LK 7548

0046705

Lockheed Environmental Systems & Technologies Co.
Lockheed Analytical Services
975 Kelly Johnson Drive Las Vegas, Nevada 89119-3705
Telephone 702-361-0220 800-582-7605 Facsimile 702-361-8146

LOCKHEED MARTIN

FEB 1997 RECEIVED LOMC

September 24, 1996

Ms. Joan Kessner
Bechtel Hanford, Inc.
3350 George Washington Way
MISN B1-35
Richland, WA 99352

SEP 1996 RECEIVED Data Log In

RE:	Log-in No.:	L7548
	Quotation No.:	Q400000-B
	SAF:	B96-141
	Document File No.:	0730596C
	BHI Document File No.:	394
	SDG No.:	LK7548

The attached data report contains the analytical results of samples that were submitted to Lockheed Analytical Services on 30 July 1996. The temperature of the cooler upon receipt was 15°C. Sample containers received all coincided with the chain-of-custody documentation. All sample containers were received intact. Samples were received in time to meet the analytical holding time requirements.

The case narratives included in the following attachments provide a detailed description of all events that occurred during sample preparation, analysis, and data review specific to the samples and analytical methods requested. A list of data qualifiers, chain-of-custody forms, sample receiving checklist, and log-in report are also enclosed representing the samples received within this group.

If you have any questions concerning the analysis or the data please call Mary Wolf at (702) 361-3955, extension 311. If you are unable to contact the client services representative, please call Mary B. Ford, client services manager, at extension 326.

"I certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature."

Sincerely,

Mary K. Wolf

Mary K. Wolf
Client Services Representative

cc: Client Services
Document Control

CASE NARRATIVE
INORGANIC NON METALS ANALYSES

The routine calibration and quality control analyses performed for this batch include as applicable: initial and continuing calibration verification, initial and continuing calibration blanks, method blank(s), laboratory control sample(s), matrix spike (predigestion) sample(s), duplicate sample(s).

Preparation and Analysis Requirements

- Five liquid waste samples were for LK7548 and analyzed in batch 730 bh3 for selected analytes to be analyzed in client-specified order as requested on the chain of custody. Quality control analysis was performed on the following samples:

Client ID	LAL #		Method
BOHXV8	L7548-13	DUP, MS	335.2 Total Cyanide
	L7548-15	DUP, MS	9030 Sulfide
	L7548-11	DUP	9041 pH
N/A	N/A	N/A	1010 Ignitability

Holding Time Requirements

- The samples were received and analyzed within method-specific holding time except for the following:

  For Methods 9041 pH and 1010 Ignitability, the samples were received and analyzed outside of the method-specific holding time and the associated samples are flagged with an "H".

  For Method 335.2 Total Cyanide and Method 9030 Sulfide, due to the client-specified sequence of analyses, these samples were analyzed outside of the method-specific holding time and the associated samples are flagged with an "H".

Method Blanks

- The concentration levels of all the requested analytes in the method blank were below the reporting detection limits.

Internal Quality Control

- All Internal Quality Control were within acceptance limits.

Sample Results

- For Method 335.2 Total Cyanide and 9030 Sulfide the samples were logged in with a matrix of liquid waste. However, as the samples were oil and grease, the matrix spike, sample duplicate and samples are reported in mg/kg.

Kay McCann
Prepared By

September 4, 1996
Date

CASE NARRATIVE
INORGANIC METALS ANALYSES

The routine calibration and quality control analyses performed for this batch include as applicable: instrument tune (ICP/MS only), initial and continuing calibration verification, initial and continuing calibration blanks, method blank(s), laboratory control sample(s), ICP interference check samples (ICP only), serial dilutions, analytical (post-digestion) spike samples, matrix spike (predigestion) sample(s), and duplicate sample(s).

Preparation and Analysis Requirements

All samples were received on July 30, 1996. The samples were logged in as L7548 and were prepared and analyzed in batch 730 bh3 for TCLP metals. The samples were analyzed by Method 6010A ICP Trace and Method 7470 Mercury.

Holding Time Requirements

- All samples were analyzed within the method-specific holding times.

Method Blanks

- The concentration levels of all the requested analytes in the method blank were below the reporting detection limits.

Internal Quality Control

- All Internal Quality Control were within acceptance limits.

Sample Results

- The liquid waste samples were prepared as a solid and the density was determined in order to report the results in mg/L.

Shellee McGrath
Prepared By

September 24, 1996
Date

CASE NARRATIVE
ORGANIC ANALYSES

Analytical Method 8240

The associated samples were analyzed in three analytical batches. All associated tunes, initial and continuing calibrations met criteria. All samples met internal standard area counts and retention times method criteria.

Analytical Batch 080496-8260-C1

NOTE: Client sample B0HXS8 (L7544-40) was the native sample used for the Matrix Spike (39737MS) and Matrix Spike Duplicate (39737MSD).

The Laboratory Control Sample (39737LCS) contained several compounds in addition to the five (5) required spike compounds.

The samples were analyzed within the required holding time on August 4, 1996. There were no target compounds detected in the Method Blank (39737MB). Surrogate recoveries were within QC limits. Compound recoveries were within QC limits in the 39737MS, 39737MSD, and 39737LCS. The Relative Percent Differences (RPDs) between the 39737MS and 39737MSD recoveries were within QC limits.

Analytical Batch 080596-8260-E1

NOTE: The 39810LCS and 39810LCS-1 contained several compounds in addition to the five (5) required spike compounds.

The samples were analyzed within the required holding time on August 5, 1996. Acetone and 2-Hexanone were detected in the 39810MB. Methylene Chloride was detected in the 39810MB-1. All associated samples with detected target compounds as in the 39810MB and 39810MB-1 were flagged with the Qualifier B. Surrogate recoveries were within QC limits except for Toluene-d8 and Bromofluorobenzene in client sample B0HXV8 (L7548-5). This sample was diluted and reanalyzed in analytical batch 080696-8260-E1 with similar results. All analyses results were reported in this data package. Compound recoveries were within QC limits in the 39810LCS and 39810LCS-1. Refer to analytical batch 080496-8260-C1 for the associated 39737MS and 39737MSD results.

PL 9/25/96

Analytical Batch 080696-8260-E1

NOTE: The 39876LCS-1 contained several compounds in addition to the five (5) required spike compounds.

Client sample B0HXV8 (L7548-5) was prepared by weight using a medium level extraction method due to its insolubility in water. The concentration was converted back to liquid units using the samples' density.

The samples were analyzed within the required holding time on August 6, 1996. Methylene Chloride and 2-Hexanone were detected in the 39876MB-1. All associated samples with detected target compounds as in the 39876MB-1 were flagged with the Qualifier B. Surrogate recoveries were within QC limits except for Toluene-d8 and Brompfluorobenzene in the diluted and reanalyzed client sample B0HXV8 (L7548-5). Compound recoveries were within QC limits in the 39876LCS-1. Refer to analytical batch 080496-8260-C1 for the associated 39737MS and 39737MSD results.

Analytical Method 8270

Analytical Batch 082096-8270-A

NOTE: Client sample B0HXW1 (L7548-19) was the native sample used for the 39771MS and 39771MSD.

The samples were extracted within the required holding time on August 5, 1996 and analyzed within the required holding time on August 20, 1996. All associated tunes, initial and continuing calibrations met criteria. There were no target compounds detected in the 39771MB and 39782MB. Surrogate recoveries were within QC limits except for 2,4,6-Tribromophenol in samples B0HXV8 (L7548-7) and 39782MSD and in the reanalyzed 39782MS and 39782MSD. Compound recoveries were within QC limits in the 39771MS, 39771MSD, and 39771LCS. The RPDs between the 39771MS and 39771MSD recoveries were within QC limits. Compound recoveries were within QC limits in the 39782MS, 39782MSD, and 39782LCS except for Pentachlorophenol in the 39782MS and 39782MSD. Compound recoveries were within QC limits in the reanalyzed 39782MS and 39782MS except for Pentachlorophenol in the 39782MS and 4-Nitrophenol and Pentachlorophenol in the 39782MSD. The RPDs between the 39782MS and 39782MSD recoveries were within QC limits except for 4-Nitrophenol. The RPDs between the reanalyzed 39782MS and 39782MSD recoveries were within QC limits except for 4-Nitrophenol. All samples met internal standard area counts and retention times method criteria except for Perylene-d12 in client sample B0HXV8 (L7548-7). This sample was reanalyzed in this analytical batch with similar results. All analyses results were reported in this data package.

PL 9/25/96

Analytical Method 8080 Pesticides/PCBs

The associated samples were analyzed in two analytical batches.

Analytical Batch 080596-8080-E-3

NOTE: Client sample BOHXW2 (L7548-10) was the native sample used for the 39770MS and 39770MSD.

The 39770MS, 39770MSD, and 39770LCS contained several compounds in addition to the six (6) required spike compounds.

The samples were extracted within the required holding time on August 3, 1996 and analyzed within the required holding time on August 7 and 8, 1996. All initial and continuing calibrations met criteria except for 4,4'-DDD, Methoxychlor, and D-BHC in the ending continuing calibration. There were no compounds detected in the associated client samples and we believe that data quality was unaffected. There were no target compounds detected in the 39770MB. Surrogate recoveries were within QC limits except in client sample BOHXW1 (L7548-19) and DCB in client sample BOHXW2 (L7548-10). Compound recoveries were within QC limits in the 39770MS, 39770MSD, and 39770LCS except for Aldrin in the 39770LCS. The RPDs between the 39770MS and 39770MSD recoveries were within QC limits.

PL 9/25/96

Analytical Batch 081196-8080-E-5

NOTE: Client sample BOHXV8 (L7548-9) was the native sample used for the 39812MS and 39812MSD.

The 39812MS, 39812MSD, and 39812LCS contained several compounds in addition to the six (6) required spike compounds.

The DCB peak in client sample BOHXV8 (L7548-9) had to be manually identified due to a matrix characteristic specific to this sample, not instrument related. This was determined because all of the other samples and standards that were injected just prior and just after had no such peak identification error. Since client sample BOHXV8 (L7548-9) was the sample used for the 39812MS and 39812MSD a few of the latter eluting peaks also needed manual identification.

The samples were extracted within the required holding time on August 5, 1996 and analyzed within the required holding time on August 15, 1996. All initial and continuing calibrations met criteria. There were no target compounds detected in the 39812MB. Surrogate recoveries were within QC limits. Compound recoveries were within QC limits in the 39812MS, 39812MSD, and 39812LCS. The RPDs between the 39812MS and 39812MSD recoveries were within QC limits.

Prepared By
Patricia Lonergan

September 25, 1996

PL 9/25/96

Revised

LOCKHEED ANALYTICAL SERVICES
LOGIN CHAIN OF CUSTODY REPORT (ln01)
Aug 05 1996, 11:10 am

Login Number: L7548
Account: 596 Bechtel Hanford, Inc. * Richland, WA
Project: BECHTEL-HANFORD Bechtel Hanford Project

Laboratory Sample Number	Client Sample Number	Collect Date	Receive Date	PR	Due Date
L7548-1	B0HXV8	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15					
Location: 156TMP-2					
Liq. Waste 7 S SCREENING		Hold: 18-JAN-97			
L7548-2	B0HXW2	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15					
Location: 156TMP-2					
Liq. Waste 7 S SCREENING		Hold: 18-JAN-97			
L7548-3	B0HXV8	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15 "60mls"					
Location: EXPENDED					
Liq. Waste 7 S 1010 IGNITABILITY		Hold: 29-JUL-96			
Liq. Waste 7 S 9040 PH		Hold: 29-JUL-96			
L7548-4	B0HXW2	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15 "60mls"					
Location: EXPENDED					
Liq. Waste 7 S 1010 IGNITABILITY		Hold: 29-JUL-96			
Liq. Waste 7 S 9040 PH		Hold: 29-JUL-96			
L7548-5	B0HXV8	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15 "60mls"					
Location: 130					
Liq. Waste 7 S 8240 VOLATILES		Hold: 05-AUG-96			
L7548-6	B0HXW2	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15 "60mls"					
Location: 130					
Liq. Waste 7 S 8240 VOLATILES		Hold: 05-AUG-96			
L7548-7	B0HXV8	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15 "60mls"					
Location: RFG02-25B					
Liq. Waste 7 S 8270 SEMI-VOLATILES		Hold: 05-AUG-96			
L7548-8	B0HXW2	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15 "60mls"					
Location: RFG02-25B					
Liq. Waste 7 S 8270 SEMI-VOLATILES		Hold: 05-AUG-96			

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LOCKHEED ANALYTICAL SERVICES
LOGIN CHAIN OF CUSTODY REPORT (ln01)
Aug 05 1996, 11:10 am

Login Number: L7548
Account: 596 Bechtel Hanford, Inc. * Richland, WA
Project: BECHTEL-HANFORD Bechtel Hanford Project

Laboratory Sample Number	Client Sample Number	Collect Date	Receive Date	Due PR Date
L7548-9	B0HXV8	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "60mls"				
Location: RFG02-25B				
Liq. Waste 7 S 8080 PEST/PCBS		Hold:05-AUG-96		
L7548-10	B0HXW2	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "60mls"				
Location: RFG02-25B				
Liq. Waste 7 S 8080 PEST/PCBS		Hold:05-AUG-96		
L7548-11	B0HXV8	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "120mls"	"TCLP=M"			
Location: RFG02-25B				
Liq. Waste 7 S 1311 TCLP REG. EXTR.		Hold:05-AUG-96		
TCLP Extr 13 S 6010A ICP TRACE		Hold:18-JAN-97		
TCLP Extr 13 S 7470 MERCURY		Hold:19-AUG-96		
L7548-12	B0HXW2	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "120mls"	"TCLP=M"			
Location: RFG02-25B				
Liq. Waste 7 S 1311 TCLP REG. EXTR.		Hold:05-AUG-96		
TCLP Extr 13 S 6010A ICP TRACE		Hold:18-JAN-97		
TCLP Extr 13 S 7470 MERCURY		Hold:19-AUG-96		
L7548-13	B0HXV8	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "60mls"				
Location: RFG02-25B				
Liq. Waste 7 S 335.2 CYANIDE TOTAL		Hold:05-AUG-96		
L7548-14	B0HXW2	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "60mls"				
Location: RFG02-25B				
Liq. Waste 7 S 335.2 CYANIDE TOTAL		Hold:05-AUG-96		
L7548-15	B0HXV8	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "60mls"				
Location: RFG02-25B				
Liq. Waste 7 S 9030 SULFIDE		Hold:29-JUL-96		
L7548-16	B0HXW2	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "60mls"				
Location: RFG02-25B				
Liq. Waste 7 S 9030 SULFIDE		Hold:29-JUL-96		

LOCKHEED ANALYTICAL SERVICES
LOGIN CHAIN OF CUSTODY REPORT (ln01)
Aug 05 1996, 11:10 am

Login Number: L7548
Account: 596 Bechtel Hanford, Inc. * Richland, WA
Project: BECHTEL-HANFORD Bechtel Hanford Project

Laboratory Sample Number	Client Sample Number	Collect Date	Receive Date	PR	Due Date
L7548-17	B0HXV9	22-JUL-96	30-JUL-96		14-AUG-96
* TEMP 15 "100mls"	PRIORITIZE LIST OF ANALYTES				
Location: EXPENDED					
Liq. Waste 7 S 1010	IGNITABILITY	Hold:29-JUL-96			
Liq. Waste 7 S 9040	PH	Hold:29-JUL-96			
Liq. Waste 7 S SCREENING		Hold:18-JAN-97			
L7548-18	B0HXW0	22-JUL-96	30-JUL-96		14-AUG-96
* TEMP 15 "100mls"	PRIORITIZE LIST OF ANALYTES				
Location: EXPENDED					
Liq. Waste 7 S 1010	IGNITABILITY	Hold:29-JUL-96			
Liq. Waste 7 S 9040	PH	Hold:29-JUL-96			
Liq. Waste 7 S SCREENING		Hold:18-JAN-97			
L7548-19	B0HXW1	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15 "100mls"	PRIORITIZE LIST OF ANALYTES				
Location: 153					
* Liq. Waste 7 S 1010	IGNITABILITY	Hold:29-JUL-96			
Liq. Waste 7 S 8080	PEST/PCBS	Hold:05-AUG-96			
Liq. Waste 7 S 8240	VOLATILES	Hold:05-AUG-96			
Liq. Waste 7 S 8270	SEMI-VOLATILES	Hold:05-AUG-96			
Liq. Waste 7 S 9040	PH	Hold:29-JUL-96			
Liq. Waste 7 S SCREENING		Hold:18-JAN-97			
L7548-20	REPORT TYPE	31-JUL-96	30-JUL-96		14-AUG-96
Location:					
Water 1 S EDD - DISK DEL.					
Water 1 S GC2					
Water 1 S GCMS2					
Water 1 S INORG TYPE 2 RPT					

* Deleted methods for which there was insufficient sample volume to perform.

