenzene	15	U
100-41-4	Ethylbenzene	15	U
100-42-5	Styrene	15	U
1330-20-7	Xylene (Total)	15	U
75-05-8	acetonitrile	300	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF004

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788965

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GR088965A55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 33 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107-02-8	acrolein	340	U
107-05-1	3-chloropropene	22	U
106-93-4	1,2-dibromoethane	22	U
74-95-3	dibromomethane	30	U
110-57-6	trans-1,4-dichloro-2-butene	22	U
75-71-8	dichlorodifluoromethane	30	U
123-91-1	1,4-dioxane	76000	U
107-12-0	propionitrile(ethylcyanide)	880	U
97-63-2	ethyl methacrylate	37	U
74-88-4	iodomethane	15	U
78-83-1	isobutyl alcohol	19000	U
126-98-7	methacrylonitrile	30	U
80-62-6	methyl methacrylate	75	U
630-20-6	1,1,1,2-tetrachloroethane	30	U
96-18-4	1,2,3-trichloropropane	30	U
108-05-4	vinyl acetate	30	U
96-12-8	1,2-dibromo-3-chloropropane	75	U
75-69-4	trichlorofluoromethane	30	U
107-13-1	acrylonitrile	310	U
156-60-5	trans-1,2-Dichloroethene	15	U

FORM I VOA

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE

BIOF004

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788965

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GR088965A55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 33 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	3.54	250	JB
2.	LABORATORY ARTIFACT	22.83	14	J
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FORM I VOA-TIC

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF004

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____
Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 375C__
Matrix (soil/water): SOIL_ Lab Sample ID: 788922
Level (low/med): LOW__ Date Received: 03/07/96
% Solids: _67.2

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony_	335	B	N	P
7440-38-2	Arsenic__	4950			P
7440-39-3	Barium___	123000			P
7440-41-7	Beryllium	729	B		P
7440-43-9	Cadmium__	29.8	U	N	P
7440-47-3	Chromium_	10400			P
7440-48-4	Cobalt___	9890			P
7440-50-8	Copper___	10300			P
7439-92-1	Lead____	16700			P
7440-02-0	Nickel___	9860			P
7782-49-2	Selenium_	733	B	N	P
7440-22-4	Silver___	104	U		P
7440-28-0	Thallium_	521	U		P
7440-62-2	Vanadium_	18300			P
7440-66-6	Zinc____	27000			P
7439-93-2	Lithium__	4730	B		P
7440-31-5	Tin_____	1060	B		P

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:0.79g__Wet:5.82g__Dry:4.17g_____

D 00620

BIOF005

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0333C

Matrix: (soil/water) SOIL Lab Sample ID: 789198

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: 24 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/14/96

Concentrated Extract Volume: 10000(ul) Date Analyzed: 03/15/96

Injection Volume: 25.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.74	U
121-82-4	RDX	2.4	U
98-95-3	Nitrobenzene	0.47	U
99-65-0	1,3-Dinitrobenzene	0.42	U
99-35-4	1,3,5-Trinitrobenzene	0.84	U
121-14-2	2,4-Dinitrotoluene	1.0	U
606-20-2	2,6-Dinitrotoluene	0.79	U
118-96-7	2,4,6-Trinitrotoluene	0.37	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.79	U
479-45-8	Tetryl	1.4	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.63	U
88-72-2	2-Nitrotoluene	6.3	U
99-99-0	4-Nitrotoluene	6.3	U
99-08-1	3-Nitrotoluene	1.5	U

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF005

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 398C__

Matrix (soil/water): SOIL_ Lab Sample ID: 789171

Level (low/med): LOW__ Date Received: 03/07/96

% Solids: _75.8

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7439-97-6	Mercury__	110	U		CV

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: VIOLET___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:0.68g__Wet:5.69g__Dry:4.48g_____

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF005

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789187

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089187C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
62-75-9	N-Nitrosodimethylamine	340	U
110-86-1	Pyridine	720	U
109-06-8	2-Picoline	1600	U
10595-95-6	Nitrosomethylethylamine	310	U
66-27-3	Methyl Methanesulfonate	920	U
55-18-5	N-Nitrosodiethylamine	290	U
62-50-0	Ethyl Methanesulfonate	780	U
108-95-2	Phenol	740	U
62-53-3	Aniline	730	U
111-44-4	Bis(2-chloroethyl)ether	370	U
95-57-8	2-Chlorophenol	820	U
541-73-1	1,3-Dichlorobenzene	670	U
106-46-7	1,4-Dichlorobenzene	680	U
100-51-6	Benzyl Alcohol	720	U
95-50-1	1,2-Dichlorobenzene	770	U
95-48-7	2-Methylphenol	850	U
39638-32-9	bis(2-Chloroisopropyl)ether	850	U
108-39-4	3-Methylphenol	1700	U
106-44-5	4-Methylphenol	1700	U
930-55-2	N-Nitrosopyrrolidine	690	U
621-64-7	N-Nitroso-di-N-propylamine	310	U
98-86-2	Acetophenone	860	U
59-89-2	N-Nitrosomorpholine	980	U
636-21-5	o-Toluidine hydrochloride	2600	U
67-72-1	Hexachloroethane	780	U
98-95-3	Nitrobenzene	890	U
100-75-4	N-Nitrosopiperidine	970	U
78-59-1	Isophorone	890	U
88-75-5	2-Nitrophenol	810	U
105-67-9	2,4-Dimethylphenol	800	U
126-68-1	o,o,o-Triethylphosphorothioa	6900	U
111-91-1	Bis(2-chloroethoxy)methane	880	U
120-83-2	2,4-Dichlorophenol	720	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF005

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789187

Sample wt/vol: 30.2 (g/mL) G Lab File ID: CH089187C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
120-82-1	1,2,4-Trichlorobenzene	720	U
91-20-3	Naphthalene	860	U
106-47-8	4-Chloroaniline	900	U
87-65-0	2,6-Dichlorophenol	1600	U
1888-71-7	Hexachloropropene	740	U
87-68-3	Hexachlorobutadiene	730	U
924-16-3	N-Nitroso-di-n-butylamine	200	U
59-50-7	4-Chloro-3-methylphenol	250	U
94-59-7	Safrole	760	U
91-57-6	2-Methylnaphthalene	1100	U
77-47-4	Hexachlorocyclopentadiene	860	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1700	U
88-06-2	2,4,6-Trichlorophenol	1700	U
95-95-4	2,4,5-Trichlorophenol	1700	U
120-58-1	Isosafrole	1700	U
91-58-7	2-Chloronaphthalene	1300	U
88-74-4	2-Nitroaniline	1400	U
130-15-4	1,4-Napthoquinone	2100	U
131-11-3	Dimethylphthalate	1300	U
99-65-0	1,3-Dinitrobenzene	730	U
606-20-2	2,6-Dinitrotoluene	980	U
208-96-8	Acenaphthylene	880	U
99-09-2	3-Nitroaniline	900	U
83-32-9	Acenaphthene	860	U
51-28-5	2,4-Dinitrophenol	2200	U
100-02-7	4-Nitrophenol	900	U
608-93-5	Pentachlorobenzene	860	U
121-14-2	2,4-Dinitrotoluene	860	U
132-64-9	Dibenzofuran	900	U
91-59-8	2-Naphthylamine	1100	U
58-90-2	2,3,4,6-Tetrachlorophenol	1800	U
134-32-7	1-Naphthylamine	1800	U
84-66-2	Diethylphthalate	940	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
BIOF005

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789187

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089187C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
7005-72-3	4-Chlorophenyl-phenylether	780	U
99-55-8	5-Nitro-o-toluidine	1300	U
86-73-7	Fluorene	900	U
100-01-6	4-Nitroaniline	1400	U
534-52-1	4,6-Dinitro-2-methylphenol	2400	U
86-30-6	N-Nitrosodiphenylamine (1)	1800	U
122-39-4	Diphenylamine	1800	U
99-35-4	1,3,5-Trinitrobenzene	1200	U
2303-16-4	Diallate (trans isomer)	860	U
62-44-2	Phenacetin	800	U
2303-16-4	Diallate (cis isomer)	860	U
101-55-3	4-Bromophenyl-phenylether	980	U
118-74-1	Hexachlorobenzene	1000	U
92-67-1	4-Aminobiphenyl	540	U
87-86-5	Pentachlorophenol	1800	U
23950-58-5	Pronamide	850	U
85-01-8	Phenanthrene	810	U
120-12-7	Anthracene	970	U
84-74-2	Di-n-butylphthalate	1000	U
56-57-5	4-Nitroquinoline-1-oxide	6300	U
91-80-5	Methapyrilene	1700	U
465-73-6	Isodrin	1200	U
206-44-0	Fluoranthene	1200	U
129-00-0	Pyrene	950	U
140-57-8	Aramite	860	U
60-11-7	p-Dimethylaminoazobenzene	880	U
510-15-6	Chlorobenzilate	930	U
85-68-7	Butylbenzylphthalate	890	U
119-93-7	3,3'-Dimethylbenzidine	590	U
117-81-7	bis(2-ethylhexyl)Phthalate	980	U
91-94-1	3,3'-Dichlorobenzidine	650	U
56-55-3	Benzo(a)Anthracene	860	U
218-01-9	Chrysene	710	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF005

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789187

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089187C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
117-84-0	Di-n-octylphthalate	630	U
57-97-6	7,12-Dimethylbenz(a)anthrace	540	U
205-99-2	Benzo(b)fluoranthene	1000	U
207-08-9	Benzo(k)fluoranthene	810	U
193-39-5	Indeno(1,2,3-c,d)pyrene	600	U
53-70-3	Dibenzo(a,h)anthracene	240	U
191-24-2	Benzo(g,h,i)perylene	810	U
122-09-08	a,a-Dimethylphenethylamine	860	U
106-50-3	p-Phenylenediamine	860	U

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
BIOF005

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789187

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089187C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL (BC)	3.69	180	JAB
2.	UNKNOWN (BC)	3.86	300	JB
3.	ALDOL (BC)	4.07	5900	JAB
4.	UNKNOWN	4.70	170	J
5.	ADVISORY SURROGATE COMPOUND	5.47	1800	JB
6.	ADVISORY SURROGATE COMPOUND	5.98	1300	JB
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FORM I SV-TIC

1D

ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

BIOF005

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0347C

Matrix: (soil/water) SOIL Lab Sample ID: 789214

Sample wt/vol: 30.00 (g/ml) G Lab File ID:

% Moisture: 24 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/19/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 03/24/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	0.067	JP
309-00-2	Aldrin	1.3	U
959-98-8	Endosulfan I	0.13	JB
60-57-1	Dieldrin	0.080	JBP
33213-65-9	Endosulfan II	4.6	U
50-29-3	4,4'-DDT	0.13	J
72-43-5	Methoxychlor	0.26	JP
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	0.19	JBP
319-86-8	delta-BHC	0.23	JBP
1024-57-3	Heptachlor epoxide	0.090	JBP
72-55-9	4,4'-DDE	0.28	JP
72-20-8	Endrin	0.085	JP
72-54-8	4,4'-DDD	0.33	JBP
7421-93-4	Endrin aldehyde	0.31	JP
1031-07-8	Endosulfan sulfate	2.6	U
11096-82-5	Aroclor-1260	26	U
12674-11-2	Aroclor-1016	26	U
11104-28-2	Aroclor-1221	26	U
11141-16-5	Aroclor-1232	26	U
53469-21-9	Aroclor-1242	26	U
12672-29-6	Aroclor-1248	26	U
11097-69-1	Aroclor-1254	26	U
8001-35-2	Toxaphene	26	U
57-74-9	Chlordane (Technical)	5.3	U

FORM I 8080

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF005

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788966

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088966B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 24 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	12	JB
67-64-1	Acetone	13	U
75-15-0	Carbon Disulfide	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon Tetrachloride	13	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
108-88-3	Toluene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
100-42-5	Styrene	13	U
1330-20-7	Xylene (Total)	13	U
75-05-8	acetonitrile	260	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF005

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788966

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088966B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 24 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107-02-8	acrolein	300	U
107-05-1	3-chloropropene	20	U
106-93-4	1,2-dibromoethane	20	U
74-95-3	dibromomethane	26	U
110-57-6	trans-1,4-dichloro-2-butene	20	U
75-71-8	dichlorodifluoromethane	26	U
123-91-1	1,4-dioxane	67000	U
107-12-0	propionitrile(ethylcyanide)	780	U
97-63-2	ethyl methacrylate	33	U
74-88-4	iodomethane	13	U
78-83-1	isobutyl alcohol	17000	U
126-98-7	methacrylonitrile	26	U
80-62-6	methyl methacrylate	66	U
630-20-6	1,1,1,2-tetrachloroethane	26	U
96-18-4	1,2,3-trichloropropane	26	U
108-05-4	vinyl acetate	26	U
96-12-8	1,2-dibromo-3-chloropropane	66	U
75-69-4	trichlorofluoromethane	26	U
107-13-1	acrylonitrile	280	U
156-60-5	trans-1,2-Dichloroethene	13	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
BIOF005

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788966

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088966B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 24 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	3.56	180	JB
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FORM I VOA-TIC

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF005

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____
Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 375C__
Matrix (soil/water): SOIL_ Lab Sample ID: 788924
Level (low/med): LOW__ Date Received: 03/07/96
% Solids: _75.8

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony_	346	B	N	P
7440-38-2	Arsenic__	7430			P
7440-39-3	Barium___	105000			P
7440-41-7	Beryllium	602	B		P
7440-43-9	Cadmium__	26.4	U	N	P
7440-47-3	Chromium_	12100			P
7440-48-4	Cobalt___	8690			P
7440-50-8	Copper___	10900			P
7439-92-1	Lead____	16300			P
7440-02-0	Nickel___	9050			P
7782-49-2	Selenium_	985		N	P
7440-22-4	Silver___	92.3	U		P
7440-28-0	Thallium_	462	U		P
7440-62-2	Vanadium_	24100			P
7440-66-6	Zinc____	29700			P
7439-93-2	Lithium__	5820	B		P
7440-31-5	Tin_____	888	B		P

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:0.68g__Wet:5.69g__Dry:4.48g_____

BIOF006

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0333C

Matrix: (soil/water) SOIL Lab Sample ID: 789199

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: 27 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/14/96

Concentrated Extract Volume: 10000(ul) Date Analyzed: 03/15/96

Injection Volume: 25.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.15	J
121-82-4	RDX	2.5	U
98-95-3	Nitrobenzene	0.49	U
99-65-0	1,3-Dinitrobenzene	0.44	U
99-35-4	1,3,5-Trinitrobenzene	0.88	U
121-14-2	2,4-Dinitrotoluene	1.1	U
606-20-2	2,6-Dinitrotoluene	0.82	U
118-96-7	2,4,6-Trinitrotoluene	0.38	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.82	U
479-45-8	Tetryl	1.4	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.66	U
88-72-2	2-Nitrotoluene	6.5	U
99-99-0	4-Nitrotoluene	6.5	U
99-08-1	3-Nitrotoluene	1.6	U

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF006

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 398C__

Matrix (soil/water): SOIL_ Lab Sample ID: 789172

Level (low/med): LOW__ Date Received: 03/07/96

% Solids: _72.5

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7439-97-6	Mercury	106	U		CV

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: VIOLET___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:0.59g__Wet:5.61g__Dry:4.23g_____

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF006

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789188

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089188C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 27 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
62-75-9	N-Nitrosodimethylamine	360	U
110-86-1	Pyridine	750	U
109-06-8	2-Picoline	1600	U
10595-95-6	Nitrosomethylethylamine	330	U
66-27-3	Methyl Methanesulfonate	960	U
55-18-5	N-Nitrosodiethylamine	310	U
62-50-0	Ethyl Methanesulfonate	820	U
108-95-2	Phenol	780	U
62-53-3	Aniline	770	U
111-44-4	Bis(2-chloroethyl)ether	380	U
95-57-8	2-Chlorophenol	860	U
541-73-1	1,3-Dichlorobenzene	700	U
106-46-7	1,4-Dichlorobenzene	710	U
100-51-6	Benzyl Alcohol	750	U
95-50-1	1,2-Dichlorobenzene	810	U
95-48-7	2-Methylphenol	890	U
39638-32-9	bis(2-Chloroisopropyl)ether	890	U
108-39-4	3-Methylphenol	1800	U
106-44-5	4-Methylphenol	1800	U
930-55-2	N-Nitrosopyrrolidine	730	U
621-64-7	N-Nitroso-di-N-propylamine	330	U
98-86-2	Acetophenone	900	U
59-89-2	N-Nitrosomorpholine	1000	U
636-21-5	o-Toluidine hydrochloride	2700	U
67-72-1	Hexachloroethane	820	U
98-95-3	Nitrobenzene	930	U
100-75-4	N-Nitrosopiperidine	1000	U
78-59-1	Isophorone	930	U
88-75-5	2-Nitrophenol	850	U
105-67-9	2,4-Dimethylphenol	840	U
126-68-1	o,o,o-Triethylphosphorothioa	7300	U
111-91-1	Bis(2-chloroethoxy)methane	920	U
120-83-2	2,4-Dichlorophenol	750	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF006

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789188

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089188C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 27 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
120-82-1	1,2,4-Trichlorobenzene	750	U
91-20-3	Naphthalene	900	U
106-47-8	4-Chloroaniline	950	U
87-65-0	2,6-Dichlorophenol	1600	U
1888-71-7	Hexachloropropene	780	U
87-68-3	Hexachlorobutadiene	770	U
924-16-3	N-Nitroso-di-n-butylamine	210	U
59-50-7	4-Chloro-3-methylphenol	260	U
94-59-7	Safrole	790	U
91-57-6	2-Methylnaphthalene	1200	U
77-47-4	Hexachlorocyclopentadiene	900	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1800	U
88-06-2	2,4,6-Trichlorophenol	1800	U
95-95-4	2,4,5-Trichlorophenol	1800	U
120-58-1	Isosafrole	1800	U
91-58-7	2-Chloronaphthalene	1300	U
88-74-4	2-Nitroaniline	1500	U
130-15-4	1,4-Napthoquinone	2200	U
131-11-3	Dimethylphthalate	1300	U
99-65-0	1,3-Dinitrobenzene	770	U
606-20-2	2,6-Dinitrotoluene	1000	U
208-96-8	Acenaphthylene	920	U
99-09-2	3-Nitroaniline	950	U
83-32-9	Acenaphthene	900	U
51-28-5	2,4-Dinitrophenol	2300	U
100-02-7	4-Nitrophenol	950	U
608-93-5	Pentachlorobenzene	900	U
121-14-2	2,4-Dinitrotoluene	900	U
132-64-9	Dibenzofuran	950	U
91-59-8	2-Naphthylamine	1200	U
58-90-2	2,3,4,6-Tetrachlorophenol	1900	U
134-32-7	1-Naphthylamine	1900	U
84-66-2	Diethylphthalate	990	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
BIOF006

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789188

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089188C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 27 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
7005-72-3	4-Chlorophenyl-phenylether	820	U
99-55-8	5-Nitro-o-toluidine	1400	U
86-73-7	Fluorene	950	U
100-01-6	4-Nitroaniline	1500	U
534-52-1	4,6-Dinitro-2-methylphenol	2500	U
86-30-6	N-Nitrosodiphenylamine (1)	1900	U
122-39-4	Diphenylamine	1900	U
99-35-4	1,3,5-Trinitrobenzene	1200	U
2303-16-4	Diallate (trans isomer)	900	U
62-44-2	Phenacetin	840	U
2303-16-4	Diallate (cis isomer)	900	U
101-55-3	4-Bromophenyl-phenylether	1000	U
118-74-1	Hexachlorobenzene	1100	U
92-67-1	4-Aminobiphenyl	560	U
87-86-5	Pentachlorophenol	1900	U
23950-58-5	Pronamide	890	U
85-01-8	Phenanthrene	850	U
120-12-7	Anthracene	1000	U
84-74-2	Di-n-butylphthalate	1100	U
56-57-5	4-Nitroquinoline-1-oxide	6600	U
91-80-5	Methapyrilene	1800	U
465-73-6	Isodrin	1300	U
206-44-0	Fluoranthene	1300	U
129-00-0	Pyrene	1000	U
140-57-8	Aramite	900	U
60-11-7	p-Dimethylaminoazobenzene	920	U
510-15-6	Chlorobenzilate	970	U
85-68-7	Butylbenzylphthalate	930	U
119-93-7	3,3'-Dimethylbenzidine	620	U
117-81-7	bis(2-ethylhexyl)Phthalate	1000	U
91-94-1	3,3'-Dichlorobenzidine	680	U
56-55-3	Benzo(a)Anthracene	900	U
218-01-9	Chrysene	740	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF006

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789188

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089188C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 27 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
117-84-0	Di-n-octylphthalate	660	U
57-97-6	7,12-Dimethylbenz(a)anthrace	560	U
205-99-2	Benzo(b)fluoranthene	1100	U
207-08-9	Benzo(k)fluoranthene	850	U
193-39-5	Indeno(1,2,3-c,d)pyrene	630	U
53-70-3	Dibenzo(a,h)anthracene	250	U
191-24-2	Benzo(g,h,i)perylene	850	U
122-09-08	a,a-Dimethylphenethylamine	900	U
106-50-3	p-Phenylenediamine	900	U

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
BIOF006

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789188

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089188C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 27 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL (BC)	3.69	220	JAB
2.	UNKNOWN (BC)	3.86	280	JB
3.	ALDOL (BC)	4.07	6900	JAB
4.	UNKNOWN	4.70	210	J
5.	ADVISORY SURROGATE COMPOUND	5.47	1800	JB
6.	ADVISORY SURROGATE COMPOUND	5.98	1400	JB
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FORM I SV-TIC

1D

ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

BIOF006

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0347C

Matrix: (soil/water) SOIL Lab Sample ID: 789215

Sample wt/vol: 30.00 (g/ml) G Lab File ID:

% Moisture: 27 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/19/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 03/24/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
58-89-9	gamma-BHC (Lindane)	1.4	U
76-44-8	Heptachlor	0.057	JP
309-00-2	Aldrin	0.14	J
959-98-8	Endosulfan I	0.11	JBP
60-57-1	Dieldrin	0.097	JBP
33213-65-9	Endosulfan II	4.8	U
50-29-3	4,4'-DDT	4.8	U
72-43-5	Methoxychlor	4.8	U
319-84-6	alpha-BHC	1.4	U
319-85-7	beta-BHC	1.4	U
319-86-8	delta-BHC	0.054	JBP
1024-57-3	Heptachlor epoxide	1.4	U
72-55-9	4,4'-DDE	4.8	U
72-20-8	Endrin	0.087	JP
72-54-8	4,4'-DDD	0.099	JBP
7421-93-4	Endrin aldehyde	0.13	JP
1031-07-8	Endosulfan sulfate	2.7	U
11096-82-5	Aroclor-1260	27	U
12674-11-2	Aroclor-1016	27	U
11104-28-2	Aroclor-1221	27	U
11141-16-5	Aroclor-1232	27	U
53469-21-9	Aroclor-1242	27	U
12672-29-6	Aroclor-1248	27	U
11097-69-1	Aroclor-1254	27	U
8001-35-2	Toxaphene	27	U
57-74-9	Chlordane (Technical)	5.5	U

FORM I 8080

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE

BIOF006

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788967

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088967B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 27 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	10	JB
67-64-1	Acetone	11	JB
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
100-42-5	Styrene	14	U
1330-20-7	Xylene (Total)	14	U
75-05-8	acetonitrile	270	U

FORM I VOA

D-3664

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF006

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788967

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088967B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 27 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107-02-8	acrolein	320	U
107-05-1	3-chloropropene	21	U
106-93-4	1,2-dibromoethane	21	U
74-95-3	dibromomethane	27	U
110-57-6	trans-1,4-dichloro-2-butene	21	U
75-71-8	dichlorodifluoromethane	27	U
123-91-1	1,4-dioxane	70000	U
107-12-0	propionitrile(ethylcyanide)	810	U
97-63-2	ethyl methacrylate	34	U
74-88-4	iodomethane	14	U
78-83-1	isobutyl alcohol	18000	U
126-98-7	methacrylonitrile	27	U
80-62-6	methyl methacrylate	68	U
630-20-6	1,1,1,2-tetrachloroethane	27	U
96-18-4	1,2,3-trichloropropane	27	U
108-05-4	vinyl acetate	27	U
96-12-8	1,2-dibromo-3-chloropropane	68	U
75-69-4	trichlorofluoromethane	27	U
107-13-1	acrylonitrile	290	U
156-60-5	trans-1,2-Dichloroethene	14	U

FORM I VOA

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
BIOF006

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788967

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088967B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 27 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	3.54	190	JB
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FORM I VOA-TIC

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF006

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____
Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 375C__
Matrix (soil/water): SOIL_ Lab Sample ID: 788926
Level (low/med): LOW__ Date Received: 03/07/96
% Solids: _72.5

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony_	248	U	N	P
7440-38-2	Arsenic__	5880			P
7440-39-3	Barium___	89200			P
7440-41-7	Beryllium	642	B		P
7440-43-9	Cadmium__	27.6	U	N	P
7440-47-3	Chromium_	11300			P
7440-48-4	Cobalt___	10300			P
7440-50-8	Copper___	10400			P
7439-92-1	Lead____	16500			P
7440-02-0	Nickel___	9410			P
7782-49-2	Selenium_	816		N	P
7440-22-4	Silver___	96.6	U		P
7440-28-0	Thallium_	483	U		P
7440-62-2	Vanadium_	20900			P
7440-66-6	Zinc____	25800			P
7439-93-2	Lithium__	5100	B		P
7440-31-5	Tin_____	1410	B		P

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:0.59g__Wet:5.61g__Dry:4.23g_____

BIOF007

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0333C

Matrix: (soil/water) SOIL Lab Sample ID: 789200

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: 25 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/14/96

Concentrated Extract Volume: 10000(ul) Date Analyzed: 03/15/96

Injection Volume: 25.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.75	U
121-82-4	RDX	2.4	U
98-95-3	Nitrobenzene	0.48	U
99-65-0	1,3-Dinitrobenzene	0.43	U
99-35-4	1,3,5-Trinitrobenzene	0.85	U
121-14-2	2,4-Dinitrotoluene	1.1	U
606-20-2	2,6-Dinitrotoluene	0.80	U
118-96-7	2,4,6-Trinitrotoluene	0.37	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.80	U
479-45-8	Tetryl	1.4	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.64	U
88-72-2	2-Nitrotoluene	6.3	U
99-99-0	4-Nitrotoluene	6.3	U
99-08-1	3-Nitrotoluene	1.5	U

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF007

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 398C__

Matrix (soil/water): SOIL_ Lab Sample ID: 789173

Level (low/med): LOW__ Date Received: 03/07/96

% Solids: _75.3

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7439-97-6	Mercury__	133	U		CV

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: VIOLET___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:0.67g__Wet:5.69g__Dry:4.45g_____

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF007

Lab Name: COMPUCHEM ENV. CORP: Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789189

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089189C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 25 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
62-75-9	N-Nitrosodimethylamine	340	U
110-86-1	Pyridine	730	U
109-06-8	2-Picoline	1600	U
10595-95-6	Nitrosomethylethylamine	320	U
66-27-3	Methyl Methanesulfonate	930	U
55-18-5	N-Nitrosodiethylamine	300	U
62-50-0	Ethyl Methanesulfonate	790	U
108-95-2	Phenol	760	U
62-53-3	Aniline	740	U
111-44-4	Bis(2-chloroethyl)ether	370	U
95-57-8	2-Chlorophenol	830	U
541-73-1	1,3-Dichlorobenzene	680	U
106-46-7	1,4-Dichlorobenzene	690	U
100-51-6	Benzyl Alcohol	730	U
95-50-1	1,2-Dichlorobenzene	780	U
95-48-7	2-Methylphenol	860	U
39638-32-9	bis(2-Chloroisopropyl)ether	860	U
108-39-4	3-Methylphenol	1700	U
106-44-5	4-Methylphenol	1700	U
930-55-2	N-Nitrosopyrrolidine	700	U
621-64-7	N-Nitroso-di-N-propylamine	320	U
98-86-2	Acetophenone	870	U
59-89-2	N-Nitrosomorpholine	990	U
636-21-5	o-Toluidine hydrochloride	2600	U
67-72-1	Hexachloroethane	790	U
98-95-3	Nitrobenzene	900	U
100-75-4	N-Nitrosopiperidine	980	U
78-59-1	Isophorone	900	U
88-75-5	2-Nitrophenol	820	U
105-67-9	2,4-Dimethylphenol	810	U
126-68-1	o,o,o-Triethylphosphorothioa	7000	U
111-91-1	Bis(2-chloroethoxy)methane	890	U
120-83-2	2,4-Dichlorophenol	730	U

D- 00647

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF007

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789189

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089189C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 25 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
120-82-1	1,2,4-Trichlorobenzene	730	U
91-20-3	Naphthalene	870	U
106-47-8	4-Chloroaniline	910	U
87-65-0	2,6-Dichlorophenol	1600	U
1888-71-7	Hexachloropropene	760	U
87-68-3	Hexachlorobutadiene	740	U
924-16-3	N-Nitroso-di-n-butylamine	200	U
59-50-7	4-Chloro-3-methylphenol	250	U
94-59-7	Safrole	770	U
91-57-6	2-Methylnaphthalene	1100	U
77-47-4	Hexachlorocyclopentadiene	870	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1700	U
88-06-2	2,4,6-Trichlorophenol	1700	U
95-95-4	2,4,5-Trichlorophenol	1700	U
120-58-1	Isosafrole	1700	U
91-58-7	2-Chloronaphthalene	1300	U
88-74-4	2-Nitroaniline	1500	U
130-15-4	1,4-Napthoquinone	2100	U
131-11-3	Dimethylphthalate	1300	U
99-65-0	1,3-Dinitrobenzene	740	U
606-20-2	2,6-Dinitrotoluene	990	U
208-96-8	Acenaphthylene	890	U
99-09-2	3-Nitroaniline	910	U
83-32-9	Acenaphthene	870	U
51-28-5	2,4-Dinitrophenol	2300	U
100-02-7	4-Nitrophenol	910	U
608-93-5	Pentachlorobenzene	870	U
121-14-2	2,4-Dinitrotoluene	870	U
132-64-9	Dibenzofuran	910	U
91-59-8	2-Naphthylamine	1100	U
58-90-2	2,3,4,6-Tetrachlorophenol	1900	U
134-32-7	1-Naphthylamine	1900	U
84-66-2	Diethylphthalate	950	U

D 00645

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF007

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789189

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089189C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 25 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
7005-72-3	4-Chlorophenyl-phenylether	790	U
99-55-8	5-Nitro-o-toluidine	1300	U
86-73-7	Fluorene	910	U
100-01-6	4-Nitroaniline	1500	U
534-52-1	4,6-Dinitro-2-methylphenol	2400	U
86-30-6	N-Nitrosodiphenylamine (1)	1900	U
122-39-4	Diphenylamine	1900	U
99-35-4	1,3,5-Trinitrobenzene	1200	U
2303-16-4	Diallate (trans isomer)	870	U
62-44-2	Phenacetin	810	U
2303-16-4	Diallate (cis isomer)	870	U
101-55-3	4-Bromophenyl-phenylether	990	U
118-74-1	Hexachlorobenzene	1000	U
92-67-1	4-Aminobiphenyl	540	U
87-86-5	Pentachlorophenol	1900	U
23950-58-5	Pronamide	860	U
85-01-8	Phenanthrene	820	U
120-12-7	Anthracene	980	U
84-74-2	Di-n-butylphthalate	1000	U
56-57-5	4-Nitroquinoline-1-oxide	6400	U
91-80-5	Methapyrilene	1700	U
465-73-6	Isodrin	1200	U
206-44-0	Fluoranthene	1200	U
129-00-0	Pyrene	970	U
140-57-8	Aramite	870	U
60-11-7	p-Dimethylaminoazobenzene	890	U
510-15-6	Chlorobenzilate	940	U
85-68-7	Butylbenzylphthalate	900	U
119-93-7	3,3'-Dimethylbenzidine	600	U
117-81-7	bis(2-ethylhexyl)Phthalate	990	U
91-94-1	3,3'-Dichlorobenzidine	660	U
56-55-3	Benzo(a)Anthracene	870	U
218-01-9	Chrysene	720	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF007

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789189

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089189C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 25 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
117-84-0	Di-n-octylphthalate	640	U
57-97-6	7,12-Dimethylbenz(a)anthrace	540	U
205-99-2	Benzo(b)fluoranthene	1000	U
207-08-9	Benzo(k)fluoranthene	820	U
193-39-5	Indeno(1,2,3-c,d)pyrene	610	U
53-70-3	Dibenzo(a,h)anthracene	240	U
191-24-2	Benzo(g,h,i)perylene	820	U
122-09-08	a,a-Dimethylphenethylamine	870	U
106-50-3	p-Phenylenediamine	870	U

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
BIOF007

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789189

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089189C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 25 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	3.86	280	JB
2.	ALDOL (BC)	4.07	5700	JAB
3.	ADVISORY SURROGATE COMPOUND	5.47	1600	JB
4.	ADVISORY SURROGATE COMPOUND	5.98	1200	JB
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FORM I SV-TIC

1D

ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

BIOF007

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0347C

Matrix: (soil/water) SOIL Lab Sample ID: 789216

Sample wt/vol: 30.00 (g/ml) G Lab File ID:

% Moisture: 25 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/19/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 03/24/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
58-89-9	gamma-BHC (Lindane)	0.039	JBP
76-44-8	Heptachlor	1.3	U
309-00-2	Aldrin	1.3	U
959-98-8	Endosulfan I	0.075	JBP
60-57-1	Dieldrin	0.052	JBP
33213-65-9	Endosulfan II	4.7	U
50-29-3	4,4'-DDT	4.7	U
72-43-5	Methoxychlor	4.7	U
319-84-6	alpha-BHC	0.045	JP
319-85-7	beta-BHC	0.35	BJP
319-86-8	delta-BHC	0.20	JBP
1024-57-3	Heptachlor epoxide	1.3	U
72-55-9	4,4'-DDE	0.076	JP
72-20-8	Endrin	3.3	U
72-54-8	4,4'-DDD	4.7	U
7421-93-4	Endrin aldehyde	0.18	JP
1031-07-8	Endosulfan sulfate	2.7	U
11096-82-5	Aroclor-1260	27	U
12674-11-2	Aroclor-1016	27	U
11104-28-2	Aroclor-1221	27	U
11141-16-5	Aroclor-1232	27	U
53469-21-9	Aroclor-1242	27	U
12672-29-6	Aroclor-1248	27	U
11097-69-1	Aroclor-1254	27	U
8001-35-2	Toxaphene	27	U
57-74-9	Chlordane (Technical)	5.3	U

FORM I 8080

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
BIOF007

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788968

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088968B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 25 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	9	JB
67-64-1	Acetone	13	B
75-15-0	Carbon Disulfide	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon Tetrachloride	13	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
108-88-3	Toluene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
100-42-5	Styrene	13	U
1330-20-7	Xylene (Total)	13	U
75-05-8	acetonitrile	270	U

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF007

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788968

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088968B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 25 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107-02-8	acrolein	310	U
107-05-1	3-chloropropene	20	U
106-93-4	1,2-dibromoethane	20	U
74-95-3	dibromomethane	27	U
110-57-6	trans-1,4-dichloro-2-butene	20	U
75-71-8	dichlorodifluoromethane	27	U
123-91-1	1,4-dioxane	68000	U
107-12-0	propionitrile(ethylcyanide)	790	U
97-63-2	ethyl methacrylate	33	U
74-88-4	iodomethane	13	U
78-83-1	isobutyl alcohol	17000	U
126-98-7	methacrylonitrile	27	U
80-62-6	methyl methacrylate	67	U
630-20-6	1,1,1,2-tetrachloroethane	27	U
96-18-4	1,2,3-trichloropropane	27	U
108-05-4	vinyl acetate	27	U
96-12-8	1,2-dibromo-3-chloropropane	67	U
75-69-4	trichlorofluoromethane	27	U
107-13-1	acrylonitrile	280	U
156-60-5	trans-1,2-Dichloroethene	13	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
BIOF007

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788968

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088968B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 25 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	3.53	280	JB
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FORM I VOA-TIC

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF007

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____
Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 375C__
Matrix (soil/water): SOIL_ Lab Sample ID: 788928
Level (low/med): LOW__ Date Received: 03/07/96
% Solids: _75.3

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony_	448	B	N	P
7440-38-2	Arsenic__	11400			P
7440-39-3	Barium___	58300			P
7440-41-7	Beryllium	546	B		P
7440-43-9	Cadmium__	26.6	U	N	P
7440-47-3	Chromium_	17700			P
7440-48-4	Cobalt___	6370	B		P
7440-50-8	Copper___	15400			P
7439-92-1	Lead____	16400			P
7440-02-0	Nickel___	10900			P
7782-49-2	Selenium_	1310		N	P
7440-22-4	Silver___	93.0	U		P
7440-28-0	Thallium_	465	U		P
7440-62-2	Vanadium_	32000			P
7440-66-6	Zinc____	35700			P
7439-93-2	Lithium__	8730	B		P
7440-31-5	Tin_____	1450	B		P

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:0.67g__Wet:5.69g__Dry:4.45g_____

SWMU 16/16 DATA
BACKFILL - SAMPLES BIOF - 008 THROUGH 014

BIOF008

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0333C

Matrix: (soil/water) SOIL Lab Sample ID: 789201

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: 30 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/14/96

Concentrated Extract Volume: 10000(ul) Date Analyzed: 03/15/96

Injection Volume: 25.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.80	U
121-82-4	RDX	2.6	U
98-95-3	Nitrobenzene	0.51	U
99-65-0	1,3-Dinitrobenzene	0.46	U
99-35-4	1,3,5-Trinitrobenzene	0.91	U
121-14-2	2,4-Dinitrotoluene	1.1	U
606-20-2	2,6-Dinitrotoluene	0.86	U
118-96-7	2,4,6-Trinitrotoluene	0.40	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.86	U
479-45-8	Tetryl	1.5	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.68	U
88-72-2	2-Nitrotoluene	6.8	U
99-99-0	4-Nitrotoluene	6.8	U
99-08-1	3-Nitrotoluene	1.6	U

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF008

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 398C__

Matrix (soil/water): SOIL_ Lab Sample ID: 789174

Level (low/med): LOW__ Date Received: 03/07/96

% Solids: _70.5

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7439-97-6	Mercury__	135	U		CV

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: VIOLET___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:0.70g__Wet:5.71g__Dry:4.23g_____

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF008

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789190

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089190C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 30 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
62-75-9	N-Nitrosodimethylamine	260	U
110-86-1	Pyridine	550	U
109-06-8	2-Picoline	1200	U
10595-95-6	Nitrosomethylethylamine	240	U
66-27-3	Methyl Methanesulfonate	700	U
55-18-5	N-Nitrosodiethylamine	220	U
62-50-0	Ethyl Methanesulfonate	600	U
108-95-2	Phenol	570	U
62-53-3	Aniline	560	U
111-44-4	Bis(2-chloroethyl)ether	280	U
95-57-8	2-Chlorophenol	630	U
541-73-1	1,3-Dichlorobenzene	510	U
106-46-7	1,4-Dichlorobenzene	520	U
100-51-6	Benzyl Alcohol	550	U
95-50-1	1,2-Dichlorobenzene	590	U
95-48-7	2-Methylphenol	650	U
39638-32-9	bis(2-Chloroisopropyl)ether	650	U
108-39-4	3-Methylphenol	1300	U
106-44-5	4-Methylphenol	1300	U
930-55-2	N-Nitrosopyrrolidine	530	U
621-64-7	N-Nitroso-di-N-propylamine	240	U
98-86-2	Acetophenone	660	U
59-89-2	N-Nitrosomorpholine	750	U
636-21-5	o-Toluidine hydrochloride	2000	U
67-72-1	Hexachloroethane	600	U
98-95-3	Nitrobenzene	680	U
100-75-4	N-Nitrosopiperidine	740	U
78-59-1	Isophorone	680	U
88-75-5	2-Nitrophenol	620	U
105-67-9	2,4-Dimethylphenol	610	U
126-68-1	o,o,o-Triethylphosphorothioa	5300	U
111-91-1	Bis(2-chloroethoxy)methane	670	U
120-83-2	2,4-Dichlorophenol	550	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
BIOF008

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789190

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089190C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 30 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
120-82-1	1,2,4-Trichlorobenzene	550	U
91-20-3	Naphthalene	660	U
106-47-8	4-Chloroaniline	690	U
87-65-0	2,6-Dichlorophenol	1200	U
1888-71-7	Hexachloropropene	570	U
87-68-3	Hexachlorobutadiene	560	U
924-16-3	N-Nitroso-di-n-butylamine	150	U
59-50-7	4-Chloro-3-methylphenol	190	U
94-59-7	Safrole	580	U
91-57-6	2-Methylnaphthalene	840	U
77-47-4	Hexachlorocyclopentadiene	660	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1300	U
88-06-2	2,4,6-Trichlorophenol	1300	U
95-95-4	2,4,5-Trichlorophenol	1300	U
120-58-1	Isosafrole	1300	U
91-58-7	2-Chloronaphthalene	970	U
88-74-4	2-Nitroaniline	1100	U
130-15-4	1,4-Napthoquinone	1600	U
131-11-3	Dimethylphthalate	970	U
99-65-0	1,3-Dinitrobenzene	560	U
606-20-2	2,6-Dinitrotoluene	750	U
208-96-8	Acenaphthylene	670	U
99-09-2	3-Nitroaniline	690	U
83-32-9	Acenaphthene	660	U
51-28-5	2,4-Dinitrophenol	1700	U
100-02-7	4-Nitrophenol	690	U
608-93-5	Pentachlorobenzene	660	U
121-14-2	2,4-Dinitrotoluene	660	U
132-64-9	Dibenzofuran	690	U
91-59-8	2-Naphthylamine	860	U
58-90-2	2,3,4,6-Tetrachlorophenol	1400	U
134-32-7	1-Naphthylamine	1400	U
84-66-2	Diethylphthalate	720	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF008

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789190

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089190C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 30 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
7005-72-3	4-Chlorophenyl-phenylether	600	U
99-55-8	5-Nitro-o-toluidine	1000	U
86-73-7	Fluorene	690	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1800	U
86-30-6	N-Nitrosodiphenylamine (1)	1400	U
122-39-4	Diphenylamine	1400	U
99-35-4	1,3,5-Trinitrobenzene	910	U
2303-16-4	Diallate (trans isomer)	660	U
62-44-2	Phenacetin	610	U
2303-16-4	Diallate (cis isomer)	660	U
101-55-3	4-Bromophenyl-phenylether	750	U
118-74-1	Hexachlorobenzene	770	U
92-67-1	4-Aminobiphenyl	410	U
87-86-5	Pentachlorophenol	1400	U
23950-58-5	Pronamide	650	U
85-01-8	Phenanthrene	620	U
120-12-7	Anthracene	740	U
84-74-2	Di-n-butylphthalate	770	U
56-57-5	4-Nitroquinoline-1-oxide	4800	U
91-80-5	Methapyrilene	1300	U
465-73-6	Isodrin	920	U
206-44-0	Fluoranthene	920	U
129-00-0	Pyrene	730	U
140-57-8	Aramite	660	U
60-11-7	p-Dimethylaminoazobenzene	670	U
510-15-6	Chlorobenzilate	710	U
85-68-7	Butylbenzylphthalate	680	U
119-93-7	3,3'-Dimethylbenzidine	450	U
117-81-7	bis(2-ethylhexyl)Phthalate	750	U
91-94-1	3,3'-Dichlorobenzidine	500	U
56-55-3	Benzo(a)Anthracene	660	U
218-01-9	Chrysene	540	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF008

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789190

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089190C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 30 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
117-84-0	Di-n-octylphthalate	480	U
57-97-6	7,12-Dimethylbenz(a)anthrace	410	U
205-99-2	Benzo(b)fluoranthene	770	U
207-08-9	Benzo(k)fluoranthene	620	U
193-39-5	Indeno(1,2,3-c,d)pyrene	460	U
53-70-3	Dibenzo(a,h)anthracene	180	U
191-24-2	Benzo(g,h,i)perylene	620	U
122-09-08	a,a-Dimethylphenethylamine	660	U
106-50-3	p-Phenylenediamine	660	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

BIOF008

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789190

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089190C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 30 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6

Number TICs found: 7

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		ALDOL (BC)	3.69	160	JAB
2.		UNKNOWN (BC)	3.86	220	JB
3.		ALDOL (BC)	4.06	4600	JAB
4.		UNKNOWN	4.70	140	J
5.		ADVISORY SURROGATE COMPOUND	5.47	1400	JB
6.		ADVISORY SURROGATE COMPOUND	5.97	1100	JB
7.		UNKNOWN	18.42	230	J
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FORM I SV-TIC

1D

ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

BIOF008

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0347C

Matrix: (soil/water) SOIL Lab Sample ID: 789217

Sample wt/vol: 30.10 (g/ml) G Lab File ID:

% Moisture: 30 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/19/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 03/24/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
58-89-9	gamma-BHC (Lindane)	1.4	U
76-44-8	Heptachlor	1.4	U
309-00-2	Aldrin	1.4	U
959-98-8	Endosulfan I	0.13	JBP
60-57-1	Dieldrin	2.1	U
33213-65-9	Endosulfan II	5.0	U
50-29-3	4,4'-DDT	5.0	U
72-43-5	Methoxychlor	0.25	JP
319-84-6	alpha-BHC	1.4	U
319-85-7	beta-BHC	0.45	JBP
319-86-8	delta-BHC	0.074	JBP
1024-57-3	Heptachlor epoxide	1.4	U
72-55-9	4,4'-DDE	0.066	JP
72-20-8	Endrin	0.20	J
72-54-8	4,4'-DDD	5.0	U
7421-93-4	Endrin aldehyde	0.23	J
1031-07-8	Endosulfan sulfate	2.8	U
11096-82-5	Aroclor-1260	28	U
12674-11-2	Aroclor-1016	28	U
11104-28-2	Aroclor-1221	28	U
11141-16-5	Aroclor-1232	28	U
53469-21-9	Aroclor-1242	28	U
12672-29-6	Aroclor-1248	28	U
11097-69-1	Aroclor-1254	28	U
8001-35-2	Toxaphene	28	U
57-74-9	Chlordane (Technical)	5.7	U

FORM I 8080

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF008

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788969

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088969B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 30 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	13	JB
67-64-1	Acetone	11	JB
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
100-42-5	Styrene	14	U
1330-20-7	Xylene (Total)	14	U
75-05-8	acetonitrile	290	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF008

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788969

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088969B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 30 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107-02-8	acrolein	330	U
107-05-1	3-chloropropene	21	U
106-93-4	1,2-dibromoethane	21	U
74-95-3	dibromomethane	29	U
110-57-6	trans-1,4-dichloro-2-butene	21	U
75-71-8	dichlorodifluoromethane	29	U
123-91-1	1,4-dioxane	73000	U
107-12-0	propionitrile(ethylcyanide)	840	U
97-63-2	ethyl methacrylate	36	U
74-88-4	iodomethane	14	U
78-83-1	isobutyl alcohol	19000	U
126-98-7	methacrylonitrile	29	U
80-62-6	methyl methacrylate	71	U
630-20-6	1,1,1,2-tetrachloroethane	29	U
96-18-4	1,2,3-trichloropropane	29	U
108-05-4	vinyl acetate	29	U
96-12-8	1,2-dibromo-3-chloropropane	71	U
75-69-4	trichlorofluoromethane	29	U
107-13-1	acrylonitrile	300	U
156-60-5	trans-1,2-Dichloroethene	14	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

BIOF008

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788969

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088969B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 30 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	3.53	230	JB
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FORM I VOA-TIC

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF008

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____
Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 375C__
Matrix (soil/water): SOIL_ Lab Sample ID: 788930
Level (low/med): LOW__ Date Received: 03/07/96
% Solids: _70.5

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony_	239	U	N	P
7440-38-2	Arsenic__	6130			P
7440-39-3	Barium___	91900			P
7440-41-7	Beryllium	648	B		P
7440-43-9	Cadmium__	26.5	U	N	P
7440-47-3	Chromium_	11400			P
7440-48-4	Cobalt___	11100			P
7440-50-8	Copper___	10400			P
7439-92-1	Lead____	17000			P
7440-02-0	Nickel___	10500			P
7782-49-2	Selenium_	943		N	P
7440-22-4	Silver___	92.8	U		P
7440-28-0	Thallium_	464	U		P
7440-62-2	Vanadium_	22300			P
7440-66-6	Zinc____	29900			P
7439-93-2	Lithium__	6220	B		P
7440-31-5	Tin_____	1350	B		P

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:0.70g__Wet:5.71g__Dry:4.23g_____

BIOF009

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0333C

Matrix: (soil/water) SOIL Lab Sample ID: 789202

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: 33 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/14/96

Concentrated Extract Volume: 10000 (ul) Date Analyzed: 03/16/96

Injection Volume: 25.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.84	U
121-82-4	RDX	2.7	U
98-95-3	Nitrobenzene	0.54	U
99-65-0	1,3-Dinitrobenzene	0.48	U
99-35-4	1,3,5-Trinitrobenzene	0.96	U
121-14-2	2,4-Dinitrotoluene	1.2	U
606-20-2	2,6-Dinitrotoluene	0.90	U
118-96-7	2,4,6-Trinitrotoluene	0.42	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.90	U
479-45-8	Tetryl	1.6	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.72	U
88-72-2	2-Nitrotoluene	7.1	U
99-99-0	4-Nitrotoluene	7.1	U
99-08-1	3-Nitrotoluene	1.7	U

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF009

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 398C__

Matrix (soil/water): SOIL_ Lab Sample ID: 789175

Level (low/med): LOW__ Date Received: 03/07/96

% Solids: _67.4

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7439-97-6	Mercury	135	U		CV

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: VIOLET___ Clarity After: _____ Artifacts: _____

Comments:

Undecanted_Dry_Weights____Container:0.79g__Wet:5.79g__Dry:4.16g_____

FORM I - IN

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
BIOF009

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019
Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C
Matrix: (soil/water) SOIL Lab Sample ID: 789191
Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089191C60.D
Level: (low/med) LOW Date Received: 03/07/96
% Moisture: 33 decanted: (Y/N) N Date Extracted: 03/14/96
Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96
Injection Volume: 1.0(uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
62-75-9	N-Nitrosodimethylamine	390	U
110-86-1	Pyridine	820	U
109-06-8	2-Picoline	1800	U
10595-95-6	Nitrosomethylethylamine	360	U
66-27-3	Methyl Methanesulfonate	1000	U
55-18-5	N-Nitrosodiethylamine	330	U
62-50-0	Ethyl Methanesulfonate	890	U
108-95-2	Phenol	850	U
62-53-3	Aniline	830	U
111-44-4	Bis(2-chloroethyl)ether	420	U
95-57-8	2-Chlorophenol	940	U
541-73-1	1,3-Dichlorobenzene	760	U
106-46-7	1,4-Dichlorobenzene	770	U
100-51-6	Benzyl Alcohol	820	U
95-50-1	1,2-Dichlorobenzene	880	U
95-48-7	2-Methylphenol	970	U
39638-32-9	bis(2-Chloroisopropyl)ether	970	U
108-39-4	3-Methylphenol	1900	U
106-44-5	4-Methylphenol	1900	U
930-55-2	N-Nitrosopyrrolidine	790	U
621-64-7	N-Nitroso-di-N-propylamine	360	U
98-86-2	Acetophenone	980	U
59-89-2	N-Nitrosomorpholine	1100	U
636-21-5	o-Toluidine hydrochloride	3000	U
67-72-1	Hexachloroethane	890	U
98-95-3	Nitrobenzene	1000	U
100-75-4	N-Nitrosopiperidine	1100	U
78-59-1	Isophorone	1000	U
88-75-5	2-Nitrophenol	920	U
105-67-9	2,4-Dimethylphenol	910	U
126-68-1	o,o,o-Triethylphosphorothioa	7900	U
111-91-1	Bis(2-chloroethoxy)methane	1000	U
120-83-2	2,4-Dichlorophenol	820	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF009

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789191

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089191C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 33 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
120-82-1	1,2,4-Trichlorobenzene	820	U
91-20-3	Naphthalene	980	U
106-47-8	4-Chloroaniline	1000	U
87-65-0	2,6-Dichlorophenol	1800	U
1888-71-7	Hexachloropropene	850	U
87-68-3	Hexachlorobutadiene	830	U
924-16-3	N-Nitroso-di-n-butylamine	220	U
59-50-7	4-Chloro-3-methylphenol	280	U
94-59-7	Safrole	860	U
91-57-6	2-Methylnaphthalene	1200	U
77-47-4	Hexachlorocyclopentadiene	980	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1900	U
88-06-2	2,4,6-Trichlorophenol	1900	U
95-95-4	2,4,5-Trichlorophenol	1900	U
120-58-1	Isosafrole	1900	U
91-58-7	2-Chloronaphthalene	1400	U
88-74-4	2-Nitroaniline	1600	U
130-15-4	1,4-Napthoquinone	2400	U
131-11-3	Dimethylphthalate	1400	U
99-65-0	1,3-Dinitrobenzene	830	U
606-20-2	2,6-Dinitrotoluene	1100	U
208-96-8	Acenaphthylene	1000	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	980	U
51-28-5	2,4-Dinitrophenol	2500	U
100-02-7	4-Nitrophenol	1000	U
608-93-5	Pentachlorobenzene	980	U
121-14-2	2,4-Dinitrotoluene	980	U
132-64-9	Dibenzofuran	1000	U
91-59-8	2-Naphthylamine	1300	U
58-90-2	2,3,4,6-Tetrachlorophenol	2100	U
134-32-7	1-Naphthylamine	2100	U
84-66-2	Diethylphthalate	1100	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF009

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789191

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089191C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 33 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
7005-72-3	4-Chlorophenyl-phenylether	890	U
99-55-8	5-Nitro-o-toluidine	1500	U
86-73-7	Fluorene	1000	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	2700	U
86-30-6	N-Nitrosodiphenylamine (1)	2100	U
122-39-4	Diphenylamine	2100	U
99-35-4	1,3,5-Trinitrobenzene	1400	U
2303-16-4	Diallate (trans isomer)	980	U
62-44-2	Phenacetin	910	U
2303-16-4	Diallate (cis isomer)	980	U
101-55-3	4-Bromophenyl-phenylether	1100	U
118-74-1	Hexachlorobenzene	1100	U
92-67-1	4-Aminobiphenyl	610	U
87-86-5	Pentachlorophenol	2100	U
23950-58-5	Pronamide	970	U
85-01-8	Phenanthrene	920	U
120-12-7	Anthracene	1100	U
84-74-2	Di-n-butylphthalate	1100	U
56-57-5	4-Nitroquinoline-1-oxide	7100	U
91-80-5	Methapyrilene	1900	U
465-73-6	Isodrin	1400	U
206-44-0	Fluoranthene	1400	U
129-00-0	Pyrene	1100	U
140-57-8	Aramite	980	U
60-11-7	p-Dimethylaminoazobenzene	1000	U
510-15-6	Chlorobenzilate	1100	U
85-68-7	Butylbenzylphthalate	1000	U
119-93-7	3,3'-Dimethylbenzidine	670	U
117-81-7	bis(2-ethylhexyl)Phthalate	1100	U
91-94-1	3,3'-Dichlorobenzidine	740	U
56-55-3	Benzo(a)Anthracene	980	U
218-01-9	Chrysene	800	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF009

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789191

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089191C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 33 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
117-84-0	Di-n-octylphthalate	710	U
57-97-6	7,12-Dimethylbenz(a)anthrace	610	U
205-99-2	Benzo(b)fluoranthene	1100	U
207-08-9	Benzo(k)fluoranthene	920	U
193-39-5	Indeno(1,2,3-c,d)pyrene	680	U
53-70-3	Dibenzo(a,h)anthracene	270	U
191-24-2	Benzo(g,h,i)perylene	920	U
122-09-08	a,a-Dimethylphenethylamine	980	U
106-50-3	p-Phenylenediamine	980	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

BIOF009

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789191

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH089191C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 33 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL (BC)	3.69	230	JAB
2.	UNKNOWN (BC)	3.86	310	JB
3.	ALDOL (BC)	4.06	6800	JAB
4.	UNKNOWN	4.70	200	J
5.	ADVISORY SURROGATE COMPOUND	5.47	1700	JB
6.	ADVISORY SURROGATE COMPOUND	5.98	1300	JB
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FORM I SV-TIC

1D

ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

BIOF009

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0347C

Matrix: (soil/water) SOIL Lab Sample ID: 789218

Sample wt/vol: 30.00 (g/ml) G Lab File ID:

% Moisture: 33 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/19/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 03/24/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
58-89-9	gamma-BHC (Lindane)	1.5	U
76-44-8	Heptachlor	0.073	J
309-00-2	Aldrin	0.099	JP
959-98-8	Endosulfan I	0.11	JBP
60-57-1	Dieldrin	2.2	U
33213-65-9	Endosulfan II	5.2	U
50-29-3	4,4'-DDT	5.2	U
72-43-5	Methoxychlor	5.2	U
319-84-6	alpha-BHC	1.5	U
319-85-7	beta-BHC	0.36	BJP
319-86-8	delta-BHC	0.17	JBP
1024-57-3	Heptachlor epoxide	1.5	U
72-55-9	4,4'-DDE	5.2	U
72-20-8	Endrin	0.10	JP
72-54-8	4,4'-DDD	5.2	U
7421-93-4	Endrin aldehyde	1.5	U
1031-07-8	Endosulfan sulfate	3.0	U
11096-82-5	Aroclor-1260	30	U
12674-11-2	Aroclor-1016	30	U
11104-28-2	Aroclor-1221	30	U
11141-16-5	Aroclor-1232	30	U
53469-21-9	Aroclor-1242	30	U
12672-29-6	Aroclor-1248	30	U
11097-69-1	Aroclor-1254	30	U
8001-35-2	Toxaphene	30	U
57-74-9	Chlordane (Technical)	6.0	U

FORM I 8080

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF009

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788970

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088970B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 33 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	15	U
74-83-9	Bromomethane	15	U
75-01-4	Vinyl Chloride	15	U
75-00-3	Chloroethane	15	U
75-09-2	Methylene Chloride	12	JB
67-64-1	Acetone	12	JB
75-15-0	Carbon Disulfide	15	U
75-35-4	1,1-Dichloroethene	15	U
75-34-3	1,1-Dichloroethane	15	U
67-66-3	Chloroform	15	U
107-06-2	1,2-Dichloroethane	15	U
78-93-3	2-Butanone	15	U
71-55-6	1,1,1-Trichloroethane	15	U
56-23-5	Carbon Tetrachloride	15	U
75-27-4	Bromodichloromethane	15	U
78-87-5	1,2-Dichloropropane	15	U
10061-01-5	cis-1,3-Dichloropropene	15	U
79-01-6	Trichloroethene	15	U
124-48-1	Dibromochloromethane	15	U
79-00-5	1,1,2-Trichloroethane	15	U
71-43-2	Benzene	15	U
10061-02-6	trans-1,3-Dichloropropene	15	U
75-25-2	Bromoform	15	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	15	U
79-34-5	1,1,2,2-Tetrachloroethane	15	U
108-88-3	Toluene	15	U
108-90-7	Chlorobenzene	15	U
100-41-4	Ethylbenzene	15	U
100-42-5	Styrene	15	U
1330-20-7	Xylene (Total)	15	U
75-05-8	acetonitrile	300	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
BIOF009

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788970

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088970B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 33 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107-02-8	acrolein	340	U
107-05-1	3-chloropropene	22	U
106-93-4	1,2-dibromoethane	22	U
74-95-3	dibromomethane	30	U
110-57-6	trans-1,4-dichloro-2-butene	22	U
75-71-8	dichlorodifluoromethane	30	U
123-91-1	1,4-dioxane	76000	U
107-12-0	propionitrile(ethylcyanide)	880	U
97-63-2	ethyl methacrylate	37	U
74-88-4	iodomethane	15	U
78-83-1	isobutyl alcohol	19000	U
126-98-7	methacrylonitrile	30	U
80-62-6	methyl methacrylate	75	U
630-20-6	1,1,1,2-tetrachloroethane	30	U
96-18-4	1,2,3-trichloropropane	30	U
108-05-4	vinyl acetate	30	U
96-12-8	1,2-dibromo-3-chloropropane	75	U
75-69-4	trichlorofluoromethane	30	U
107-13-1	acrylonitrile	310	U
156-60-5	trans-1,2-Dichloroethene	15	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

BIOF009

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788970

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088970B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 33 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	3.51	210	JB
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FORM I VOA-TIC

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF009

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____
Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 375C__
Matrix (soil/water): SOIL_ Lab Sample ID: 788932
Level (low/med): LOW__ Date Received: 03/07/96
% Solids: _67.4

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony_	267	U	N	P
7440-38-2	Arsenic__	2960			P
7440-39-3	Barium___	83500			P
7440-41-7	Beryllium	540	B		P
7440-43-9	Cadmium__	29.7	U	N	P
7440-47-3	Chromium_	9490			P
7440-48-4	Cobalt___	4860	B		P
7440-50-8	Copper___	10500			P
7439-92-1	Lead____	13200			P
7440-02-0	Nickel___	8990			P
7782-49-2	Selenium_	386	U	N	P
7440-22-4	Silver___	104	U		P
7440-28-0	Thallium_	519	U		P
7440-62-2	Vanadium_	17200			P
7440-66-6	Zinc____	39700			P
7439-93-2	Lithium__	6030	B		P
7440-31-5	Tin_____	2140	B		P

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:0.79g__Wet:5.79g__Dry:4.16g_____

BIOF010

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0333C

Matrix: (soil/water) SOIL Lab Sample ID: 789203

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: 21 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/14/96

Concentrated Extract Volume: 10000(ul) Date Analyzed: 03/16/96

Injection Volume: 25.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.71	U
121-82-4	RDX	2.3	U
98-95-3	Nitrobenzene	0.46	U
99-65-0	1,3-Dinitrobenzene	0.40	U
99-35-4	1,3,5-Trinitrobenzene	0.81	U
121-14-2	2,4-Dinitrotoluene	1.0	U
606-20-2	2,6-Dinitrotoluene	0.76	U
118-96-7	2,4,6-Trinitrotoluene	0.35	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.76	U
479-45-8	Tetryl	1.3	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.61	U
88-72-2	2-Nitrotoluene	6.0	U
99-99-0	4-Nitrotoluene	6.0	U
99-08-1	3-Nitrotoluene	1.5	U

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF010

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 398C__

Matrix (soil/water): SOIL_ Lab Sample ID: 789176

Level (low/med): LOW__ Date Received: 03/07/96

% Solids: _79.2

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7439-97-6	Mercury	110	U		CV

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: VIOLET___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:0.74g__Wet:5.75g__Dry:4.71g_____

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
BIOF010

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019
Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C
Matrix: (soil/water) SOIL Lab Sample ID: 789192
Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089192C60.D
Level: (low/med) LOW Date Received: 03/07/96
% Moisture: 21 decanted: (Y/N) N Date Extracted: 03/14/96
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) Y pH: 7.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
62-75-9	N-Nitrosodimethylamine	330	U
110-86-1	Pyridine	690	U
123-63-7	Paraldehyde	450	U
97-63-2	Ethylmethacrylate	740	U
109-06-8	2-Picoline	1500	U
10595-95-6	Nitrosomethylethylamine	300	U
66-27-3	Methyl Methanesulfonate	880	U
55-18-5	N-Nitrosodiethylamine	280	U
62-50-0	Ethyl Methanesulfonate	750	U
108-95-2	Phenol	720	U
62-53-3	Aniline	700	U
111-44-4	Bis(2-chloroethyl)ether	350	U
76-01-7	Pentachloroethane	1000	U
95-57-8	2-Chlorophenol	790	U
541-73-1	1,3-Dichlorobenzene	640	U
100-44-7	Benzyl Chloride	730	U
106-46-7	1,4-Dichlorobenzene	650	U
100-51-6	Benzyl Alcohol	690	U
95-50-1	1,2-Dichlorobenzene	740	U
95-48-7	2-Methylphenol	820	U
39638-32-9	bis(2-Chloroisopropyl)ether	820	U
108-39-4	3-Methylphenol	1600	U
106-44-5	4-Methylphenol	1600	U
930-55-2	N-Nitrosopyrrolidine	670	U
621-64-7	N-Nitroso-di-N-propylamine	300	U
98-86-2	Acetophenone	830	U
59-89-2	N-Nitrosomorpholine	940	U
636-21-5	o-Toluidine hydrochloride	2500	U
67-72-1	Hexachloroethane	750	U
98-95-3	Nitrobenzene	860	U
100-75-4	N-Nitrosopiperidine	930	U
78-59-1	Isophorone	860	U
88-75-5	2-Nitrophenol	780	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF010

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789192

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089192C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 21 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
105-67-9	2,4-Dimethylphenol	770	U
108-70-3	1,3,5-Trichlorobenzene	770	U
98-87-3	Benzal chloride	670	U
126-68-1	o,o,o-Triethylphosphorothioa	6700	U
65-85-0	Benzoic Acid	2400	U
111-91-1	Bis(2-chloroethoxy)methane	840	U
120-83-2	2,4-Dichlorophenol	690	U
120-82-1	1,2,4-Trichlorobenzene	690	U
91-20-3	Naphthalene	830	U
106-47-8	4-Chloroaniline	870	U
87-65-0	2,6-Dichlorophenol	1500	U
1888-71-7	Hexachloropropene	720	U
87-68-3	Hexachlorobutadiene	700	U
87-61-6	1,2,3-Trichlorobenzene	750	U
98-07-7	Benzotrichloride	780	U
924-16-3	N-Nitroso-di-n-butylamine	190	U
59-50-7	4-Chloro-3-methylphenol	240	U
94-59-7	Safrole	730	U
91-57-6	2-Methylnaphthalene	1100	U
90-12-0	1-Methylnaphthalene	1400	U
77-47-4	Hexachlorocyclopentadiene	830	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1600	U
634-90-2	1,2,3,5-Tetrachlorobenzene	1600	U
88-06-2	2,4,6-Trichlorophenol	1600	U
95-95-4	2,4,5-Trichlorophenol	1600	U
120-58-1	Isosafrole	1600	U
634-66-2	1,2,3,4-Tetrachlorobenzene	800	U
91-58-7	2-Chloronaphthalene	1200	U
90-13-1	1-Chloronaphthalene	1500	U
88-74-4	2-Nitroaniline	1400	U
130-15-4	1,4-Napthoquinone	2000	U
131-11-3	Dimethylphthalate	1200	U
99-65-0	1,3-Dinitrobenzene	700	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF010

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789192

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089192C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 21 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
606-20-2	2,6-Dinitrotoluene	940	U
208-96-8	Acenaphthylene	840	U
99-09-2	3-Nitroaniline	870	U
83-32-9	Acenaphthene	830	U
51-28-5	2,4-Dinitrophenol	2100	U
100-02-7	4-Nitrophenol	870	U
608-93-5	Pentachlorobenzene	830	U
121-14-2	2,4-Dinitrotoluene	830	U
132-64-9	Dibenzofuran	870	U
91-59-8	2-Naphthylamine	1100	U
58-90-2	2,3,4,6-Tetrachlorophenol	1800	U
134-32-7	1-Naphthylamine	1800	U
84-66-2	Diethylphthalate	910	U
297-97-2	Zinophos	840	U
7005-72-3	4-Chlorophenyl-phenylether	750	U
99-55-8	5-Nitro-o-toluidine	1300	U
86-73-7	Fluorene	870	U
100-01-6	4-Nitroaniline	1400	U
534-52-1	4,6-Dinitro-2-methylphenol	2300	U
86-30-6	N-Nitrosodiphenylamine (1)	1800	U
122-39-4	Diphenylamine	1800	U
122-66-7	1,2-Diphenylhydrazine	870	U
99-35-4	1,3,5-Trinitrobenzene	1100	U
2303-16-4	Diallate (trans isomer)	830	U
62-44-2	Phenacetin	770	U
2303-16-4	Diallate (cis isomer)	830	U
101-55-3	4-Bromophenyl-phenylether	940	U
118-74-1	Hexachlorobenzene	970	U
60-51-5	Dimethoate	830	U
92-67-1	4-Aminobiphenyl	520	U
87-86-5	Pentachlorophenol	1800	U
23950-58-5	Pronamide	820	U
82-68-8	Pentachloronitrobenzene	800	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF010

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789192

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089192C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 21 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
85-01-8	Phenanthrene	780	U
120-12-7	Anthracene	930	U
84-74-2	Di-n-butylphthalate	970	U
56-57-5	4-Nitroquinoline-1-oxide	6000	U
91-80-5	Methapyrilene	1600	U
6055-19-2	Cyclophosphamide	790	U
465-73-6	Isodrin	1200	U
206-44-0	Fluoranthene	1200	U
92-87-5	Benzidine	2000	U
129-00-0	Pyrene	920	U
140-57-8	Aramite	830	U
60-11-7	p-Dimethylaminoazobenzene	840	U
510-15-6	Chlorobenzilate	890	U
52-85-7	Famfur	2500	U
85-68-7	Butylbenzylphthalate	860	U
119-93-7	3,3'-Dimethylbenzidine	570	U
53-96-3	2-Acetylamino fluorene	890	U
119-90-4	3,3'-Dimethoxybenzidine	1200	U
117-81-7	bis(2-ethylhexyl)Phthalate	940	U
101-14-4	4,4'-Methylene-bis(2-chloroa	570	U
91-94-1	3,3'-Dichlorobenzidine	630	U
56-55-3	Benzo(a)Anthracene	830	U
218-01-9	Chrysene	680	U
117-84-0	Di-n-octylphthalate	600	U
57-97-6	7,12-Dimethylbenz(a)anthrace	520	U
205-99-2	Benzo(b)fluoranthene	970	U
207-08-9	Benzo(k)fluoranthene	780	U
50-32-8	Benzo(a)pyrene	830	U
56-49-5	3-Methylcholanthrene	770	U
224-42-0	Dibenzo(a,j)acridine	520	U
193-39-5	Indeno(1,2,3-c,d)pyrene	580	U
53-70-3	Dibenzo(a,h)anthracene	230	U
191-24-2	Benzo(g,h,i)perylene	780	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF010

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789192

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089192C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 21 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
298-02-2	Phorate	830	U
298-00-0	Methyl Parathion	830	U
298-04-4	Disulfoton	830	U
56-38-2	Parathion	830	U
122-09-08	a,a-Dimethylphenethylamine	830	U
106-50-3	p-Phenylenediamine	830	U

FORM I SV-5

SAMPLE NO.

BIOF010

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789192

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089192C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 21 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

Number TICs found: 8

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL (BC)	3.69	190	JAB
2.	UNKNOWN (BC)	3.86	260	JB
3.	ALDOL (BC)	4.06	5500	JAB
4.	ADVISORY SURROGATE COMPOUND	5.47	1500	JB
5.	ADVISORY SURROGATE COMPOUND	5.98	1100	JB
6.	UNKNOWN	27.52	2400	J
7.	UNKNOWN	28.06	260	J
8.	UNKNOWN	28.86	200	J
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FORM I SV-TIC

1D
ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

BIOF010

Lab Name: COMPUCHEM,RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0347C

Matrix: (soil/water) SOIL Lab Sample ID: 789219

Sample wt/vol: 30.20 (g/ml) G Lab File ID:

% Moisture: 21 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/19/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 03/25/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	0.072	JP
309-00-2	Aldrin	0.17	JP
959-98-8	Endosulfan I	0.079	JBP
60-57-1	Dieldrin	0.093	JBP
33213-65-9	Endosulfan II	0.097	JP
50-29-3	4,4'-DDT	4.4	U
72-43-5	Methoxychlor	0.28	JP
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	0.21	BJP
319-86-8	delta-BHC	0.11	JBP
1024-57-3	Heptachlor epoxide	0.12	JB
72-55-9	4,4'-DDE	0.069	J
72-20-8	Endrin	0.41	J
72-54-8	4,4'-DDD	0.094	JBP
7421-93-4	Endrin aldehyde	0.13	JP
1031-07-8	Endosulfan sulfate	2.5	U
11096-82-5	Aroclor-1260	25	U
12674-11-2	Aroclor-1016	25	U
11104-28-2	Aroclor-1221	25	U
11141-16-5	Aroclor-1232	25	U
53469-21-9	Aroclor-1242	25	U
12672-29-6	Aroclor-1248	25	U
11097-69-1	Aroclor-1254	25	U
8001-35-2	Toxaphene	25	U
57-74-9	Chlordane (Technical)	5.0	U

FORM I 8080

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
BIOF010

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788971

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088971B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 21 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	23	B
67-64-1	Acetone	13	U
75-15-0	Carbon Disulfide	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon Tetrachloride	13	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
108-88-3	Toluene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
100-42-5	Styrene	13	U
1330-20-7	Xylene (Total)	13	U
75-05-8	acetonitrile	250	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

BIOF010

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788971

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088971B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 21 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	3.54	180	JB
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FORM I VOA-TIC

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
BIOF010

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788971

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088971B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 21 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107-02-8	acrolein	290	U
107-05-1	3-chloropropene	19	U
106-93-4	1,2-dibromoethane	19	U
74-95-3	dibromomethane	25	U
110-57-6	trans-1,4-dichloro-2-butene	19	U
75-71-8	dichlorodifluoromethane	25	U
123-91-1	1,4-dioxane	65000	U
107-12-0	propionitrile(ethylcyanide)	750	U
97-63-2	ethyl methacrylate	32	U
74-88-4	iodomethane	13	U
78-83-1	isobutyl alcohol	16000	U
126-98-7	methacrylonitrile	25	U
80-62-6	methyl methacrylate	63	U
630-20-6	1,1,1,2-tetrachloroethane	25	U
96-18-4	1,2,3-trichloropropane	25	U
108-05-4	vinyl acetate	25	U
96-12-8	1,2-dibromo-3-chloropropane	63	U
75-69-4	trichlorofluoromethane	25	U
107-13-1	acrylonitrile	270	U
156-60-5	trans-1,2-Dichloroethene	13	U

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF010

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____
Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 375C__
Matrix (soil/water): SOIL_ Lab Sample ID: 788934
Level (low/med): LOW__ Date Received: 03/07/96
% Solids: _79.2

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony_	233	B	N	P
7440-38-2	Arsenic__	5260			P
7440-39-3	Barium___	46700			P
7440-41-7	Beryllium	478	B		P
7440-43-9	Cadmium__	25.3	U	N	P
7440-47-3	Chromium_	12400			P
7440-48-4	Cobalt___	8080			P
7440-50-8	Copper___	7120			P
7439-92-1	Lead____	13700			P
7440-02-0	Nickel___	7240			P
7782-49-2	Selenium_	855		N	P
7440-22-4	Silver___	88.4	U		P
7440-28-0	Thallium_	442	U		P
7440-62-2	Vanadium_	20900			P
7440-66-6	Zinc____	20600			P
7439-93-2	Lithium__	4430	B		P
7440-31-5	Tin_____	1250	B		P

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:0.74g__Wet:5.75g__Dry:4.71g_____

BIOF011

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0333C

Matrix: (soil/water) SOIL Lab Sample ID: 789204

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: 23 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/14/96

Concentrated Extract Volume: 10000 (ul) Date Analyzed: 03/16/96

Injection Volume: 25.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.73	U
121-82-4	RDX	2.3	U
98-95-3	Nitrobenzene	0.47	U
99-65-0	1,3-Dinitrobenzene	0.42	U
99-35-4	1,3,5-Trinitrobenzene	0.83	U
121-14-2	2,4-Dinitrotoluene	1.0	U
606-20-2	2,6-Dinitrotoluene	0.78	U
118-96-7	2,4,6-Trinitrotoluene	0.36	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.78	U
479-45-8	Tetryl	1.4	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.62	U
88-72-2	2-Nitrotoluene	6.2	U
99-99-0	4-Nitrotoluene	6.2	U
99-08-1	3-Nitrotoluene	1.5	U

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF011

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 398C__

Matrix (soil/water): SOIL_ Lab Sample ID: 789177

Level (low/med): LOW__ Date Received: 03/07/96

% Solids: _77.3

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7439-97-6	Mercury__	129	U		CV

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: VIOLET___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:0.78g__Wet:5.80g__Dry:4.66g_____

FORM I - IN ILM03.0

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF011

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789193

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089193C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 23 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
62-75-9	N-Nitrosodimethylamine	340	U
110-86-1	Pyridine	710	U
109-06-8	2-Picoline	1600	U
10595-95-6	Nitrosomethylethylamine	310	U
66-27-3	Methyl Methanesulfonate	910	U
55-18-5	N-Nitrosodiethylamine	290	U
62-50-0	Ethyl Methanesulfonate	780	U
108-95-2	Phenol	740	U
62-53-3	Aniline	730	U
111-44-4	Bis(2-chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	820	U
541-73-1	1,3-Dichlorobenzene	660	U
106-46-7	1,4-Dichlorobenzene	680	U
100-51-6	Benzyl Alcohol	710	U
95-50-1	1,2-Dichlorobenzene	770	U
95-48-7	2-Methylphenol	840	U
39638-32-9	bis(2-Chloroisopropyl)ether	840	U
108-39-4	3-Methylphenol	1700	U
106-44-5	4-Methylphenol	1700	U
930-55-2	N-Nitrosopyrrolidine	690	U
621-64-7	N-Nitroso-di-N-propylamine	310	U
98-86-2	Acetophenone	860	U
59-89-2	N-Nitrosomorpholine	970	U
636-21-5	o-Toluidine hydrochloride	2600	U
67-72-1	Hexachloroethane	780	U
98-95-3	Nitrobenzene	880	U
100-75-4	N-Nitrosopiperidine	960	U
78-59-1	Isophorone	880	U
88-75-5	2-Nitrophenol	810	U
105-67-9	2,4-Dimethylphenol	790	U
126-68-1	o,o,o-Triethylphosphorothioa	6900	U
111-91-1	Bis(2-chloroethoxy)methane	870	U
120-83-2	2,4-Dichlorophenol	710	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF011

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789193

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089193C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 23 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
120-82-1	1,2,4-Trichlorobenzene	710	U
91-20-3	Naphthalene	860	U
106-47-8	4-Chloroaniline	900	U
87-65-0	2,6-Dichlorophenol	1600	U
1888-71-7	Hexachloropropene	740	U
87-68-3	Hexachlorobutadiene	730	U
924-16-3	N-Nitroso-di-n-butylamine	190	U
59-50-7	4-Chloro-3-methylphenol	250	U
94-59-7	Safrole	750	U
91-57-6	2-Methylnaphthalene	1100	U
77-47-4	Hexachlorocyclopentadiene	860	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1700	U
88-06-2	2,4,6-Trichlorophenol	1700	U
95-95-4	2,4,5-Trichlorophenol	1700	U
120-58-1	Isosafrole	1700	U
91-58-7	2-Chloronaphthalene	1300	U
88-74-4	2-Nitroaniline	1400	U
130-15-4	1,4-Napthoquinone	2100	U
131-11-3	Dimethylphthalate	1300	U
99-65-0	1,3-Dinitrobenzene	730	U
606-20-2	2,6-Dinitrotoluene	970	U
208-96-8	Acenaphthylene	870	U
99-09-2	3-Nitroaniline	900	U
83-32-9	Acenaphthene	860	U
51-28-5	2,4-Dinitrophenol	2200	U
100-02-7	4-Nitrophenol	900	U
608-93-5	Pentachlorobenzene	860	U
121-14-2	2,4-Dinitrotoluene	860	U
132-64-9	Dibenzofuran	900	U
91-59-8	2-Naphthylamine	1100	U
58-90-2	2,3,4,6-Tetrachlorophenol	1800	U
134-32-7	1-Naphthylamine	1800	U
84-66-2	Diethylphthalate	940	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF011

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789193

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089193C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 23 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
7005-72-3	4-Chlorophenyl-phenylether	780	U
99-55-8	5-Nitro-o-toluidine	1300	U
86-73-7	Fluorene	900	U
100-01-6	4-Nitroaniline	1400	U
534-52-1	4,6-Dinitro-2-methylphenol	2300	U
86-30-6	N-Nitrosodiphenylamine (1)	1800	U
122-39-4	Diphenylamine	1800	U
99-35-4	1,3,5-Trinitrobenzene	1200	U
2303-16-4	Diallate (trans isomer)	860	U
62-44-2	Phenacetin	790	U
2303-16-4	Diallate (cis isomer)	860	U
101-55-3	4-Bromophenyl-phenylether	970	U
118-74-1	Hexachlorobenzene	1000	U
92-67-1	4-Aminobiphenyl	530	U
87-86-5	Pentachlorophenol	1800	U
23950-58-5	Pronamide	840	U
85-01-8	Phenanthrene	810	U
120-12-7	Anthracene	960	U
84-74-2	Di-n-butylphthalate	1000	U
56-57-5	4-Nitroquinoline-1-oxide	6200	U
91-80-5	Methapyrilene	1700	U
465-73-6	Isodrin	1200	U
206-44-0	Fluoranthene	1200	U
129-00-0	Pyrene	950	U
140-57-8	Aramite	860	U
60-11-7	p-Dimethylaminoazobenzene	870	U
510-15-6	Chlorobenzilate	920	U
85-68-7	Butylbenzylphthalate	880	U
119-93-7	3,3'-Dimethylbenzidine	580	U
117-81-7	bis(2-ethylhexyl)Phthalate	970	U
91-94-1	3,3'-Dichlorobenzidine	650	U
56-55-3	Benzo(a)Anthracene	860	U
218-01-9	Chrysene	700	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF011

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789193

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089193C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 23 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
117-84-0	Di-n-octylphthalate	620	U
57-97-6	7,12-Dimethylbenz(a)anthrace	530	U
205-99-2	Benzo(b)fluoranthene	1000	U
207-08-9	Benzo(k)fluoranthene	810	U
193-39-5	Indeno(1,2,3-c,d)pyrene	600	U
53-70-3	Dibenzo(a,h)anthracene	230	U
191-24-2	Benzo(g,h,i)perylene	810	U
122-09-08	a,a-Dimethylphenethylamine	860	U
106-50-3	p-Phenylenediamine	860	U

FORM I SV-4

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

BIOF011

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789193

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089193C60.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: 23 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL (BC)	3.69	180	JAB
2.	UNKNOWN (BC)	3.86	280	JB
3.	ALDOL (BC)	4.06	5600	JAB
4.	UNKNOWN	4.70	190	J
5.	ADVISORY SURROGATE COMPOUND	5.47	1600	JB
6.	ADVISORY SURROGATE COMPOUND	5.98	1200	JB
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FORM I SV-TIC

1D

ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

BIOF011

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0347C

Matrix: (soil/water) SOIL Lab Sample ID: 789220

Sample wt/vol: 30.20 (g/ml) G Lab File ID:

% Moisture: 23 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/19/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 03/24/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	0.063	JP
309-00-2	Aldrin	0.22	JP
959-98-8	Endosulfan I	0.37	JBP
60-57-1	Dieldrin	1.9	U
33213-65-9	Endosulfan II	4.5	U
50-29-3	4,4'-DDT	0.35	JP
72-43-5	Methoxychlor	2.5	JP
319-84-6	alpha-BHC	0.047	JP
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	0.23	JBP
1024-57-3	Heptachlor epoxide	1.3	U
72-55-9	4,4'-DDE	0.18	JP
72-20-8	Endrin	3.2	U
72-54-8	4,4'-DDD	0.21	JBP
7421-93-4	Endrin aldehyde	0.20	JP
1031-07-8	Endosulfan sulfate	0.12	JBP
11096-82-5	Aroclor-1260	26	U
12674-11-2	Aroclor-1016	26	U
11104-28-2	Aroclor-1221	26	U
11141-16-5	Aroclor-1232	26	U
53469-21-9	Aroclor-1242	26	U
12672-29-6	Aroclor-1248	26	U
11097-69-1	Aroclor-1254	26	U
8001-35-2	Toxaphene	26	U
57-74-9	Chlordane (Technical)	5.2	U

FORM I 8080

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
BIOF011

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788972

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088972B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 23 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	22	B
67-64-1	Acetone	38	B
75-15-0	Carbon Disulfide	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon Tetrachloride	13	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
108-88-3	Toluene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
100-42-5	Styrene	13	U
1330-20-7	Xylene (Total)	13	U
75-05-8	acetonitrile	260	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

BIOF011

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788972

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088972B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 23 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	3.53	230	JB
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FORM I VOA-TIC

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF011

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788972

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088972B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 23 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107-02-8	acrolein	300	U
107-05-1	3-chloropropene	19	U
106-93-4	1,2-dibromoethane	19	U
74-95-3	dibromomethane	26	U
110-57-6	trans-1,4-dichloro-2-butene	19	U
75-71-8	dichlorodifluoromethane	26	U
123-91-1	1,4-dioxane	66000	U
107-12-0	propionitrile(ethylcyanide)	770	U
97-63-2	ethyl methacrylate	32	U
74-88-4	iodomethane	13	U
78-83-1	isobutyl alcohol	17000	U
126-98-7	methacrylonitrile	26	U
80-62-6	methyl methacrylate	65	U
630-20-6	1,1,1,2-tetrachloroethane	26	U
96-18-4	1,2,3-trichloropropane	26	U
108-05-4	vinyl acetate	26	U
96-12-8	1,2-dibromo-3-chloropropane	65	U
75-69-4	trichlorofluoromethane	26	U
107-13-1	acrylonitrile	270	U
156-60-5	trans-1,2-Dichloroethene	13	U

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF011

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 375C__

Matrix (soil/water): SOIL_ Lab Sample ID: 788936

Level (low/med): LOW__ Date Received: 03/07/96

% Solids: _77.3

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony_	610	B	N	P
7440-38-2	Arsenic__	6870			P
7440-39-3	Barium___	73000			P
7440-41-7	Beryllium	542	B		P
7440-43-9	Cadmium__	25.9	U	N	P
7440-47-3	Chromium_	38300			P
7440-48-4	Cobalt___	9180			P
7440-50-8	Copper___	16000			P
7439-92-1	Lead____	15200			P
7440-02-0	Nickel___	193000			P
7782-49-2	Selenium_	1430		N	P
7440-22-4	Silver___	90.6	U		P
7440-28-0	Thallium_	453	U		P
7440-62-2	Vanadium_	24200			P
7440-66-6	Zinc____	38700			P
7439-93-2	Lithium__	45200			P
7440-31-5	Tin_____	1830	B		P

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:

Undecanted_Dry_Weights____Container:0.78g__Wet:5.80g__Dry:4.66g_____

BIOF012

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0333C

Matrix: (soil/water) SOIL Lab Sample ID: 789205

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: 23 decanted: (Y/N) N Date Received: 03/08/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/14/96

Concentrated Extract Volume: 10000(ul) Date Analyzed: 03/16/96

Injection Volume: 25.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.73	U
121-82-4	RDX	2.3	U
98-95-3	Nitrobenzene	0.47	U
99-65-0	1,3-Dinitrobenzene	0.42	U
99-35-4	1,3,5-Trinitrobenzene	0.83	U
121-14-2	2,4-Dinitrotoluene	1.0	U
606-20-2	2,6-Dinitrotoluene	0.78	U
118-96-7	2,4,6-Trinitrotoluene	0.36	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.78	U
479-45-8	Tetryl	1.4	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.62	U
88-72-2	2-Nitrotoluene	6.2	U
99-99-0	4-Nitrotoluene	6.2	U
99-08-1	3-Nitrotoluene	1.5	U

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF012

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 398C__

Matrix (soil/water): SOIL_ Lab Sample ID: 789178

Level (low/med): LOW__ Date Received: 03/08/96

% Solids: _77.2

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7439-97-6	Mercury__	118	U		CV

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: VIOLET___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:1.57g__Wet:6.58g__Dry:5.44g_____

N-001707

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF012

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789194

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089194C60.D

Level: (low/med) LOW Date Received: 03/08/96

% Moisture: 23 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
62-75-9	N-Nitrosodimethylamine	340	U
110-86-1	Pyridine	710	U
109-06-8	2-Picoline	1600	U
10595-95-6	Nitrosomethylethylamine	310	U
66-27-3	Methyl Methanesulfonate	910	U
55-18-5	N-Nitrosodiethylamine	290	U
62-50-0	Ethyl Methanesulfonate	780	U
108-95-2	Phenol	740	U
62-53-3	Aniline	730	U
111-44-4	Bis(2-chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	820	U
541-73-1	1,3-Dichlorobenzene	660	U
106-46-7	1,4-Dichlorobenzene	680	U
100-51-6	Benzyl Alcohol	710	U
95-50-1	1,2-Dichlorobenzene	770	U
95-48-7	2-Methylphenol	840	U
39638-32-9	bis(2-Chloroisopropyl)ether	840	U
108-39-4	3-Methylphenol	1700	U
106-44-5	4-Methylphenol	1700	U
930-55-2	N-Nitrosopyrrolidine	690	U
621-64-7	N-Nitroso-di-N-propylamine	310	U
98-86-2	Acetophenone	860	U
59-89-2	N-Nitrosomorpholine	970	U
636-21-5	o-Toluidine hydrochloride	2600	U
67-72-1	Hexachloroethane	780	U
98-95-3	Nitrobenzene	880	U
100-75-4	N-Nitrosopiperidine	960	U
78-59-1	Isophorone	880	U
88-75-5	2-Nitrophenol	810	U
105-67-9	2,4-Dimethylphenol	790	U
126-68-1	o,o,o-Triethylphosphorothioa	6900	U
111-91-1	Bis(2-chloroethoxy)methane	870	U
120-83-2	2,4-Dichlorophenol	710	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF012

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789194

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089194C60.D

Level: (low/med) LOW Date Received: 03/08/96

% Moisture: 23 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
7005-72-3	4-Chlorophenyl-phenylether	780	U
99-55-8	5-Nitro-o-toluidine	1300	U
86-73-7	Fluorene	900	U
100-01-6	4-Nitroaniline	1400	U
534-52-1	4,6-Dinitro-2-methylphenol	2300	U
86-30-6	N-Nitrosodiphenylamine (1)	1800	U
122-39-4	Diphenylamine	1800	U
99-35-4	1,3,5-Trinitrobenzene	1200	U
2303-16-4	Diallate (trans isomer)	860	U
62-44-2	Phenacetin	790	U
2303-16-4	Diallate (cis isomer)	860	U
101-55-3	4-Bromophenyl-phenylether	970	U
118-74-1	Hexachlorobenzene	1000	U
92-67-1	4-Aminobiphenyl	530	U
87-86-5	Pentachlorophenol	1800	U
23950-58-5	Pronamide	840	U
85-01-8	Phenanthrene	810	U
120-12-7	Anthracene	960	U
84-74-2	Di-n-butylphthalate	1000	U
56-57-5	4-Nitroquinoline-1-oxide	6200	U
91-80-5	Methapyrilene	1700	U
465-73-6	Isodrin	1200	U
206-44-0	Fluoranthene	1200	U
129-00-0	Pyrene	950	U
140-57-8	Aramite	860	U
60-11-7	p-Dimethylaminoazobenzene	870	U
510-15-6	Chlorobenzilate	920	U
85-68-7	Butylbenzylphthalate	880	U
119-93-7	3,3'-Dimethylbenzidine	580	U
117-81-7	bis(2-ethylhexyl)Phthalate	970	U
91-94-1	3,3'-Dichlorobenzidine	650	U
56-55-3	Benzo(a)Anthracene	860	U
218-01-9	Chrysene	700	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF012

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789194

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089194C60.D

Level: (low/med) LOW Date Received: 03/08/96

% Moisture: 23 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
120-82-1	1,2,4-Trichlorobenzene	710	U
91-20-3	Naphthalene	860	U
106-47-8	4-Chloroaniline	900	U
87-65-0	2,6-Dichlorophenol	1600	U
1888-71-7	Hexachloropropene	740	U
87-68-3	Hexachlorobutadiene	730	U
924-16-3	N-Nitroso-di-n-butylamine	190	U
59-50-7	4-Chloro-3-methylphenol	250	U
94-59-7	Safrole	750	U
91-57-6	2-Methylnaphthalene	1100	U
77-47-4	Hexachlorocyclopentadiene	860	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1700	U
88-06-2	2,4,6-Trichlorophenol	1700	U
95-95-4	2,4,5-Trichlorophenol	1700	U
120-58-1	Isosafrole	1700	U
91-58-7	2-Chloronaphthalene	1300	U
88-74-4	2-Nitroaniline	1400	U
130-15-4	1,4-Napthoquinone	2100	U
131-11-3	Dimethylphthalate	1300	U
99-65-0	1,3-Dinitrobenzene	730	U
606-20-2	2,6-Dinitrotoluene	970	U
208-96-8	Acenaphthylene	870	U
99-09-2	3-Nitroaniline	900	U
83-32-9	Acenaphthene	860	U
51-28-5	2,4-Dinitrophenol	2200	U
100-02-7	4-Nitrophenol	900	U
608-93-5	Pentachlorobenzene	860	U
121-14-2	2,4-Dinitrotoluene	860	U
132-64-9	Dibenzofuran	900	U
91-59-8	2-Naphthylamine	1100	U
58-90-2	2,3,4,6-Tetrachlorophenol	1800	U
134-32-7	1-Naphthylamine	1800	U
84-66-2	Diethylphthalate	940	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
BIOF012

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789194

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089194C60.D

Level: (low/med) LOW Date Received: 03/08/96

% Moisture: 23 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
117-84-0	Di-n-octylphthalate	620	U
57-97-6	7,12-Dimethylbenz(a)anthrace	530	U
205-99-2	Benzo(b)fluoranthene	1000	U
207-08-9	Benzo(k)fluoranthene	810	U
193-39-5	Indeno(1,2,3-c,d)pyrene	600	U
53-70-3	Dibenzo(a,h)anthracene	230	U
191-24-2	Benzo(g,h,i)perylene	810	U
122-09-08	a,a-Dimethylphenethylamine	860	U
106-50-3	p-Phenylenediamine	860	U

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

BIOF012

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789194

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089194C60.D

Level: (low/med) LOW Date Received: 03/08/96

% Moisture: 23 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

Number TICs found: 8

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		ALDOL (BC)	3.69	210	JAB
2.		UNKNOWN (BC)	3.86	270	JB
3.		ALDOL (BC)	4.06	5600	JAB
4.		UNKNOWN	4.23	180	J
5.		UNKNOWN	4.70	180	J
6.		ADVISORY SURROGATE COMPOUND	5.47	1800	JB
7.		ADVISORY SURROGATE COMPOUND	5.99	1400	JB
8.		UNKNOWN	27.52	650	J
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FORM I SV-TIC

1D

ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

BIOF012

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0347C

Matrix: (soil/water) SOIL Lab Sample ID: 789221

Sample wt/vol: 30.00 (g/ml) G Lab File ID:

% Moisture: 23 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/19/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 03/25/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 8.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	0.12	J
309-00-2	Aldrin	0.14	J
959-98-8	Endosulfan I	0.062	JBP
60-57-1	Dieldrin	0.11	JBP
33213-65-9	Endosulfan II	0.14	JP
50-29-3	4,4'-DDT	0.12	JP
72-43-5	Methoxychlor	0.45	JP
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	0.069	JBP
1024-57-3	Heptachlor epoxide	1.3	U
72-55-9	4,4'-DDE	0.064	JP
72-20-8	Endrin	0.079	JP
72-54-8	4,4'-DDD	0.085	JBP
7421-93-4	Endrin aldehyde	0.33	JP
1031-07-8	Endosulfan sulfate	0.12	JBP
11096-82-5	Aroclor-1260	26	U
12674-11-2	Aroclor-1016	26	U
11104-28-2	Aroclor-1221	26	U
11141-16-5	Aroclor-1232	26	U
53469-21-9	Aroclor-1242	26	U
12672-29-6	Aroclor-1248	26	U
11097-69-1	Aroclor-1254	26	U
8001-35-2	Toxaphene	26	U
57-74-9	Chlordane (Technical)	5.2	U

FORM I 8080

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
BIOF012

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788973

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088973B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 23 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	12	JB
67-64-1	Acetone	13	U
75-15-0	Carbon Disulfide	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon Tetrachloride	13	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
108-88-3	Toluene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
100-42-5	Styrene	13	U
1330-20-7	Xylene (Total)	13	U
75-05-8	acetonitrile	260	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF012

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788973

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088973B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 23 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107-02-8	acrolein	300	U
107-05-1	3-chloropropene	19	U
106-93-4	1,2-dibromoethane	19	U
74-95-3	dibromomethane	26	U
110-57-6	trans-1,4-dichloro-2-butene	19	U
75-71-8	dichlorodifluoromethane	26	U
123-91-1	1,4-dioxane	66000	U
107-12-0	propionitrile(ethylcyanide)	770	U
97-63-2	ethyl methacrylate	32	U
74-88-4	iodomethane	13	U
78-83-1	isobutyl alcohol	17000	U
126-98-7	methacrylonitrile	26	U
80-62-6	methyl methacrylate	65	U
630-20-6	1,1,1,2-tetrachloroethane	26	U
96-18-4	1,2,3-trichloropropane	26	U
108-05-4	vinyl acetate	26	U
96-12-8	1,2-dibromo-3-chloropropane	65	U
75-69-4	trichlorofluoromethane	26	U
107-13-1	acrylonitrile	270	U
156-60-5	trans-1,2-Dichloroethene	13	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

BIOF012

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788973

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088973B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 23 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	3.54	170	JB
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FORM I VOA-TIC

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF012

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____
Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 375C__
Matrix (soil/water): SOIL_ Lab Sample ID: 788938
Level (low/med): LOW_ Date Received: 03/07/96
% Solids: _77.2

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	491	B	N	P
7440-38-2	Arsenic	6730			P
7440-39-3	Barium	54600			P
7440-41-7	Beryllium	459	B		P
7440-43-9	Cadmium	25.9	U	N	P
7440-47-3	Chromium	17600			P
7440-48-4	Cobalt	12600			P
7440-50-8	Copper	11200			P
7439-92-1	Lead	14500			P
7440-02-0	Nickel	21100			P
7782-49-2	Selenium	938		N	P
7440-22-4	Silver	90.7	U		P
7440-28-0	Thallium	453	U		P
7440-62-2	Vanadium	23500			P
7440-66-6	Zinc	31300			P
7439-93-2	Lithium	7940	B		P
7440-31-5	Tin	1510	B		P

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:1.57g__Wet:6.58g__Dry:5.44g_____

BIOF013

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0333C

Matrix: (soil/water) SOIL Lab Sample ID: 789206

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: 19 decanted: (Y/N) N Date Received: 03/08/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/14/96

Concentrated Extract Volume: 10000 (ul) Date Analyzed: 03/15/96

Injection Volume: 25.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.69	U
121-82-4	RDX	2.2	U
98-95-3	Nitrobenzene	0.44	U
99-65-0	1,3-Dinitrobenzene	0.40	U
99-35-4	1,3,5-Trinitrobenzene	0.79	U
121-14-2	2,4-Dinitrotoluene	0.99	U
606-20-2	2,6-Dinitrotoluene	0.74	U
118-96-7	2,4,6-Trinitrotoluene	0.34	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.74	U
479-45-8	Tetryl	1.3	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.59	U
88-72-2	2-Nitrotoluene	5.9	U
99-99-0	4-Nitrotoluene	5.9	U
99-08-1	3-Nitrotoluene	1.4	U

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF013

Lab Name: COMPUCHEM_ENV._CORP. Contract: SW-846

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 398C

Matrix (soil/water): SOIL_ Lab Sample ID: 789179

Level (low/med): LOW Date Received: 03/08/96

% Solids: 81.0

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7439-97-6	Mercury	123	U		CV

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: VIOLET Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights Container:1.57g Wet:6.58g Dry:5.63g

FORM I - IN ILM03.0

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF013

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789195

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089195C60.D

Level: (low/med) LOW Date Received: 03/08/96

% Moisture: 19 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
62-75-9	N-Nitrosodimethylamine	320	U
110-86-1	Pyridine	670	U
109-06-8	2-Picoline	1500	U
10595-95-6	Nitrosomethylethylamine	290	U
66-27-3	Methyl Methanesulfonate	860	U
55-18-5	N-Nitrosodiethylamine	280	U
62-50-0	Ethyl Methanesulfonate	740	U
108-95-2	Phenol	700	U
62-53-3	Aniline	690	U
111-44-4	Bis(2-chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	770	U
541-73-1	1,3-Dichlorobenzene	630	U
106-46-7	1,4-Dichlorobenzene	640	U
100-51-6	Benzyl Alcohol	670	U
95-50-1	1,2-Dichlorobenzene	720	U
95-48-7	2-Methylphenol	800	U
39638-32-9	bis(2-Chloroisopropyl)ether	800	U
108-39-4	3-Methylphenol	1600	U
106-44-5	4-Methylphenol	1600	U
930-55-2	N-Nitrosopyrrolidine	650	U
621-64-7	N-Nitroso-di-N-propylamine	290	U
98-86-2	Acetophenone	810	U
59-89-2	N-Nitrosomorpholine	920	U
636-21-5	o-Toluidine hydrochloride	2500	U
67-72-1	Hexachloroethane	740	U
98-95-3	Nitrobenzene	830	U
100-75-4	N-Nitrosopiperidine	910	U
78-59-1	Isophorone	830	U
88-75-5	2-Nitrophenol	760	U
105-67-9	2,4-Dimethylphenol	750	U
126-68-1	o,o,o-Triethylphosphorothioa	6500	U
111-91-1	Bis(2-chloroethoxy)methane	820	U
120-83-2	2,4-Dichlorophenol	670	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF013

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789195

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089195C60.D

Level: (low/med) LOW Date Received: 03/08/96

% Moisture: 19 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
120-82-1	1,2,4-Trichlorobenzene	670	U
91-20-3	Naphthalene	810	U
106-47-8	4-Chloroaniline	850	U
87-65-0	2,6-Dichlorophenol	1500	U
1888-71-7	Hexachloropropene	700	U
87-68-3	Hexachlorobutadiene	690	U
924-16-3	N-Nitroso-di-n-butylamine	180	U
59-50-7	4-Chloro-3-methylphenol	230	U
94-59-7	Safrole	710	U
91-57-6	2-Methylnaphthalene	1000	U
77-47-4	Hexachlorocyclopentadiene	810	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1600	U
88-06-2	2,4,6-Trichlorophenol	1600	U
95-95-4	2,4,5-Trichlorophenol	1600	U
120-58-1	Isosafrole	1600	U
91-58-7	2-Chloronaphthalene	1200	U
88-74-4	2-Nitroaniline	1300	U
130-15-4	1,4-Napthoquinone	2000	U
131-11-3	Dimethylphthalate	1200	U
99-65-0	1,3-Dinitrobenzene	690	U
606-20-2	2,6-Dinitrotoluene	920	U
208-96-8	Acenaphthylene	820	U
99-09-2	3-Nitroaniline	850	U
83-32-9	Acenaphthene	810	U
51-28-5	2,4-Dinitrophenol	2100	U
100-02-7	4-Nitrophenol	850	U
608-93-5	Pentachlorobenzene	810	U
121-14-2	2,4-Dinitrotoluene	810	U
132-64-9	Dibenzofuran	850	U
91-59-8	2-Naphthylamine	1100	U
58-90-2	2,3,4,6-Tetrachlorophenol	1700	U
134-32-7	1-Naphthylamine	1700	U
84-66-2	Diethylphthalate	880	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF013

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789195

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089195C60.D

Level: (low/med) LOW Date Received: 03/08/96

% Moisture: 19 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
7005-72-3	4-Chlorophenyl-phenylether	740	U
99-55-8	5-Nitro-o-toluidine	1200	U
86-73-7	Fluorene	850	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	2200	U
86-30-6	N-Nitrosodiphenylamine (1)	1700	U
122-39-4	Diphenylamine	1700	U
99-35-4	1,3,5-Trinitrobenzene	1100	U
2303-16-4	Diallate (trans isomer)	810	U
62-44-2	Phenacetin	750	U
2303-16-4	Diallate (cis isomer)	810	U
101-55-3	4-Bromophenyl-phenylether	920	U
118-74-1	Hexachlorobenzene	940	U
92-67-1	4-Aminobiphenyl	500	U
87-86-5	Pentachlorophenol	1700	U
23950-58-5	Pronamide	800	U
85-01-8	Phenanthrene	760	U
120-12-7	Anthracene	910	U
84-74-2	Di-n-butylphthalate	940	U
56-57-5	4-Nitroquinoline-1-oxide	5900	U
91-80-5	Methapyrilene	1600	U
465-73-6	Isodrin	1100	U
206-44-0	Fluoranthene	1100	U
129-00-0	Pyrene	900	U
140-57-8	Aramite	810	U
60-11-7	p-Dimethylaminoazobenzene	820	U
510-15-6	Chlorobenzilate	870	U
85-68-7	Butylbenzylphthalate	830	U
119-93-7	3,3'-Dimethylbenzidine	550	U
117-81-7	bis(2-ethylhexyl)Phthalate	920	U
91-94-1	3,3'-Dichlorobenzidine	610	U
56-55-3	Benzo(a)Anthracene	810	U
218-01-9	Chrysene	660	U

D-00522

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF013

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789195

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089195C60.D

Level: (low/med) LOW Date Received: 03/08/96

% Moisture: 19 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
117-84-0	Di-n-octylphthalate	590	U
57-97-6	7,12-Dimethylbenz(a)anthrace	500	U
205-99-2	Benzo(b)fluoranthene	940	U
207-08-9	Benzo(k)fluoranthene	760	U
193-39-5	Indeno(1,2,3-c,d)pyrene	560	U
53-70-3	Dibenzo(a,h)anthracene	220	U
191-24-2	Benzo(g,h,i)perylene	760	U
122-09-08	a,a-Dimethylphenethylamine	810	U
106-50-3	p-Phenylenediamine	810	U

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

BIOF013

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789195

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH089195C60.D

Level: (low/med) LOW Date Received: 03/08/96

% Moisture: 19 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.8

Number TICs found: 6

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		ALDOL (BC)	3.69	210	JAB
2.		UNKNOWN (BC)	3.86	260	JB
3.		ALDOL (BC)	4.07	5500	JAB
4.		UNKNOWN	4.70	180	J
5.		ADVISORY SURROGATE COMPOUND	5.47	1600	JB
6.		ADVISORY SURROGATE COMPOUND	5.98	1200	JB
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FORM I SV-TIC

1D
ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.
BIOF013

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0347C

Matrix: (soil/water) SOIL Lab Sample ID: 789222

Sample wt/vol: 30.10 (g/ml) G Lab File ID:

% Moisture: 19 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/19/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 03/25/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 8.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
58-89-9	gamma-BHC (Lindane)	1.2	U
76-44-8	Heptachlor	0.049	JP
309-00-2	Aldrin	0.13	J
959-98-8	Endosulfan I	0.16	JBP
60-57-1	Dieldrin	0.13	JBP
33213-65-9	Endosulfan II	0.10	JP
50-29-3	4,4'-DDT	4.3	U
72-43-5	Methoxychlor	4.3	U
319-84-6	alpha-BHC	1.2	U
319-85-7	beta-BHC	1.2	U
319-86-8	delta-BHC	0.18	JBP
1024-57-3	Heptachlor epoxide	1.2	U
72-55-9	4,4'-DDE	0.079	JP
72-20-8	Endrin	0.12	JP
72-54-8	4,4'-DDD	0.14	JB
7421-93-4	Endrin aldehyde	0.19	JP
1031-07-8	Endosulfan sulfate	1.0	JBP
11096-82-5	Aroclor-1260	25	U
12674-11-2	Aroclor-1016	25	U
11104-28-2	Aroclor-1221	25	U
11141-16-5	Aroclor-1232	25	U
53469-21-9	Aroclor-1242	25	U
12672-29-6	Aroclor-1248	25	U
11097-69-1	Aroclor-1254	25	U
8001-35-2	Toxaphene	25	U
57-74-9	Chlordane (Technical)	4.9	U

FORM I 8080

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
BIOF013

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788974

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088974B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 19 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	11	JB
67-64-1	Acetone	13	B
75-15-0	Carbon Disulfide	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon Tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	12	U
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U
1330-20-7	Xylene (Total)	12	U
75-05-8	acetonitrile	250	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
BIOF013

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788974

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088974B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 19 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
107-02-8	acrolein	280	U
107-05-1	3-chloropropene	19	U
106-93-4	1,2-dibromoethane	19	U
74-95-3	dibromomethane	25	U
110-57-6	trans-1,4-dichloro-2-butene	19	U
75-71-8	dichlorodifluoromethane	25	U
123-91-1	1,4-dioxane	63000	U
107-12-0	propionitrile(ethylcyanide)	730	U
97-63-2	ethyl methacrylate	31	U
74-88-4	iodomethane	12	U
78-83-1	isobutyl alcohol	16000	U
126-98-7	methacrylonitrile	25	U
80-62-6	methyl methacrylate	62	U
630-20-6	1,1,1,2-tetrachloroethane	25	U
96-18-4	1,2,3-trichloropropane	25	U
108-05-4	vinyl acetate	25	U
96-12-8	1,2-dibromo-3-chloropropane	62	U
75-69-4	trichlorofluoromethane	25	U
107-13-1	acrylonitrile	260	U
156-60-5	trans-1,2-Dichloroethene	12	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
BIOF013

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0305C

Matrix: (soil/water) SOIL Lab Sample ID: 788974

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH088974B55.D

Level: (low/med) LOW Date Received: 03/07/96

% Moisture: not dec. 19 Date Analyzed: 03/14/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	3.54	120	JB
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FORM I VOA-TIC

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF013

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____
Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 375C__
Matrix (soil/water): SOIL_ Lab Sample ID: 788940
Level (low/med): LOW__ Date Received: 03/07/96
% Solids: _81.0

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony_	383	B	N	P
7440-38-2	Arsenic__	2880			P
7440-39-3	Barium___	51600			P
7440-41-7	Beryllium	454	B		P
7440-43-9	Cadmium__	24.7	U	N	P
7440-47-3	Chromium_	9360			P
7440-48-4	Cobalt___	7820			P
7440-50-8	Copper___	8510			P
7439-92-1	Lead____	7380			P
7440-02-0	Nickel___	10600			P
7782-49-2	Selenium_	572	B	N	P
7440-22-4	Silver___	86.4	U		P
7440-28-0	Thallium_	432	U		P
7440-62-2	Vanadium_	14200			P
7440-66-6	Zinc____	25300			P
7439-93-2	Lithium__	5580	B		P
7440-31-5	Tin_____	897	B		P

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:1.57g__Wet:6.58g__Dry:5.63g_____

BIOF014

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0333C

Matrix: (soil/water) SOIL Lab Sample ID: 789207

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: 21 decanted: (Y/N) N Date Received: 03/08/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/14/96

Concentrated Extract Volume: 10000(ul) Date Analyzed: 03/15/96

Injection Volume: 25.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.71	U
121-82-4	RDX	2.3	U
98-95-3	Nitrobenzene	0.46	U
99-65-0	1,3-Dinitrobenzene	0.40	U
99-35-4	1,3,5-Trinitrobenzene	0.81	U
121-14-2	2,4-Dinitrotoluene	1.0	U
606-20-2	2,6-Dinitrotoluene	0.76	U
118-96-7	2,4,6-Trinitrotoluene	0.35	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.76	U
479-45-8	Tetryl	1.3	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.61	U
88-72-2	2-Nitrotoluene	6.0	U
99-99-0	4-Nitrotoluene	6.0	U
99-08-1	3-Nitrotoluene	1.5	U

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BIOF014

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 398C__

Matrix (soil/water): SOIL_ Lab Sample ID: 789180

Level (low/med): LOW__ Date Received: 03/08/96

% Solids: _78.9

Concentration Units (ug/L or mg/kg dry weight): UG/KG

CAS No.	Analyte	Concentration	C	Q	M
7439-97-6	Mercury	106	U		CV

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: VIOLET___ Clarity After: _____ Artifacts: _____

Comments:
Undecanted_Dry_Weights____Container:1.57g__Wet:6.59g__Dry:5.53g_____

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF014

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789196

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089196B60.D

Level: (low/med) LOW Date Received: 03/08/96

% Moisture: 21 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
62-75-9	N-Nitrosodimethylamine	330	U
110-86-1	Pyridine	700	U
109-06-8	2-Picoline	1500	U
10595-95-6	Nitrosomethylethylamine	300	U
66-27-3	Methyl Methanesulfonate	890	U
55-18-5	N-Nitrosodiethylamine	280	U
62-50-0	Ethyl Methanesulfonate	760	U
108-95-2	Phenol	720	U
62-53-3	Aniline	710	U
111-44-4	Bis(2-chloroethyl)ether	350	U
95-57-8	2-Chlorophenol	800	U
541-73-1	1,3-Dichlorobenzene	650	U
106-46-7	1,4-Dichlorobenzene	660	U
100-51-6	Benzyl Alcohol	700	U
95-50-1	1,2-Dichlorobenzene	750	U
95-48-7	2-Methylphenol	820	U
39638-32-9	bis(2-Chloroisopropyl)ether	820	U
108-39-4	3-Methylphenol	1600	U
106-44-5	4-Methylphenol	1600	U
930-55-2	N-Nitrosopyrrolidine	670	U
621-64-7	N-Nitroso-di-N-propylamine	300	U
98-86-2	Acetophenone	840	U
59-89-2	N-Nitrosomorpholine	950	U
636-21-5	o-Toluidine hydrochloride	2500	U
67-72-1	Hexachloroethane	760	U
98-95-3	Nitrobenzene	860	U
100-75-4	N-Nitrosopiperidine	940	U
78-59-1	Isophorone	860	U
88-75-5	2-Nitrophenol	780	U
105-67-9	2,4-Dimethylphenol	770	U
126-68-1	o,o,o-Triethylphosphorothioa	6700	U
111-91-1	Bis(2-chloroethoxy)methane	850	U
120-83-2	2,4-Dichlorophenol	700	U

00732

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF014

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789196

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089196B60.D

Level: (low/med) LOW Date Received: 03/08/96

% Moisture: 21 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
120-82-1	1,2,4-Trichlorobenzene	700	U
91-20-3	Naphthalene	840	U
106-47-8	4-Chloroaniline	870	U
87-65-0	2,6-Dichlorophenol	1500	U
1888-71-7	Hexachloropropene	720	U
87-68-3	Hexachlorobutadiene	710	U
924-16-3	N-Nitroso-di-n-butylamine	190	U
59-50-7	4-Chloro-3-methylphenol	240	U
94-59-7	Safrole	730	U
91-57-6	2-Methylnaphthalene	1100	U
77-47-4	Hexachlorocyclopentadiene	840	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1600	U
88-06-2	2,4,6-Trichlorophenol	1600	U
95-95-4	2,4,5-Trichlorophenol	1600	U
120-58-1	Isosafrole	1600	U
91-58-7	2-Chloronaphthalene	1200	U
88-74-4	2-Nitroaniline	1400	U
130-15-4	1,4-Napthoquinone	2000	U
131-11-3	Dimethylphthalate	1200	U
99-65-0	1,3-Dinitrobenzene	710	U
606-20-2	2,6-Dinitrotoluene	950	U
208-96-8	Acenaphthylene	850	U
99-09-2	3-Nitroaniline	870	U
83-32-9	Acenaphthene	840	U
51-28-5	2,4-Dinitrophenol	2200	U
100-02-7	4-Nitrophenol	870	U
608-93-5	Pentacnlorobenzene	840	U
121-14-2	2,4-Dinitrotoluene	840	U
132-64-9	Dibenzofuran	870	U
91-59-8	2-Naphthylamine	1100	U
58-90-2	2,3,4,6-Tetrachlorophenol	1800	U
134-32-7	1-Naphthylamine	1800	U
84-66-2	Diethylphthalate	910	U

FORM I SV-2

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF014

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789196

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089196B60.D

Level: (low/med) LOW Date Received: 03/08/96

% Moisture: 21 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
7005-72-3	4-Chlorophenyl-phenylether	760	U
99-55-8	5-Nitro-o-toluidine	1300	U
86-73-7	Fluorene	870	U
100-01-6	4-Nitroaniline	1400	U
534-52-1	4,6-Dinitro-2-methylphenol	2300	U
86-30-6	N-Nitrosodiphenylamine (1)	1800	U
122-39-4	Diphenylamine	1800	U
99-35-4	1,3,5-Trinitrobenzene	1200	U
2303-16-4	Diallate (trans isomer)	840	U
62-44-2	Phenacetin	770	U
2303-16-4	Diallate (cis isomer)	840	U
101-55-3	4-Bromophenyl-phenylether	950	U
118-74-1	Hexachlorobenzene	970	U
92-67-1	4-Aminobiphenyl	520	U
87-86-5	Pentachlorophenol	1800	U
23950-58-5	Pronamide	820	U
85-01-8	Phenanthrene	780	U
120-12-7	Anthracene	940	U
84-74-2	Di-n-butylphthalate	970	U
56-57-5	4-Nitroquinoline-1-oxide	6100	U
91-80-5	Methapyrilene	1600	U
465-73-6	Isodrin	1200	U
206-44-0	Fluoranthene	1200	U
129-00-0	Pyrene	920	U
140-57-8	Aramite	840	U
60-11-7	p-Dimethylaminoazobenzene	850	U
510-15-6	Chlorobenzilate	900	U
85-68-7	Butylbenzylphthalate	860	U
119-93-7	3,3'-Dimethylbenzidine	570	U
117-81-7	bis(2-ethylhexyl)Phthalate	950	U
91-94-1	3,3'-Dichlorobenzidine	630	U
56-55-3	Benzo(a)Anthracene	840	U
218-01-9	Chrysene	680	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BIOF014

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789196

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089196B60.D

Level: (low/med) LOW Date Received: 03/08/96

% Moisture: 21 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
117-84-0	Di-n-octylphthalate	610	U
57-97-6	7,12-Dimethylbenz(a)anthrace	520	U
205-99-2	Benzo(b)fluoranthene	970	U
207-08-9	Benzo(k)fluoranthene	780	U
193-39-5	Indeno(1,2,3-c,d)pyrene	580	U
53-70-3	Dibenzo(a,h)anthracene	230	U
191-24-2	Benzo(g,h,i)perylene	780	U
122-09-08	a,a-Dimethylphenethylamine	840	U
106-50-3	p-Phenylenediamine	840	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

BIOF014

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0319C

Matrix: (soil/water) SOIL Lab Sample ID: 789196

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH089196B60.D

Level: (low/med) LOW Date Received: 03/08/96

% Moisture: 21 decanted: (Y/N) N Date Extracted: 03/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/18/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.6

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	3.86	230	JB
2.	ALDOL (BC)	4.07	4900	JAB
3.	ADVISORY SURROGATE COMPOUND	5.47	1500	JB
4.	ADVISORY SURROGATE COMPOUND	5.99	1100	JB
5.	UNKNOWN ALKANE	24.53	190	J
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FORM I SV-TIC

1D

ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

BIOF014

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0347C

Matrix: (soil/water) SOIL Lab Sample ID: 789223

Sample wt/vol: 30.00 (g/ml) G Lab File ID:

% Moisture: 21 decanted: (Y/N) N Date Received: 03/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/19/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 03/25/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 8.6 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	0.077	JP
309-00-2	Aldrin	1.3	U
959-98-8	Endosulfan I	0.062	JBP
60-57-1	Dieldrin	1.9	U
33213-65-9	Endosulfan II	4.4	U
50-29-3	4,4'-DDT	0.12	JP
72-43-5	Methoxychlor	4.4	U
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	0.13	JBP
1024-57-3	Heptachlor epoxide	0.20	JB
72-55-9	4,4'-DDE	0.14	JP
72-20-8	Endrin	0.080	JP
72-54-8	4,4'-DDD	0.11	JBP
7421-93-4	Endrin aldehyde	0.20	JP
1031-07-8	Endosulfan sulfate	0.55	BJP
11096-82-5	Aroclor-1260	25	U
12674-11-2	Aroclor-1016	25	U
11104-28-2	Aroclor-1221	25	U
11141-16-5	Aroclor-1232	25	U
53469-21-9	Aroclor-1242	25	U
12672-29-6	Aroclor-1248	25	U
11097-69-1	Aroclor-1254	25	U
8001-35-2	Toxaphene	25	U
57-74-9	Chlordane (Technical)	5.1	U

FORM I 8080

APPENDIX E

MANIFESTS, DISPOSAL INFORMATION

Chemical Waste Management, Inc.

BV 1112
Profile #

WASTE PROFILE

(Please carefully read the instructions before completing this form)

Sales #

TSDF requested ADM Center Technology requested Stabilization

☐ Check here if this is a Recertification ☐ Check here if a Certificate of Destruction or Disposal is required

GENERAL INFORMATION

1. GENERATOR NAME: NSWC, Crane, IN Generator USEPA ID: IN5170023498
2. Generator Address: CTR 12, 300 Hwy 361, Crane, IN 47522 Billing Address: ☒ Same Morrison Knudsen Ramadan
3. Technical Contact/Phone: Doug Boom 812-474-2129 Abdelsalam
4. Alternate Contact/Phone: Dustin Hayes 812-474-2129 Billing Contact/Phone: Patti Wittigen 812-474-2129

PROPERTIES AND COMPOSITION

5. A. Process Generating Waste: lead contaminated soil
   B. Is the waste from a CERCLA or state mandated cleanup? Yes ☐ No ☑ Location name:
6. Waste Name: lead contaminated soil
7. A. Is this a USEPA hazardous waste (40 CFR Part 261)? Yes ☑ No ☐
   B. If D001, D002, D012- D043 do any underlying hazardous constituents (UHC's) apply? Yes ☐ No ☑ (If yes, attach UHC form)
   C. Does this waste contain debris (List size and type in chemical composition)? Yes ☐ No ☑
   D. Identify ALL USEPA listed and characteristic waste code numbers (D,F,K,P,U): D008 State Waste Codes:
8. Physical State @ 70°F: A. Solid ☑ Liquid ☐ Both ☐ Gas ☐ B. Single Layer ☑ Multilayer ☐ C. Free liquid range 5 to 10 %
9. A. pH: Range 6 to 9 or Not applicable ☐ B. Strong Odor ☐: describe NONE
10. Liquid Flash Point: < 73°F ☐ 73-99°F ☐ 100-139°F ☐ 140-199°F ☐ ≥ 200°F ☑ N.A. ☐
11. CHEMICAL COMPOSITION: List ALL constituents (including halogenated organics and UHC's) present in any concentration and forward available analysis

Constituents	Range	Units	Constituents	Range	Units
Soil	99-100%				
Sludge	0-20%				
Sand dust or clay	0-10%				
Rock (less 2")	0-10%				
lead	500 ppm				

TOTAL COMPOSITION MUST EQUAL OR EXCEED 100%

12. OTHER: PCBs if yes, concentration ___ ppm, PCBs regulated by 40 CFR 761 ☐ Pyrophoric ☐ Explosive ☐ Radioactive ☐ Water Reactive ☐ Shock Sensitive ☐ Oxidizer ☐ Carcinogen ☐ Infectious ☐ Other NO
13. If Benzene, concentration ___ ppm. Is the waste subject to the Benzene Waste Operations NESHAP? Yes ☐ No ☑ Unknown ☐
14. Is the waste subject to RCRA subpart CC controls? Yes ☐ No ☑ Volatile organic concentration, if known N/A ppmw.
15. If the waste is subject to the land ban and meets the treatment standards, check here: ___ and supply analytical results where applicable.

SHIPPING INFORMATION

16. PACKAGING: Bulk Solid ☑ Type/Size: Enduro trailer Bulk Liquid ☐ Type/Size: ___ Drum ☐ Type/Size: ___ Other ___
17. SHIPPING FREQUENCY: Units 500 tons Per: ☐ Month ☐ Qtr. ☐ Year ☐ One Time ☐ Other ___

SAMPLING INFORMATION

18. A. Sample source (drum, lagoon, pond, tank, vat, etc.) Stockpile
    Date Sampled: 9-21-95 Sampler's Name/Company: Ramadan Abdelsalam - US Tech
    18. B. Generator's Agent Supervising Sampling: Ramadan Abdelsalam 19. No sample required (See instructions.) ☐

GENERATOR'S CERTIFICATION

I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste. Any sample submitted is representative as defined in 40 CFR 261- Appendix I or by using an equivalent method. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I authorize CWM to obtain a sample from any waste shipment for purposes of recertification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Profile Sheet from information provided by the generator and additional information as it has determined to be reasonably necessary.

Thomas J. Brent (Signature) THOMAS J. BRENT (Printed (or typed) name and title) 9/26/95 (Date)

CWM Form 6000-D replaces the following forms: CWM-51, CWM 6000, CWM 50-A-2, CWM 50-B and CWM 6000C.

Printed on recycled paper

CWM OF INDIANA SUPPLEMENTAL INFORMATION FORM

PROFILE # Bv 1112

1 Does this waste contain free liquids as determined by the paint filter test? Yes ✓ No ____

If yes, give the concentration of cyanides and metals in the liquid portion.
Free Cyanides 0 (ppm) Metals 500 (ppm)

2 Does the waste or treatment residue contain any of the following:

a. Polychlorinated biphenyls in concentrations greater than 50 ppm? Yes ____ No ✓

b. Halogenated organic compounds listed in Appendix III to 40 CFR subpart 268 in concentrations greater than 1000 ppm? Yes ____ No ✓

c. Dioxin wastes F020, F021, F022, F023, F026, F027 or F028? Yes ____ No ✓

3 Does the waste or treatment residue contain waste solvents F001, F002, F003, F004 or F005. Yes ____ No ✓

4 Does this waste stream contain any sorbents? If yes go to 4 a. Yes ✓ No ____

a. Were the sorbents used for absorption or for their absorption properties? If no, stop. If yes, go to 4 b. Yes ✓ No ____

b. Will the waste be managed in drums (i.e. any non-bulk container)? If yes, go to 4 c. If no, stop. Yes ✓ No ____

c. Are the sorbents nonbiodegradable and listed in 40 CFR 264.314(e)(1) or 40 CFR 265.314(f)(1) or have the sorbents been tested to be nonbiodegradable using the tests listed in 40 CFR 264.314(e)(2) or 40 CFR 265.314(f)(2) (attach confirmatory data to this form). Yes ____ No ____

5. What is the source of the above information?

Generator Knowledge ____ Analysis ____ Both ✓

Thomas J. Brent — 9/20/95

Confirmed by (Contact Name/Generator) — CWM Employee Initials — Date

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

CFWT

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch typewriter.) Form approved. OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I.N.5.1.7.8.8.2.3.4.9.8 Manifest Document No. 95075
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but items D, F, H, I and K are required by State law.

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522
4. Generator's Phone (812 854-1729

A. State Manifest Document Number INA 1078097
B. State Generator's ID N/A

5. Transporter 1 Company Name: Chemical Waste Management Inc
6. US EPA ID Number: I.L.D.0.9.9.2.0.2.6.8.1
C. State Transporter's ID
D. Transporter's Phone 219-423-1655

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806
10. US EPA ID Number: I.N.D.0.7.8.9.1.1.1.4.6
G. State Facility's ID
H. Facility's Phone (219)447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a "RQ" HAZARDOUS WASTE, SOLID, n.o.s. 9, NA3077, PG III, (D008)	001	DT	00020	Y	D008
b					
c					
d					

J. Additional Descriptions for Materials Listed Above
a. BVIII2
ERG 31

K. Handling Codes for Wastes Listed Above
D-81 LANDFILL
NET 45660

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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Printed/Typed Name: Timothy J. Brant
Signature
Date: Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Timothy S. Nave
Signature: Timothy S. Nave
Date: Month 10 Day 10 Year 95

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

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name: Scott L. Woolsey
Signature
Date: Month 10 Day 10 Year 95

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

INA 1078097

...e of a spill call the Indiana Office of Environmental Response ...241-4336 (day or night) and the ...onal Response Center at 800/424-8802 or 202/426-2675.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch typewriter.) Form approved. OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I.N.5.1.7.0.2.3.4.9.8 Manifest Document No. 9507.7
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but Items D, F, H, I and K are required by State law.

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522
4. Generator's Phone (812 854-1728

A. State Manifest Document Number INA 1078081
B. State Generator's ID N/A

5. Transporter 1 Company Name: Beelman Truck Co
6. US EPA ID Number: I.L.0.0.0.7.8.1.4.8.2.5
C. State Transporter's ID: 0093
D. Transporter's Phone: (800) 851-8854

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806
10. US EPA ID Number: I.N.D.0.7.8.9.1.1.1.4.6
G. State Facility's ID
H. Facility's Phone: (219) 447-5583

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a "RQ" HAZARDOUS WASTE, SOLID, n.o.s., 9, NA3077, PG III, (D008)	001	DT	47270	P	D008
b					
c					
d					

J. Additional Descriptions for Materials Listed Above
a. B41112
ERG-31 NET 47270

K. Handling Codes for Wastes Listed Above
D-81 LANDFILL
NET 47120

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300

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Printed/Typed Name: Jerry L McCracken
Signature: Jerry L McCracken
Date: Month 10 Day 12 Year 9

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Rickey Goodman 6/110
Signature: Rickey Goodman
Date: Month 10 Day 13 Year 9

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

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Jon Oy Patterson
Signature
Date: Month 10 Day 12 Year 9

GENERATOR
TRANSPORTER
FACILITY

EPA Form 8700-22
Previous editions are obsolete.
State Form 11865 (R2 / 1-94)

In case of a spill call the Indiana Office of Environmental Response at 317-233-7745 or 800-451-6027 (day or night) and the National Response Center at 800/424-8802 or 202/426-2675.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

CFWT

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I N 5 1 7 8 8 2 3 4 9 8 | Manifest Document No. 9 5 0 7 8

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but items D, F, H, I and K are required by State law.

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522

4. Generator's Phone (812 854-1728

A. State Manifest Document Number INA 1078082

B. State Generator's ID N/A

5. Transporter 1 Company Name: Beelman Truck Co

6. US EPA ID Number: I L D 0 0 7 8 1 4 3 2 5

C. State Transporter's ID: 0093

D. Transporter's Phone: (800) 837-8854

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID:

F. Transporter's Phone:

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806

10. US EPA ID Number: I N D 0 7 8 9 1 1 1 4 6

G. State Facility's ID

H. Facility's Phone: (219) 447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	Waste No.
a "RQ" HAZARDOUS WASTE, SOLID, n.o.s., 9, NA3077, PG III, (D008)	001	DT	49470	P	D008
b					
c					
d					

J. Additional Descriptions for Materials Listed Above
a. BV1112
ERG 31 NET: 49470

K. Handling Codes for Wastes Listed Above
B-81 LANDFILL
Net 49 x 40

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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GENERATOR — Printed/Typed Name: Jerry L McCracken | Signature | Date Month 1 Day 0 Year 1 2 9 5

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Charles Ford 966-39171 | Signature | Date Month 1 Day 0 Year 1 2 9 5

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

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name: LARRY THALACKER | Signature | Date Month 1 Day 0 Year 1 2 9 5

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

INA 1078082

In case of a spill call the Indiana Office of Environmental Response at 317/241-4336 (day or night) and the National Response Center at 800/424-8802 or 202/426-2675.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch typewriter.)

Form approved. OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I.N.5.1.7.8.8.2.3.4.9.8
Manifest Document No. 9.5.0.7.9
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but Items D, F, H, I and K are required by State law.

A. State Manifest Document Number: INA 1078084

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522

B. State Generator's ID: N/A

4. Generator's Phone (812 854-1729

5. Transporter 1 Company Name: Beelman Truck Co.
6. US EPA ID Number: I.L.D.0.0.7.8.1.4.8.2.5
C. State Transporter's ID: 0093
D. Transporter's Phone: (800) 257-8854

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806
10. US EPA ID Number: I.N.D.0.7.8.9.1.1.1.4.6
G. State Facility's ID
H. Facility's Phone: (219) 447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a RQ, HAZARDOUS WASTE, SOLID, n.o.s, 9, NA3077; PG III, (D008)	001	DT	49410	P	D008
b					
c					
d					

J. Additional Descriptions for Materials Listed Above
a. BV1112
ERG-31

K. Handling Codes for Wastes Listed Above
D-81 LANDFILL
NET 49210

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300

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GENERATOR — Printed/Typed Name: Terry L. McCracken — Signature: Terry L. McCracken — Date: Month 10 Day 12 Year 9

TRANSPORTER
17. Transporter 1 Acknowledgement of Receipt of Materials — Printed/Typed Name: DARRELL GOBLE — Signature: Darrell Goble — Date: Month 10 Day 12 Year 9
18. Transporter 2 Acknowledgement of Receipt of Materials — Printed/Typed Name — Signature — Date: Month Day Year

FACILITY
19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name: SCOTT L. WOODRY — Signature — Date: Month 10 Day 12

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

If a spill call the Indiana Office of Environmental Response at 1-4336 (day or night) and the National Response Center at 800/424-8802 or 202/426-2675.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: I.N.5.1.7.8.3.2.3.4.9.8 | Manifest Document No.: 7.5.0.5.0
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but items D, F, H, I and K are required by State law.