0016

Signature: Neaith L Bulling

Date: 08-05-96
C-1305960

Revised

LOCKHEED ANALYTICAL SERVICES
LOGIN CHAIN OF CUSTODY REPORT (ln01)
Aug 02 1996, 02:28 pm

Login Number: L7548
Account: 596 Bechtel Hanford, Inc. * Richland, WA
Project: BECHTEL-HANFORD Bechtel Hanford Project

Laboratory Sample Number	Client Sample Number	Collect Date	Receive Date	PR	Due Date
L7548-1	B0HXV8	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15					
Location: 156TMP-2					
Liq. Waste 7 S SCREENING		Hold:18-JAN-97			
L7548-2	B0HXW2	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15					
Location: 156TMP-2					
Liq. Waste 7 S SCREENING		Hold:18-JAN-97			
L7548-3	B0HXV8	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15 "60mls"					
Location: RFG02-25B					
Liq. Waste 7 S 1010 IGNITABILITY		Hold:29-JUL-96			
Liq. Waste 7 S 9040 PH		Hold:29-JUL-96			
L7548-4	B0HXW2	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15 "60mls"					
Location: RFG02-25B					
Liq. Waste 7 S 1010 IGNITABILITY		Hold:29-JUL-96			
Liq. Waste 7 S 9040 PH		Hold:29-JUL-96			
L7548-5	B0HXV8	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15 "60mls"					
* Location: RFG02-25B					
Liq. Waste 7 S 8240 VOLATILES		Hold:05-AUG-96			
L7548-6	B0HXW2	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15 "60mls"					
Location: RFG02-25B					
Liq. Waste 7 S 8240 VOLATILES		Hold:05-AUG-96			
L7548-7	B0HXV8	22-JUL-96	30-JUL-96		14-AUG-9
TEMP 15 "60mls"					
* Location: RFG02-25B					
Liq. Waste 7 S 8270 SEMI-VOLATILES		Hold:05-AUG-96			
L7548-8	B0HXW2	22-JUL-96	30-JUL-96		14-AUG-9
TEMP 15 "60mls"					
Location: RFG02-25B					
Liq. Waste 7 S 8270 SEMI-VOLATILES		Hold:05-AUG-96			

LOCKHEED ANALYTICAL SERVICES
LOGIN CHAIN OF CUSTODY REPORT (ln01)
Aug 02 1996, 02:28 pm

Login Number: L7548
Account: 596 Bechtel Hanford, Inc. * Richland, WA
Project: BECHTEL-HANFORD Bechtel Hanford Project

Laboratory Sample Number	Client Sample Number	Collect Date	Receive Date	Due PR Date
L7548-9	B0HXV8	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "60mls"				
Location: RFG02-25B				
Liq. Waste 7 S 8080	PEST/PCBS	Hold:05-AUG-96		
L7548-10	B0HXW2	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "60mls"				
Location: RFG02-25B				
Liq. Waste 7 S 8080	PEST/PCBS	Hold:05-AUG-96		
L7548-11	B0HXV8	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "120mls"	"TCLP=M"			
Location: RFG02-25B				
Liq. Waste 7 S 1311	TCLP REG. EXTR.	Hold:05-AUG-96		
TCLP Extr 13 S 6010A	ICP TRACE	Hold:18-JAN-97		
TCLP Extr 13 S 7470	MERCURY	Hold:19-AUG-96		
L7548-12	B0HXW2	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "120mls"	"TCLP=M"			
Location: RFG02-25B				
Liq. Waste 7 S 1311	TCLP REG. EXTR.	Hold:05-AUG-96		
TCLP Extr 13 S 6010A	ICP TRACE	Hold:18-JAN-97		
TCLP Extr 13 S 7470	MERCURY	Hold:19-AUG-96		
L7548-13	B0HXV8	22-JUL-96	30-JUL-96	14-AUG-9
TEMP 15 "60mls"				
Location: RFG02-25B				
Liq. Waste 7 S 335.2	CYANIDE TOTAL	Hold:05-AUG-96		
L7548-14	B0HXW2	22-JUL-96	30-JUL-96	14-AUG-9
TEMP 15 "60mls"				
Location: RFG02-25B				
Liq. Waste 7 S 335.2	CYANIDE TOTAL	Hold:05-AUG-96		
L7548-15	B0HXV8	22-JUL-96	30-JUL-96	14-AUG-9
TEMP 15 "60mls"				
Location: RFG02-25B				
Liq. Waste 7 S 9030	SULFIDE	Hold:29-JUL-96		
L7548-16	B0HXW2	22-JUL-96	30-JUL-96	14-AUG-9
TEMP 15 "60mls"				
Location: RFG02-25B				
Liq. Waste 7 S 9030	SULFIDE	Hold:29-JUL-96		

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LOCKHEED ANALYTICAL SERVICES
LOGIN CHAIN OF CUSTODY REPORT (ln01)
Aug 02 1996, 02:28 pm

Login Number: L7548
Account: 596 Bechtel Hanford, Inc. * Richland, WA
Project: BECHTEL-HANFORD Bechtel Hanford Project

Laboratory Sample Number	Client Sample Number	Collect Date	Receive Date	Due PR Date
L7548-17	B0HXV9	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "100mls"	PRIORITIZE LIST OF ANALYTES			
Location: 156RAD1-03				
Liq. Waste 7 S 1010 IGNITABILITY		Hold:29-JUL-96		
Liq. Waste 7 S 1311 TCLP REG. EXTR.		Hold:05-AUG-96		
Liq. Waste 7 S 335.2 CYANIDE TOTAL		Hold:05-AUG-96		
* TCLP Extr 13 S 6010A ICP TRACE		Hold:18-JAN-97		
TCLP Extr 13 S 7470 MERCURY		Hold:19-AUG-96		
Liq. Waste 7 S 8080 PEST/PCBS		Hold:05-AUG-96		
Liq. Waste 7 S 8240 VOLATILES		Hold:05-AUG-96		
Liq. Waste 7 S 8270 SEMI-VOLATILES		Hold:05-AUG-96		
Liq. Waste 7 S 9030 SULFIDE		Hold:29-JUL-96		
Liq. Waste 7 S 9040 PH		Hold:29-JUL-96		
Liq. Waste 7 S SCREENING		Hold:18-JAN-97		
L7548-18	B0HXW0	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "100mls"	PRIORITIZE LIST OF ANALYTES			
Location: 156RAD1-03				
Liq. Waste 7 S 1010 IGNITABILITY		Hold:29-JUL-96		
Liq. Waste 7 S 1311 TCLP REG. EXTR.		Hold:05-AUG-96		
Liq. Waste 7 S 335.2 CYANIDE TOTAL		Hold:05-AUG-96		
* TCLP Extr 13 S 6010A ICP TRACE		Hold:18-JAN-97		
TCLP Extr 13 S 7470 MERCURY		Hold:19-AUG-96		
Liq. Waste 7 S 8080 PEST/PCBS		Hold:05-AUG-96		
Liq. Waste 7 S 8240 VOLATILES		Hold:05-AUG-96		
Liq. Waste 7 S 8270 SEMI-VOLATILES		Hold:05-AUG-96		
Liq. Waste 7 S 9030 SULFIDE		Hold:29-JUL-96		
Liq. Waste 7 S 9040 PH		Hold:29-JUL-96		
Liq. Waste 7 S SCREENING		Hold:18-JAN-97		
L7548-19	B0HXW1	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "100mls"	PRIORITIZE LIST OF ANALYTES			
Location: 156RAD1-03				
Liq. Waste 7 S 1010 IGNITABILITY		Hold:29-JUL-96		
Liq. Waste 7 S 1311 TCLP REG. EXTR.		Hold:05-AUG-96		
Liq. Waste 7 S 335.2 CYANIDE TOTAL		Hold:05-AUG-96		
* TCLP Extr 13 S 6010A ICP TRACE		Hold:18-JAN-97		
TCLP Extr 13 S 7470 MERCURY		Hold:19-AUG-96		
Liq. Waste 7 S 8080 PEST/PCBS		Hold:05-AUG-96		
Liq. Waste 7 S 8240 VOLATILES		Hold:05-AUG-96		
Liq. Waste 7 S 8270 SEMI-VOLATILES		Hold:05-AUG-96		
Liq. Waste 7 S 9030 SULFIDE		Hold:29-JUL-96		
Liq. Waste 7 S 9040 PH		Hold:29-JUL-96		
Liq. Waste 7 S SCREENING		Hold:18-JAN-97		

LOCKHEED ANALYTICAL SERVICES
LOGIN CHAIN OF CUSTODY REPORT (ln01)
Aug 02 1996, 02:28 pm

Login Number: L7548
Account: 596 Bechtel Hanford, Inc. * Richland, WA
Project: BECHTEL-HANFORD Bechtel Hanford Project

Laboratory Sample Number	Client Sample Number	Collect Date	Receive Date	Due PR Date
L7548-20	REPORT TYPE	31-JUL-96	30-JUL-96	14-AUG-96
Location:				
Water	1 S EDD - DISK DEL.			
Water	1 S GC2			
Water	1 S GCMS2			
Water	1 S INORG TYPE 2 RPT			

x changed to ICP Trace

* Analysis added per client request.

Signature: Meath L Blunt 002:

Date: 08-02-96

0730596C

LOCKHEED ANALYTICAL SERVICES
LOGIN CHAIN OF CUSTODY REPORT (ln01)
Jul 31 1996, 03:57 pm

Login Number: L7548
Account: 596 Bechtel Hanford, Inc. * Richland, WA
Project: BECHTEL-HANFORD Bechtel Hanford Project

Laboratory Sample Number	Client Sample Number	Collect Date	Receive Date	Due PR Date
L7548-1	B0HXV8	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15				
Location: 157				
Liq. Waste 7 S SCREENING		Hold: 18-JAN-97		
L7548-2	B0HXW2	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15				
Location: 157				
Liq. Waste 7 S SCREENING		Hold: 18-JAN-97		
L7548-3	B0HXV8	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "60mls"				
Location: RFG02-25B				
Liq. Waste 7 S 1010 IGNITABILITY		Hold: 29-JUL-96		
Liq. Waste 7 S 9040 PH		Hold: 29-JUL-96		
L7548-4	B0HXW2	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "60mls"				
Location: RFG02-25B				
Liq. Waste 7 S 1010 IGNITABILITY		Hold: 29-JUL-96		
Liq. Waste 7 S 9040 PH		Hold: 29-JUL-96		
L7548-5	B0HXV8	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "60mls"				
Location: RFG02-25B				
Liq. Waste 7 S 8240 VOLATILES		Hold: 05-AUG-96		
L7548-6	B0HXW2	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "60mls"				
Location: RFG02-25B				
Liq. Waste 7 S 8240 VOLATILES		Hold: 05-AUG-96		
L7548-7	B0HXV8	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "60mls"				
Location: RFG02-25B				
Liq. Waste 7 S 8270 SEMI-VOLATILES		Hold: 05-AUG-96		
L7548-8	B0HXW2	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "60mls"				
Location: RFG02-25B				
Liq. Waste 7 S 8270 SEMI-VOLATILES		Hold: 05-AUG-96		

LOCKHEED ANALYTICAL SERVICES
LOGIN CHAIN OF CUSTODY REPORT (ln01)
Jul 31 1996, 03:57 pm

Login Number: L7548
Account: 596 Bechtel Hanford, Inc. * Richland, WA
Project: BECHTEL-HANFORD Bechtel Hanford Project

Laboratory Sample Number	Client Sample Number	Collect Date	Receive Date	PR	Due Date
L7548-9	B0HXV8	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15 "60mls"					
Location: RFG02-25B					
Liq. Waste 7 S 8080 PEST/PCBS		Hold: 05-AUG-96			
L7548-10	B0HXW2	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15 "60mls"					
Location: RFG02-25B					
Liq. Waste 7 S 8080 PEST/PCBS		Hold: 05-AUG-96			
L7548-11	B0HXV8	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15 "120mls"	"TCLP=M"				
Location: RFG02-25B					
Liq. Waste 7 S 1311 TCLP REG. EXTR.		Hold: 05-AUG-96			
TCLP Extr 13 S 6010A ICP METALS		Hold: 18-JAN-97			
TCLP Extr 13 S 7470 MERCURY		Hold: 19-AUG-96			
L7548-12	B0HXW2	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15 "120mls"	"TCLP=M"				
Location: RFG02-25B					
Liq. Waste 7 S 1311 TCLP REG. EXTR.		Hold: 05-AUG-96			
TCLP Extr 13 S 6010A ICP METALS		Hold: 18-JAN-97			
TCLP Extr 13 S 7470 MERCURY		Hold: 19-AUG-96			
L7548-13	B0HXV8	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15 "60mls"					
Location: RFG02-25B					
Liq. Waste 7 S 335.2 CYANIDE TOTAL		Hold: 05-AUG-96			
L7548-14	B0HXW2	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15 "60mls"					
Location: RFG02-25B					
Liq. Waste 7 S 335.2 CYANIDE TOTAL		Hold: 05-AUG-96			
L7548-15	B0HXV8	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15 "60mls"					
Location: RFG02-25B					
Liq. Waste 7 S 9030 SULFIDE		Hold: 29-JUL-96			
L7548-16	B0HXW2	22-JUL-96	30-JUL-96		14-AUG-96
TEMP 15 "60mls"					
Location: RFG02-25B					
Liq. Waste 7 S 9030 SULFIDE		Hold: 29-JUL-96			

0730596 C

LOCKHEED ANALYTICAL SERVICES
LOGIN CHAIN OF CUSTODY REPORT (ln01)
Jul 31 1996, 03:57 pm

Login Number: L7548
Account: 596 Bechtel Hanford, Inc. * Richland, WA
Project: BECHTEL-HANFORD Bechtel Hanford Project

Laboratory Sample Number	Client Sample Number	Collect Date	Receive Date	Due PR Date
L7548-17	B0HXV9	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "100mls"	PRIORITIZE LIST OF ANALYTES			
Location: RFG02-25B				
Liq. Waste 7 S 1010 IGNITABILITY	Hold:29-JUL-96			
Liq. Waste 7 S 1311 TCLP REG. EXTR.	Hold:05-AUG-96			
Liq. Waste 7 S 335.2 CYANIDE TOTAL	Hold:05-AUG-96			
TCLP Extr 13 S 6010A ICP METALS	Hold:18-JAN-97			
TCLP Extr 13 S 7470 MERCURY	Hold:19-AUG-96			
Liq. Waste 7 S 8080 PEST/PCBS	Hold:05-AUG-96			
Liq. Waste 7 S 8240 VOLATILES	Hold:05-AUG-96			
Liq. Waste 7 S 8270 SEMI-VOLATILES	Hold:05-AUG-96			
Liq. Waste 7 S 9030 SULFIDE	Hold:29-JUL-96			
Liq. Waste 7 S 9040 PH	Hold:29-JUL-96			
Liq. Waste 7 S SCREENING	Hold:18-JAN-97			
L7548-18	B0HXW0	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "100mls"	PRIORITIZE LIST OF ANALYTES			
Location: RFG02-25B				
Liq. Waste 7 S 1010 IGNITABILITY	Hold:29-JUL-96			
Liq. Waste 7 S 1311 TCLP REG. EXTR.	Hold:05-AUG-96			
Liq. Waste 7 S 335.2 CYANIDE TOTAL	Hold:05-AUG-96			
TCLP Extr 13 S 6010A ICP METALS	Hold:18-JAN-97			
TCLP Extr 13 S 7470 MERCURY	Hold:19-AUG-96			
Liq. Waste 7 S 8080 PEST/PCBS	Hold:05-AUG-96			
Liq. Waste 7 S 8240 VOLATILES	Hold:05-AUG-96			
Liq. Waste 7 S 8270 SEMI-VOLATILES	Hold:05-AUG-96			
Liq. Waste 7 S 9030 SULFIDE	Hold:29-JUL-96			
Liq. Waste 7 S 9040 PH	Hold:29-JUL-96			
Liq. Waste 7 S SCREENING	Hold:18-JAN-97			
L7548-19	B0HXW1	22-JUL-96	30-JUL-96	14-AUG-96
TEMP 15 "100mls"	PRIORITIZE LIST OF ANALYTES			
Location: RFG02-25B				
Liq. Waste 7 S 1010 IGNITABILITY	Hold:29-JUL-96			
Liq. Waste 7 S 1311 TCLP REG. EXTR.	Hold:05-AUG-96			
Liq. Waste 7 S 335.2 CYANIDE TOTAL	Hold:05-AUG-96			
TCLP Extr 13 S 6010A ICP METALS	Hold:18-JAN-97			
TCLP Extr 13 S 7470 MERCURY	Hold:19-AUG-96			
Liq. Waste 7 S 8080 PEST/PCBS	Hold:05-AUG-96			
Liq. Waste 7 S 8240 VOLATILES	Hold:05-AUG-96			
Liq. Waste 7 S 8270 SEMI-VOLATILES	Hold:05-AUG-96			
Liq. Waste 7 S 9030 SULFIDE	Hold:29-JUL-96			
Liq. Waste 7 S 9040 PH	Hold:29-JUL-96			
Liq. Waste 7 S SCREENING	Hold:18-JAN-97			

0730596 C

LOCKHEED ANALYTICAL SERVICES
LOGIN CHAIN OF CUSTODY REPORT (ln01)
Jul 31 1996, 03:57 pm

Login Number: L7548
Account: 596 Bechtel Hanford, Inc. * Richland, WA
Project: BECHTEL-HANFORD Bechtel Hanford Project

Laboratory Sample Number	Client Sample Number	Collect Date	Receive Date	PR	Due Date
L7548-20	REPORT TYPE	31-JUL-96	30-JUL-96		14-AUG-96
Location:					
Water	1 S EDD - DISK DEL.				
Water	1 S GC2				
Water	1 S GCMS2				
Water	1 S INORG TYPE 2 RPT				

Signature: Paula Davis
Date: 7-31-96 0024
0730 596 C

Lockheed Analytical Laboratory
SAMPLE SUMMARY REPORT (su02)
Bechtel Hanford, Inc. * Richland, WA

Client Sample Number	LAL Sample Number	SDG Number	Matrix	Method
B0HXV8	L7548-1		Liq. Waste	SCREENING
	L7548-3		Liq. Waste	1010 IGNITABILI
	L7548-3		Liq. Waste	9040 PH
	L7548-5		Liq. Waste	8240 VOLATILES
	L7548-7		Liq. Waste	8270 SEMI-VOLAT
	L7548-9		Liq. Waste	8080 PEST/PCBS
	L7548-11		Liq. Waste	1311 TCLP REG.
	L7548-11		TCLP Extr	6010A ICP METAL
	L7548-11		TCLP Extr	7470 MERCURY
	L7548-13		Liq. Waste	335.2 CYANIDE T
	L7548-15		Liq. Waste	9030 SULFIDE
B0HXV9	L7548-17		Liq. Waste	1010 IGNITABILI
	L7548-17		Liq. Waste	1311 TCLP REG.
	L7548-17		Liq. Waste	335.2 CYANIDE T
	L7548-17		TCLP Extr	6010A ICP METAL
	L7548-17		TCLP Extr	7470 MERCURY
	L7548-17		Liq. Waste	8080 PEST/PCBS
	L7548-17		Liq. Waste	8240 VOLATILES
	L7548-17		Liq. Waste	8270 SEMI-VOLAT
	L7548-17		Liq. Waste	9030 SULFIDE
	L7548-17		Liq. Waste	9040 PH
	L7548-17		Liq. Waste	SCREENING
B0HXW0	L7548-18		Liq. Waste	1010 IGNITABILI
	L7548-18		Liq. Waste	1311 TCLP REG.
	L7548-18		Liq. Waste	335.2 CYANIDE T
	L7548-18		TCLP Extr	6010A ICP METAL
	L7548-18		TCLP Extr	7470 MERCURY
	L7548-18		Liq. Waste	8080 PEST/PCBS
	L7548-18		Liq. Waste	8240 VOLATILES
	L7548-18		Liq. Waste	8270 SEMI-VOLAT
	L7548-18		Liq. Waste	9030 SULFIDE
	L7548-18		Liq. Waste	9040 PH
	L7548-18		Liq. Waste	SCREENING
B0HXW1	L7548-19		Liq. Waste	1010 IGNITABILI
	L7548-19		Liq. Waste	1311 TCLP REG.
	L7548-19		Liq. Waste	335.2 CYANIDE T
	L7548-19		TCLP Extr	6010A ICP METAL
	L7548-19		TCLP Extr	7470 MERCURY
	L7548-19		Liq. Waste	8080 PEST/PCBS
	L7548-19		Liq. Waste	8240 VOLATILES
	L7548-19		Liq. Waste	8270 SEMI-VOLAT
	L7548-19		Liq. Waste	9030 SULFIDE
	L7548-19		Liq. Waste	9040 PH
	L7548-19		Liq. Waste	SCREENING
B0HXW2	L7548-2		Liq. Waste	SCREENING
	L7548-4		Liq. Waste	1010 IGNITABILI
	L7548-4		Liq. Waste	9040 PH
	L7548-6		Liq. Waste	8240 VOLATILES
	L7548-8		Liq. Waste	8270 SEMI-VOLAT
	L7548-10		Liq. Waste	8080 PEST/PCBS

0730596 0025

Lockheed Analytical Laboratory
SAMPLE SUMMARY REPORT (su02)
Bechtel Hanford, Inc. * Richland, WA

Client Sample Number*	LAL Sample Number	SDG Number	Matrix	Method
	L7548-12		Liq. Waste	1311 TCLP REG.
	L7548-12		TCLP Extr	6010A ICP METAL
	L7548-12		TCLP Extr	7470 MERCURY
	L7548-14		Liq. Waste	335.2 CYANIDE T
	L7548-16		Liq. Waste	9030 SULFIDE
REPORT TYPE	L7548-20		Water	EDD - DISK DEL.
	L7548-20		Water	GC2
	L7548-20		Water	GCMS2
	L7548-20		Water	INORG TYPE 2 RP

0730596C

Bechtel Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST L7548

B96-141-1 | Page 1 of 2

Data Turnaround: ☐ Priority ☐ Normal

Collector: Doug Bowers	Company Contact: Don Eckert	Telephone No.: 373-4955
Project Designation: 100-N 90-Day Pad Waste Container Characterization	Sampling Location: 109N Building 100 Area	SAF No.: B96-141
Ice Chest No.: GWS-108	Field Logbook No.: EFL-1133-1	Method of Shipment: Common Carrier (ground)
Shipped To: Lockheed	Offsite Property No.	Bill of Lading/Air Bill No.