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522
4. Generator's Phone (812 854-1729

A. State Manifest Document Number: INA 1078085
B. State Generator's ID: N/A

5. Transporter 1 Company Name: Beelman Truck Co
6. US EPA ID Number: I.L.D.0.0.7.8.1.4.3.2.5
C. State Transporter's ID: 0093
D. Transporter's Phone: (800) 257-8853

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806
10. US EPA ID Number: I.N.D.0.7.8.9.1.1.1.4.6
G. State Facility's ID
H. Facility's Phone: (219) 447-3585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	Waste No.
a "RQ" HAZARDOUS WASTE, SOLID, n.o.s., 9, NA3077, PG III, (D008)	001	DT	49600	P	D008
b					
c					
d					

J. Additional Descriptions for Materials Listed Above
a. BV1112
ERG-31

K. Handling Codes for Wastes Listed Above
D-81 LANDFILL
NET = 49370

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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Printed/Typed Name: Jerry L McCracken | Signature: Jerry L McCracken | Date: Month 10 Day 12 Year 95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: [illegible] | Signature: [illegible] | Date: Month [illegible] Day [illegible] Year [illegible]

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

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name: Scott L Wonderly | Signature: [illegible] | Date: Month 10 Day 12 Year 95

GENERATOR

INA 1078085

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

In case of a spill call the Indiana Office of Environmental Response at 317/232-3211-4336 (day or night) and the National Response Center at 800/424-8802 or 202/426-2675.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

CF

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I.N.5.1.7.8.8.2.3.4.9.8 Manifest Document No. 7.5.0.8.1

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but Items D, F, H, I and K are required by State law.

A. State Manifest Document Number INA 1078086

B. State Generator's ID N/A

C. State Transporter's ID 0093

D. Transporter's Phone (800)851-885

E. State Transporter's ID

F. Transporter's Phone

G. State Facility's ID

H. Facility's Phone (219)447-5385

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522

4. Generator's Phone (812 854-1[illegible] 3114

5. Transporter 1 Company Name: Beelman Truck Co.

6. US EPA ID Number: I.L.D.0.0.7.8.1.4.8.2.5

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806

10. US EPA ID Number: I.N.D.0.7.8.9.1.1.1.4.6

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a. RQ, HAZARDOUS WASTE, SOLID, N.O.S., 9, NA3077, PG III, (D008)	001	DT	52170	P	D008
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. BV1112
ERG-31

K. Handling Codes for Wastes Listed Above
D-81 LANDFILL
Net 52370

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300

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Printed/Typed Name: Terry L. McCracken Signature: [signature] Date: Month 10 Day 12 Year 95

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: GAYLORD LEGGE Signature: [signature] Date: Month 10 Day 12 Year 95

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

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name: [illegible] Signature: [signature] Date: Month 10 Day 12 Year 95

GENERATOR
TRANSPORTER
FACILITY

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

In case of a spill call the Indiana Office of Environmental Response at 241-4336 (day or night) and the National Response Center at 800/424-8802 or 202/426-2675.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOU STE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I.N.5.1.7.8.3.2.3.4.9.8 | Manifest Document No. 9.5.0.8.2

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but items D, F, H, I and K are required by State law.

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522

4. Generator's Phone (812 854-~~5288~~ 3114

A. State Manifest Document Number INA 1078087

B. State Generator's ID N/A

5. Transporter 1 Company Name: Beelman Truck Co

6. US EPA ID Number: I.L.D.0.7.8.1.4.2.2.5

C. State Transporter's ID: 0073

D. Transporter's Phone: (800) 851-8854

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806

10. US EPA ID Number: I.N.D.0.7.8.9.1.1.1.4.6

G. State Facility's ID

H. Facility's Phone: (219) 447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a. RQ, HAZARDOUS WASTE, SOLID, n.o.s., 9, NA3077, PG III, (D008)	001	DT	49530	P	D008
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. B91112
ERG-31

K. Handling Codes for Wastes Listed Above
D-81 LANDFILL
NET 49920

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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Printed/Typed Name: Jerry L McCracken | Signature | Date Month 10 Day 12 Year 95

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Jimmy Crafton | Signature | Date Month 10 Day 12 Year 95

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

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name: Scott Woodcock | Signature | Date Month 10 Day 17 Year 95

GENERATOR
TRANSPORTER
FACILITY

INA 1078087

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

of a spill call the Indiana Office of Environmental Response
Response Center at 800/424-8802 or 202/426-2675.
11-4336 (day or night) and the

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

CFW

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch typewriter.) Form approved. OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I.N.5.1.7.8.3.2.3.4.9.8 Manifest Document No. 95083

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but items D, F, H, I and K are required by State law.

A. State Manifest Document Number: INA 1078088

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522

B. State Generator's ID: N/A

4. Generator's Phone (812 854-~~1289~~ 3114

5. Transporter 1 Company Name: EEELMAN TRUCK Co.

6. US EPA ID Number: I.L.D.0.0.7.3.1.4.8.2.5

C. State Transporter's ID: 0093

D. Transporter's Phone: (800) 851-8655

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806

10. US EPA ID Number: I.N.D.0.7.8.9.1.1.1.4.6

G. State Facility's ID

H. Facility's Phone: (219) 447-3585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	Waste No.
a. "RQ" HAZARDOUS WASTE, SOLID, n.o.s. 9, NA3077, PG III, (D008)	001	DT	50.2.10	P	D008
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. BV1112
ERG-31

K. Handling Codes for Wastes Listed Above
D-81 LANDFILL
NET 50100

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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Printed/Typed Name: Jerry L. M. Crocker | Signature: Jerry M. Crocker | Date: Month 10 Day 12 Year 95

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Date: Month Day Year

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

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name: Scott Wonning | Signature | Date: Month 10 Day 12 Year 95

GENERATOR
TRANSPORTER
FACILITY

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

...of a spill call the Indiana Office of Environmental Response ... 11-4336 (day or night) and the National Response Center at 800/424-8802 or 202/426-2675.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

CFWT

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch typewriter.) Form approved. OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I N 5 1 7 8 2 3 4 9 8
Manifest Document No.
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but items D, F, H, I and K are required by State law.

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522
4. Generator's Phone (812 854-[redacted] 3114

A. State Manifest Document Number
INA 1078089
B. State Generator's ID
VA

5. Transporter 1 Company Name
DEE Jay Truck Co.
6. US EPA ID Number
IL D 0 7 8 4 5 3 2 5
C. State Transporter's ID 0093
D. Transporter's Phone 800-851-8854

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806
10. US EPA ID Number
I N D 0 7 8 9 1 1 1 4 6
G. State Facility's ID
H. Facility's Phone
(219)447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	Waste No.
a "RQ," HAZARDOUS WASTE, SOLID, n.o.s., 9, NA3077, PG III, (D008)	001	DT	52190	P	D008
b					
c					
d					

J. Additional Descriptions for Materials Listed Above
a. BV1112
ERG-31

K. Handling Codes for Wastes Listed Above
D-81 LANDFILL
Net 50760

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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Printed/Typed Name: Jerry L McCracken
Signature: Jerry L McCracken
Date: Month 10 Day 12 Year 95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: John Malcum
Signature
Date: Month 10 Day 12 Year 95

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

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name: Scott Wonderly
Signature
Date: Month 10 Day 13 Year 95

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

INA 1078089

of a spill call the Indiana Office of Environmental Response
Na... al Response Center at 800/424-8802 or 202/426-2675.
41-4336 (day or night) and the

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

CFW1

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I.N.5.1.7.8.8.2.3.4.9.8 Manifest Document No. 95.055

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but items D, F, H, I and K are required by State law.

A. State Manifest Document Number: INA 1078091

B. State Generator's ID: N/A

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522

4. Generator's Phone (812 854-1728

5. Transporter 1 Company Name: Beelman Truck Co

6. US EPA ID Number: I.L.D.0.0.7.9.1.4.9.2.5

C. State Transporter's ID: 0093

D. Transporter's Phone: (800) 851-8654

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806

10. US EPA ID Number: I.N.D.0.7.8.9.1.1.1.4.6

G. State Facility's ID

H. Facility's Phone: (219)447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a. RQ, HAZARDOUS WASTE, SOLID, n.o.s., 9, NA3077, PG III, (D008)	001	DT	4993.0	P	D008
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. B91112
ERG 31

K. Handling Codes for Wastes Listed Above
D-81 LANDFILL
NET 5000#

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300
252964-1

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Jerry L McCracken Signature: Jerry L McCracken Date: Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: KENNETH G DAUZR Signature: Kenneth G Dauzr Date: Month 10 Day 12 Year 95

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

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name: Anthony L Strauch Jr Signature: Anthony L Strauch Date: Month 10 Day 13 Year 95

GENERATOR

...241-4336 (day or night) and the

...e of a spill call the Indiana Office of Environmental Response at ...ial Response Center at 800/424-8802 or 202/426-2675.

EPA Form 8700-22
Previous editions are obsolete.
State Form 11865 (R2 / 1-94)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

CFWT

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I.N.3.1.7.8.0.2.3.4.9.8
Manifest Document No. 9.5.0.7.6
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but Items D, F, H, I and K are required by State law.

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522
4. Generator's Phone (812 854-1729

A. State Manifest Document Number: INA 1078098
B. State Generator's ID: N/A

5. Transporter 1 Company Name: Bedman Truck Co.
6. US EPA ID Number: I.L.D.0.0.7.8.1.4.8.2.5
C. State Transporter's ID: 0093
D. Transporter's Phone: (800)251-8854

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806
10. US EPA ID Number: I.N.D.0.7.9.9.1.1.1.4.6
G. State Facility's ID:
H. Facility's Phone: (219)447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a. UN, HAZARDOUS WASTE, SOLID, n.o.s, 9, NA3077, PG III, (D008)	001	DT	47140	P	D008
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. BV1112
ERG 31 NET 47140

K. Handling Codes for Wastes Listed Above
D-81 LANDFILL
NET 47040 P

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300

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GENERATOR — Printed/Typed Name: Jerry L. McCee Key — Signature: [signature] — Date: Month 10 Day 12 Year 95

TRANSPORTER
17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Rick Ko-ll — Signature: [signature] — Date: Month 10 Day 12 Year 95
18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: — Signature: — Date: Month Day Year

FACILITY
19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
Printed/Typed Name: Sandy L. Tomchek — Signature: [signature] — Date: Month 10 Day 12 Year 95

INA 1078098

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

...of a spill call the Indiana Office of Environmental Response at ...11-4336 (day or night) and the ...al Response Center at 800/424-8802 or 202/426-2675.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOU STE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

CFWT

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I.N.S.1.7.0.0.2.3.4.9.8 Manifest Document No. 95087
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but items D, F, H, I and K are required by State law.

A. State Manifest Document Number INA 1077352

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522

B. State Generator's ID N/A

4. Generator's Phone (812 854-~~1288~~ 3114

5. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC.
6. US EPA ID Number: I.L.D.0.9.9.2.0.2.6.8.1

C. State Transporter's ID
D. Transporter's Phone (219)423-1555

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806

10. US EPA ID Number: I.N.D.0.7.8.9.1.1.1.4.6

G. State Facility's ID
H. Facility's Phone (219)447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	Waste No.
a RQ, HAZARDOUS WASTE, SOLID, N.O.S., 9, NA3077, PG III, (D008)	0.0.1	CM	33620	P	D008
b					
c					
d					

J. Additional Descriptions for Materials Listed Above
a. BV1112
ERG#31 Net. 33620

K. Handling Codes for Wastes Listed Above
D-01 LANDFILL
Net 35900#

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300

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GENERATOR

Printed/Typed Name: THOMAS T. BREMIT
Signature: Thomas T. Bremit
Date: Month 1 0 Day 0 3 Year 9 5

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Timothy S. Nave
Signature: Timothy S. Nave
Date: Month 1 0 Day 0 3 Year 9 5

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

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name: SANDY LUTMCHER
Signature: Sandy Lutmcher
Date: Month 1 0 Day 0 3 Year 9 5

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

...of a spill call the Indiana Office of Environmental Response at ...11-4336 (day or night) and the ...nal Response Center at 800/424-8802 or 202/426-2675.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I N 5 1 7 0 0 2 3 4 9 8 — Manifest Document No. 9 5 0 8 6

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law, but items D, F, H, I and K are required by State law.

A. State Manifest Document Number: INA 1078096

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522

4. Generator's Phone (812 854-~~[illegible]~~ 3114

B. State Generator's ID: N/A

5. Transporter 1 Company Name: Beelman Truck Company

6. US EPA ID Number: I L D 0 0 7 8 1 4 8 2 5

C. State Transporter's ID: 0073

D. Transporter's Phone: 800-851-9854

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806

10. US EPA ID Number: I N D 0 8 7 8 9 1 1 1 4 6

G. State Facility's ID

H. Facility's Phone: (219)447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a RQ, HAZARDOUS WASTE, SOLID, N.O.S., 9, NA3077, PG III, (D008)	001	DT	49140	P	D008
b					
c					
d					

J. Additional Descriptions for Materials Listed Above
a. BV1112
ERG #31 NET. 49140

K. Handling Codes for Wastes Listed Above
D-51 LANDFILL
Net 49140 #

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300

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GENERATOR — Printed/Typed Name: THOMAS T. BRENT — Signature: Thomas T. Brent — Date: Month 10 Day 13 Year 95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Jimmy Crafton — Signature: Jimmy Crafton — Date: Month 10 Day 13 Year 95

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

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name: SANDY HOFMEISTER — Signature: Sandy Hofmeister — Date: Month 10 Day 13 Year 95

INA 1078096

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

COPY 4 - TSD MAIL TO GENERATOR

...se of a spill call the Indiana Office of Environmental Response ...241-4336 (day or night) and the ...onal Response Center at 800/424-8802 or 202/426-2675.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

CFW

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I.N.5.1.7.8.8.2.3.4.9.8 | Manifest Document No. 9.5.0.4.5 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law, but Items D, F, H, I and K are required by State law.

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522

4. Generator's Phone (812 854-~~[illegible]~~ 3114

A. State Manifest Document Number: INA 1078092

B. State Generator's ID: N/A

5. Transporter 1 Company Name: Beelman Trucking Co

6. US EPA ID Number: ILD007814825

C. State Transporter's ID: 0093

D. Transporter's Phone: 800-851-8554

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806

10. US EPA ID Number: I.N.D.0.7.8.9.1.1.1.4.6

G. State Facility's ID

H. Facility's Phone: (219)447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a "RQ", HAZARDOUS WASTE, SOLID, N.O.S, 9, NA3077, PG III, (D008)	001	DT	47190	P	D008
b					
c					
d					

J. Additional Descriptions for Materials Listed Above
a. B91112
ERG#31 NET. 47190

K. Handling Codes for Wastes Listed Above
D-84 LANDFILL
No 4 Month

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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GENERATOR — Printed/Typed Name: Jerry L McCracken | Signature: Jerry L McCracken | Date: Month 10 Day 25 Year 95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: James E Odom | Signature: James E Odom | Date: Month 10 Day 25 Year 95

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

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: [illegible] | Signature | Date: Month 10 Day 25 Year 95

EPA Form 8700-22
Previous editions are obsolete.
State Form 11865 (R2 / 1-94)

In case of a spill call the Indiana Office of Environmental Response at 317/241-4336 (day or night) and the National Response Center at 800/424-8802 or 202/426-2675.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOI \STE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

CFWT

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch typewriter.) Form approved. OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I N 5 1 7 0 0 2 3 4 9 8 Manifest Document No. 45096

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law, but Items D, F, H, I and K are required by State law.

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522

4. Generator's Phone (812 854-~~[illegible]~~ 3114

A. State Manifest Document Number: INA 1078093

B. State Generator's ID: N/A

5. Transporter 1 Company Name: Beelman Trucking Co.

6. US EPA ID Number: ILD007814825

C. State Transporter's ID: 0093

D. Transporter's Phone: 800-851-8554

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806

10. US EPA ID Number: I N D 0 7 8 9 1 1 1 4 6

G. State Facility's ID

H. Facility's Phone: (219)447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	Waste No.
a "RQ," HAZARDOUS WASTE, SOLID, n.o.s., 9, NA3077, PG III, (D008)	001	DT	49920	P	D008
b					
c					
d					

J. Additional Descriptions for Materials Listed Above
a. BV1112
ERG 31 NET 49920

K. Handling Codes for Wastes Listed Above
D-81 LANDFILL
Net 49920

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR — Printed/Typed Name: Jerry L. McCracken — Signature: Jerry L McCracken — Date: Month 10 Day 25 Year 95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Bill Shehnen Jr — Signature: Bill Shehnen — Date: Month 10 Day 25 Year 95

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

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted Item 19.
Printed/Typed Name: [illegible] — Signature — Date: Month 10 Day 25 Year 95

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

If a spill call the Indiana Office of Environmental Response at 11-4336 (day or night) and the National Response Center at 800/424-8802 or 202/426-2675.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

CFWT

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch typewriter.) Form approved. OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I N S 1 7 8 8 2 3 4 9 8 Manifest Document No. 4 5 0 7 7

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but items D, F, H, I and K are required by State law.

A. State Manifest Document Number INA 1078094

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522

B. State Generator's ID N/A

4. Generator's Phone (812 854-~~4799~~ 3114

5. Transporter 1 Company Name Beelman Trucking Co

6. US EPA ID Number I L D 0 0 7 3 1 4 8 2 5

C. State Transporter's ID 0093

D. Transporter's Phone 800-851-6854

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806

10. US EPA ID Number I N D 0 7 8 9 1 1 1 4 6

G. State Facility's ID

H. Facility's Phone (219)447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a. RQ, HAZARDOUS WASTE, SOLID, n.o.s., 9, NA3077, PG III, (D008)	001	DT	51340	P	D008
b					
c					
d					

J. Additional Descriptions for Materials Listed Above
a. BW1112
ERG 31 NET 51340

K. Handling Codes for Wastes Listed Above
D-81 LANDFILL
51300

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300
212334-01

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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Printed/Typed Name: Jerry L McCracken
Signature: Jerry L McCracken
Date: Month 10 Day 25 Year 95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: JOE OWENS
Signature: [illegible]
Date: Month 10 Day 25 Year 95

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

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name: Ford Morrison
Signature: Ford Morrison
Date: Month 10 Day 26 Year 95

GENERATOR

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

COPY 1 - TSD MAIL TO GENERATOR

e of a spill call the Indiana Office of Environmental Response at 317/241-4336 (day or night) and the
nal Response Center at 800/424-8802 or 202/426-2675.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

CFWT

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch typewriter.) Form approved. OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I·N·5·1·7·0·0·2·3·4·9·8 Manifest Document No. 9·5·0·7·8

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but Items D, F, H, I and K are required by State law.

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522

4. Generator's Phone (812 ~~854-1725~~ 3114

A. State Manifest Document Number INA 1078095

B. State Generator's ID N/A

5. Transporter 1 Company Name Bedinger Trucking Co.

6. US EPA ID Number I·L·D·0·7·4·1·4·8·2·5

C. State Transporter's ID 0093

D. Transporter's Phone 309 852-8854

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806

10. US EPA ID Number I·N·D·0·7·8·9·1·1·1·4·6

G. State Facility's ID

H. Facility's Phone (219)447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a RQ, HAZARDOUS WASTE, SOLID, N.O.S, 9, NA3077, PG III, (D008)	001	DT	50100	P	D008
b					
c					
d					

J. Additional Descriptions for Materials Listed Above
a. B01112
ERG 31 NET 50,100

K. Handling Codes for Wastes Listed Above
D-81 LANDFILL
MT = 50080

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300
256334-3

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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GENERATOR

Printed/Typed Name: Jerry L. McCracken
Signature: Jerry L McCracken
Date: Month 10 Day 25 Year 95

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: John Marcum
Signature: John Marcum
Date: Month 10 Day 25 Year 95

TRANSPORTER

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

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name: Paul Marcum
Signature: Paul Marcum
Date: Month 10 Day 26 Year 95

INA 1078095

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

of a spill call the Indiana Office of Environmental Response at 41-4336 (day or night) and the
N. Response Center at 800/424-8802 or 202/426-2675.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

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NOV 14 1995
CFWT

Form approved. OMB No. 2050-0039. Expires 9-30-94

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: I.N.5.1.7.8.0.2.3.4.9.8
Manifest Document No.: [illegible]
Page 1 of 1
Information in the shaded areas is not required by Federal law, but items G, H, I and K are required by State law.

MR-CRANE

A. State Manifest Document Number: INA 1077487

B. State Generator's ID: N/A

C. State Transporter's ID: [illegible]

D. Transporter's Phone: [illegible]

E. State Transporter's ID:

F. Transporter's Phone:

G. State Facility's ID:

H. Facility's Phone: (219)447-5585

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
~~BLDG 25-16~~ Code 075 BLDG 3240
CRANE IN 47522

4. Generator's Phone (812 854-~~1199~~ 2111

5. Transporter 1 Company Name: [illegible] Truck Co
6. US EPA ID Number: [illegible]

7. Transporter 2 Company Name:
8. US EPA ID Number:

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806
10. US EPA ID Number: I.N.D.0.7.8.9.1.1.1.4.6

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	Waste No.
a. RQ, HAZARDOUS WASTE, SOLID, n.o.s., 9, NA3077, PG III, (D008)	001	DT	50130	P	D008
b.					
c.					
d.					

NSWC - CRANE 43244-0005
PROJECT MEMBER / PROJECT MANAGER / PROJECT ENGINEER / GNL SUPT / SAFETY AND HEALTH / QA/QC SUPERVISOR / PROJECT CONTROLS / FIELD ENGINEERING / PMO CHARLESTON / FILE / FILE / FILE
INFO / ACT / INIT
30,040 lb

J. Additional Descriptions for Materials Listed Above
a. BV1112
EPA-31 NET 40130

K. Handling Codes for Wastes Listed Above
D-81 LANDFILL
NET 47660

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300

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Printed/Typed Name: Terry L. McCracken
Signature: Terry L McCracken
Date: Month 10 Day 27 Year 95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: JOE OWENS
Signature: Joe Owens
Date: Month 10 Day 27 Year 95

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

FACILITY

19. Discrepancy Indication Space
#corrected per Tom Brunt 10-30-95 TCR

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name: ROBERT F. COX
Signature:
Date: Month 10 Day 27 Year 95

GENERATOR

In of a spill call the Indiana Office of Environmental Response at 41-4336 (day or night) and the National Response Center at 800/424-8802 or 202/426-2675.

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

CFWT

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch typewriter.) Form approved. OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I.N.5.1.7.8.8.2.3.4.9.8 | Manifest Document No. 95100 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law, but items D, F, H, I and K are required by State law.

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16 Code 095
CRANE IN 47522
4. Generator's Phone (812 854-~~1726~~ 3114

A. State Manifest Document Number: INA 1077488
B. State Generator's ID: N/A

5. Transporter 1 Company Name: BEELMAN TRUCK Co
6. US EPA ID Number: I.L.D.0.0.7.8.1.4.8.2.5
C. State Transporter's ID: 0093
D. Transporter's Phone: 800-857-8854

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806
10. US EPA ID Number: I.N.D.0.7.8.9.1.1.1.4.6
G. State Facility's ID
H. Facility's Phone: (219)447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a RQ, HAZARDOUS WASTE, SOLID, N.O.S. 9, NA3077, PG III, (D008)	001	DT	48450	P	D008
b					
c					
d					

J. Additional Descriptions for Materials Listed Above: a. BV1112
K. Handling Codes for Wastes Listed Above: D-81 LANDFILL NET-47840

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300
ERG-31

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Printed/Typed Name: Jerry L. McCracken | Signature: Jerry L. McCracken | Date Month 10 Day 27 Year 95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: James E Odom | Signature: James E Odom | Date Month 10 Day 27 Year 95

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

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name: ROBERT F. CISZ | Signature | Date Month 10 Day 27 Year 95

GENERATOR

...e of a spill call the Indiana Office of Environmental Response a... 241-4336 (day or night) and the ...al Response Center at 800/424-8802 or 202/426-2675.

INA 1077488

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

CFWT

IND 1 7 8 2 3 4 9 8

CFWT

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch typewriter.) Form approved. OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I·N·D·1·7·8·2·3·4·9·8 Manifest Document No. 95-09-9

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law, but Items D, F, H, I and K are required by State law.

A. State Manifest Document Number INA 1078083

B. State Generator's ID N/A

3. Generator's Name and Mailing Address
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16 CODE 095
CRANE IN 47522

4. Generator's Phone (812 854-3114

C. State Transporter's ID 0093

5. Transporter 1 Company Name: BEEIMAN TRUCK Co.

6. US EPA ID Number: IL·D·0·0·7·8·1·4·8·2·5

D. Transporter's Phone 800-851-8859

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806

10. US EPA ID Number: I·N·D·0·7·8·9·1·1·1·4·6

G. State Facility's ID

H. Facility's Phone (219)447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a. RQ, HAZARDOUS WASTE, SOLID, n.o.s., 9, NA3077, PG III, (D008)	001	DT	47740	P	D008
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. BV1112

K. Handling Codes for Wastes Listed Above
D-81 LANDFILL
VET-4-7-95

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300
ERG 31

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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Printed/Typed Name: Jerry L. McCracken — Signature: Jerry L McCracken — Date: Month 10 Day 27 Year 95

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Bill Shehorn — Signature: Bill Shehorn — Date: Month 10 Day 27 Year 95

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

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name: Scott Dubnoerly — Signature: Scott Dubnoerly — Date: Month 10 Day 27 Year 95

GENERATOR — TRANSPORTER — FACILITY

In case of a spill call the Indiana Office of Environmental Response at 317-233-7745 (day or night) and the National Response Center at 800/424-8802 or 202/426-2675.

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

Truck # 327

12660

Disposal Notification
Spill/Underground Storage Tank Debris

Spill/UST Information (please check) Spill ☐ ~~UST~~ AST Cleanup ☒

Spill/UST Location U.S. NAVAL SURFACE WARFARE CENTER	
CODE 095, BUILDING 3260, CRANE, IN 47522	County MARTIN
Material Spilled/Leaked DIESEL CONTAMINATED SOIL	
Spill/UST Date	Time / Volume (lbs)

Owner/Owner's Representative (please check) Owner ☒ Owner's Rep. ☐

Owner/Owner's Rep. U.S. NAVAL SURFACE WARFARE CENTER	
Mailing Address CODE 95, BUILDING, 3260	
CRANE, IN 47522	Phone 812 854-3114
Contact TOM BRENT/Christine Freeman	Title Environmental Protection Specialist

I hereby certify that the information concerning the circumstances of this spill/UST Cleanup are true and accurate to the best of my knowledge.

Signature Christine D. Freeman Date 2/7/96

Clean up Contractor

Company Name U.S. TECH GROUP, INC.	
Mailing Address 5354 OLD BOONEVILLE HIGHWAY	
EVANSVILLE, IN 47715	
Contractor Contact RAMADAN ABDELSALAM	Phone 812 476 2845
Transporter (to landfill) TRI AX, INC. / ENVIROSOLVE	Phone 317 761 7867

Disposal Site Information

Site Name SOUTHSIDE LANDFILL	OPP No. 49-1 / N243
Disposal Volume - Quantity 2089 TONS 40,300 lbs.	Type of Containers DT
Signature	Date: 2/7/96

This disposal notification form must accompany each load of spill/UST cleanup debris sent for disposal and shall be signed and dated by the owner/owner's representative and the landfill representative.

Indiana Department of Environmental Management 317/232-4473

8/92

Truck # 312

12662

Disposal Notification
Spill/Underground Storage Tank Debris

Spill/UST Information (please check) Spill ☐ ~~UST~~ AST Cleanup ☒

Spill/UST Location U.S. NAVAL SURFACE WARFARE CENTER

CODE 095, BUILDING 3260, CRANE, IN 47522 County MARTIN

Material Spilled/Leaked DIESEL CONTAMINATED SOIL

Spill/UST Date Time Volume (lbs)

Owner/Owner's Representative (please check) Owner ☒ Owner's Rep. ☐

Owner/Owner's Rep. U.S. NAVAL SURFACE WARFARE CENTER

Mailing Address CODE 9S, BUILDING, 3260

CRANE, IN 47522 Phone 812 854-3114

Contact TOM BRENT/Christine Freeman Title Environmental Protection Specialist

I hereby certify that the information concerning the circumstances of this spill/UST Cleanup are true and accurate to the best of my knowledge.

Signature Christine D. Freeman Date 2/7/96

Clean up Contractor

Company Name U.S. TECH GROUP, INC.

Mailing Address 5354 OLD BOONEVILLE HIGHWAY

EVANSVILLE, IN 47715

Contractor Contact RAMADAN ABDELSALAM Phone 812 476 2845

Transporter (to landfill) TRI AX, INC. / ENVIROSOURCE Phone 317 741 7367

Disposal Site Information

Site Name SOUTHSIDE LANDFILL OPP No. 49-1 / N243

Disposal Volume - Quantity 37540 lbs 18.94 TONS Type of Containers DT

Signature Date 2/7/96

This disposal notification form must accompany each load of spill/UST cleanup debris sent for disposal and shall be signed and dated by the owner/owner's representative and the landfill representative.

Indiana Department of Environmental Management 317/232-4473

Truck # 316

12664

Disposal Notification
Spill/Underground Storage Tank Debris

Spill/UST Information (please check) Spill ☐ ~~UST~~ AST Cleanup ☒

Spill/UST Location U.S. NAVAL SURFACE WARFARE CENTER	
CODE 095, BUILDING 3260, CRANE, IN 47522	County MARTIN
Material Spilled/Leaked DIESEL CONTAMINATED SOIL	
Spill/UST Date	Time / Volume (lbs)

Owner/Owner's Representative (please check) Owner ☒ Owner's Rep. ☐

Owner/Owner's Rep. U.S. NAVAL SURFACE WARFARE CENTER	
Mailing Address CODE 95, BUILDING, 3260	
CRANE, IN 47522	Phone 812 854-3114
Contact TOM BRENT/Christine Freeman	Title Environmental Protection Specialist

I hereby certify that the information concerning the circumstances of this spill/UST Cleanup are true and accurate to the best of my knowledge.

Signature Christine D. Freeman Date 2/7/96

Clean up Contractor

Company Name U.S. TECH GROUP, INC.	
Mailing Address 5354 OLD BOONEVILLE HIGHWAY	
EVANSVILLE, IN 47715	
Contractor Contact RAMADAN ABDELSALAM	Phone 812 476 2845
Transporter (to landfill) TRI AX, INC / ENVIROSOLVE	Phone 817 761 7867

Disposal Site Information

Site Name SOUTHSIDE LANDFILL	OPP No. 49-1 / NZ43
Disposal Volume - Quantity 39,880 lbs. 19.11 TONS	Type of Containers DT
Signature	Date 2-7-96

This disposal notification form must accompany each load of spill/UST cleanup debris sent for disposal and shall be signed and dated by the owner/owner's representative and the landfill representative.

Indiana Department of Environmental Management 317/232-4473

8/92

Truck # 326

12666

Disposal Notification
Spill/Underground Storage Tank Debris

Spill/UST Information (please check) Spill ☐ ~~UST~~ AST Cleanup ☒

Spill/UST Location U.S. NAVAL SURFACE WARFARE CENTER

CODE 095, BUILDING 3260, CRANE, IN 47522 County MARTIN

Material Spilled/Leaked DIESEL CONTAMINATED SOIL

Spill/UST Date Time Volume (lbs)

Owner/Owner's Representative (please check) Owner ☒ Owner's Rep. ☐

Owner/Owner's Rep. U.S. NAVAL SURFACE WARFARE CENTER

Mailing Address CODE 95, BUILDING, 3260

CRANE, IN 47522 Phone 812 854-3114

Contact TOM BRANT/Christine Freeman Title Environmental Protection Specialist

I hereby certify that the information concerning the circumstances of this spill/UST Cleanup are true and accurate to the best of my knowledge.

Signature Christine D. Freeman Date 2/7/96

Clean up Contractor

Company Name U.S. TECH GROUP, INC.

Mailing Address 5354 O/O BOONEVILLE HIGHWAY

EVANSVILLE, IN 47715

Contractor Contact RAMADAN ABDELSALAM Phone 812 476 2845

Transporter (to landfill) TRI AX, INC / ENVIROSOLVE Phone 317 761 7867

Disposal Site Information

Site Name SOUTHSIDE LANDFILL OPP No. 49-1/N243

Disposal Volume - Quantity 19.34 TONS 38,680 lbs. Type of Containers dump truck

Signature [illegible] Date 2/7/96

This disposal notification form must accompany each load of spill/UST cleanup debris sent for disposal and shall be signed and dated by the owner/owner's representative and the landfill representative.
Indiana Department of Environmental Management 317/232-4473

uck # 357

12667

Disposal Notification
Spill/Underground Storage Tank Debris

Spill/UST Information (please check) Spill ☐ ~~UST~~ AST Cleanup ☒

Spill/UST Location U.S. NAVAL SURFACE WARFARE CENTER	
CODE 095, BUILDING 3260, CRANE, IN 47522	County MARTIN
Material Spilled/Leaked DIESEL CONTAMINATED SOIL	
Spill/UST Date	Time Volume ~~(lbs) 40200~~ CDF

Owner/Owner's Representative (please check) Owner ☒ Owner's Rep. ☐

Owner/Owner's Rep. U.S. NAVAL SURFACE WARFARE CENTER	
Mailing Address CODE 95, BUILDING, 3260	
CRANE, IN 47522	Phone 812 854 3114
Contact TOM BRENT/Christine Freeman	Title Environmental Protection Specialist

I hereby certify that the information concerning the circumstances of this spill/UST Cleanup are true and accurate to the best of my knowledge.

Signature Christine D. Freeman Date 2/7/96

Clean up Contractor

Company Name U.S. TECH GROUP, INC.	
Mailing Address 5354 OLD BOONEVILLE HIGHWAY	
EVANSVILLE, IN 47715	
Contractor Contact BRANDON ABELSMITH	Phone 812 476 2045
Transporter (to landfill) TRI AX, INC. / ENVIROSOLVE	Phone 317 761 7864

Disposal Site Information

Site Name SOUTHSIDE LANDFILL	OPP No. 49-1 / N243
Disposal Volume - Quantity 40,200 lbs. 20.11 TONS	Type of Containers DT
Signature	Date: 2-7-96

This disposal notification form must accompany each load of spill/UST cleanup debris sent for disposal and shall be signed and dated by the owner/owner's representative and the landfill representative.

Indiana Department of Environmental Management 317/232-1473

8/92

Truck # 328

12677

Disposal Notification

Spill/Underground Storage Tank Debris

Spill/UST Information (please check) Spill ☐ ~~UST~~ AST Cleanup ☒

Spill/UST Location U.S. NAVAL SURFACE WARFARE CENTER	
CODE 095, BUILDING 3260, CRANE, IN 47522	County MARTIN
Material Spilled/Leaked DIESEL CONTAMINATED SOIL	
Spill/UST Date	Time / Volume (lbs)

Owner/Owner's Representative (please check) Owner ☒ Owner's Rep. ☐

Owner/Owner's Rep. U.S. NAVAL SURFACE WARFARE CENTER	
Mailing Address CODE 95, BUILDING, 3260	
CRANE, IN 47522	Phone 812 854-3114
Contact TOM BRENT/Christine Freeman	Title Environmental Protection Specialist

I hereby certify that the information concerning the circumstances of this spill/UST Cleanup are true and accurate to the best of my knowledge.

Signature Christine D. Freeman Date 2/7/96

Clean up Contractor

Company Name U.S. TECH GROUP, INC.	
Mailing Address 5354 OLD BOONEVILLE HIGHWAY	
EVANSVILLE, IN 47715	
Contractor Contact RAMADAN ABDELSALAM	Phone 812-476 2845
Transporter (to landfill) TRI AX, INC. / ENVIROSOLVE	Phone 317 761 7867

Disposal Site Information

Site Name SOUTHSIDE LANDFILL	OPP No. 49-1 / N243
Disposal Volume - Quantity 39080 lbs. 1934 TONS	Type of Containers DT
Signature	Date 2-7-96

This disposal notification form must accompany each load of spill/UST cleanup debris sent for disposal and shall be signed and dated by the owner/owner's representative and the landfill representative.

Indiana Department of Environmental Management 317/232-4475

8/

02/21/97 15:28 317 247 7034 SO.SIDE LANDFILL 007

Truck # 330

12701

Disposal Notification
Spill/Underground Storage Tank Debris

Spill/UST Information (please check) Spill ☐ ~~UST~~ AST Cleanup ☒

Spill/UST Location U.S. NAVAL SURFACE WARFARE CENTER	
CODE 095, BUILDING 3260, CRANE, IN 47522	County MARTIN
Material Spilled/Leaked DIESEL CONTAMINATED SOIL	
Spill/UST Date	Time / Volume (lbs)

Owner/Owner's Representative (please check) Owner ☒ Owner's Rep. ☐

Owner/Owner's Rep. U.S. NAVAL SURFACE WARFARE CENTER	
Mailing Address CODE 95, BUILDING, 3260	
CRANE, IN 47522	Phone 812 854-3114
Contact TOM BRENT/Christine Freeman	Title Environmental Protection Specialist

I hereby certify that the information concerning the circumstances of this spill/UST Cleanup are true and accurate to the best of my knowledge.

Signature Christine D. Freeman Date 2/7/96

Clean up Contractor

Company Name U.S. TECH GROUP, INC.	
Mailing Address 5354 OLD BOONEVILLE HIGHWAY	
EVANSVILLE, IN 47715	
Contractor Contact RAMADAN ABDELSALAM	Phone 812 476 2845
Transporter (to landfill) TEI AX, INC. / ENVIROSOLVE	Phone 317 761 7867

Disposal Site Information

Site Name SOUTHSIDE LANDFILL	OPP No. 49-1 / N243
Disposal Volume - Quantity 23,240 lbs. 11.61 TONS	Type of Containers DT
Signature	Date: 2-7-96

This disposal notification form must accompany each load of spill/UST cleanup debris sent for disposal and shall be signed and dated by the owner/owner's representative and the landfill representative.

Indiana Department of Environmental Management 317/232-4473

8/97

Truck # 3600

12702

Disposal Notification
Spill/Underground Storage Tank Debris

Spill/UST Information (please check) Spill ☐ ~~UST~~ AST Cleanup ☒

Spill/UST Location U.S. NAVAL SURFACE WARFARE CENTER	
CODE 095, BUILDING 3260, CRANE, IN 47522	County MARTIN
Material Spilled/Leaked DIESEL CONTAMINATED SOIL	
Spill/UST Date	Time / Volume (lbs)

Owner/Owner's Representative (please check) Owner ☒ Owner's Rep. ☐

Owner/Owner's Rep. U.S. NAVAL SURFACE WARFARE CENTER	
Mailing Address CODE 95, BUILDING 3260	
CRANE, IN 47522	Phone 812 854-3114
Contact TOM BRENT/Christine Freeman	Title Environmental Protection Specialist

I hereby certify that the information concerning the circumstances of this spill/UST Cleanup are true and accurate to the best of my knowledge.

Signature Christine D. Freeman Date 2/7/96

Clean up Contractor

Company Name U.S. TECH GROUP, INC.	
Mailing Address 5354 OLD BOONEVILLE HIGHWAY	
EVANSVILLE, IN 47715	
Contractor Contact RAMADAN ABDELSALAM	Phone 812 476 2845
Transporter (to landfill) TRI AX, INC. / ENVIROSOLVE	Phone 317 761 7867

Disposal Site Information

Site Name SOUTHSIDE LANDFILL	OPP No. 49-1 / N243
Disposal Volume - Quantity ~~20.30 TONS~~ 40560 lbs.	Type of Containers DT
Signature	Date: 2-7-96

This disposal notification form must accompany each load of spill/UST cleanup debris sent for disposal and shall be signed and dated by the owner/owner's representative and the landfill representative.

Indiana Department of Environmental Management 317/232-4473

8/

EXCEL TSD, INC.

552 Rivergate Road
Memphis, TN 38109
901-774-8146
TND980847024

MATERIAL PROFILE FORM

№ 07968

FOR EXCEL OFFICE USE ONLY:
MAT. CODE NO. _____
CSR NO. _____

COMPANY: NAVAL SURFACE WARFARE CENTER EPA ID NO. IN5170023193
ADDRESS: CODE 095 BLDG. 3260 STATE ID NO. _____
CITY: CRANE STATE: IN ZIP: 47421 PHONE: (812) 854-6160/3114
TECHNICAL CONTACT: THOMAS J. BRENT FAX: (812) 854-4177
MANIFEST RECIPIENT: THOMAS J. BRENT
MATERIAL NAME: NON-HAZARDOUS, NON-REGULATED LIQUID (DIESEL)
GENERATING PROCESS: ABOVE-GROUND TANK REMOVAL

BILLING INFORMATION (IF DIFFERENT THAN ABOVE)

COMPANY: US TECH GROUP
ADDRESS: 5354 OLD BOONVILLE HIGHWAY
CITY: EVANSVILLE STATE: IN ZIP: 47715
INVOICE CONTACT: RAMADAN ABDELSALAM
TELEPHONE NUMBER: 812-476-2845 FAX NUMBER: 812-476-2887

HAZARDOUS CHARACTERIZATION

USEPA HAZARDOUS WASTE? X YES ~~X~~ NO 3/18 7/22/96
WASTE I.D. NO.(S) D004 _____ _____ _____
REACTIVITY? ____ YES X NO
IF YES, EXPLAIN: _____
PCB'S? ____ YES X NO
IF YES, CONCENTRATION: _____

MATERIAL COMPOSITION

COMPONENT	%	RANGE
Liquid	95	
Sludge	5	
TOTAL	100%	

SHIPPING INFORMATION

DOT HAZARDOUS MATERIAL? X YES ____ NO
PROPER SHIPPING NAME: HAZARDOUS LIQUID, N.O.S.
HAZARD CLASS: 9
UN/NA NUMBER: NA 3082 RQ: X YES ____ NO
EMERGENCY RESPONSE GUIDE NUMBER: 55
24-HR EMERGENCY PHONE: (800) 424-9300
24-HR. EMERGENCY CONTACT: CHEMTREC
CONTAINER ____ (ENTER NO.)
(1. DRUMS) / 2. TANKERS 3. TOTES
GALLONS 55 LBS. _____ PER MONTH
PICKUP FREQUENCY 1 TIMES ~~PER ____ MO. / ____ YR.~~
ADDITIONAL COMMENTS: _____

MATERIAL CHARACTERIZATION

PHYSICAL STATE : X LIQUID ____ SEMI SOLID ____ SOLID
LAYERING: X SINGLE ____ BI ____ MULTI
ODOR : ____ NONE ____ MILD X STRONG
LBS/GAL. _____ BTU/LB: _____
FLASH POINT (°F): _____ pH: _____

CONFIDENTIALITY: ALL INFORMATION SUBMITTED WILL BE KEPT CONFIDENTIAL WITHIN THE LIMITS OF EXISTING ENVIRONMENTAL REGULATIONS:

MPF 7/92

Excel TSD, Inc. Material Profile Form

552 Rivergate Road, Memphis, TN 38109
EPA ID No. TND 980847024
Phone (901) 774-8146 Fax (901) 775-5181

Company: US Naval Surface Warfare Center
Address: Code 095, Bldg. 3260
City: Crane State: IN Zip Code: 47522

Gen/Str No: 1610-00~~1~~ 2
EPA ID No: IN5170023498
State ID No:

Contact Name: Thomas J. Brent
Manifest Recipient: Bill Kemp

Phone: (812) 854-3114
Fax: (812) 854-4177

Material Name: Contaminated Sump Water
Generating Process: Sump Water Collection

Shipping Information

Proper Shipping Name: RQ, Hazardous Waste Liquid
H-C: 9
UN/NA: NA3082
PG: III
DOT Haz Material: ☒
ER Guide No: 31
24 Hr Emer Contact: ChemTrec
24 Hr Emer No: (800) 424-9300

Hazardous Characterization

US EPA Haz Material: ☒
RCRA ID No: D040
State Waste ID No:
Reactivity: ☐ Contain PCBs: ☐

Container Information

Qty per Shipment: 35 Drums DOT Cont Type: 55g
P/U Frequency: One Time

Material Composition

%/Range Component1: %95 Water
%/Range Component2: %5 Residual
%/Range Component3:
%/Range Component4:
%/Range Component5:
%/Range Component6:
%/Range Component7:
%/Range Component8:
%/Range Component9:
%/Range Component10:
%/Range Component11:
%/Range Component12:

Billing Information

Company: US Tech Group, Inc.
Address: 5354 Old Boonville Hwy
City: Evansville
State: IN ZipCode: 47522
Contact: Ramadan Abdelsalam
Phone: (812) 476-2845 Fax: (812) 476-2887

Material Characterization

Physical State/Layering/Odor: Liquid/Single/Mild
LBS/GA: BTU/Lb: pH:
Flash Point: > 140 % Halogens:
% Solids: % Water:

For Excel Office Use Only

Sales Rep: B Osbourne Profile Expires: 2/27/97 Treatment Code: T50 FI4

NEED this for the Drum of Sludge

CAN be FAXED HOWEVER ORIGINAL MONDAY MORNING

№ 07968

TOXICITY CHARACTERISTICS OF HAZARDOUS WASTE: Indicate if this waste contains any of the following characteristics based on criteria mandated by 40 CFR 261.21, 261.22, 261.23 and 261.24. All blanks must be filled in if it exceeds the regulatory level.

(Check All That Apply)		Regulatory Threshold Level	Analytical Data	Generator's Knowledge
____ D001	Characteristics Of Ignitability	<140°F		
____ D002	Characteristics of Corrosivity	≤2 or ≥12.5		
____ D003	Characteristics of Reactivity	*		

* As defined by 40 CFR 261.21

*Check if exceeds regulatory level	Constituent	Regulatory Threshold Level, ppm	Analytical Data, ppm	Generator's Knowledge
X D004	Arsenic	5.0	38 ppm	
____ D005	Barium	100.0		
____ D006	Cadmium	1.0		
____ D007	Chromium	5.0		
____ D008	Lead	5.0		
____ D009	Mercury	0.2		
____ D010	Selenium	1.0		
____ D011	Silver	5.0		
____ D012	Endrin	0.02		
____ D013	Lindane	0.4		
____ D014	Methoxychlor	10.0		
____ D015	Toxaphene	0.5		
____ D016	2,4-D (2,4 Dichlorphenoxyacetic acid.)	10.0		
____ D017	2,4,5-TP (Silvex)	1.0		
____ D018	Benzene	0.5		
____ D019	Carbon Tetrachloride	0.5		
____ D020	Chlordane	0.03		
____ D021	Chlorobenzene	100.0		
____ D022	Chloroform	6.0		
____ D023	o-Cresol	200.0		
____ D024	m-Cresol	200.0		

*Check if exceeds regulatory level	Constituent	Regulatory Threshold Level, ppm	Analytical Data, ppm	Generator's Knowledge
____ D025	p-Cresol	200.0		
____ D026	Cresol	200.0		
____ D027	1,4-Dichlorobenzene	7.5		
____ D028	1,2-Dichloroethane	0.5		
____ D029	1,1-Dichloroethylene	0.7		
____ D030	2,4-Dinitrotoluene	0.13		
____ D031	Heptachlor and its epoxide	0.008		
____ D032	Hexachlorobenzene	0.13		
____ D033	Hexachlorobutadiene	0.5		
____ D034	Hexachloroethane	3.0		
____ D035	Methyl ethyl ketone	200.0		
____ D036	Nitrobenzene	2.0		
____ D037	Pentachlorophenol	100.0		
____ D038	Pyridine	5.0		
____ D039	Tetrachloroethylene	0.7		
____ D040	Trichloroethylene	0.5		
____ D041	2,4,5-Trichlorophenol	400.0		
____ D042	2,4,6-Trichlorophenol	2.0		
____ D043	Vinyl Chloride	0.2		

*As defined by the TCLP (Method 1311)

ATTACH TCLP ANALYSIS AND/OR MSDS

"LISTED" Hazardous Wastes: Indicate if this waste also contains any listed hazardous wastes coded in 40 CFR 261.31, 261.32, and 261.33 by including the appropriate EPA hazardous waste code(s).

AUTHORIZATION TO CORRECT MPF. I authorize EXCEL TSD, INC. to act as my agent to make corrections to this MPF. Such corrections being consistent with the results of sample characterization and/or regulatory requirements of the EPA. I understand that a corrected copy will be sent to me. ☒ Yes ☐ No Initial: JJB

CERTIFICATION: I HEREBY CERTIFY THAT ALL INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS IS COMPLETE AND ACCURATE. ALL KNOWN OR SUSPECTED HAZARDS HAVE BEEN DISCLOSED.

Signature: Thomas J. Brent Date: 3/22/96 ~~3/21/96~~ JJB 3/22/96

Print Name: THOMAS J. BRENT Title: ENVIRO. PROT. SPEC.

Will need [illegible] monthly (2 copies)

Drum of Sludge

Land Disposal Restriction Notification

SWI

MPF # 1610-002

Manifest # INA-1089776 16/

Generator Name: US NAVAL SURFACE WARFARE CENTER

City/State: CRANE IN Generator EPA ID No. ~~INA-1609~~ IN5170023499

This form is submitted to Excel TSD, Inc. in accordance with the regulations published by EPA in 40 CFR 268, which govern the land disposal of certain untreated hazardous wastes. I have indicated how my waste must be managed to conform to the land disposal restrictions. "F" solvents and California List Wastes are shown on the following pages.

INSTRUCTIONS: Indicate the appropriate treatment standard(s) for the waste by checking the box beside all EPA waste codes that apply. For additional restricted codes of wastewaters not shown below, write in the waste codes; description, sub category, or constituent; and treatment standard. Determine which of the three treatment standard columns to complete by referring to the indicated tables in 40 CFR 268 Subpart D.

THIS IS A NON-WASTEWATER UNLESS THE BOX IS CHECKED INDICATING WASTEWATER ☐

X	EPA Waste Codes	Waste Description, Treatment Sub Category or Constituent	Treatment Standards: Concentration Based Non-wastewater 268.40	Treatment Standards: Technology Based Technology Code 268.42
	D001	High TOC Ignitable liquids >10% organic carbon		FSUBS, RORGS, INCIN
X	D004	Arsenic	5.0	
	D005	Barium	100.0	
	D006	Cadmium	1.0	
	D007	Chromium	5.0	
	D008	Lead	5.0	
	D010	Selenium	5.7	
	D011	Silver	5.0	

Non-RCRA to dispose

I am the generator of an untreated waste identified either above or on the front page of this form which must be treated to the appropriate treatment standard set forth in 40 CFR 268. This information is based upon knowledge of the waste stream or generating process.

Signature: _____ Date: / /

(F001-F005 Spent Solvent Wastes Treatment Standards

Instructions: Indicate all "F" solvent constituents present in the waste by checking the appropriate box in the Wastewaters or Non-Wastewaters column. At least one constituent should be checked for each waste code that appears on the manifest,

Waste Codes: _____

EPA Waste Code	Constituents of Concern	X	Wastewaters (mg/l)	X	Non-Wastewaters Total Composition (mg/kg)
F001-Spent halogenated solvents used in degreasing	Carbon Tetrachloride		0.057		5.6
	Methylene Chloride		0.089		33.0
	Tetrachloroethylene		0.056		5.6
	1,1,1-Trichloroethane		0.054		5.6
	Trichoroethylene		0.054		5.6
	1,1,2-Trichloro-1,2,2-Triflouroethane		0.057		28
	Trichloroflouromethane		0.02		33
F002-Spent halogenated solvents	Chlorobenzene		0.057		5.7
	1,2-Dichlorobenzene		0.088		6.2
	Methylene Chloride		0.089		33
	Methylene Chloride (Pharmaceutical)		0.44		N/A
	Tetrachloroethylene		0.056		5.6
	1,1,1-Trichloroethane		0.054		5.6
	1,1,2-Trichloroethane		0.03		7.6
	Trichoroethylene		0.054		5.6
	1,1,2-Trichloro-1,2,2-Triflouroethane		0.057		28
	Trichloroflouromethane		0.02		33
F003-Spent non-halogenated	Acetone		0.28		160
	n-Butyl Alcohol		5.6		2.6
	Cyclohexanone		0.36		.75*
	Ethyl Acetate		0.34		33
	Ethyl Benzene		0.057		6
	Ethyl Ether		0.12		160
	Methanol		5.6		.75*
	Methyl Isobutyl Ketone		0.14		33
	Xylene (Total)		0.32		28
F004-Spent non-halogenated solvents	m-p-Cresol		0.77		3.2
	o-Cresol		0.11		5.6
	Nitrobenzene		0.068		14
F005-Spent non-halogenated	Benzene		0.070		3.7
	Carbon Disulfide		0.014		4.8*
	2-Ethoxyethanol		**		**
	Isobutanol		5.6		170
	Methyl Ethyl Ketone		0.28		36
	2-Nitropropane		**		**
	Pyridine		0.014		16
	Toluene		0.08		28

*Standards based on TCLP, not total composition **Technology Standard

Instructions: Check the appropriate boxes to indicate all applicable categories and corresponding treatment standards.

☐	PCB's > 50ppm	Incineration
☐	Nickel > 134 mg/l (Liquid Waste)	Removal of compounds and/or solidification to pass PFT
☐	Thallium > 130 mg/l (Liquid Waste)	Removal of compounds and/or solidification to pass PFT
☐	Liquid or Solid hazardous waste containing halogenated organic compounds (HOC's) listed in 40 CFR 268.32 Appendix III in total concentration > 1,000 mg/kg or 1,000 mg/l	Incineration

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

CFWT

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch typewriter.) Form approved. OMB No. 2050-0039. Expires 9-30-95

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: IN5 7 8 0 2 3 4 9 8
Manifest Document No.: 1.6.0.1.9
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but items D, F, H, I and K are required by State law.

3. Generator's Name and Mailing Address
US NAVAL SURFACE WARFARE CENTER
CODE 95, BLDG. 3260
CRANE IN 47522
4. Generator's Phone (812 854-3114

A. State Manifest Document Number: INA 1161812
B. State Generator's ID: N/A
C. State Transporter's ID:
D. Transporter's Phone: (219)423-1655
E. State Transporter's ID:
F. Transporter's Phone:
G. State Facility's ID:
H. Facility's Phone: (219)447-5585

5. Transporter 1 Company Name: Chemical Waste Management, INC
6. US EPA ID Number: I.L.D.0.9.9.2.0.6.5.1
7. Transporter 2 Company Name:
8. US EPA ID Number:
9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT of INDIANA L.L.C.
4636 ADAMS CENTER ROAD
FORT WAYNE IN 46806
10. US EPA ID Number: IND 0 7 8 9 1 1 1 4 6

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a RQ, HAZARDOUS WASTE, SOLID, n.o.s. 9, NA3077, PG III, (D008)	0 0 1	D	27.1.0.0	P	D008
b					
c					
d					

J. Additional Descriptions for Materials Listed Above
a. BV1112 ERG # 31
Net. 29,100

K. Handling Codes for Wastes Listed Above
D-BP LANDFILL
NET= 29480

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Christine D Freeman
Signature: Christine D Freeman
Date: Month 0.4 Day 0.4 Year 9.6

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Chris Reichert
Signature: Chris Reichert
Date: Month Day Year

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

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name: Robert F. Cisz
Signature: Robert F. Cisz
Date: Month 0.4 Day 0.8 Year 9.6

GENERATOR

In case of a spill call the Indiana Office of Environmental Response at 317/241-4336 (day or night) and the National Response Center at 800/424-8802 or 202/426-2675.

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

INA 1161812

MORRISON KNUDSEN CORPORATION
Engineering Construction & Environmental Group
NAVFAC SouthDiv C4324
300 Highway 361, CTR-12
P.O. Box 310
Crane, Indiana 47522

RECEIVED
APR 12 1996
MK-CRANE

SWMU 16/16

NSWC - CRANE			
4324-0000			
PROJECT MEMBER	ACT	INFO	INIT
PROJECT MANAGER	✓		
PROJECT ENGINEER			
GNL SUPT			
SAFETY AND HEALTH			
QA/QC SUPERVISOR		X	Done
PROJECT CONTROLS			
FIELD ENGINEERING			
PMO-CHARLESTON			
USTECH		FAXED	Done
FILE: 11.04.15			
FILE: 13.050.050F			
FILE:			

Date: APRIL 12, 1996

Please Deliver the Following Pages to:

Name: RAMADAN Abdelsalam

Company: US TECH

Telephone Number: 812-476-2845

Fax Number: 812-476-2887

From:

Name: BILL KEMP / STEVE DOWNEY

Of: **MORRISON KNUDSEN CORPORATION**

Telephone Number: (812) 854-6941

Fax Number: (812) 854-6944

Total Number of Pages 4/6 **(Including this cover sheet)**

If you do not receive all of the pages, please call Jenny at (812) 854-6941 A.S.A.P.

Message:

THE PAPERWORK & DOCUMENTATION FOR THE 35 DRUMS OF TCE CONTAMINATED SUMP WATER IS CORRECT AND ACCEPTABLE

HOWEVER

THE ONE DRUM (FO SLUDGE) WILL NEED THE FOLLOWING ORIGINAL FORMS PRIOR TO OR AT THE TIME OF SHIPMENT.

- LAND DISPOSAL RESTRICTION NOTIFICATION
- EXCEL TSD. INC. MATERIAL PROFILE FORM

THE FORMS ATTACHED ARE EXAMPLES - THESE ARE REQUIRED PRIOR TO TRANSPORT OF THE (1) ONE DRUM.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

WO 71271
TRK 4218
EM 119744

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch typewriter.) Form approved. OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. I N 5 1 7 0 0 2 3 4 9 8 — Manifest Document No. 9 6 0 2 0
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law, but items D, F, H, I and K are required by State law.

A. State Manifest Document Number: INA 1089776

B. State Generator's ID

C. State Transporter's ID

D. Transporter's Phone: 800-234-8888

E. State Transporter's ID

F. Transporter's Phone

G. State Facility's ID

H. Facility's Phone: 901-774-8146

GENERATOR

3. Generator's Name and Mailing Address
US Naval Surface Warfare Center
Code 095, Bldg. 3260, Crane, IN 47522

4. Generator's Phone (812) 854-3114 Attn: ~~Bill Kemp~~

5. Transporter 1 Company Name: Tri-State Motor Transit Co.
6. US EPA ID Number: M O D 0 9 5 0 3 8 9 9 8

7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
Excel TSD, Inc.
552 Rivergate Road
Memphis, TN 38109
10. US EPA ID Number: T N D 9 8 0 8 4 7 0 2 4

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a RQ, Hazardous Waste Liquid, n.o.s., 9, NA3082, PG III (Contaminated Sump Water)	35	DM	1925	G	D040
b RQ, Hazardous Waste Liquid, N.O.S., (9, NA3082, PG III (Contaminated Fuel Oil)	1	DM	55	G	D004
c					
d					

J. Additional Descriptions for Materials Listed Above
11a. 1610-001 ER GUIDE #31
11b. 1610-002 ER GUIDE #31

K. Handling Codes for Wastes Listed Above
S01/T50

15. Special Handling Instructions and Additional Information
ROR #4174
24 HOUR EMERGENCY PHONE #800-424-9300 CHEMTREC

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Christine D. Freeman — Signature: Christine D. Freeman — Date: Month 04 Day 15 Year 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: [illegible] — Signature: [illegible] — Date: Month [illegible] Day [illegible] Year [illegible]

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

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.
Printed/Typed Name: Gilbert Fleury — Signature: Gilbert Fleury — Date: Month 04 Day 17 Year 96

INA 1089776

EPA Form 8700-22
Previous editions are obsolete
State Form 11865 (R2 / 1-94)

COPY 4. TSD MAIL TO GENERATOR

ase of a spill call the Indiana Office of Environmental Response at 317/232-8603 or 800/451-6027 (day or night) and the
onal Response Center at 800/424-8802 or 202/426-2675

Date 5/2/96

Certificate of Destruction

Whereas, Excel TSD, Inc. is organized under the laws of the State of Tennessee with its principal location in Memphis, Tennessee and

Whereas, Excel TSD, Inc. operates a facility which fuel blends, consolidates, and recycles various waste materials to prepare for shipment offsite under authority issued by the Tennessee Department of Health and Environment and holds permit #TND 980847024.

Now, therefore, Excel TSD, Inc. does hereby issue this certificate to: US Naval Surface Warfare Center
Code 095, Bldg. 3260
Crane, IN 47522

To evidence the total blending, consolidation, and/or recycling of: All of the Material on MDN #96020

Said blending, consolidation, and/or recycling has been completed in a manner consistent with acceptable state of the art engineering standards and in compliance with the rules and regulations set forth by the State of Tennessee and U.S. Environmental Protection Agency, on about the date stated above.

Excel TSD, Inc.
Facility Manager

©GOES 746

STATE OF ILLINOIS

P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

State Form LPC 62 8/81 IL532-0610

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

CTW

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.) **EPA Form 8700-22 (Rev. 6-89)** Form Approved. OMB No. 2050-0039. Expires 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. I N 5 1 7 0 0 2 3 4 9 8 | Manifest Document No. 96021

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address
NAVSURFWARCENDIV
CODE095B3260 300 HGWY 361
CRANE IN 47522

Location If Different
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS* 812 854-1225

A. Illinois Manifest Document Number IL 7204033 FEE PAID IF APP

B. Illinois Generator's ID 9 1 8 0 0 1 9 9 9 9

5. Transporter 1 Company Name: AREA DISPOSAL

6. US EPA ID Number: I L D 9 8 4 9 1 9 4 9 8

C. Illinois Transporter's ID 2 1 8 3

D. (217) 935-5652 Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. Illinois Transporter's ID

F. ( ) Transporter's Phone

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
#7 MOBILE AVE
SAUGET IL 62201

10. US EPA ID Number: I L D 0 9 8 6 4 2 4 2 4

G. Illinois Facility's ID 1 6 3 1 2 1 0 0 0 9

H. Facility's Phone (618) 271-2804

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE, SOLID, N.O.S., 9, NA3077, III, (LEAD, TRICHLOROETHYLENE), RQ (D008)	001	CM	29180 29,820	P	EPA HW Number XX D008 Authorization Number 09000
b.					EPA HW Number XX Authorization Number
c.					EPA HW Number XX Authorization Number
d.					EPA HW Number XX Authorization Number

J. Additional Description for Materials Listed Above
a. BU9669 D040

K. Handling Codes for Wastes Listed Above In Item #14

IEPA purposes #3 Converted to CY = 14.77

15. Special Handling Instructions and Additional Information
CHEMICAL EMERGENCY RESPONSE NUMBER (800)424-9300 MAIL MANIFEST ATTENTION

RQ 219296

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR,** if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: THOMAS J. BRENT | Signature: Thomas J. Brent | Date (Month Day Year): 050296

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Marvin R Reel | Signature: Marvin R Reel | Date (Month Day Year): 050296

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date (Month Day Year)

FACILITY

19. Discrepancy Indication Space

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

Printed/Typed Name: Diane Bolbach | Signature: Diane Bolbach | Date (Month D): 050[illegible]

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1 TSD MAIL TO GENERATOR

7-9867

STATE OF ILLINOIS

249373

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

State Form LPC 62 8/81 IL532-0610

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.) EPA Form 8700-22 (Rev. 6-89) Form Approved. OMB No. 2050-0039. Expires 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. I N 5 4 0 7 0 0 2 3 4 9 9 | Manifest Document No. 96022

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address
NAVSURFWARCENDIV
CODE09S83260 300 HGWY 361
CRANE IN 47522

Location If Different
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522

4. 24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS: 812 854-1225

A. Illinois Manifest Document Number IL 7204034 FEE PAID IF APPLICABLE

B. Illinois Generator's ID 9 1 8 0 0 1 9 9 9 9

5. Transporter 1 Company Name: AREA DISPOSAL

6. US EPA ID Number: I L D 9 8 4 9 1 9 4 9 8

C. Illinois Transporter's ID 2 1 8 3

D. (217) 935-5652 Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. Illinois Transporter's ID

F. ( ) Transporter's Phone

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
#7 MOBILE AVE
SAUGET IL 62201

10. US EPA ID Number: I L D 0 9 8 6 4 2 4 3 4

G. Illinois Facility's ID 1 6 3 1 2 1 0 0 0 9

H. Facility's Phone (618) 271-2804

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE, SOLID, N.O.S., 9, NA3077, III, (LEAD, TRICHLOROETHYLENE), RQ (D008)	001	CM	24860 28760	P	EPA HW Number XX D008; Authorization Number 99999
b.					EPA HW Number XX; Authorization Number
c.					EPA HW Number XX; Authorization Number
d.					EPA HW Number XX; Authorization Number

J. Additional Description for Materials Listed Above
a. BU9669 D040

80 Cubic yards For IEPA Reporting

K. Handling Codes for Wastes Listed Above In Item #14

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300

PO # 249373

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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GENERATOR

Printed/Typed Name: THOMAS J. BRENT | Signature: Thomas J. Brent | Date (Month Day Year): 050296

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Walter R Scranton | Signature: Walter R Scranton | Date (Month Day Year): 050296

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date (Month Day Year)

FACILITY

19. Discrepancy Indication Space

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

Printed/Typed Name: Diane Bolbach | Signature: Diane Bolbach | Date (Month Day Year): 050396

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1. TSD MAIL TO GENERATOR

7-9871

STATE OF ILLINOIS

P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

State Form LPC 62 8/81 IL532-0610

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.) **EPA Form 8700-22 (Rev. 6-89)** Form Approved. OMB No. 2050-0039. Expires 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. I N 5 1 7 0 0 2 3 4 9 8 | Manifest Document No. 96023

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address
NAVSURFWARCENDIV
CODE095B3260 300 HGWY 361
CRANE IN 47522

Location If Different
US NAVAL WEAPONS SUPPORT CTR
BLDG 25-16
CRANE IN 47522

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS* 812 854-1225

A. Illinois Manifest Document Number IL 7204035 FEE PA[redacted] IF APP[redacted]

B. Illinois Generator's ID 9 1 8 0 0 1 9 9 9 9

5. Transporter 1 Company Name: AREA DISPOSAL

6. US EPA ID Number: I L D 9 8 4 9 1 9 4 9 8

C. Illinois Transporter's ID 2 1 8 3

D. (217) 935-5652 Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. Illinois Transporter's ID

F. ( ) Transporter's Phone

9. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
#7 MOBILE AVE
SAUGET IL 62201

10. US EPA ID Number: I L D 0 9 8 6 4 2 4 2 4

G. Illinois Facility's ID 1 6 3 1 2 1 0 0 0 9

H. Facility's Phone (618) 271-2804

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE, SOLID, N.O.S., 9, NA3077, III, (LEAD, TRICHLOROETHYLENE), RQ (D008)	001	CM	19360 23600	P	EPA HW Number XX D008 / Authorization Number 99999
b.					EPA HW Number XX / Authorization Number
c.					EPA HW Number XX / Authorization Number
d.					EPA HW Number XX / Authorization Number

J. Additional Description for Materials Listed Above
a. BU9669 D040

20 cubic yards for IEPA Reporting

K. Handling Codes for Wastes Listed Above In Item #14
249086

15. Special Handling Instructions and Additional Information
CHEMTREC Emergency Response Number (800)424-9300 [redacted]

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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Printed/Typed Name: THOMAS J. BRENT — Signature: Thomas J. Brent — Date (Month Day Year): 050296

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Norman L Shaw — Signature: Norman L. Shaw — Date (Month Day Year): 050296

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Date (Month Day Year)

FACIL

19. Discrepancy Indication Space

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

Printed/Typed Name: Diane Bolbach — Signature: Diane Bolbach — Date (Month [redacted]): 050396

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1. TSD MAIL TO GENERATOR

7-9872

TRADE WASTE INCINERATION
A DIVISION OF CHEMICAL WASTE MANAGEMENT
Federal EPA ID: ILD098642424
State EPA ID: 1631210009
7 MOBILE AVENUE
SAUGET, IL 62201-1069
(618) 271-2804

US NAVAL WEAPONS SUPPORT CTR
ATTN: MANIFEST SECTION
IN5170023498
BLDG 25-16
CRANE IN 47522

CERTIFICATE OF DESTRUCTION

Chemical Waste Management, Inc. has received waste material from US NAVAL WEAPONS SUPPORT CTR on 05/03/96 as described on [State Manifest or Uniform] Hazardous Waste Manifest number(s) IL07204034.