POSSIBLE SAMPLE HAZARDS/REMARKS: Unknown

Special Handling and/or Storage: Cool to 4C.

Preservation	None	None	None	None	None	None	None	None	None	None
Type of Container	G	aG	G	aG	aG	aG	aG	aG	G	aG
No. of Container(s)	1	1	1	1	1	1	1	1	1	1
Volume	125ml	60ml	125ml	60ml	125ml	60ml	125ml	60ml	300ml	125ml
SAMPLE ANALYSIS	Ignitability - 1010; pH (Soil) - 9045	Ignitability - 1010; pH (Soil) - 9045	VOA - 8240A (TCL)	VOA - 8240A (TCL)	Semi-VOA - 8270A (TCL)	Semi-VOA - 8270A (TCL)	Pest/PCBs - 8080 (TCL)	Pest/PCBs - 8080 (TCL)	See item (1) in Special Instructions.	See item (2) in Special Instructions.

Sample No.	Matrix *	Sample Date	Sample Time										
B0HXV8 ✓	Other Solid	7-22-96	1300		X		X		X		X		X
B0HXV9 ✓	Other Solid	7-22-96	1320		X DAS 7/24/96		X DAS 7/24/96		X DAS 7/24/96		X DAS 7/24/96		X DAS 7/24/96
B0HXW0 ✓	Other Solid	7-22-96	1325		X DAS 7/24/96		X DAS 7/24/96		X DAS 7/24/96		X DAS 7/24/96		X DAS 7/24/96
B0HXW1 ✓	Other Solid	7-22-96	1402		X DAS 7/24/96		X DAS 7/24/96		X DAS 7/24/96		X DAS 7/24/96		X DAS 7/24/96
B0HXW2 ✓	Other Solid	7-22-96	1412		X		X		X		X		X

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By	Date/Time	Received By	Date/Time
[signature]	7-24-96 / 0620	[signature]	7/24/96 DAS 0622
Relinquished By: D. S. John ITA [signature]	7-24-96 0730	Received By: ERC [signature] Bechtel	Date/Time 0730 7-24-96
Relinquished By: ERC [signature] Bechtel	Date/Time 0900 26 7-24-96	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

SPECIAL INSTRUCTIONS

Due to limited volumes of waste containers, perform sampling and analysis in order listed on FSR.
Data Turnaround Requirements - 15 days

(1) Metals by ICP (TCLP) - 1311/6010A; Mercury (TCLP) - 1311/7470
(2) Metals by ICP (TCLP) - 1311/6010A; Mercury (TCLP) - 1311/7470

Matrix *
- S = Soil
- SB = Sediment
- SO = Solid
- SL = Sludge
- W = Water
- O = Oil
- A = Air
- DS = Drum Solids
- DL = Drum Liquids
- T = Tissue
- WI = Wipe
- L = Liquid
- V = Vegetation
- X = Other

LABORATORY SECTION — Received By: [signature] — Title: Sample Custodian — Date/Time: 7-30-96/16:00

FINAL SAMPLE DISPOSITION — Disposal Method — Disposed By — Date/Time

0705096

Bechtel Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	B96-141-1	Page 2 of 2

Data Turnaround: ☐ Priority ☐ Normal

Collector: Doug Bowers	Company Contact: Don Eckert	Telephone No.: 373-4955
Project Designation: 100-N 90-Day Pad Waste Container Characterization	Sampling Location: 109N Building 100 Area	SAF No.: B96-141
Ice Chest No.: GWS-108	Field Logbook No.: EFL-1133-1	Method of Shipment: Common Carrier (ground)
Shipped To: ~~Lockheed~~ 222-S Lockheed 7-22-96	Offsite Property No.:	Bill of Lading/Air Bill No.:

POSSIBLE SAMPLE HAZARDS/REMARKS: Unknown

Special Handling and/or Storage: Cool to 4C.

SAMPLE ANALYSIS											
Preservation	None	None	None	None	None	None	None				
Type of Container	G/P	aG	G	aG	P	G	G				
No. of Container(s)	1	1	1	1	1	1	1				
Volume	125ml	60ml	125ml	60ml	20ml	125 ml	250 ml				
	Cyanide (Total) - 335.2	Cyanide (Total) - 335.2	Sulfides - 9030	Sulfides - 9030	Activity Scan	Ltd Volume Available See Below	Ltd Volume Available See Below				
Sample No. / Matrix * / Sample Date / Sample Time											
B0HXV8 / Other Solid / 7-22-96 / 1300		X		X	X						
B0HXV9 / Other Solid / 7-22-96 / 1320		~~X~~ DAS 7/24/96		~~X~~ DAS 7/24/96	~~X~~ DAS 7/24/96	X					
B0HXW0 / Other Solid / 7-22-96 / 1326		~~X~~ DAS 7/24/96		~~X~~ DAS 7/24/96	~~X~~ DAS 7/24/96	X					
B0HXW1 / Other Solid / 7-22-96 / 1402		~~X~~ DAS 7/24/96		~~X~~ DAS 7/24/96	~~X~~ DAS 7/24/96		X				
B0HXW2 / Other Solid / 7-22-96 / 1412		X		X	X						

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By: D. Bowers	Date/Time: 7-24-96/0620	Received By: David Stejskal	Date/Time: 7/24/96 DAS 0620
Relinquished By: David Stejskal	Date/Time: 7-24-96 0730	Received By: ERC Bakhtiar	Date/Time: 0730 7-24-96
Relinquished By: ERC Bakhtiar	Date/Time: 0900 7-24-96 BW	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:

SPECIAL INSTRUCTIONS
Due to limited volumes of waste containers, perform sampling and analysis in order listed on FSR.
Data Turnaround Requirements - 15 days

DUE TO SHIPPING REQUIREMENTS, THE ERC CONTRACTOR ACKNOWLEDGES THE HOLDING TIME FOR SULFIDES BY EPA 9030 MAY NOT BE MET. BW 7-25-96

Matrix *
S = Soil
SE = Sediment
SO = Solid
SL = Sludge
W = Water
O = Oil
A = Air
DS = Drum Solids
DL = Drum Liquids
T = Tissue
WI = Wipe
L = Liquid
V = Vegetation
X = Other

LABORATORY SECTION	Received By	Title	Date/Time
	Tracy Davis	Sample Custodian	7-30-96/16:00
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

0730 96 DOD

MEMO COPY 96/07/26 7/31

LQ1602
FREIGHT BILL # 569643455

viking freight
A Caldor System Company
P.O. BOX 649001
SAN JOSE, CA 95164
TELEPHONE (408) 922
CAL T84,649

SHIPPER
US DEPT OF ENERGY
PO BOX 1970 Q1 14
P. O. BOX 1970
RICHLAND WA 99352

DELV # 569643455
ROUTING WD SCAC = VIKN
PAS/LVS-21A
14528/999999
REF. #

PAGE 1 OF 2

CONSIGNEE CCCA BILL: BCT350QRRC
LOCKHEED LAB
TONY MILLER SH# BHI3669
975 KELLY JOHNSON RD
LAS VEGAS NV 89119

UNITS	P	HM	DESCRIPTION	WEIGHT IN LBS	RATE	CHARGES
			*EMERGENCY CONTACT: *			
			1-509-373-3800 DAY OR NIGHT			
5	X		FLAMMABLE LIQUID, NOS (SAMPLES	309		
			*FOR ANALYSIS), 3, UN1993,			
			*PG I, LIMITED QUANTITY,			
			*NO LABELS REQUIRED, ERG# 128			
			*POLY COOLERS			
1	X		CORROSIVE LIQUID, ACIDIC,	110		
			*ORGANIC, NOS (SAMPLES FOR			
			*ANALYSIS), 8, UN3265, PG I,			
			*CORROSIVE LABELS APPLIED,			
			*ERG# 153			
			*STEEL DRUM			

DRIVER
UNITS
DATE
TIME

RECEIVED IN GOOD ORDER EXCEPT AS NOTED X | RECEIVING CO. NAME | SURCHARGE
MOND | PRINT LAST NAME | SEAL # | INTACT ON RECEIPT X | AMT. DUE | AMT. COL

SEE BACK OF MEMO COPY DATE 96/07/26 7/31 LAS VEGAS 702/871-5323 96/07/27 02:06:35

LQ1602
FREIGHT BILL # 569643455

viking freight
A Caldor System Company
P.O. BOX 649001
SAN JOSE, CA 95164
TELEPHONE (408) 922
CAL T84,649

SHIPPER
US DEPT OF ENERGY
PO BOX 1970 Q1 14
P. O. BOX 1970
RICHLAND WA 99352

DELV # 569643455
ROUTING WD SCAC = VIKN
PAS/LVS-21A
14528/999999
REF. #

PAGE 2 OF 2

CONSIGNEE CCCA BILL: BCT350QRRC
LOCKHEED LAB
TONY MILLER SH# BHI3669
975 KELLY JOHNSON RD
LAS VEGAS NV 89119

UNITS	P	HM	DESCRIPTION	WEIGHT IN LBS	RATE	CHARGES
			*COST CODE: [illegible]0125			
			*878			
			**. . RDD. . DEL. . 7-29-96. . MONDAY			
			*FRIDAY P/U AND MONDAY DELVY			
			DEFICIT WEIGHT	81		
			FUEL SURCHARGE			
6				500		

0029

WE'RE ONE. WE'RE REGIONAL. WE'RE NATIONAL. WE'RE VIKING.

RECEIVED IN GOOD ORDER EXCEPT AS NOTED X | RECEIVING CO. NAME | SURCHARGE 0730596 C
MOND | PRINT LAST NAME | SEAL # | INTACT ON RECEIPT X | AMT. DUE PREPAID | AMT. CO

HAZARDOUS MATERIAL SHIPMENT RECORD (HMSR)

SHIPPING INST.

SHIP TO: LOCKHEED LAB
Company: 975 KELLY JOHNSON RD
Address: LAS VEGAS NV. 89119
City, State, Zip: TONY MILLER
Attention:

Originating Facility: Building 4701-C, Area 4100
Originator Signature: [signature]
Date: 7-26-96
FROM: ☐ WHC ☐ KEH ☐ PNL ☒ OTHER BHI

OFFSITE ONLY: SHIP: ☒ PREPAID ☐ COLLECT
VIA: ☐ Parcel Post ☐ Air Parcel Post ☒ Freight (Rail/Truck) ☐ Air (Passenger) ☐ Air (Cargo)
Cost Code: X60105

SHIPMENT DESCRIPTION

Number of Containers	Type	DOT Spec	Package Dimensions	Quantity Pkg	Gross Wt Each Pkg	CONTENT DESCRIPTION (See 49 CFR 172.101(c) Hazardous Material Table)
1	STEEL DRUM	1A2	29.5"X19.5" 30 GAL DRUM	24 BOTTLES 7,130 mL	110 lbs	Proper Ship Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N Hazard Class: 8 PG I (SAMPLES FOR ANALYSIS) UN/NA No.: UN3265 List Secondary Hazards: NONE List Labels Req'd/Applied: CORROSIVE
				N/A		Proper Ship Name: Hazard Class: UN/NA No.: List Secondary Hazards: List Labels Req'd/Applied
						Proper Ship Name: Hazard Class: UN/NA No.: List Secondary Hazards: List Labels Req'd/Applied

Total No. Containers	Gross Wt of Shipment	Identify Placards Required:	Identify Property Control or Return Order No.: (if applicable)
1	110 lbs	1. NONE 2. 3. 4.	N/A

Material in manufacturers original container: ☐ Yes ☒ No
Container free of deterioration or damage: ☒ Yes
Container acceptability documented: ☒ Yes
Material is packaged, sealed, marked and labelled to meet DOT requirements: ☒ Yes

Describe Internal Packaging: SAMPLES ARE DOUBLE BAGGED WITH BLUE ICE CUSHIONED WITH VERMICULITE AND BUBBLE WRAP

RADIATION RELEASE	Survey No.	Date	RM Signature	Print Name
	N/A	7-23		

CERTIFICATION

CONTRACTORS CERTIFICATION

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transport according to the applicable regulations of the Department of Transportation:

This shipment is within the Limitations prescribed for: ☐ Passenger Aircraft ☐ Cargo Aircraft ☒ NA

Authorizing Signature: [signature] Print Name: RONALD L. CLAWSON Date: 7-26-96

FOR OFFSITE SHIPMENTS – ADDITIONAL APPROVAL REQUIRED

WHC	TRAFFIC	B.L. No.	Date Shipped	ETA	Routing	Special Considerations
		BHI-3669	7/26/96	7/29/96	Viking	0030

WHC Traffic: [signature] WHC Shipping:

07305960

54-8000-596 (10-87)

VALIDATED RESULTS SHORT REPORT 24 Jul 1996

Customer ID: BOHXX7
Lab Sample#: S96E000883
Sample Date:
Recv. Date: 07/23/96 18:45

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Act. by LSC: % Uncert.	4.79	%Uncertainty
Total Activity by LSC (Solid)	2.24e-4	uCi/g

Customer ID: BOHXX8
Lab Sample#: S96E000884
Sample Date:
Recv. Date: 07/23/96 18:51

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Act. by LSC: % Uncert.	21.2	%Uncertainty
Total Activity by LSC (Solid)	< 9.26e-6	uCi/g

Customer ID: BOHXX2
Lab Sample#: S96E000885
Sample Date:
Recv. Date: 07/23/96 18:51

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Act. by LSC: % Uncert.	7.31	%Uncertainty
Total Activity by LSC (Solid)	4.14e-5	uCi/g

Customer ID: BOHXX3
Lab Sample#: S96E000886
Sample Date:
Recv. Date: 07/23/96 18:51

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Act. by LSC: % Uncert.	20.31	%Uncertainty
Total Activity by LSC (Solid)	< 9.59e-6	uCi/g

Customer ID: BOHXX0
Lab Sample#: S96E000887
Sample Date:
Recv. Date: 07/23/96 18:51

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Act. by LSC: % Uncert.	7.62	%Uncertainty
Total Activity by LSC (Solid)	2.04e-4	uCi/g

0031

0730596 C

VALIDATED RESULTS SHORT REPORT 24 Jul 19

Customer ID: BOHXS9
Lab Sample#: S96E000876
Sample Date:
Recv. Date: 07/23/96 18:35

PARAMETER	RESULTS	UNITS

Customer ID: BOHXS9
Lab Sample#: S96E000876
Sample Date:
Recv. Date: 07/23/96 18:35

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Act. by LSC: % Uncert.	11.53	%Uncertainty
Total Activity by LSC (Liquid)	< 9.73e-6	uCi/mL

Customer ID: BOHXT0
Lab Sample#: S96E000877
Sample Date:
Recv. Date: 07/23/96 18:35

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Act. by LSC: % Uncert.	4.87	%Uncertainty
Total Activity by LSC (Liquid)	1.22e-4	uCi/mL

Customer ID: BOHXT1
Lab Sample#: S96E000878
Sample Date:
Recv. Date: 07/23/96 18:35

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Act. by LSC: % Uncert.	5.39	%Uncertainty
Total Activity by LSC (Liquid)	1.47e-4	uCi/mL

Customer ID: BOHXW6
Lab Sample#: S96E000879
Sample Date:
Recv. Date: 07/23/96 18:35

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Act. by LSC: % Uncert.	14.64	%Uncertainty
Total Activity by LSC (Liquid)	< 9.23e-6	uCi/mL

Customer ID: BOHXW7
Lab Sample#: S96E000880
Sample Date:
Recv. Date: 07/23/96 18:35

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Act. by LSC: % Uncert.	n/a	%Uncertainty
Total Activity by LSC (Liquid)	qnch 2 hi	uCi/mL

UNABLE TO ANALYZE

0032

0730596C

VALIDATED RESULTS SHORT REPORT 24 Jul 199

Customer ID: BOHXW8
Lab Sample#: S96E000881

Sample Date:
Recv. Date: 07/23/96 18:35

PARAMETER -	RESULTS	UNITS

Customer ID: BOHXW8
Lab Sample#: S96E000881

Sample Date:
Recv. Date: 07/23/96 18:35

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Act. by LSC: % Uncert.	12.99	%Uncertainty
Total Activity by LSC (Liquid)	< 8.91e-6	uCi/mL

Customer ID: BOHXW9
Lab Sample#: S96E000882

Sample Date:
Recv. Date: 07/23/96 18:35

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Act. by LSC: % Uncert.	11.9	%Uncertainty
Total Activity by LSC (Liquid)	< 9.34e-6	uCi/mL

003:

0730596C

INTERIM RESULTS REPORT 23 Jul 199

Customer ID: BOHXV8
Lab Sample#: S96E000856
Sample Date:
Recv. Date: 07/22/96 16:45

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Activity by LSC (Solid)	< 9.89e-6	uCi/g
Total Act. by LSC: % Uncert.	13.07	%Uncertainty

Customer ID: BOHXV9
Lab Sample#: S96E000857
Sample Date:
Recv. Date: 07/22/96 16:45

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Activity by LSC (Solid)	< 1.18e-5	uCi/g
Total Act. by LSC: % Uncert.	14.64	%Uncertainty

~~Customer ID: BOHXV0~~ WRONG # BW 7-24-96
Lab Sample#: S96E000858
Sample Date:
Recv. Date: 07/22/96 16:45

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Activity by LSC (Solid)	1.78e-4	uCi/g
Total Act. by LSC: % Uncert.	4.8	%Uncertainty

Customer ID: BOHXW1
Lab Sample#: S96E000859
Sample Date:
Recv. Date: 07/22/96 16:45

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Activity by LSC (Solid)	< 9.05e-6	uCi/g
Total Act. by LSC: % Uncert.	11.68	%Uncertainty

Customer ID: BOHXW2
Lab Sample#: S96E000860
Sample Date:
Recv. Date: 07/22/96 16:45

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Activity by LSC (Solid)	3.1e-5	uCi/g
Total Act. by LSC: % Uncert.	8.71	%Uncertainty

Customer ID: BOHXW5
Lab Sample#: S96E000861
Sample Date:
Recv. Date: 07/22/96 16:45

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Activity by LSC (Solid)	< 7.96e-6	uCi/g
Total Act. by LSC: % Uncert.	13.6	%Uncertainty

0034
0730596C

VALIDATED RESULTS SHORT REPORT 24 Jul 19

Customer ID: BOHXS3
Lab Sample#: S96E000870
Sample Date:
Recv. Date: 07/23/96 18:35

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Act. by LSC: % Uncert.	11.27	%Uncertainty
Total Activity by LSC (Liquid)	< 8.78e-6	uCi/mL

Customer ID: BOHXS4
Lab Sample#: S96E000871
Sample Date:
Recv. Date: 07/23/96 18:35

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Act. by LSC: % Uncert.	11.76	%Uncertainty
Total Activity by LSC (Liquid)	< 8.77e-6	uCi/mL

Customer ID: BOHXS5
Lab Sample#: S96E000872
Sample Date:
Recv. Date: 07/23/96 18:35

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Act. by LSC: % Uncert.	19.41	%Uncertainty
Total Activity by LSC (Liquid)	< 9.82e-6	uCi/mL

Customer ID: BOHXS6
Lab Sample#: S96E000873
Sample Date:
Recv. Date: 07/23/96 18:35