Profile Number: BU9669
CWM Tracking ID: 7-9871
Process: ROTARY KILN INCINERATOR
Treatment Date: 05/10/96

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

SUSAN A. DIPAOLA

Certificate # 42732
02/13/97

TRADE WASTE INCINERATION
A DIVISION OF CHEMICAL WASTE MANAGEMENT
Federal EPA ID: ILD098642424
State EPA ID: 1631210009
7 MOBILE AVENUE
SAUGET, IL 62201-1069
(618) 271-2804

US NAVAL WEAPONS SUPPORT CTR
ATTN: MANIFEST SECTION
IN5170023498
BLDG 25-16
CRANE IN 47522

CERTIFICATE OF DESTRUCTION

Chemical Waste Management, Inc. has received waste material from US NAVAL WEAPONS SUPPORT CTR on 05/03/96 as described on [State Manifest or Uniform] Hazardous Waste Manifest number(s) IL07204035.

Profile Number: BU9669
CWM Tracking ID: 7-9872
Process: ROTARY KILN INCINERATOR
Treatment Date: 05/08/96

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

SUSAN A. DIPAOLA

Certificate # 42733
02/13/97

TRADE WASTE INCINERATION
A DIVISION OF CHEMICAL WASTE MANAGEMENT
Federal EPA ID: ILD098642424
State EPA ID: 1631210009
7 MOBILE AVENUE
SAUGET, IL 62201-1069
(618) 271-2804

US NAVAL WEAPONS SUPPORT CTR
ATTN: MANIFEST SECTION
IN5170023498
BLDG 25-16
CRANE IN 47522

CERTIFICATE OF DESTRUCTION

Chemical Waste Management, Inc. has received waste material from US NAVAL WEAPONS SUPPORT CTR on 05/03/96 as described on [State Manifest or Uniform] Hazardous Waste Manifest number(s) ILO7204033.

Profile Number: BO9669
CWM Tracking ID: 7-9867
Process: ROTARY KILN INCINERATOR
Treatment Date: 05/11/96

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

SUSAN A. DIPAOLA

Certificate # 42731
02/13/97

APPENDIX F

QA/QC DATA

APPENDIX F

QA/QC

SDG 0101C

COMPUCHEM
ENVIRONMENTAL
CORPORATION

21/FEB/96

Morrison Knudsen Corp.
Attn: Alan Fosdick
1500 West 3rd Street
Cleveland, OH 44113-1406

ACCOUNT #: 501019

CC#	SAMPLE-ID	RECEIPT DATE
782604	24-00-069	2/09/96
782609	24-00-070	2/09/96
782610	24-00-073	2/09/96
782617	24-00-071	2/09/96
782624	24-00-072	2/09/96
782671	16-16-074	2/09/96
782672	16-16-075	2/09/96
782673	16-16-076	2/09/96
782674	16-16-077	2/09/96
782675	16-16-078	2/09/96

TOTAL NUMBER OF SAMPLES = 10

1D

ORGANOCHLORINE PESTICIDES AND PCBs ANALYSIS DATA SHEET

SAMPLE NO.

PBLK66

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0101C

Matrix: (soil/water) SOIL Lab Sample ID: 784320

Sample wt/vol: 30.00 (g/ml) G Lab File ID:

% Moisture: decanted: (Y/N) Date Received:

Extraction: (SepF/Cont/Sonc) ~~SEPF~~ SONC 2/23/96 Date Extracted: 02/19/96

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 02/22/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
58-89-9	gamma-BHC (Lindane)	1.0	U
76-44-8	Heptachlor	1.0	U
309-00-2	Aldrin	1.0	U
959-98-8	Endosulfan I	0.092	JP
60-57-1	Dieldrin	1.5	U
33213-65-9	Endosulfan II	3.5	U
50-29-3	4,4'-DDT	3.5	U
72-43-5	Methoxychlor	3.5	U
319-84-6	alpha-BHC	1.0	U
319-85-7	beta-BHC	1.0	U
319-86-8	delta-BHC	1.0	U
1024-57-3	Heptachlor epoxide	1.0	U
72-55-9	4,4'-DDE	3.5	U
72-20-8	Endrin	2.5	U
72-54-8	4,4'-DDD	3.5	U
7421-93-4	Endrin aldehyde	1.0	U
1031-07-8	Endosulfan sulfate	2.0	U
11096-82-5	Aroclor-1260	20	U
12674-11-2	Aroclor-1016	20	U
11104-28-2	Aroclor-1221	20	U
11141-16-5	Aroclor-1232	20	U
53469-21-9	Aroclor-1242	20	U
12672-29-6	Aroclor-1248	20	U
11097-69-1	Aroclor-1254	20	U
8001-35-2	Toxaphene	20	U
57-74-9	Chlordane (Technical)	4.0	U

FORM I 8080

SOIL PESTICIDE LABORATORY CONTROL SAMPLE RECOV

Lab Name: COMPUCHEM,RTP

Lab Code: COMPU Case No.: 31923 SDG No.:0101C

Lab Sample ID: 784497 LCS Sample No.: BSPEST

COMPOUND	SPIKE ADDED (ug/kg)	LCS CONC. (ug/kg)	LCS % REC.
gamma-BHC (Lindane)	7.675	6.49	85
Heptachlor	7.675	6.49	85
Aldrin	7.675	6.66	87
Endosulfan I	7.675	5.92	77
Dieldrin	19.188	16.47	86
Endosulfan II	19.188	12.99	68
4,4'-DDT	19.188	18.70	97
Methoxychlor	19.188	20.87	109
alpha-BHC	7.675	7.41	97
beta-BHC	7.675	7.97	104
delta-BHC	7.675	7.26	95
Heptachlor Epoxide	7.675	6.4	83
4,4'-DDE	7.675	16.83	219 *
Endrin	19.188	18.61	97
4,4'-DDD	19.188	13.23	69
Endrin Aldehyde	19.188	17.51	91
Endosulfan Sulfate	19.188	19.52	102

* = VALUES OUTSIDE OF QC LIMITS

Lab Name: COMPUCHEM,RTP Contract:

Lab Code: COMPU Case No.: 31923 SDG No.:0101C

Lab Sample ID: 784321 LCS Sample No.:

COMPOUND	SPIKE ADDED (ug/kg)	LCS CONC. (ug/kg)	LCS % REC.	QC LIMITS REC.
Aroclor 1254	666.667	630	95	46 - 127

* = VALUES OUTSIDE OF QC LIMITS

3F

SOIL ORGANOCHLORINE PESTICIDE/PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0101C

Matrix Spike - Sample No.: 24-00-071

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC #	QC. LIMITS REC.
gamma-BHC (Lindane)	7.675	0.00	5.0	65	32-127
Heptachlor	7.675	0.00	5.3	69	34-111
Aldrin	7.675	0.00	5.7	74	42-122
Endosulfan I	7.675	0.13	2.6	32 *	45-153
Dieldrin	19.188	0.089	5.7	29 *	36-146
Endosulfan II	19.188	0.00	0.00	0 *	20-120
4,4'-DDT	19.188	0.27	5.9	29	25-160
Methoxychlor	19.188	0.00	17	89	40-130
alpha-BHC	7.675	0.00	5.9	77	37-134
beta-BHC	7.675	0.00	6.1	79	17-147
delta-BHC	7.675	0.081	5.5	71	19-140
Heptachlor epoxide	7.675	0.00	4.5	59	37-142
4,4'-DDE	7.675	0.19	4.5	56	30-145
Endrin	19.188	0.00	0.00	0 *	30-147
4,4'-DDD	19.188	0.18	0.00	-1 *	31-141
Endrin aldehyde	19.188	0.00	11	57	26-144
Endosulfan sulfate	19.188	0.00	5.5	29	26-144

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	7.675	7.0	91	33 *	20	32-127
Heptachlor	7.675	7.2	94	31 *	20	34-111
Aldrin	7.675	7.9	103	33 *	20	42-122
Endosulfan I	7.675	2.3	28 *	13	20	45-153
Dieldrin	19.188	11	57	65 *	20	36-146
Endosulfan II	19.188	0.00	0 *	999 *	20	20-120
4,4'-DDT	19.188	7.4	37	24 *	20	25-160
Methoxychlor	19.188	20	104	16	20	40-130
alpha-BHC	7.675	8.4	109	34 *	20	37-134
beta-BHC	7.675	8.5	111	34 *	20	17-147
delta-BHC	7.675	7.8	101	35 *	20	19-140
Heptachlor epoxide	7.675	5.2	68	14	20	37-142
4,4'-DDE	7.675	7.6	97	54 *	20	30-145
Endrin	19.188	0.00	0 *	999 *	20	30-147
4,4'-DDD	19.188	5.6	28 *	215 *	20	31-141
Endrin aldehyde	19.188	14	73	25 *	20	26-144
Endosulfan sulfate	19.188	21	109	116 *	20	26-144

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 14 out of 17 outside limits
Spike Recovery: 9 out of 34 outside limits

COMMENTS:

FORM III 8080-2

2F

SOIL ORGANOCHLORINE PESTICIDE AND PCB SURROGATE RECOVERY

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0101C

GC Column (1): RTX-1701 ID: 0.53 (mm) GC Column (2): DB-608 ID: 0.53 (mm

	SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	24-00-073	47	77	72	80			0
02	24-00-069	51	84	77	88			0
03	24-00-071MS	50	82	70	79			0
04	24-00-071MSD	62	100	90	100			0
05	24-00-070	41	68	66	75			0
06	24-00-071	53	86	80	89			0
07	24-00-072	51	90	79	89			0
08	16-16-078	49	92	80	91			0
09	16-16-074	210*	2600*	87	70			2
10	16-16-075	52	75	62	71			0
11	16-16-076	60	100	86	91			0
12	16-16-077	58	97	80	89			0
13	BSPEST	64	100	97	110			0
14	BSPCB	79	91	82	92			0
15	PBLK66	52	87	78	87			0
16								
17								
18								
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30								

		QC LIMITS
TCX	= Tetrachloro-m-xylene	(20-150)
DCB	= Decachlorobiphenyl	(20-150)

Column to be used to flag recovery values.
* Values outside of QC Limits
D Surrogate diluted out.

FORM II 8080-2

SDG 0082C

COMPUCHEM
ENVIRONMENTAL
CORPORATION

30/MAR/96

Morrison Knudsen Corp.
Attn: Alan Fosdick
1500 West 3rd Street
Cleveland, OH 44113-1406

ACCOUNT #: 501019

CC#	SAMPLE-ID	RECEIPT DATE
782545	16-16RB13	2/09/96
782560	16-16-070	2/09/96

TOTAL NUMBER OF SAMPLES = 2

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: CompuChem Env. Corp. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0082C

	EPA SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 (TPH) #	S7 #	S8 #	TOT OUT
01	SBLK88	70	71	88	88	44	101			0
02	LCS89	55	57	69	71	36	93			0
03	16-16-070	31	36	42	51	32	66			0
04	16-16-070MS	67	68	83	84	47	89			0
05	16-16-070MSD	55	59	71	74	43	84			0
06	16-16RB13	62	65	79	81	42	89			0
07										
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		QC LIMITS
S1 (2FP)	= 2-Fluorophenol	(21-100)
S2 (PHL)	= Phenol-d5	(10- 94)
S3 (NBZ)	= Nitrobenzene-d5	(35-114)
S4 (FBP)	= 2-Fluorobiphenyl	(43-116)
S5 (TBP)	= 2,4,6-Tribromophenol	(10-123)
S6 (TPH)	= Terphenyl-d14	(33-141)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

F-00008

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: CompuChem Env. Corp. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0082C

Matrix Spike - EPA Sample No.: 16-16-070

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Phenol	75.00	0.000	46.22	62	12- 89
2-Chlorophenol	75.00	0.000	45.06	60	27-123
1,4-Dichlorobenzene	50.00	0.000	33.70	67	36- 97
N-Nitroso-di-N-prop.(1)	50.00	0.000	36.66	73	41-116
1,2,4-Trichlorobenzene	50.00	0.000	42.10	84	39- 98
4-Chloro-3-methylphenol	75.00	0.000	57.81	77	23- 97
Acenaphthene	50.00	0.000	38.46	77	46-118
4-Nitrophenol	75.00	0.000	73.24	98*	10- 80
2,4-Dinitrotoluene	50.00	1.24	46.53	90	24- 96
Pentachlorophenol	75.00	0.000	48.54	65	9-103
Pyrene	50.00	1.08	37.24	72	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	75.00	40.75	54	14	42	12- 89
2-Chlorophenol	75.00	39.06	52	14	40	27-123
1,4-Dichlorobenzene	50.00	27.80	56	18	28	36- 97
N-Nitroso-di-N-prop.(1)	50.00	30.69	61	18	38	41-116
1,2,4-Trichlorobenzene	50.00	35.94	72	15	28	39- 98
4-Chloro-3-methylphenol	75.00	53.88	72	7	42	23- 97
Acenaphthene	50.00	34.74	69	11	31	46-118
4-Nitrophenol	75.00	67.58	90*	8	50	10- 80
2,4-Dinitrotoluene	50.00	42.80	83	8	38	24- 96
Pentachlorophenol	75.00	45.25	60	8	50	9-103
Pyrene	50.00	35.75	69	4	31	26-127

(1) N-Nitroso-di-n-propylamine
Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 2 out of 22 outside limits

COMMENTS:

3C

WATER SEMIVOLATILE LAB CONTROL SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS89

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0082C

Lab Sample ID: 782755 LCS Lot No.: 43955

Lab File ID: GH082755C60.D Date Extracted: 02/12/96

LCS Aliquot: 500 (uL) Date Analyzed: 02/15/96

Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0

injection Volume: 1.0 (uL) pH: ____

COMPOUND	AMOUNT ADDED (ug/L)	AMOUNT RECOVERED (ug/L)	%REC #	QC LIMITS
Phenol	75.00	41.25	55	12- 89
2-Chlorophenol	75.00	39.73	53	27-123
1,4-Dichlorobenzene	50.00	28.92	58	36- 97
N-Nitroso-di-N-propylamine	50.00	31.48	63	41-116
1,2,4-Trichlorobenzene	50.00	36.96	74	39- 98
4-Chloro-3-methylphenol	75.00	48.69	65	23- 97
Acenaphthene	50.00	33.18	66	46-118
4-Nitrophenol	75.00	40.93	54	10- 80
2,4-Dinitrotoluene	50.00	36.28	72	24- 96
Pentachlorophenol	75.00	29.32	39	9-103
Pyrene	50.00	46.13	92	26-127

Column to be used to flag LCS recovery with an asterisk.
* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 11 total.

COMMENTS: _____

FORM III

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK88

Lab Name: CompuChem Env. Corp. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0082C

Matrix: (soil/water) WATER Lab Sample ID: 782754

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH082754C60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/15/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-Nitrosodimethylamine	5	U
110-86-1	Pyridine	20	U
109-06-8	2-Picoline	45	U
10595-95-6	Nitrosomethylethylamine	15	U
66-27-3	Methyl Methanesulfonate	20	U
55-18-5	N-Nitrosodiethylamine	5	U
62-50-0	Ethyl Methanesulfonate	20	U
108-95-2	Phenol	15	U
62-53-3	Aniline	15	U
111-44-4	Bis(2-chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	15	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	20	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	20	U
39638-32-9	bis(2-Chloroisopropyl)ether	15	U
108-39-4	3-Methylphenol	35	U
106-44-5	4-Methylphenol	35	U
930-55-2	N-Nitrosopyrrolidine	15	U
621-64-7	N-Nitroso-di-N-propylamine	5	U
98-86-2	Acetophenone	20	U
59-89-2	N-Nitrosomorpholine	10	U
636-21-5	o-Toluidine hydrochloride	25	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
100-75-4	N-Nitrosopiperidine	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	35	U
126-68-1	o,o,o-Triethylphosphorothioa	110	U
111-91-1	Bis(2-chloroethoxy)methane	15	U
120-83-2	2,4-Dichlorophenol	15	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK88

Lab Name: CompuChem Env. Corp. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0082C

Matrix: (soil/water) WATER Lab Sample ID: 782754

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH082754C60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/15/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-65-0	2,6-Dichlorophenol	25	U
1888-71-7	Hexachloropropene	20	U
87-68-3	Hexachlorobutadiene	5	U
924-16-3	N-Nitroso-di-n-butylamine	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
94-59-7	Safrole	5	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	25	U
95-94-3	1,2,4,5-Tetrachlorobenzene	15	U
88-06-2	2,4,6-Trichlorophenol	25	U
95-95-4	2,4,5-Trichlorophenol	25	U
120-58-1	Isosafrole	10	U
91-58-7	2-Chloronaphthalene	15	U
88-74-4	2-Nitroaniline	20	U
130-15-4	1,4-Napthoquinone	35	U
131-11-3	Dimethylphthalate	10	U
99-65-0	1,3-Dinitrobenzene	15	U
606-20-2	2,6-Dinitrotoluene	15	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	30	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	75	U
100-02-7	4-Nitrophenol	15	U
608-93-5	Pentachlorobenzene	10	U
121-14-2	2,4-Dinitrotoluene	10	U
132-64-9	Dibenzofuran	10	U
91-59-8	2-Naphthylamine	20	U
58-90-2	2,3,4,6-Tetrachlorophenol	35	U
134-32-7	1-Naphthylamine	35	U
84-66-2	Diethylphthalate	15	U

F- 0012

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK88

Lab Name: CompuChem Env. Corp. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0082C

Matrix: (soil/water) WATER Lab Sample ID: 782754

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH082754C60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/15/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
7005-72-3	4-Chlorophenyl-phenylether	10	U
99-55-8	5-Nitro-o-toluidine	30	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	35	U
534-52-1	4,6-Dinitro-2-methylphenol	45	U
86-30-6	N-Nitrosodiphenylamine (1)	30	U
122-39-4	Diphenylamine	30	U
99-35-4	1,3,5-Trinitrobenzene	45	U
2303-16-4	Diallate (trans isomer)	20	U
62-44-2	Phenacetin	20	U
2303-16-4	Diallate (cis isomer)	20	U
101-55-3	4-Bromophenyl-phenylether	15	U
118-74-1	Hexachlorobenzene	15	U
92-67-1	4-Aminobiphenyl	10	U
87-86-5	Pentachlorophenol	55	U
23950-58-5	Pronamide	15	U
85-01-8	Phenanthrene	15	U
120-12-7	Anthracene	15	U
84-74-2	Di-n-butylphthalate	15	U
56-57-5	4-Nitroquinoline-1-oxide	75	U
91-80-5	Methapyrilene	30	U
465-73-6	Isodrin	15	U
206-44-0	Fluoranthene	20	U
129-00-0	Pyrene	10	U
140-57-8	Aramite	20	U
60-11-7	p-Dimethylaminoazobenzene	10	U
510-15-6	Chlorobenzilate	10	U
85-68-7	Butylbenzylphthalate	10	U
119-93-7	3,3'-Dimethylbenzidine	10	U
117-81-7	bis(2-ethylhexyl)Phthalate	25	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	15	U

(1) - Cannot be separated from Diphenylamine

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK88

Lab Name: CompuChem Env. Corp. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0082C

Matrix: (soil/water) WATER Lab Sample ID: 782754

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH082754C60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/15/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
117-84-0	Di-n-octylphthalate	20	U
57-97-6	7,12-Dimethylbenz(a)anthrace	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	20	U
193-39-5	Indeno(1,2,3-c,d)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	10	U
122-09-08	a,a-Dimethylphenethylamine	25	U
106-50-3	p-Phenylenediamine	80	U

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK88

Lab Name: CompuChem Env. Corp. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0082C

Matrix: (soil/water) WATER Lab Sample ID: 782754

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH082754C60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 02/15/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	3.95	18	J
2.	UNKNOWN (BC)	4.71	8	J
3.	CYCLOHEXENONE (BC)	5.47	4	J
4.	SURROGATE COMPOUND	6.09	47	J
5.	SURROGATE COMPOUND	6.67	38	J
6.				
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SDG 0084C

COMPUCHEM
ENVIRONMENTAL
CORPORATION

30/MAR/96

Morrison Knudsen Corp.
Attn: Alan Fosdick
1500 West 3rd Street
Cleveland, OH 44113-1406

ACCOUNT #: 501019

CC#	SAMPLE-ID	RECEIPT DATE
782542	16-16RB13	2/09/96
782559	16-16-070	2/09/96

TOTAL NUMBER OF SAMPLES = 2

F-00016

COMPUCHEM
ENVIRONMENTAL
CORPORATION

3306 Chapel Hill/Nelson Highway P.O. Box 149
Research Triangle Park, NC 27709-4998
(919) 406-1600

SDG Narrative
Case #31923
SDG# 0084C

Sample Identifications: 16-16RB13, 16-16-070

This narrative covers two (2) water samples received on February 9, 1996, and processed for pesticide/PCB organic compounds by SW-846 Method 8080. The samples were received intact, properly refrigerated, and with proper documentation.

Pesticides/PCB's

The samples were extracted and analyzed within holding times.

Surrogate recoveries for the method blank, blank spike (BS), matrix spike (MS), matrix spike duplicate (MSD), and samples met QC acceptance criteria, with the exception of slightly high recovery of tetrachloro-m-xylene (TCX) in the MS (16-16-070MS) on the DB-608 column. All other QC criteria (initial and continuing calibrations, retention time, resolution, and breakdown) were met.

No TCL (target compound list) analytes were detected in the samples, or the method blank, above the RDL's (Reportable Detection Limits). Compounds flagged with a "J" flag are analytes detected below the RDL's, and are estimated.

A MS and MSD were extracted with this SDG. Two of the twelve spike recoveries and six of six % RPD's fell outside QC acceptance limits. The failure of the MS/MSD for spike recoveries and RPD's is being attributed to the particular matrix of the sample and not to any deficiencies in the sample extraction or analysis of the samples associated with this sample delivery group (SDG). A BS was also extracted and analyzed with this SDG. The BS had acceptable spike recoveries.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and computer-readable data submitted on diskette has been authorized by the laboratory manager or his designee, as verified by the following signature.

Joe Bumgarner, Jr.
GC Method Development Chemist
November 29, 1995

NOTE: This report is paginated for reference and accountability.

2E

WATER ORGANOCHLORINE PESTICIDE AND PCB SURROGATE RECOVERY

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0084C

GC Column (1): DB-608 ID: 4.00 (mm) GC Column (2): RTX-1701 ID: 0.53 (mm)

	SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK72	120	120	97	96			0
02	BS	120	110	88	88			0
03	16-16RB13	110	120	110	110			0
04	16-16-070	120	130	94	92			0
05	16-16-070MSD	89	120	77	78			0
06	16-16-070MS	170*	130	93	92			1
07	PBLK72	120	110	93	91			0
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TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

QC LIMITS
(24-154)
(24-154)

Column to be used to flag recovery values.
* Values outside of QC Limits
D Surrogate diluted out.

page 1 of 1

FORM II 8080-1

3E

WATER ORGANOCHLORINE PEST/PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE REC[illegible]Y

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0084C

Matrix Spike - Sample No.: 16-16-070

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMIT REC.
gamma-BHC (Lindane)	0.200	0.00	0.11	55	32-12
Heptachlor	0.200	0.016	0.14	62	34-11
Aldrin	0.200	0.00	0.00	0 *	42-12
Dieldrin	0.500	0.00	0.44	88	36-14
4,4'-DDT	0.500	0.00	0.51	102	25-16
Endrin	0.500	0.0028	0.62	123	30-14
Aroclor-1254	1.000	0.00	0.00	0	30-15

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	0.200	0.073	37	39 *	20	32-12
Heptachlor	0.200	0.091	38	48 *	20	34-11
Aldrin	0.200	0.00	0 *	999 *	20	42-12
Dieldrin	0.500	0.28	56	44 *	20	36-14
4,4'-DDT	0.500	0.21	42	83 *	20	25-16
Endrin	0.500	0.36	71	54 *	20	30-14
Aroclor-1254	1.000	0.00	0	0	20	30-15

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 6 out of 6 outside limits
Spike Recovery: 2 out of 12 outside limits

COMMENTS:

FORM III 8080-1

F-00049

WATER PESTICIDE LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: COMPUCHEM,RTP

Lab Code: COMPU Case No.: 31923 SDG No.:0084C

Lab Sample ID: 782887 LCS Sample No.: BS

COMPOUND	SPIKE ADDED (ug/l)	LCS CONC. (ug/l)	LCS % REC.	QC LIMITS REC.
gamma-BHC (Lindane)	0.200	0.20	100	56 - 123
Heptachlor	0.200	0.19	95	40 - 131
Aldrin	0.200	0.19	95	40 - 120
Dieldrin	0.500	0.49	98	52 - 126
Endrin	0.500	0.55	110	56 - 121
4,4'-DDT	0.500	0.51	102	38 - 127

* = VALUES OUTSIDE OF QC LIMITS

F-00520

SDG 0086C

COMPUCHEM
ENVIRONMENTAL
CORPORATION

30/MAR/96

Morrison Knudsen Corp.
Attn: Alan Fosdick
1500 West 3rd Street
Cleveland, OH 44113-1406

ACCOUNT #: 501019

CC#	SAMPLE-ID	RECEIPT DATE
782548	16-16RB13	2/09/96
782561	16-16-070	2/09/96

TOTAL NUMBER OF SAMPLES = 2

F-00023

2E
WATER ORGANOPHOSPHORUS PESTICIDES SURROGATE RECOVERY

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0086C

GC Column (1): RTX-5 ID: 0.53 (mm) GC Column (2): ID: (mm)

	SAMPLE NO.	METH 1 %REC #	METH 2 %REC #	%REC #	%REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK24	95						0
02	16-16RB13	91						0
03	16-16-070MS	120						0
04	BS	99						0
05	16-16-070	98						0
06	16-16-070MSD	110						0
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

ADVISORY
QC LIMITS
(60-120)

METH = Methidathion

Column to be used to flag recovery values.
* Values outside of QC Limits
D Surrogate diluted out.

FORM II 8140-1

F-00024

3E

WATER ORGANOPHOSPHORUS PESTICIDES MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0086C

Matrix Spike - Sample No.: 16-16-070

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Disulfoton	25.000	0.00	31	124	50-135
Famphur	25.000	0.025	31	124	50-135
Methyl-Parathion	25.000	0.00	32	128	50-135
Ethyl-Parathion	25.000	0.00	33	132	50-135
Phorate	25.000	0.00	31	124	50-135
Dimethoate	25.000	0.00	29	116	50-135
Sulfotepp	25.000	0.030	32	128	50-135

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Disulfoton	25.000	30	120	3	20	50-135
Famphur	25.000	27	108	14	20	50-135
Methyl-Parathion	25.000	31	124	3	20	50-135
Ethyl-Parathion	25.000	33	132	0	20	50-135
Phorate	25.000	30	120	3	20	50-135
Dimethoate	25.000	27	108	7	20	50-135
Sulfotepp	25.000	31	124	3	20	50-135

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 7 outside limits
Spike Recovery: 0 out of 14 outside limits

COMMENTS:

WATER ORGANOPHOSPHOROUS PESTICIDE LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: COMPUCHEM,RTP

Lab Code: COMPU Case No.: 31923 SDG No.:0086C

Lab Sample ID: 782551 LCS Sample No.: BS

COMPOUND	SPIKE ADDED (ug/l)	LCS CONC. (ug/l)	LCS % REC.	QC LIMITS REC.
PHORATE	25.000	26.96	108	50 - 135
SULFOTEPP	25.000	27.36	109	50 - 135
DISULFOTON	25.000	27.16	109	50 - 135
DIMETHOATE	25.000	27.45	110	50 - 135
METHYL-PARATHION	25.000	29.15	117	50 - 135
ETHYL-PARATHION	25.000	24.49	98	50 - 135
FAMPHUR	25.000	24.49	98	50 - 135

* = VALUES OUTSIDE OF QC LIMITS

1D
ORGANOPHOSPHORUS PESTICIDES ANALYSIS DATA SHEET

SAMPLE NO.

PBLK24

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0086C

Matrix: (soil/water) WATER Lab Sample ID: 782919

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

% Moisture: decanted: (Y/N) Date Received:

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 02/13/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/15/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
298-02-2	Phorate	0.50	U
3689-24-5	Sulfotepp	0.061	J
298-04-4	Disulfoton	0.50	U
60-51-5	Dimethoate	0.50	U
298-00-0	Methyl-Parathion	0.093	J
56-38-2	Ethyl-Parathion	0.50	U
52-85-7	Famphur	0.50	U

SDG 0088C

COMPUCHEM
ENVIRONMENTAL
CORPORATION

30/MAR/96

Morrison Knudsen Corp.
Attn: Alan Fosdick
1500 West 3rd Street
Cleveland, OH 44113-1406

ACCOUNT #: 501019

CC#	SAMPLE-ID	RECEIPT DATE
782552	16-16RB13	2/09/96
782562	16-16-070	2/09/96

TOTAL NUMBER OF SAMPLES = 2

F-[illegible]28

COMPUCHEM
ENVIRONMENTAL
CORPORATION

3306 Chapel Hill/Nelson Highway P.O. Box 14998
Research Triangle Park, NC 27709-4998
(919) 406-1600

SDG Narrative
Case #31923
SDG# 0088C

Sample Identifications: 16-16RB13, 16-16-070

This narrative covers two (2) water samples received on February 9, 1996, and processed for herbicide organic compounds by SW-846 Method 8150. The samples were received intact, properly refrigerated, and with proper documentation.

Herbicides

The samples were extracted and analyzed within holding times.

Surrogate recoveries for the method blank, samples, matrix spike (MS) and matrix spike duplicate (MSD), and blank spike (BS) met QC acceptance criteria. All other QC criteria (initial and continuing calibrations, and retention time) were met.

No TCL (target compound list) analytes were detected in the samples, and the method blank, above the CRQL.

A MS/MSD was extracted with this extraction batch. The MS/MSD had met QC acceptance criteria. A BS was also extracted and analyzed with this batch and the BS also met QC acceptance criteria.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and computer-readable diskette has been authorized by the laboratory manager or his designee, as verified by the following signature.

Joe Bumgarner, Jr.
GC Method Development Chemist
February 15, 1996

NOTE: This report is paginated for reference and accountability.

2E
WATER HERBICIDE SURROGATE RECOVERY

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0088C

GC Column (1): RTX-1701 ID: 0.53 (mm) GC Column (2): RTX-35 ID: 0.53 (mm)

	SAMPLE NO.	DB 1 %REC #	DB 2 %REC #	%REC #	%REC #	OTHER (1)	OTHER (2)	TOT OUT
01	16-16RB13	69	72					0
02	16-16-070MS	98	76					0
03	BS	73	66					0
04	16-16-070MSD	120	66					0
05	16-16-070	93	66					0
06	HBLK39	49	47					0
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

DB = 2,4-DB

ADVISORY
QC LIMITS
(24-154)

Column to be used to flag recovery values.
* Values outside of QC Limits
D Surrogate diluted out.

FORM II HERB-1

F-06030

3E
WATER HERBICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0088C

Matrix Spike - Sample No.: 16-16-070

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
2,4-D	8.000	0.00	7.2	90	50-135
2,4,5-TP (Silvex)	2.000	0.14	1.8	90	50-135
2,4,5-T	2.000	0.057	2.2	107	50-135

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
2,4-D	8.000	7.0	88	2	20	50-135
2,4,5-TP (Silvex)	2.000	1.7	85	6	20	50-135
2,4,5-T	2.000	2.1	102	5	20	50-135

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 3 outside limits
Spike Recovery: 0 out of 6 outside limits

COMMENTS:

FORM III HERB-1

F-00031

WATER PESTICIDE LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: COMPUCHEM,RTP

Lab Code: COMPU Case No.: 31923 SDG No.:0088C

Lab Sample ID: 782554 LCS Sample No.: BS

COMPOUND	SPIKE ADDED (ug/l)	LCS CONC. (ug/l)	LCS % REC.	QC LIMITS REC.
2,4-D	8.000	6.605	83	50 - 135
2,4,5-TP (Silvex)	2.000	1.573	79	50 - 135
2,4,5-T	2.000	1.802	90	50 - 135

* = VALUES OUTSIDE OF QC LIMITS

1D
HERBICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

HBLK39

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0088C

Matrix: (soil/water) WATER Lab Sample ID: 782888

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

% Moisture: decanted: (Y/N) Date Received:

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 02/13/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/14/96

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
94-75-7	2,4-D	4.0	U
93-72-1	2,4,5-TP (Silvex)	0.0098	JP
93-76-5	2,4,5-T	1.0	U

FORM I HERB

F-06033

SDG 0039C

COMPUCHEM
ENVIRONMENTAL
CORPORATION

22/FEB/96

Morrison Knudsen Corp.
Attn: Alan Fosdick
1500 West 3rd Street
Cleveland, OH 44113-1406

ACCOUNT #: 501019

CC#	SAMPLE-ID	RECEIPT DATE
782644	2608D-006	2/09/96
782665	16-16-44A	2/09/96

TOTAL NUMBER OF SAMPLES = 2

F-00034

COMPUCHEM
ENVIRONMENTAL
CORPORATION

3306 Chapel Hill/Nelson Highway P.O. Box 14998
Research Triangle Park, NC 27709-4998
(919) 406-1600

INORGANIC CASE SUMMARY NARRATIVE
CASE # 31923 SDG # 39C
PROTOCOL: SW-846

The indicated Sample Delivery Group (SDG) consisting of two soil samples was received into the laboratory management system (LMS) on February 9, 1996 intact and in good condition with Chain of Custody (COC) Records in order, unless otherwise noted in any attachments or Quality Assurance Notices. The samples were leached in accordance with the TCLP leachate procedure (SW-846 method 1311) and analyzed for mercury using method 7470.

SAMPLE IDs:

The following customer IDs are associated with this SDG:

16-16-44A, 2608D-006

INSTRUMENTAL QUALITY CONTROL:

All calibration verification solutions (ICV & CCV), blanks (ICB, CCB) and interference check samples (ICSA & ICSAB) associated with this data were confirmed to be within EPA allowable limits.

SAMPLE PREPARATION QUALITY CONTROL:

The Laboratory Control Samples and Preparation Blanks were found to be within acceptable ranges. All field samples associated with this case were prepared and analyzed within the specified holding times.

MATRIX RELATED QUALITY CONTROL:

The sample matrix spike and matrix spike duplicate, 2608D-006S(782646)/2608D-006S(782645), were found to be within control limits for mercury.

CLP control limits of 75-125% of the analyte quantity added are applied to the mercury sample spike results unless original sample concentrations exceed the true values of these "spikes" by a factor of four or more; in this case affected analytes are not flagged even if recoveries fall outside percentage recovery control limits.

F-06035

2

The sample matrix duplicate, 2608D-006D(782648), was within control limits for all requested analytes.

Control limits for duplicate determinations are +/- 20% Relative Percent Difference (RPD) for concentrations greater than or equal to five times the CRDL in both the original and duplicate samples, and +/- the CRDL for concentrations less than five times the CRDL. The RPD is not calculated if both the original and duplicate values fall below the IDL.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data contained in the hardcopy data package has been authorized by the Laboratory Manager or his deaignee, as verified by the following signature.

Jeanne Alston
Final Technical Reviewer
February 18, 1996

Note: This report is paginated for reference and accountability.

U.S. EPA - CLP

3
BLANKS

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 39C__

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	N
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	NR
Nickel											CV
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide											NR

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

2608D-006S

Lab Name: COMPUCHEM_ENV._CORP. Contract: SW-846

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 39C

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury	75-125	1.0410		0.2000	U	1.00	104.1		CV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

2608D-006S

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 39C___

Matrix (soil/water): WATER_ Level (low/med): LOW___

% Solids for Sample: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury	75-125	1.0260		0.2000	U	1.00	102.6		CV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

FORM V (Part 1) - IN ILM0

F-00039 20

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

2608D-006D

Lab Name: COMPUCHEM_ENV._CORP. Contract: SW-846

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 39C

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								NR
Antimony								NR
Arsenic								NR
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury		0.2000	U	0.2000	U			CV
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Cyanide								NR

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846___

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 39C___

Solid LCS Source: _____

Aqueous LCS Source: IVT_____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury	3.0	2.94	98.1						
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

SDG 9508353

AMERICAN ENVIRONMENTAL NETWORK, INC.

9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

September 12, 1995

Client: MK Corp

Project: NSWC Crane 4324-009-007-30

Case: 9508353

Analysis: Metals

Client ID	AENI ID	Date Sampled	Date Received	Date Analyzed
NSWC-16/16-013	9508353-001	08/30/95	08/31/95	09/05-11/95
NSWC-16/16-014	9508353-002	08/30/95	08/31/95	09/05-11/95
NSWC-16/16-015	9508353-003	08/30/95	08/31/95	09/05-11/95
NSWC-16/16-016	9508353-004	08/30/95	08/31/95	09/05-11/95
NSWC-16/16-017	9508353-005	08/30/95	08/31/95	09/05-11/95
NSWC-16/16-018	9508353-006	08/30/95	08/31/95	09/05-11/95
NSWC-16/16-019	9508353-007	08/30/95	08/31/95	09/05-11/95
NSWC-16/16-020	9508353-008	08/30/95	08/31/95	09/05-11/95

Eight soil samples were received and analyzed for metals by SW846 methodology. Results are reported in units of mg/Kg dry weight.

Samples NSWC-16/16-017 and NSWC-16/16-018 were diluted 10X for the thallium analysis due to an interference.

The matrix spiked samples were outside control limits for Sb, Ba, Cd, Cr, Se and Tl and the data flagged accordingly. A post-spike was performed and reported for these analytes. The RPD for the duplicate analysis was outside control limits for Ba, Cu, Pb, Ni and Zn and the data flagged. All other QC data were within normal control limits.

F-00042

Report Released By _____

Christopher Baggett
Metals Laboratory Manager

U.S. EPA - CLP

3
BLANKS

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP___

Lab Code: _____ Case No.: 95083 SAS No.: _____ SDG No.: 508353

Preparation Blank Matrix (soil/water): SOIL_

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony	20.0	U	20.0	U	20.0	U	20.0	U	2.000	U	P
Arsenic	8.0	U	8.0	U	8.0	U	8.0	U	0.800	U	P
Barium	100.0	U	100.0	U	100.0	U	100.0	U	10.000	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	0.100	U	P
Cadmium	4.0	U	4.0	U	4.0	U	4.0	U	0.400	U	P
Calcium											NR
Chromium	10.0	U	10.0	U	10.0	U	10.0	U	1.000	U	P
Cobalt	11.0	U	11.0	U	11.0	U	11.0	U	1.100	U	P
Copper	25.0	U	25.0	U	25.0	U	25.0	U	2.500	U	P
Iron											NR
Lead	10.0	U	10.0	U	10.0	U	10.0	U	1.000	U	P
Magnesium											NR
Manganese											NR
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.100	U	AV
Nickel	15.0	U	15.0	U	15.0	U	15.0	U	1.500	U	P
Potassium											NR
Selenium	5.0	U	5.0	U	5.0	U	5.0	U	0.500	U	P
Silver	8.0	U	8.0	U	8.0	U	8.0	U	0.800	U	P
Sodium											NR
Thallium	10.0	U	10.0	U	10.0	U	10.0	U	1.000	U	P
Vanadium	16.0	U	16.0	U	16.0	U	16.0	U	1.600	U	P
Zinc	20.0	U	20.0	U	20.0	U	20.0	U	2.000	U	P
Cyanide											NR
Tin	200.0	U	200.0	U	200.0	U			20.000	U	P
Lithium	100.0	U	100.0	U	100.0	U			10.000	U	P

F-00044

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16-021M

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP___

Lab Code: _____ Case No.: 95083 SAS No.: _____ SDG No.: 508353

Matrix: __SOIL_____ Level (low/med): _LOW____

% Solids for Sample: _94.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony	75-125	7.6901		6.4751		10.09	12.0	N	NR P
Arsenic	75-125	10.0350		1.7287		10.09	82.3		P
Barium	75-125	415.8121		190.6359		201.78	111.6		P
Beryllium	75-125	4.8932		0.6208		5.04	84.8		P
Cadmium	75-125	7.1900		3.6320		5.04	70.6	N	P
Calcium									NR
Chromium	75-125	38.1498		12.1472		20.18	128.9	N	P
Cobalt	75-125	56.2338		7.3861		50.44	96.8		P
Copper		224.5909		8736.3565		25.22	-33750		P
Iron									
Lead		522.4554		856.9149		50.44	-663.1		P
Magnesium									NR
Manganese									NR
Mercury	75-125	0.7831		0.0847	U	0.76	103.0		AV
Nickel	75-125	63.4377		19.1473		50.44	87.8		P
Potassium									NR
Selenium	75-125	7.9078		0.5044	U	10.09	78.4		P
Silver	75-125	8.8384		0.8071	U	10.09	87.6		P
Sodium									NR
Thallium	75-125	6.3426		1.0089	U	10.09	62.9	N	P
Vanadium	75-125	60.2805		10.8485		50.44	98.0		P
Zinc		1136.2172		6914.1429		50.44	-11455		P
Cyanide									NR
Tin	75-125	87.8772		20.1776	U	100.89	87.1		P
Lithium	75-125	216.0365		10.0888	U	201.78	107.1		P

Comments:
CLIENT_ID: __NSWC-16/16-021
MATRIX_SPIKE_DUPLICATE

F-00045

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16-021S

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP

Lab Code: _____ Case No.: 95083 SAS No.: _____ SDG No.: 508353

Matrix: SOIL

Level (low/med): LOW

% Solids for Sample: 94.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony	75-125	10.5650		6.4751		9.90	41.3	N	NR
Arsenic	75-125	9.3721		1.7287		9.90	77.2		P
Barium	75-125	335.3986		190.6359		198.00	73.1	N	P
Beryllium	75-125	4.5386		0.6208		4.95	79.1		P
Cadmium	75-125	6.1225		3.6320		4.95	50.3	N	P
Calcium									NR
Chromium	75-125	33.1443		12.1472		19.80	106.0		P
Cobalt	75-125	50.8416		7.3861		49.50	87.8		P
Copper		230.2384		8736.3565		24.75	-34368		P
Iron									NR
Lead		442.4339		856.9149		49.50	-837.3		P
Magnesium									NR
Manganese									NR
Mercury	75-125	0.7642		0.0847	U	0.76	100.6		AV
Nickel	75-125	60.0553		19.1473		49.50	82.6		P
Potassium									NR
Selenium	75-125	7.2918		0.5044	U	9.90	73.7	N	P
Silver	75-125	8.2724		0.8071	U	9.90	83.6		P
Sodium									NR
Thallium	75-125	6.5626		1.0089	U	9.90	66.3	N	P
Vanadium	75-125	54.6986		10.8485		49.50	88.6		P
Zinc		1124.7726		6914.1429		49.50	-11695		P
Cyanide									NR
Tin	75-125	79.7811		20.1776	U	99.00	80.6		P
Lithium	75-125	206.6438		10.0888	U	198.00	104.4		P

Comments:

CLIENT_ID: NSWC-16/16-021

MATRIX_SPIKE

F-00046

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16-021P

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP___

Lab Code: _____ Case No.: 95083 SAS No.: _____ SDG No.: 508353

Matrix: ____SOIL_____ Level (low/med): LOW_____

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum									
Antimony		234.48		64.18		200.0	85.1		NR
Arsenic									P
Barium		5620.80		1889.58		4000.0	93.3		NR
Beryllium									P
Cadmium		125.75		36.00		100.0	89.7		NR
Calcium									P
Chromium		305.16		120.40		200.0	92.4		NR
Cobalt									P
Copper									NR
[illegible]on									NR
[illegible]ad									[illegible]
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver		17.20		5.00	U	20.0	86.0		P
Sodium									NR
Thallium									NR
Vanadium		10.00	U	10.00	U	20.0	0.0		P
Zinc									NR
Cyanide									NR
Tin									NR
Lithium									NR
									NR

Comments:

CLIENT_ID: __NSWC-16/16-021

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

16/16-020D

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP___

Lab Code: _____ Case No.: 95083 SAS No.: _____ SDG No.: 508353

Matrix (soil/water): SOIL_

Level (low/med): _LOW__

% Solids for Sample: _94.4

% Solids for Duplicate: __94.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								
Antimony	6.1	6.4751		4.7843				NR
Arsenic	1.0	1.7287		1.0339		30.0		P
Barium		190.6359		254.2476		50.3		P
Beryllium	0.5	0.6208		0.6821		28.6	*	P
Cadmium		3.6320		2.9935		9.4		P
Calcium						19.3		P
Chromium		12.1472		12.8428				NR
Cobalt	5.0	7.3861		6.5132		5.6		P
Copper		8736.3565		162.5494		12.6		P
Iron						192.7	*	P
Lead		856.9149		502.1784				NR
Magnesium						52.2	*	P
Manganese								NR
Mercury		0.0847	U	0.0815	U			NR
Nickel	4.0	19.1473		13.7719		32.7	*	AV
Potassium								P
Selenium		0.5044	U	0.5193	U			NR
Silver		0.8071	U	0.8308	U			P
Sodium								P
Thallium		1.0089	U	1.0386	U			NR
Vanadium	5.0	10.8485		10.9713		1.1		P
Zinc		6914.1429		1354.3782		134.5	*	P
Cyanide								
Tin		20.1776	U	20.7710	U			NR
Lithium		10.0888	U	10.3855	U			P
								P

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7

LABORATORY CONTROL SAMPLE

b Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP___

Lab Code: _____ Case No.: 95083 SAS No.: _____ SDG No.: 508353

Solid LCS Source: _____

Aqueous LCS Source: SPEX_____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony	100.0	100.53	100.5						
Arsenic	100.0	95.72	95.7						
Barium	2000.0	2035.61	101.8						
Beryllium	50.0	47.05	94.1						
Cadmium	50.0	50.85	101.7						
Calcium									
Chromium	200.0	202.29	101.1						
Cobalt	500.0	508.11	101.6						
Copper	250.0	242.12	96.8						
Iron									
Lead	500.0	500.66	100.1						
gnesium									
nganese									
Mercury									
Nickel	500.0	501.97	100.4						
Potassium									
Selenium	100.0	89.55	89.6						
Silver	100.0	92.85	92.8						
Sodium									
Thallium	100.0	96.63	96.6						
Vanadium	500.0	490.41	98.1						
Zinc	500.0	504.29	100.9						
Cyanide									
Tin	1000.0	857.84	85.8						
Lithium	2000.0	1989.57	99.5						

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7

LABORATORY CONTROL SAMPLE

Lab Name: AMERICAN_ENVIRON_NETWORK_ Contract: MK_CORP___

Lab Code: _____ Case No.: 95083 SAS No.: _____ SDG No.: 508353

Solid LCS Source: _____

Aqueous LCS Source: SPEX_____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury	2.0	1.93	96.5						
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									
Tin									
Lithium									

F-00050

FORM VII - IN

ILM02.1

AMERICAN ENVIRONMENTAL NETWORK, INC.

Client: MK Corp

September 13, 1995

Project: NSWC Crane 4324-009-007-30

Contract: 9508353

Analysis: EXPLOSIVES by 8330

Client ID	Lab ID	Date Sampled	Date Received	Date Prepared	Date Analyzed
NSWC-16/16-013	L9508353-001	08/30/95	08/31/95	09/07/95	9/12/95
NSWC-16/16-014	L9508353-002	08/30/95	08/31/95	09/07/95	9/12/95
NSWC-16/16-015	L9508353-003	08/30/95	08/31/95	09/07/95	9/12/95
NSWC-16/16-016	L9508353-004	08/30/95	08/31/95	09/07/95	9/12/95
NSWC-16/16-017	L9508353-005	08/30/95	08/31/95	09/07/95	9/12/95
NSWC-16/16-018	L9508353-006	08/30/95	08/31/95	09/07/95	9/12/95
NSWC-16/16-019	L9508353-007	08/30/95	08/31/95	09/07/95	9/12/95
NSWC-16/16-020	L9508353-008	08/30/95	08/31/95	09/07/95	9/12/95

Eight soil samples were received and analyzed for HMX, RDX, TNB, TETRYL, DNB, 4-Am-DNT, TNT, 2-Am-DNT, NB, 2,6-DNT, 2,4-DNT, O-NT, P-NT and M-NT by method 8330.

The enclosed package contains tabulated results (Form I)'s, a surrogate recovery summary (Form II), a matrix spike/matrix spike dup recovery summary (Form III), a method blank summary (Form IV), an initial calibration summary (Form VI) and a continuing calibration summary (Form VII).

Form I (Organic Analysis Data Sheet)
The qualifier 'U' indicates that a compound was analyzed for but not detected above the specified detection limit. All samples were prepared and analyzed within the method specified holding times. This data should replace the results that were faxed to you on 9/12/95.

Form II (Surrogate Recovery Summary)
The surrogate percent recovery value for the associated blank and the LCS were outside of criteria. The lab criteria for percent recovery is 50 to 150 percent.

Form III (Matrix Spike Recovery Summary)

Soil Matrix
A batch blank spike/ blank spike duplicate and matrix spikes on client sample are supplied. The percent recovery value for the analytes in the LCS were outside criteria. It appears like some of the sample may have been lost during sample preparation. All other samples met Laboratory criteria. The lab criteria for component percent recoveries are listed in the Form III. The lab criteria for RPD is 0 to 30 percent.

Form IV (Method Blank Summary)
No target analytes were detected at or above the detection limit in the method blanks.

Form VI (Initial Calibration Summary)
The calibration points listed were used for sample quantitation. All r2 values are within lab criteria. The lab criteria for r2 is .990 or greater.

Form VII (Continuing Calibration Summary)
Percent recoveries for all analytes are within lab criteria. Lab criteria for percent recovery is 75 to 125 percent.

Data Released by _____
Noble N. Nemieboka
GC/LC Acting Lab Manager

ORGANIC ANALYSIS DATA SHEET

Client: MK Corp
Project: NSWC Crane 4324-009-007-30
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

BLANK
Sample:

Matrix: SOIL
Sample: (ml) 2.0
Final Volume: (L) 0.02
(%) Moisture: N/A
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: BLK0907LC
Lab Name: AENI - MD
Contract: 9508353
Date Sampled: N/A
Date Received: N/A
Date Prepared: 09/07/95
Date Analyzed: 09/12/95
Time Analyzed: 8:04

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.28	U
RDX		0.34	U
TNB		0.23	U
TETRYL		0.25	U
DNB		0.19	U
4-Am-DNT		0.32	U
TNT		0.22	U
2-Am-DNT		0.32	U
NB		0.17	U
2,6-DNT		0.24	U
2,4-DNT		0.19	U
O-NT		0.25	U
P-NT		0.18	U
M-NT		0.27	U

F-000053

SURROGATE RECOVERY SUMMARY

Client: MK Corp
Project: NSWC Crane 4324-009-007-30
Analysis: EXPLOSIVES
Method: 8330
Instrument HPLC SYS 2

Surrogate: O-Nitroanaline
Q.C. Criteria: 50 to 150 (%)
Lab Name: AENI - MD
Contract: 9508353

Sample	Lab Sample ID	(%) Recovery
BLANK	BLK0907LC	31 *
LAB CONTROL SAMPLE	LCS0907LC	41 *
LAB CONT SAMPLE DUP	LCSD0907LC	100
LAB CONTROL SAMPLE	MS9508353-09	86
LAB CONT SAMPLE DUP	MSD9508353-10	101
NSWC-16/16-013	L9508353-001	76
NSWC-16/16-014	L9508353-002	108
NSWC-16/16-015	L9508353-003	58
NSWC-16/16-016	L9508353-004	95
NSWC-16/16-017	L9508353-005	84
NSWC-16/16-018	L9508353-006	81
NSWC-16/16-019	L9508353-007	84
NSWC-16/16-020	L9508353-008	84

* - indicates values outside of criteria

F-00054

Form II

MATRIX SPIKE / MATRIX SPIKE DUPLICATE SUMMARY

Client: MK Corp
Project: NSWC Crane 4324-009-007-30
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

Matrix: SOIL
(%) Moisture: 5.6
Dilution Factor: 1
Lab Name: AENI - MD
Contract: 9508353

Matrix Spike (S) - Sample: LAB CONTROL SAMPLE
Date Prepared 09/07/95

Lab Sample ID: MS9508353-09
Date Analyzed: 9/12/95

Matrix Spike Dup (D) Sample: LAB CONT SAMPLE DUP
Date Prepared 09/07/95

Lab Sample ID: MSD9508353-10
Date Analyzed: 9/12/95

Compound	Concentration (mg/Kg)			Recovery			
	True	Found - S	Found - D-	(%) - S	(%) - D	RPD	(%) Criteria
HMX	5.0	3.9	4.7	78	94	13	50 -150
RDX	5.0	3.9	4.5	78	90	10	50 -150
TNB	5.0	4.0	4.8	80	96	13	50 -150
TETRYL	4.0	4.8	5.6	120	140	11	50 -150
DNB	5.0	3.8	4.6	76	92	13	50 -150
4-Am-DNT	4.0	4.6	5.2	115	130	8	50 -150
TNT	5.0	4.2	5.1	84	102	13	50 -150
2-Am-DNT	4.0	4.2	5.3	105	133	16	50 -150
NB	5.0	4.1	5.0	82	100	14	50 -150
2,6-DNT	4.0	4.5	5.9	113	148	19	50 -150
2,4-DNT	5.0	4.0	4.8	80	96	13	50 -150
O-NT	4.0	4.5	5.2	113	130	10	50 -150
P-NT	4.0	4.2	5.2	105	130	15	50 -150
M-NT	4.0	4.1	5.2	102	130	16	50 -150

* - indicates values outside of criteria.

MATRIX SPIKE / MATRIX SPIKE DUPLICATE SUMMARY

Client: MK Corp
Project: NSWC Crane 4324-009-007-30
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

Matrix: SOIL
(%) Moisture: N/A
Dilution Factor: 1
Lab Name: AENI - MD
Contract: 9508353

Matrix Spike (S) - Sample: LAB CONTROL SAMPLE
Date Prepared 09/07/95

Lab Sample ID: LCS0907LC
Date Analyzed: 9/12/95

Matrix Spike Dup (D) Sample: LAB CONT SAMPLE DUP
Date Prepared 09/07/95

Lab Sample ID: LCSD0907LC
Date Analyzed: 9/12/95

Compound	Concentration (mg/Kg)			Recovery			
	True	Found - S	Found - D	(%) - S	(%) - D	RPD	(%) Criteria
HMX	5.0	1.5	4.7	30 *	94	83	50 -150
RDX	5.0	1.7	4.3	34 *	86	68	50 -150
TNB	5.0	1.6	4.5	32 *	90	75	50 -150
TETRYL	5.0	2.1	5.0	42 *	100	63	50 -150
DNB	4.0	2.1	5.0	52	125	63	50 -150
4-Am-DNT	5.0	1.5	4.5	30 *	90	80	50 -150
TNT	4.0	1.6	4.9	40 *	123	81	50 -150
2-Am-DNT	5.0	1.6	5.1	32 *	102	84	50 -150
NB	4.0	1.7	5.1	43 *	127	80	50 -150
2,6-DNT	5.0	1.6	5.1	32 *	102	84	50 -150
2,4-DNT	4.0	1.6	5.1	40 *	127	84	50 -150
O-NT	5.0	1.4	4.6	28 *	92	86	50 -150
P-NT	4.0	1.7	4.6	43 *	115	73	50 -150
M-NT	4.0	1.5	5.3	38*	133	92	50 -150

* - indicates values outside of criteria.

AMERICAN ENVIRONMENTAL NETWORK, INC.

September 7, 1995

Client: MK CORP

Case: 9508353

Project: NSWC CRANE

Analysis: PCBs by SW-846 Method 8080

Client ID	AENI#	Date Sampled	Date Received	Date Extracted	Date Analyzed
NSWC-16/16-013	9508353-001	08/30/95	08/31/95	09/05/95	09/06/95
NSWC-16/16-014	9508353-002	08/30/95	08/31/95	09/05/95	09/06/95
NSWC-16/16-015	9508353-003	08/30/95	08/31/95	09/05/95	09/06/95
NSWC-16/16-016	9508353-004	08/30/95	08/31/95	09/05/95	09/06/95
NSWC-16/16-017	9508353-005	08/30/95	08/31/95	09/05/95	09/06/95
NSWC-16/16-018	9508353-006	08/30/95	08/31/95	09/05/95	09/06/95
NSWC-16/16-019	9508353-007	08/30/95	08/31/95	09/05/95	09/07/95
NSWC-16/16-020	9508353-008	08/30/95	08/31/95	09/05/95	09/07/95
NSWC-16/16-021	9508353-009/10	08/30/95	08/31/95	09/05/95	09/07/95

Ten soil samples were extracted and analyzed for PCBs by SW-846 method 8080.

The enclosed package consists specifically of tabulated results (Form I), surrogate spike recoveries (Form II), matrix spike recoveries (Form III), method blank summary (Form IV), and initial and continuing calibration summaries (Forms VI and VII).

Form I (Tabulated Results)

The qualifier "U" indicates that a compound was analyzed for but not detected at or above the detection limit. The samples were extracted and analyzed within holding time.

Form II (Surrogate Spike Recoveries)

All recoveries are based on a single column analysis.

Eleven out of twelve surrogate recoveries were within EPA CLP criteria (60-150%).

Form III (Matrix Spike Recoveries)

A lab control sample was prepared with this set. LCS recovery was within SW-846 Method 8080 criteria (29-131%).

MS/MSD was performed on sample NSWC-16/16-021 (AENI# 9508353-009/010) with acceptable recoveries and RPD.

Form IV (Method Blank Summary)

No PCBs were detected in the blank.

Form VI (Initial Calibration Summary)

Five-point linear calibration curve with a correlation coefficient of 0.995 or better was used for sample quantitation.

Form VII (Continuing Calibration Summary)

Calibration factors for the daily standards were within 15% of initial calibration factor.

Data Released By Noble Nemieboka
Noble Nemieboka
GC/LC Acting Lab Manager

AMERICAN ENVIRONMENTAL NETWORK, INC.
ORGANIC ANALYSIS DATA SHEET
PCBs BY 8080

Contract Number: 9508353
Client Name: MK CORP
Project: NSWC CRANE

CLIENT NUMBER: BLANK

AENI #: 0905LC

Concentration: Low
Date Sampled : N/A
Date Received : N/A
Date Extract Prepared : 09/05/95
Date Analyzed: 09/06/95
Conc/Dil Factor: 1

GPC Cleanup: Yes[ ] No[X]
Sonication Ext: [ ]
Soxhlett Ext: [X]
Matrix SOIL
Percent Moisture: 0

	ug/Kg		
COMPOUND	CONCENTRATION	DETECTION LIMIT	QUALIFIER
AR1016		20	U
AR1221		20	U
AR1232		20	U
AR1242		20	U
AR1248		20	U
AR1254		40	U
AR1260		40	U

U-Indicates that a compound was analyzed for but not detected at or above the detection limit.

Vi - Volume of extract injected (ul) - 1

Vs - Volume of water extracted (ml) - N/A

Ws - Mass of soil extracted (g) - 30

Vt - Volume of total extract (ul) - 10000

FORM I

F- [illegible]

SOIL SURROGATE PERCENT RECOVERY
PCB'S BY SW-846 METHOD 8080

Case no: 9508353

Laboratory: American Environmental Network, Inc.

Client ID	AEN ID	% Rec DCB (60-150)
BLANK	BLK 0905LC	102
BLANK SPIKE	LCS 0905LC	104
NSWC-16/16-013	9508353-001	104
NSWC-16/16-014	9508353-002	82
NSWC-16/16-015	9508353-003	107
NSWC-16/16-016	9508353-004	89
NSWC-16/16-017	9508353-005	120
NSWC-16/16-018	9508353-006	74
NSWC-16/16-019	9508353-007	123
NSWC-16/16-020	9508353-008	85
MATRIX SPIKE	MS 9508353-009	158*
MATRIX SPIKE DUP	MSD 9508353-010	116

DCB - Decachlorobiphenyl

* - Surrogate outside control limits.

D - Surrogate diluted out.

M - Surrogate masked by interfering peaks

ORGANIC ANALYSIS DATA SHEET

AMERICAN ENVIRONMENTAL NETWORK, Inc.

Case Number: 9508353

Method: PCB 8080

Matrix: Soil

Analysis Date: 9/6/95

Units of AR 1254 in ug/kg

CLIENT ID.	AENI ID.	Spike Added	Sample Results	Conc. LCS	% Rec.
LAB CONTROL SAMPLE	0905LC	170	0	160	94

FORM III

ORGANIC ANALYSIS DATA SHEET

AMERICAN ENVIRONMENTAL NETWORK, Inc.

Case Number: 9508353

Method: PCB 8080

Matrix: Soil

Analysis Date: 9/7/95

Units of AR 1254 in ug/kg

CLIENT ID.	AENI ID.	Spike Added	Sample Results	Conc. MS	% Rec.	Conc. MSD	% Rec.	% RPD
NSWC-16/16-021	9508353-009/010	180	0	220	122	170	94	28

FORM III

F-000062

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 RUMSEY ROAD
COLUMBIA, MD. 21045
(410) 730-8525

Project Number: 9508353
Client Name: Morrison-Knudsen Corporation
Project Title: NSWC Crane

Ten soil samples (including one set of MS/MSD) were analyzed for the trichloroethene (TCE) and tetrachloroethene (PCE) by method 8240. The analyses followed the standard AENI QA/QC and holding time requirements.

This package consists of tabulated results of the samples and the method blanks, along with the QC forms II, III, IV, V, VI, VII and VIII.

Data Released
Minh-Thuy L. Nguyen
GC/MS Lab Manager

Client ID	AENI ID	Matrix	Date Sampled	Date Received	Date Analyzed
NSWC-16/16-013	353-001	Soil	08/30/95	08/31/95	09/05/95
NSWC-16/16-014	353-002	Soil	08/30/95	08/31/95	09/05/95
NSWC-16/16-015	353-003	Soil	08/30/95	08/31/95	09/05/95
NSWC-16/16-016	353-004	Soil	08/30/95	08/31/95	09/05/95
NSWC-16/16-017	353-005	Soil	08/30/95	08/31/95	09/05/95
NSWC-16/16-018	353-006	Soil	08/30/95	08/31/95	09/05/95
NSWC-16/16-019	353-007	Soil	08/30/95	08/31/95	09/05/95
NSWC-16/16-020	353-008	Soil	08/30/95	08/31/95	09/05/95
NSWC-16/16-021MS	353-009	Soil	08/30/95	08/31/95	09/05/95
NSWC-16/16-021MSD	353-010	Soil	08/30/95	08/31/95	09/05/95

Form I (Tabulated Results)
All sample analyses were performed within the technical holding time requirement. The results were reported on the basis of dry weight.

Form II (Surrogate Recoveries)
The surrogate recoveries for the samples, QC and method blanks were within the method specified limits.

Form III (MS Recoveries)
The MS/MSD analysis was performed on sample NSWC-16/16-020 (NSWC-16/16-021), as specified by the project. All spike recoveries and all %RPDs were within criteria.

Form IV (Method Blank Summary)
The method blanks were free of target analytes.

Form V (Tuning and Mass Calibration)
All calibration standards, method blanks, QC and samples were analyzed within the method specified mass calibration and 12-hr tune criteria.