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Act. by LSC: % Uncert.	13.33	%Uncertainty
Total Activity by LSC (Liquid)	< 9.49e-6	uCi/mL

Customer ID: BOHXS7
Lab Sample#: S96E000874
Sample Date:
Recv. Date: 07/23/96 18:35

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Act. by LSC: % Uncert.	12.39	%Uncertainty
Total Activity by LSC (Liquid)	< 9.76e-6	uCi/mL

Customer ID: BOHXS8
Lab Sample#: S96E000875
Sample Date:
Recv. Date: 07/23/96 18:35

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Act. by LSC: % Uncert.	11.49	%Uncertainty
Total Activity by LSC (Liquid)	< 8.66e-6	uCi/mL

0035

0730596C

VALIDATED RESULTS SHORT REPORT 25 Jul 1996

Customer ID: BOHXW0
Lab Sample#: S96E000858

Sample Date:
Recv. Date: 07/22/96 16:45

PARAMETER	RESULTS	UNITS
Total Activity by LSC		
Total Act. by LSC: % Uncert.	4.8	%Uncertainty
Total Activity by LSC (Solid)	1.78e-4	uCi/g

0036

0730596C

MESSAGE CONFIRMATION

07/31/96 15:30

SESSION NO.= 154

ID=LOCKHEED LAB SAMPLE RECEIVING

DATE	TIME	S.R-TIME	DISTANT STATION ID	MODE	PAGES	RESULT	
07/31	15:23	06'53"	5093754238	G3 -S	08	OK	0000

0037

0730596C

SAMPLE CHECK-IN LIST

Date/Time Received: 7-30-96 / 16:00 SDG#: n/a

Work Order Number: n/a SAF #: B96-141

Shipping Container ID: GWS-108 Chain of Custody # B96-141-1

1. Custody Seals on shipping container intact? Yes [X] No [ ]
2. Custody Seals dated and signed? Yes [X] No [ ]
3. Sample temperature 15°
4. Vermiculite/packing materials is Wet [ ] Dry [X]
5. Each sample is in a plastic bag? Yes [X] No [ ]
6. Sample holding times exceeded? Yes [ ] No [X]

7. Samples have:
   - ___ tape
   - X custody seals
   - ___ hazard labels
   - ___ appropriate sample labels

8. Samples are:
   - X in good condition
   - ___ broken
   - ___ leaking
   - ___ have air bubbles

9. Is the information on the COC and Sample bottles in agreement?

Yes[ ] No [ ]

Notes: Blue ice not Frozen

Sample Custodian/Laboratory: Paula K Jenkins Date: 7-31-96

~~Telephoned~~ Faxed To: Kathleen Hall On 7-31-96 By Paula K Jenkins

RA 7-31-96

0038

0730596C

LOCKHEED MARTIN

Sample Login
Login Review Checklist

Lot Number L7548

The login review should be conducted by that person logging in the samples as well as a peer. Please use this checklist to ensure that such reviews occur in a uniform basis. Please sign and date below to verify that a login review has occurred. This checklist should be affixed to each login package prior to distribution.

For effective login review, at a minimum, five reports form the login process are required. These are the COC (or equivalent), the login COC report, the sample summary report, the sample receiving checklist, and the login quotation. Before beginning review, ensure that these five components are available. Jobs with single component samples, the sample summary report may be omitted.

SAMPLE SUMMARY REPORT	YES	NO	N/A	Comment
1. Are all sample ID's correct?	X			
2. Are all samples present?	X			
3. Are all matrices indicated correctly?	X			
4. Are all analyses on the COC logged in for the appropriate samples?	X			
5. Are all analyses logged in for the correct container?	X			
6. Are samples logged in according to LAS batching procedures?	X			

LOGIN CHAIN OF CUSTODY	YES	NO	N/A	Comment
1. Are the collect, receive, and due dates correct for every sample?	X			
2. Have all appropriate comments been indicated in the comment section?	X			

SAMPLE RECEIVING CHECKLIST	YES	NO	N/A	Comment
1. Are all discrepancies between the COC and the login noted (if applicable)?			X	

0039

Paulina Davis 7-31-96
primary review signature date

A Mott 7-31-96
secondary review signature date

0730596C

Lockheed Analytical Services
Sample Receiving Checklist

Client Name: Bechtel-Hanford Job No. L7548 Cooler ID: N/A

COOLER CONDITION UPON RECEIPT

Temperature of cooler upon receipt: 15°C

temperature of temp. blank upon receipt: —

	Yes	No	* Comments/Discrepancies
custody seals intact	X		
chain of custody present	X		
blue ice (or equiv.) present/frozen		X	Blue ice not frozen
rad survey completed	X		

SAMPLE CONDITION UPON RECEIPT

	Yes	No	* Comments/Discrepancies
all bottles labeled	X		
samples intact	X		
proper container used for sample type	X		
sample volume sufficient for analysis	X		
proper pres. indicated on the COC	X		
VOA's contain headspace		N/A	
are samples bi-phasic (if so, indicate sample ID'S):		N/A	

MISCELLANEOUS ITEMS

	Yes	No	* Comments/Discrepancies
samples with short holding times		X	
samples to subcontract		N/A	

ADDITIONAL COMMENTS/DISCREPANCIES "The Sample were Liquid waste" RCO 2-21-96

Completed by / date: Paula Deuel 2-21-96

Sent to the client (date/initials): ** Client's signature upon receipt:

*Notes: * = contact the appropriate CSR of any discrepancies immediately upon receipt*

*** = please review this information and return via facsimile to the appropriate CSR (702) 361-8146*

2905030

00400

version 2.0 (11/11/94)

LOCKHEED ANALYTICAL SERVICES

Sample Results

Client Sample ID: B0HXV8	Date Collected: 22-JUL-96
Matrix: Liq. Waste	Date Received: 30-JUL-96
Percent Solids: N/A	

Constituent	Units	Method	Result	Project Reporting Limit	Data Qualifier(s)	Date Analyzed	LAS Batch ID	LAS Sample ID
Ignitability	deg F	1010	150	N/A	H	02-AUG-96	39653	L7548-3
Cyanide	mg/kg	335.2	< 0.25	0.50	HU	08-AUG-96	39779	L7548-13
Sulfide	mg/kg	9030	39.	60.	HB	20-AUG-96	40374	L7548-15
pH - Test Paper	pH Units	9041	6.0	N/A	H	13-AUG-96	40677	L7548-11

LOCKHEED ANALYTICAL SERVICES

Sample Results

Client Sample ID: B0HXV9	Date Collected: 22-JUL-96
Matrix: Liq. Waste	Date Received: 30-JUL-96
Percent Solids: N/A	

Constituent	Units	Method	Result	Project Reporting Limit	Data Qualifier(s)	Date Analyzed	LAS Batch ID	LAS Sample ID
Ignitability	deg F	1010	110	N/A	H	02-AUG-96	39653	L7548-17

LOCKHEED ANALYTICAL SERVICES

Sample Results

Client Sample ID: B0HXW0	Date Collected: 22-JUL-96
Matrix: Liq. Waste	Date Received: 30-JUL-96
Percent Solids: N/A	

Constituent	Units	Method	Result	Project Reporting Limit	Data Qualifier(s)	Date Analyzed	LAS Batch ID	LAS Sample ID
Ignitability	deg F	1010	130	N/A	H	02-AUG-96	39653	L7548-18

LOCKHEED ANALYTICAL SERVICES

Sample Results

Client Sample ID: B0HXW1	Date Collected: 22-JUL-96
Matrix: Liq. Waste	Date Received: 30-JUL-96
Percent Solids: N/A	

Constituent	Units	Method	Result	Project Reporting Limit	Data Qualifier(s)	Date Analyzed	LAS Batch|ID	LAS Sample|ID
Ignitability	deg F	1010	0.00	N/A	NO FLASH	02-AUG-96	39653	L7548-19
pH - Test Paper	pH Units	9041	8.0	N/A	H	13-AUG-96	40677	L7548-19

LOCKHEED ANALYTICAL SERVICES

Sample Results

Client Sample ID: B0HXW2	Date Collected: 22-JUL-96
Matrix: Liq. Waste	Date Received: 30-JUL-96
Percent Solids: N/A	

Constituent	Units	Method	Result	Project Reporting Limit	Data Qualifier(s)	Date Analyzed	LAS Batch|ID	LAS Sample|ID
Ignitability	deg F	1010	0.00	N/A	NO FLASH	02-AUG-96	39653	L7548-4
Cyanide	mg/kg	335.2	< 0.25	0.50	HU	08-AUG-96	39779	L7548-14
Sulfide	mg/kg	9030	16.	60.	HB	20-AUG-96	40374	L7548-16
pH - Test Paper	pH Units	9041	9.0	N/A	H	13-AUG-96	40677	L7548-12

LOCKHEED ANALYTICAL LABORATORY
WATER QUALITY PARAMETERS
CALIBRATION SUMMARY

SDG: N/A	UNITS: mg/L	CONSTANT: 0.000248801
LAL BATCH: 730-bh3	CALIBRATION DATE: 8/8/96	LINEAR COEFFICIENT: 1.560445041
METHOD: 335.2	CALIBRATION TIME: 9:15 p.m.	QUADRATIC COEFFICIENT: N/A
ANALYTE: Total Cyanide	NUMBER OF STANDARDS: 7	CUBIC COEFFICIENT: N/A
INSTRUMENT: Spectronic 20D	CALIBRATION TYPE: Linear	COEFFICIENT OF DETERMINATION (r^2): 0.999954013

STANDARD DATA

STANDARD ID	MANUFACTURER	LOT #	TRUE VALUE	INSTRUMENT RESPONSE (578nm)	CALCULATED CONCENTRATION
1	EM	30078115	0.000	0.000	0.000
2	"	"	0.010	0.015	0.009
3	"	"	0.020	0.031	0.020
4	"	"	0.100	0.156	0.100
5	"	"	0.200	0.315	0.202
6	"	"	0.300	0.470	0.301
7	"	"	0.400	0.622	0.398

INITIAL CALIBRATION VERIFICATION DATA

SAMPLE ID	TRUE VALUE	FOUND	% RECOVERY
ICV	0.320	0.322	100.6

INITIAL CALIBRATION BLANK DATA

SAMPLE ID	INJECTION #	FOUND
ICB	N/A	0.005 U

CONTINUING CALIBRATION VERIFICATION DATA

SAMPLE ID	INJECTION #	TRUE VALUE	FOUND VALUE	% RECOVERY
CCV1	N/A	0.200	0.197	98.5
CCV2	N/A	0.200	0.200	100.0

CONTINUING CALIBRATION BLANK DATA

SAMPLE ID	INJECTION #	FOUND
CCB1	N/A	0.005 U
CCB2	N/A	0.005 U

LOCKHEED ANALYTICAL LABORATORY
WATER QUALITY PARAMETERS
QUALITY CONTROL DATA SUMMARY

SDG: N/A	ANALYTE: Total Cyanide
LAL BATCH: 730-bh3	UNITS: mg/L (mg/kg in solids/oils)

LABORATORY CONTROL SAMPLES

LCS ID	ACCEPTANCE LIMITS (%R)	TRUE VALUE	FOUND VALUE	% RECOVERY
lcss	16.9-77.3 mg/kg	44.7 mg/kg	50.427 mg/kg	112.8
lcsw	90-110	0.100	0.095	95.0

MATRIX SPIKE SAMPLES

CLIENT SAMPLE ID	ACCEPTANCE LIMITS (%R)	SPIKED SAMPLE RESULT	SAMPLE RESULT	SPIKE ADDED	% RECOVERY
B0HXV8	75-125	4.359	0.5 ~~0.250~~ U	5.000	87.2

KM 8-30-91

LABORATORY DUPLICATE SAMPLES

CLIENT SAMPLE ID	ACCEPTANCE LIMITS (RPD)	SAMPLE VALUE	DUPLICATE VALUE	RPD
B0HXV8	20	0.5 ~~0.250~~ U	0.5 ~~0.250~~ U	b

KM 8-30-91

FIELD DUPLICATE SAMPLES

CLIENT SAMPLE ID	CLIENT DUPLICATE SAMPLE ID	SAMPLE VALUE	DUPLICATE VALUE	RPD
N/A				

FIELD BLANK SAMPLES

CLIENT SAMPLE ID	ANALYSIS RESULT
N/A	

MATRIX BLANK SAMPLES

LAL SAMPLE ID	ANALYSIS RESULT
pb	0.005 U

LOCKHEED ANALYTICAL LABORATORY
WATER QUALITY PARAMETERS
CALIBRATION SUMMARY

SDG: N/A	UNITS: mg/L	CONSTANT: N/A
LAL BATCH: 730-bh3	CALIBRATION DATE: 8/20/96	LINEAR COEFFICIENT: N/A
METHOD: 9030A	CALIBRATION TIME: N/A	QUADRATIC COEFFICIENT: N/A
ANALYTE: Sulfide	NUMBER OF STANDARDS: 3	CUBIC COEFFICIENT: N/A
INSTRUMENT: N/A	CALIBRATION TYPE: N/A	COEFFICIENT OF DETERMINATION (r^2): N/A

STANDARD DATA

STANDARD ID	MANUFACTURER	LOT #	TRUE VALUE	INSTRUMENT RESPONSE	CALCULATED CONCENTRATION
KIO_3	EM Scientific	29160028	1.0268 g/100 mL	N/A	N/A
Iodine	EM Scientific	3000201	0.0250 N	N/A	0.02397 N
$Na_2S_2O_3.5H_2O$	Mallinckrodt	8100 KHJN	0.0250 N	N/A	0.02419 N

INITIAL CALIBRATION VERIFICATION DATA

SAMPLE ID	TRUE VALUE	FOUND	% RECOVERY
ICV	13.29	13.382	100.7

INITIAL CALIBRATION BLANK DATA

SAMPLE ID	INJECTION #	FOUND
ICB	N/A	0.600 U

CONTINUING CALIBRATION VERIFICATION DATA

SAMPLE ID	INJECTION #	TRUE VALUE	FOUND VALUE	% RECOVERY
CCV	N/A	23.325	22.681	97.2

CONTINUING CALIBRATION BLANK DATA

SAMPLE ID	INJECTION #	FOUND
CCB	N/A	0.600 U

LOCKHEED ANALYTICAL LABORATORY
WATER QUALITY PARAMETERS
QUALITY CONTROL DATA SUMMARY

SDG: N/A	ANALYTE: TOTAL SULFIDE
LAL BATCH: 730-bh3	UNITS: mg/L (mg/kg sample results)

LABORATORY CONTROL SAMPLES

LCS ID	ACCEPTANCE LIMITS (%R)	TRUE VALUE	FOUND VALUE	% RECOVERY
lcs730bh3	75-125	9.33	8.825	94.6

MATRIX SPIKE SAMPLES

CLIENT SAMPLE ID	ACCEPTANCE LIMITS (%R)	SPIKED SAMPLE RESULT	SAMPLE RESULT	SPIKE ADDED	% RECOVERY
B0HXV8	65-135	189.847	39.052 B	186.6	80.8

LABORATORY DUPLICATE SAMPLES

CLIENT SAMPLE ID	ACCEPTANCE LIMITS (%RPD)	SAMPLE VALUE	DUPLICATE VALUE	RPD
B0HXV8	25	39.052 B	46.632 B	b

FIELD DUPLICATE SAMPLES

CLIENT SAMPLE ID	CLIENT DUPLICATE SAMPLE ID	SAMPLE VALUE	DUPLICATE VALUE	RPD
N/A				

FIELD BLANK SAMPLES

CLIENT SAMPLE ID	ANALYSIS RESULT
N/A	

MATRIX BLANK SAMPLES

LAL SAMPLE ID	ANALYSIS RESULT
pb730bh3	0.600 U

LOCKHEED ANALYTICAL LABORATORY
WATER QUALITY PARAMETERS
CALIBRATION SUMMARY

SDG:	UNITS: pH
LAL BATCH: 730-BH3	CALIBRATION DATE: 08-14-96
METHOD: 9041	NUMBER OF STANDARDS: 2
ANALYTE: pH	
INSTRUMENT: N/A	

STANDARD DATA

STANDARD ID	MANUFACTURER	LOT #	TRUE VALUE (pH)	INSTRUMENT RESPONSE (pH)
N/A				

INITIAL CALIBRATION VERIFICATION DATA

SAMPLE ID	TRUE VALUE (pH)	FOUND (pH)	DIFFERENCE (pH)
ICV4 (9101879001)	4.00	4.00	0.00
ICV10 (9101877418)	10.00	10.00	0.00

CONTINUING CALIBRATION VERIFICATION DATA

SAMPLE ID	TRUE VALUE (pH)	FOUND VALUE (pH)	DIFFERENCE (pH)
CCV4 (9101879013)	4.00	4.00	0.00
CCV10 (9101877217)	10.00	10.00	0.00

LOCKHEED ANALYTICAL LABORATORY

WATER QUALITY PARAMETERS

QUALITY CONTROL DATA SUMMARY

SDG:	ANALYTE: pH
LAL BATCH: 730-BH3	UNITS: pH

LABORATORY DUPLICATE SAMPLES

CLIENT SAMPLE ID	ACCEPTANCE LIMITS (DIFFERENCE)	SAMPLE VALUE (pH)	DUPLICATE VALUE (pH)	DIFFERENCE (pH)
BOHXV8	± 0.20	6.00	6.00	0.00

LOCKHEED ANALYTICAL SERVICES

Sample Results

Client Sample ID: B0HXV8	Date Collected: 22-JUL-96
Matrix: TCLP Extr	Date Received: 30-JUL-96
Percent Solids: N/A	

Constituent	Units	Method	Result	MDL	RDL	Data Qual	Dilution	Date Analyzed	LAS Batch ID	LAS Sample ID
Arsenic, TCLP	mg/L	6010	< 0.61	0.61	2.0	U	1	19-SEP-96	41251	L7548-11
Barium, TCLP	mg/L	6010	< 1.6	1.6	41.	U	1	19-SEP-96	41251	L7548-11
Cadmium, TCLP	mg/L	6010	< 0.61	0.61	1.0	U	1	19-SEP-96	41251	L7548-11
Chromium, TCLP	mg/L	6010	< 1.2	1.2	2.0	U	1	19-SEP-96	41251	L7548-11
Lead, TCLP	mg/L	6010	0.61	0.41	0.61		1	19-SEP-96	41251	L7548-11
Selenium, TCLP	mg/L	6010	< 0.81	0.81	1.0	U	1	19-SEP-96	41251	L7548-11
Silver, TCLP	mg/L	6010	< 0.81	0.81	2.0	U	1	19-SEP-96	41251	L7548-11
Mercury, TCLP	mg/l	7470	< 0.10	0.10	0.10	U	1	10-SEP-96	41252	L7548-11

LOCKHEED ANALYTICAL SERVICES

Sample Results

Client Sample ID: B0HXW2	Date Collected: 22-JUL-96
Matrix: TCLP Extr	Date Received: 30-JUL-96
Percent Solids: N/A	

Constituent	Units	Method	Result	MDL	RDL	Data Qual	Dilution	Date Analyzed	LAS Batch ID	LAS Sample ID
Arsenic, TCLP	mg/L	6010	< 0.63	0.63	2.1	U	1	19-SEP-96	41251	L7548-12
Barium, TCLP	mg/L	6010	< 1.7	1.7	42.	U	1	19-SEP-96	41251	L7548-12
Cadmium, TCLP	mg/L	6010	2.3	0.63	1.0		1	19-SEP-96	41251	L7548-12
Chromium, TCLP	mg/L	6010	< 1.3	1.3	2.1	U	1	19-SEP-96	41251	L7548-12
Lead, TCLP	mg/L	6010	440	0.42	0.63		1	19-SEP-96	41251	L7548-12
Selenium, TCLP	mg/L	6010	< 0.84	0.84	1.0	U	1	19-SEP-96	41251	L7548-12
Silver, TCLP	mg/L	6010	< 0.84	0.84	2.1	U	1	19-SEP-96	41251	L7548-12
Mercury, TCLP	mg/l	7470	< 0.11	0.11	0.11	U	1	10-SEP-96	41252	L7548-12

LOCKHEED ANALYTICAL SERVICES

GC/MS FOR VOLATILE ORGANICS
8240 VOLATILES

Client Sample ID:	B0HXV8	LAL Sample ID:	L7548-5
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	05-AUG-96	Analytical Dilution:	1
Matrix:	Liq. Waste	Analytical Batch ID:	080596-8260-E1
		Preparation Dilution:	105.