Form VI (Initial Calibration)
The initial calibration curve met the method specified Min mean RRF for the SPCC compounds and Max %RSD for the CCC compounds.

Form VII (Continuing Calibration)
All CCC and SPCC compounds for the daily continuing calibrations were within the method specified criteria for max %D and Min RRF50.

Form VIII (Internal Standard Summary)
All internal standard areas and all retention time shifting were within the lab warning limits.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
VBLK01

Lab Name: AENI MD Contract: MKC

Project No.: 9508353 Site: NSWC Location: CRANE Group:

Matrix: (soil/water) SOIL Lab Sample ID: 0905EBLK

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EI10.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. 0 Date Analyzed: 9/5/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
79-01-6	Trichloroethene	5	U
127-18-4	Tetrachloroethene	5	U

FORM I VOA SW846

F-00065

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
VBLK02

Lab Name: AENI MD Contract: MKC

Project No.: 9508353 Site: NSWC Location: CRANE Group:

Matrix: (soil/water) SOIL Lab Sample ID: 0908EBLK

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EI58.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. 0 Date Analyzed: 9/8/95

GC Column: CAP. ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
79-01-6	Trichloroethene	5	U
127-18-4	Tetrachloroethene	5	U

FORM I VOA SW846

F-00088

2B

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: AENI MD Contract: MKC

Project No.: 9508353 Site: NSWC Location: CRANE Group:

Level: (low/med) LOW

	SAMPLE NO.	SMC1 (DCE) #	SMC2 (TOL) #	SMC3 (BFB) #	OTHER #	TOT OUT
01	VBLK01	92	101	101		
02	NSWC-16/16-013	96	105	86		
03	NSWC-16/16-014	107	115	99		
04	VBLK02	89	93	88		
05	NSWC-16/16-015	93	95	98		
06	NSWC-16/16-016	91	108	92		
07	NSWC-16/16-017	96	103	93		
08	NSWC-16/16-018	96	105	101		
09	NSWC-16/16-019	95	103	99		
10	NSWC-16/16-020	94	100	104		
11	NSWC-16/16-020MS	83	85	103		
12	NSWC-16/16-020MSD	97	99	120		
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
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25						
26						
27						
28						
29						
30						

	QC LIMITS
SMC1 (DCE) - 1,2-Dichloroethane-d4	(70-121)
SMC2 (TOL) - Toluene-d8	(81-117)
SMC3 (BFB) - Bromofluorobenzene	(74-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM II VOA-2 SW846

F-000087

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AENI MD Contract: MKC

Project No.: 9508353 Site: NSWC Location: CRANE Group: _____

Matrix Spike - Sample No.: NSWC-16/16-020 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	53	0	47	88	(59-172)
Trichloroethene	53	0	44	83	(62-137)
Benzene	53	0	49	92	(66-142)
Toluene	53	0	53	100	(59-139)
Chlorobenzene	53	0	49	92	(60-133)

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MS % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	53	54	102	14	22	(59-172)
Trichloroethene	53	50	94	13	24	(62-137)
Benzene	53	55	104	12	21	(66-142)
Toluene	53	60	113	12	21	(59-139)
Chlorobenzene	53	56	106	13	21	(60-133)

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Comments: _____

F-00088

SDG 0046C

COMPUCHEM
ENVIRONMENTAL
CORPORATION

20/FEB/96

Morrison Knudsen Corp.
Attn: Alan Fosdick
1500 West 3rd Street
Cleveland, OH 44113-1406

ACCOUNT #: 501019

CC#	SAMPLE-ID	RECEIPT DATE
782508	16-16-071	2/09/96
782513	16-16-072	2/09/96
782514	16-16-073	2/09/96

TOTAL NUMBER OF SAMPLES = 3

F-

COMPUCHEM
ENVIRONMENTAL
CORPORATION

SDG Narrative
Case #51923
SDG #0046C
Contract #OLM03 - REVS

Sample Identification: 16-16-071, 16-16-072, 16-16-073

This narrative covers three (3) solid samples received on February 9, 1996, and processed for volatile organic compounds by the EPA CLP OLM03 Statement-OF Work (SOW) with the exceptions and/or additions presented in the project profile sheet (PPS) # 467. The samples were received intact, properly refrigerated, and with proper documentation.

All pertinent Quality Assurance (QA) Notices are included in the narrative section or the sample data sections.

All samples were analyzed within holding time.

System monitoring compound (surrogate) recoveries for the samples, the blanks, the laboratory control sample (LCS), matrix spike, and matrix spike duplicate met QC acceptance criteria. The internal standard criteria (retention time and response) were also met for the sample and QC test. All spike compound recoveries were met for the matrix spike, matrix spike duplicate, and the LCS. All other QC acceptance criteria (tunes and initial and continuing calibrations) were met.

When target compound list (TCL) analytes are detected below the contract required quantitation limit (CRQL), the results are flagged with a "J". All three samples had "J" level hits of xylenes, and samples 16-16-071, and 16-16-072 also contained ""J" levels of ethylbenzene. Tentatively identified compounds (TIC) were not reported for this case.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the laboratory manager or his designee, as verified by the following signature.

Susan W. Bass
Susan W. Bass
Volatile Manager
February 19, 1996

Note: The report is paginated for reference and accountability.

F-00070

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: C046C

Level: (low/med) LOW

	SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	16-16-071	107	104	107		0
02	16-16-072	103	97	107		0
03	16-16-072MS	100	94	93		0
04	16-16-072MSD	94	98	95		0
05	16-16-073	112	111	112		0
06	VBLKX6	98	94	104		0
07	VBLKX8	103	102	97		0
08	VHBLKJH	99	101	92		0
09	VLCS601	97	100	110		0
10	VLCS602	99	103	95		0
11						
12						
13						
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29						
30						

			QC LIMITS
SMC1	(TOL)	= Toluene-d8	(84-138)
SMC2	(BFB)	= Bromofluorobenzene	(59-113)
SMC3	(DCE)	= 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM II VOA-2

F-00071

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0046C

Matrix Spike - Sample No.: 16-16-072 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Benzene	56.82	0.000	61.62	108	66-142
Toluene	56.82	0.000	57.43	101	59-139
Ethylbenzene	56.82	2.79	60.86	102	50-150
Xylene (Total)	170.4	7.43	174.3	98	50-150

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzene	56.82	61.60	108	0	21	66-142
Toluene	56.82	55.65	98	3	21	59-139
Ethylbenzene	56.82	54.27	91	11	20	50-150
Xylene (Total)	170.4	156.2	87	12	20	50-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 4 outside limits
Spike Recovery: 0 out of 8 outside limits

COMMENTS: _____

FORM III VOA-2

F-00072

SOIL VOLATILE LAB CONTROL SAMPLE RECOVERY

CLIENT SAMPLE NO.

VLCS601

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0046C

Lab Sample ID: 782710 LCS Lot No.: 44472

Lab File ID: GH082710C55.D Date Analyzed: 02/11/96

Purge Volume: 0.0 (mL) Dilution Factor: 1.0

LCS Aliquot: 2.5 (uL)

COMPOUND	AMOUNT ADDED (ug/Kg)	AMOUNT RECOVERED (ug/Kg)	%REC #	QC LIMITS
Ethylbenzene	50.00	56.10	112	50-150
Xylene (Total)	150.0	169.3	113	50-150
Toluene	50.00	52.01	104	59-139
Benzene	50.00	59.01	118	66-142

Column to be used to flag LCS recovery with an asterisk.
* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 4 total.

COMMENTS:

FORM III

3B

SOIL VOLATILE LAB CONTROL SAMPLE RECOVERY

CLIENT SAMPLE NO.

VLCS602

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0046C

Lab Sample ID: 782712 LCS Lot No.: 44472

Lab File ID: GH082712B55.D Date Analyzed: 02/12/96

Purge Volume: 0.0 (mL) Dilution Factor: 1.0

LCS Aliquot: 2.5 (uL)

COMPOUND	AMOUNT ADDED (ug/Kg)	AMOUNT RECOVERED (ug/Kg)	%REC #	QC LIMITS
Ethylbenzene	50.00	50.16	100	50-150
Xylene (Total)	150.0	146.4	98	50-150
Toluene	50.00	47.95	96	59-139
Benzene	50.00	54.75	110	66-142

Column to be used to flag LCS recovery with an asterisk.
* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 4 total.

COMMENTS:

FORM III

F-000074

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VBLKX6

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0046C

Matrix: (soil/water) SOIL Lab Sample ID: 782709

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH082709C55.D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 02/11/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
71-43-2	Benzene	10	U
108-88-3	Toluene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U

FORM I VOA

SDG 0070C

COMPUCHEM
ENVIRONMENTAL
CORPORATION

22/FEB/96

Morrison Knudsen Corp.
Attn: Alan Fosdick
1500 West 3rd Street
Cleveland, OH 44113-1406

ACCOUNT #: 501019

CC#	SAMPLE-ID	RECEIPT DATE
782676	16-16-074	2/09/96
782681	16-16-075	2/09/96
782682	16-16-076	2/09/96
782683	16-16-077	2/09/96
782684	16-16-078	2/09/96

TOTAL NUMBER OF SAMPLES = 5

F-00076

COMPUCHEM
ENVIRONMENTAL
CORPORATION

3306 Chapel Hill/Nelson Highway P.O. Box 14998
Research Triangle Park, NC 27709-4998
(919) 406-1600

INORGANIC CASE SUMMARY NARRATIVE
CASE # 31923 SDG # 70C
PROTOCOL: SW-846

The indicated Sample Delivery Group (SDG) consisting of five soil samples were received into the laboratory management system (LMS) on February 9, 1996 intact and in good condition with Chain of Custody (COC) Records in order, unless otherwise noted in any attachments or Quality Assurance Notices. The samples were analyzed for antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, selenium, silver, thallium, tin, vanadium, and zinc using method 6010 for ICP analysis.

SAMPLE IDs:

The following customer IDs are associated with this SDG:

16-16-074, 16-16-075, 16-16-076, 16-16-077, 16-16-078

INSTRUMENTAL QUALITY CONTROL:

All calibration verification solutions (ICV & CCV), blanks (ICB, CCB) and interference check samples (ICSA & ICSAB) associated with this data were confirmed to be within EPA allowable limits.

SAMPLE PREPARATION QUALITY CONTROL:

The Laboratory Control Samples for Soils (LCSS) and Preparation Blanks for Soils (PBS) were found to be within acceptable ranges. All field samples associated with this case were prepared and analyzed within the specified holding times. Note: Tin was inadvertently not spiked in the LCS.

MATRIX RELATED QUALITY CONTROL:

The sample matrix spike and matrix spike duplicate, 16-16-074S(782678)/16-16-074S(782677), were found to be outside control limits for antimony. The reported concentrations for these analytes are flagged with an "N"

F-00077

on all associated Form 1 and on Form 5a. Note: Tin was inadvertently not spiked in the matrix spike samples.

An "N" indicates a matrix-related interference in the sample preparation procedure &/or analysis for the flagged analyte. This is normally the consequence of a relatively high anionic content in the sample or of an inconsistent sample matrix relative to that analyte in sediment.

Method 6010 control limits for matrix spike recoveries are set at 80% to 120% of the analyte quantity added unless original sample concentrations exceed the true values of these "spikes" by a factor of four or more; in this case affected analytes are not flagged even if recoveries fall outside percentage recovery control limits.

Post-digestion spikes are mandatory for analytes demonstrating unsatisfactory matrix spike recoveries during ICP analysis (excluding silver due to that analyte's extreme sensitivity to light and halides). The results of such spikes are presented on Form 5b.

Unsatisfactory recovery of post-digestion spikes do not have bearing upon the aforementioned "N" flags, but may indicate interference during analysis &/or a solution matrix which is hostile to the analyte in question.

Satisfactory recovery of an analyte in this type of post-digestion spike implies interference by the required preparation procedure or in the sample matrix itself. Lack of uniformity for an analyte in sediment samples will also result in satisfactory recovery of post-digestion spikes after failure in the related matrix spike.

The sample matrix duplicate, 16-16-074D, was outside of control limits for antimony. The reported concentrations for this analyte are flagged with a "*" on all associated Form 1 and on Form 6.

A "*" indicates a non-homogeneous sample matrix in regard to the flagged analyte. This is normally the consequence of a relatively coarse texture or of a mixed-matrix in sediment samples, but more often the result of a degree of container &/or sediment content variation in aqueous samples.

Control limits for duplicate determinations are +/- 20% Relative Percent Difference (RPD) for concentrations greater than or equal to five times the CRDL in both the original and duplicate samples, and +/- the CRDL for concentrations less than five times the CRDL. The RPD is not calculated if both the original and duplicate values fall below the IDL.

A four-fold serial dilution of sample, 16-16-074L, was performed in accordance with method 6010 requirements for ICP analysis. The adjusted sample concentrations outside control limits for beryllium, cadmium, chromium, copper, lead, nickel, vanadium, zinc, and tin resulting in the application of an "E" flag on all associated Form 1, the Cover Page and Form 9.

An "E" indicates that a chemical or physical interference effect was encountered during the analysis of the flagged analyte. As a result of this interference, all values for the analyte in the same matrix must be considered to be estimated quantities.

Control limits for serial dilution are defined as deviation less than or equal to 10% in the dilution-adjusted concentrations from the original values for all analyte concentrations with values greater than fifty (50) times their respective Instrument Detection Limit (IDL) in the original sample.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data contained in the hardcopy data package has been authorized by the Laboratory Manager or his deaignee, as verified by the following signature.

Jeanne Alston
Final Technical Reviewer
February 18, 1996

F-000075

U.S. EPA - CLP

3
BLANKS

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 70C___

Preparation Blank Matrix (soil/water): SOIL_

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Antimony	1.8	U	1.8	U	1.8	U	1.8	U	0.180	U	P
Arsenic	3.0	U	3.0	U	3.0	U	3.0	U	0.300	U	P
Barium	-0.2	B	0.2	B	0.4	B	1.4	B	-0.022	B	P
Beryllium	0.3	U	0.4	B	0.4	B	0.3	B	0.030	U	P
Cadmium	0.2	U	0.3	B	0.3	B	0.2	U	0.020	U	P
Chromium	0.7	U	0.7	U	0.7	U	0.7	U	0.735	B	P
Cobalt	0.5	U	0.5	B	0.5	U	0.5	U	0.050	U	P
Copper	0.7	U	0.7	U	2.3	B	1.8	B	0.070	U	P
Lead	1.6	U	1.6	U	1.6	U	1.6	U	0.160	U	P
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	0.565	B	P
Selenium	2.6	U	2.6	U	2.6	U	2.6	U	0.260	U	P
Silver	0.7	U	0.7	U	0.7	U	0.7	U	0.070	U	P
Thallium	3.5	U	3.5	U	3.5	U	3.5	U	0.350	U	P
Vanadium	0.6	U	0.6	U	0.6	U	0.6	U	0.060	U	P
Zinc	-5.5	B	-5.2	B	-4.9	B	-5.2	B	-0.461	B	P
Tin	4.2	U	4.2	U	4.2	U	4.2	U	0.420	U	P

F-00080

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16-16-074S

Lab Name: COMPUCHEM_ENV._CORP. Contract: SW-846

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 70C

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 64.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Antimony	80-120	163.0805	B	108.6687	B	77.40	70.3	N	P
Arsenic	80-120	289.6285		7.5248		309.60	91.1		P
Barium		7322.7554		6902.4768		309.60	135.7		P
Beryllium	80-120	7.2291		0.3642	B	7.74	88.7		P
Cadmium		116.5944		144.7059		7.74	-363.2		P
Chromium	80-120	58.6842		30.6502		30.96	90.5		P
Cobalt	80-120	72.0898		3.7539	B	77.40	88.3		P
Copper		5050.3096		5170.2786		38.70	-310.0		P
Lead		15178.0186		15286.3777		77.40	-140.0		
Nickel	80-120	90.7740		25.7895		77.40	84.0		
Selenium	80-120	261.6099		0.7601	B	309.60	84.3		P
Silver	80-120	8.4721		1.2885	B	7.74	92.8		P
Thallium	80-120	282.9721		0.5418	U	309.60	91.4		P
Vanadium	80-120	82.3065		9.8529		77.40	93.6		P
Zinc		48931.8885		48653.2508		77.40	360.0		P
Tin									NR

Comments:

U.S. EPA - CLP

5A

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16-16-074S

Lab Name: COMPUCHEM_ENV._CORP. Contract: SW-846

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 70C

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 64.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Antimony	80-120	230.3406	B	108.6687	B	77.40	157.2	N	P
Arsenic	80-120	293.1889		7.5248		309.60	92.3		P
Barium		7075.8514		6902.4768		309.60	56.0		P
Beryllium	80-120	7.2879		0.3642	B	7.74	89.5		P
Cadmium		131.8266		144.7059		7.74	-166.4		P
Chromium	80-120	58.2817		30.6502		30.96	89.2		P
Cobalt	80-120	71.9659		3.7539	B	77.40	88.1		P
Copper		4435.7585		5170.2786		38.70	-1898.0		P
Lead		13722.9102		15286.3777		77.40	-2020.0		P
Nickel	80-120	94.1022		25.7895		77.40	88.3		P
Selenium	80-120	263.9319		0.7601	B	309.60	85.0		P
Silver	80-120	8.3003		1.2885	B	7.74	90.6		P
Thallium	80-120	283.7461		0.5418	U	309.60	91.6		P
Vanadium	80-120	83.3591		9.8529		77.40	95.0		P
Zinc		46277.0898		48653.2508		77.40	-3070.0		P
Tin									NR

Comments:

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16-16-074A

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 70C___

Matrix: ____SOIL_____ Level (low/med): LOW_____

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Antimony		2275.50	B	702.00	B	1400.0	112.4		P
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Lead									
Nickel									NR
Selenium									NR
Silver									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Tin									NR

Comments:

FORM V (Part 2) - IN
U.S. EPA - CLP

3/90

6
DUPLICATES

EPA SAMPLE NO.

16-16-074D

Lab Name: COMPUCHEM_ENV._CORP. Contract: SW-846

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 70C

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 64.6 % Solids for Duplicate: 64.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Antimony		108.6687	B	174.6130	B	46.6	*	P
Arsenic	1.5	7.5248		6.9520		7.9		P
Barium		6902.4768		6881.5789		0.3		P
Beryllium		0.3642	B	0.3471	B	4.8		P
Cadmium		144.7059		128.9628		11.5		P
Chromium		30.6502		32.6316		6.3		P
Cobalt		3.7539	B	3.8050	B	1.4		P
Copper		5170.2786		4897.8328		5.4		P
Lead		15286.3777		14698.1424		3.9		P
Nickel	6.2	25.7895		25.8978		0.4		P
Selenium		0.7601	B	0.4845	B	44.3		P
Silver		1.2885	B	1.3574	B	5.2		P
Thallium		0.5418	U	0.5418	U			P
Vanadium	7.7	9.6529		10.8514		9.6		P
Zinc		48653.2508		47298.7616		2.8		P
Tin		58.4365		65.2477		11.0		P

FORM VI - IN

F-

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 70C___

Solid LCS Source: EPA-LV_____

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L) True	Aqueous (ug/L) Found	Aqueous (ug/L) %R	Solid (mg/kg) True	Solid (mg/kg) Found	Solid (mg/kg) C	Solid (mg/kg) Limits		Solid (mg/kg) %R
Antimony				211.0	213.0		127.0	294.0	100.
Arsenic				917.0	1019.2		635.0	1199.0	111.
Barium				4.8	6.8	B	0.0	40.0	141.
Beryllium				19.4	19.4		16.5	22.3	100.
Cadmium				45.4	41.6		35.7	55.1	91.
Chromium				99.6	101.3		79.2	120.0	101.
Cobalt				144.0	152.0		125.0	162.0	105.
Copper				6910.0	7461.0		6006.0	7820.0	108.
Lead				236.0	227.0		188.0	285.0	96.
Nickel				60.9	59.2		49.2	72.6	[illegible]
Selenium				39.2	40.2		19.1	59.4	[illegible]
Silver				22.2	24.9		15.5	29.0	112.
Thallium				39.0	40.8		24.6	53.5	104.
Vanadium				65.8	68.7		51.7	79.9	104.
Zinc				187.0	184.4		138.0	236.0	98.
Tin									

SDG 0092C

COMPUCHEM
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CORPORATION

21/FEB/96

Morrison Knudsen Corp.
Attn: Alan Fosdick
1500 West 3rd Street
Cleveland, OH 44113-1406

ACCOUNT #: 501019

CC#	SAMPLE-ID	RECEIPT DATE
782534	16-16RB13	2/09/96
782557	16-16-070	2/09/96

TOTAL NUMBER OF SAMPLES = 2

F-00086

COMPUCHEM
ENVIRONMENTAL
CORPORATION

3306 Chapel Hill/Nelson Highway P.O. Box 14998
Research Triangle Park, NC 27709-4998
(919) 406-1600

INORGANIC CASE SUMMARY NARRATIVE
CASE # 31923 SDG # 92C
PROTOCOL: SW-846

The indicated Sample Delivery Group (SDG) consisting of two water samples was received into the laboratory management system (LMS) on February 9, 1996 intact and in good condition with Chain of Custody (COC) Records in order, unless otherwise noted in any attachments or Quality Assurance Notices. The samples were analyzed for antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, selenium, silver, thallium, tin, vanadium, and zinc using method 6010 for Trace ICP analysis.

SAMPLE IDs:

The following customer IDs are associated with this SDG:

16-16-070, 16-16RB13

INSTRUMENTAL QUALITY CONTROL:

All calibration verification solutions (ICV & CCV), blanks (ICB, CCB) and interference check samples (ICSA & ICSAB) associated with this data were confirmed to be within EPA allowable limits.

SAMPLE PREPARATION QUALITY CONTROL:

The Laboratory Control Samples for Waters (LCSW) and Preparation Blanks for Waters (PBW) were found to be within acceptable ranges. All field samples associated with this case were prepared and analyzed within the specified holding times. Note: Tin was inadvertently not spiked in the LCS.

MATRIX RELATED QUALITY CONTROL:

The sample matrix spike and matrix spike duplicate, 16-16-070S(782536)/16-16-070S(782535), were found to be within control limits for all requested analytes. Note: Tin was inadvertently not spiked in the matrix spike samples.

F-00087

Method 6010 control limits for matrix spike recoveries are set at 80% to 120% of the analyte quantity added unless original sample concentrations exceed the true values of these "spikes" by a factor of four or more; in this case affected analytes are not flagged even if recoveries fall outside percentage recovery control limits.

Post-digestion spikes are mandatory for analytes demonstrating unsatisfactory matrix spike recoveries during ICP analysis (excluding silver due to that analyte's extreme sensitivity to light and halides). None wre required for this SDG.

The sample matrix duplicate, 16-16-070D(782538), was within control limits for all requested analytes.

Control limits for duplicate determinations are +/- 20% Relative Percent Difference (RPD) for concentrations greater than or equal to five times the Reporting Limit in both the original and duplicate samples, and +/- the Reporting Limit for concentrations less than five times the Reporting Limit. The RPD is not calculated if both the original and duplicate values fall below the IDL.

A four-fold serial dilution of sample, 16-16-070L, was performed in accordance with method 6010 requirements for ICP analysis. The adjusted sample concentrations were within control limits for all requested analytes.

Control limits for serial dilution are defined as a deviation less than or equal to 10% in the dilution-adjusted concentrations from the original values for all analyte concentrations with values greater than fifty (50) times their respective Instrument Detection Limit (IDL) in the original sample.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data contained in the hardcopy data package has been authorized by the Laboratory Manager or his deaignee, as verified by the following signature.

Jeanne Alston
Final Technical Reviewer
February 18, 1996

F-00088

U.S. EPA - CLP

3
BLANKS

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 92C__

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Antimony	1.8	U	1.8	U	1.8	U	1.8	U	1.800	U	P
Arsenic	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Barium	-0.2	B	0.2	B	0.4	B	1.4	B	-0.210	B	P
Beryllium	0.3	U	0.4	B	0.4	B	0.3	B	0.300	U	P
Cadmium	0.2	U	0.3	B	0.3	B	0.2	U	-0.284	B	P
Chromium	0.7	U	0.7	U	0.7	U	0.7	U	0.700	[illegible]	[illegible]
Cobalt	0.5	U	0.5	B	0.5	U	0.5	U	0.500	[illegible]	P
Copper	0.7	U	0.7	U	2.3	B	1.8	B	0.700	U	P
Lead	1.6	U	1.6	U	1.6	U	1.6	U	1.600	U	P
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Selenium	2.6	U	2.6	U	2.6	U	2.6	U	2.600	U	P
Silver	0.7	U	0.7	U	0.7	U	0.7	U	0.700	U	P
Thallium	3.5	U	3.5	U	3.5	U	3.5	U	3.500	U	P
Vanadium	0.6	U	0.6	U	0.6	U	0.6	U	0.600	U	P
Zinc	-5.5	B	-5.2	B	-4.9	B	-5.2	B	-4.702	B	P
Tin	4.2	U	4.2	U	4.2	U	4.2	U	4.200	U	P

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____ 16-16-070S___

Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 92C___
Matrix: __WATER_____ Level (low/med): _LOW____
% Solids for Sample: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Antimony	80-120	469.6000		4.1430	B	500.00	93.1		P
Arsenic	80-120	1837.0000		3.0000	U	2000.00	91.8		P
Barium	80-120	2107.0000		181.8000	B	2000.00	96.3		P
Beryllium	80-120	46.6800		0.3400	B	50.00	92.7		P
Cadmium	80-120	47.0300		0.2000	U	50.00	94.1		P
Chromium	80-120	215.8000		25.3000		200.00	95.2		P
Cobalt	80-120	489.3000		0.5000	U	500.00	97.9		P
Copper	80-120	284.3000		43.2400		250.00	96.4		P
Lead	80-120	673.9000		202.5000		500.00	94.3		P
Nickel	80-120	475.4000		1.8760	B	500.00	94.7		P
Selenium	80-120	1705.0000		2.6000	U	2000.00	85.2		P
Silver	80-120	48.2700		0.7000	U	50.00	96.5		P
Thallium	80-120	1962.0000		3.5000	U	2000.00	98.1		P
Vanadium	80-120	502.4000		0.6000	U	500.00	100.5		P
Zinc	80-120	1036.0000		581.0000		500.00	91.0		P
Tin									NR

Comments:

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16-16-070S

Lab Name: COMPUCHEM_ENV._CORP. Contract: SW-846

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 92C

Matrix: WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Antimony	80-120	474.0000		4.1430	B	500.00	94.0		P
Arsenic	80-120	1854.0000		3.0000	U	2000.00	92.7		P
Barium	80-120	2120.0000		181.8000	B	2000.00	96.9		P
Beryllium	80-120	47.4400		0.3400	B	50.00	94.2		P
Cadmium	80-120	48.0100		0.2000	U	50.00	96.0		P
Chromium	80-120	221.7000		25.3000		200.00	98.2		P
Cobalt	80-120	497.9000		0.5000	U	500.00	99.6		P
Copper	80-120	286.7000		43.2400		250.00	97.4		P
Lead	80-120	688.1000		202.5000		500.00	97.1		
Nickel	80-120	484.0000		1.8760	B	500.00	96.4		P
Selenium	80-120	1718.0000		2.6000	U	2000.00	85.9		P
Silver	80-120	48.4200		0.7000	U	50.00	96.8		P
Thallium	80-120	1990.0000		3.5000	U	2000.00	99.5		P
Vanadium	80-120	511.1000		0.6000	U	500.00	102.2		P
Zinc	80-120	1117.0000		581.0000		500.00	107.2		P
Tin									NR

Comments:

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

16-16-070D

Lab Name: COMPUCHEM_ENV._CORP. Contract: SW-846

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 92C

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Antimony		4.1430	B	4.9040	B	16.8		P
Arsenic		3.0000	U	3.0000	U			P
Barium		181.8000	B	177.9000	B	2.2		P
Beryllium		0.3400	B	0.3000	U	200.0		P
Cadmium		0.2000	U	0.2000	U			P
Chromium	10.0	25.3000		24.4600		3.4		P
Cobalt		0.5000	U	0.5000	U			P
Copper	25.0	43.2400		41.5000		4.1		P
Lead		202.5000		202.6000		0.0		P
Nickel		1.8760	B	2.2130	B	16.5		P
Selenium		2.6000	U	2.6000	U			P
Silver		0.7000	U	0.7000	U			P
Thallium		3.5000	U	3.5000	U			P
Vanadium		0.6000	U	0.6000	U			P
Zinc		581.0000		590.8000		1.7		P
Tin		4.2000	U	4.2000	U			P

U.S. EPA - CLP

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LABORATORY CONTROL SAMPLE

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923 SAS No.: _____ SDG No.: 92C___

Solid LCS Source: _____

Aqueous LCS Source: PELMER_____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Antimony	6000.0	5686.00	94.8						
Arsenic	1000.0	967.70	96.8						
Barium	20000.0	19570.00	97.8						
Beryllium	500.0	477.30	95.5						
Cadmium	500.0	471.60	94.3						
Chromium	1000.0	968.40	96.8						
Cobalt	5000.0	4786.00	95.7						
Copper	2500.0	2469.00	98.8						
Lead	300.0	289.50	96.5						
Nickel	4000.0	3777.00	94.4						
Selenium	500.0	442.20	88.4						
Silver	1000.0	985.40	98.5						
Thallium	1000.0	986.40	98.6						
Vanadium	5000.0	4982.00	99.6						
Zinc	2000.0	1947.00	97.3						
Tin									

SDG 0094C

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22/FEB/96

Morrison Knudsen Corp.
Attn: Alan Fosdick
1500 West 3rd Street
Cleveland, OH 44113-1406

ACCOUNT #: 501019

CC#	SAMPLE-ID	RECEIPT DATE
782539	16-16RB13	2/09/96
782558	16-16-070	2/09/96

TOTAL NUMBER OF SAMPLES = 2

F-06094

COMPUCHEM
ENVIRONMENTAL
CORPORATION

3306 Chapel Hill/Nelson Highway P.O. Box 14998
Research Triangle Park, NC 27709-4998
(919) 406-1600

INORGANIC CASE SUMMARY NARRATIVE
CASE # 31923 SDG # 94C
PROTOCOL: SW-846

The indicated Sample Delivery Group (SDG) consisting of two water samples was received into the laboratory management system (LMS) on February 9, 1996 intact and in good condition with Chain of Custody (COC) Records in order, unless otherwise noted in any attachments or Quality Assurance Notices. The samples were analyzed for mercury using method method 7470.

SAMPLE IDs:

The following customer IDs are associated with this SDG:

16-16-070, 16-16RB13

INSTRUMENTAL QUALITY CONTROL:

All calibration verification solutions (ICV & CCV), blanks (ICB, CCB) and interference check samples (ICSA & ICSAB) associated with this data were confirmed to be within EPA allowable limits.

SAMPLE PREPARATION QUALITY CONTROL:

The Laboratory Control Samples for Waters (LCSW) and Preparation Blanks for Waters (PBW) were found to be within acceptable ranges. All field samples associated with this case were prepared and analyzed within the specified holding times.

MATRIX RELATED QUALITY CONTROL:

The sample matrix spike and matrix spike duplicate, 16-16-070S(783499)/16-16-070S(783498), were found to be within control limits for mercury.

CLP control limits of 75-125% of the analyte quantity added are applied to the mercury sample spike results unless original sample concentrations exceed the true values of these "spikes" by a factor of four or more; in this case

F-00085 00002

affected analytes are not flagged even if recoveries fall outside percentage recovery control limits.

The sample matrix duplicate, 16-16-070D(782541), was within control limits for all requested analytes.

Control limits for duplicate determinations are +/- 20% Relative Percent Difference (RPD) for concentrations greater than or equal to five times the Reporting Limit in both the original and duplicate samples, and +/- the Reporting Limit for concentrations less than five times the Reporting Limit. The RPD is not calculated if both the original and duplicate values fall below the IDL.

Control limits for serial dilution are defined as a deviation less than or equal to 10% in the dilution-adjusted concentrations from the original values for all analyte concentrations with values greater than fifty (50) times their respective Instrument Detection Limit (IDL) in the original sample.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data contained in the hardcopy data package has been authorized by the Laboratory Manager or his deaignee, as verified by the following signature.

Jeanne Alston
Final Technical Reviewer
February 18, 1996

Note: This report is paginated for reference and accountability.

U.S. EPA - CLP

3
BLANKS

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 94C___

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	CV

FORM III - IN

ILM03.0

F-00097 00015

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16-16-070S

Lab Name: COMPUCHEM_ENV._CORP. Contract: SW-846

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 94C

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Mercury	80-120	0.9660		0.2000	U	1.00	96.6		CV

Comments:

FORM V (Part 1) - IN ILM03.0

F-00098

00017

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16-16-070S

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 94C___

Matrix (soil/water): WATER_ Level (low/med): LOW___

% Solids for Sample: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Mercury	80-120	0.9870		0.2000	U	1.00	98.7		CV

Comments:

FORM V (Part 1) - IN ILM0[illegible]

00018

F-00098

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

16-16-070D

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 94C___

Matrix (soil/water): WATER Level (low/med): _LOW__

% Solids for Sample: __0.0 % Solids for Duplicate: ___0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Mercury		0.2000	U	0.2000	U			CV

F-00100 00019

U.S. EPA - CLP

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LABORATORY CONTROL SAMPLE

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 94C___

Solid LCS Source: _____

Aqueous LCS Source: IVT_____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Mercury	3.0	2.76	92.1						

F-00101 00010

SDG 0090C

COMPUCHEM
ENVIRONMENTAL
CORPORATION

22/FEB/96

Morrison Knudsen Corp.
Attn: Alan Fosdick
1500 West 3rd Street
Cleveland, OH 44113-1406

ACCOUNT #: 501019

CC#	SAMPLE-ID	RECEIPT DATE
782529	16-16RB13	2/09/96
782556	16-16-070	2/09/96

TOTAL NUMBER OF SAMPLES = 2

F-00102

COMPUCHEM
ENVIRONMENTAL
CORPORATION

3306 Chapel Hill/Nelson Highway P.O. Box 14998
Research Triangle Park, NC 27709-4998
(919) 406-1600

INORGANIC CASE SUMMARY NARRATIVE
CASE # 31923 SDG # 90C
PROTOCOL: SW-846

The indicated Sample Delivery Group (SDG) consisting of two water samples was received into the laboratory management system (LMS) on February 9, 1996 intact and in good condition with Chain of Custody (COC) Records in order, unless otherwise noted in any attachments or Quality Assurance Notices. The samples were analyzed for cyanide using method method 9012.

SAMPLE IDs:

The following customer IDs are associated with this SDG:

16-16-070, 16-16RB13

INSTRUMENTAL QUALITY CONTROL:

All calibration verification solutions (ICV & CCV), blank (ICB, CCB) and interference check samples (ICSA & ICSAB) associated with this data were confirmed to be within EPA allowable limits.

SAMPLE PREPARATION QUALITY CONTROL:

The Laboratory Control Samples for Waters (LCSW) and Preparation Blanks for Waters (PBW) were found to be within acceptable ranges. All field samples associated with this case were prepared and analyzed within the specified holding times.

MATRIX RELATED QUALITY CONTROL:

The sample matrix spike and matrix spike duplicate, 16-16-070S(783499)/16-16-070S(783498), were found to be within control limits for cyanide.

CLP control limits of 75-125% of the analyte quantity added are applied to the cyanide sample spike results unless original sample concentrations exceed the true values of these "spikes" by a factor of four or more; in this case

00002
F00103

affected analytes are not flagged even if recoveries fall outside percentage recovery control limits.

The sample matrix duplicate, 16-16-070D(782541), was within control limits for all requested analytes.

Control limits for duplicate determinations are +/- 20% Relative Percent Difference (RPD) for concentrations greater than or equal to five times the Reporting Limit in both the original and duplicate samples, and +/- the Reporting Limit for concentrations less than five times the Reporting Limit. The RPD is not calculated if both the original and duplicate values fall below the IDL.

Control limits for serial dilution are defined as a deviation less than or equal to 10% in the dilution-adjusted concentrations from the original values for all analyte concentrations with values greater than fifty (50) times their respective Instrument Detection Limit (IDL) in the original sample.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data contained in the hardcopy data package has been authorized by the Laboratory Manager or his deaignee, as verified by the following signature.

Jeanne Alston
Final Technical Reviewer
February 18, 1996

Note: This report is paginated for reference and accountability.

F- 00104

00003

U.S. EPA - CLP

3
BLANKS

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 90C___

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	10.000	U	AS

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16-16-070S

Lab Name: COMPUCHEM_ENV._CORP. Contract: SW-846

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 90C

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Cyanide	80-120	33.9200		10.0000	U	40.00	84.8		AS

Comments:

FORM V (Part 1) - IN ILM03.0

F-00108

00015

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 90C___

Solid LCS Source: _____

Aqueous LCS Source: IVT_____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Cyanide	90.0	96.24	106.9						

F-00109

SDG 0065C

COMPUCHEM
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CORPORATION

23/FEB/96

Morrison Knudsen Corp.
Attn: Alan Fosdick
1500 West 3rd Street
Cleveland, OH 44113-1406

ACCOUNT #: 501019

CC#	SAMPLE-ID	RECEIPT DATE
782685	16-16-074	2/09/96
782689	16-16-075	2/09/96
782690	16-16-076	2/09/96
782691	16-16-077	2/09/96
782692	16-16-078	2/09/96

TOTAL NUMBER OF SAMPLES = 5

F-00110

COMPUCHEM
ENVIRONMENTAL
CORPORATION

3306 Chapel Hill/Nelson Highway P.O. Box 14998
Research Triangle Park, NC 27709-4998
(919) 406-1600

Case Narrative
Case #31923
SDG# 0065C

Sample Identifications: 16-16-074, 16-16-075, 16-16-076, 16-16-077, and 16-16-078.

This narrative covers five (5) soil samples received on February 9, 1996, and processed for explosives by SW-846 Method 8330, with the exceptions and/or additions described in the Project Profile Sheet (PPS) #467. The samples were received intact, properly refrigerated, and with proper documentation.

All pertinent Laboratory notices for Case #31923, SDG # 0065C are included in the sample data sections.

Explosives by Method 8330

The samples were extracted and analyzed in one extraction batch within holding times.

No TCL (target compound list) analytes were detected in any of the samples or the method blanks, above the CRQL except for 2,4-Dinitrotoluene and 2,6-Dinitrotoluene detected in sample ID# 16-16-074.

A blank spike (BS22) was extracted with the batch associated with the method blank, (PBLK22). BS22 met QC acceptance criteria for surrogate and spike recoveries. A matrix spike, (16-16074MS) and a matrix spike duplicate (16-16-074MSD) was extracted with the extraction batch. 16-16-074MS and 16-16-074MSD met QC acceptance criteria for surrogate but did not for spike recoveries. 16-16-074MS had high recovery for RDX and low recovery for 2,4-Dinitrotoluene. 16-16-074MSD had low recovery for 2,4-Dinitrotoluene. The quantitation for 2,4-Dinitrotoluene in the MS and MSD was severely interfered by the amount quantitated from the original sample.

Single injections of five levels of calibration standard were analyzed, and all QC acceptance criteria were met. A single injection of the mid-level standard was then analyzed as a daily calibration. A closing continuing calibration was also analyzed. All continuing, daily, and closing calibration met the required 15 %D acceptance criteria. All retention time shift criteria was met, as well.

COMPUCHEM
ENVIRONMENTAL
CORPORATION

3306 Chapel Hill/Nelson Highway P.O. Box 14998
Research Triangle Park, NC 27709-4998
(919) 406-1600

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package and in the computer-readable data submitted on diskette has been authorized by the laboratory manager or his designee, as verified by the following signature.

Elizabeth C. Murer

Elizabeth C. Murer
GC/HPLC Chemist
February 22, 1996

NOTE: This report is paginated for reference and accountability.

F-00112

FORM 2
SOIL 8330 SURROGATE RECOVERY

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0065C

GC Column(1): C8 ID: 3.90 (mm) GC Column(2): C8+CN ID: 3.90

	CLIENT SAMPLE NO.	S1 1 %REC #	S1 2 %REC #	S2 1 %REC #	S2 2 %REC #	S3 1 %REC #	S3 2 %REC #	TOT OUT
01	16-16-074	115	114					0
02	16-16-074MS	130						0
03	16-16-074MSD	125						0
04	16-16-075	105						0
05	16-16-076	105						0
06	16-16-077	108						0
07	16-16-078	106						0
08	BS22	105						0
09	PBLK22	104	110					0
10								
11								
12								
13								
14								
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16								
17								
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27								
28								
29								
30								

S1 = Nitroglycerin

ADVISORY QC LIMITS (50-150)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

FORM II 8330

F-00013

FORM 3

SOIL 8330 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0065C

Matrix Spike - Sample No.: 16-16-074

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC #	QC. LIMITS REC.
HMX	4.615	0.0000	5.191	112	30-150
RDX	3.077	0.0000	6.067	197*	30-150
Nitrobenzene	3.077	0.0000	2.367	77	30-150
1,3-Dinitrobenzene	3.077	0.0000	3.207	104	30-150
1,3,5-Trinitrobenzene	3.077	0.8625	4.005	102	30-150
2,4-Dinitrotoluene	3.077	34.67	3.211	-1022*	30-150
2,6-Dinitrotoluene	4.615	1.140	4.920	82	30-150
2,4,6-Trinitrotoluene	3.077	0.0000	3.077	100	30-150
2-Amino-4,6-dinitrotolu	4.615	0.0000	4.728	102	30-150
Tetryl	4.615	0.0000	3.966	86	30-150
4-Amino-2,6-dinitrotolu	4.615	0.0000	4.878	106	30-150
2-Nitrotoluene	4.615	0.0000	4.952	107	30-150
4-Nitrotoluene	4.615	0.0000	4.952	107	30-150
3-Nitrotoluene	4.615	0.0000	5.265	114	30-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

F-00114

FORM 3
SOIL 8330 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0065C

Matrix Spike - Sample No.: 16-16-074

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
HMX	4.615	4.753	103	8	30	30-150
RDX	3.077	3.700	120	48*	30	30-150
Nitrobenzene	3.077	2.278	74	4	30	30-150
1,3-Dinitrobenzene	3.077	3.299	107	3	30	30-150
1,3,5-Trinitrobenzene	3.077	3.793	95	7	30	30-150
2,4-Dinitrotoluene	3.077	3.235	-1022*	0	30	30-150
2,6-Dinitrotoluene	4.615	4.982	83	1	30	30-150
2,4,6-Trinitrotoluene	3.077	3.072	100	0	30	30-150
2-Amino-4,6-dinitrotolu	4.615	4.872	106	4	30	30-150
Tetryl	4.615	4.216	91	6	30	30-150
4-Amino-2,6-dinitrotolu	4.615	4.935	107	1	30	30-150
2-Nitrotoluene	4.615	5.070	110	3	30	30-150
4-Nitrotoluene	4.615	5.070	110	3	30	30-150
3-Nitrotoluene	4.615	5.094	110	4	30	30-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 14 outside limits
Spike Recovery: 3 out of 28 outside limits

COMMENTS:

F-00115

FORM 3
SOIL 8330 METHOD SPIKE RECOVERY

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0065C

Matrix Spike - Sample No.: BS22

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (mg/Kg)	% REC #	QC. LIMITS REC.
HMX	3.000	3.232	108	50-130
RDX	2.000	2.544	127	50-130
Nitrobenzene	2.000	1.445	72	50-130
1,3-Dinitrobenzene	2.000	2.063	103	50-130
1,3,5-Trinitrobenzene	2.000	2.299	115	50-130
2,4-Dinitrotoluene	2.000	1.989	99	50-130
2,6-Dinitrotoluene	3.000	3.502	117	50-130
2,4,6-Trinitrotoluene	2.000	1.984	99	50-130
2-Amino-4,6-dinitrotolu	3.000	3.296	110	50-130
Tetryl	3.000	2.437	81	50-130
4-Amino-2,6-dinitrotolu	3.000	3.304	110	50-130
2-Nitrotoluene	3.000	3.137	104	50-130
4-Nitrotoluene	3.000	3.137	104	50-130
3-Nitrotoluene	3.000	3.192	106	50-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM III 8330

F-00116

FORM 1
8330 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PBLK22

Lab Name: COMPUCHEM ENV. CORP. Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0065C

Matrix: (soil/water) SOIL Lab Sample ID: 782920

Sample wt/vol: 2.0 (g/mL) G Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/15/96

Concentrated Extract Volume: 10000(ul) Date Analyzed: 02/16/96

Injection Volume: 25.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
2691-41-0	HMX	0.56	U
121-82-4	RDX	1.8	U
98-95-3	Nitrobenzene	0.36	U
99-65-0	1,3-Dinitrobenzene	0.32	U
99-35-4	1,3,5-Trinitrobenzene	0.64	U
121-14-2	2,4-Dinitrotoluene	0.80	U
606-20-2	2,6-Dinitrotoluene	0.60	U
118-96-7	2,4,6-Trinitrotoluene	0.28	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.60	U
479-45-8	Tetryl	1.0	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.48	U
88-72-2	2-Nitrotoluene	4.8	U
99-99-0	4-Nitrotoluene	4.8	U
99-08-1	3-Nitrotoluene	1.2	U

F-00017

SDG 0035C

COMPUCHEM
ENVIRONMENTAL
CORPORATION

26/FEB/96

Morrison Knudsen Corp.
Attn: Alan Fosdick
1500 West 3rd Street
Cleveland, OH 44113-1406

ACCOUNT #: 501019

CC#	SAMPLE-ID	RECEIPT DATE
782494	2608D-006	2/09/96
782507	16-16-44A	2/09/96

TOTAL NUMBER OF SAMPLES = 2

F-00118

COMPUCHEM
ENVIRONMENTAL
CORPORATION

SDG NARRATIVE

CASE # 31923
SDG # 0035C
PROTOCOL # SW846

SAMPLE IDENTIFICATIONS: 16-16-44A, 2608D-006

The two (2) aqueous samples listed above were received intact, properly refrigerated, with proper documentation, in a sealed shipping container, on February 9, 1996. The samples were scheduled for the requested analyses of the volatile, semivolatile, and pesticide/PCB fractions. These samples were analyzed following SW846 (document 8270) protocol, with the exceptions and/or additions described in the attached Project Profile Sheet (PPS) #467. This portion of the SDG narrative deals with the semi-volatile fraction only. All pertinent Quality Assurance notices are included in the narrative section, and all pertinent Laboratory notices for Case 31923, SDG 0035C are included in the sample data sections.

Semivolatiles Section

Extraction and analysis holding time requirements were met for all of these samples.

There were no semivolatile Target Compound List (TCL) analytes identified above the Contract Required Quantitation Limit (CRQL) in any of these samples. Tentatively Identified Compounds (TICs) were not required.

All of the surrogates met recovery criteria in the analyses of these samples. All of the internal standards met response and retention time criteria in the analyses of these samples.

The associated method blanks met all quality control criteria. The associated duplicate matrix spikes met all advisory accuracy and precision criteria. The associated Laboratory Control Samples (LCS) met all accuracy criteria.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data contained in the hard copy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Supervisor, as verified by the following signature.

Paul T. Frankson
GC/MS SVOA Supervisor
February 16, 1996

F-00119

4

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0035C

	SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 (TPH) #	S7 #	S8 #	TOT OUT
01	16-16-44A	24D	23D	84D	95D	37D	62D			0
02	2608D-006	34	27	60	65	30	65			0
03	2608D-006MS	35	28	63	68	33	69			0
04	2608D-006MSD	34	28	61	69	32	69			0
05	SBLK75	38	28	64	66	30	64			0
06	SLCS06	34	25	66	61	30	78			0
07	SLCS76	34	26	59	62	28	62			0
08	SBLK05	38	28	79	72	33	81			0
09										
10										
11										
12										
13										
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30										

			QC LIMITS
S1	(2FP)	= 2-Fluorophenol	(21-100)
S2	(PHL)	= Phenol-d5	(10- 94)
S3	(NBZ)	= Nitrobenzene-d5	(35-114)
S4	(FBP)	= 2-Fluorobiphenyl	(43-116)
S5	(TBP)	= 2,4,6-Tribromophenol	(10-123)
S6	(TPH)	= Terphenyl-d14	(33-141)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM II SV-1

F. 00120

24

SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0035C

Matrix Spike - Sample No.: 2608D-006

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Pyridine	250.0	0.000	59.21	24	1-200
1,4-Dichlorobenzene	250.0	0.000	188.9	76	20-124
2-Methylphenol	250.0	0.000	157.5	63	1-200
3-Methylphenol	500.0	0.000	311.8	62	1-200
4-Methylphenol	500.0	0.000	311.8	62	1-200
Hexachloroethane	250.0	0.000	186.2	74	40-113
Nitrobenzene	250.0	0.000	186.0	74	35-180
Hexachlorobutadiene	250.0	0.000	210.5	84	24-116
2,4,6-Trichlorophenol	250.0	0.000	180.0	72	37-144
2,4,5-Trichlorophenol	250.0	0.000	187.4	75	37-144
2,4-Dinitrotoluene	250.0	0.000	210.3	84	39-139
Hexachlorobenzene	250.0	0.000	165.1	66	1-152
Pentachlorophenol	250.0	0.000	120.4	48	14-176

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Pyridine	250.0	54.56	22	9	40	1-2[illegible]
1,4-Dichlorobenzene	250.0	194.6	78	2	40	20-1[illegible]
2-Methylphenol	250.0	159.5	64	2	40	1-200
3-Methylphenol	500.0	316.7	63	2	40	1-200
4-Methylphenol	500.0	316.7	63	2	40	1-200
Hexachloroethane	250.0	200.7	80	8	40	40-113
Nitrobenzene	250.0	181.5	73	1	40	35-180
Hexachlorobutadiene	250.0	219.4	88	5	40	24-116
2,4,6-Trichlorophenol	250.0	187.3	75	4	40	37-144
2,4,5-Trichlorophenol	250.0	196.1	78	4	40	37-144
2,4-Dinitrotoluene	250.0	218.2	87	4	40	39-139
Hexachlorobenzene	250.0	167.9	67	2	40	1-152
Pentachlorophenol	250.0	122.1	49	2	40	14-176

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 13 outside limits
Spike Recovery: 0 out of 26 outside limits

COMMENTS: _____

SLCS76

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0035C

Lab Sample ID: 782497 LCS Lot No.: 73569

Lab File ID: GH082497C60.D Date Extracted: 02/12/96

LCS Aliquot: 1000 (uL) Date Analyzed: 02/13/96

Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0

injection Volume: 1.0 (uL) pH: ____

COMPOUND	AMOUNT ADDED (ug/L)	AMOUNT RECOVERED (ug/L)	%REC #	QC LIMITS
Pyridine	250.0	77.27	31	1-200
1,4-Dichlorobenzene	250.0	168.7	67	20-124
2-Methylphenol	250.0	150.3	60	1-200
3-Methylphenol	500.0	281.0	56	1-200
4-Methylphenol	500.0	281.0	56	1-200
Hexachloroethane	250.0	165.5	66	40-113
Nitrobenzene	250.0	174.0	70	35-180
Hexachlorobutadiene	250.0	189.4	76	24-116
2,4,6-Trichlorophenol	250.0	174.2	70	37-144
2,4,5-Trichlorophenol	250.0	182.3	73	37-144
2,4-Dinitrotoluene	250.0	193.5	77	39-139
Hexachlorobenzene	250.0	152.1	61	1-152
Pentachlorophenol	250.0	116.3	46	14-176

Column to be used to flag LCS recovery with an asterisk.
* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 13 total.

COMMENTS: _____

FORM III

F.00122

WATER SEMIVOLATILE LAB CONTROL SAMPLE RECOVERY

CLIENT SAMPLE NO.

SLCS06

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0035C

Lab Sample ID: 783401 LCS Lot No.: 43569

Lab File ID: GH083401A60.D Date Extracted: 02/14/96

LCS Aliquot: 1000 (uL) Date Analyzed: 02/14/96

Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0

injection Volume: 1.0 (uL) pH: ____

COMPOUND	AMOUNT ADDED (ug/L)	AMOUNT RECOVERED (ug/L)	%REC #	QC LIMITS
Pyridine	50.00	18.97	38	1-200
1,4-Dichlorobenzene	50.00	31.85	64	20-124
2-Methylphenol	50.00	26.06	52	1-200
3-Methylphenol	100.0	50.47	50	1-200
4-Methylphenol	100.0	50.47	50	1-200
Hexachloroethane	50.00	28.50	57	40-113
Nitrobenzene	50.00	38.99	78	35-180
Hexachlorobutadiene	50.00	37.47	75	24-116
2,4,6-Trichlorophenol	50.00	34.03	68	37-144
2,4,5-Trichlorophenol	50.00	35.00	70	37-144
2,4-Dinitrotoluene	50.00	39.92	80	39-139
Hexachlorobenzene	50.00	35.37	71	1-152
Pentachlorophenol	50.00	11.72	23	14-176

Column to be used to flag LCS recovery with an asterisk.
* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 13 total.

COMMENTS: _____

FORM III

F. 00123

28

SBLK05

Lab Name: CompuChem Env. Corp. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0035C

Matrix: (soil/water) WATER Lab Sample ID: 783400

Sample wt/vol: 1000 (g/mL) mL Lab File ID: GH083400A60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/14/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/14/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
110-86-1	Pyridine	20	U
106-46-7	1,4-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	20	U
108-39-4	3-Methylphenol	35	U
106-44-5	4-Methylphenol	35	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
87-68-3	Hexachlorobutadiene	5	U
88-06-2	2,4,6-Trichlorophenol	25	U
95-95-4	2,4,5-Trichlorophenol	25	U
121-14-2	2,4-Dinitrotoluene	10	U
118-74-1	Hexachlorobenzene	15	U
87-86-5	Pentachlorophenol	55	U

F-00124 32

SDG 0038C

COMPUCHEM
ENVIRONMENTAL
CORPORATION

21/FEB/96

Morrison Knudsen Corp.
Attn: Alan Fosdick
1500 West 3rd Street
Cleveland, OH 44113-1406

ACCOUNT #: 501019

CC#	SAMPLE-ID	RECEIPT DATE
782639	2608D-006	2/09/96
782664	16-16-44A	2/09/96

TOTAL NUMBER OF SAMPLES = 2

F-00125

COMPUCHEM
ENVIRONMENTAL
CORPORATION

3306 Chapel Hill/Nelson Highway P.O. Box 14998
Research Triangle Park, NC 27709-4998
(919) 406-1600

INORGANIC CASE SUMMARY NARRATIVE
CASE # 31923 SDG # 38C
PROTOCOL: SW-846

The indicated Sample Delivery Group (SDG) consisting of two soil samples was received into the laboratory management system (LMS) on February 9, 1996 intact and in good condition with Chain of Custody (COC) Records in order, unless otherwise noted in any attachments or Quality Assurance Notices. The samples were leached in accordance with the TCLP leachate procedure (SW-846 method 1311) and analyzed for arsenic, barium, cadmium, chromium, lead, selenium, and silver using method Trace ICP method 6010.

SAMPLE IDs:

The following customer IDs are associated with this SDG:

16-16-44A, 2608D-006

INSTRUMENTAL QUALITY CONTROL:

All calibration verification solutions (ICV & CCV), blanks (ICB, CCB) and interference check samples (ICSA & ICSAB) associated with this data were confirmed to be within EPA allowable limits.

SAMPLE PREPARATION QUALITY CONTROL:

The Laboratory Control Samples and Preparation Blanks were found to be within acceptable ranges. All field samples associated with this case were prepared and analyzed within the specified holding times.

MATRIX RELATED QUALITY CONTROL:

The sample matrix spike and matrix spike duplicate, 2608D-006S(782641)/2608D-006S(782640), were found to be within control limits for all requested analytes.

Method 6010 control limits for matrix spike recoveries are set at 80% to 120% of the analyte quantity added unless original sample concentrations exceed the true values of these "spikes" by a factor of four or more; in this case

F. 00128 2

affected analytes are not flagged even if recoveries fall outside percentage recovery control limits.

The sample matrix duplicate, 2608D-006D(782643), was within control limits for all requested analytes.

Control limits for duplicate determinations are +/- 20% Relative Percent Difference (RPD) for concentrations greater than or equal to five times the CRDL in both the original and duplicate samples, and +/- the CRDL for concentrations less than five times the CRDL. The RPD is not calculated if both the original and duplicate values fall below the IDL.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data contained in the hardcopy data package has been authorized by the Laboratory Manager or his deaignee, as verified by the following signature.

Jeanne Alston
Final Technical Reviewer
February 18, 1996

Note: This report is paginated for reference and accountability.

U.S. EPA - CLP

3
BLANKS

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846_ _

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 38C__

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Arsenic	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Barium	-0.2	B	0.2	B	0.4	B	1.4	B	-0.115	B	P
Cadmium	0.2	U	0.3	B	0.3	B	0.2	U	0.200	U	P
Chromium	0.7	U	0.7	U	0.7	U	0.7	U	0.700	U	P
Lead	1.6	U	1.6	U	1.6	U	1.6	U	1.600	U	P
Selenium	2.6	U	2.6	U	2.6	U	2.6	U	-4.821	B	P
Silver	0.7	U	0.7	U	0.7	U	0.7	U	0.700	U	P

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

2608D-006S

Lab Name: COMPUCHEM_ENV._CORP. Contract: SW-846

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 38C

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic	80-120	2092.0000		3.0000	U	2000.00	104.6		P
Barium		65250.0000		63400.0000		2000.00	92.5		P
Cadmium	80-120	63.0200		16.9500		50.00	92.1		P
Chromium	80-120	191.3000		1.9130	B	200.00	94.7		P
Lead	80-120	552.8000		62.8000		500.00	98.0		P
Selenium	80-120	2064.0000		6.7690		2000.00	102.9		P
Silver	80-120	52.2300		0.7000	U	50.00	104.5		P

Comments:

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

2608D-006

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 38C___

Matrix (soil/water): WATER_ Level (low/med): LOW__

% Solids for Sample: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic	80-120	2103.0000		3.0000	U	2000.00	105.1		P
Barium		65350.0000		63400.0000		2000.00	97.5		P
Cadmium	80-120	62.0100		16.9500		50.00	90.1		P
Chromium	80-120	187.5000		1.9130	B	200.00	92.8		P
Lead	80-120	542.9000		62.8000		500.00	96.0		P
Selenium	80-120	2115.0000		6.7690		2000.00	105.4		P
Silver	80-120	52.1100		0.7000	U	50.00	104.2		P

Comments:

FORM V (Part 1) - IN ILM03.0

F-00130

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U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

2608D-006D

Lab Name: COMPUCHEM_ENV._CORP. Contract: SW-846

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 38C

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Arsenic		3.0000	U	3.0000	U			
Barium		63400.0000		62550.0000		1.3		P
Cadmium	5.0	16.9500		17.3400		2.3		P
Chromium		1.9130	B	2.1020	B	9.4		P
Lead		62.8000		62.1800		1.0		P
Selenium	5.0	6.7690		5.4550		21.5		P
Silver		0.7000	U	0.7000	U			P

FORM VI - IN

ILM03.0

F-00131

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: COMPUCHEM_ENV._CORP._____ Contract: SW-846____

Lab Code: COMPU_ Case No.: 31923_ SAS No.: _____ SDG No.: 38C___

Solid LCS Source: _____

Aqueous LCS Source: PELMER_____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Arsenic	1000.0	977.60	97.8						
Barium	20000.0	19450.00	97.2						
Cadmium	500.0	480.10	96.0						
Chromium	1000.0	978.00	97.8						
Lead	300.0	292.70	97.6						
Selenium	500.0	447.60	89.5						
Silver	1000.0	982.90	98.3						

SDG 9510285

AMERICAN ENVIRONMENTAL NETWORK, INC.

November 9, 1995

Client: MK CORP

Case: 9510285

Project: CRANE NSWC

Analysis: Pesticides and PCB's by SW-846 Method 8080 (Appendix IX)

Client ID	AENI#	Date Sampled	Date Received	Date Extracted	Date Analyzed
NSWC 16/16 23A	9510285-002	10/25/95	10/26/95	11/02/95	11/08/95
NSWC 16/16 24A	9510285-003	10/25/95	10/26/95	11/02/95	11/08/95
NSWC 16/16 25A	9510285-004	10/25/95	10/26/95	11/02/95	11/08/95
NSWC 16/16 26A	9510285-005	10/25/95	10/26/95	11/02/95	11/08/95
NSWC 16/16 27A	9510285-006	10/25/95	10/26/95	11/02/95	11/08/95
NSWC 16/16 28A	9510285-007	10/25/95	10/26/95	11/02/95	11/08/95
NSWC 16/16 29A	9510285-008	10/25/95	10/26/95	11/02/95	11/08/95
NSWC 16/16 30A	9510285-009	10/25/95	10/26/95	11/02/95	11/08/95
NSWC 16/16 32A	9510285-010	10/25/95	10/26/95	11/02/95	11/08/95
NSWC 16/16 33A	9510285-011	10/25/95	10/26/95	11/02/95	11/08/95
NSWC 16/16 34A	9510285-012	10/25/95	10/26/95	11/02/95	11/08/95
NSWC 16/16 35A	9510285-013	10/25/95	10/26/95	11/02/95	11/08/95
NSWC 16/16 36A	9510285-014	10/25/95	10/26/95	11/02/95	11/08/95
NSWC 16/16 37A	9510285-015	10/25/95	10/26/95	11/02/95	11/08/95
NSWC 16/16 38A	9510285-016	10/25/95	10/26/95	11/02/95	11/08/95

Fifteen soil samples were extracted and analyzed for Pesticides and PCB's by SW-846 method 8080 (Appendix IX).

The enclosed package consists specifically of tabulated results (Form I), surrogate spike recoveries (Form II), matrix spike recoveries (Form III), method blank summary (Form IV), initial calibration summary (Form VI), continuing calibration summary (Form VII), and retention time shifting summary (Form VIII).

Form I (Tabulated Results)

The qualifier "U" indicates that a compound was analyzed for but not detected above the reporting limit. The samples were prepared and analyzed within method specified holding time.

Form II (Surrogate Spike Recoveries)

Fifty-six out of seventy-six surrogate recoveries were within EPA CLP advisory limits (60-150%). TCMX was masked by matrix interference in three instances on column DB-608. Of seventeen surrogate failures, sixteen were below criteria. Uniformly low recoveries in samples NSWC 16/16 30A, NSWC 16/16 37A, and NSWC 16/16 38A may indicate a problem with the sample extraction process.

Form III (Matrix Spike Recoveries)

A blank spike (BS) was extracted with this sample set. All BS recoveries were within specified criteria (see Form III).

MS/MSD was performed on sample NSWC 16/16 28A with acceptable recoveries and RPD's.

Form IV (Method Blank Summary)

No pesticides or PCB's were detected in the method blank.

Form VI (Initial Calibration Summary)

Linear five-point curve with correlation coefficient of 0.995 or better was used for sample quantitation.

A separate calibration curve was analyzed for Diallate, PCNB, Isodrin, Chlorobenzilate, and Kepone. Quantitation (both columns) was based on a five point calibration with correlation coefficient of 0.995 or better.

Form VII (Continuing Calibration Summary)

CCV recoveries were either within or above criteria on both columns for all components of interest. The high recoveries (e.g. kepone) do not affect sample data quality since these pesticides were not present in the samples.

Form VIII (Retention Time Shifting Summary)

All retention time shifting was within criteria (+/- 1.5%).

Data Released By

Noble N. Nemieboka
GC/LC Acting Lab Manager

F-[illegible]134

2F

SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: American Environmental Network, Inc. Contract: 9510265
Lab Code: NA Case No.: NA SAS No.: NA
Instrument ID: GC-F
GC Column(1): DB-5 D: 0.53 mm GC Column(2): DB 608 ID: 0.53 mm
Dates of Analyses: 11/7/95 to 11/8/95
Method: 8080

EPA SAMPLE NO.	TCMX 1 %REC	#	TCMX 2 % REC	#	DCB 1 %REC	#	DCB 2 %REC	#	TOTAL OUT
BLK951102L	105		88		89		76		0
BS SOIL	86		88		81		70		0
NSWC 16/16 23A	138		M		79		51	*	1
NSWC 16/16 24A	87		86		68		63		0
NSWC 16/16 25A	109		M		87		66		0
NSWC 16/16 26A	154	*	M		74		80		1
NSWC 16/16 27A	146		131		107		110		0
NSWC 16/16 28A	124		98		97		77		0
NSWC 16/16 28AMS	95		84		75		100		0
NSWC 16/16 28AMSD	97		85		69		56	*	1
NSWC 16/16 29A	104		86		55	*	50	*	2
NSWC 16/16 30A	37	*	22	*	17	*	7	*	4
NSWC 16/16 32A	103		81		80		67		0
NSWC 16/16 33A	89		88		82		68		0
NSWC 16/16 34A	90		76		80		72		0
NSWC 16/16 35A	105		80		83		74		0
NSWC 16/16 36A	81		68		64		60		0
NSWC 16/16 37A	15	*	7	*	24	*	10	*	4
NSWC 16/16 38A	0	*	0	*	0	*	0	*	4

ADVISORY QC LIMITS

TCMX= Tetrachloro-m-xylene (60-150)
DCB= Decachlorobiphenyl (60-150)

COLUMN TO BE USED TO FLAG RECOVERY VALUES
* VALUES OUTSIDE OF QC LIMITS
D SURROGATE DILUTED OUT
M SURROGATE MASKED

FORM II PEST-1

3F

SOIL BLANK SPIKE RECOVERY

Lab Name: American Environmental Network, Inc. Contract: 9510285

Lab Code: NA Case No.: NA SAS No.: NA

Matrix Spike - EPA Sample No.: BS9511021L

Method: 8080

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC	#	QC LIMITS REC.
gamma-BHC (Lindane)	6.7	0.0	6.0	90		46 - 127
Heptachlor	6.7	0.0	6.5	97		35 - 130
Aldrin	6.7	0.0	6.0	90		34 - 132
Dieldrin	17	0.0	16	94		31 - 134
Endrin	17	0.0	19	112		42 - 139
4,4'-DDT	17	0.0	18	106		23 - 134

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits.

FORM III PEST-2

F-00136

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: American Environmental Network, Inc. Contract: 9510286
Lab Code: NA Case No.: NA SAS No.: NA
Matrix Spike - EPA Sample No.: NSWC 16/16 28A
Method: 8080

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	#	QC LIMITS REC.
gamma-BHC (Lindane)	7.6	0.0	5.4	71		46 - 127
Heptachlor	7.6	2.3	5.7	46		35 - 130
Aldrin	7.6	0.0	4.9	64		34 - 132
Dieldrin	19	12	20	42		31 - 134
Endrin	19	5.5	20	76		42 - 139
4,4'-DDT	19	0.0	18	95		23 - 134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	7.5	5.6	75		3.6		50	46-127
Heptachlor	7.5	5.8	47		1.7		31	35-130
Aldrin	7.5	4.9	65		0.0		43	34-132
Dieldrin	19	20	42		0.0		38	31-134
Endrin	19	20	76		0.0		45	42-139
4,4'-DDT	19	19	100		5.4		50	23-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 12 outside limits.
RPD: 0 out of 6 outside limits.

FORM III PEST-2

F-00137

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 RUMSEY ROAD
COLUMBIA, MD. 21045
(410) 730-8525

Project Number: 9510-285
Client Name: Morrison Knudsen Corporation
Project Title: NSWC Crane

One water and fifteen soil samples were analyzed for the volatile organic compounds in the Appendix IX list, by method 8260. Two soil samples were analyzed for the polynuclear aromatic compounds, by method 8270.
All analyses followed the standard AENI QA/QC and holding time requirements.

This package consists of the tabulated results of the samples and the method blanks, along with the QC forms II, III, IV, V, VI, VII and VIII.

Data Released [signature] (11/10/[illegible])
Minh-Thuy L. Nguyen
GC/MS Lab Manager

F-00138

VOLATILES Section:

Client ID	AENI ID	Matrix	Date Sampled	Date Received	Date Analyzed
NSWC 16/16-RB11	285-001	Water	10/25/95	10/26/95	11/08/95
NSWC 16/16 23A	285-002	Soil	10/25/95	10/26/95	11/08/95
NSWC 16/16 24A	285-003	Soil	10/25/95	10/26/95	11/08/95
NSWC 16/16 25A	285-004	Soil	10/25/95	10/26/95	11/08/95
NSWC 16/16 26A	285-005	Soil	10/25/95	10/26/95	11/08/95
NSWC 16/16 27A	285-006	Soil	10/25/95	10/26/95	11/08/95
NSWC 16/16 28A	285-007	Soil	10/25/95	10/26/95	11/08/95
NSWC 16/16 29A	285-008	Soil	10/25/95	10/26/95	11/08/95
NSWC 16/16 30A	285-009	Soil	10/25/95	10/26/95	11/08/95
NSWC 16/16 32A	285-010	Soil	10/25/95	10/26/95	11/08/95
NSWC 16/16 33A	285-011	Soil	10/25/95	10/26/95	11/08/95
NSWC 16/16 34A	285-012	Soil	10/25/95	10/26/95	11/08/95
NSWC 16/16 35A	285-013	Soil	10/25/95	10/26/95	11/08/95
NSWC 16/16 36A	285-014	Soil	10/25/95	10/26/95	11/08/95
NSWC 16/16 37A	285-015	Soil	10/25/95	10/26/95	11/08/95
NSWC 16/16 38A	285-016	Soil	10/25/95	10/26/95	11/08/95

Form I (Tabulated Results)
Since the water sample is a QC sample for the soils, it was analyzed as soil samples.
All analyses were performed within the holding time requirement. The results for the soil samples were reported on the basis of dry weight. Note that chloroprene was reported for semiquantitative analysis only ('Z' flag), due to the laboratory inability to purchase this compound in a known mixture.

Form II (Surrogate Recoveries)
The surrogate recoveries for the samples and method blank were within the method specified limits. The recoveries for dibromofluoromethane in the MS and MSD were above the limits. Reanalysis was not required.

Form III (MS/MSD Recoveries)
The MS/MSD analysis was performed on sample NSWC 16/16 38A. All spike recoveries with the exception of 1,1-dichloroethane in both the MS and MSD were within the limits. All %RPDs were within the method advisory limits.

Form IV (Method Blank Summary)
The method blank was free of target analytes, except for methylene chloride and acetone, which are common lab artifacts and should be viewed with suspicion if they were detected in the samples at below the 10ppb level.

Form V (Tuning and Mass Calibration)
All calibration standards, method blanks and samples were analyzed within the method specified mass calibration and 12-hr tune criteria.

Form VI (Initial Calibration)
The initial calibration curve met the method specified Min mean RRF fo the SPCC compounds and Max %RSD for the CCC compounds.

Form VII (Continuing Calibration)
All CCC and SPCC compounds for the daily continuing calibrations were within the method specified criteria for max %D and Min RRF50.

Form VIII (Internal Standard Summary)
All internal standard areas and all retention times were within the lab warning limits.

2B

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: _____ Location: _____ Group: _____

Level: (low/med) LOW

	SAMPLE NO.	SMC1 #	SMC2 (TOL) #	SMC3 (BFB) #	OTHER #	TOT OUT
01	VBLK01	105	106	102		
02	NSWC 16/16 RB1	114	100	104		
03	NSWC 16/16 23A	109	100	99		
04	NSWC 16/16 24A	115	99	95		
05	NSWC 16/16 25A	113	104	99		
06	NSWC 16/16 26A	115	97	101		
07	NSWC 16/16 27A	115	97	99		
08	NSWC 16/16 28A	118	102	104		
09	NSWC 16/16 29A	114	114	84		
10	NSWC 16/16 30A	116	97	100		
11	NSWC 16/16 32A	116	99	100		
12	NSWC 16/16 33A	113	100	99		
13	NSWC 16/16 34A	116	92	96		
14	NSWC 16/16 35A	117	96	96		
15	NSWC 16/16 36A	118	96	100		
16	NSWC 16/16 37A	119	99	100		
17	NSWC 16/16 38A	119	99	102		
18	NSWC 16/16 38A	131 *	98	107		1
19	NSWC 16/16 38A	137 *	97	109		1
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
SMC1 - Dibromofluoromethane	(80-120)
SMC2 (TOL) - Toluene-d8	(81-117)
SMC3 (BFB) - Bromofluorobenzene	(74-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM II VOA-2

SW846

F-00141

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AENI Contract: 9510285

Project No.: MKC70 Site: _____ Location: _____ Group: _____

Matrix Spike - Sample No.: NSWC 16/16 38A Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	57	0	120	211 *	(59-172)
Trichloroethene	57	0	57	100	(62-137)
Benzene	57	0	66	116	(66-142)
Toluene	57	0	58	102	(59-139)
Chlorobenzene	57	0	58	102	(60-133)

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MS % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	57	130	228 *	8	22	(59-172)
Trichloroethene	57	60	105	5	24	(62-137)
Benzene	57	71	125	7	21	(66-142)
Toluene	57	63	111	8	21	(59-139)
Chlorobenzene	57	61	107	5	21	(60-133)

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 2 out of 10 outside limits

Comments: _____

F-00142

AMERICAN ENVIRONMENTAL NETWORK, INC.

Client: MK CORP

November 14, 1995

Account#: MKC70

Contract: 9510285

Analysis: EXPLOSIVES by 8330

Client ID	Lab ID	Date Sampled	Date Received	Date Prepared	Date Analyzed
NSWC 16/16 RB11	L9510285-001	10/25/95	10/26/95	11/01/95	11/09/95
NSWC 16/16 23A	L9510285-002	10/25/95	10/26/95	11/02/95	11/09/95
NSWC 16/16 24A	L9510285-003	10/25/95	10/26/95	11/02/95	11/09/95
NSWC 16/16 25A	L9510285-004	10/25/95	10/26/95	11/02/95	11/09/95
NSWC 16/16 26A	L9510285-005	10/25/95	10/26/95	11/02/95	11/10/95
NSWC 16/16 27A	L9510285-006	10/25/95	10/26/95	11/02/95	11/10/95
NSWC 16/16 28A	L9510285-007	10/25/95	10/26/95	11/02/95	11/10/95
NSWC 16/16 29A	L9510285-008	10/25/95	10/26/95	11/02/95	11/10/95
NSWC 16/16 30A	L9510285-009	10/25/95	10/26/95	11/02/95	11/10/95
NSWC 16/16 32A	L9510285-010	10/25/95	10/26/95	11/02/95	11/10/95
NSWC 16/16 33A	L9510285-011	10/25/95	10/26/95	11/02/95	11/10/95
NSWC 16/16 34A	L9510285-012	10/25/95	10/26/95	11/02/95	11/10/95
NSWC 16/16 35A	L9510285-013	10/25/95	10/26/95	11/02/95	11/10/95
NSWC 16/16 36A	L9510285-014	10/25/95	10/26/95	11/02/95	11/10/95
NSWC 16/16 37A	L9510285-015	10/25/95	10/26/95	11/02/95	11/10/95
NSWC 16/16 38A	L9510285-016	10/25/95	10/26/95	11/02/95	11/10/95

One water sample and fifteen soil samples were received and analyzed for HMX, RDX, TNB, TETRYL, DNB, TNT, 2,6-DNT and 2,4-DNT by method 8330.

The enclosed package contains tabulated results (Form I)'s, a surrogate recovery summary (Form II), a matrix spike/matrix spike dup recovery summary (Form III), a method blank summary (Form IV), an initial calibration summary (Form VI) and a continuing calibration summary (Form VII).

Form I (Organic Analysis Data Sheet)
The qualifier 'U' indicates that a compound was analyzed for but not detected above the specified detection limit. All samples were prepared and analyzed within the method specified holding times.

Form II (Surrogate Recovery Summary)
The surrogate percent recovery value for the blank soil was outside of criteria. All other analytes are within criteria. The lab criteria for percent recovery is 50 to 150 percent.

Form III (Matrix Spike Recovery Summary)

Soil Matrix
A batch matrix spike and matrix spike duplicate on client sample and a blank spike are supplied. The percent recovery value for HMX is slightly high in the blank spike. All other analytes are within criteria. The lab criteria for component percent recoveries are listed in the Form III. The lab criteria for RPD is 0 to 30 percent.

Form IV (Method Blank Summary)
No target analytes were detected at or above the detection limit in the method blanks.

Form VI (Initial Calibration Summary)
The calibration points listed were used for sample quantitation. All r2 values are within lab criteria. The lab criteria for r2 is .990 or greater.

Form VII (Continuing Calibration Summary)
Percent recoveries for all analytes are within lab criteria. Lab criteria for percent recovery is 75 to 125 percent.

Data Released by _____
Noble N. Nemieboka
GC/LC Asst. Lab. Manager

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

SBLK01
Sample:

Matrix: WATER
Sample: (ml) 770
Final Volume: (L) 10.0
(%) Moisture: N/A
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: BLK951101LS
Lab Name: AENI
Contract: 9510285
Date Sampled: N/A
Date Received: N/A
Date Prepared: 11/01/95
Date Analyzed: 11/07/95
Time Analyzed: 0:20

Compound	Concentration (ug/L)	Detection Limit	Qualifier
HMX		0.36	U
RDX		0.44	U
TNB		0.30	U
TETRYL		0.32	U
DNB		0.25	U
TNT		0.29	U
2,6-DNT		0.31	U
2,4-DNT		0.25	U

F-00035

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

SBLK01
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: N/A
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: BLK951102LSB
Lab Name: AENI
Contract: 9510285
Date Sampled: N/A
Date Received: N/A
Date Prepared: 11/02/95
Date Analyzed: 11/07/95
Time Analyzed: 21:08

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.28	U
RDX		0.34	U
TNB		0.23	U
TETRYL		0.25	U
DNB		0.19	U
TNT		0.22	U
2,6-DNT		0.24	U
2,4-DNT		0.19	U

F-00146

SURROGATE RECOVERY SUMMARY

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument HPLC SYS 2

Surrogate: O-Nitroanaline
Q.C. Criteria: 50 to 150 (%)
Lab Name: AENI
Contract: 9510285

Sample	Lab Sample ID	(%) Recovery
SBLK01	BLK951101LS	82
SBLK01	BLK951102LSB	15 *
BS	BS951101LS	86
BS	BS951102LSB	95
TR705MS	9510237-006MS	78
TR705MSD	9510237-006MSD	86
NSWC 16/16 RB11	L9510285-001	70
NSWC 16/16 23A	L9510285-002	82
NSWC 16/16 24A	L9510285-003	88
NSWC 16/16 25A	L9510285-004	87
NSWC 16/16 26A	L9510285-005	88
NSWC 16/16 27A	L9510285-006	89
NSWC 16/16 28A	L9510285-007	91
NSWC 16/16 29A	L9510285-008	91
NSWC 16/16 30A	L9510285-009	90
NSWC 16/16 32A	L9510285-010	67
NSWC 16/16 33A	L9510285-011	91
NSWC 16/16 34A	L9510285-012	92
NSWC 16/16 35A	L9510285-013	75
NSWC 16/16 36A	L9510285-014	96
NSWC 16/16 37A	L9510285-015	81
NSWC 16/16 38A	L9510285-016	92

* - indicates values outside of criteria

F-00037

Form II

MATRIX SPIKE / MATRIX SPIKE DUPLICATE SUMMARY

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

Matrix: SOIL
(%) Moisture: 12.1
Dilution Factor: 1
Lab Name: AENI
Contract: 9510285

Matrix Spike (S) - Sample: TR705MS
Date Prepared 11/02/95

Lab Sample ID: 9510237-006MS
Date Analyzed: 11/9/95

Matrix Spike Dup (D) Sample: TR705MSD
Date Prepared 11/02/95

Lab Sample ID: 9510237-006MSD
Date Analyzed: 11/9/95

Compound	Concentration (mg/Kg)			Recovery			
	True	Found - S	Found - D	(%) - S	(%) - D	RPD	(%) Criteria
HMX	4.0	5.1	4.6	127	115	7	50 -150
RDX	4.0	3.7	4.1	93	102	7	50 -150
TNB	4.0	3.6	4.1	90	102	9	50 -150
TETRYL	5.0	3.5	3.9	70	98	7	50 -150
DNB	4.0	3.6	4.0	90	100	7	50 -150
TNT	4.0	3.3	3.8	82	95	10	50 -150
2,6-DNT	5.0	4.4	4.9	88	98	7	50 -150
2,4-DNT	4.0	3.5	4.0	88	100	9	50 -150

* - indicates values outside of criteria.

F-00148

MATRIX SPIKE / MATRIX SPIKE DUPLICATE SUMMARY

Client:	MK CORP		Matrix:	SOIL
Account #	MKC70		(%) Moisture:	N/A
Analysis:	EXPLOSIVES	11/10/95	Dilution Factor:	1
Method:	8330		Lab Name:	AENI
Instrument:	HPLC SYS 2	11/10/95	Contract:	9510285

Matrix Spike (S) - Sample: BS
Date Prepared 11/02/95

Lab Sample ID: BS951102LSB
Date Analyzed: 11/10/95

Matrix Spike Dup (D) Sample: BSD
Date Prepared:

Lab Sample ID: BSD
Date Analyzed:

Compound	Concentration (mg/Kg)			Recovery			
	True	Found - S	Found - D	(%) - S	(%) - D	RPD	(%) Criteria
HMX	4.0	6.2		155 *			50 -150
RDX	4.0	4.6		115			50 -150
TNB	4.0	4.6		115			50 -150
TETRYL	5.0	4.0		80			50 -150
DNB	4.0	4.4		110			50 -150
TNT	4.0	4.1		102			50 -150
2,6-DNT	5.0	5.1		102			50 -150
2,4-DNT	4.0	4.2		105			50 -150

* - indicates values outside of criteria.

F-00148

AMERICAN ENVIRONMENTAL NETWORK, INC.

9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

November 3, 1995

Client: MK Corp

Project: NSWC Crane

Case: 9510285

Analysis: Metals

Client ID	AENI ID	Date Sampled	Date Received	Date Analyzed
NSWC 16/16 RB11	9510285-001	10/25/95	10/26/95	10/30-11/2/95
NSWC 16/16 23A	9510285-002	10/25/95	10/26/95	10/30-11/2/95
NSWC 16/16 24A	9510285-003	10/25/95	10/26/95	10/30-11/2/95
NSWC 16/16 25A	9510285-004	10/25/95	10/26/95	10/30-11/2/95
NSWC 16/16 26A	9510285-005	10/25/95	10/26/95	10/30-11/2/95
NSWC 16/16 27A	9510285-006	10/25/95	10/26/95	10/30-11/2/95
NSWC 16/16 28A	9510285-007	10/25/95	10/26/95	10/30-11/2/95
NSWC 16/16 29A	9510285-008	10/25/95	10/26/95	10/30-11/2/95
NSWC 16/16 30A	9510285-009	10/25/95	10/26/95	10/30-11/2/95
NSWC 16/16 32A	9510285-010	10/25/95	10/26/95	10/30-11/2/95
NSWC 16/16 33A	9510285-011	10/25/95	10/26/95	10/30-11/2/95
NSWC 16/16 34A	9510285-012	10/25/95	10/26/95	10/30-11/2/95
NSWC 16/16 35A	9510285-013	10/25/95	10/26/95	10/30-11/2/95
NSWC 16/16 36A	9510285-014	10/25/95	10/26/95	10/30-11/2/95
NSWC 16/16 37A	9510285-015	10/25/95	10/26/95	10/30-11/2/95
NSWC 16/16 38A	9510285-016	10/25/95	10/26/95	10/30-11/2/95

One waste water sample was received and analyzed for Metals. Results are reported in units of ug/L. Fifteen soil samples were

received and analyzed for metals per SW846 methodology. Results are reported in units of mg/Kg dry weight.

The matrix spike recovery for Li was outside control limits and a post-spike was performed. All other QC data were within normal control limits.

Report Released By _____
Christopher Baggett
Metals Laboratory Manager

U.S. EPA - CLP

3
BLANKS

Lab Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony	20.0	U	20.0	U	20.0	U			20.000	U	P
Arsenic	8.0	U	8.0	U	8.0	U			8.000	U	P
Barium											NR
Beryllium	2.0	U	2.0	U	2.0	U			2.000	U	P
Cadmium	4.0	U	4.0	U	4.0	U			4.000	U	P
Calcium											NR
Chromium	10.0	U	10.0	U	10.0	U			10.000	U	P
Cobalt											NR
Copper	25.0	U	25.0	U	25.0	U			25.000	U	[illegible]
Iron											NR
Lead	10.0	U	10.0	U	10.0	U			10.000	U	P
Magnesium											NR
Manganese											NR
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	AV
Nickel	15.0	U	15.0	U	15.0	U			15.000	U	P
Potassium											NR
Selenium	5.0	U	5.0	U	5.0	U			5.000	U	P
Silver	8.0	U	8.0	U	8.0	U			8.000	U	P
Sodium											NR
Thallium	10.0	U	10.0	U	10.0	U			10.000	U	P
Vanadium											NR
Zinc	20.0	U	20.0	U	20.0	U			20.000	U	P
Cyanide											NR
Tin											NR
Lithium	100.0	U	100.0	U	100.0	U	100.0	U			P

U.S. EPA - CLP

3
BLANKS

Lab Name: AENI Contract: 9510285

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel			0.2	U	0.2	U	0.2	U	0.100	U	AV
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide											NR
Tin											NR
Lithium											NR
									10.000	U	P

F-00153

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16 33AS

Lab Name: AENI Contract: 9510285

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 84.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									
Lead									
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR
Tin									NR
Lithium	80-120	73.5552		11.2388	U	115.44	63.7	N	P

Comments:
CLIENT_ID: NSWC_16/16_33A
MATRIX_SPIKE

F-00154

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16 33AM

Lab Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 84.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR
Tin									NR
Lithium	80-120	97.9724		11.2388	U	111.13	88.2		P

Comments:

CLIENT_ID: NSWC_16/16_33A

MATRIX_SPIKE_DUPLICATE

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

951026601S

Lab Name: AENI Contract: 9510285

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									[illegible]
Magnesium									NR
Manganese									NR
Mercury	80-120	1.0200		0.1000	U	1.00	102.0		AV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR
Tin									NR
Lithium									NR

Comments:
MATRIX_SPIKE

F- [illegible]

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

951026601M

Lab Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury	80-120								NR
Nickel		1.0700		0.1000	U	1.00	107.0		AV
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR
Tin									NR
Lithium									NR
									NR

Comments:
MATRIX_SPIKE_DUPLICATE

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16 33AA

Lab Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix: SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum									
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
[illegible]									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR
Tin									NR
Lithium		1001.69		100.00	U	1000.0	100.2		P

Comments:
CLIENT_ID: NSWC_16/16_33A

2.1

F-00158

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

16/16 33AD

Lab Name: AENI Contract: 9510285

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 84.1 % Solids for Duplicate: 84.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								
Antimony								NR
Arsenic								NR
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury								NR
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Cyanide								NR
Tin								NR
Lithium		11.2388	U	11.4996	U			P

F-00159

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

951026601D

Lab Name: AENI Contract: 9510285

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 100.0 % Solids for Duplicate: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								NR
Antimony								NR
Arsenic								NR
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury		0.1000	U	0.1000	U			AV
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Cyanide								NR
Tin								NR
Lithium								NR

F-00160

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Name: AENI Contract: 9510285

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16

Solid LCS Source: _____

Aqueous LCS Source: SPEX

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									
Tin									
Lithium	1000.0	810.93	81.1						

FORM VII - IN

ILM02.1

F- 00161

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Solid LCS Source:

Aqueous LCS Source: SPEX

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury	2.0	1.88	94.0						
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									
Tin									
Lithium									

U.S. EPA - CLP

LABORATORY CONTROL SAMPLE

Name: AENI Contract: 9510285

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16

Solid LCS Source: _____

Aqueous LCS Source: SPEX

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury	2.0	1.91	95.5						
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									
Tin									
Lithium									

FORM VII - IN

ILM02.1

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Name: AENI Contract: 9510285

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Solid LCS Source:

Aqueous LCS Source: SPEX

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony	100.0	91.77	91.8						
Arsenic	100.0	90.33	90.3						
Barium									
Beryllium	50.0	46.38	92.8						
Cadmium	50.0	48.26	96.5						
Calcium									
Chromium	200.0	196.28	98.1						
Cobalt									
Copper	250.0	243.85	97.5						
Iron									
Lead	500.0	488.76	97.8						
Magnesium									
Manganese									
Mercury									
Nickel	500.0	496.16	99.2						
Potassium									
Selenium	100.0	88.38	88.4						
Silver	100.0	95.29	95.3						
Sodium									
Thallium	100.0	95.37	95.4						
Vanadium									
Zinc	500.0	487.88	97.6						
Cyanide									
Tin									
Lithium									

FORM VII - IN

ILM02.1

F-00164

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510285
Report To: MK Corp
Project: Crane NSWC
Date: November 10, 1995
Analysis: Nitrate-N, EPA 353.3

Client ID	AENI ID	Date Sampled	Date Received
NSWC 16/16 RB11	9510285-001	10/25/95	10/26/95

One water sample was received and analyzed for Nitrate-N.

All quality control met standard laboratory criteria.

This report consists of tabulated sample results and a QC Summary Report.

Report Released By: Rhonda Green-Barron
General Chemistry Laboratory Manager

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510285
Report To: MK Corp
Project: Crane NSWC
Date: November 10, 1995
Analysis: Nitrate-N, EPA 353.3

QC SUMMARY

Parameter	Sample ID	Result/Recovery
Nitrate-N	PBLK951110	< 0.05 mg/L
	BS951110	103%
	BSD951110	103%

SDG 9510218

AMERICAN ENVIRONMENTAL NETWORK, INC.

Client: MK Corp

November 08, 1995

Project: MKC70

Contract: 9510218

Analysis: BTEX by 8020

Client ID	Lab ID	Date Sampled	Date Received	Date Prepared	Date Analyzed
NSWC 16/16-063	L9510218-021	10/19/95	10/20/95	10/24/95	10/25/95
NSWC 16/16-064	L9510218-022	10/19/95	10/20/95	10/24/95	10/25/95

Two soil samples were received and analyzed for Benzene, Toluene, Ethyl Benzene and Total Xylenes by method 8020.

The enclosed package contains tabulated results (Form I)'s, a surrogate recovery summary (Form II), a blank spike recovery summary (Form III), a method blank summary (Form IV), an initial calibration summary (Form VI) and a continuing calibration summary (Form VII).

Form I (Organic Analysis Data Sheet)
The qualifier 'U' indicates that a compound was analyzed for but not detected above the specified detection limit. The samples were prepared and analyzed within the method specified holding times.

Form II (Surrogate Recovery Summary)
The percent recovery values for all surrogates are within criteria. The lab criteria for percent recovery is 50 to 150 percent.

Form III (Blank Spike Recovery Summary)

Soil Blank
A soil blank spike is supplied. All values are within criteria. The lab criteria for component percent recoveries are listed in the Form III.

Form IV (Method Blank Summary)
No target analytes were detected at or above the detection limit in the method blank.

Form VI (Initial Calibration Summary)
The calibration points listed were used for sample quantitation. All r2 values are within lab criteria. The lab criteria for r2 is .990 or greater.

Form VII (Continuing Calibration Summary)
Percent recoveries for all analytes are within lab criteria. Lab criteria for percent recovery is 75 to 125 percent.

Data Released by Noble N. Nemieboka
GC/LC Acting Lab Manager

ORGANIC ANALYSIS DATA SHEET

Account #: MKC70
Analysis: BTEX
Method: 8020
Instrument: GC - L (HP5890)

VBLK01
Sample:

Matrix: SOIL
Sample: (g) 5.0
Final Volume: (ml) 5.0
(%) Moisture: 0
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: BLK951024LS
Lab Name: AENI - MD
Contract: 9510218
Date Sampled: N/A
Date Received: N/A
Date Prepared: 10/24/95
Date Analyzed: 10/25/95
Time Analyzed: 8:17

Compound	Concentration (ug/Kg)	Detection Limit	Qualifier
Benzene		1.0	U
Toluene		1.0	U
Ethyl Benzene		1.0	U
Total Xylenes		3.0	U

SURROGATE RECOVERY SUMMARY

Account #: MKC70
Analysis: BTEX
Method: 8020
Instrument GC - L (HP5890)

Surrogate: α,α,α Trifluorotoluene
Q.C. Criteria: 50 to 150 (%)
Lab Name: AENI - MD
Contract: 9510218

Sample	Lab Sample ID	(%) Recovery
VBLK01	BLK951024LS	107
BS	BS951024LS	97
NSWC 16/16-063	L9510218-021	54
NSWC 16/16-064	L9510218-022	86

* - indicates values outside of criteria

Form II

F- 000176

MATRIX SPIKE / MATRIX SPIKE DUPLICATE SUMMARY

Account #: MKC70
Analysis: BTEX
Method: 8020
Instrument: GC - L (HP5890)

Matrix: SOIL
(%) Moisture: 0
Dilution Factor: 1
Lab Name: AENI - MD
Contract: 9510218

Matrix Spike (S) - Sample: BS
Date Prepared 10/24/95

Lab Sample ID: BS951024LS
Date Analyzed: 10/25/95

Matrix Spike Dup (D) Sample: LAB CONT SAMPLE DUP
Date Prepared:

Lab Sample ID: LCSD2
Date Analyzed:

Compound	Concentration (ug/Kg)			Recovery			
	True	Found - S	Found - D	(%) - S	(%) - D	RPD	(%) Criteria
Benzene	20	17		85			50 -150
Toluene	20	20		100			50 -150
Ethyl Benzene	20	21		105			50 -150
Total Xylenes	60	62		103			50 -150

* - indicates values outside of criteria.

F-00171

AMERICAN ENVIRONMENTAL NETWORK, INC.

November 14, 1995

Client: MK CORP

Case: 9510218

Project: CRANE NSWC

Analysis: Pesticides and PCB's by SW-846 Method 8080 (Appendix IX)

Client ID	AENI#	Date Sampled	Date Received	Date Extracted	Date Analyzed
NSWC 16/16-044	9510218-001	10/18/95	10/20/95	11/10/95	11/10/95

One sludge sample was diluted in hexane and analyzed for Pesticides and PCB's by SW-846 method 8080 (Appendix IX).

The enclosed package consists specifically of tabulated results (Form I), surrogate spike recoveries (Form II), matrix spike recoveries (Form III), method blank summary (Form IV), initial calibration summary (Form VI), continuing calibration summary (Form VII), and retention time shifting summary (Form VIII).

Form I (Tabulated Results)

The qualifier "U" indicates that a compound was analyzed for but not detected above the reporting limit. The sample was prepared outside method specified holding time. The original sample chromatogram exhibited a strong PCB-like multi-peak response which roughly matched the AR1248 standard on packed column. After sulfuric acid wash, however, these peaks were completely absent. The non-PCB interference may be attributed to early eluting alkanes.

Form II (Surrogate Spike Recoveries)

All surrogate recoveries were within EPA CLP advisory limits (60-150%) with the exception of TCMX (DB-5) in sample NSWC 16/16-044. The minimal nature of the failure reflects no problem with the sample preparation process.

Form III (Matrix Spike Recoveries)

A blank spike (BS) was extracted with this sample set. All BS recoveries were within specified criteria (see Form III).

F- 00172

Form IV (Method Blank Summary)

No pesticides or PCB's were detected in the method blank.

Form VI (Initial Calibration Summary)

Linear five-point curve with correlation coefficient of 0.995 or better was used for sample quantitation.

A separate calibration curve was analyzed for Diallate, PCNB, Isodrin, Chlorobenzilate, and Kepone. Quantitation (both columns) was based on a five point calibration with correlation coefficient of 0.995 or better.

Form VII (Continuing Calibration Summary)

CCV recoveries were either within or above criteria on both columns for all components of interest. The high recoveries (e.g. kepone) do not affect sample data quality since no target pesticides were present in the samples.

Form VIII (Retention Time Shifting Summary)

All retention time shifting was within criteria (+/- 1.5%).

Data Released By

Noble N. Nemieboka
GC/LC Acting Lab Manager

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218
Account #:——— MKC70
Client Name:——— MK CORP

Sample Number
PBLK01

AEN# # BLK951110VB

Concentration:——— Low
Date Sampled:——— N/A
Date Received:——— N/A
Date Ext Prepared:—— 11/10/95
Date Analyzed:——— 11/10/95
Conc/Dil Factor:——— 1
Method: ——— 8080

GPC Cleanup | | Yes | X | No
Seperatory Funnel Extraction | | Yes
Continuous Liquid - Liquid Extraction | | Yes
Percent Moisture 0
Matrix: SOIL

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		500	U
319-85-7	beta-BHC		500	U
319-86-8	delta-BHC		500	U
58-89-9	gamma-BHC (Lindane)		1000	U
75-44-8	Heptachlor		500	U
309-00-2	Aldrin		500	U
1024-57-3	Heptachlor epoxide		500	U
959-98-8	Endosulfan I		500	U
60-57-1	Dieldrin		1000	U
75-55-9	4, 4'-DDE		1000	U
72-20-8	Endrin		1000	U
33213-65-9	Endosulfan II		1000	U
72-54-8	4, 4'-DDD		1000	U
1031-07-8	Endosulfan Sulfate		1000	U
50-29-3	4, 4'-DDT		1000	U
72-43-5	Methoxychlor		5000	U
53494-70-5	Endrin Ketone		1000	U
7421-36-3	Endrin aldehyde		1000	U
57-74-9	Chlordane		10000	U
8001-35-2	Toxaphene		50000	U
12674-11-2	Aroclor-1016		10000	U
11104-28-2	Aroclor-1221		20000	U
11141-16-5	Aroclor-1232		10000	U
53469-21-9	Aroclor-1242		10000	U
12672-29-6	Aroclor-1248		10000	U
11097-69-1	Aroclor-1254		10000	U
11096-82-5	Aroclor-1260		10000	U
510-15-6	Chlorobenzilate		20000	U
2303-16-4	Diallate		100000	U
465-73-6	Isodrin		2500	U
143-50-0	Kepone		10000	U
82-68-8	Pentachloronitrobenzene		2000	U

Vi - Volume of extract injected (ul) - _____ 1
Vs - Volume of Water extracted (ml) - _____ N/A
Ws - Weight of sample extracted (g) - _____ 0.1
Vt - Volume of total extract (ul) - _____ 10,000

FORM I

F-00174

2F

SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: American Environmental Network, Inc. Contract: 9510218

Lab Code: NA Case No.: NA SAS No.: NA

Instrument ID: GC-F

GC Column(1): DB-5 D: 0.53 mm GC Column(2): DB 608 ID: 0.53 mm

Dates of Analyses: 11/10/95 to 11/10/95

Method: 8080

EPA SAMPLE NO.	TCMX 1 %REC	#	TCMX 2 % REC	#	DCB 1 %REC	#	DCB 2 %REC	#	TOTAL OUT
BLK951110VB	102		109		72		70		0
BS	108		116		82		78		0
NSWC 16/16-044	61		45	*	82		76		1

ADVISORY QC LIMITS

TCMX= Tetrachloro-m-xylene (60-150)

DCB= Decachlorobiphenyl (60-150)

COLUMN TO BE USED TO FLAG RECOVERY VALUES

* VALUES OUTSIDE OF QC LIMITS

D SURROGATE DILUTED OUT

FORM II PEST-1

F-00075

3F

SOIL BLANK SPIKE RECOVERY

Lab Name: American Environmental Network, Inc. Contract: 9510218

Lab Code: NA Case No.: NA SAS No.: NA

Matrix Spike - EPA Sample No.: BS951110VB

Method: 8080

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC	#	QC LIMITS REC.
gamma-BHC (Lindane)	2000	0.0	1900	95		46 - 127
Heptachlor	2000	0.0	1900	95		35 - 130
Aldrin	2000	0.0	2000	100		34 - 132
Dieldrin	5000	0.0	5200	104		31 - 134
Endrin	5000	0.0	5000	100		42 - 139
4,4'-DDT	5000	0.0	3800	76		23 - 134

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits.

FORM III PEST-2

F-00176

AMERICAN ENVIRONMENTAL NETWORK, INC.

November 8, 1995

Client: MK CORP

Case: 9510218

Project: CRANE NSWC

Analysis: Pesticides and PCB's by SW-846 Method 8080 (Appendix IX)

Client ID	AENI#	Date Sampled	Date Received	Date Extracted	Date Analyzed
NSWC 16/16-055	9510218-013	10/19/95	10/20/95	11/02/95	11/07/95
NSWC 16/16-063	9510218-021	10/19/95	10/20/95	11/02/95	11/08/95

Two soil samples were extracted and analyzed for Pesticides and PCB's by SW-846 method 8080 (Appendix IX).

The enclosed package consists specifically of tabulated results (Form I), surrogate spike recoveries (Form II), matrix spike recoveries (Form III), method blank summary (Form IV), initial calibration summary (Form VI), continuing calibration summary (Form VII), and retention time shifting summary (Form VIII).

Form I (Tabulated Results)

The qualifier "U" indicates that a compound was analyzed for but not detected above the reporting limit. The samples were prepared and analyzed within method specified holding time.

Form II (Surrogate Spike Recoveries)

All surrogate recoveries were within EPA CLP advisory limits (60-150%) with the exceptions of TCMX (DB-5) and DCB (DB-608) in sample NSWC 16/16-063. TCMX (DB-608) was masked by matrix interference in this sample. The minimal nature of the failures reflects no problem with the sample preparation process.

Form III (Matrix Spike Recoveries)

A blank spike (BS) was extracted with this sample set. All BS recoveries were within specified criteria (see Form III).

Form IV (Method Blank Summary)

No pesticides or PCB's were detected in the method blank.

F-00177

Form VI (Initial Calibration Summary)

Linear five-point curve with correlation coefficient of 0.995 or better was used for sample quantitation.

A separate calibration curve was analyzed for Diallate, PCNB, Isodrin, Chlorobenzilate, and Kepone. Quantitation (both columns) was based on a five point calibration with correlation coefficient of 0.995 or better.

Form VII (Continuing Calibration Summary)

CCV recoveries were either within or above criteria on both columns for all components of interest. The high recoveries (e.g. kepone) do not affect sample data quality since no target pesticides were present in the samples.

Form VIII (Retention Time Shifting Summary)

All retention time shifting was within criteria (+/- 1.5%).

Data Released By Noble Ngange Nemieboka

Noble N. Nemieboka
GC/LC Acting Lab Manager

F-00178

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218

Account #:——— MKC70

Client Name:——— MK CORP

Sample Number

PBLK01 SOIL

AENI # BLK951102L

Concentration:——— Low

Date Sampled:——— N/A

Date Received:——— N/A

Date Ext Prepared:——— 11/2/95

Date Analyzed:——— 11/7/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup | | Yes | X | No

Seperatory Funnel Extraction | | Yes

Continuous Liquid - Liquid Extraction | | Yes

Percent Moisture 0

Matrix SOIL

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.7	U
319-85-7	beta-BHC		1.7	U
319-86-8	delta-BHC		1.7	U
58-89-9	gamma-BHC (Lindane)		3.3	U
75-44-8	Heptachlor		1.7	U
309-00-2	Aldrin		1.7	U
1024-57-3	Heptachlor epoxide		1.7	U
959-98-8	Endosulfan I		1.7	U
60-57-1	Dieldrin		3.3	U
75-55-9	4, 4'-DDE		3.3	U
72-20-8	Endrin		3.3	U
33213-65-9	Endosulfan II		3.3	U
72-54-8	4, 4'-DDD		3.3	U
1031-07-8	Endosulfan Sulfate		3.3	U
50-29-3	4, 4'-DDT		3.3	U
72-43-5	Methoxychlor		17	U
53494-70-5	Endrin Ketone		3.3	U
7421-36-3	Endrin aldehyde		3.3	U
57-74-9	Chlordane		33	U
8001-35-2	Toxaphene		170	U
12674-11-2	Aroclor-1016		33	U
11104-28-2	Aroclor-1221		67	U
11141-16-5	Aroclor-1232		33	U
53469-21-9	Aroclor-1242		33	U
12672-29-6	Aroclor-1248		33	U
11097-69-1	Aroclor-1254		33	U
11096-82-5	Aroclor-1260		33	U
510-15-6	Chlorobenzilate		67	U
2303-16-4	Diallate		333	U
465-73-6	Isodrin		8.3	U
143-50-0	Kepone		33	U
82-68-8	Pentachloronitrobenzene		6.7	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30

Vt - Volume of total extract (ul) - _____ 10,000

FORM I

F-00179

2F

SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: American Environmental Network, Inc. Contract: 9510218
Lab Code: NA Case No.: NA SAS No.: NA
Instrument ID: GC-F
GC Column(1): DB-5 D: 0.53 mm GC Column(2): DB 608 ID: 0.53 mm
Dates of Analyses: 11/7/95 to 11/8/95
Method: 8080

EPA SAMPLE NO.	TCMX 1 %REC	#	TCMX 2 % REC	#	DCB 1 %REC	#	DCB 2 %REC	#	TOTAL OUT
BLK951102L	105		88		89		76		0
BS SOIL	86		88		81		70		0
NSWC 16/16-055	106		85		77		66		0
NSWC 16/16-063	51	*	M		66		51	*	2

ADVISORY QC LIMITS

TCMX = Tetrachloro-m-xylene (60-150)
DCB = Decachlorobiphenyl (60-150)

COLUMN TO BE USED TO FLAG RECOVERY VALUES
* VALUES OUTSIDE OF QC LIMITS
D SURROGATE DILUTED OUT

FORM II PEST-1

F-00180

3F

SOIL BLANK SPIKE RECOVERY

Lab Name: American Environmental Network, Inc. Contract: 9510218

Lab Code: NA Case No.: NA SAS No.: NA

Matrix Spike - EPA Sample No.: BS951102L

Method: 8080

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC	#	QC LIMITS REC.
gamma-BHC (Lindane)	6.7	0.0	6.0	90		46 - 127
Heptachlor	6.7	0.0	6.5	97		35 - 130
Aldrin	6.7	0.0	6.0	90		34 - 132
Dieldrin	17	0.0	16	94		31 - 134
Endrin	17	0.0	19	112		42 - 139
4,4'-DDT	17	0.0	18	106		23 - 134

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits.

FORM III PEST-2

F-00181

AMERICAN ENVIRONMENTAL NETWORK, INC.

November 4, 1995

Client: MK CORP

Case: 9510218

Project: CRANE NSWC

Analysis: Pesticides and PCB's by SW-846 Method 8080 (Appendix IX)

Client ID	AENI#	Date Sampled	Date Received	Date Extracted	Date Analyzed
NSWC 16/16-046	9510218-004	10/19/95	10/20/95	10/27/95	11/03/95
NSWC 16/16-047	9510218-005	10/19/95	10/20/95	10/27/95	11/03/95
NSWC 16/16-048	9510218-006	10/19/95	10/20/95	10/27/95	11/03/95
NSWC 16/16-049	9510218-007	10/19/95	10/20/95	10/27/95	11/03/95
NSWC 16/16-050	9510218-008	10/19/95	10/20/95	10/27/95	11/03/95
NSWC 16/16-051	9510218-009	10/19/95	10/20/95	10/27/95	11/03/95
NSWC 16/16-052	9510218-010	10/19/95	10/20/95	10/27/95	11/03/95
NSWC 16/16-053	9510218-011	10/19/95	10/20/95	10/27/95	11/03/95
NSWC 16/16-054	9510218-012	10/19/95	10/20/95	10/27/95	11/03/95
NSWC 16/16-056	9510218-014	10/19/95	10/20/95	10/27/95	11/03/95
NSWC 16/16-057	9510218-015	10/19/95	10/20/95	10/27/95	11/04/95
SWC 16/16-058	9510218-016	10/19/95	10/20/95	10/27/95	11/04/95
NSWC 16/16-059	9510218-017	10/19/95	10/20/95	10/27/95	11/04/95
NSWC 16/16-060	9510218-018	10/19/95	10/20/95	10/27/95	11/04/95
NSWC 16/16-061	9510218-019	10/19/95	10/20/95	10/27/95	11/04/95
NSWC 16/16-062	9510218-020	10/19/95	10/20/95	10/27/95	11/04/95
NSWC 16/16-064	9510218-022	10/19/95	10/20/95	10/27/95	11/04/95
NSWC 16/16-065	9510218-023	10/19/95	10/20/95	10/27/95	11/04/95
NSWC 16/16-066	9510218-024	10/19/95	10/20/95	10/27/95	11/04/95

Nineteen soil samples were extracted and analyzed for Pesticides and PCB's by SW-846 method 8080 (Appendix IX).

The enclosed package consists specifically of tabulated results (Form I), surrogate spike recoveries (Form II), matrix spike recoveries (Form III), method blank summary (Form IV), initial calibration summary (Form VI), continuing calibration summary (Form VII), and retention time shifting summary (Form VIII).

Form I (Tabulated Results)

The qualifier "U" indicates that a compound was analyzed for but not detected above the reporting limit The samples were prepared and analyzed within method specified holding time. Several of the sample extracts required dilution due to very dark coloration and potential for damage to the chromatographic column. Reporting limits for these samples are elevated in proportion to the dilution factor.

Form II (Surrogate Spike Recoveries)

All measurable surrogate recoveries were within specified criteria (60-150%) with the exception of DCB on column DB-5. The minimal nature of the failures reflects no problem with the sample preparation process. The surrogates were diluted out of those samples with dark-colored extracts.

Form III (Matrix Spike Recoveries)

A blank spike (BS) was extracted with this sample set. All BS recoveries were within specified criteria (see Form III).

MS/MSD was performed on sample NSWC 16/16-065 (AENI# 9510218-023). Recoveries could not be evaluated due to 100X dilution.

Form IV (Method Blank Summary)

No pesticides or PCB's were detected in the method blank.

Form VI (Initial Calibration Summary)

Linear five-point curve with correlation coefficient of 0.995 or better was used for sample quantitation.

A separate calibration curve was analyzed for Diallate, PCNB, Isodrin, Chlorobenzilate, and Kepone. Quantitation (both columns) was based on a five point calibration with correlation coefficient of 0.995 or better.

Form VII (Continuing Calibration Summary)

CCV recoveries were either within or above criteria on both columns for all components of interest. The high recoveries do not affect sample data quality since no target pesticides were present in the samples.

Form VIII (Retention Time Shifting Summary)

All retention time shifting was within criteria (+/- 1.5%).

Data Released By Noble Nyange Namieboka

Noble N. Namieboka
GC/LC Acting Lab Manager

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510218

Account #:——— MKC70

Client Name:——— MK CORP

Sample Number

PBLK01

AEN1 # BLK951027LC

Concentration:——— Low

Date Sampled:——— N/A

Date Received:——— N/A

Date Ext Prepared:— 10/27/95

Date Analyzed:——— 11/3/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup | | Yes | X | No

Seperatory Funnel Extraction | | Yes

Continuous Liquid - Liquid Extraction | | Yes

Percent Moisture 0

Matrix SOIL

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.7	U
319-85-7	beta-BHC		1.7	U
319-86-8	delta-BHC		1.7	U
58-89-9	gamma-BHC (Lindane)		3.3	U
75-44-8	Heptachlor		1.7	U
309-00-2	Aldrin		1.7	U
1024-57-3	Heptachlor epoxide		1.7	U
959-98-8	Endosulfan I		1.7	U
60-57-1	Dieldrin		3.3	U
75-55-9	4, 4'-DDE		3.3	U
72-20-8	Endrin		3.3	U
33213-65-9	Endosulfan II		3.3	U
72-54-8	4, 4'-DDD		3.3	U
1031-07-8	Endosulfan Sulfate		3.3	U
50-29-3	4, 4'-DDT		3.3	U
72-43-5	Methoxychlor		17	U
53494-70-5	Endrin Ketone		3.3	U
7421-36-3	Endrin aldehyde		3.3	U
57-74-9	Chlordane		33	U
8001-35-2	Toxaphene		170	U
12674-11-2	Aroclor-1016		33	U
11104-28-2	Aroclor-1221		67	U
11141-16-5	Aroclor-1232		33	U
53469-21-9	Aroclor-1242		33	U
12672-29-6	Aroclor-1248		33	U
11097-69-1	Aroclor-1254		33	U
11096-82-5	Aroclor-1260		33	U
510-15-6	Chlorobenzilate		67	U
2303-16-4	Diallate		333	U
465-73-6	Isodrin		8.3	U
143-50-0	Kepone		33	U
82-68-8	Pentachloronitrobenzene		6.7	U

Vi - Volume of extract injected (ul) - _____ 1

Vs - Volume of Water extracted (ml) - _____ N/A

Ws - Weight of sample extracted (g) - _____ 30

Vt - Volume of total extract (ul) - _____ 10,000

FORM I

F-00184

2F

SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: American Environmental Network, Inc. Contract: 9510218
Lab Code: NA Case No.: NA SAS No.: NA
Instrument ID: GC-F
GC Column(1): DB-5 D: 0.53 mm GC Column(2): DB 608 ID: 0.53 mm
Dates of Analyses: 11/3/95 to 11/4/95
Method: 8080

	EPA SAMPLE NO.	TCMX 1 %REC	#	TCMX 2 % REC	#	DCB 1 %REC	#	DCB 2 %REC	#	TOTAL OUT
	BLK951027LC	86		105		51	*	82		1
	BS	91		110		54	*	76		1
10X	NSWC 16/16-046	D		D		D		D		0
	NSWC 16/16-047	84		100		60		79		0
	NSWC 16/16-048	86		101		55	*	83		1
	NSWC 16/16-049	97		79		57	*	66		1
	NSWC 16/16-050	101		106		60	*	75		1
10X	NSWC 16/16-051	D		D		D		D		0
20X	NSWC 16/16-052	D		D		D		D		0
	NSWC 16/16-053	95		92		53	*	74		1
10X	NSWC 16/16-054	D		D		D		D		0
10X	NSWC 16/16-056	D		D		D		D		0
100X	NSWC 16/16-057	D		D		D		D		0
100X	NSWC 16/16-058	D		D		D		D		0
20X	NSWC 16/16-059	D		D		D		D		0
20X	NSWC 16/16-060	D		D		D		D		0
	NSWC 16/16-061	86		99		61		79		0
	NSWC 16/16-062	86		86		51	*	89		1
	NSWC 16/16-064	46	*	55	*	60	*	69		3
100X	NSWC 16/16-065	D		D		D		D		0
	NSWC 16/16-066	83		86		61		78		0

ADVISORY QC LIMITS

TCMX= Tetrachloro-m-xylene (60-150)
DCB= Decachlorobiphenyl (60-150)

COLUMN TO BE USED TO FLAG RECOVERY VALUES
* VALUES OUTSIDE OF QC LIMITS
D SURROGATE DILUTED OUT

FORM II PEST-1

F-00025

3F

SOIL BLANK SPIKE RECOVERY

Lab Name: American Environmental Network, Inc. Contract: 9510218

Lab Code: NA Case No.: NA SAS No.: NA

Matrix Spike - EPA Sample No.: BS951027LC

Method: 8080

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC	#	QC LIMITS REC.
gamma-BHC (Lindane)	6.7	0.0	6.0	90		46 - 127
Heptachlor	6.7	0.0	5.8	87		35 - 130
Aldrin	6.7	0.0	5.8	87		34 - 132
Dieldrin	17	0.0	15	88		31 - 134
Endrin	17	0.0	17	100		42 - 139
4,4'-DDT	17	0.0	16	94		23 - 134

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits.

FORM III PEST-2

F-00136

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 RUMSEY ROAD
COLUMBIA, MD. 21045
(410) 730-8525

Project Number: 9510-218
Client Name: Morrison Knudsen Corporation
Project Title: NSWC Crane

One water and twenty-one soil samples were analyzed for the volatile organic compounds in the Appendix IX list, by method 8260. Two soil samples were analyzed for the polynuclear aromatic compounds, by method 8270.
All analyses followed the standard AENI QA/QC and holding time requirements.

This package consists of the tabulated results of the samples and the method blanks, along with the QC forms II, III, IV, V, VI, VII and VIII.

Data Released Minh-Thuy L. Nguyen 4/7/1
Minh-Thuy L. Nguyen
GC/MS Lab Manager

F-00187

VOLATILES Section:

Client ID	AENI ID	Matrix	Date Sampled	Date Received	Date Analyzed
NSWC 16/16-RB10	218-003	Water	10/19/95	10/20/95	10/25/95
NSWC 16/16-046	218-004	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-047	218-005	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-048	218-006	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-049	218-007	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-050	218-008	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-051	218-009	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-052	218-010	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-053	218-011	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-054	218-012	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-055	218-013	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-056	218-014	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-057	218-015	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-058	218-016	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-059	218-017	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-060	218-018	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-061	218-019	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-062	218-020	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-063	218-021	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-064	218-022	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-065	218-023	Soil	10/19/95	10/20/95	10/25/95
NSWC 16/16-066	218-024	Soil	10/19/95	10/20/95	10/26/95

Form I (Tabulated Results)

Since the water sample is a QC sample for the soils, it was analyzed as soil samples.

All analyses were performed within the holding time requirement. The results for the soil samples were reported on the basis of dry weight. Note that chloroprene was reported for semiquantitative analysis only ('Z' flag), due to the laboratory inability to purchase this compound in a known mixture.

Form II (Surrogate Recoveries)

The surrogate recoveries for the samples, QC and method blanks were within the method specified limits.

Form III (MS/MSD Recoveries)

The MS/MSD analyses were performed on samples NSWC 16/16-056 and NSWC 16/16-066. All spike recoveries and all %RPDs were within the method advisory limits.

Form IV (Method Blank Summary)
The method blanks were free of target analytes, except for methylene chloride, which is a common lab artifact and should be viewed with suspicion if it was detected in the samples at below the 10ppb level.

Form V (Tuning and Mass Calibration)
All calibration standards, method blanks and samples were analyzed within the method specified mass calibration and 12-hr tune criteria.

Form VI (Initial Calibration)
The initial calibration curve met the method specified Min mean RRF for the SPCC compounds and Max %RSD for the CCC compounds.

Form VII (Continuing Calibration)
All CCC and SPCC compounds for the daily continuing calibrations were within the method specified criteria for max %D and Min RRF50.

Form VIII (Internal Standard Summary)
All internal standard areas and all retention times were within the lab warning limits

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: _____ Location: _____ Group: _____

Level: (low/med) LOW

	SAMPLE NO.	SMC1 #	SMC2 (TOL) #	SMC3 (BFB) #	OTHER #	TOT OUT
01	VBLK01	82	85	85		
02	NSWC 16/16-RB1	117	105	112		
03	NSWC 16/16-046	91	88	84		
04	NSWC 16/16-047	95	103	77		
05	NSWC 16/16-048	96	87	86		
06	NSWC 16/16-049	99	83	87		
07	NSWC 16/16-051	102	88	82		
08	NSWC 16/16-052	95	85	82		
09	NSWC 16/16-053	88	95	80		
10	VBLK02	91	99	90		
11	NSWC 16/16-050	96	108	91		
12	NSWC 16/16-054	100	103	91		
13	NSWC 16/16-056	98	103	90		
14	NSWC 16/16-056	96	101	89		
15	NSWC 16/16-056	105	106	90		
16	NSWC 16/16-057	99	106	90		
17	NSWC 16/16-058	107	109	84		
18	NSWC 16/16-059	104	107	85		
19	NSWC 16/16-060	104	102	90		
20	NSWC 16/16-061	106	103	90		
21	NSWC 16/16-062	104	102	91		
22	NSWC 16/16-063	103	101	93		
23	NSWC 16/16-064	106	108	101		
24	NSWC 16/16-065	101	116	83		
25	NSWC 16/16-066	99	104	88		
26	NSWC 16/16-066	105	106	96		
27	NSWC 16/16-066	108	104	88		
28	VBLK03	103	104	109		
29	NSWC 16/16-055	99	113	115		
30						

	QC LIMITS
SMC1 - Dibromofluoromethane	(80-120)
SMC2 (TOL) - Toluene-d8	(81-117)
SMC3 (BFB) - Bromofluorobenzene	(74-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

F-061190

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix Spike - Sample No.: NSWC 16/16-056 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	53	0	49	92	(59-172)
Trichloroethene	53	0	47	89	(62-137)
Benzene	53	0	52	98	(66-142)
Toluene	53	0	53	100	(59-139)
Chlorobenzene	53	0	49	92	(60-133)

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MS % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	53	54	101	10	22	(59-172)
Trichloroethene	53	51	96	8	24	(62-137)
Benzene	53	57	108	9	21	(66-142)
Toluene	53	58	109	9	21	(59-139)
Chlorobenzene	53	53	100	8	21	(60-133)

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Comments:

F-00191

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: _____ Location: _____ Group: _____

Matrix Spike - Sample No.: NSWC 16/16-066 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	63	0	59	93	(59-172)
Trichloroethene	63	0	59	94	(62-137)
Benzene	63	0	65	103	(66-142)
Toluene	63	0	67	106	(59-139)
Chlorobenzene	63	0	61	97	(60-133)

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MS % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	63	61	97	3	22	(59-172)
Trichloroethene	63	56	89	5	24	(62-137)
Benzene	63	67	106	3	21	(66-142)
Toluene	63	65	103	3	21	(59-139)
Chlorobenzene	63	60	95	2	21	(60-133)

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Comments: _____

F-00092

SEMIVOLATILES Section:

Client ID	AENI ID	Matrix	Date Sampled	Date Received	Date Extracted	Date Analyzed
NSWC 16/16-063	218-021	Soil	10/19/95	10/20/95	10/26/95	11/02/95
NSWC 16/16-064	218-022	Soil	10/19/95	10/20/95	10/26/95	11/02/95

Form I (Tabulated Results)
All sample preparation and analyses were performed within the holding time requirement. The results were reported on the basis of dry weight.

Form II (Surrogate Recoveries)
The surrogate recoveries for the samples, QC, and method blank were within the method specified limits.

Form III (Blank Spike Recoveries)
A BS analysis was reported. All spike recoveries were within the method advisory limits.

Form IV (Method Blank Summary)
The method blank was free of target analytes.

Form V (Tuning and Mass Calibration)
All calibration standards, method blank, QC and samples were analyzed within the method specified mass calibration and 12-hr tune criteria.

Form VI (Initial Calibration)
The initial calibration curve met the method specified Min mean RRF for the SPCC compounds and Max %RSD for the CCC compounds.

Form VII (Continuing Calibration)
All CCC and SPCC compounds for the daily continuing calibration were within the method specified criteria for max %D and Min RRF50.

Form VIII (Internal Standard Summary)
All internal standard area recoveries and retention times were within the lab warning limits.

SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: _____ Location: _____ Group: _____

Level: (low/med) LOW

	SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	#	#	#	#	#	TOT OUT
01	SBLK01	81	87	105						
02	BS	87	94	116						
03	NSWC 16/16-063	95	95	109						
04	NSWC 16/16-064	114	93	108						
05										
06										
07										
08										
09										
10										
11										
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28										
29										
30										

	QC LIMITS
S1 (NBZ) - Nitrobenzene-d5	(23-120)
S2 (FBP) - 2-Fluorobiphenyl	(30-115)
S3 (TPH) - Terphenyl-d14	(18-137)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

FORM II SV-2 SW846

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AENI Contract: 9510218

Project No.: MKC70 Site: Location: Group:

Matrix Spike · Sample No.: 951026JC Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,4-Dichlorobenzene	3300	0	2600	79	(28-104)
N-Nitroso-di-n-propylamine	3300	0	2500	76	(41-126)
1,2,4-Trichlorobenzene	3300	0	2800	85	(41-126)
Acenaphthene	3300	0	3100	94	(31-137)
2,4-Dinitrotoluene	3300	0	2900	88	(28-89)
Pyrene	3300	0	2900	88	(35-142)

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene					27	(28-104)
N-Nitroso-di-n-propylamine					38	(41-126)
1,2,4-Trichlorobenzene					38	(41-126)
Acenaphthene					19	(31-137)
2,4-Dinitrotoluene					47	(28-89)
Pyrene					36	(35-142)

* Values outside of QC limits

Comments:

AMERICAN ENVIRONMENTAL NETWORK, INC.

Client: MK CORP

November 10, 1995

Project: MKC70

Contract: 9510218

Analysis: EXPLOSIVES by 8330

Client ID	Lab ID	Date Sampled	Date Received	Date Prepared	Date Analyzed
NSWC 16/16-RB10	L9510218-003	10/19/95	10/20/95	10/20/95	10/28/95
NSWC 16/16-046	L9510218-004	10/19/95	10/20/95	10/23/95	10/25/95
NSWC 16/16-047	L9510218-005	10/19/95	10/20/95	10/23/95	10/25/95
NSWC 16/16-048	L9510218-006	10/19/95	10/20/95	10/23/95	10/25/95
NSWC 16/16-049	L9510218-007	10/19/95	10/20/95	10/23/95	10/25/95
NSWC 16/16-050	L9510218-008	10/19/95	10/20/95	11/01/95	11/07/95
NSWC 16/16-051	L9510218-009	10/19/95	10/20/95	11/01/95	11/07/95
NSWC 16/16-052	L9510218-010	10/19/95	10/20/95	11/01/95	11/07/95
NSWC 16/16-053	L9510218-011	10/19/95	10/20/95	11/01/95	11/07/95
NSWC 16/16-054	L9510218-012	10/19/95	10/20/95	11/01/95	11/07/95
NSWC 16/16-055	L9510218-013	10/19/95	10/20/95	11/01/95	11/07/95
NSWC 16/16-056	L9510218-014	10/19/95	10/20/95	11/01/95	11/07/95
NSWC 16/16-057	L9510218-015	10/19/95	10/20/95	11/01/95	11/07/95
NSWC 16/16-058	L9510218-016	10/19/95	10/20/95	11/01/95	11/07/95
NSWC 16/16-059	L9510218-017	10/19/95	10/20/95	11/01/95	11/07/95
NSWC 16/16-060	L9510218-018	10/19/95	10/20/95	11/01/95	11/07/95
NSWC 16/16-061	L9510218-019	10/19/95	10/20/95	11/01/95	11/07/95
NSWC 16/16-062	L9510218-020	10/19/95	10/20/95	11/01/95	11/07/95
NSWC 16/16-063	L9510218-021	10/19/95	10/20/95	11/01/95	11/07/95
NSWC 16/16-064	L9510218-022	10/19/95	10/20/95	11/01/95	11/07/95
NSWC 16/16-065	L9510218-023	10/19/95	10/20/95	11/01/95	11/07/95
NSWC 16/16-066	L9510218-024	10/19/95	10/20/95	11/01/95	11/07/95

One water sample and twenty-one soil samples were received and analyzed for HMX, RDX, TNB, TETRYL, DNB, TNT, 2,6-DNT and 2,4-DNT by method 8330.

The enclosed package contains tabulated results (Form I)'s, a surrogate recovery summary (Form II), a matrix spike/matrix spike dup recovery summary (Form III), a method blank summary (Form IV), an initial calibration summary (Form VI) and a continuing calibration summary (Form VII).

Form I (Organic Analysis Data Sheet)

The qualifier 'U' indicates that a compound was analyzed for but not detected above the specified detection limit. All samples were prepared and analyzed within the method specified holding times.

Form II (Surrogate Recovery Summary)
The surrogate percent recovery value for four out of thirty four samples are outside of criteria. The sample preparation chemist modified the water extraction method to make up for loss of sample. This may have affected the recoveries. The lab criteria for percent recovery is 50 to 150 percent.

Form III (Matrix Spike Recovery Summary)

Water Matrix
A batch blank spike is supplied. The percent recovery value for most of the analytes are outside of criteria. The data for the water sample should therefore be considered semi-quantitative. The lab criteria for component percent recoveries are listed in the Form III. The lab criteria for RPD is 0 to 30 percent.

Soil Matrix
Three sets of blank spkikes and two sets of matrix spike and matrix spike duplicate on client samples are supplied. All values are within criteria. The lab criteria for component percent recoveries are listed in the Form III. The lab criteria for RPD is 0 to 30 percent.

Form IV (Method Blank Summary)
No target analytes were detected at or above the detection limit in the method blanks.

Form VI (Initial Calibration Summary)
The calibration points listed were used for sample quantitation. All r2 values are within lab criteria. The lab criteria for r2 is .990 or greater.

Form VII (Continuing Calibration Summary)
Six sets of continuing calibration verification standards are supplied. The percent recovery for TNT was high in one of the CCV's due interfering peak, the quality of data is not affected since all other CCV's had acceptable recoveries. Lab criteria for percent recovery is 75 to 125 percent.

Data Released by _____
Noble N. Nemieboka
GC/LC Asst. Lab. Manager

F-00197

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

SBLK01
Sample:

Matrix: WATER
Sample: (ml) 226
Final Volume: (L) 1.0
(%) Moisture: N/A
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: BLK951020LC
Lab Name: AENI
Contract: 9510218
Date Sampled: N/A
Date Received: N/A
Date Prepared: 10/20/95
Date Analyzed: 10/28/95
Time Analyzed: 17:33

Compound	Concentration (ug/L)	Detection Limit	Qualifier
HMX		0.12	U
RDX		0.15	U
TNB		0.10	U
TETRYL		0.11	U
DNB		0.08	U
TNT		0.10	U
2,6-DNT		0.11	U
2,4-DNT		0.08	U

F-001198

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

SBLK01
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: N/A
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: BLK951023RA
Lab Name: AENI
Contract: 9510218
Date Sampled: N/A
Date Received: N/A
Date Prepared: 10/23/95
Date Analyzed: 10/24/95
Time Analyzed: 20:48

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.28	U
RDX		0.34	U
TNB		0.23	U
TETRYL		0.25	U
DNB		0.19	U
TNT		0.22	U
2,6-DNT		0.24	U
2,4-DNT		0.19	U

F-001195

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

SBLK01
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: N/A
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: BLK951102LS
Lab Name: AENI
Contract: 9510218
Date Sampled: N/A
Date Received: N/A
Date Prepared: 11/02/95
Date Analyzed: 11/07/95
Time Analyzed: 21:08

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.28	U
RDX		0.34	U
TNB		0.23	U
TETRYL		0.25	U
DNB		0.19	U
TNT		0.22	U
2,6-DNT		0.24	U
2,4-DNT		0.19	U

F-001200

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

SBLK01
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: N/A
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: BLK951101LS
Lab Name: AENI
Contract: 9510218
Date Sampled: N/A
Date Received: N/A
Date Prepared: 11/01/95
Date Analyzed: 11/07/95
Time Analyzed: 0:20

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.28	U
RDX		0.34	U
TNB		0.23	U
TETRYL		0.25	U
DNB		0.19	U
TNT		0.22	U
2,6-DNT		0.24	U
2,4-DNT		0.19	U

F-00201

SURROGATE RECOVERY SUMMARY

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument HPLC SYS 2

Surrogate: O-Nitroanaline
Q.C. Criteria: 50 to 150 (%)
Lab Name: AENI
Contract: 9510218

Sample	Lab Sample ID	(%) Recovery
VBLK01	BLK951023RA	86
VBLK01	BLK951101LS	82
VBLK01	BLK951020LC	20 *
VBLK01	BLK951102LS	15 *
BS	BS951023LA	94
BS	BS951101LS	86
BS	MS9510218-023	95
BSD	MSD9510218-023	87
BS	BS951020LC	36 *
BS	MS9510218-007	89
BSD	MSD9510218-007	91
BS	BS951102LS	71
NSWC 16/16-RB10	L9510218-003	35 *
NSWC 16/16-046	L9510218-004	87
NSWC 16/16-047	L9510218-005	83
NSWC 16/16-048	L9510218-006	89
NSWC 16/16-049	L9510218-007	85
NSWC 16/16-050	L9510218-008	81
NSWC 16/16-051	L9510218-009	80
NSWC 16/16-052	L9510218-010	81
NSWC 16/16-053	L9510218-011	83
NSWC 16/16-054	L9510218-012	80
NSWC 16/16-055	L9510218-013	81
NSWC 16/16-056	L9510218-014	77
NSWC 16/16-057	L9510218-015	81

* - indicates values outside of criteria

Form II

F-00202

SURROGATE RECOVERY SUMMARY

Client: MK CORP
Project: MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument HPLC SYS 2

Form II... Page 2
Surrogate: O-Nitroanaline
Q.C. Criteri 50 to 150 (%)
Lab Name: AENI - MD
Contract: 9510218

Sample	Lab Sample ID	(%) Recovery
NSWC 16/16-058	L9510218-016	78
NSWC 16/16-059	L9510218-017	78
NSWC 16/16-060	L9510218-018	76
NSWC 16/16-061	L9510218-019	85
NSWC 16/16-062	L9510218-020	81
NSWC 16/16-063	L9510218-021	78
NSWC 16/16-064	L9510218-022	81
NSWC 16/16-065	L9510218-023	105
NSWC 16/16-066	L9510218-024	85

Form II

F-00203

MATRIX SPIKE / MATRIX SPIKE DUPLICATE SUMMARY

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

Matrix: SOIL
(%) Moisture: 5.1
Dilution Factor: 1
Lab Name: AENI
Contract: 9510218

Matrix Spike (S) - Sample: NSWC 16/16-049MS
Date Prepared 10/23/95

Lab Sample ID: 9510218-007MS
Date Analyzed: 10/25/95

Matrix Spike Dup (D) Sample: NSWC 16/16-049MSD
Date Prepared 10/23/95

Lab Sample ID: 9510218-007MSD
Date Analyzed: 10/25/95

Compound	Concentration (mg/Kg)			Recovery			
	True	Found - S	Found - D	(%) - S	(%) - D	RPD	(%) Criteria
HMX	4.0	3.0	3.3	75	82	6	50 -150
RDX	4.0	3.3	3.5	82	88	4	50 -150
TNB	4.0	3.3	2.8	82	70	11	50 -150
TETRYL	5.0	3.9	4.2	78	84	5	50 -150
DNB	4.0	3.4	3.7	85	93	6	50 -150
TNT	4.0	2.2	2.4	55	60	6	50 -150
2,6-DNT	5.0	4.3	4.6	86	92	5	50 -150
2,4-DNT	4.0	3.5	3.8	88	95	6	50 -150

* - indicates values outside of criteria.