SURROGATE	RECOVERY	QC Limits
1,2-Dichloroethane-d4	98%	84-122
Toluene-d8	75% *	87-117
Bromofluorobenzene	70% *	83-118

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Chloromethane	74-87-3	<530	530	
Vinyl Chloride	75-01-4	<530	530	
Bromomethane	74-83-9	<530	530	
Chloroethane	75-00-3	<530	530	
Trichlorofluoromethane	75-69-4	<530	530	
Acetone	67-64-1	13000	1100	
1,1-Dichloroethene	75-35-4	<530	530	
Carbon Disulfide	75-15-0	<530	530	
Methylene Chloride	75-09-2	<530	530	
trans-1,2-Dichloroethene	156-60-5	<530	530	
Vinyl Acetate	108-05-4	<1100	1100	
1,1-Dichloroethane	75-34-3	<530	530	
2-Butanone	78-93-3	2500	1100	
cis-1,2-Dichloroethene	156-59-2	<530	530	
Chloroform	67-66-3	<530	530	
1,1,1-Trichloroethane	71-55-6	2200	530	
Carbon tetrachloride	56-23-5	<530	530	
1,2-Dichloroethane	107-06-2	<530	530	
Benzene	71-43-2	<530	530	
Trichloroethene	79-01-6	<530	530	
1,2-Dichloropropane	78-87-5	<530	530	
Bromodichloromethane	75-27-4	<530	530	
2-Chloroethylvinylether	110-75-8	<2100	2100	
4-Methyl-2-Pentanone	108-10-1	<1100	1100	
cis-1,3-Dichloropropene	10061-01-5	<530	530	
Toluene	108-88-3	130	530	J
trans-1,3-Dichloropropene	10061-02-6	<530	530	
2-Hexanone	591-78-6	<1100	1100	
1,1,2-Trichloroethane	79-00-5	<530	530	
Tetrachloroethene	127-18-4	<530	530	
Dibromochloromethane	124-48-1	<530	530	
Chlorobenzene	108-90-7	<530	530	
Ethylbenzene	100-41-4	300	530	J
m,p-Xylene	136777-61-2	1700	530	
o-Xylene	95-47-6	1000	530	
Styrene	100-42-5	<530	530	
Bromoform	75-25-2	<530	530	
1,1,2,2-Tetrachloroethane	79-34-5	<530	530	
1,3-Dichlorobenzene	541-73-1	<530	530	
1,4-Dichlorobenzene	106-46-7	<530	530	
1,2-Dichlorobenzene	95-50-1	<530	530	

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LOCKHEED ANALYTICAL SERVICES

GC/MS FOR VOLATILE ORGANICS
8240 VOLATILES

Client Sample ID:	B0HXV8	LAL Sample ID:	L7548-5
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	06-AUG-96	Analytical Dilution:	1
Matrix:	Liq. Waste	Analytical Batch ID:	080696-8260-E1
		Preparation Dilution:	105.

SURROGATE	RECOVERY	QC Limits
1,2-Dichloroethane-d4	97%	84-122
Toluene-d8	73% *	87-117
Bromofluorobenzene	63% *	83-118

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Chloromethane	74-87-3	<530	530	
Vinyl Chloride	75-01-4	<530	530	
Bromomethane	74-83-9	<530	530	
Chloroethane	75-00-3	<530	530	
Trichlorofluoromethane	75-69-4	<530	530	
Acetone	67-64-1	12000	1100	
1,1-Dichloroethene	75-35-4	<530	530	
Carbon Disulfide	75-15-0	<530	530	
Methylene Chloride	75-09-2	<530	530	
trans-1,2-Dichloroethene	156-60-5	<530	530	
Vinyl Acetate	108-05-4	<1100	1100	
1,1-Dichloroethane	75-34-3	<530	530	
2-Butanone	78-93-3	2000	1100	
cis-1,2-Dichloroethene	156-59-2	<530	530	
Chloroform	67-66-3	<530	530	
1,1,1-Trichloroethane	71-55-6	2200	530	
Carbon tetrachloride	56-23-5	<530	530	
1,2-Dichloroethane	107-06-2	<530	530	
Benzene	71-43-2	<530	530	
Trichloroethene	79-01-6	<530	530	
1,2-Dichloropropane	78-87-5	<530	530	
Bromodichloromethane	75-27-4	<530	530	
2-Chloroethylvinylether	110-75-8	<2100	2100	
4-Methyl-2-Pentanone	108-10-1	430	1100	J
cis-1,3-Dichloropropene	10061-01-5	<530	530	
Toluene	108-88-3	140	530	J
trans-1,3-Dichloropropene	10061-02-6	<530	530	
2-Hexanone	591-78-6	<1100	1100	
1,1,2-Trichloroethane	79-00-5	<530	530	
Tetrachloroethene	127-18-4	<530	530	
Dibromochloromethane	124-48-1	<530	530	
Chlorobenzene	108-90-7	<530	530	
Ethylbenzene	100-41-4	310	530	J
m,p-Xylene	136777-61-2	1800	530	
o-Xylene	95-47-6	960	530	
Styrene	100-42-5	<530	530	
Bromoform	75-25-2	<530	530	
1,1,2,2-Tetrachloroethane	79-34-5	<530	530	
1,3-Dichlorobenzene	541-73-1	<530	530	
1,4-Dichlorobenzene	106-46-7	<530	530	
1,2-Dichlorobenzene	95-50-1	<530	530	

LOCKHEED ANALYTICAL SERVICES

GC/MS FOR VOLATILE ORGANICS
8240 VOLATILES

Client Sample-ID:	B0HXW2	LAL Sample ID:	L7548-6
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	04-AUG-96	Analytical Dilution:	1
Matrix:	Liq. Waste	Analytical Batch ID:	080496-8260-C1
		Preparation Dilution:	1.00

SURROGATE	RECOVERY	QC Limits
1,2-Dichloroethane-d4	106%	84-122
Toluene-d8	101%	87-117
Bromofluorobenzene	87%	83-118

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Chloromethane	74-87-3	<5.0	5.0	
Vinyl Chloride	75-01-4	<5.0	5.0	
Bromomethane	74-83-9	<5.0	5.0	
Chloroethane	75-00-3	<5.0	5.0	
Trichlorofluoromethane	75-69-4	<5.0	5.0	
Acetone	67-64-1	61.	10.	
1,1-Dichloroethene	75-35-4	<5.0	5.0	
Carbon Disulfide	75-15-0	<5.0	5.0	
Methylene Chloride	75-09-2	<5.0	5.0	
trans-1,2-Dichloroethene	156-60-5	<5.0	5.0	
Vinyl Acetate	108-05-4	<10.	10.	
1,1-Dichloroethane	75-34-3	<5.0	5.0	
2-Butanone	78-93-3	160	10.	
cis-1,2-Dichloroethene	156-59-2	<5.0	5.0	
Chloroform	67-66-3	<5.0	5.0	
1,1,1-Trichloroethane	71-55-6	<5.0	5.0	
Carbon tetrachloride	56-23-5	<5.0	5.0	
1,2-Dichloroethane	107-06-2	<5.0	5.0	
Benzene	71-43-2	<5.0	5.0	
Trichloroethene	79-01-6	<5.0	5.0	
1,2-Dichloropropane	78-87-5	<5.0	5.0	
Bromodichloromethane	75-27-4	<5.0	5.0	
2-Chloroethylvinylether	110-75-8	<20.	20.	
4-Methyl-2-Pentanone	108-10-1	12.	10.	
cis-1,3-Dichloropropene	10061-01-5	<5.0	5.0	
Toluene	108-88-3	<5.0	5.0	
trans-1,3-Dichloropropene	10061-02-6	<5.0	5.0	
2-Hexanone	591-78-6	<10.	10.	
1,1,2-Trichloroethane	79-00-5	<5.0	5.0	
Tetrachloroethene	127-18-4	<5.0	5.0	
Dibromochloromethane	124-48-1	<5.0	5.0	
Chlorobenzene	108-90-7	<5.0	5.0	
Ethylbenzene	100-41-4	<5.0	5.0	
m,p-Xylene	136777-61-2	<5.0	5.0	
o-Xylene	95-47-6	<5.0	5.0	
Styrene	100-42-5	<5.0	5.0	
Bromoform	75-25-2	<5.0	5.0	
1,1,2,2-Tetrachloroethane	79-34-5	<5.0	5.0	
1,3-Dichlorobenzene	541-73-1	<5.0	5.0	
1,4-Dichlorobenzene	106-46-7	<5.0	5.0	
1,2-Dichlorobenzene	95-50-1	<5.0	5.0	

LOCKHEED ANALYTICAL SERVICES

GC/MS FOR VOLATILE ORGANICS
8240 VOLATILES

Client Sample ID:	B0HXW1	LAL Sample ID:	L7548-19
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	05-AUG-96	Analytical Dilution:	10
Matrix:	Liq. Waste	Analytical Batch ID:	080596-8260-E
		Preparation Dilution:	1.00

SURROGATE	RECOVERY	QC Limits
1,2-Dichloroethane-d4	104%	84-122
Toluene-d8	107%	87-117
Bromofluorobenzene	101%	83-118

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Chloromethane	74-87-3	<50.	50.	
Vinyl Chloride	75-01-4	<50.	50.	
Bromomethane	74-83-9	<50.	50.	
Chloroethane	75-00-3	<50.	50.	
Trichlorofluoromethane	75-69-4	<50.	50.	
Acetone	67-64-1	1300	100	B
1,1-Dichloroethene	75-35-4	<50.	50.	
Carbon Disulfide	75-15-0	<50.	50.	
Methylene Chloride	75-09-2	48.	50.	J
trans-1,2-Dichloroethene	156-60-5	<50.	50.	
Vinyl Acetate	108-05-4	<100	100	
1,1-Dichloroethane	75-34-3	<50.	50.	
2-Butanone	78-93-3	1500	100	
cis-1,2-Dichloroethene	156-59-2	<50.	50.	
Chloroform	67-66-3	<50.	50.	
1,1,1-Trichloroethane	71-55-6	<50.	50.	
Carbon tetrachloride	56-23-5	<50.	50.	
1,2-Dichloroethane	107-06-2	<50.	50.	
Benzene	71-43-2	<50.	50.	
Trichloroethene	79-01-6	<50.	50.	
1,2-Dichloropropane	78-87-5	<50.	50.	
Bromodichloromethane	75-27-4	<50.	50.	
2-Chloroethylvinylether	110-75-8	<200	200	
4-Methyl-2-Pentanone	108-10-1	<100	100	
cis-1,3-Dichloropropene	10061-01-5	<50.	50.	
Toluene	108-88-3	<50.	50.	
trans-1,3-Dichloropropene	10061-02-6	<50.	50.	
2-Hexanone	591-78-6	<100	100	
1,1,2-Trichloroethane	79-00-5	<50.	50.	
Tetrachloroethene	127-18-4	<50.	50.	
Dibromochloromethane	124-48-1	<50.	50.	
Chlorobenzene	108-90-7	<50.	50.	
Ethylbenzene	100-41-4	<50.	50.	
m,p-Xylene	136777-61-2	<50.	50.	
o-Xylene	95-47-6	<50.	50.	
Styrene	100-42-5	<50.	50.	
Bromoform	75-25-2	<50.	50.	
1,1,2,2-Tetrachloroethane	79-34-5	<50.	50.	
1,3-Dichlorobenzene	541-73-1	<50.	50.	
1,4-Dichlorobenzene	106-46-7	<50.	50.	
1,2-Dichlorobenzene	95-50-1	<50.	50.	

LOCKHEED ANALYTICAL SERVICES

MATRIX SPIKE DATA SUMMARY
GC/MS FOR VOLATILE ORGANICS

Client Sample ID:	B0HXS8	LAL Sample ID:	39737MS
Date Collected:	23-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	04-AUG-96	Analytical Dilution:	1
		Analytical Batch ID:	080496-8260-C1
		Preparation Dilution:	1.00

SURROGATE	RECOVERY	QC Limits
1,2-Dichloroethane-d4	102%	84-122
Toluene-d8	102%	87-117
Bromofluorobenzene	113%	83-118

Constituent	Spike Added ug/L	Sample Concentration ug/L	MS Concentration ug/L	% Recovery	QC Limits % Recovery
1,1-Dichloroethene	50.0	0.000	57.6	115	62-124
Benzene	50.0	1.40	57.6	112	68-128
Trichloroethene	50.0	0.000	54.3	109	65-125
Toluene	50.0	0.000	55.5	111	69-129
Chlorobenzene	50.0	0.000	56.0	112	68-128

LOCKHEED ANALYTICAL SERVICES

MATRIX SPIKE DUPLICATE DATA SUMMARY
GC/MS FOR VOLATILE ORGANICS

Client Sample ID:	B0HXS8	LAL Sample ID:	39737MSD
Date Collected:	23-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	04-AUG-96	Analytical Dilution:	1
		Analytical Batch ID:	080496-8260-C1
		Preparation Dilution:	1.00

SURROGATE	RECOVERY	QC Limits
1,2-Dichloroethane-d4	101%	84-122
Toluene-d8	101%	87-117
Bromofluorobenzene	112%	83-118

Constituent	Spike Added ug/L	MSD Concentration ug/L	% Recovery	RPD	QC Limits RPD	QC Limits % Recovery
1,1-Dichloroethene	50.0	52.3	105	10	14	62-124
Benzene	50.0	53.6	104	7	11	68-128
Trichloroethene	50.0	50.1	100	8	14	65-125
Toluene	50.0	50.9	102	9	13	69-129
Chlorobenzene	50.0	50.7	101	10	13	68-128

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LOCKHEED ANALYTICAL SERVICES

SEMI-VOLATILE ORGANICS BY GC/MS
8270 SEMI-VOLATILES

Client Sample ID:	B0HXV8	LAL Sample ID:	L7548-7
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
Matrix:	Liq. Waste	Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39782	Analytical Dilution:	1
		Preparation Dilution:	11400

SURROGATE	RECOVERY	QC Limits
2-Fluorophenol	72%	31-110
Phenol-d5	81%	27-111
Nitrobenzene-d5	68%	40-114
2-Fluorobiphenyl	81%	41-111
2,4,6-Tribromophenol	0.00% *	34-147
Terphenyl-d14	131%	33-141

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Phenol	108-95-2	<110000	110000	
bis(2-Chloroethyl)ether	111-44-4	<110000	110000	
2-Chlorophenol	95-57-8	<110000	110000	
1,3-Dichlorobenzene	541-73-1	<110000	110000	
1,4-Dichlorobenzene	106-46-7	<110000	110000	
Benzyl alcohol	100-51-6	<230000	230000	
1,2-Dichlorobenzene	95-50-1	<110000	110000	
2-Methylphenol	95-48-7	<110000	110000	
bis(2-chloroisopropyl)ether	108-60-1	<110000	110000	
4-Methylphenol	106-44-5	<110000	110000	
N-Nitroso-di-n-propylamine	621-64-7	<110000	110000	
Hexachloroethane	67-72-1	<110000	110000	
Nitrobenzene	98-95-3	<110000	110000	
Isophorone	78-59-1	<110000	110000	
2-Nitrophenol	88-75-5	<110000	110000	
2,4-Dimethylphenol	105-67-9	<110000	110000	
Benzoic acid	65-85-0	<570000	570000	
bis(2-Chloroethoxy)methane	111-91-1	<110000	110000	
2,4-Dichlorophenol	120-83-2	<110000	110000	
1,2,4-Trichlorobenzene	120-82-1	<110000	110000	
Naphthalene	91-20-3	<110000	110000	
4-Chloroaniline	106-47-8	<230000	230000	
Hexachlorobutadiene	87-68-3	<110000	110000	
4-Chloro-3-methylphenol	59-50-7	<230000	230000	
2-Methylnaphthalene	91-57-6	<110000	110000	
Hexachlorocyclopentadiene	77-47-4	<110000	110000	
2,4,6-Trichlorophenol	88-06-2	<110000	110000	
2,4,5-Trichlorophenol	95-95-4	<110000	110000	
2-Chloronaphthalene	91-58-7	<110000	110000	
2-Nitroaniline	88-74-4	<570000	570000	
Dimethylphthalate	131-11-3	<110000	110000	
Acenaphthylene	208-96-8	<110000	110000	
2,6-Dinitrotoluene	606-20-2	<110000	110000	
3-Nitroaniline	99-09-2	<570000	570000	
Acenaphthene	83-32-9	<110000	110000	
2,4-Dinitrophenol	51-28-5	<570000	570000	
4-Nitrophenol	100-02-7	<570000	570000	

LOCKHEED ANALYTICAL SERVICES

SEMI-VOLATILE ORGANICS BY GC/MS
8270 SEMI-VOLATILES

Client Sample ID:	B0HXV8	LAL Sample ID:	L7548-7
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
Matrix:	Liq. Waste	Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39782	Analytical Dilution:	1
		Preparation Dilution:	11400

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(S)
Dibenzofuran	132-64-9	<110000	110000	
2,4-Dinitrotoluene	121-14-2	<110000	110000	
Diethylphthalate	84-66-2	<110000	110000	
4-Chlorophenyl-phenylether	7005-72-3	<110000	110000	
Fluorene	86-73-7	<110000	110000	
4-Nitroaniline	100-01-6	<230000	230000	
4,6-Dinitro-2-methylphenol	534-52-1	<570000	570000	
N-Nitrosodiphenylamine (1)	86-30-6	<110000	110000	
4-Bromophenyl-phenylether	101-55-3	<110000	110000	
Hexachlorobenzene	118-74-1	<110000	110000	
Pentachlorophenol	87-86-5	<570000	570000	
Phenanthrene	85-01-8	<110000	110000	
Anthracene	120-12-7	<110000	110000	
Carbazole	86-74-8	<110000	110000	
Di-n-butylphthalate	84-74-2	<110000	110000	
Fluoranthene	206-44-0	<110000	110000	
Pyrene	129-00-0	<110000	110000	
Butylbenzylphthalate	85-68-7	<110000	110000	
3,3'-Dichlorobenzidine	91-94-1	<230000	230000	
Benzo(a)anthracene	56-55-3	<110000	110000	
Chrysene	218-01-9	<110000	110000	
bis(2-Ethylhexyl)phthalate	117-81-7	89000	110000	J
Di-n-octylphthalate	117-84-0	<110000	110000	
Benzo(b)fluoranthene	205-99-2	<110000	110000	
Benzo(k)fluoranthene	207-08-9	<110000	110000	
Benzo(a)pyrene	50-32-8	<110000	110000	
Indeno(1,2,3-cd)pyrene	193-39-5	<110000	110000	
Dibenz(a,h)anthracene	53-70-3	<110000	110000	
Benzo(g,h,i)perylene	191-24-2	<110000	110000	

LOCKHEED ANALYTICAL SERVICES

SEMI-VOLATILE ORGANICS BY GC/MS
8270 SEMI-VOLATILES

Client Sample ID:	B0HXV8	LAL Sample ID:	L7548-7
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
Matrix:	Liq. Waste	Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39782	Analytical Dilution:	1
		Preparation Dilution:	11400

SURROGATE	RECOVERY	QC Limits
2-Fluorophenol	61%	31-110
Phenol-d5	70%	27-111
Nitrobenzene-d5	65%	40-114
2-Fluorobiphenyl	76%	41-111
2,4,6-Tribromophenol	0.00% *	34-147
Terphenyl-d14	119%	33-141

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Phenol	108-95-2	<110000	110000	
bis(2-Chloroethyl)ether	111-44-4	<110000	110000	
2-Chlorophenol	95-57-8	<110000	110000	
1,3-Dichlorobenzene	541-73-1	<110000	110000	
1,4-Dichlorobenzene	106-46-7	<110000	110000	
Benzyl alcohol	100-51-6	<230000	230000	
1,2-Dichlorobenzene	95-50-1	<110000	110000	
2-Methylphenol	95-48-7	<110000	110000	
bis(2-chloroisopropyl)ether	108-60-1	<110000	110000	
4-Methylphenol	106-44-5	<110000	110000	
N-Nitroso-di-n-propylamine	621-64-7	<110000	110000	
Hexachloroethane	67-72-1	<110000	110000	
Nitrobenzene	98-95-3	<110000	110000	
Isophorone	78-59-1	<110000	110000	
2-Nitrophenol	88-75-5	<110000	110000	
2,4-Dimethylphenol	105-67-9	<110000	110000	
Benzoic acid	65-85-0	<570000	570000	
bis(2-Chloroethoxy)methane	111-91-1	<110000	110000	
2,4-Dichlorophenol	120-83-2	<110000	110000	
1,2,4-Trichlorobenzene	120-82-1	<110000	110000	
Naphthalene	91-20-3	<110000	110000	
4-Chloroaniline	106-47-8	<230000	230000	
Hexachlorobutadiene	87-68-3	<110000	110000	
4-Chloro-3-methylphenol	59-50-7	<230000	230000	
2-Methylnaphthalene	91-57-6	<110000	110000	
Hexachlorocyclopentadiene	77-47-4	<110000	110000	
2,4,6-Trichlorophenol	88-06-2	<110000	110000	
2,4,5-Trichlorophenol	95-95-4	<110000	110000	
2-Chloronaphthalene	91-58-7	<110000	110000	
2-Nitroaniline	88-74-4	<570000	570000	
Dimethylphthalate	131-11-3	<110000	110000	
Acenaphthylene	208-96-8	<110000	110000	
2,6-Dinitrotoluene	606-20-2	<110000	110000	
3-Nitroaniline	99-09-2	<570000	570000	
Acenaphthene	83-32-9	<110000	110000	
2,4-Dinitrophenol	51-28-5	<570000	570000	
4-Nitrophenol	100-02-7	<570000	570000	

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LOCKHEED ANALYTICAL SERVICES

SEMI-VOLATILE ORGANICS BY GC/MS
8270 SEMI-VOLATILES

Client Sample ID:	B0HXV8	LAL Sample ID:	L7548-7
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
Matrix:	Liq. Waste	Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39782	Analytical Dilution:	1
		Preparation Dilution:	11400

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Dibenzofuran	132-64-9	<110000	110000	
2,4-Dinitrotoluene	121-14-2	<110000	110000	
Diethylphthalate	84-66-2	<110000	110000	
4-Chlorophenyl-phenylether	7005-72-3	<110000	110000	
Fluorene	86-73-7	<110000	110000	
4-Nitroaniline	100-01-6	<230000	230000	
4,6-Dinitro-2-methylphenol	534-52-1	<570000	570000	
N-Nitrosodiphenylamine (1)	86-30-6	<110000	110000	
4-Bromophenyl-phenylether	101-55-3	<110000	110000	
Hexachlorobenzene	118-74-1	<110000	110000	
Pentachlorophenol	87-86-5	<570000	570000	
Phenanthrene	85-01-8	<110000	110000	
Anthracene	120-12-7	<110000	110000	
Carbazole	86-74-8	<110000	110000	
Di-n-butylphthalate	84-74-2	<110000	110000	
Fluoranthene	206-44-0	<110000	110000	
Pyrene	129-00-0	<110000	110000	
Butylbenzylphthalate	85-68-7	<110000	110000	
3,3'-Dichlorobenzidine	91-94-1	<230000	230000	
Benzo(a)anthracene	56-55-3	<110000	110000	
Chrysene	218-01-9	<110000	110000	
bis(2-Ethylhexyl)phthalate	117-81-7	95000	110000	J
Di-n-octylphthalate	117-84-0	<110000	110000	
Benzo(b)fluoranthene	205-99-2	<110000	110000	
Benzo(k)fluoranthene	207-08-9	<110000	110000	
Benzo(a)pyrene	50-32-8	<110000	110000	
Indeno(1,2,3-cd)pyrene	193-39-5	<110000	110000	
Dibenz(a,h)anthracene	53-70-3	<110000	110000	
Benzo(g,h,i)perylene	191-24-2	<110000	110000	

LOCKHEED ANALYTICAL SERVICES

SEMI-VOLATILE ORGANICS BY GC/MS
8270 SEMI-VOLATILES

Client Sample ID:	B0HXW2	LAL Sample ID:	L7548-8
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
Matrix:	Liq. Waste	Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39771	Analytical Dilution:	1
		Preparation Dilution:	1000

SURROGATE	RECOVERY	QC Limits
2-Fluorophenol	65%	31-110
Phenol-d5	65%	27-111
Nitrobenzene-d5	67%	40-114
2-Fluorobiphenyl	79%	41-111
2,4,6-Tribromophenol	86%	34-147
Terphenyl-d14	80%	33-141

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Phenol	108-95-2	<10000	10000	
bis(2-Chloroethyl)ether	111-44-4	<10000	10000	
2-Chlorophenol	95-57-8	<10000	10000	
1,3-Dichlorobenzene	541-73-1	<10000	10000	
1,4-Dichlorobenzene	106-46-7	<10000	10000	
Benzyl alcohol	100-51-6	<20000	20000	
1,2-Dichlorobenzene	95-50-1	<10000	10000	
2-Methylphenol	95-48-7	<10000	10000	
bis(2-chloroisopropyl)ether	108-60-1	<10000	10000	
4-Methylphenol	106-44-5	<10000	10000	
N-Nitroso-di-n-propylamine	621-64-7	<10000	10000	
Hexachloroethane	67-72-1	<10000	10000	
Nitrobenzene	98-95-3	<10000	10000	
Isophorone	78-59-1	<10000	10000	
2-Nitrophenol	88-75-5	<10000	10000	
2,4-Dimethylphenol	105-67-9	<10000	10000	
Benzoic acid	65-85-0	<50000	50000	
bis(2-Chloroethoxy)methane	111-91-1	<10000	10000	
2,4-Dichlorophenol	120-83-2	<10000	10000	
1,2,4-Trichlorobenzene	120-82-1	<10000	10000	
Naphthalene	91-20-3	<10000	10000	
4-Chloroaniline	106-47-8	<20000	20000	
Hexachlorobutadiene	87-68-3	<10000	10000	
4-Chloro-3-methylphenol	59-50-7	<20000	20000	
2-Methylnaphthalene	91-57-6	<10000	10000	
Hexachlorocyclopentadiene	77-47-4	<10000	10000	
2,4,6-Trichlorophenol	88-06-2	<10000	10000	
2,4,5-Trichlorophenol	95-95-4	<10000	10000	
2-Chloronaphthalene	91-58-7	<10000	10000	
2-Nitroaniline	88-74-4	<50000	50000	
Dimethylphthalate	131-11-3	<10000	10000	
Acenaphthylene	208-96-8	<10000	10000	
2,6-Dinitrotoluene	606-20-2	<10000	10000	
3-Nitroaniline	99-09-2	<50000	50000	
Acenaphthene	83-32-9	<10000	10000	
2,4-Dinitrophenol	51-28-5	<50000	50000	
4-Nitrophenol	100-02-7	<50000	50000	

LOCKHEED ANALYTICAL SERVICES

SEMI-VOLATILE ORGANICS BY GC/MS
8270 SEMI-VOLATILES

Client Sample ID:	B0HXW2	LAL Sample ID:	L7548-8
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
Matrix:	Liq. Waste	Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39771	Analytical Dilution:	1
		Preparation Dilution:	1000

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Dibenzofuran	132-64-9	<10000	10000	
2,4-Dinitrotoluene	121-14-2	<10000	10000	
Diethylphthalate	84-66-2	<10000	10000	
4-Chlorophenyl-phenylether	7005-72-3	<10000	10000	
Fluorene	86-73-7	<10000	10000	
4-Nitroaniline	100-01-6	<20000	20000	
4,6-Dinitro-2-methylphenol	534-52-1	<50000	50000	
N-Nitrosodiphenylamine (1)	86-30-6	<10000	10000	
4-Bromophenyl-phenylether	101-55-3	<10000	10000	
Hexachlorobenzene	118-74-1	<10000	10000	
Pentachlorophenol	87-86-5	<50000	50000	
Phenanthrene	85-01-8	<10000	10000	
Anthracene	120-12-7	<10000	10000	
Carbazole	86-74-8	<10000	10000	
Di-n-butylphthalate	84-74-2	<10000	10000	
Fluoranthene	206-44-0	<10000	10000	
Pyrene	129-00-0	<10000	10000	
Butylbenzylphthalate	85-68-7	<10000	10000	
3,3'-Dichlorobenzidine	91-94-1	<20000	20000	
Benzo(a)anthracene	56-55-3	<10000	10000	
Chrysene	218-01-9	<10000	10000	
bis(2-Ethylhexyl)phthalate	117-81-7	<10000	10000	
Di-n-octylphthalate	117-84-0	<10000	10000	
Benzo(b)fluoranthene	205-99-2	<10000	10000	
Benzo(k)fluoranthene	207-08-9	<10000	10000	
Benzo(a)pyrene	50-32-8	<10000	10000	
Indeno(1,2,3-cd)pyrene	193-39-5	<10000	10000	
Dibenz(a,h)anthracene	53-70-3	<10000	10000	
Benzo(g,h,i)perylene	191-24-2	<10000	10000	

LOCKHEED ANALYTICAL SERVICES

SEMI-VOLATILE ORGANICS BY GC/MS
8270 SEMI-VOLATILES

Client Sample ID:	B0HXW1	LAL Sample ID:	L7548-19
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
Matrix:	Liq. Waste	Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39771	Analytical Dilution:	1
		Preparation Dilution:	1000

SURROGATE	RECOVERY	QC Limits
2-Fluorophenol	57%	31-110
Phenol-d5	55%	27-111
Nitrobenzene-d5	68%	40-114
2-Fluorobiphenyl	80%	41-111
2,4,6-Tribromophenol	87%	34-147
Terphenyl-d14	72%	33-141

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Phenol	108-95-2	<10000	10000	
bis(2-Chloroethyl)ether	111-44-4	<10000	10000	
2-Chlorophenol	95-57-8	<10000	10000	
1,3-Dichlorobenzene	541-73-1	<10000	10000	
1,4-Dichlorobenzene	106-46-7	<10000	10000	
Benzyl alcohol	100-51-6	<20000	20000	
1,2-Dichlorobenzene	95-50-1	<10000	10000	
2-Methylphenol	95-48-7	<10000	10000	
bis(2-chloroisopropyl)ether	108-60-1	<10000	10000	
4-Methylphenol	106-44-5	<10000	10000	
N-Nitroso-di-n-propylamine	621-64-7	<10000	10000	
Hexachloroethane	67-72-1	<10000	10000	
Nitrobenzene	98-95-3	<10000	10000	
Isophorone	78-59-1	<10000	10000	
2-Nitrophenol	88-75-5	<10000	10000	
2,4-Dimethylphenol	105-67-9	<10000	10000	
Benzoic acid	65-85-0	<50000	50000	
bis(2-Chloroethoxy)methane	111-91-1	<10000	10000	
2,4-Dichlorophenol	120-83-2	<10000	10000	
1,2,4-Trichlorobenzene	120-82-1	<10000	10000	
Naphthalene	91-20-3	<10000	10000	
4-Chloroaniline	106-47-8	<20000	20000	
Hexachlorobutadiene	87-68-3	<10000	10000	
4-Chloro-3-methylphenol	59-50-7	<20000	20000	
2-Methylnaphthalene	91-57-6	<10000	10000	
Hexachlorocyclopentadiene	77-47-4	<10000	10000	
2,4,6-Trichlorophenol	88-06-2	<10000	10000	
2,4,5-Trichlorophenol	95-95-4	<10000	10000	
2-Chloronaphthalene	91-58-7	<10000	10000	
2-Nitroaniline	88-74-4	<50000	50000	
Dimethylphthalate	131-11-3	<10000	10000	
Acenaphthylene	208-96-8	<10000	10000	
2,6-Dinitrotoluene	606-20-2	<10000	10000	
3-Nitroaniline	99-09-2	<50000	50000	
Acenaphthene	83-32-9	<10000	10000	
2,4-Dinitrophenol	51-28-5	<50000	50000	
4-Nitrophenol	100-02-7	<50000	50000	

LOCKHEED ANALYTICAL SERVICES

SEMI-VOLATILE ORGANICS BY GC/MS
8270 SEMI-VOLATILES

Client Sample ID:	B0HXW1	LAL Sample ID:	L7548-19
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
Matrix:	Liq. Waste	Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39771	Analytical Dilution:	1
		Preparation Dilution:	1000

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Dibenzofuran	132-64-9	<10000	10000	
2,4-Dinitrotoluene	121-14-2	<10000	10000	
Diethylphthalate	84-66-2	<10000	10000	
4-Chlorophenyl-phenylether	7005-72-3	<10000	10000	
Fluorene	86-73-7	<10000	10000	
4-Nitroaniline	100-01-6	<20000	20000	
4,6-Dinitro-2-methylphenol	534-52-1	<50000	50000	
N-Nitrosodiphenylamine (1)	86-30-6	<10000	10000	
4-Bromophenyl-phenylether	101-55-3	<10000	10000	
Hexachlorobenzene	118-74-1	<10000	10000	
Pentachlorophenol	87-86-5	<50000	50000	
Phenanthrene	85-01-8	<10000	10000	
Anthracene	120-12-7	<10000	10000	
Carbazole	86-74-8	<10000	10000	
Di-n-butylphthalate	84-74-2	<10000	10000	
Fluoranthene	206-44-0	<10000	10000	
Pyrene	129-00-0	<10000	10000	
Butylbenzylphthalate	85-68-7	<10000	10000	
3,3'-Dichlorobenzidine	91-94-1	<20000	20000	
Benzo(a)anthracene	56-55-3	<10000	10000	
Chrysene	218-01-9	<10000	10000	
bis(2-Ethylhexyl)phthalate	117-81-7	<10000	10000	
Di-n-octylphthalate	117-84-0	<10000	10000	
Benzo(b)fluoranthene	205-99-2	<10000	10000	
Benzo(k)fluoranthene	207-08-9	<10000	10000	
Benzo(a)pyrene	50-32-8	<10000	10000	
Indeno(1,2,3-cd)pyrene	193-39-5	<10000	10000	
Dibenz(a,h)anthracene	53-70-3	<10000	10000	
Benzo(g,h,i)perylene	191-24-2	<10000	10000	

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LOCKHEED ANALYTICAL SERVICES

SPIKED SAMPLE RESULT
SEMI-VOLATILE ORGANICS BY GC/MS

Client Sample ID:	BOHXW1	LAL Sample ID:	39771MS
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
		Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39771	Analytical Dilution:	1
		Preparation Dilution:	1000

SURROGATE	RECOVERY	QC Limits
2-Fluorophenol	48%	31-110
Phenol-d5	45%	27-111
Nitrobenzene-d5	65%	40-114
2-Fluorobiphenyl	78%	41-111
2,4,6-Tribromophenol	79%	34-147
Terphenyl-d14	77%	33-141

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(S)
Phenol	108-95-2	67000	10000	
bis(2-Chloroethyl)ether	111-44-4	<10000	10000	
2-Chlorophenol	95-57-8	89000	10000	
1,3-Dichlorobenzene	541-73-1	<10000	10000	
1,4-Dichlorobenzene	106-46-7	71000	10000	
Benzyl alcohol	100-51-6	<20000	20000	
1,2-Dichlorobenzene	95-50-1	<10000	10000	
2-Methylphenol	95-48-7	<10000	10000	
bis(2-chloroisopropyl)ether	108-60-1	<10000	10000	
4-Methylphenol	106-44-5	<10000	10000	
N-Nitroso-di-n-propylamine	621-64-7	59000	10000	
Hexachloroethane	67-72-1	<10000	10000	
Nitrobenzene	98-95-3	<10000	10000	
Isophorone	78-59-1	<10000	10000	
2-Nitrophenol	88-75-5	<10000	10000	
2,4-Dimethylphenol	105-67-9	<10000	10000	
Benzoic acid	65-85-0	<50000	50000	
bis(2-Chloroethoxy)methane	111-91-1	<10000	10000	
2,4-Dichlorophenol	120-83-2	<10000	10000	
1,2,4-Trichlorobenzene	120-82-1	75000	10000	
Naphthalene	91-20-3	<10000	10000	
4-Chloroaniline	106-47-8	<20000	20000	
Hexachlorobutadiene	87-68-3	<10000	10000	
4-Chloro-3-methylphenol	59-50-7	76000	20000	
2-Methylnaphthalene	91-57-6	<10000	10000	
Hexachlorocyclopentadiene	77-47-4	<10000	10000	
2,4,6-Trichlorophenol	88-06-2	<10000	10000	
2,4,5-Trichlorophenol	95-95-4	<10000	10000	
2-Chloronaphthalene	91-58-7	<10000	10000	
2-Nitroaniline	88-74-4	<50000	50000	
Dimethylphthalate	131-11-3	<10000	10000	
Acenaphthylene	208-96-8	<10000	10000	
2,6-Dinitrotoluene	606-20-2	<10000	10000	
3-Nitroaniline	99-09-2	<50000	50000	
Acenaphthene	83-32-9	74000	10000	
2,4-Dinitrophenol	51-28-5	<50000	50000	
4-Nitrophenol	100-02-7	39000	50000	J

LOCKHEED ANALYTICAL SERVICES

SPIKED SAMPLE RESULT
SEMI-VOLATILE ORGANICS BY GC/MS

Client Sample ID:	BOHXW1	LAL Sample ID:	39771MS
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
		Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39771	Analytical Dilution:	1
		Preparation Dilution:	1000