F-001204

MATRIX SPIKE / MATRIX SPIKE DUPLICATE SUMMARY

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

Matrix: WATER
(%) Moisture: N/A
Dilution Factor: 1
Lab Name: AENI
Contract: 9510218

Matrix Spike (S) - Sample: BS
Date Prepared 10/20/95

Lab Sample ID: BS951020LC
Date Analyzed: 10/28/95

Matrix Spike Dup (D) Sample: BSD
Date Prepared:

Lab Sample ID: BSD
Date Analyzed:

Compound	Concentration (ug/L)			Recovery			
	True	Found - S	Found - D	(%) - S	(%) - D	RPD	(%) Criteria
HMX	3.5	0.99		28 *			50 -150
RDX	3.5	1.2		34 *			50 -150
TNB	3.5	2.7		77			50 -150
TETRYL	4.4	1.3		30 *			50 -150
DNB	3.5	2.0		57			50 -150
TNT	3.5	1.3		37 *			50 -150
2,6-DNT	4.4	1.4		32 *			50 -150
2,4-DNT	3.5	1.4		40 *			50 -150

* - indicates values outside of criteria.

F-001205

MATRIX SPIKE / MATRIX SPIKE DUPLICATE SUMMARY

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

Matrix: SOIL
(%) Moisture: 4.1
Dilution Factor: 1
Lab Name: AENI
Contract: 9510218

Matrix Spike (S) - Sample: NSWC 16/16-065MS
Date Prepared 11/01/95

Lab Sample ID: 9510218-023MS
Date Analyzed: 11/7/95

Matrix Spike Dup (D) Sample: NSWC 16/16-065MSD
Date Prepared 11/01/95

Lab Sample ID: 9510218-023MSD
Date Analyzed: 11/7/95

Compound	Concentration (mg/Kg)			Recovery			
	True	Found - S	Found - D	(%) - S	(%) - D	RPD	(%) Criteria
HMX	4.0	4.3	3.8	108	95	8	50 -150
RDX	4.0	4.1	3.8	102	95	5	50 -150
TNB	4.0	4.5	3.9	113	98	9	50 -150
TETRYL	5.0	4.1	3.7	82	74	7	50 -150
DNB	4.0	2.9	3.8	73	95	19	50 -150
TNT	4.0	3.6	3.5	90	88	2	50 -150
2,6-DNT	5.0	5.2	4.8	104	96	5	50 -150
2,4-DNT	4.0	4.3	3.9	108	98	6	50 -150

* - indicates values outside of criteria.

F-001208

MATRIX SPIKE / MATRIX SPIKE DUPLICATE SUMMARY

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

Matrix: SOIL
(%) Moisture: N/A
Dilution Factor: 1
Lab Name: AENI
Contract: 9510218

Matrix Spike (S) - Sample: BS
Date Prepared 11/02/95

Lab Sample ID: BS951102LS
Date Analyzed: 11/7/95

Matrix Spike Dup (D) Sample: BSD
Date Prepared:

Lab Sample ID: LCSD12
Date Analyzed:

Compound	Concentration (mg/Kg)			Recovery			
	True	Found - S	Found - D	(%) - S	(%) - D	RPD	(%) Criteria
HMX	4.0	5.3		133			50 -150
RDX	4.0	4.2		105			50 -150
TNB	4.0	4.2		105			50 -150
TETRYL	5.0	4.0		80			50 -150
DNB	4.0	4.2		105			50 -150
TNT	4.0	3.6		90			50 -150
2,6-DNT	5.0	3.1		62			50 -150
2,4-DNT	4.0	3.2		80			50 -150

* - indicates values outside of criteria.

F-000207

MATRIX SPIKE / MATRIX SPIKE DUPLICATE SUMMARY

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

Matrix: SOIL
(%) Moisture: N/A
Dilution Factor: 1
Lab Name: AENI
Contract: 9510218

Matrix Spike (S) - Sample: BS
Date Prepared 11/01/95

Lab Sample ID: BS951101LS
Date Analyzed: 11/7/95

Matrix Spike Dup (D) Sample: BSD
Date Prepared:

Lab Sample ID: BSD
Date Analyzed:

Compound	Concentration (mg/Kg)			Recovery			
	True	Found - S	Found - D	(%) - S	(%) - D	RPD	(%) Criteria
HMX	4.0	3.7		93			50 -150
RDX	4.0	3.6		90			50 -150
TNB	4.0	3.7		93			50 -150
TETRYL	5.0	3.6		72			50 -150
DNB	4.0	3.7		93			50 -150
TNT	4.0	3.3		82			50 -150
2,6-DNT	5.0	4.5		90			50 -150
2,4-DNT	4.0	3.7		93			50 -150

* - indicates values outside of criteria.

F-011208

MATRIX SPIKE / MATRIX SPIKE DUPLICATE SUMMARY

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

Matrix: SOIL
(%) Moisture: N/A
Dilution Factor: 1
Lab Name: AENI
Contract: 9510218

Matrix Spike (S) - Sample: BS
Date Prepared 10/23/95

Lab Sample ID: BS951023LA
Date Analyzed: 10/24/95

Matrix Spike Dup (D) Sample: BSD
Date Prepared:

Lab Sample ID: BSD
Date Analyzed:

Compound	Concentration (mg/Kg)			Recovery			
	True	Found - S	Found - D	(%) - S	(%) - D	RPD	(%) Criteria
HMX	4.0	3.5		88			50 -150
RDX	4.0	3.7		93			50 -150
TNB	4.0	3.8		95			50 -150
TETRYL	5.0	4.4		88			50 -150
DNB	4.0	3.9		98			50 -150
TNT	4.0	2.8		70			50 -150
2,6-DNT	5.0	4.9		98			50 -150
2,4-DNT	4.0	4.1		102			50 -150

* - indicates values outside of criteria.

F-000209

AMERICAN ENVIRONMENTAL NETWORK, INC.

9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

November 03, 1995

Client: MK Corp

Project: NSWC Crane

Case: 9510218

Analysis: Metals

Client ID	AENI ID	Date Sampled	Date Received	Date Analyzed
NSWC 16/16-045	9510218-002	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-RB10	9510218-003	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-046	9510218-004	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-047	9510218-005	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-048	9510218-006	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-049	9510218-007	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-050	9510218-008	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-051	9510218-009	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-052	9510218-010	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-053	9510218-011	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-054	9510218-012	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-055	9510218-013	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-056	9510218-014	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-057	9510218-015	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-058	9510218-016	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-059	9510218-017	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-060	9510218-018	10/19/95	10/20/95	10/23-27/95

Client ID	AENI ID	Date Sampled	Date Received	Date Analyzed
NSWC 16/16-061	9510218-019	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-062	9510218-020	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-063	9510218-021	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-064	9510218-022	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-065	9510218-023	10/19/95	10/20/95	10/23-27/95
NSWC 16/16-066	9510218-024	10/19/95	10/20/95	10/23-27/95

One groundwater sample was received and analyzed for metals per SW846 methodology. Results are reported in units of ug/L. One waste water was received and analyzed for metals per EPA 200 series methodology. Results are reported in units of ug/L. Twenty-one soil samples were received and analyzed for metals per SW846 methodology. Results are reported in units of mg/Kg dry weight.

In regards to the water samples:
All QC data were within normal control limits.

In regards to the soil samples:
The matrix spike and/or matrix spike duplicate samples were outside control limits for Sb, As, Be, Cd, Cr, Co, Cu, Pb, Hg, Ni, Se, Ag, Tl, V and Zn. A post-spike was performed and reported for these analytes. The duplicate analysis was outside control limits for As and the data flagged accordingly. All other QC data were within normal control limits.

Report Released By

Christopher Baggett
Metals Laboratory Manager

U.S. EPA - CLP

3
BLANKS

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony	20.0	U	20.0	U	20.0	U	20.0	U	20.000	U	NR
Arsenic	8.0	U	8.0	U	8.0	U	8.0	U	8.000	U	P
Barium	100.0	U	100.0	U	100.0	U	100.0	U	100.000	U	P
Beryllium	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Cadmium	4.0	U	4.0	U	4.0	U	4.0	U	4.000	U	P
Calcium											
Chromium	10.0	U	10.0	U	10.0	U	10.0	U	10.000	U	NR
Cobalt	11.0	U	11.0	U	11.0	U	11.0	U	11.000	U	P
Copper	25.0	U	25.0	U	25.0	U	25.0	U	25.000	U	P
Iron											
Lead	10.0	U	10.0	U	10.0	U	10.0	U	10.000	U	NR
Magnesium											P
Manganese											NR
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	NR
Nickel	15.0	U	15.0	U	15.0	U	15.0	U	15.000	U	AV
Potassium											P
Selenium	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	NR
Silver	8.0	U	8.0	U	8.0	U	8.0	U	8.000	U	P
Sodium											P
Thallium	10.0	U	10.0	U	10.0	U	10.0	U	10.000	U	NR
Vanadium	16.0	U	16.0	U	16.0	U	16.0	U	16.000	U	P
Zinc	20.0	U	20.0	U	20.0	U	20.0	U	20.000	U	P
Cyanide											P
Tin	200.0	U	200.0	U	200.0	U	200.0	U	200.000	U	NR
Lithium	100.0	U	100.0	U	100.0	U	100.0	U			P

F-00212

3
BLANKS

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony			20.0	U	20.0	U	20.0	U	20.000	U	NR
Arsenic			8.0	U	8.0	U	8.0	U	8.000	U	P
Barium			100.0	U	100.0	U	100.0	U			P
Beryllium			2.0	U	2.0	U	2.0	U	2.000	U	P
Cadmium			4.0	U	4.0	U	4.0	U	4.000	U	P
Calcium											NR
Chromium			10.0	U	10.0	U	10.0	U	10.000	U	P
Cobalt			11.0	U	11.0	U	11.0	U			P
Copper			25.0	U	25.0	U	25.0	U	25.000	U	P
Iron											NR
Lead			10.0	U	10.0	U	10.0	U	10.000	U	P
Magnesium											NR
Manganese											NR
Mercury			0.2	U	0.2	U	0.2	U	0.200	U	AV
Nickel			15.0	U	15.0	U	15.0	U	15.000	U	P
Potassium											NR
Selenium			5.0	U	5.0	U	5.0	U	5.000	U	P
Silver			8.0	U	8.0	U	8.0	U	8.000	U	P
Sodium											NR
Thallium			10.0	U	10.0	U	10.0	U	10.000	U	P
Vanadium			16.0	U	16.0	U	16.0	U			P
Zinc			20.0	U	20.0	U	20.0	U	20.000	U	P
Cyanide											NR
Tin			200.0	U							P
Lithium			100.0	U	100.0	U	100.0	U			P

FORM III - IN

ILM02.1

F-00213

U.S. EPA - CLP

3
BLANKS

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony	20.0	U	20.0	U	20.0	U	20.0	U	2.000	U	P
Arsenic	8.0	U	8.0	U	8.0	U	8.0	U	0.800	U	P
Barium	100.0	U	100.0	U	100.0	U	100.0	U	10.000	U	P
Beryllium	2.0	U	2.0	U	2.0	U	2.0	U	0.200	U	P
Cadmium	4.0	U	4.0	U	4.0	U	4.0	U	0.400	U	P
Calcium											NR
Chromium	10.0	U	10.0	U	10.0	U	10.0	U	1.000	U	P
Cobalt	11.0	U	11.0	U	11.0	U	11.0	U	1.100	U	[illegible]
Copper	25.0	U	25.0	U	25.0	U	25.0	U	2.500	U	P
Iron											NR
Lead	10.0	U	10.0	U	10.0	U	10.0	U	1.000	U	P
Magnesium											NR
Manganese											NR
Mercury			0.2	U	0.2	U			0.100	U	CV
Nickel	15.0	U	15.0	U	15.0	U	15.0	U	1.500	U	P
Potassium											NR
Selenium	5.0	U	5.0	U	5.0	U	5.0	U	0.500	U	P
Silver	8.0	U	8.0	U	8.0	U	8.0	U	0.800	U	P
Sodium											NR
Thallium	10.0	U	10.0	U	10.0	U	10.0	U	1.000	U	P
Vanadium	16.0	U	16.0	U	16.0	U	16.0	U	1.600	U	P
Zinc	20.0	U	20.0	U	20.0	U	20.0	U	2.000	U	P
Cyanide											NR
Tin	200.0	U	200.0	U	200.0	U			20.000	U	P
Lithium									10.000	U	P

F-00044

U.S. EPA - CLP

3
BLANKS

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony			20.0	U	20.0	U	20.0	U	2.000	U	P
Arsenic			8.0	U	8.0	U	8.0	U	0.800	U	P
Barium			100.0	U	100.0	U	100.0	U	10.000	U	P
Beryllium			2.0	U	2.0	U	2.0	U	0.200	U	P
Cadmium			4.0	U	4.0	U	4.0	U	0.400	U	P
Calcium											NR
Chromium			10.0	U	10.0	U	10.0	U	1.000	U	P
Cobalt			11.0	U	11.0	U	11.0	U	1.100	U	P
Copper			25.0	U	25.0	U	25.0	U	2.500	U	P
Iron											NR
Lead			10.0	U	10.0	U	10.0	U	1.000	U	P
Magnesium											NR
Manganese											NR
Mercury	0.2	U	0.2	U	0.2	U	0.2	U			CV
Nickel			15.0	U	15.0	U	15.0	U	1.500	U	P
Potassium											NR
Selenium			5.0	U	5.0	U	5.0	U	0.500	U	P
Silver			8.0	U	8.0	U	8.0	U	0.800	U	P
Sodium											NR
Thallium			10.0	U	10.0	U	10.0	U	1.000	U	P
Vanadium			16.0	U	16.0	U	16.0	U	1.600	U	P
Zinc			20.0	U	20.0	U	20.0	U	2.000	U	P
Cyanide											NR
Tin									20.000	U	P
Lithium									10.000	U	P

F-00945

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16-045S

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix: WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	80-120	312.8840		215.2150		100.00	97.7		P
Arsenic	80-120	94.1870		8.0000	U	100.00	94.2		P
Barium	80-120	3121.1820		1416.5900		2000.00	85.2		P
Beryllium	80-120	42.5480		2.0000	U	50.00	85.1		P
Cadmium	80-120	48.6970		4.9160		50.00	87.6		P
Calcium									NR
Chromium	80-120	366.1620		185.0920		200.00	90.5		P
Cobalt	80-120	460.4860		11.0000	U	500.00	92.1		P
Copper	80-120	467.2120		243.3820		250.00	89.5		P
Iron									
Lead	80-120	1935.3890		1416.4110		500.00	103.8		
Magnesium									NR
Manganese									NR
Mercury	80-120	2.4955		0.4715		2.00	101.2		AV
Nickel	80-120	450.0010		15.0000	U	500.00	90.0		P
Potassium									NR
Selenium	80-120	96.2190		5.0000	U	100.00	96.2		P
Silver	80-120	89.1980		8.0000	U	100.00	89.2		P
Sodium									NR
Thallium	80-120	91.3430		10.0000	U	100.00	91.3		P
Vanadium	80-120	445.9900		16.0000	U	500.00	89.2		P
Zinc		5574.6300		4941.4870		500.00	126.6		P
Cyanide									NR
Tin	80-120	1030.0690		200.0000	U	1000.00	103.0		P
Lithium									NR

Comments:
CLIENT_ID: NSWC_16/16-045
MATRIX_SPIKE

F-0020

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

Lab Name: AENI Contract: 9510218 | 16/16-045M

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-
Matrix: WATER Level (low/med): LOW
% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony	80-120	304.6150		215.2150					NR
Arsenic	80-120	92.3190		8.0000	U	100.00	89.4		P
Barium	80-120	3205.6660		1416.5900		100.00	92.3		P
Beryllium	80-120	41.8080		2.0000	U	2000.00	89.5		P
Cadmium	80-120	48.1000		4.9160		50.00	83.6		P
Calcium						50.00	86.4		P
Chromium	80-120	357.2230		185.0920					NR
Cobalt	80-120	453.3170		11.0000	U	200.00	86.1		P
Copper	80-120	455.6360		243.3820		500.00	90.7		P
Iron						250.00	84.9		P
Lead	80-120	1896.7230		1416.4110		500.00	96.1		P
Magnesium									NR
Manganese									NR
Mercury	80-120	2.7945		0.4715		2.00	116.1		AV
Nickel	80-120	442.2640		15.0000	U	500.00	88.5		P
Potassium									NR
Selenium	80-120	89.6590		5.0000	U	100.00	89.7		P
Silver	80-120	84.2050		8.0000	U	100.00	84.2		P
Sodium									NR
Thallium	80-120	85.0960		10.0000	U	100.00	85.1		P
Vanadium	80-120	438.2600		16.0000	U	500.00	87.7		P
Zinc		5516.2920		4941.4870		500.00	115.0		P
Cyanide									NR
Tin	80-120	1035.1790		200.0000	U	1000.00	103.5		P
Lithium									NR

Comments:
CLIENT_ID: NSWC_16/16-045
MATRIX_SPIKE_DUPLICATE

F-00017

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16-049S

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 94.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
J d									
l nesium									NR
Manganese									NR
Mercury	80-120	0.7276		0.0958	U	1.00	72.8	N	CV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR
Tin									NR
Lithium									NR
									NR

omments:
CLIENT_ID: NSWC_16/16-049
MATRIX_SPIKE

F-00218

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

Lab Name: AENI Contract: 9510218 16/16-049M

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16-

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 94.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury	80-120								NR
Nickel		0.5910		0.0958	U	0.92	64.2	N	CV
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR
Tin									NR
Lithium									NR

Comments:
CLIENT_ID: NSWC_16/16-049
MATRIX_SPIKE_DUPLICATE

F-0591a

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16-050S

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 95.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									NR
Arsenic	80-120	8.9177		0.8119	U	10.30	86.6		NR
Barium									P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead		428.5565		466.8007		51.49	-74.3		P
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium	80-120	7.3375		0.5074	U	10.30	71.2	N	P
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR
Tin									NR
Lithium									NR

Comments:
CLIENT_ID: NSWC_16/16-050
MATRIX_SPIKE

F-00220

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

Lab Name: AENI Contract: 9510218

16/16-050M

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 95.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									
Arsenic	80-120								NR
Barium		9.0074		0.8119	U	10.50	85.8		NR
Beryllium									P
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium		426.3693		466.8007					NR
Manganese						52.52	-77.0		P
Mercury									NR
Nickel									NR
Potassium									NR
Selenium	80-120								NR
Silver		7.4925		0.5074	U	10.50	71.4	N	P
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR
Tin									NR
Lithium									NR

Comments:

CLIENT_ID: NSWC_16/16-050
MATRIX_SPIKE_DUPLICATE

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16-051S

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 98.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony	80-120	15.5556		5.5205		10.08	99.6		NR
Arsenic									P
Barium	80-120	491.4262		303.0829		201.65	93.4		NR
Beryllium	80-120	4.3562		0.4071		5.04	78.4	N	P
Cadmium	80-120	5.8344		2.1909		5.04	72.3	N	P
Calcium									
Chromium	80-120	28.4510		10.8954		20.16	87.1		NR
Cobalt	80-120	44.3863		4.7854		50.41	78.6	N	P
Copper		412.1466		401.7206		25.21	41.4		P
Iron									
Lead									
agnesium									
Manganese									NR
Mercury									NR
Nickel	80-120	49.7665		10.8454		50.41	77.2	N	NR
Potassium									P
Selenium									NR
Silver	80-120	7.6021		0.7508	U	10.08	75.4	N	NR
Sodium									P
Thallium	80-120	5.9889		0.9386	U	10.08	59.4	N	NR
Vanadium	80-120	52.1230		10.1758		50.41	83.2		P
Zinc		2795.8485		2861.2380		50.41	-129.7		P
Cyanide									P
Tin	80-120	107.3537		18.7711	U	100.82	106.5		NR
Lithium	80-120	92.9953		9.3855	U	100.82	92.2		P

Comments:

CLIENT_ID: NSWC_16/16-051

MATRIX_SPIKE

F-00022

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16-051M

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 98.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	80-120	15.0115		5.5205		9.98	95.1		P
Arsenic									NR
Barium	80-120	501.2650		303.0829		199.67	99.3		P
Beryllium	80-120	4.3484		0.4071		4.99	79.0	N	P
Cadmium	80-120	5.6583		2.1909		4.99	69.5	N	P
Calcium									NR
Chromium	80-120	28.9192		10.8954		19.97	90.3		P
Cobalt	80-120	44.1279		4.7854		49.92	78.8	N	P
Copper		519.5725		401.7206		24.96	472.2		P
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel	80-120	49.7790		10.8454		49.92	78.0	N	P
Potassium									NR
Selenium									NR
Silver	80-120	7.4888		0.7508	U	9.98	75.0	N	P
Sodium									NR
Thallium	80-120	6.1259		0.9386	U	9.98	61.4	N	P
Vanadium	80-120	51.8453		10.1758		49.92	83.5		P
Zinc		3355.0977		2861.2380		49.92	989.3		P
Cyanide									NR
Tin	80-120	99.1905		18.7711	U	99.84	99.3		P
Lithium	80-120	92.2384		9.3855	U	99.84	92.4		P

Comments:
CLIENT_ID: NSWC_16/16-051
MATRIX_SPIKE_DUPLICATE

F-00023

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16-065S

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 95.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									NR
Arsenic	80-120	13.0131		2.5649		10.43	100.2		NR
Barium									P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									
Magnesium									
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium	80-120	11.0310		0.5033	U	10.43	105.8		NR
Silver	80-120	11.3563		0.8052	U	10.43	108.9		P
Sodium									P
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR
Tin	80-120	92.9433		20.8551	U	104.28	89.1		NR
Lithium	80-120	97.5450		10.4275	U	104.28	93.5		P

Comments:

CLIENT_ID: NSWC_16/16-065

MATRIX_SPIKE

F- 00026

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16-065M

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 95.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									NR
Arsenic	80-120	15.2809							NR
Barium				2.5649		10.43	121.9	N	P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium	80-120	11.1558							NR
Silver	80-120	11.0092		0.5033	U	10.43	107.0		P
Sodium				0.8052	U	10.43	105.6		P
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR
Tin	80-120	101.2721		20.8551	U	104.28	97.1		P
Lithium	80-120	97.4002		10.4275	U	104.28	93.4		P

Comments:

CLIENT_ID: NSWC_16/16-065

MATRIX_SPIKE_DUPLICATE

F-00027

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16-050A

Lab Name: AENI Contract: 9510218

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16-

Matrix: SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum									
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver		18.64		5.00	U	20.0	93.2		P
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR
Tin									NR
Lithium									NR
									NR

Comments:
CLIENT_ID: NSWC_16/16-050

F-

U.S. EPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16-051A

Lab Name: AENI Contract: 9510218

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16-

Matrix: SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum									
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium		98.73		4.34		100.0	94.4		P
Calcium		115.47		23.34		100.0	92.1		P
Chromium									NR
Cobalt									NR
Copper		991.62		50.99		1000.0	94.1		P
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium		1067.80		115.55		1000.0	95.2		P
Selenium									NR
Silver									NR
Sodium		189.47		8.00	U	200.0	94.7		P
Thallium									NR
Vanadium		10.00	U	10.00	U	20.0	0.0		P
Zinc									NR
Cyanide									NR
Tin									NR
Lithium									NR
									NR

Comments:

CLIENT_ID: NSWC_16/16-051

2.1

F-00029

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16-063A

Lab Name: AENI Contract: 9510218

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16-

Matrix: SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum									
Antimony		192.02							NR
Arsenic				20.00	U	200.0	96.0		P
Barium									NR
Beryllium									NR
Cadmium		112.14		14.54		100.0	97.6		P
Calcium		99.75		4.00	U	100.0	99.7		P
Chromium									NR
Cobalt		421.68		219.39		200.0	101.1		P
Copper		1315.23		304.60		1000.0	101.1		P
Iron		776.76		247.20		500.0	105.9		P
Lead									NR
Magnesium		299.96		101.35		200.0	99.3		P
Manganese									NR
Mercury									NR
Nickel									NR
Potassium		1539.36		514.97		1000.0	102.4		P
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium		10.00	U	10.00	U	20.0	0.0		P
Zinc		1164.82		171.03		1000.0	99.4		P
Cyanide		2468.71		1505.08		1000.0	96.4		P
Tin									NR
Lithium									NR
									NR

Comments:
CLIENT_ID: NSWC_16/16-063

F-00230

U.S. EPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

Lab Name: AENI Contract: 9510218 | 16/16-065A

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16-

Matrix: SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum									
Antimony									NR
Arsenic									NR
Barium		44.12		25.48		20.0	93.2		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR
Tin									NR
Lithium									NR
									NR

F-000031

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

16/16-045D

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								NR
Antimony	60.0	215.2150		214.0650		0.5		P
Arsenic		8.0000	U	8.0000	U			P
Barium		1416.5900		1469.6030		3.7		P
Beryllium		2.0000	U	2.0000	U			P
Cadmium		4.9160		4.7580		3.3		P
Calcium								NR
Chromium		185.0920		180.0950		2.7		P
Cobalt		11.0000	U	11.0000	U			P
Copper		243.3820		250.3090		2.8		P
Iron								NR
Lead		1416.4110		1459.8980		3.0		P
Magnesium								NR
Manganese								NR
Mercury	0.2	0.4715		0.4600		2.5		AV
Nickel		15.0000	U	15.0000	U			P
Potassium								NR
Selenium		5.0000	U	5.0000	U			P
Silver		8.0000	U	8.0000	U			P
Sodium								NR
Thallium		10.0000	U	10.0000	U			P
Vanadium		16.0000	U	16.0000	U			P
Zinc		4941.4870		4925.8040		0.3		P
Cyanide								NR
Tin		200.0000	U	200.0000	U			P
Lithium								NR

F-00032

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

16/16-049D

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 94.9 % Solids for Duplicate: 94.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								
Antimony								NR
Arsenic								NR
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury								NR
Nickel		0.0958	U	0.0916	U			CV
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Cyanide								NR
Tin								NR
Lithium								NR

F-000335

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

16/16-050D

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 95.2 % Solids for Duplicate: 95.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								
Antimony								NR
Arsenic								NR
Barium	1.0	0.8119	U	1.0670		200.0	*	P
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium		466.8007		418.9171		10.8		P
Manganese								NR
Mercury								NR
Nickel								NR
Potassium								NR
Selenium								NR
Silver		0.5074	U	0.5221	U			P
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Cyanide								NR
Tin								NR
Lithium								NR

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

16/16-051D

Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 98.2 % Solids for Duplicate: 98.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								NR
Antimony		5.5205		5.0390		9.1		P
Arsenic								NR
Barium		303.0829		315.2590		3.9		P
Beryllium		0.4071		0.3802		6.8		P
Cadmium	0.5	2.1909		2.0615		6.1		P
Calcium								NR
Chromium		10.8954		10.0050		8.5		P
Cobalt	4.7	4.7854		4.3760		8.9		P
Copper		401.7206		457.4012		13.0		P
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury								NR
Nickel	3.8	10.8454		9.2159		16.2		P
Potassium								NR
Selenium								NR
Silver		0.7508	U	0.7502	U			P
Sodium								NR
Thallium		0.9386	U	0.9377	U			P
Vanadium	4.7	10.1758		10.1299		0.5		P
Zinc		2861.2380		2842.8587		0.6		P
Cyanide								NR
Tin		18.7711	U	18.7538	U			P
Lithium		9.3855	U	9.3769	U			P

F-

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

16/16-063D

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 84.8 % Solids for Duplicate: 84.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								
Antimony		2.1919	U	2.2526	U			NR
Arsenic								P
Barium		142.4224		143.5353		0.8		NR
Beryllium	0.5	1.5940		1.4915		6.6		P
Cadmium		0.4384	U	0.4505	U			P
Calcium								P
Chromium		24.0438		22.3382		7.4		NR
Cobalt		33.3828		32.7725		1.8		P
Copper		27.0916		25.7953		4.9		P
Iron								P
Lead		11.1073		10.4398		6.2		NR
Magnesium								P
Manganese								NR
Mercury								NR
Nickel		56.4386		54.3331		3.8		NR
Potassium								P
Selenium								NR
Silver								NR
Sodium								NR
Thallium		1.0960	U	1.1263	U			NR
Vanadium	5.5	18.7441		17.3530		7.7		P
Zinc		164.9497		159.8584		3.1		P
Cyanide								P
Tin								NR
Lithium								NR
								NR

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F-00030

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

16/16-065D

D Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 95.9 % Solids for Duplicate: 95.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								
Antimony								NR
Arsenic								NR
Barium	1.0	2.5649		3.9880		43.4	*	P
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury								NR
Nickel								NR
Potassium								NR
Selenium								NR
Silver		0.5033	U	0.5214	U			P
Sodium		0.8052	U	0.8342	U			P
Thallium								NR
Vanadium								NR
Zinc								NR
Cyanide								NR
Tin								NR
Lithium		20.8551	U	20.8551	U			P
		10.4275	U	10.4275	U			P

FORM VI - IN ILM02.1

F-000037

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

b Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Solid LCS Source:

Aqueous LCS Source: SPEX

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
nganese									
mercury	2.0	1.98	99.0						
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									
Tin									
Lithium									

FORM VII - IN

ILM02.1

F-00022

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

b Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Solid LCS Source:

Aqueous LCS Source: SPEX

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony	100.0	81.84	81.8						
Arsenic									
Barium	2000.0	1868.63	93.4						
Beryllium	50.0	41.67	83.3						
Cadmium	50.0	43.02	86.0						
Calcium									
Chromium	200.0	174.63	87.3						
Cobalt	500.0	439.66	87.9						
Copper	250.0	221.04	88.4						
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel	500.0	439.08	87.8						
Potassium									
Selenium									
Silver	100.0	80.55	80.6						
Sodium									
Thallium	100.0	86.19	86.2						
Vanadium	500.0	438.02	87.6						
Zinc	500.0	425.00	85.0						
Cyanide									
Tin	1000.0	1100.14	110.0						
Lithium	1000.0	834.35	83.4						

FORM VII - IN

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U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: AENI Contract: 9510218

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16-

Solid LCS Source: _____

Aqueous LCS Source: SPEX

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic	100.0	116.63	116.6						
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium	100.0	115.35	115.4						
Silver	100.0	116.92	116.9						
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									
Tin	1000.0	949.43	94.9						
Lithium	1000.0	844.92	84.5						

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F-000030

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

b Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Solid LCS Source:

Aqueous LCS Source: SPEX

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony	100.0	80.40	80.4						
Arsenic									
Barium	2000.0	1835.04	91.8						
Beryllium	50.0	40.86	81.7						
Cadmium	50.0	41.96	83.9						
Calcium									
Chromium	200.0	221.97	111.0						
Cobalt	500.0	429.73	85.9						
Copper	250.0	217.22	86.9						
Iron									
Lead	500.0	420.69	84.1						
Magnesium									
Manganese									
Mercury									
Nickel	500.0	457.66	91.5						
Potassium									
Selenium									
Silver									
Sodium									
Thallium	100.0	82.36	82.4						
Vanadium	500.0	431.18	86.2						
Zinc	500.0	413.31	82.7						
Cyanide									
Tin									
Lithium									

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U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

b Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Solid LCS Source:

Aqueous LCS Source: SPEX

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic	100.0	83.88	83.9						
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	500.0	472.44	94.5						
gnesium									
anganese									
Mercury									
Nickel									
Potassium									
Selenium	100.0	83.62	83.6						
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									
Tin									
Lithium									

FORM VII - IN

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F-00042

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Name: AENI Contract: 9510218

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16-

Solid LCS Source: _____

Aqueous LCS Source: SPEX

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury	2.0	2.01	100.5						
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									
Tin									
Lithium									

FORM VII - IN

ILM02.1

7

LABORATORY CONTROL SAMPLE

Lab Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Solid LCS Source:

Aqueous LCS Source: SPEX

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony	100.0	90.89	90.9						
Arsenic	100.0	86.17	86.2						
Barium	2000.0	1907.35	95.4						
Beryllium	50.0	44.08	88.2						
Cadmium	50.0	45.78	91.6						
Calcium									
Chromium	200.0	184.37	92.2						
Cobalt	500.0	469.99	94.0						
Copper	250.0	223.82	89.5						
Iron									
Lead	500.0	460.41	92.1						
Magnesium									
nganese									
ercury									
Nickel	500.0	467.26	93.5						
Potassium									
Selenium	100.0	89.06	89.1						
Silver	100.0	86.25	86.3						
Sodium									
Thallium	100.0	89.33	89.3						
Vanadium	500.0	454.97	91.0						
Zinc	500.0	457.50	91.5						
Cyanide									
Tin	1000.0	1186.42	118.6						
Lithium									

F-00044

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: AENI Contract: 9510218

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16-

Solid LCS Source: _____

Aqueous LCS Source: SPEX

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury	2.0	2.06	103.0						
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									
Tin									
Lithium									

F-00045

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U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

b Name: AENI Contract: 9510218

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16-

Solid LCS Source:

Aqueous LCS Source: SPEX

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony	100.0	86.15	86.1						
Arsenic	100.0	83.04	83.0						
Barium									
Beryllium	50.0	43.69	87.4						
Cadmium	50.0	47.18	94.4						
Calcium									
Chromium	200.0	181.76	90.9						
Cobalt									
Copper	250.0	228.97	91.6						
Iron									
Lead	500.0	452.63	90.5						
ıgnesium									
ınganese									
Mercury									
Nickel	500.0	462.44	92.5						
Potassium									
Selenium	100.0	84.74	84.7						
Silver	100.0	85.86	85.9						
Sodium									
Thallium	100.0	88.75	88.8						
Vanadium									
Zinc	500.0	451.35	90.3						
Cyanide									
Tin									
Lithium									

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FORM VII - IN

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AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510218
Report To: MK Corp
Project: Crane NSWC
Date: November 10, 1995
Analysis: Nitrate-N, EPA 353.3

Client ID	AENI ID	Date Sampled	Date Received
NSWC 16/16-RB10	9510218-003	10/19/95	10/20/95

One water sample was received and analyzed for Nitrate-N.

All quality control met standard laboratory criteria.

This report consists of tabulated sample results and a QC Summary Report.

Report Released By: Rhonda Green-Barron
General Chemistry Laboratory Manager

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510218
Report To: MK Corp
Project: Crane NSWC
Date: November 10, 1995
Analysis: Nitrate-N, EPA 353.3

QC SUMMARY

Parameter	Sample ID	Result/Recovery
Nitrate-N	PBLK951110	< 0.05 mg/L
	BS951110	103%
	BSD951110	103%

F-

SDG 0037C

COMPUCHEM
ENVIRONMENTAL
CORPORATION

26/FEB/96

Morrison Knudsen Corp.
Attn: Alan Fosdick
1500 West 3rd Street
Cleveland, OH 44113-1406

ACCOUNT #: 501019

CC#	SAMPLE-ID	RECEIPT DATE
782631	2608D-006	2/09/96
782662	16-16-44A	2/09/96

TOTAL NUMBER OF SAMPLES = 2

F-000049

COMPUCHEM
ENVIRONMENTAL
CORPORATION

3306 Chapel Hill/Nelson Highway P.O. Box 14998
Research Triangle Park, NC 27709-4998
(919) 406-1600

SDG Narrative
Case #31923
SDG# 0037C

Sample Identification: 2608D-006, 16-16-44A

This narrative covers two (2) soil sample received on February 9, 1996, and leached following the Toxicity Characteristic Leaching Procedure (TCLP) Method 1311 from SW-846, then processed for pesticide/PCB organic compounds by SW-846 Method 8080. The samples were received intact, and with proper documentation.

Pesticides/PCB's

The samples were leached, extracted and analyzed within holding times.

Surrogate recoveries for the blank, blank spike (BS), matrix spike (MS), matrix spike duplicate (MSD), and samples were within QC control limits, with the exceptions of tetrachloro-m-xylene (TCX) on the DB-608 column for the following samples: 2608D-006MS, 2608D-006MSD, 2608D-006, and 16-16-44A. The high recoveries of TCX are being attributed to a matrix effect and are addressed in a laboratory notice contained in the sample data.

All QC criteria (initial and continuing calibrations, retention time, and breakdown) were met.

No TCLP analytes were detected in the samples or the TCLP leachate blank, above the reporting limits.

A MS and MSD were extracted and analyzed with this sample delivery group (SDG). One of the eight spike recoveries fell below QC limits and one of the four RPD's fell outside QC limits. A blank spike was also extracted and analyzed with this SDG. The blank spike met all QC acceptance criteria.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable diskette has been authorized by the laboratory manager or his designee, as verified by the following signature.

Joe Bumgarner Jr.
GC Method Development Chemist
February 15,1996

NOTE: This report is paginated for reference and accountability.

2E

WATER ORGANOCHLORINE PESTICIDE AND PCB SURROGATE RECOVERY

Lab Name: COMPUCHEM, RTP Contract:

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0037C

GC Column (1): RTX-1701 ID: 0.53 (mm) GC Column (2): DB-608 ID: 4.00 (mm)

	SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	2608D-006	120	530*	95	99			1
02	2608D-006MS	120	520*	92	100			1
03	2608D-006MSD	100	330*	110	110			1
04	BS	100	100	94	110			0
05	16-16-44A	130	480*	100	120			1
06	TCLPBLK29	130	110	130	120			0
07								
08								
09								
10								
11								
12								
13								
14								
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16								
17								
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21								
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25								
26								
27								
28								
29								
30								

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

QC LIMITS
(24-154)
(24-154)

Column to be used to flag recovery values.
* Values outside of QC Limits
D Surrogate diluted out.

FORM II 8080-1

F-000051

14

F. 00:52

PESTICIDE METHOD TCLP

MATRIX SPIKE / MATRIX SPIKE DUPLICATE QUALITY CONTROL SUMMARY

	MS	MSD	ORIG					
IPLE #	782632	782633		SPIKE AMT	1.5	SPIKE AMT	50	
.UTION	5	5	5	MS SP CON	1.5	MS SP CON	50	
				MSD SP CON	1.5	MSD SP CON	50	
KE AMT	1	1						

IPOUND	QUANT AMT	QUANT AMT	QUANT AMT	782632 CONC	782633 CONC	CONC			
'TACHLOR	0.22	0.22	0.0148	1.1	1.1	0.074	68.4	68.4	0.0
'TACHLOR EPOXIDE	0.198	0.22	0.034	0.99	1.1	0.17	54.66666	62	-12.6
.APHENE	5.6	6	0	28	30	0	56	60	-6.9
IMA-BHC (LINDANE)	0.118	0.068	0.0052	0.59	0.34	0.026	37.6	20.93333	56.9
.ORDANE	-----	-----	-----	-------	-------	-------			
'RIN	-----	-----	-----	-------	-------	-------			
'-METHOXYCHLOR	-----	-----	-----	-------	-------	-------			

PESTICIDE METHOD TCLP

MATRIX SPIKE / MATRIX SPIKE DUPLICATE QUALITY CONTROL SUMMARY

MATRIX SPIKE #782632 MATRIX SPIKE DUPLICATE # 782633

ORIGINAL #

A.	B.	C.	D.	E.	F.	G.	H.	I.	J.			
IPOUND NAME	CONCENTRATION SPIKE ADDED (UG/L) MS	MSD	ORIGINAL CONC. (UG/L)	MS CONC. (UG/L)	MS % RECOVERY	MSD CONC. (UG/L)	MSD % RECOVERY MSD %	RPD	QC LIMITS RPD	RECOVERY	AVERAGE % REC	PASS FAIL
'TACHLOR	1.5	1.5	0.074	1.1	68	1.1	68	0.0	20	34 - 111	68	PASS
'TACHLOR EPOXIDE	1.5	1.5	0.17	0.99	55	1.1	62	-12.6	20	37 - 142	59	PASS
.APHENE	50.0	50.0	0	28	56	30	60	-6.9	20	41 - 126	58	PASS
IMA-BHC (LINDANE)	1.5	1.5	0.026	0.59	38	0.34	21 *	56.9 *	20	32 - 127	30	FAIL
.ORDANE	NOT SPIKED		-----	----	------	----	------	----	---	-------	----------	
'RIN	NOT SPIKED		-----	----	------	----	------	----	---	-------	----------	
'-METHOXYCHLOR	NOT SPIKED		-----	----	------	----	------	----	---	-------	----------	

. FAILED ADVISORY ACCEPTANCE CRITERIA - SEE ASSOCIATED BLANK SPIKE DATA AND QA NOTICE

PESTICIDE METHOD TCLP

BLANK SPIKE SUMMARY DATA

BLANK SPIKE # 782634

A.	B.	C.	D.	
COMPOUND NAME	CONCENTRATION SPIKE ADDED (UG/L) BS	BS CONC. (UG/L)	BS % RECOVERY	QC LIMITS RECOVERY
HEPTACHLOR	0.3	0.2	70	34 - 111
HEPTACHLOR EPOXIDE	0.3	0.2	80	37 - 142
TOXAPHENE	10.0	5.6	56	41 - 126
GAMMA-BHC (LINDANE)	0.3	0.2	80	32 - 127
CHLORDANE	NOT SPIKED	----	--------	---------
ENDRIN	NOT SPIKED	----	--------	---------
P,P'-METHOXYCHLOR	NOT SPIKED	----	--------	---------

CONCENTRATION SPIKE ADDED = 0.3 OR 10 X CORRECTION FACTOR

CONCENTRATION BS = QUANTITATION REPORT VALUE X CORRECTION FACTOR

BLANK SPIKE (BS) PERCENT RECOVERY (D.) = (C. / B.) X 100

F- 00253

PESTICIDE METHOD TCLP

LEACHATE BLANK SUMMARY RESULTS

DATE LEACHED : 02/09/96 (TCLP ROTATION STARTED)
DATE EXTRACTED: 02/12/96
DATE ANALYZED : 02/13/96

COMPUCHEM SAMPLE #782522
LEACHATE BLANK I.D.#TCLPBLK29

COMPOUND	COMPUCHEM REPORTING AMOUNT (MG/L)	COMPUCHEM REPORTING LIMIT (MG/L)	REGULATORY LEVEL (MG/L)	ALLOWABLE BLANK CONC. (MG/L)
HEPTACHLOR	BAL	0.004	0.008	0.0003
HEPTACHLOR EPOXIDE	BAL	0.004	0.008	0.0003
TOXAPHENE	BAL	0.250	0.500	0.01
GAMMA-BHC (LINDANE)	BAL	0.200	0.400	0.0003
CHLORDANE	BAL	0.015	0.030	0.0012
ENDRIN	BAL	0.010	0.020	0.0005
P,P'METHOXYCHLOR	BAL	5.000	10.00	0.005

BAL = Below Allowable Limits
= Refer to CompuChem's "Plans and Policies".

SDG 0034C

COMPUCHEM
ENVIRONMENTAL
CORPORATION

30/MAR/96

Morrison Knudsen Corp.
Attn: Alan Fosdick
1500 West 3rd Street
Cleveland, OH 44113-1406

ACCOUNT #: 501019

CC#	SAMPLE-ID	RECEIPT DATE
782490	2608D-006	2/09/96
782498	16-16-44A	2/09/96

TOTAL NUMBER OF SAMPLES = 2

COMPUCHEM
ENVIRONMENTAL
CORPORATION

SDG Narrative
Case #31923
SDG #0034C
Contract #SW846

Sample Identification: 2608D-006, 16-16-44A

This narrative covers two (2) solid samples received on February 9, 1996, and processed for volatile organic compounds by the 8240 SW846 Method with the exceptions and/or additions described in the attached Project Profile Sheet (PPS) # 467. The sample was received intact, properly refrigerated , and with proper documentation.

All pertinent Quality Assurance (QA) Notices are included in the narrative section or the sample data sections.

The samples were analyzed after the ZHE extraction process within holding time.

System monitoring compound (surrogate) recoveries for the samples, the matrix spike, matrix spike duplicate, ZHE blank, and the instrument blank met QC acceptance criteria. The internal standard criteria (retention time and response) were also met for the samples, matrix spike, matrix spike duplicate, ZHE blank, and instrument blank. All other QC acceptance criteria (tunes and initial and continuing calibrations) were met.

When target compound list (TCL) analytes are detected below the contract required quantitation limit (CRQL), the results are flagged with a "J". The samples were analyzed at a five to one dilution. Sample 2608D-006 contained no compounds of interest. Sample 16-16-44A contained "J" levels of 1,1-dichloroethene, trichloroethene, tetrachloroethene, and chlorobenzene.

No tentatively identified compounds (TIC) were reported for this Case.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Susan W Bass

Susan W. Bass
Volatile Manager
February 16, 1996
Note: The report is paginated for reference and accountability.

F-00058

2A
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0034C

	SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	16-16-44A	90	88	95		0
02	2608D-006	95	96	102		0
03	2608D-006MS	110	114	101		0
04	2608D-006MSD	110	114	102		0
05	VBLKAQ	89	92	96		0
06	VLCSJJ	105	108	97		0
07	ZHEBLK974	94	91	100		0
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

			QC LIMITS
SMC1	(TOL)	= Toluene-d8	(88-110)
SMC2	(BFB)	= Bromofluorobenzene	(86-115)
SMC3	(DCE)	= 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM II VOA-1

3A
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0034C

Matrix Spike - Sample No.: 2608D-006

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Vinyl Chloride	500.0	0.000	371.2	74	1-251
1,1-Dichloroethene	500.0	0.000	530.6	106	1-234
Chloroform	500.0	0.000	426.7	85	51-138
1,2-Dichloroethane	500.0	0.000	449.7	90	49-155
2-Butanone	500.0	0.000	655.2	131	1-200
Carbon Tetrachloride	500.0	0.000	449.7	90	70-140
Trichloroethene	500.0	0.000	438.2	88	71-157
Benzene	500.0	0.000	433.4	87	37-151
Tetrachloroethene	500.0	0.000	429.9	86	64-148
Chlorobenzene	500.0	0.000	409.7	82	37-160

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Vinyl Chloride	500.0	352.6	70	6	20	1[illegible]
1,1-Dichloroethene	500.0	529.8	106	0	20	1-234
Chloroform	500.0	424.1	85	0	20	51-138
1,2-Dichloroethane	500.0	459.1	92	2	20	49-155
2-Butanone	500.0	580.1	116	12	20	1-200
Carbon Tetrachloride	500.0	455.2	91	1	20	70-140
Trichloroethene	500.0	446.1	89	1	20	71-157
Benzene	500.0	435.5	87	0	20	37-151
Tetrachloroethene	500.0	432.7	86	0	20	64-148
Chlorobenzene	500.0	413.2	83	1	20	37-160

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 10 outside limits
Spike Recovery: 0 out of 20 outside limits

COMMENTS:

3A

WATER VOLATILE LAB CONTROL SAMPLE RECOVERY

CLIENT SAMPLE NO.

VLCSJJ

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0034C

Lab Sample ID: 782493 LCS Lot No.: 44461

Lab File ID: CN082493B57.D Date Analyzed: 02/13/96

Purge Volume: 5.0 (mL) Dilution Factor: 1.0

COMPOUND	AMOUNT ADDED (ug/L)	AMOUNT RECOVERED (ug/L)	%REC #	QC LIMITS
Carbon Tetrachloride	100.0	90.18	90	70-140
Tetrachloroethene	100.0	84.55	84	64-148
Benzene	100.0	88.22	88	37-151
1,2-Dichloroethane	100.0	89.63	90	49-155
Trichloroethene	100.0	89.56	90	71-157
2-Butanone	100.0	112.6	113	1-200
Chloroform	100.0	85.03	85	51-138
Chlorobenzene	100.0	82.29	82	37-160
1,1-Dichloroethene	100.0	107.4	107	1-234
Vinyl Chloride	100.0	80.00	80	1-251

Column to be used to flag LCS recovery with an asterisk.
* Values outside of QC limits.

LCS Recovery: 0 outside limits out of 10 total.

COMMENTS:

FORM III

F-00259

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

ZHEBLK974

Lab Name: COMPUCHEM ENV. CORP. Contract: 501019

Lab Code: COMPU Case No.: 31923 SAS No.: SDG No.: 0034C

Matrix: (soil/water) WATER Lab Sample ID: 782766

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN082766B57.D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 02/13/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl Chloride	50	U
75-35-4	1,1-Dichloroethene	25	U
67-66-3	Chloroform	25	U
107-06-2	1,2-Dichloroethane	25	U
78-93-3	2-Butanone	50	U
56-23-5	Carbon Tetrachloride	25	U
79-01-6	Trichloroethene	25	U
71-43-2	Benzene	25	U
127-18-4	Tetrachloroethene	25	U
108-90-7	Chlorobenzene	25	U

FORM I VOA

SDG 9510147

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510147
Report To: MK Corp
Project: Crane NSWC
Date: November 10, 1995
Analysis: General Chemistry Parameters

Client ID	AENI ID	Date Sampled	Date Received
NSWC 16/16 022	9510147-001	10/13/95	10/14/95
NSWC 16/16 040	9510147-020	10/13/95	10/14/95

Two water samples were received and analyzed for General Chemistry Parameters.

All quality control met standard laboratory criteria.

This report consists of tabulated sample results and a QC Summary Report.

Report Released By: Rhonda Green-Barron
Rhonda Green-Barron
General Chemistry Laboratory Manager

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Report Number: 9510147
Report To: MK Corp
Project: Crane NSWC
Date: November 10, 1995
Analysis: General Chemistry Parameters

QC SUMMARY

Parameter	Sample ID	Result/Recovery
Total Cyanide	PBLK951019	< 0.02 mg/L
	BS951019	96%
	BSD951019	96%
Total Sulfide	PBLK951019	< 1 mg/L
Nitrate-N	PBLK951110	< 0.05 mg/L
	BS951110	103%
	BSD951110	103%

AMERICAN ENVIRONMENTAL NETWORK, INC.

October 31, 1995

Client: MK CORP

Case: 9510147

Project: CRANE NSWC

Analysis: Organophosphorus Pesticides by Method 8140

Client ID	AENI#	Date Sampled	Date Received	Date Extracted	Date Analyzed
NSWC 16/16 RB8	9510147-001	10/11/95	10/14/95	10/20/95	10/30/95

One water sample was extracted and analyzed for selected organophosphorus pesticides using SW-846 method 8140.

The enclosed package consists specifically of tabulated results (Form I), surrogate spike recoveries (Form II), matrix spike recoveries (Form III), method blank summary (Form IV), initial calibration summary (Form VI), and continuing calibration summary (Form VII).

Form I (Tabulated Results)

The qualifier "U" indicates that a compound was analyzed for but not detected above the reporting limit. The sample was prepared and analyzed within method specified holding time.

Form II (Surrogate Spike Recoveries)

All surrogate recoveries were within specified criteria (50-150%).

Form III (Matrix Spike Recoveries)

A blank spike and blank spike duplicate were extracted with this sample set. All spike recoveries were within specified criteria (50-150%).

Form IV (Method Blank Summary)

No organophosphorus pesticides were detected in the method blank above the reporting limit.

F-00287

Form VI (Initial Calibration Summary)

Linear five-point curve with correlation coefficient of 0.995 or better was used for sample quantitation. Famphur and Disulfoton failed linearity criteria on column DB-5 but were acceptable on column DB-608. Phorate failed linearity criteria on column DB-608, but was acceptable on column DB-5. Quantitation for the surrogate (Tokuthion) was based on a four-point calibration due to off-scale peak in calibration standard #5.

Form VII (Continuing Calibration Summary)

Recoveries for continuing calibration verification standards are presented on Form VII. CCV recoveries were within or above criteria for all components. Possible high bias does not impact on sample data quality since no hits were present in the sample.

Data Released By

Noble Nemieboka
GC/LC Acting Lab Manager

F-00064

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Organophosphorus

Case No.: 9510147

Project Name: CRANE NSWC

Client Name: MK CORP

Sample Number
SBLK01

AENI # BLK951020RC

Concentration: Low

Date Sampled: N/A

Date Received: N/A

Date Ext Prepared: 10/20/95

Date Analyzed: 10/30/95

Conc/Dil Factor: 1

Method: 8140

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		X Yes
Continuous Liquid - Liquid Extration		Yes
Percent Solid	N/A	
Matrix	WATER	

CAS Number	Compound	Concentration ug/L	Detection Limit	Qualifier
298-02-2	Phorate		0.05	U
60-51-5	Dimethoate		0.10	U
23950-58-5	Pronamide		0.05	U
298-04-4	Disulfoton		0.05	U
298-00-0	Methyl Parathion		0.05	U
56-38-2	Ethyl Parathion		0.05	U
52-85-7	Famphur		0.05	U
3689-24-5	Tetraethyl dithiopyrophosphate		5.0	U

Vi - Volume of extract injected (ul) - 1

Vs - Volume of Water extracted (ml) - 1000

Ws - Weight of sample extracted (g) - N/A

Vt - Volume of total extract (ul) - 1,000

FORM I

AMERICAN ENVIRONMENTAL NETWORK, INC.
ORGANIC ANALYSIS DATA SHEET
SURROGATE PERCENT RECOVERIES
ORGANOPHOPHORUS

CLIENT NAME: MK CORP
PROJECT NAME: CRANE NSWC
CONTRACT NUMBER : 9510147
SURROGATE: Tokuthion
ACCEPTANCE CRITERIA: 50-150%
MATRIX: WATER
METHOD: 8140

CLIENT ID	AENI ID	DB5 COLUMN % RECOVERY	#	608 COLUMN % RECOVERY	#
SBLK01	BLK951020RIC	104		104	
BS	BS951020RIC	102		104	
SSD	BSD951020RIC	113		114	
NSWC 16/16 RB8	9510147-001	112		110	

COLUMN TO BE USED TO FLAG RECOVERY VALUES
• VALUES OUTSIDE OF QC LIMITS

F-00066

WATER BLANK SPIKE RECOVERY

Lab Name: American Environmental Network, Inc. Contract: 9510147
Lab Code: NA Case No.: NA SAS No.: NA
Matrix Spike - EPA Sample No.: BS951020RC
Method: 8140

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	BS CONC (ug/L)	BS % REC	#	BSD CONC (ug/L)	BSD % REC	#
Phorate	0.20	0.0	0.20	98		0.25	123	
Disulfoton	0.20	0.0	0.29	143		0.14	68	

QC limits for %recovery 50-150%

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 4 outside limits.

F-00287

AMERICAN ENVIRONMENTAL NETWORK, INC.

October 20, 1995

Client: MK CORP

Case: 9510147

Project: NSWC, CRANE

Analysis: Herbicides by Method 8150

Client ID	AENI#	Date Sampled	Date Received	Date Extracted	Date Analyzed
NSWC 16/16 RB8	9510147-001	10/11/95	10/14/95	10/19/95	10/20/95

One water sample was extracted and analyzed for 2,4-D, Silvex, and 2,4,5-T using SW-846 method 8150.

The enclosed package consists specifically of tabulated results (Form I), surrogate spike recoveries (Form II), matrix spike recoveries (Form III), method blank summary (Form IV), initial calibration summary (Form VI), and continuing calibration summary (Form VII).

Form I (Tabulated Results)

The qualifier "U" indicates that a compound was analyzed for but not detected above the reporting limit. The sample was prepared and analyzed within method specified holding time.

Form II (Surrogate Spike Recoveries)

All surrogate recoveries were within specified criteria (50-150%).

Form III (Matrix Spike Recoveries)

A blank spike (BS) was extracted with this sample set. BS recoveries were within criteria (50-150%).

Form IV (Method Blank Summary)

No herbicides were detected in the method blank.

Form VI (Initial Calibration Summary)

Linear five-point curve with correlation coefficient of 0.995 or better was used for sample quantitation.

F-

Form VII (Continuing Calibration Summary)

Recoveries for continuing calibration verification standards were within +/- 15% criteria.

Data Released By

Noble Nemieboka
GC/LC Acting Lab Manager

F-00088

AENI
ORGANIC ANALYSIS DATA SHEET
HERBICIDES METHOD 8150

Sample Number
SBLK

Case No.: 9510147
Client Name: MK CORP
Project Name: NSWC, CRANE

AENI # BLK 951019LA

Concentration: Low
Date Sampled: N/A
Date Received: N/A
Date Extract Prepared: 10/19/95
Date Analyzed: 10/20/95
Conc/Dil Factor: 1
Matrix WATER

GPC Cleanup No
Separatory Funnel Ext.: Yes
Continuous Liq-Liq Ext.: No
Percent Moisture (decanted) N/A

Compound	Concentration ug/L	Reporting Limit	Qualifier
2,4 D		0.25	U
SILVEX		0.25	U
2,4,5-T		0.25	U

Vi - Volume of extract injected (ul) 1
Vs - Volume of water extracted (ml) 1000
Ws - Mass of soil extracted (g) N/A
Vt- Volume of total extract (ul) 5000

FORM I

F-000270

WATER SURROGATE PERCENT RECOVERY SUMMARY

Case No.: 9510147 Laboratory Name: American Environmental Network Inc.

Client ID	AEN ID	DCAA DB-5	DCAA DB-608
SBLK	BLK 951019LA	58	75
BS	TCLP BS 951019LA	86	88
NSWC 16/16 RB8	9510147-001	56	69

CONTROL LIMITS = 50-150%

* - Values are outside of contract required QC limits.
M-Matrix interference. D-Surrogate diluted out.

0 out of 6
outside QC limits.

F-00071

AMERICAN ENVIRONMENTAL NETWORK, INC.
HERBICIDE MATRIX SPIKE RECOVERIES

Case No.: 9510147

Client Name: MK CORP

Project Name: CRANE, NSWC

Client Sample ID: TCLP BS 951019LA

Date of Analysis: 10/20/95

Instrument ID: GC-H

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	BS CONC (ug/L)	BS % REC	BSD CONC (ug/L)	BSD % REC	QC LIMITS REC
2,4-D	5.03	0.0	3.32	66	N/A	N/A	50-150
Silvex	5.29	0.0	4.25	80	N/A	N/A	50-150

Spike Recovery: 0 out of 2 outside QC limits.

F. 00072

AMERICAN ENVIRONMENTAL NETWORK, INC.
9151 RUMSEY ROAD
COLUMBIA, MD. 21045
(410) 730-8525

Project Number: 9510-147
Client Name: Morrison Knudsen Corporation
Project Title: NSWC Crane

Three water and seventeen soil samples were analyzed for the volatile organic compounds in the Appendix IX list, by method 8260. One water and one soil sample were analyzed for the polynuclear aromatic compounds, by method 8270.
All analyses followed the standard AENI QA/QC and holding time requirements.

This package consists of the tabulated results of the samples and the method blanks, along with the QC forms II, III, IV, V, VI, VII and VIII.

Data Released _____ 10/27/
Minh-Thy L. Nguyen
GC/MS Lab Manager

F-000273

VOLATILES Section:

Client ID	AENI ID	Matrix	Date Sampled	Date Received	Date Analyzed
NSWC 16/16 RB8	147-001	Water	10/11/95	10/14/95	10/23/95
NSWC 16/16 022	147-002	Soil	10/13/95	10/14/95	10/23/95
NSWC 16/16 023	147-003	Soil	10/13/95	10/14/95	10/23/95
NSWC 16/16 024	147-004	Soil	10/13/95	10/14/95	10/23/95
NSWC 16/16 025	147-005	Soil	10/13/95	10/14/95	10/23/95
NSWC 16/16 026	147-006	Soil	10/13/95	10/14/95	10/23/95
NSWC 16/16 027	147-007	Soil	10/13/95	10/14/95	10/23/95
NSWC 16/16 028	147-008	Soil	10/13/95	10/14/95	10/23/95
NSWC 16/16 029	147-009	Soil	10/13/95	10/14/95	10/23/95
NSWC 16/16 030	147-010	Soil	10/13/95	10/14/95	10/23/95
NSWC 16/16 031	147-011	Soil	10/13/95	10/14/95	10/23/95
NSWC 16/16 032	147-012	Soil	10/13/95	10/14/95	10/23/95
NSWC 16/16 033	147-013	Soil	10/13/95	10/14/95	10/23/95
NSWC 16/16 034	147-014	Soil	10/13/95	10/14/95	10/23/95
NSWC 16/16 035	147-015	Soil	10/13/95	10/14/95	10/23/95
NSWC 16/16 036	147-016	Soil	10/13/95	10/14/95	10/23/95
NSWC 16/16 037	147-017	Soil	10/13/95	10/14/95	10/24/95
NSWC 16/16 038	147-018	Soil	10/13/95	10/14/95	10/24/95
NSWC 16/16 040	147-020	Water	10/13/95	10/14/95	10/24/95
NSWC 16/16 TB5	147-021	Water	10/13/95	10/14/95	10/24/95

Form I (Tabulated Results)
All analyses were performed within the holding time requirement. Since the water samples are QC samples for the soils, they were analyzed as soil samples. The results for the soil samples were reported on the basis of dry weight.

Form II (Surrogate Recoveries)
The surrogate recoveries for the samples, QC and method blanks were within the method specified limits.

Form III (MS/MSD Recoveries)
The MS/MSD analysis was performed on sample NSWC 16/16 036. All spike recoveries and all %RPDs were within the method advisory limits.

Form IV (Method Blank Summary)
The method blanks were free of target analytes, except for methylene chloride which is a common lab artifact and should be viewed with suspicion if it was detected in the samples at below the 10ppb level.

Form V (Tuning and Mass Calibration)
All calibration standards, method blanks, QC and samples were analyzed within the method specified mass calibration and 12-hr tune criteria.

Form VI (Initial Calibration)
The initial calibration curve met the method specified Min mean RRF for the SPCC compounds and Max %RSD for the CCC compounds.

Form VII (Continuing Calibration)
All CCC and SPCC compounds for the daily continuing calibrations were within the method specified criteria for max %D and Min RRF50.

Form VIII (Internal Standard Summary)
All internal standard areas and all retention times were within the lab warning limits

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: _____ Location: _____ Group: _____

Level: (low/med) LOW

	SAMPLE NO.	SMC1 #	SMC2 (TOL) #	SMC3 (BFB) #	OTHER #	TOT OUT
01	VBLK01	105	96	102		
02	NSWC 16/16 RB8	97	100	106		
03	NSWC 16/16 022	114	98	103		
04	NSWC 16/16 023	118	103	100		
05	NSWC 16/16 024	114	111	84		
06	NSWC 16/16 025	109	101	106		
07	NSWC 16/16 026	115	99	103		
08	NSWC 16/16 027	112	96	93		
09	NSWC 16/16 028	105	94	95		
10	NSWC 16/16 029	107	99	95		
11	NSWC 16/16 030	110	95	91		
12	NSWC 16/16 031	110	94	95		
13	NSWC 15/16 032	106	95	97		
14	NSWC 16/16 033	108	97	99		
15	NSWC 16/16 034	108	96	100		
16	NSWC 16/16 035	114	98	98		
17	NSWC 16/16 036	115	103	93		
18	NSWC 16/16 036	101	89	85		
19	NSWC 16/16 036	106	94	87		
20	VBLK02	98	94	105		
21	NSWC 16/16 037	102	87	106		
22	NSWC 16/16 038	101	89	106		
23	VBLK03	103	103	108		
24	NSWC 16/16 TB5	104	100	111		
25	VBLK04	91	99	90		
26	NSWC 16/16 040	90	105	93		
27						
28						
29						
30						

	QC LIMITS
SMC1 - Dibromofluoromethane	(80-120)
SMC2 (TOL) - Toluene-d8	(84-138)
SMC3 (BFB) - Bromofluorobenzene	(59-113)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM II VOA-2 SW846

F-00076

JB

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix Spike - Sample No.: NSWC 16/16 036 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	55	0	57	104	(59-172)
Trichloroethene	55	2	44	76	(62-137)
Benzene	55	0	54	98	(66-142)
Toluene	55	19	55	65	(59-139)
Chlorobenzene	55	0	50	91	(60-133)

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MS % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	55	62	113	8	22	(59-172)
Trichloroethene	55	43	75	1	24	(62-137)
Benzene	55	56	102	4	21	(66-142)
Toluene	55	54	73	11	21	(59-139)
Chlorobenzene	55	50	91	0	21	(60-133)

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Comments:

F-00077

SEMIVOLATILES Section:

Client ID	AENI ID	Matrix	Date Sampled	Date Received	Date Extracted	Date Analyzed
NSWC 16/16 RB8	147-001	Water	10/11/95	10/14/95	10/17/95	10/23/95
NSWC 16/16 039	147-019	Soil	10/13/95	10/14/95	10/20/95	10/23/95

Form I (Tabulated Results)
All sample preparation and analyses were performed within the holding time requirement. The results for the soil samples were reported on the basis of dry weight.

Form II (Surrogate Recoveries)
The surrogate recoveries for the samples, QC, and method blanks were within the method specified limits.

Form III (Blank Spike Recoveries)
Two sets of BS analysis were reported, one for each matrix. All spike recoveries were within criteria.

Form IV (Method Blank Summary)
The method blanks were free of target analytes.

Form V (Tuning and Mass Calibration)
All calibration standards, method blanks, QC and samples were analyzed within the method specified mass calibration and 12-hr tune criteria.

Form VI (Initial Calibration)
The initial calibration curve met the method specified Min mean RRF for the SPCC compounds and Max %RSD for the CCC compounds.

Form VII (Continuing Calibration)
All CCC and SPCC compounds for the daily continuing calibrations were within the method specified criteria for max %D and Min RRF50.

Form VIII (Internal Standard Summary)
All internal standard area recoveries and retention times were within the lab warning limits.

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: _____ Location: _____ Group: _____

	SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	#	#	#	#	#	TOT OUT
01	SBLK01	81	80	72						
02	BS	68	69	70						
03	NSWC 16/16 RB8	75	74	76						
04										
05										
06										
07										
08										
09										
10										
11										
12										
13										
14										
15										
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23										
24										
25										
26										
27										
28										
29										
30										

	QC LIMITS
S1 (NBZ) - Nitrobenzene-d5	(34-114)
S2 (FBP) - 2-Fluorobiphenyl	(43-116)
S3 (TPH) - Terphenyl-d14	(33-141)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

FORM II SV-1 SW846

F-00075

2D

SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: _____ Location: _____ Group: _____

Level: (low/med) LOW

	SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	#	#	#	#	#	TOT OUT
01	SBLK02	74	76	77						
02	BS	75	76	74						
03	NSWC 16/16/039	288 D	125 D	141 D						
04										
05										
06										
07										
08										
09										
10										
11										
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25										
26										
27										
28										
29										
30										

	QC LIMITS
S1 (NBZ) - Nitrobenzene-d5	(23-120)
S2 (FBP) - 2-Fluorobiphenyl	(30-115)
S3 (TPH) - Terphenyl-d14	(18-137)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

FORM II SV-2 SW846

F-000280

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix Spike - Sample No.: 951017JA

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,4-Dichlorobenzene	100	0	65	65	(36-97)
N-Nitroso-di-n-propylamine	100	0	71	71	(41-116)
1,2,4-Trichlorobenzene	100	0	66	66	(39-98)
Acenaphthene	100	0	71	71	(46-118)
2,4-Dinitrotoluene	100	0	69	69	(24-96)
Pyrene	100	0	72	72	(26-127)

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene					28	(36-97)
N-Nitroso-di-n-propylamine					38	(41-116)
1,2,4-Trichlorobenzene					28	(39-98)
Acenaphthene					31	(46-118)
2,4-Dinitrotoluene					38	(24-96)
Pyrene					31	(26-127)

(1) N-Nitroso-di-n-propylamine

* Values outside of QC limits

Comments:

F-00081

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AENI Contract: 9510147

Project No.: MKC70 Site: Location: Group:

Matrix Spike · Sample No.: 951020RA Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,4-Dichlorobenzene	3300	0	2200	67	(28-104)
N-Nitroso-di-n-propylamine	3300	0	2400	73	(41-126)
1,2,4-Trichlorobenzene	3300	0	2500	76	(41-126)
Acenaphthene	3300	0	2500	76	(31-137)
2,4-Dinitrotoluene	3300	0	2200	67	(28-89)
Pyrene	3300	0	2200	67	(35-142)

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene					27	(28-104)
N-Nitroso-di-n-propylamine					38	(41-126)
1,2,4-Trichlorobenzene					38	(41-126)
Acenaphthene					19	(31-137)
2,4-Dinitrotoluene					47	(28-89)
Pyrene					36	(35-142)

* Values outside of QC limits

Comments:

F-00282

AMERICAN ENVIRONMENTAL NETWORK, INC.

Client: MK CORP

October 27, 1995

Project: MKC70

Contract: 9510147

Analysis: EXPLOSIVES by 8330

Client ID	Lab ID	Date Sampled	Date Received	Date Prepared	Date Analyzed
NSWC 16/16 022	L9510147-002	10/13/95	10/14/95	10/19/95	10/20/95
NSWC 16/16 023	L9510147-003	10/13/95	10/14/95	10/19/95	10/20/95
NSWC 16/16 024	L9510147-004	10/13/95	10/14/95	10/19/95	10/20/95
NSWC 16/16 025	L9510147-005	10/13/95	10/14/95	10/19/95	10/20/95
NSWC 16/16 026	L9510147-006	10/13/95	10/14/95	10/19/95	10/20/95
NSWC 16/16 027	L9510147-007	10/13/95	10/14/95	10/19/95	10/21/95
NSWC 16/16 028	L9510147-008	10/13/95	10/14/95	10/19/95	10/21/95
NSWC 16/16 029	L9510147-009	10/13/95	10/14/95	10/19/95	10/21/95
NSWC 16/16 030	L9510147-010	10/13/95	10/14/95	10/19/95	10/21/95
NSWC 16/16 031	L9510147-011	10/13/95	10/14/95	10/19/95	10/21/95
NSWC 16/16 032	L9510147-012	10/13/95	10/14/95	10/23/95	10/24/95
NSWC 16/16 033	L9510147-013	10/13/95	10/14/95	10/23/95	10/24/95
NSWC 16/16 034	L9510147-014	10/13/95	10/14/95	10/23/95	10/25/95
NSWC 16/16 035	L9510147-015	10/13/95	10/14/95	10/23/95	10/25/95
NSWC 16/16 036	L9510147-016	10/13/95	10/14/95	10/23/95	10/25/95
NSWC 16/16 037	L9510147-017	10/13/95	10/14/95	10/23/95	10/25/95
NSWC 16/16 038	L9510147-018	10/13/95	10/14/95	10/23/95	10/25/95

Seventeen soil samples were received and analyzed for HMX, RDX, TNB, TETRYL, DNB, TNT, 2,6-DNT and 2,4-DNT by method 8330.

The enclosed package contains tabulated results (Form I)'s, a surrogate recovery summary (Form II), a matrix spike/matrix spike dup recovery summary (Form III), a method blank summary (Form IV), an initial calibration summary (Form VI) and a continuing calibration summary (Form VII).

Form I (Organic Analysis Data Sheet)

The qualifier 'U' indicates that a compound was analyzed for but not detected above the specified detection limit. All samples were prepared and analyzed within the method specified holding times. Sample #NSWC 16/16 040 (AENI# 9510147-020) is not reported because of insifficient sample volume.

F-0002R.5

Form II (Surrogate Recovery Summary)
The percent recovery values for all surrogates are within criteria. Th lab criteria for percent recovery is 50 to 150 percent.

Form III (Matrix Spike Recovery Summary)

Soil Matrix
A batch matrix spike and matrix spike duplicate are supplied. All values are within criteria. The lab criteria for component percent recoveries are listed in the Form III. The lab criteria for RPD is 0 to 30 percent.

Form IV (Method Blank Summary)
No target analytes were detected at or above the detection limit in the method blanks.

Form VI (Initial Calibration Summary)
The calibration points listed were used for sample quantitation. All r2 values are within lab criteria. The lab criteria for r2 is .990 or greater.

Form VII (Continuing Calibration Summary)
Percent recoveries for all analytes are within lab criteria. Lab criteria for percent recovery is 75 to 125 percent.

Data Released by Noble O. Namieboka
Noble O. Namieboka
GC/LC Asst. Lab Manager

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

Sample: SBLK01

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: N/A
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: BLK951019LC
Lab Name: AENI
Contract: 9510147
Date Sampled: N/A
Date Received: N/A
Date Prepared: 10/19/95
Date Analyzed: 10/20/95
Time Analyzed: 19:05

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.28	U
RDX		0.34	U
TNB		0.23	U
TETRYL		0.25	U
DNB		0.19	U
TNT		0.22	U
2,6-DNT		0.24	U
2,4-DNT		0.19	U

ORGANIC ANALYSIS DATA SHEET

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

SBLK01
Sample:

Matrix: SOIL
Sample: (g) 2.0
Final Volume: (L) 0.02
(%) Moisture: N/A
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: BLK951023RA
Lab Name: AENI
Contract: 9510147
Date Sampled: N/A
Date Received: N/A
Date Prepared: 10/23/95
Date Analyzed: 10/24/95
Time Analyzed: 20:48

Compound	Concentration (mg/Kg)	Detection Limit	Qualifier
HMX		0.28	U
RDX		0.34	U
TNB		0.23	U
TETRYL		0.25	U
DNB		0.19	U
TNT		0.22	U
2,6-DNT		0.24	U
2,4-DNT		0.19	U

SURROGATE RECOVERY SUMMARY

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument HPLC SYS 2

Surrogate: O-Nitroanaline
Q.C. Criteria: 50 to 150 (%)
Lab Name: AENI
Contract: 9510147

Sample	Lab Sample ID	(%) Recovery
SBLK01	BLK951019LC	83
SBLK01	BLK951023RA	86
BS	BS951019LC	93
BS	BS951023RA	94
NSWC 16/16 022	L9510147-002	84
NSWC 16/16 023	L9510147-003	79
NSWC 16/16 024	L9510147-004	81
NSWC 16/16 025	L9510147-005	86
NSWC 16/16 026	L9510147-006	86
NSWC 16/16 027	L9510147-007	84
NSWC 16/16 028	L9510147-008	79
NSWC 16/16 029	L9510147-009	89
NSWC 16/16 030	L9510147-010	81
NSWC 16/16 031	L9510147-011	75
NSWC 16/16 032	L9510147-012	88
NSWC 16/16 033	L9510147-013	86
NSWC 16/16 034	L9510147-014	86
NSWC 16/16 035	L9510147-015	85
NSWC 16/16 036	L9510147-016	83
NSWC 16/16 037	L9510147-017	88
NSWC 16/16 038	L9510147-018	90

* - indicates values outside of criteria

Form II

F. 000287

MATRIX SPIKE / MATRIX SPIKE DUPLICATE SUMMARY

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

Matrix: SOIL
(%) Moisture: N/A
Dilution Factor: 1
Lab Name: AENI
Contract: 9510147

Matrix Spike (S) - Sample: BS
Date Prepared 10/19/95

Lab Sample ID: BS951019LC
Date Analyzed: 10/20/95

Matrix Spike Dup (D) Sample: BSD
Date Prepared:

Lab Sample ID: BSD
Date Analyzed:

Compound	Concentration (mg/Kg)			Recovery			
	True	Found - S	Found - D	(%) - S	(%) - D	RPD	(%) Criteria
HMX	4.0	3.5		88			50 -150
RDX	4.0	3.9		98			50 -150
TNB	4.0	4.0		100			50 -150
TETRYL	5.0	4.7		94			50 -150
DNB	4.0	3.9		98			50 -150
TNT	4.0	3.3		83			50 -150
2,6-DNT	5.0	4.8		96			50 -150
2,4-DNT	4.0	3.9		98			50 -150

* - indicates values outside of criteria.

MATRIX SPIKE / MATRIX SPIKE DUPLICATE SUMMARY

Client: MK CORP
Account # MKC70
Analysis: EXPLOSIVES
Method: 8330
Instrument: HPLC SYS 2

Matrix: SOIL
(%) Moisture: N/A
Dilution Factor: 1
Lab Name: AENI
Contract: 9510147

Matrix Spike (S) - Sample: BS
Date Prepared 10/23/95

Lab Sample ID: BS951023RA
Date Analyzed: 10/24/95

Matrix Spike Dup (D) Sample: BSD
Date Prepared:

Lab Sample ID: BSD
Date Analyzed:

Compound	Concentration (mg/Kg)			Recovery			
	True	Found - S	Found - D	(%) - S	(%) - D	RPD	(%) Criteria
HMX	4.0	3.5		88			50 -150
RDX	4.0	3.7		93			50 -150
TNB	4.0	3.8		95			50 -150
TETRYL	5.0	4.4		88			50 -150
DNB	4.0	3.9		98			50 -150
TNT	4.0	2.8		70			50 -150
2,6-DNT	5.0	4.9		98			50 -150
2,4-DNT	4.0	4.1		102			50 -150

* - indicates values outside of criteria.

AMERICAN ENVIRONMENTAL NETWORK, INC.

October 23, 1995

Client: MK CORP

Case: 9510147

Project: CRANE NSWC

Analysis: Pesticides and PCB's by SW-846 Method 8080 (Appendix IX)

Client ID	AENI#	Date Sampled	Date Received	Date Extracted	Date Analyzed
NSWC 16/16 RB8	9510147-001	10/11/95	10/14/95	10/17/95	10/20/95
NSWC 16/16 022	9510147-002	10/13/95	10/14/95	10/18/95	10/20/95
NSWC 16/16 023	9510147-003	10/13/95	10/14/95	10/18/95	10/20/95
NSWC 16/16 024	9510147-004	10/13/95	10/14/95	10/18/95	10/20/95
NSWC 16/16 025	9510147-005	10/13/95	10/14/95	10/18/95	10/20/95
NSWC 16/16 026	9510147-006	10/13/95	10/14/95	10/18/95	10/20/95
NSWC 16/16 027	9510147-007	10/13/95	10/14/95	10/18/95	10/20/95
NSWC 16/16 028	9510147-008	10/13/95	10/14/95	10/18/95	10/20/95
NSWC 16/16 029	9510147-009	10/13/95	10/14/95	10/18/95	10/20/95
NSWC 16/16 030	9510147-010	10/13/95	10/14/95	10/18/95	10/20/95
NSWC 16/16 031	9510147-011	10/13/95	10/14/95	10/18/95	10/20/[illegible]
NSWC 16/16 032	9510147-012	10/13/95	10/14/95	10/18/95	10/20/[illegible]
NSWC 16/16 033	9510147-013	10/13/95	10/14/95	10/18/95	10/20/95
NSWC 16/16 034	9510147-014	10/13/95	10/14/95	10/18/95	10/20/95
NSWC 16/16 035	9510147-015	10/13/95	10/14/95	10/18/95	10/20/95
NSWC 16/16 036	9510147-016	10/13/95	10/14/95	10/18/95	10/20/95
NSWC 16/16 037	9510147-017	10/13/95	10/14/95	10/18/95	10/20/95
NSWC 16/16 038	9510147-018	10/13/95	10/14/95	10/18/95	10/21/95
NSWC 16/16 039	9510147-019	10/13/95	10/14/95	10/18/95	10/21/95

Eighteen soil samples and one water sample were extracted and analyzed for Pesticides and PCB's by SW-846 method 8080 (Appendix IX). Data for sample NSWC 16/16 040 (AENI# 9510147-020) will be reported in a separate package.

The enclosed package consists specifically of tabulated results (Form I), surrogate spike recoveries (Form II), matrix spike recoveries (Form III), method blank summary (Form IV), initial calibration summary (Form VI), continuing calibration summary (Form VII), and retention time shifting summary (Form VIII).

F-[illegible]

Form I (Tabulated Results)

The qualifier "U" indicates that a compound was analyzed for but not detected above the reporting limit. The samples were prepared and analyzed within method specified holding time. Many of the sample extracts were diluted prior to analysis due to suspected matrix interference. Reporting limits for these samples are elevated in proportion to the dilution factor.

Form II (Surrogate Spike Recoveries)

All measurable surrogate recoveries were within specified criteria (60-150%).

Form III (Matrix Spike Recoveries)

Two blank spike samples were extracted with this sample set. All BS recoveries were within specified criteria (see Form III).

MS/MSD was performed on sample NSWC 16/16 036 (AENI# 9510147-016). Ten out of twelve recoveries and all RPD's were within criteria.

Form IV (Method Blank Summary)

No pesticides or PCB's were detected in the method blanks.

Form VI (Initial Calibration Summary)

Linear five-point curve with correlation coefficient of 0.995 or better was used for sample quantitation.

A separate calibration curve was analyzed for Diallate, PCNB, Isodrin, Chlorobenzilate, and Kepone. Quantitation (both columns) was based on a five point calibration with correlation coefficient of 0.995 or better.

Form VII (Continuing Calibration Summary)

CCV recoveries were either within or above criteria on both columns for all components of interest. The few high recoveries do not affect sample data quality since these pesticides were not present in the samples.

Form VIII (Retention Time Shifting Summary)

All retention time shifting was within criteria (+/- 1.5%).

Data Released By Noble Ngang'a Nemieboka

Noble N. Nemieboka
GC/LC Acting Lab Manager

F-00291

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.:——— 9510147

Project Name:——— CRANE NSWC

Client Name:——— MK CORP

Sample Number
PBLK01

AENI # BLK951017JB

Concentration:——— Low

Date Sampled:——— N/A

Date Received:——— N/A

Date Ext Prepared:— 10/17/95

Date Analyzed:——— 10/19/95

Conc/Dil Factor:——— 1

Method: ——— 8080

GPC Cleanup | | Yes | X | No

Seperatory Funnel Extraction | X | Yes

Continuous Liquid - Liquid Extraction | | Yes

Percent Moisture N/A

Matrix: WATER

CAS Number	Compound	Concentration ug/L	Detection Limit	Qualifier
319-84-6	alpha-BHC		0.05	U
319-85-7	beta-BHC		0.05	U
319-86-8	delta-BHC		0.05	U
58-89-9	gamma-BHC (Lindane)		0.10	U
75-44-8	Heptachlor		0.05	U
309-00-2	Aldrin		0.05	U
1024-57-3	Heptachlor epoxide		0.05	U
959-98-8	Endosulfan I		0.05	U
60-57-1	Dieldrin		0.10	U
75-55-9	4, 4'-DDE		0.10	U
72-20-8	Endrin		0.10	U
33213-65-9	Endosulfan II		0.10	U
72-54-8	4, 4'-DDD		0.10	U
1031-07-8	Endosulfan Sulfate		0.10	U
50-29-3	4, 4'-DDT		0.10	U
72-43-5	Methoxychlor		0.50	U
53494-70-5	Endrin Ketone		0.10	U
7421-36-3	Endrin aldehyde		0.10	U
57-74-9	Chlordane		1.0	U
8001-35-2	Toxaphene		5.0	U
12674-11-2	Aroclor-1016		1.0	U
11104-28-2	Aroclor-1221		2.0	U
11141-16-5	Aroclor-1232		1.0	U
53469-21-9	Aroclor-1242		1.0	U
12672-29-6	Aroclor-1248		1.0	U
11097-69-1	Aroclor-1254		1.0	U
11096-82-5	Aroclor-1260		1.0	U
510-15-6	Chlorobenzilate		2.0	U
2303-16-4	Diallate		10	U
465-73-6	Isodrin		0.25	U
143-50-0	Kepone		1.0	U
82-68-8	Pentachloronitrobenzene		0.20	U

Vi - Volume of extract injected (ul) - _____ 5

Vs - Volume of Water extracted (ml) - _____ 1000

Ws - Weight of sample extracted (g) - _____ N/A

Vt - Volume of total extract (ul) - _____ 10,000

FORM I

F-000292

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.: 9510147
Project Name: CRANE NSWC
Client Name: MK CORP

Sample Number
PBLK01

AENI # BLK951018VC

Concentration: Low
Date Sampled: N/A
Date Received: N/A
Date Ext Prepared: 10/18/95
Date Analyzed: 10/20/95
Conc/Dil Factor: 1
Method: 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	0	
Matrix	SOIL	

CAS Number	Compound	Concentration ug/Kg	Detection Limit	Qualifier
319-84-6	alpha-BHC		1.7	U
319-85-7	beta-BHC		1.7	U
319-86-8	delta-BHC		1.7	U
58-89-9	gamma-BHC (Lindane)		3.3	U
75-44-8	Heptachlor		1.7	U
309-00-2	Aldrin		1.7	U
1024-57-3	Heptachlor epoxide		1.7	U
959-98-8	Endosulfan I		1.7	U
60-57-1	Dieldrin		3.3	U
75-55-9	4, 4'-DDE		3.3	U
72-20-8	Endrin		3.3	U
33213-65-9	Endosulfan II		3.3	U
72-54-8	4, 4'-DDD		3.3	U
1031-07-8	Endosulfan Sulfate		3.3	U
50-29-3	4, 4'-DDT		3.3	U
72-43-5	Methoxychlor		17	U
53494-70-5	Endrin Ketone		3.3	U
7421-36-3	Endrin aldehyde		3.3	U
57-74-9	Chlordane		33	U
8001-35-2	Toxaphene		170	U
12674-11-2	Aroclor-1016		33	U
11104-28-2	Aroclor-1221		67	U
11141-16-5	Aroclor-1232		33	U
53469-21-9	Aroclor-1242		33	U
12672-29-6	Aroclor-1248		33	U
11097-69-1	Aroclor-1254		33	U
11096-82-5	Aroclor-1260		33	U
510-15-6	Chlorobenzilate		67	U
2303-16-4	Diallate		333	U
465-73-6	Isodrin		8.3	U
143-50-0	Kepone		33	U
82-68-8	Pentachloronitrobenzene		6.7	U

Vi - Volume of extract injected (ul) - 5
Vs - Volume of Water extracted (ml) - N/A
Ws - Weight of sample extracted (g) - 30
Vt - Volume of total extract (ul) - 10,000

FORM I

F-00296

2E

WATER PESTICIDE SURROGATE RECOVERY

Lab Name: American Environmental Network, Inc. Contract: 9510147

Lab Code: NA Case No.: NA SAS No.: NA

Instrument ID: GC-F

GC Column(1): DB-5 D: 0.53 mm GC Column(2): DB 608 ID: 0.53 mm

Dates of Analyses: 10/19/95 to 10/20/95

Method: 8080

EPA SAMPLE NO.	TCMX 1 %REC	#	TCMX 2 % REC	#	DCB 1 %REC	#	DCB 2 %REC	#	TOTAL OUT
BLK951017JB	86		103		79		72		0
BS (TCLP)	99		105		81		82		0
NSWC 16/16 RB8	65		88		65		67		0

ADVISORY QC LIMITS

TCMX= Tetrachloro-m-xylene (60-150)

DCB= Decachlorobiphenyl (60-150)

COLUMN TO BE USED TO FLAG RECOVERY VALUES

* VALUES OUTSIDE OF QC LIMITS

D SURROGATE DILUTED OUT

FORM II PEST-1

F-00294

2F

SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: American Environmental Network, Inc.
Lab Code: NA Case No.: NA
Contract: 9510147
SAS No.: NA
Instrument ID: GC-F
GC Column(1): DB-5 D: 0.53 mm GC Column(2): DB 608 ID: 0.53 mm
Dates of Analyses: 10/20/95 to 10/21/95
Method: 8080

	EPA SAMPLE NO.	TCMX 1 %REC	#	TCMX 2 % REC	#	DCB 1 %REC	#	DCB 2 %REC	#	TOTAL OUT
	BLK951018VC	102		130		83		91		0
	BS (SOIL)	104		134		95		95		0
	NSWC 16/16 022	70		94		77		81		0
5X	NSWC 16/16 023	D		D		D		D		0
5X	NSWC 16/16 024	D		D		D		D		0
5X	NSWC 16/16 025	D		D		D		D		0
5X	NSWC 16/16 026	D		D		D		D		0
10X	NSWC 16/16 027	D		D		D		D		0
5X	NSWC 16/16 028	D		D		D		D		0
2X	NSWC 16/16 029	D		D		D		D		0
5X	NSWC 16/16 030	D		D		D		D		0
	NSWC 16/16 031	71		87		73		69		0
	NSWC 16/16 032	66		97		75		71		0
	NSWC 16/16 033	75		89		70		68		0
	NSWC 16/16 034	81		M		73		71		0
5X	NSWC 16/16 035	D		D		D		D		0
2X	NSWC 16/16 036	D		D		D		D		0
2X	NSWC 16/16 036MS	D		D		D		D		0
2X	NSWC 16/16 036MSD	D		D		D		D		0
10X	NSWC 16/16 037	D		D		D		D		0
10X	NSWC 16/16 038	D		D		D		D		0
20X	NSWC 16/16 039	D		D		D		D		0

ADVISORY QC LIMITS

TCMX = Tetrachloro-m-xylene (60-150)
DCB = Decachlorobiphenyl (60-150)

COLUMN TO BE USED TO FLAG RECOVERY VALUES
* VALUES OUTSIDE OF QC LIMITS
D SURROGATE DILUTED OUT
M SURROGATE MASKED

FORM II PEST-1

F-00295

3E

WATER BLANK SPIKE RECOVERY

Lab Name: American Environmental Network, Inc. Contract: 9510147

Lab Code: – NA Case No.: NA SAS No.: NA

Matrix Spike - EPA Sample No.: BS951017JB

Method: 8080

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	BS CONCENTRATION (ug/L)	BS % REC	#	QC LIMITS REC.
gamma-BHC (Lindane)	0.40	0.0	0.32	80		56 - 123
Heptachlor	0.40	0.0	0.31	78		40 - 131
Aldrin	0.40	0.0	0.33	83		40 - 120
Dieldrin	1.0	0.0	0.85	85		52 - 126
Endrin	1.0	0.0	0.92	92		56 - 121
4,4'-DDT	1.0	0.0	0.81	81		38 - 127

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits.

FORM III PEST-1

F-00256

3F

SOIL BLANK SPIKE RECOVERY

Lab Name: American Environmental Network, Inc.
Lab Code: NA
Case No.: NA
Contract: 9510147
SAS No.: NA
Matrix Spike - EPA Sample No.: BS 951018VC
Method: 8080

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC	#	QC LIMITS REC.
gamma-BHC (Lindane)	6.7	0.0	6.5	97		46 - 127
Heptachlor	6.7	0.0	5.6	84		35 - 130
Aldrin	6.7	0.0	6.9	103		34 - 132
Dieldrin	17	0.0	18	106		31 - 134
Endrin	17	0.0	21	124		42 - 139
4,4'-DDT	17	0.0	20	118		23 - 134

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits.

FORM III PEST-2

F-00097

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: American Environmental Network, Inc. Contract: 9510147

Lab Code: NA Case No.: NA SAS No.: NA

Matrix Spike - EPA Sample No.: NSWC 16/16 036

Method: 8080

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	#	QC LIMITS REC.
gamma-BHC (Lindane)	7.1	0.0	2.7	38	*	46 - 127
Heptachlor	7.1	0.0	4.1	58		35 - 130
Aldrin	7.1	0.0	6.2	87		34 - 132
Dieldrin	18	0.0	16	89		31 - 134
Endrin	18	0.0	17	94		42 - 139
4,4'-DDT	18	0.0	16	89		23 - 134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	7.2	3.2	44	*	17		50	46-127
Heptachlor	7.2	4.8	67		16		31	35-130
Aldrin	7.2	5.9	82		5.0		43	34-132
Dieldrin	18	17	94		6.1		38	31-134
Endrin	18	19	106		11		45	42-139
4,4'-DDT	18	18	100		12		50	23-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 2 out of 12 outside limits.
RPD: 0 out of 6 outside limits.

FORM III PEST-2

F-00288

AMERICAN ENVIRONMENTAL NETWORK, INC.

October 24, 1995

Client: MK CORP

Case: 9510147

Project: CRANE NSWC

Analysis: Pesticides and PCB's by SW-846 Method 8080 (Appendix IX)

Client ID	AENI#	Date Sampled	Date Received	Date Extracted	Date Analyzed
NSWC 16/16 040	9510147-020	10/13/95	10/14/95	10/20/95	10/24/95

One water sample was extracted and analyzed for Pesticides and PCB's by SW-846 method 8080 (Appendix IX).

The enclosed package consists specifically of tabulated results (Form I), surrogate spike recoveries (Form II), matrix spike recoveries (Form III), method blank summary (Form IV), initial calibration summary (Form VI), continuing calibration summary (Form VII), and retention time shifting summary (Form VIII).

Form I (Tabulated Results)

The qualifier "U" indicates that a compound was analyzed for but not detected above the reporting limit. The sample was prepared and analyzed within method specified holding time. The sample extract required 10X dilution due to high interference levels in the undiluted extract. Reporting limits are elevated in proportion to the dilution factor.

Form II (Surrogate Spike Recoveries)

Seven out of eight measurable surrogate recoveries were within specified criteria (60-150%).

Form III (Matrix Spike Recoveries)

A blank spike (BS) was extracted with this sample set. All BS recoveries were within specified criteria (see Form III).

Form IV (Method Blank Summary)

No pesticides or PCB's were detected in the method blank.

F-

Form VI (Initial Calibration Summary)

Linear five-point curve with correlation coefficient of 0.995 or better was used for sample quantitation.

A separate calibration curve was analyzed for Diallate, PCNB, Isodrin, Chlorobenzilate, and Kepone. Quantitation (both columns) was based on a five point calibration with correlation coefficient of 0.995 or better.

Form VII (Continuing Calibration Summary)

CCV recoveries were either within or above criteria on both columns for all components of interest. The few high recoveries do not affect sample data quality since these pesticides were not present in the samples.

Form VIII (Retention Time Shifting Summary)

All retention time shifting was within criteria (+/- 1.5%).

Data Released By

Noble N. Nemieboka
GC/LC Acting Lab Manager

AMERICAN ENVIRONMENTAL NETWORK, INC.

Organic Analysis Data Sheet

Pesticide/PCBs

Case No.: 9510147
Project Name: CRANE NSWC
Client Name: MK CORP

Sample Number
PBLK01

AENI # BLK951020RD

Concentration: Low
Date Sampled: N/A
Date Received: N/A
Date Ext Prepared: 10/20/95
Date Analyzed: 10/23/95
Conc/Dil Factor: 1
Method: 8080

GPC Cleanup	Yes	X No
Seperatory Funnel Extraction		X Yes
Continuous Liquid - Liquid Extraction		Yes
Percent Moisture	N/A	
Matrix:	WATER	

CAS Number	Compound	Concentration ug/L	Detection Limit	Qualifier
319-84-6	alpha-BHC		0.05	U
319-85-7	beta-BHC		0.05	U
319-86-8	delta-BHC		0.05	U
58-89-9	gamma-BHC (Lindane)		0.10	U
75-44-8	Heptachlor		0.05	U
309-00-2	Aldrin		0.05	U
1024-57-3	Heptachlor epoxide		0.05	U
959-98-8	Endosulfan I		0.05	U
60-57-1	Dieldrin		0.10	U
75-55-9	4, 4'-DDE		0.10	U
72-20-8	Endrin		0.10	U
33213-65-9	Endosulfan II		0.10	U
72-54-8	4, 4'-DDD		0.10	U
1031-07-8	Endosulfan Sulfate		0.10	U
50-29-3	4, 4'-DDT		0.10	U
72-43-5	Methoxychlor		0.50	U
53494-70-5	Endrin Ketone		0.10	U
7421-36-3	Endrin aldehyde		0.10	U
57-74-9	Chlordane		1.0	U
8001-35-2	Toxaphene		5.0	U
12674-11-2	Aroclor-1016		1.0	U
11104-28-2	Aroclor-1221		2.0	U
11141-16-5	Aroclor-1232		1.0	U
53469-21-9	Aroclor-1242		1.0	U
12672-29-6	Aroclor-1248		1.0	U
11097-69-1	Aroclor-1254		1.0	U
11096-82-5	Aroclor-1260		1.0	U
510-15-6	Chlorobenzilate		2.0	U
2303-16-4	Diallate		10	U
465-73-6	Isodrin		0.25	U
143-50-0	Kepone		1.0	U
82-68-8	Pentachloronitrobenzene		0.20	U

Vi - Volume of extract injected (ul) - 5
Vs - Volume of Water extracted (ml) - 1000
Ws - Weight of sample extracted (g) - N/A
Vt - Volume of total extract (ul) - 10,000

FORM I

F-00301

2E

WATER PESTICIDE SURROGATE RECOVERY

Lab Name: American Environmental Network, Inc. Contract: 9510147

Lab Code: NA Case No.: NA SAS No.: NA

Instrument ID: GC-F

GC Column(1): DB-5 D: 0.53 mm GC Column(2): DB 608 ID: 0.53 mm

Dates of Analyses: 10/23/95 to 10/24/95

Method: 8080

	EPA SAMPLE NO.	TCMX 1 %REC	#	TCMX 2 % REC	#	DCB 1 %REC	#	DCB 2 %REC	#	TOTAL OUT
	BLK951020RD	98		119		60		56	*	1
	BS	104		127		80		79		0
10X	NSWC 16/16 040	D		D		D		D		0

ADVISORY QC LIMITS

TCMX= Tetrachloro-m-xylene (60-150)

DCB= Decachlorobiphenyl (60-150)

COLUMN TO BE USED TO FLAG RECOVERY VALUES

* VALUES OUTSIDE OF QC LIMITS

D SURROGATE DILUTED OUT

FORM II PEST-1

F-000802

3E

WATER BLANK SPIKE RECOVERY

Lab Name: American Environmental Network, Inc. Contract: 9510147

Lab Code: NA Case No.: NA SAS No.: NA

Matrix Spike - EPA Sample No.: BS951020RD

Method: 8080

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	BS CONCENTRATION (ug/L)	BS % REC	#	QC LIMITS REC.
gamma-BHC (Lindane)	0.20	0.0	0.17	85		56 - 123
Heptachlor	0.20	0.0	0.18	90		40 - 131
Aldrin	0.20	0.0	0.19	95		40 - 120
Dieldrin	0.50	0.0	0.49	98		52 - 126
Endrin	0.50	0.0	0.54	108		56 - 121
4,4'-DDT	0.50	0.0	0.46	92		38 - 127

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits.

FORM III PEST-1

F-00000

AMERICAN ENVIRONMENTAL NETWORK, INC.

October 25, 1995

Account #: MKC70

Contract: 9510147

Analysis: BTEX by 8020

Client ID	Lab ID	Date Sampled	Date Received	Date Prepared	Date Analyzed
NSWC 16/16 039	L9510147-019	10/13/95	10/14/95	10/24/95	10/25/95

One soil sample was received and analyzed for Benzene, Toluene, Ethyl Benzene and Total Xylenes by method 8020.

The enclosed package contains tabulated results (Form I)'s, a surrogate recovery summary (Form II), a blank spike recovery summary (Form III), a method blank summary (Form IV), an initial calibration summary (Form VI) and a continuing calibration summary (Form VII).

Form I (Organic Analysis Data Sheet)
The qualifier 'U' indicates that a compound was analyzed for but not detected above the specified detection limit. The sample was prepared and analyzed within the method specified holding time.

Form II (Surrogate Recovery Summary)
The percent recovery values for all surrogates are within criteria. The lab criteria for percent recovery is 50 to 150 percent.

Form III (Blank Spike Recovery Summary)

Soil Blank
A soil blank spike is supplied. All values are within criteria. The lab criteria for component percent recoveries are listed in the Form III.

Form IV (Method Blank Summary)
No target analytes were detected at or above the detection limit in the method blank.

F-000304

Form VI (Initial Calibration Summary)
The calibration points listed were used for sample quantitation. All r2 values are within lab criteria. The lab criteria for r2 is .990 or greater.

Form VII (Continuing Calibration Summary)
Percent recoveries for all analytes are within lab criteria. Lab criteria for percent recovery is 75 to 125 percent.

Data Released by Noble N. Nemieboka
Noble N. Nemieboka
GC/LC Acting Lab Manager

ORGANIC ANALYSIS DATA SHEET

Account #: MKC70
Analysis: BTEX
Method: 8020
Instrument: GC - L (HP5890)

VBLK01
Sample:

Matrix: SOIL
Sample: (g) 5.0
Final Volume: (ml) 5.0
(%) Moisture: 0
Dilution Factor: 1
Level (low/med): LOW

Lab Sample ID: BLK951025LS
Lab Name: AENI - MD
Contract: 9510147
Date Sampled: N/A
Date Received: N/A
Date Prepared: 10/24/95
Date Analyzed: 10/25/95
Time Analyzed: 8:17

Compound	Concentration (ug/Kg)	Detection Limit	Qualifier
Benzene		1.0	U
Toluene		1.0	U
Ethyl Benzene		1.0	U
Total Xylenes		3.0	U

MATRIX SPIKE / MATRIX SPIKE DUPLICATE SUMMARY

Account #: MKC70
Analysis: BTEX
Method: 8020
Instrument: GC - L (HP5890)

Matrix: SOIL
(%) Moisture: 0
Dilution Factor: 1
Lab Name: AENI - MD
Contract: 9510147

Matrix Spike (S) - Sample: LAB CONTROL SAMPLE
Date Prepared 10/24/95

Lab Sample ID: BS951025LS
Date Analyzed: 10/24/95

Matrix Spike Dup (D) Sample: LAB CONT SAMPLE DUP
Date Prepared:

Lab Sample ID: LCSD2
Date Analyzed:

Compound	Concentration (ug/Kg)			Recovery			
	True	Found - S	Found - D	(%) - S	(%) - D	RPD	(%) Criteria
Benzene	20	17		85			50 -150
Toluene	20	20		100			50 -150
Ethyl Benzene	20	21		105			50 -150
Total Xylenes	60	62		103			50 -150

* - indicates values outside of criteria.

F- [illegible]

AMERICAN ENVIRONMENTAL NETWORK, INC.

9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

Client: MK Corp

Project: NSWC-Crane

Case: 9510147, 9510148

Analysis: Dioxins

Date: October 25, 1995

Client ID	AENI ID	Date Sampled	Date Received
NSWC 16/16 RB8	9510147-001	10/11/95	10/14/95
NSWC BP/BF 003	9510148-001	10/12/95	10/14/95
NSWC BP/BF 004	9510148-002	10/12/95	10/14/95

Three samples were received and analyzed for Dioxins by Method 8280. The samples were subcontracted to a third party lab for analysis.

The enclosed report consists of tabulated results.

Report Released By: Kristina C. Yamarik 10/25/95
Kristina C. Yamarik
Project Manager

F-00308

TRIANGLE LABS

CASE NARRATIVE

Analysis of Samples for the Presence of Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans by High-Resolution Chromatography / Low-Resolution Mass Spectrometry

Method 8280 Rev. 0 (9/86)

Date: October 23, 1995

Client ID: American Environmental Network

P.O. Number:

TLI Project Number: 34600A & B

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Rev. 06/21/95

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F-001200

Overview

The sample and any associated QC samples were extracted and analyzed according to procedures described in EPA Method 8280. Any particular difficulties encountered during the sample handling by Triangle Laboratories will be discussed in the QC Remarks section below. Results reported relate only to the items tested.

Sample Extraction

The water sample has been separatory funnel extracted with methylene chloride to produce a final extract. Eighty percent of the extract was archived while twenty percent was processed through the cleanup procedures.

The soil samples have been Soxhlet extracted using toluene as the solvent to provide a final extract. Eighty percent of the extracts were archived while twenty percent was processed through the cleanup procedures.

The cleanup of extracts may include the use of bulk acid/base washes, and acid silica, basic silica, activated alumina, and carbon column liquid chromatography.

Sample Analysis

A five point initial calibration curve was analyzed, in triplicate, on each instrument used for sample analysis. Calibration ranges are listed below and are based on sample size. A continuing calibration check and a column performance evaluation are analyzed at the beginning of each twelve hour period of sample analysis. The column performance solution, which is used to evaluate the GC resolution is also performed at the end of each twelve hour analytical sequence.

Calibration Ranges

Compounds	Solid (10 g sample) ppb (µg/Kg)	Water (1 L sample) ppt (ng/L)	ppb (µg/L)
TCDD/TCDF PeCDD/PeCDF	1-20	10-200	0.01-0.2
HxCDD/HxCDF HpCDD/HpCDF	2.5-50	25-500	0.025-0.5
OCDD/OCDF	5-100	50-1000	0.05-1.0

F-06316

Some of the labeled standards used in the analysis have ion fragments with the same mass as the quantitation mass of some of the analytes. These lower mass fragments appear as peaks or 'breakthrough' in the analyte channels. This can often be witnessed in the cases of $^{13}C_{12}$-TCDF internal standard appearing in the TCDD analyte channels, $^{13}C_{12}$-HxCDD internal and recovery standards appearing the HpCDF analyte channels, and $^{13}C_{12}$-HpCDF internal standard appearing the HpCDD analyte channels. For most of the above situations, the interfering peaks due to the labeled standards lie outside the retention time window of the analyte. In the case of TCDD/TCDF, the interferences usually lie within the retention time window. Whenever breakthrough peaks occur from the labeled standards, these peaks are reported as EMPCs, and may be considered artifacts from the labeled standards. This is a limitation caused by the use of low-resolution mass spectrometry, recommended in the method.

Quality Control Samples

Two laboratory method blanks, identified as the TLI Water Blank and the TLI Soil Blank, were prepared along with the sample. One such sample per 20 field samples (or less) of a given matrix is prepared.

The advisory quality control range for internal and clean-up standard percent recoveries is 40-120 percent recovery (25-120 for the OCDD internal standard). If recoveries are below the advisory range, analyte results are judged to be valid as long as the ratio of signal to noise for the standard is greater than ten to one and the percent recovery is greater than ten percent.

Quality Control Remarks

This release of this particular set of American Environmental Network analytical data by Triangle Laboratories was authorized by the Quality Control Chemist who has reviewed each sample data package individually following a series of inspections/reviews. When applicable, general deviations from acceptable QC requirements are identified below and comments are made on the effect of these deviations upon the validity and reliability of the results. Specific QC issues associated with this particular project are:

Sample receipt: One water sample and two soil samples were received from American Environmental Network at 3 °C in good condition October 18, 1995 and were stored in a refrigerator at 4°C until the time of extraction.

Sample Preparation Laboratory: None

Mass Spectrometry: None

Data Review: The internal and cleanup standards for these samples are within the QC advisory limits of 40-120 percent (25-120 percent for the OCDD internal standard) or meet ten to one signal to noise criteria in all cases.

The percent recoveries of all the internal standards in the sample NSWC 16/16 R88 are above the specified QC limits. Since no analyte is detected in sample and detection limits of analytes are well below the target detection limits these high recoveries do not have any impact on data quality.

Other Comments: No 2,3,7,8-substituted target analytes were detected in the TLI Blank above the method detection limit (MDL).

Sample Calculations:

Method 8280 does not specify which of the two monitored masses to use for quantitation of all of the isotope-labeled standards. Following the pattern established by the method, we have selected which mass to use for each analyte and standard based on the theoretical ratio. For groups with theoretical ratios that are greater than one (the pentas, hexas and heptas), the first monitored mass should be larger and is therefore used for quantitation. For channels with theoretical ratios of less than one (the tetras and octas), the second monitored mass should generally be larger and is used for quantitation.

Analyte Concentration

The concentration or amount of any analyte is calculated using the following expression.

$$C_{(\sigma)} = \frac{A_\sigma * Q_\beta}{A_\beta * RRF_{(\sigma)} * W}$$

Where:

$C_{(\sigma)}$ is the concentration or amount of a given analyte,

A_σ is the integrated ion current of the quantitation ion of the analyte,

A_β is the integrated ion current of the quantitation ion of the corresponding internal standard,

Q_β represents the amount of internal standard added to the sample before extraction,

$RRF_{(\sigma)}$ is the analyte relative response factor from the continuing calibration and,

W is the sample weight or volume

Detection Limits

The detection limit reported for a target analyte was derived from a method validation study performed by Triangle Laboratories, Inc. The reported detection limit has been adjusted for each sample using the actual sample size extracted and any dilution factors associated with that sample analysis.

Data Flags

In order to assist with data interpretation, data qualifier flags are used on the final reports. Please note that all data qualifier flags are subjective and are applied as consistently as possible. Each flag has been reviewed by two independent Chemists and the impact of the data qualifier flag on the quality of the data discussed above. The most commonly used flags are:

A 'B' flag is used to indicate that an analyte has been detected in the laboratory method blank as well as in an associated field sample. The 'B' flag will be used only when the concentration of analyte found in the sample is less than 20 times that found in the associated blank. This flag denotes possible contribution of background laboratory contamination to the concentration or amount of that analyte detected in the field sample. Under Triangle Laboratories guidelines, a laboratory blank is acceptable if the analyte levels are all below the target detection limits (TDLS) or if the contamination levels are less than 5% of the levels detected in the associated field samples. If these conditions are satisfied or if the blank is unable to be reextracted, the interpretation of the contamination levels relative to the samples should be as follows: 1) analyte quantitations should be considered valid if the level of blank contamination is less than five percent of the level detected in the field sample, 2) analyte quantitations should be considered estimated if the analyte level in the sample is five to twenty times the level of the analyte in the blank, or 3) analytes whose level in a sample is the same as or less than five times the level detected in the associated blank should be considered present likely due to laboratory contamination and not native to the sample.

An 'E' flag is used to indicate that a PCDF peak has eluted at the same time as the associated diphenyl ether (DPE) and that the DPE peak intensity is ten percent or more of the total PCDF peak intensity. Total PCDF values are flagged 'E' if the total DPE contribution to the total PCDF value is greater than ten percent. All PCDF peaks that are significantly influenced by the presence of DPE peaks are quantitated with EMPC values, regardless of the isotopic abundance ratio. These EMPC values are most likely overestimated due to the DPE contribution to the peak area.

An 'I' flag is used to indicate labeled standards have been interfered with on the GC column by coeluting, interferent peaks. The interference may have caused the standard's

area to be overestimated. All quantitations relative to this standard, therefore, may be underestimated.

A 'V' flag is used to indicate that, although the percent recovery of a labeled standard may be below a specific QC limit, the signal-to-noise ratio of the peak is greater than ten-to-one. The standard is considered reliably quantifiable. All quantitations derived from the standard are considered valid as well.

The value reported for 'EMPCs' represents the estimated maximum possible concentration reported for GC/MS peaks eluting within the retention time windows established by the daily GC performance analysis, and which are characterized by a signal to noise ratio in excess of 2.5 to 1, but which do not meet the ion abundance ratio criteria. The 'EMPC' is calculated by using the same expression used for reporting the identified analyte concentrations. An EMPC can be reported for a non-detected specific isomers (e.g. 2,3,7,8-TCDD) but can also be reported for 'totals' (e.g. Total TCDD) in which case the 'total' EMPC represents the sum of all the positively identified PCDD/PCDF peaks and of the peaks that do not meet all the identification criteria.

By our interpretation, the analytical data in this project are valid based on the guidelines of EPA Method 8280. Any specific QC concerns or problems have been discussed in the QC Remarks section of this case narrative with emphasis on their affect on the data. Should American Environmental Network have any questions or comments regarding this data package, please feel free to contact our Project Scientist
Mary McDonald, at 919/544-5729.

For Triangle Laboratories, Inc.,

Report Preparation

Vijay Singh Chhabra
Report Preparation Chemist

Quality Control

Rose V. West 10-23-95
Rose West
Report Preparation Chemist

The total number of pages in the data package is : 117 .

F-00314

AMERICAN ENVIRONMENTAL NETWORK, INC.

9151 Rumsey Road Suite 150, Columbia, MD 21045-1992
(410) 730-8525 Fax (410) 997-2586

October 23, 1995

Client: MK Corp

Project: Crane NSWC

Case: 9510147

Analysis: APPIX Metals

Client ID	AENI ID	Date Sampled	Date Received	Date Analyzed
NSWC 16/16 RB8	9510147-001	10/11/95	10/14/95	10/18-20/95
NSWC 16/16 022	9510147-002	10/13/95	10/14/95	10/18-20/95
NSWC 16/16 023	9510147-003	10/13/95	10/14/95	10/18-20/95
NSWC 16/16 024	9510147-004	10/13/95	10/14/95	10/18-20/95
NSWC 16/16 025	9510147-005	10/13/95	10/14/95	10/18-20/95
NSWC 16/16 026	9510147-006	10/13/95	10/14/95	10/18-20/95
NSWC 16/16 027	9510147-007	10/13/95	10/14/95	10/18-20/95
NSWC 16/16 028	9510147-008	10/13/95	10/14/95	10/18-20/95
NSWC 16/16 029	9510147-009	10/13/95	10/14/95	10/18-20/95
NSWC 16/16 030	9510147-010	10/13/95	10/14/95	10/18-20/95
NSWC 16/16 031	9510147-011	10/13/95	10/14/95	10/18-20/95
NSWC 16/16 032	9510147-012	10/13/95	10/14/95	10/18-20/95
NSWC 16/16 033	9510147-013	10/13/95	10/14/95	10/18-20/95
NSWC 16/16 034	9510147-014	10/13/95	10/14/95	10/18-20/95
NSWC 16/16 035	9510147-015	10/13/95	10/14/95	10/18-20/95
NSWC 16/16 036	9510147-016	10/13/95	10/14/95	10/18-20/95
NSWC 16/16 037	9510147-017	10/13/95	10/14/95	10/18-20/95

NSWC 16/16 038	9510147-018	10/13/95	10/14/95	10/18-20/95
NSWC 16/16 040	9510147-020	10/13/95	10/14/95	10/18-20/95

Seventeen soil samples were received and analyzed for metals per SW846 methodology. Results are reported in units of mg/Kg dry weight. One groundwater and one waste water sample were received and analyzed for metals. Results are reported in units of ug/L.

Thallium was analyzed on a diluted sample for all soil samples due to a matrix interference.

The matrix spike recovery for the soil samples were outside control limits for As, Cr, Ni, Se, and Tl and a post-spike performed. The duplicate sample RPD was outside control limits for Cu and the data flagged accordingly. The serial dilution analysis was outside control limits for Zn and the data flagged. All other QC data for the soil samples were within normal control limits.

All QC data for the water samples were within normal control limits.

Report Released By _____
Christopher Baggett
Metals Laboratory Manager

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: AENI Contract: 9510147

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16

Solid LCS Source: _____

Aqueous LCS Source: SPEX

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony	100.0	104.30	104.3						
Arsenic	100.0	96.35	96.4						
Barium	2000.0	2198.74	109.9						
Beryllium	50.0	48.87	97.7						
Cadmium	50.0	53.21	106.4						
Calcium									
Chromium	200.0	213.02	106.5						
Cobalt	500.0	538.22	107.6						
Copper	250.0	260.18	104.1						
Iron									
Lead	500.0	548.14	109.6						
Magnesium									
Manganese									
Mercury									
Nickel	500.0	532.93	106.6						
Potassium									
Selenium	100.0	98.85	98.9						
Silver	100.0	96.18	96.2						
Sodium									
Thallium	100.0	108.40	108.4						
Vanadium	500.0	509.15	101.8						
Zinc	500.0	555.72	111.1						
Cyanide									
Tin	1000.0	984.16	98.4						
Lithium	1000.0	813.93	81.4						

FORM VII - IN

ILM02.1

F-00317

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: AENI Contract: 9510147

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16

Solid LCS Source: _____

Aqueous LCS Source: SPEX

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury	2.0	2.20	110.0						
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									
Tin									
Lithium									

FORM VII - IN

ILM02.1

F- 00318

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: AENI Contract: 9510147

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16

Solid LCS Source: _____

Aqueous LCS Source: SPEX

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury	2.0	1.82	91.0						
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									
Tin									
Lithium									

FORM VII - IN

ILM02.1

F-00319

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

b Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Solid LCS Source:

Aqueous LCS Source: SPEX

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury	2.0	2.09	104.5						
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									
Tin									
Lithium									

FORM VII - IN

ILM02.1

F-00320

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16 RB8S

Lab Name: AENI Contract: 9510147

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16

Matrix: WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	75-125	95.9580		20.0000	U	100.00	96.0		P
Arsenic	75-125	92.5630		8.0000	U	100.00	92.6		P
Barium	75-125	2143.5890		100.0000	U	2000.00	107.2		P
Beryllium	75-125	47.5830		2.0000	U	50.00	95.2		P
Cadmium	75-125	51.2010		4.0000	U	50.00	102.4		P
Calcium									NR
Chromium	75-125	205.5680		10.0000	U	200.00	102.8		P
Cobalt	75-125	516.7650		11.0000	U	500.00	103.4		P
Copper	75-125	254.1590		25.0000	U	250.00	101.7		P
Iron									NR
Lead	75-125	533.0300		10.0000	U	500.00	106.6		P
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel	75-125	518.4670		15.0000	U	500.00	103.7		P
Potassium									NR
Selenium	75-125	94.2910		5.0000	U	100.00	94.3		P
Silver	75-125	89.9540		8.0000	U	100.00	90.0		P
Sodium									NR
Thallium	75-125	100.4370		10.0000	U	100.00	100.4		P
Vanadium	75-125	495.4800		16.0000	U	500.00	99.1		P
Zinc	75-125	543.3950		20.0000	U	500.00	108.7		P
Cyanide									NR
Tin	75-125	1001.6950		200.0000	U	1000.00	100.2		P
Lithium	75-125	850.0580		100.0000	U	1000.00	85.0		P

Comments:
CLIENT_ID: NSWC_16/16_RB8
MATRIX_SPIKE

F-00R2

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16 RB8M

Lab Name: AENI Contract: 9510147

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16

Matrix: WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	75-125	98.3820		20.0000	U	100.00	98.4		P
Arsenic	75-125	91.9670		8.0000	U	100.00	92.0		P
Barium	75-125	2102.9690		100.0000	U	2000.00	105.1		P
Beryllium	75-125	46.6900		2.0000	U	50.00	93.4		P
Cadmium	75-125	50.6930		4.0000	U	50.00	101.4		P
Calcium									NR
Chromium	75-125	202.7820		10.0000	U	200.00	101.4		P
Cobalt	75-125	514.7360		11.0000	U	500.00	102.9		P
Copper	75-125	250.4310		25.0000	U	250.00	100.2		P
Iron									
Lead	75-125	525.3330		10.0000	U	500.00	105.1		
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel	75-125	509.1030		15.0000	U	500.00	101.8		P
Potassium									NR
Selenium	75-125	91.7200		5.0000	U	100.00	91.7		P
Silver	75-125	90.3310		8.0000	U	100.00	90.3		P
Sodium									NR
Thallium	75-125	101.6010		10.0000	U	100.00	101.6		P
Vanadium	75-125	487.4400		16.0000	U	500.00	97.5		P
Zinc	75-125	532.9190		20.0000	U	500.00	106.6		P
Cyanide									NR
Tin	75-125	1026.6760		200.0000	U	1000.00	102.7		P
Lithium	75-125	842.8450		100.0000	U	1000.00	84.3		P

Comments:

CLIENT_ID: NSWC_16/16_RB8

MATRIX_SPIKE_DUPLICATE

F-00829

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16 025S

Lab Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 87.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony		665.1225		669.1111		10.79	-37.0		P
Arsenic	75-125	26.4450		16.1569		10.79	95.3		P
Barium		7930.5273		8203.5398		215.88	-126.5		P
Beryllium	75-125	5.0383		0.2311		5.40	89.0		P
Cadmium		47.5635		38.1482		5.40	174.4		P
Calcium									NR
Chromium	75-125	59.7114		60.9023		21.59	-5.5	N	P
Cobalt	75-125	43.6204		1.2090	U	53.97	80.8		P
Copper		19790.1712		51255.0311		26.99			P
Iron									NR
Lead		60749.4441		56603.7321		53.97	7681.5		P
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel	75-125	136.6916		93.1506		53.97	80.7		P
Potassium									NR
Selenium	75-125	8.2201		0.5496	U	10.79	76.2		P
Silver	75-125	10.6971		2.1449		10.79	79.3		P
Sodium									NR
Thallium	75-125	21.5271	U	21.9820	U	10.79	0.0	N	P
Vanadium	75-125	60.2877		7.5486		53.97	97.7		P
Zinc		47426.3289		47771.3517		53.97	-639.3		P
Cyanide									NR
Tin	75-125	177.5638		65.5872		107.94	103.7		P
Lithium	75-125	94.6770		10.9910	U	107.94	87.7		P

Comments:
CLIENT_ID: NSWC_16/16_025
MATRIX_SPIKE

F-

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16 025M

Lab Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 87.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony		626.0362		669.1111		10.90	-395.2		NR
Arsenic	75-125	23.7387		16.1569		10.90	69.6	N	P
Barium		8283.1908		8203.5398		217.94	36.5		P
Beryllium	75-125	5.0262		0.2311		5.45	88.0		P
Cadmium		50.5127		38.1482		5.45	226.9		P
Calcium									NR
Chromium	75-125	66.0258		60.9023		21.79	23.5	N	P
Cobalt	75-125	45.9888		1.2090	U	54.48	84.4		P
Copper		27789.3282		51255.0311		27.24	-86144		P
Iron									NR
ad		55037.1474		56603.7321		54.48	-2875.5		
gnesium									NR
Manganese									NR
Mercury									NR
Nickel	75-125	120.9861		93.1506		54.48	51.1	N	P
Potassium									NR
Selenium	75-125	7.9167		0.5496	U	10.90	72.6	N	P
Silver	75-125	11.7255		2.1449		10.90	87.9		P
Sodium									NR
Thallium	75-125	21.7109	U	21.9820	U	10.90	0.0	N	P
Vanadium	75-125	59.1112		7.5486		54.48	94.6		P
Zinc		51467.8744		47771.3517		54.48	6785.1		P
Cyanide									NR
Tin	75-125	168.7938		65.5872		108.97	94.7		P
Lithium	75-125	96.8926		10.9910	U	108.97	88.9		P

Comments:
CLIENT_ID: NSWC_16/16_025
MATRIX_SPIKE_DUPLICATE

F-0032

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16 038S

Lab Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 93.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury	75-125	1.1846		0.2188		1.07	90.3		AV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR
Tin									NR
Lithium									NR

Comments:
CLIENT_ID: NSWC_16/16_038
MATRIX_SPIKE

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16 038M

Lab Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 93.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
ad									NR
gnesium									
Manganese									NR
Mercury	75-125	1.2540		0.2188		1.07	96.7		NR
Nickel									AV
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR
Tin									NR
Lithium									NR
									NR

Comments:
CLIENT_ID: NSWC_16/16_038
MATRIX_SPIKE_DUPLICATE

F-

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16 040S

Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix: WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury	75-125								NR
Nickel		2.7100		0.6700		2.00	102.0		AV
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR
Tin									NR
Lithium									NR
									NR

Comments:
CLIENT_ID: NSWC_16/16_040

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

951016601S

Lab Name: AENI Contract: 9510147

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16

Matrix: WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury	75-125	2.0400		0.2000	U	2.00	102.0		AV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR
Tin									NR
Lithium									NR

Comments:
MATRIX_SPIKE

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

951016601M

Lab Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix: WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury	75-125	2.0500		0.2000	U	2.00	102.5		NR
Nickel									AV
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR
Tin									NR
Lithium									NR

Comments:
MATRIX_SPIKE_DUPLICATE

F-00329

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

16/16 025A

Lab Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix: SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum									
Antimony									NR
Arsenic									NR
Barium		166.07		147.00		20.0	95.3		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt		758.10		554.11		200.0	102.0		P
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium		1869.81		847.52		1000.0	102.2		P
Selenium									NR
Silver		13.61		5.00	U	20.0	68.0		P
Sodium									NR
Thallium									NR
Vanadium		14.11		200.00	U	20.0	70.5		P
Zinc									NR
Cyanide									NR
Tin									NR
Lithium									NR
									NR

Comments:
CLIENT_ID: NSWC_16/16_025

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F-00330

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

16/16 RB8D

Lab Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								
Antimony								NR
Arsenic		20.0000	U	20.0000	U			P
Barium		8.0000	U	8.0000	U			P
Beryllium		100.0000	U	100.0000	U			P
Cadmium		2.0000	U	2.0000	U			P
Calcium		4.0000	U	4.0000	U			P
Chromium								NR
Cobalt		10.0000	U	10.0000	U			P
Copper		11.0000	U	11.0000	U			P
Iron		25.0000	U	25.0000	U			P
Lead								NR
Magnesium		10.0000	U	10.0000	U			P
Manganese								NR
Mercury								NR
Nickel								NR
Potassium		15.0000	U	15.0000	U			P
Selenium								NR
Silver		5.0000	U	5.0000	U			P
Sodium		8.0000	U	8.0000	U			P
Thallium								NR
Vanadium		10.0000	U	10.0000	U			P
Zinc		16.0000	U	16.0000	U			P
Cyanide		20.0000	U	20.0000	U			P
Tin								NR
Lithium		200.0000	U	200.0000	U			P
		100.0000	U	100.0000	U			P

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

16/16 040D

Lab Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								NR
Antimony								NR
Arsenic								NR
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury	0.2	0.6700		0.8100		18.9		AV
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Cyanide								NR
Tin								NR
Lithium								NR

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U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

951016602D

Lab Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								
Antimony								NR
Arsenic								NR
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury								NR
Nickel		0.2000	U	0.2000	U			AV
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Cyanide								NR
Tin								NR
Lithium								NR

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

16/16 025D

b Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 87.4 % Solids for Duplicate: 87.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								NR
Antimony		669.1111		611:4525		9.0		P
Arsenic		16.1569		15.5820		3.6		P
Barium		8203.5398		8778.7873		6.8		P
Beryllium		0.2311		0.2813		19.6		P
Cadmium		38.1482		44.0546		14.4		P
Calcium								NR
Chromium		60.9023		68.2856		11.4		P
Cobalt		1.2090	U	1.2449	U			P
Copper		51255.0311		16466.0383		102.7	*	P
Iron								NR
Lead		56603.7321		66046.9390		15.4		P
Magnesium								NR
Manganese								NR
Mercury								NR
Nickel		93.1506		78.5603		17.0		P
Potassium								NR
Selenium		0.5496	U	0.5659	U			P
Silver	1.1	2.1449		1.9423		9.9		P
Sodium								NR
Thallium		21.9820	U	22.6343	U			P
Vanadium	5.5	7.5486		7.4320		1.6		P
Zinc		47771.3517		44987.9699		6.0		P
Cyanide								NR
Tin		65.5872		63.6946		2.9		P
Lithium		10.9910	U	11.3172	U			P

F-00534

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

16/16 038D

Lab Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 93.7 % Solids for Duplicate: 93.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								
Antimony								NR
Arsenic								NR
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury	0.1	0.2188		0.1974		10.3		AV
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Cyanide								NR
Tin								NR
Lithium								NR

F-001335

3
BLANKS

) Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony			20.0	U	20.0	U	20.0	U	20.000	U	P
Arsenic			8.0	U	8.0	U	8.0	U	8.000	U	P
Barium			100.0	U	100.0	U	100.0	U	100.000	U	P
Beryllium			2.0	U	2.0	U	2.0	U	2.000	U	P
Cadmium			4.0	U	4.0	U	4.0	U	4.000	U	P
Calcium											NR
Chromium			10.0	U	10.0	U	10.0	U	10.000	U	P
Cobalt			11.0	U	11.0	U	11.0	U	11.000	U	P
Copper			25.0	U	25.0	U	25.0	U	25.000	U	P
on											
ad			10.0	U	10.0	U	10.0	U	10.000	U	P
Magnesium											NR
Manganese											NR
Mercury			0.2	U	0.2	U	0.2	U	0.200	U	AV
Nickel			15.0	U	15.0	U	15.0	U	15.000	U	P
Potassium											NR
Selenium			5.0	U	5.0	U	5.0	U	5.000	U	P
Silver			8.0	U	8.0	U	8.0	U	8.000	U	P
Sodium											NR
Thallium			10.0	U	10.0	U	10.0	U	10.000	U	P
Vanadium			16.0	U	16.0	U	16.0	U	16.000	U	P
Zinc			20.0	U	20.0	U	20.0	U	20.000	U	P
Cyanide											NR
Tin			200.0	U	200.0	U			200.000	U	P
Lithium			100.0	U	100.0	U			100.000	U	P

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U.S. EPA - CLP

3
BLANKS

Name: AENI Contract: 9510147

Lab Code: Case No.: MKC70 SAS No.: SDG No.: 16/16

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											NR
Arsenic			20.0	U	20.0	U					P
Barium			8.0	U	8.0	U					P
Beryllium			100.0	U	100.0	U					P
Cadmium			2.0	U	2.0	U					P
Calcium			4.0	U	4.0	U					P
Chromium											NR
Cobalt			10.0	U	10.0	U					P
Copper			11.0	U	11.0	U					P
Iron			25.0	U	25.0	U					P
Lead											NR
Magnesium			10.0	U	10.0	U					P
Manganese											NR
Mercury											NR
Nickel			0.2	U	0.2	U	0.2	U	0.200	U	AV
Potassium			15.0	U	15.0	U					P
Selenium											NR
Silver			5.0	U	5.0	U					P
Sodium			8.0	U	8.0	U					P
Thallium											NR
Vanadium			10.0	U	10.0	U					P
Zinc			16.0	U	16.0	U					P
Cyanide			20.0	U	20.0	U					P
Tin											NR
Lithium											NR
											NR

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U.S. EPA - CLP

3
BLANKS

b Name: AENI_____ Contract: 9510147___

Lab Code: _____ Case No.: MKC70 SAS No.: _____ SDG No.: 16/16_

Preparation Blank Matrix (soil/water): SOIL_

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony	20.0	U	20.0	U	20.0	U	20.0	U			P
Arsenic	8.0	U	8.0	U	8.0	U	8.0	U			P
Barium	100.0	U	100.0	U	100.0	U	100.0	U			P
Beryllium	2.0	U	2.0	U	2.0	U	2.0	U			P
Cadmium	4.0	U	4.0	U	4.0	U	4.0	U			P
Calcium											NR
Chromium	10.0	U	10.0	U	10.0	U	10.0	U			P
Cobalt	11.0	U	11.0	U	11.0	U	11.0	U			P
Copper	25.0	U	25.0	U	25.0	U	25.0	U			P
Iron											P
Lead	10.0	U	10.0	U	10.0	U	10.0	U			P
Magnesium											NR
Manganese											NR
Mercury	0.2	U	0.2	U	0.2	U			0.100	U	AV
Nickel	15.0	U	15.0	U	15.0	U	15.0	U			P
Potassium											NR
Selenium	5.0	U	5.0	U	5.0	U	5.0	U			P
Silver	8.0	U	8.0	U	8.0	U	8.0	U			P
Sodium											NR
Thallium	10.0	U	10.0	U	10.0	U	10.0	U			P
Vanadium	16.0	U	16.0	U	16.0	U	16.0	U			P
Zinc	20.0	U	20.0	U	20.0	U	20.0	U			P
Cyanide											NR
Tin											NR
Lithium											NR

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