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Dibenzofuran	132-64-9	<10000	10000	
2,4-Dinitrotoluene	121-14-2	77000	10000	
Diethylphthalate	84-66-2	<10000	10000	
4-Chlorophenyl-phenylether	7005-72-3	<10000	10000	
Fluorene	86-73-7	<10000	10000	
4-Nitroaniline	100-01-6	<20000	20000	
4,6-Dinitro-2-methylphenol	534-52-1	<50000	50000	
N-Nitrosodiphenylamine (1)	86-30-6	<10000	10000	
4-Bromophenyl-phenylether	101-55-3	<10000	10000	
Hexachlorobenzene	118-74-1	<10000	10000	
Pentachlorophenol	87-86-5	100000	50000	
Phenanthrene	85-01-8	<10000	10000	
Anthracene	120-12-7	<10000	10000	
Carbazole	86-74-8	<10000	10000	
Di-n-butylphthalate	84-74-2	<10000	10000	
Fluoranthene	206-44-0	<10000	10000	
Pyrene	129-00-0	78000	10000	
Butylbenzylphthalate	85-68-7	<10000	10000	
3,3'-Dichlorobenzidine	91-94-1	<20000	20000	
Benzo(a)anthracene	56-55-3	<10000	10000	
Chrysene	218-01-9	<10000	10000	
bis(2-Ethylhexyl)phthalate	117-81-7	<10000	10000	
Di-n-octylphthalate	117-84-0	<10000	10000	
Benzo(b)fluoranthene	205-99-2	<10000	10000	
Benzo(k)fluoranthene	207-08-9	<10000	10000	
Benzo(a)pyrene	50-32-8	<10000	10000	
Indeno(1,2,3-cd)pyrene	193-39-5	<10000	10000	
Dibenz(a,h)anthracene	53-70-3	<10000	10000	
Benzo(g,h,i)perylene	191-24-2	<10000	10000	

LOCKHEED ANALYTICAL SERVICES

SPIKED SAMPLE RESULT
SEMI-VOLATILE ORGANICS BY GC/MS

Client Sample ID:	BOHXV8	LAL Sample ID:	39782MS
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
		Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39782	Analytical Dilution:	1
		Preparation Dilution:	11500

SURROGATE	RECOVERY	QC Limits
2-Fluorophenol	73%	31-110
Phenol-d5	75%	27-111
Nitrobenzene-d5	73%	40-114
2-Fluorobiphenyl	80%	41-111
2,4,6-Tribromophenol	43%	34-147
Terphenyl-d14	87%	33-141

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Phenol	108-95-2	1200000	120000	
bis(2-Chloroethyl)ether	111-44-4	<120000	120000	
2-Chlorophenol	95-57-8	1200000	120000	
1,3-Dichlorobenzene	541-73-1	<120000	120000	
1,4-Dichlorobenzene	106-46-7	900000	120000	
Benzyl alcohol	100-51-6	<230000	230000	
1,2-Dichlorobenzene	95-50-1	<120000	120000	
2-Methylphenol	95-48-7	<120000	120000	
bis(2-chloroisopropyl)ether	108-60-1	<120000	120000	
4-Methylphenol	106-44-5	<120000	120000	
N-Nitroso-di-n-propylamine	621-64-7	740000	120000	
Hexachloroethane	67-72-1	<120000	120000	
Nitrobenzene	98-95-3	<120000	120000	
Isophorone	78-59-1	<120000	120000	
2-Nitrophenol	88-75-5	<120000	120000	
2,4-Dimethylphenol	105-67-9	<120000	120000	
Benzoic acid	65-85-0	<580000	580000	
bis(2-Chloroethoxy)methane	111-91-1	<120000	120000	
2,4-Dichlorophenol	120-83-2	<120000	120000	
1,2,4-Trichlorobenzene	120-82-1	970000	120000	
Naphthalene	91-20-3	<120000	120000	
4-Chloroaniline	106-47-8	<230000	230000	
Hexachlorobutadiene	87-68-3	<120000	120000	
4-Chloro-3-methylphenol	59-50-7	1100000	230000	
2-Methylnaphthalene	91-57-6	<120000	120000	
Hexachlorocyclopentadiene	77-47-4	<120000	120000	
2,4,6-Trichlorophenol	88-06-2	<120000	120000	
2,4,5-Trichlorophenol	95-95-4	<120000	120000	
2-Chloronaphthalene	91-58-7	<120000	120000	
2-Nitroaniline	88-74-4	<580000	580000	
Dimethylphthalate	131-11-3	<120000	120000	
Acenaphthylene	208-96-8	<120000	120000	
2,6-Dinitrotoluene	606-20-2	<120000	120000	
3-Nitroaniline	99-09-2	<580000	580000	
Acenaphthene	83-32-9	890000	120000	
2,4-Dinitrophenol	51-28-5	<580000	580000	
4-Nitrophenol	100-02-7	460000	580000	J

LOCKHEED ANALYTICAL SERVICES

SPIKED SAMPLE RESULT
SEMI-VOLATILE ORGANICS BY GC/MS

Client Sample ID:	BOHXV8	LAL Sample ID:	39782MS
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
		Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39782	Analytical Dilution:	1
		Preparation Dilution:	11500

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Dibenzofuran	132-64-9	<120000	120000	
2,4-Dinitrotoluene	121-14-2	940000	120000	
Diethylphthalate	84-66-2	<120000	120000	
4-Chlorophenyl-phenylether	7005-72-3	<120000	120000	
Fluorene	86-73-7	<120000	120000	
4-Nitroaniline	100-01-6	<230000	230000	
4,6-Dinitro-2-methylphenol	534-52-1	<580000	580000	
N-Nitrosodiphenylamine (1)	86-30-6	<120000	120000	
4-Bromophenyl-phenylether	101-55-3	<120000	120000	
Hexachlorobenzene	118-74-1	<120000	120000	
Pentachlorophenol	87-86-5	<580000	580000	
Phenanthrene	85-01-8	<120000	120000	
Anthracene	120-12-7	<120000	120000	
Carbazole	86-74-8	<120000	120000	
Di-n-butylphthalate	84-74-2	<120000	120000	
Fluoranthene	206-44-0	<120000	120000	
Pyrene	129-00-0	880000	120000	
Butylbenzylphthalate	85-68-7	<120000	120000	
3,3'-Dichlorobenzidine	91-94-1	<230000	230000	
Benzo(a)anthracene	56-55-3	<120000	120000	
Chrysene	218-01-9	<120000	120000	
bis(2-Ethylhexyl)phthalate	117-81-7	<120000	120000	
Di-n-octylphthalate	117-84-0	<120000	120000	
Benzo(b)fluoranthene	205-99-2	<120000	120000	
Benzo(k)fluoranthene	207-08-9	<120000	120000	
Benzo(a)pyrene	50-32-8	<120000	120000	
Indeno(1,2,3-cd)pyrene	193-39-5	<120000	120000	
Dibenz(a,h)anthracene	53-70-3	<120000	120000	
Benzo(g,h,i)perylene	191-24-2	<120000	120000	

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LOCKHEED ANALYTICAL SERVICES

SPIKED SAMPLE RESULT
SEMI-VOLATILE ORGANICS BY GC/MS

Client Sample ID:	BOHXV8	LAL Sample ID:	39782MS
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
		Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39782	Analytical Dilution:	1
		Preparation Dilution:	11500

SURROGATE	RECOVERY	QC Limits
2-Fluorophenol	59%	31-110
Phenol-d5	61%	27-111
Nitrobenzene-d5	61%	40-114
2-Fluorobiphenyl	68%	41-111
2,4,6-Tribromophenol	17% *	34-147
Terphenyl-d14	68%	33-141

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Phenol	108-95-2	1000000	120000	
bis(2-Chloroethyl)ether	111-44-4	<120000	120000	
2-Chlorophenol	95-57-8	950000	120000	
1,3-Dichlorobenzene	541-73-1	<120000	120000	
1,4-Dichlorobenzene	106-46-7	760000	120000	
Benzyl alcohol	100-51-6	<230000	230000	
1,2-Dichlorobenzene	95-50-1	<120000	120000	
2-Methylphenol	95-48-7	<120000	120000	
bis(2-chloroisopropyl)ether	108-60-1	<120000	120000	
4-Methylphenol	106-44-5	<120000	120000	
N-Nitroso-di-n-propylamine	621-64-7	610000	120000	
Hexachloroethane	67-72-1	<120000	120000	
Nitrobenzene	98-95-3	<120000	120000	
Isophorone	78-59-1	<120000	120000	
2-Nitrophenol	88-75-5	<120000	120000	
2,4-Dimethylphenol	105-67-9	<120000	120000	
Benzoic acid	65-85-0	<580000	580000	
bis(2-Chloroethoxy)methane	111-91-1	<120000	120000	
2,4-Dichlorophenol	120-83-2	<120000	120000	
1,2,4-Trichlorobenzene	120-82-1	810000	120000	
Naphthalene	91-20-3	<120000	120000	
4-Chloroaniline	106-47-8	<230000	230000	
Hexachlorobutadiene	87-68-3	<120000	120000	
4-Chloro-3-methylphenol	59-50-7	930000	230000	
2-Methylnaphthalene	91-57-6	<120000	120000	
Hexachlorocyclopentadiene	77-47-4	<120000	120000	
2,4,6-Trichlorophenol	88-06-2	<120000	120000	
2,4,5-Trichlorophenol	95-95-4	<120000	120000	
2-Chloronaphthalene	91-58-7	<120000	120000	
2-Nitroaniline	88-74-4	<580000	580000	
Dimethylphthalate	131-11-3	<120000	120000	
Acenaphthylene	208-96-8	<120000	120000	
2,6-Dinitrotoluene	606-20-2	<120000	120000	
3-Nitroaniline	99-09-2	<580000	580000	
Acenaphthene	83-32-9	750000	120000	
2,4-Dinitrophenol	51-28-5	<580000	580000	
4-Nitrophenol	100-02-7	260000	580000	

J 0109

LOCKHEED ANALYTICAL SERVICES

SPIKED SAMPLE RESULT
SEMI-VOLATILE ORGANICS BY GC/MS

Client Sample ID:	BOHXV8	LAL Sample ID:	39782MS
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
		Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39782	Analytical Dilution:	1
		Preparation Dilution:	11500

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Dibenzofuran	132-64-9	<120000	120000	
2,4-Dinitrotoluene	121-14-2	800000	120000	
Diethylphthalate	84-66-2	<120000	120000	
4-Chlorophenyl-phenylether	7005-72-3	<120000	120000	
Fluorene	86-73-7	<120000	120000	
4-Nitroaniline	100-01-6	<230000	230000	
4,6-Dinitro-2-methylphenol	534-52-1	<580000	580000	
N-Nitrosodiphenylamine (1)	86-30-6	<120000	120000	
4-Bromophenyl-phenylether	101-55-3	<120000	120000	
Hexachlorobenzene	118-74-1	<120000	120000	
Pentachlorophenol	87-86-5	<580000	580000	
Phenanthrene	85-01-8	<120000	120000	
Anthracene	120-12-7	<120000	120000	
Carbazole	86-74-8	<120000	120000	
Di-n-butylphthalate	84-74-2	<120000	120000	
Fluoranthene	206-44-0	<120000	120000	
Pyrene	129-00-0	680000	120000	
Butylbenzylphthalate	85-68-7	<120000	120000	
3,3'-Dichlorobenzidine	91-94-1	<230000	230000	
Benzo(a)anthracene	56-55-3	<120000	120000	
Chrysene	218-01-9	<120000	120000	
bis(2-Ethylhexyl)phthalate	117-81-7	<120000	120000	
Di-n-octylphthalate	117-84-0	<120000	120000	
Benzo(b)fluoranthene	205-99-2	<120000	120000	
Benzo(k)fluoranthene	207-08-9	<120000	120000	
Benzo(a)pyrene	50-32-8	<120000	120000	
Indeno(1,2,3-cd)pyrene	193-39-5	<120000	120000	
Dibenz(a,h)anthracene	53-70-3	<120000	120000	
Benzo(g,h,i)perylene	191-24-2	<120000	120000	

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LOCKHEED ANALYTICAL SERVICES

SPIKED SAMPLE RESULT
SEMI-VOLATILE ORGANICS BY GC/MS

Client Sample ID:	BOHXW1	LAL Sample ID:	39771MSD
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
		Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39771	Analytical Dilution:	1
		Preparation Dilution:	1000

SURROGATE	RECOVERY	QC Limits
2-Fluorophenol	52%	31-110
Phenol-d5	50%	27-111
Nitrobenzene-d5	68%	40-114
2-Fluorobiphenyl	79%	41-111
2,4,6-Tribromophenol	87%	34-147
Terphenyl-d14	78%	33-141

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Phenol	108-95-2	76000	10000	
bis(2-Chloroethyl)ether	111-44-4	<10000	10000	
2-Chlorophenol	95-57-8	95000	10000	
1,3-Dichlorobenzene	541-73-1	<10000	10000	
1,4-Dichlorobenzene	106-46-7	72000	10000	
Benzyl alcohol	100-51-6	<20000	20000	
1,2-Dichlorobenzene	95-50-1	<10000	10000	
2-Methylphenol	95-48-7	<10000	10000	
bis(2-chloroisopropyl)ether	108-60-1	<10000	10000	
4-Methylphenol	106-44-5	<10000	10000	
N-Nitroso-di-n-propylamine	621-64-7	61000	10000	
Hexachloroethane	67-72-1	<10000	10000	
Nitrobenzene	98-95-3	<10000	10000	
Isophorone	78-59-1	<10000	10000	
2-Nitrophenol	88-75-5	<10000	10000	
2,4-Dimethylphenol	105-67-9	<10000	10000	
Benzoic acid	65-85-0	<50000	50000	
bis(2-Chloroethoxy)methane	111-91-1	<10000	10000	
2,4-Dichlorophenol	120-83-2	<10000	10000	
1,2,4-Trichlorobenzene	120-82-1	79000	10000	
Naphthalene	91-20-3	<10000	10000	
4-Chloroaniline	106-47-8	<20000	20000	
Hexachlorobutadiene	87-68-3	<10000	10000	
4-Chloro-3-methylphenol	59-50-7	89000	20000	
2-Methylnaphthalene	91-57-6	<10000	10000	
Hexachlorocyclopentadiene	77-47-4	<10000	10000	
2,4,6-Trichlorophenol	88-06-2	<10000	10000	
2,4,5-Trichlorophenol	95-95-4	<10000	10000	
2-Chloronaphthalene	91-58-7	<10000	10000	
2-Nitroaniline	88-74-4	<50000	50000	
Dimethylphthalate	131-11-3	<10000	10000	
Acenaphthylene	208-96-8	<10000	10000	
2,6-Dinitrotoluene	606-20-2	<10000	10000	
3-Nitroaniline	99-09-2	<50000	50000	
Acenaphthene	83-32-9	77000	10000	
2,4-Dinitrophenol	51-28-5	<50000	50000	
4-Nitrophenol	100-02-7	53000	50000	

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LOCKHEED ANALYTICAL SERVICES

SPIKED SAMPLE RESULT
SEMI-VOLATILE ORGANICS BY GC/MS

Client Sample ID:	BOHXW1	LAL Sample ID:	39771MSD
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
		Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39771	Analytical Dilution:	1
		Preparation Dilution:	1000

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Dibenzofuran	132-64-9	<10000	10000	
2,4-Dinitrotoluene	121-14-2	79000	10000	
Diethylphthalate	84-66-2	<10000	10000	
4-Chlorophenyl-phenylether	7005-72-3	<10000	10000	
Fluorene	86-73-7	<10000	10000	
4-Nitroaniline	100-01-6	<20000	20000	
4,6-Dinitro-2-methylphenol	534-52-1	<50000	50000	
N-Nitrosodiphenylamine (1)	86-30-6	<10000	10000	
4-Bromophenyl-phenylether	101-55-3	<10000	10000	
Hexachlorobenzene	118-74-1	<10000	10000	
Pentachlorophenol	87-86-5	130000	50000	
Phenanthrene	85-01-8	<10000	10000	
Anthracene	120-12-7	<10000	10000	
Carbazole	86-74-8	<10000	10000	
Di-n-butylphthalate	84-74-2	<10000	10000	
Fluoranthene	206-44-0	<10000	10000	
Pyrene	129-00-0	74000	10000	
Butylbenzylphthalate	85-68-7	<10000	10000	
3,3'-Dichlorobenzidine	91-94-1	<20000	20000	
Benzo(a)anthracene	56-55-3	<10000	10000	
Chrysene	218-01-9	<10000	10000	
bis(2-Ethylhexyl)phthalate	117-81-7	<10000	10000	
Di-n-octylphthalate	117-84-0	<10000	10000	
Benzo(b)fluoranthene	205-99-2	<10000	10000	
Benzo(k)fluoranthene	207-08-9	<10000	10000	
Benzo(a)pyrene	50-32-8	<10000	10000	
Indeno(1,2,3-cd)pyrene	193-39-5	<10000	10000	
Dibenz(a,h)anthracene	53-70-3	<10000	10000	
Benzo(g,h,i)perylene	191-24-2	<10000	10000	

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LOCKHEED ANALYTICAL SERVICES

SPIKED SAMPLE RESULT
SEMI-VOLATILE ORGANICS BY GC/MS

Client Sample ID:	BOHXV8	LAL Sample ID:	39782MSD
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
		Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39782	Analytical Dilution:	1
		Preparation Dilution:	11500

SURROGATE	RECOVERY	QC Limits
2-Fluorophenol	68%	31-110
Phenol-d5	70%	27-111
Nitrobenzene-d5	70%	40-114
2-Fluorobiphenyl	80%	41-111
2,4,6-Tribromophenol	15% *	34-147
Terphenyl-d14	85%	33-141

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Phenol	108-95-2	1200000	120000	
bis(2-Chloroethyl)ether	111-44-4	<120000	120000	
2-Chlorophenol	95-57-8	1100000	120000	
1,3-Dichlorobenzene	541-73-1	<120000	120000	
1,4-Dichlorobenzene	106-46-7	870000	120000	
Benzyl alcohol	100-51-6	<230000	230000	
1,2-Dichlorobenzene	95-50-1	<120000	120000	
2-Methylphenol	95-48-7	<120000	120000	
bis(2-chloroisopropyl)ether	108-60-1	<120000	120000	
4-Methylphenol	106-44-5	<120000	120000	
N-Nitroso-di-n-propylamine	621-64-7	680000	120000	
Hexachloroethane	67-72-1	<120000	120000	
Nitrobenzene	98-95-3	<120000	120000	
Isophorone	78-59-1	<120000	120000	
2-Nitrophenol	88-75-5	<120000	120000	
2,4-Dimethylphenol	105-67-9	<120000	120000	
Benzoic acid	65-85-0	<580000	580000	
bis(2-Chloroethoxy)methane	111-91-1	<120000	120000	
2,4-Dichlorophenol	120-83-2	<120000	120000	
1,2,4-Trichlorobenzene	120-82-1	940000	120000	
Naphthalene	91-20-3	<120000	120000	
4-Chloroaniline	106-47-8	<230000	230000	
Hexachlorobutadiene	87-68-3	<120000	120000	
4-Chloro-3-methylphenol	59-50-7	1100000	230000	
2-Methylnaphthalene	91-57-6	<120000	120000	
Hexachlorocyclopentadiene	77-47-4	<120000	120000	
2,4,6-Trichlorophenol	88-06-2	<120000	120000	
2,4,5-Trichlorophenol	95-95-4	<120000	120000	
2-Chloronaphthalene	91-58-7	<120000	120000	
2-Nitroaniline	88-74-4	<580000	580000	
Dimethylphthalate	131-11-3	<120000	120000	
Acenaphthylene	208-96-8	<120000	120000	
2,6-Dinitrotoluene	606-20-2	<120000	120000	
3-Nitroaniline	99-09-2	<580000	580000	
Acenaphthene	83-32-9	890000	120000	
2,4-Dinitrophenol	51-28-5	<580000	580000	
4-Nitrophenol	100-02-7	210000	580000	J

LOCKHEED ANALYTICAL SERVICES

SPIKED SAMPLE RESULT
SEMI-VOLATILE ORGANICS BY GC/MS

Client Sample ID:	BOHXV8	LAL Sample ID:	39782MSD
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
		Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39782	Analytical Dilution:	1
		Preparation Dilution:	11500

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Dibenzofuran	132-64-9	<120000	120000	
2,4-Dinitrotoluene	121-14-2	910000	120000	
Diethylphthalate	84-66-2	<120000	120000	
4-Chlorophenyl-phenylether	7005-72-3	<120000	120000	
Fluorene	86-73-7	<120000	120000	
4-Nitroaniline	100-01-6	<230000	230000	
4,6-Dinitro-2-methylphenol	534-52-1	<580000	580000	
N-Nitrosodiphenylamine (1)	86-30-6	<120000	120000	
4-Bromophenyl-phenylether	101-55-3	<120000	120000	
Hexachlorobenzene	118-74-1	<120000	120000	
Pentachlorophenol	87-86-5	<580000	580000	
Phenanthrene	85-01-8	<120000	120000	
Anthracene	120-12-7	<120000	120000	
Carbazole	86-74-8	<120000	120000	
Di-n-butylphthalate	84-74-2	<120000	120000	
Fluoranthene	206-44-0	<120000	120000	
Pyrene	129-00-0	870000	120000	
Butylbenzylphthalate	85-68-7	<120000	120000	
3,3'-Dichlorobenzidine	91-94-1	<230000	230000	
Benzo(a)anthracene	56-55-3	<120000	120000	
Chrysene	218-01-9	<120000	120000	
bis(2-Ethylhexyl)phthalate	117-81-7	<120000	120000	
Di-n-octylphthalate	117-84-0	<120000	120000	
Benzo(b)fluoranthene	205-99-2	<120000	120000	
Benzo(k)fluoranthene	207-08-9	<120000	120000	
Benzo(a)pyrene	50-32-8	<120000	120000	
Indeno(1,2,3-cd)pyrene	193-39-5	<120000	120000	
Dibenz(a,h)anthracene	53-70-3	<120000	120000	
Benzo(g,h,i)perylene	191-24-2	<120000	120000	

LOCKHEED ANALYTICAL SERVICES

SPIKED SAMPLE RESULT
SEMI-VOLATILE ORGANICS BY GC/MS

Client Sample ID:	BOHXV8	LAL Sample ID:	39782MSD
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
		Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39782	Analytical Dilution:	1
		Preparation Dilution:	11500

SURROGATE	RECOVERY	QC Limits
2-Fluorophenol	61%	31-110
Phenol-d5	62%	27-111
Nitrobenzene-d5	62%	40-114
2-Fluorobiphenyl	70%	41-111
2,4,6-Tribromophenol	0.00% *	34-147
Terphenyl-d14	76%	33-141

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Phenol	108-95-2	1000000	120000	
bis(2-Chloroethyl)ether	111-44-4	<120000	120000	
2-Chlorophenol	95-57-8	980000	120000	
1,3-Dichlorobenzene	541-73-1	<120000	120000	
1,4-Dichlorobenzene	106-46-7	770000	120000	
Benzyl alcohol	100-51-6	<230000	230000	
1,2-Dichlorobenzene	95-50-1	<120000	120000	
2-Methylphenol	95-48-7	<120000	120000	
bis(2-chloroisopropyl)ether	108-60-1	<120000	120000	
4-Methylphenol	106-44-5	<120000	120000	
N-Nitroso-di-n-propylamine	621-64-7	610000	120000	
Hexachloroethane	67-72-1	<120000	120000	
Nitrobenzene	98-95-3	<120000	120000	
Isophorone	78-59-1	<120000	120000	
2-Nitrophenol	88-75-5	<120000	120000	
2,4-Dimethylphenol	105-67-9	<120000	120000	
Benzoic acid	65-85-0	<580000	580000	
bis(2-Chloroethoxy)methane	111-91-1	<120000	120000	
2,4-Dichlorophenol	120-83-2	<120000	120000	
1,2,4-Trichlorobenzene	120-82-1	830000	120000	
Naphthalene	91-20-3	<120000	120000	
4-Chloroaniline	106-47-8	<230000	230000	
Hexachlorobutadiene	87-68-3	<120000	120000	
4-Chloro-3-methylphenol	59-50-7	870000	230000	
2-Methylnaphthalene	91-57-6	<120000	120000	
Hexachlorocyclopentadiene	77-47-4	<120000	120000	
2,4,6-Trichlorophenol	88-06-2	<120000	120000	
2,4,5-Trichlorophenol	95-95-4	<120000	120000	
2-Chloronaphthalene	91-58-7	<120000	120000	
2-Nitroaniline	88-74-4	<580000	580000	
Dimethylphthalate	131-11-3	<120000	120000	
Acenaphthylene	208-96-8	<120000	120000	
2,6-Dinitrotoluene	606-20-2	<120000	120000	
3-Nitroaniline	99-09-2	<580000	580000	
Acenaphthene	83-32-9	770000	120000	
2,4-Dinitrophenol	51-28-5	<580000	580000	
4-Nitrophenol	100-02-7	<580000	580000	

LOCKHEED ANALYTICAL SERVICES

SPIKED SAMPLE RESULT
SEMI-VOLATILE ORGANICS BY GC/MS

Client Sample ID:	BOHXV8	LAL Sample ID:	39782MSD
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	20-AUG-96	Date Extracted:	05-AUG-96
		Analytical Batch ID:	082096-8270-A
QC Group:	8270 SEMI-VOLATILES_39782	Analytical Dilution:	1
		Preparation Dilution:	11500

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
Dibenzofuran	132-64-9	<120000	120000	
2,4-Dinitrotoluene	121-14-2	760000	120000	
Diethylphthalate	84-66-2	<120000	120000	
4-Chlorophenyl-phenylether	7005-72-3	<120000	120000	
Fluorene	86-73-7	<120000	120000	
4-Nitroaniline	100-01-6	<230000	230000	
4,6-Dinitro-2-methylphenol	534-52-1	<580000	580000	
N-Nitrosodiphenylamine (1)	86-30-6	<120000	120000	
4-Bromophenyl-phenylether	101-55-3	<120000	120000	
Hexachlorobenzene	118-74-1	<120000	120000	
Pentachlorophenol	87-86-5	<580000	580000	
Phenanthrene	85-01-8	<120000	120000	
Anthracene	120-12-7	<120000	120000	
Carbazole	86-74-8	<120000	120000	
Di-n-butylphthalate	84-74-2	<120000	120000	
Fluoranthene	206-44-0	<120000	120000	
Pyrene	129-00-0	790000	120000	
Butylbenzylphthalate	85-68-7	<120000	120000	
3,3'-Dichlorobenzidine	91-94-1	<230000	230000	
Benzo(a)anthracene	56-55-3	<120000	120000	
Chrysene	218-01-9	<120000	120000	
bis(2-Ethylhexyl)phthalate	117-81-7	<120000	120000	
Di-n-octylphthalate	117-84-0	<120000	120000	
Benzo(b)fluoranthene	205-99-2	<120000	120000	
Benzo(k)fluoranthene	207-08-9	<120000	120000	
Benzo(a)pyrene	50-32-8	<120000	120000	
Indeno(1,2,3-cd)pyrene	193-39-5	<120000	120000	
Dibenz(a,h)anthracene	53-70-3	<120000	120000	
Benzo(g,h,i)perylene	191-24-2	<120000	120000	

LOCKHEED ANALYTICAL SERVICES

ORGANOCHLORINE PESTICIDES/PCBS BY GC/ECD
8080 PEST/PCBS

Client Sample ID:	B0HXV8	LAL Sample ID:	L7548-9
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	15-AUG-96	Analytical Batch ID:	081196-8080-E-5
Date Extracted:	05-AUG-96	Analytical Dilution:	1
Matrix:	Liq. Waste	Preparation Dilution:	1000
		QC Group:	8080 PEST/PCBS_39812

SURROGATE	RECOVERY	QC Limits
TCMX	85%	21-110
DCB	79%	36-126

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
A-BHC	319-84-6	<50.	50.	
B-BHC	319-85-7	<50.	50.	
G-BHC	58-89-9	<50.	50.	
D-BHC	319-86-8	<50.	50.	
Heptachlor	76-44-8	<50.	50.	
Aldrin	309-00-2	<50.	50.	
Heptachlor Epoxide	1024-57-3	<50.	50.	
G-Chlordane	5103-74-2	<50.	50.	
Endosulfan I	959-98-8	<50.	50.	
A-Chlordane	5103-71-9	<50.	50.	
4,4'-DDE	72-55-9	<100	100	
4,4'-DDT	50-29-3	<100	100	
Dieldrin	60-57-1	<100	100	
Endrin	72-20-8	<100	100	
Endosulfan II	33213-65-9	<100	100	
4,4'-DDD	72-54-8	<100	100	
Endrin Aldehyde	7421-93-4	<100	100	
Endosulfan Sulfate	1031-07-8	<100	100	
Methoxychlor	72-43-5	<500	500	
Toxaphene	8001-35-2	<5000	5000	
PCB-1016	12674-11-2	<1000	1000	
PCB-1221	11104-28-2	<2000	2000	
PCB-1232	11141-16-5	<1000	1000	
PCB-1242	53469-21-9	<1000	1000	
PCB-1248	12672-29-6	<1000	1000	
PCB-1254	11097-69-1	<1000	1000	
PCB-1260	11096-82-5	<1000	1000	
Chlordane (Technical)	57-74-9	<1000	1000	

LOCKHEED ANALYTICAL SERVICES

ORGANOCHLORINE PESTICIDES/PCBS BY GC/ECD
8080 PEST/PCBS

Client Sample ID:	B0HXW2	LAL Sample ID:	L7548-10
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	08-AUG-96	Analytical Batch ID:	080596-8080-E-3
Date Extracted:	03-AUG-96	Analytical Dilution:	1
Matrix:	Liq. Waste	Preparation Dilution:	100
		QC Group:	8080 PEST/PCBS_39770

SURROGATE	RECOVERY	QC Limits
TCMX	44%	21-110
DCB	24% *	36-126

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
A-BHC	319-84-6	<5.0	5.0	
B-BHC	319-85-7	<5.0	5.0	
G-BHC	58-89-9	<5.0	5.0	
D-BHC	319-86-8	<5.0	5.0	
Heptachlor	76-44-8	<5.0	5.0	
Aldrin	309-00-2	<5.0	5.0	
Heptachlor Epoxide	1024-57-3	<5.0	5.0	
G-Chlordane	5103-74-2	<5.0	5.0	
Endosulfan I	959-98-8	<5.0	5.0	
A-Chlordane	5103-71-9	<5.0	5.0	
4,4'-DDE	72-55-9	<10.	10.	
4,4'-DDT	50-29-3	<10.	10.	
Dieldrin	60-57-1	<10.	10.	
Endrin	72-20-8	<10.	10.	
Endosulfan II	33213-65-9	<10.	10.	
4,4'-DDD	72-54-8	<10.	10.	
Endrin Aldehyde	7421-93-4	<10.	10.	
Endosulfan Sulfate	1031-07-8	<10.	10.	
Methoxychlor	72-43-5	<50.	50.	
Toxaphene	8001-35-2	<500	500	
PCB-1016	12674-11-2	<100	100	
PCB-1221	11104-28-2	<200	200	
PCB-1232	11141-16-5	<100	100	
PCB-1242	53469-21-9	<100	100	
PCB-1248	12672-29-6	<100	100	
PCB-1254	11097-69-1	<100	100	
PCB-1260	11096-82-5	<100	100	
Chlordane (Technical)	57-74-9	<100	100	

0140

LOCKHEED ANALYTICAL SERVICES

ORGANOCHLORINE PESTICIDES/PCBS BY GC/ECD
8080 PEST/PCBS

Client Sample ID:	B0HXW1	LAL Sample ID:	L7548-19
Date Collected:	22-JUL-96	Date Received:	30-JUL-96
Date Analyzed:	08-AUG-96	Analytical Batch ID:	080596-8080-E-3
Date Extracted:	03-AUG-96	Analytical Dilution:	1
Matrix:	Liq. Waste	Preparation Dilution:	100
		QC Group:	8080 PEST/PCBS_39770

SURROGATE	RECOVERY		QC Limits
TCMX	5.9%	*	21-110
DCB	5.3%	*	36-126

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
A-BHC	319-84-6	<5.0	5.0	
B-BHC	319-85-7	<5.0	5.0	
G-BHC	58-89-9	<5.0	5.0	
D-BHC	319-86-8	<5.0	5.0	
Heptachlor	76-44-8	<5.0	5.0	
Aldrin	309-00-2	<5.0	5.0	
Heptachlor Epoxide	1024-57-3	<5.0	5.0	
G-Chlordane	5103-74-2	<5.0	5.0	
Endosulfan I	959-98-8	<5.0	5.0	
A-Chlordane	5103-71-9	<5.0	5.0	
4,4'-DDE	72-55-9	<10.	10.	
4,4'-DDT	50-29-3	<10.	10.	
Dieldrin	60-57-1	<10.	10.	
Endrin	72-20-8	<10.	10.	
Endosulfan II	33213-65-9	<10.	10.	
4,4'-DDD	72-54-8	<10.	10.	
Endrin Aldehyde	7421-93-4	<10.	10.	
Endosulfan Sulfate	1031-07-8	<10.	10.	
Methoxychlor	72-43-5	<50.	50.	
Toxaphene	8001-35-2	<500	500	
PCB-1016	12674-11-2	<100	100	
PCB-1221	11104-28-2	<200	200	
PCB-1232	11141-16-5	<100	100	
PCB-1242	53469-21-9	<100	100	
PCB-1248	12672-29-6	<100	100	
PCB-1254	11097-69-1	<100	100	
PCB-1260	11096-82-5	<100	100	
Chlordane (Technical)	57-74-9	<100	100	

0141

LOCKHEED ANALYTICAL SERVICES

ORGANOCHLORINE PESTICIDES/PCBS BY GC/ECD

Client Sample ID:	Method Blank	LAL Sample ID:	39770MB
Date Collected:	N/A	Date Received:	N/A
Date Analyzed:	07-AUG-96	Analytical Batch ID:	080596-8080-E-3
Date Extracted:	03-AUG-96	Analytical Dilution:	1
		Preparation Dilution:	100
		QC Group:	8080 PEST/PCBS_39770

SURROGATE	RECOVERY	QC Limits
TCMX	73%	21-110
DCB	44%	36-126

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
A-BHC	319-84-6	<5.0	5.0	
B-BHC	319-85-7	<5.0	5.0	
G-BHC	58-89-9	<5.0	5.0	
D-BHC	319-86-8	<5.0	5.0	
Heptachlor	76-44-8	<5.0	5.0	
Aldrin	309-00-2	<5.0	5.0	
Heptachlor Epoxide	1024-57-3	<5.0	5.0	
G-Chlordane	5103-74-2	<5.0	5.0	
Endosulfan I	959-98-8	<5.0	5.0	
A-Chlordane	5103-71-9	<5.0	5.0	
4,4'-DDE	72-55-9	<10.	10.	
4,4'-DDT	50-29-3	<10.	10.	
Dieldrin	60-57-1	<10.	10.	
Endrin	72-20-8	<10.	10.	
Endosulfan II	33213-65-9	<10.	10.	
4,4'-DDD	72-54-8	<10.	10.	
Endrin Aldehyde	7421-93-4	<10.	10.	
Endosulfan Sulfate	1031-07-8	<10.	10.	
Methoxychlor	72-43-5	<50.	50.	
Toxaphene	8001-35-2	<500	500	
PCB-1016	12674-11-2	<100	100	
PCB-1221	11104-28-2	<200	200	
PCB-1232	11141-16-5	<100	100	
PCB-1242	53469-21-9	<100	100	
PCB-1248	12672-29-6	<100	100	
PCB-1254	11097-69-1	<100	100	
PCB-1260	11096-82-5	<100	100	
Chlordane (Technical)	57-74-9	<100	100	

0142

LOCKHEED ANALYTICAL SERVICES

ORGANOCHLORINE PESTICIDES/PCBS BY GC/ECD

Client Sample ID:	Method Blank	LAL Sample ID:	39812MB
Date Collected:	N/A	Date Received:	N/A
Date Analyzed:	15-AUG-96	Analytical Batch ID:	081196-8080-E-5
Date Extracted:	05-AUG-96	Analytical Dilution:	1
		Preparation Dilution:	1000
		QC Group:	8080 PEST/PCBS_39812

SURROGATE	RECOVERY	QC Limits
TCMX	95%	21-110
DCB	101%	36-126

CONSTITUENT	CAS NO.	RESULT ug/L	PRACTICAL QUANTITATION LIMIT ug/L	DATA QUALIFIER(s)
A-BHC	319-84-6	<50.	50.	
B-BHC	319-85-7	<50.	50.	
G-BHC	58-89-9	<50.	50.	
D-BHC	319-86-8	<50.	50.	
Heptachlor	76-44-8	<50.	50.	
Aldrin	309-00-2	<50.	50.	
Heptachlor Epoxide	1024-57-3	<50.	50.	
G-Chlordane	5103-74-2	<50.	50.	
Endosulfan I	959-98-8	<50.	50.	
A-Chlordane	5103-71-9	<50.	50.	
4,4'-DDE	72-55-9	<100	100	
4,4'-DDT	50-29-3	<100	100	
Dieldrin	60-57-1	<100	100	
Endrin	72-20-8	<100	100	
Endosulfan II	33213-65-9	<100	100	
4,4'-DDD	72-54-8	<100	100	
Endrin Aldehyde	7421-93-4	<100	100	
Endosulfan Sulfate	1031-07-8	<100	100	
Methoxychlor	72-43-5	<500	500	
Toxaphene	8001-35-2	<5000	5000	
PCB-1016	12674-11-2	<1000	1000	
PCB-1221	11104-28-2	<2000	2000	
PCB-1232	11141-16-5	<1000	1000	
PCB-1242	53469-21-9	<1000	1000	
PCB-1248	12672-29-6	<1000	1000	
PCB-1254	11097-69-1	<1000	1000	
PCB-1260	11096-82-5	<1000	1000	
Chlordane (Technical)	57-74-9	<1000	1000	

0143

Sample Disposition Record

Control #: B96-0130
Revision #: 0
Date Initiated: 09/10/96

Section 1 - BACKGROUND
SAF #: B96-141
OU: N/A
Project ID: 100N 90-Day Pad
Task ID: 1
Sampling Event: 109N Unknown Wastes -- Organic Liquids
Laboratory: Lockheed
Project Coordinator: C. C. Koerner
Task Manager: D. W. Eckert

Section 2 - SAMPLE INFORMATION
Number of Samples: 5
ID Numbers: B0HXV8, B0HXV9, B0HXW0, B0HXW1, B0HXW2
Matrix: Other Solid -- Various Unknown Organic Liquids
Collection Date: 07/22/96

Section 3 - ISSUE
Class: Lab Direction
NCR Number: N/A
Type: Temperature Excursion
Description: Sample coolers were received at Lockheed at a temperature of 19 degrees C or above.

N/A
NCR Validation (Print/Sign) Date

Section 4 - DISPOSITION
Type: Use As Is
Description: Lockheed is directed to continue with the analyses as requested on the Chain of Custody and the Field Sampling Requirements. The analyses include VOA and Semi-VOA.

C. C. Koerner/ C. K 9-10-96
Project Coordinator (Print/Sign) Date

D. W. Eckert/ D W Eckert 9/16/96
Task Manager (Print/Sign) Date

N/A
QA (Print/Sign) Date

Section 5 - INSPECTION (Issue Class: Nonconformance Only)
Inspection Number: N/A
Inspection Results: N/A

N/A
Inspector (Print/Sign) Date