

START

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

LK6712-LAS 30-

0045078



April 12, 1996

Ms. Joan Kessner
Bechtel Hanford, Inc.
P.O. Box 969
1022 Lee Boulevard
Richland, WA 99352



RE: Log-in No.:	L6712
Quotation No.:	Q400000-B
SAF:	B96-098
Document File No.:	0329596
BHI Document File No.:	343
SDG No.:	LK6712



The attached data report contains the analytical results of samples that were submitted to Lockheed Analytical Services on 29 March 1996.

The temperature of the cooler upon receipt was 4°C. Sample containers received agree with the chain-of-custody documentation. 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 Kathleen Hall at (509) 375-4741.

Lockheed Analytical Services

Log-in No.: L6712
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Release of this data report has been authorized by the Laboratory Director or the Director's designee as evidenced by the following signature.

" 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 Manger or a designee, as verified by the following signature."

Sincerely,

A handwritten signature in black ink that reads "Kathleen M. Hall for". The signature is written in a cursive style.

Kathleen M. Hall
Client Services Representative

cc: Client Services
Document Control

Lockheed Analytical Services

Log-in No.: L6712
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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

- One oil sample was received for LK6712 and analyzed for Method 1010 Ignitability in batch 329 bh for selected analytes as requested on the chain of custody.

Holding Time Requirements

- The sample was received and analyzed within the method-specific holding time.

Kay McCann
Prepared By

April 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), duplicate sample(s).

Preparation and Analysis Requirements

- Eight oil samples for metals analysis. The samples were prepared and analyzed as LAS Batch 329BHE and analyzed for selected analytes as requested on the chain of custody. Sample BOH8T7 (L6712-10) was used for matrix spike, duplicate, post-digestion spike analyses. All flags due to the performance of the above-mentioned QC sample are also associated with every sample digested with this batch.

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 with the following exceptions:

- The matrix spike recovered outside the control limits for mercury and silver. However, the acceptable recoveries for the oil LCS for these analytes indicates that the analytical system was operating correctly and that the out-of-control recovery may be attributed to matrix interferences. All these analytes results are flagged with a "N". A post-digestion spike for silver was performed on the sample. Results are provided on form 5B.

Lockheed Analytical Services

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Page4

Sample Results

- The methods and associated qualifies used for analyte determination and reporting are as follows:

"P" ICPAES Trace- Method CLP ILMO3.0
"AV" Cold Vapor AA- CLP ILMO3.0

Hongsheng Li

04/11/96

Prepared By

Date

9613471.2476

LOCKHEED ANALYTICAL SERVICES
 LOGIN CHAIN OF CUSTODY REPORT (1n01)
 Apr 03 1996, 08:00 am

*Revision
 METALS*

Login Number: L6712
 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
L6712-1 TEMP 4 Location: 156TMP-1 Oil 6 S SCREENING	BOH8T7	27-MAR-96	29-MAR-96	13-APR-96
L6712-2 TEMP 4 Location: 156TMP-1 Oil 6 S SCREENING	BOH8T8	27-MAR-96	29-MAR-96	13-APR-96
L6712-3 TEMP 4 Location: 156TMP-1 Oil 6 S SCREENING	BOH8V0	27-MAR-96	29-MAR-96	13-APR-96
L6712-4 TEMP 4 Location: 156TMP-1 Oil 6 S SCREENING	BOH8V1	27-MAR-96	29-MAR-96	13-APR-96
L6712-5 TEMP 4 Location: 156TMP-1 Oil 6 S SCREENING	BOH8V2	27-MAR-96	29-MAR-96	13-APR-96
L6712-6 TEMP 4 Location: 156TMP-1 Oil 6 S SCREENING	BOH8V4	27-MAR-96	29-MAR-96	13-APR-96
L6712-7 TEMP 4 Location: 156TMP-1 Oil 6 S SCREENING	BOH8V5	27-MAR-96	29-MAR-96	13-APR-96
L6712-8 TEMP 4 Location: 156TMP-1 Oil 6 S SCREENING	BOH8V6	27-MAR-96	29-MAR-96	13-APR-96
L6712-9 TEMP 4 Location: 156TMP-1 Oil 6 S 1010 IGNITABILITY	BOH8T7	27-MAR-96	29-MAR-96	13-APR-96
				Hold:05-APR-96

0010

0329596

9613471.2477

LOCKHEED ANALYTICAL SERVICES
 LOGIN CHAIN OF CUSTODY REPORT (ln01)
 Apr 03 1996, 08:00 am

Login Number: L6712
 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
* L6712-10 TEMP 4 "TCLP=M" Location: 156TMP-1	BOH8T7	27-MAR-96	29-MAR-96	13-APR-96
Oil 6 S 1311	TCLP REG. EXTR.	Hold:10-APR-96		
TCLP Extr 13 S 6010	ICP METALS	Hold:23-SEP-96		
TCLP Extr 13 S 6010	ICP TRACE	Hold:23-SEP-96		
TCLP Extr 13 S 7470	MERCURY	Hold:24-APR-96		
* L6712-11 TEMP 4 "TCLP=M" Location: 156TMP-1	BOH8T8	27-MAR-96	29-MAR-96	13-APR-96
Oil 6 S 1311	TCLP REG. EXTR.	Hold:10-APR-96		
TCLP Extr 13 S 6010	ICP METALS	Hold:23-SEP-96		
TCLP Extr 13 S 6010	ICP TRACE	Hold:23-SEP-96		
TCLP Extr 13 S 7470	MERCURY	Hold:24-APR-96		
* L6712-12 TEMP 4 "TCLP=M" Location: 156TMP-1	BOH8V0	27-MAR-96	29-MAR-96	13-APR-96
Oil 6 S 1311	TCLP REG. EXTR.	Hold:10-APR-96		
TCLP Extr 13 S 6010	ICP METALS	Hold:23-SEP-96		
TCLP Extr 13 S 6010	ICP TRACE	Hold:23-SEP-96		
TCLP Extr 13 S 7470	MERCURY	Hold:24-APR-96		
* L6712-13 TEMP 4 "TCLP=M" Location: 156TMP-1	BOH8V1	27-MAR-96	29-MAR-96	13-APR-96
Oil 6 S 1311	TCLP REG. EXTR.	Hold:10-APR-96		
TCLP Extr 13 S 6010	ICP METALS	Hold:23-SEP-96		
TCLP Extr 13 S 6010	ICP TRACE	Hold:23-SEP-96		
TCLP Extr 13 S 7470	MERCURY	Hold:24-APR-96		
* L6712-14 TEMP 4 "TCLP=M" Location: 156TMP-1	BOH8V2	27-MAR-96	29-MAR-96	13-APR-96
Oil 6 S 1311	TCLP REG. EXTR.	Hold:10-APR-96		
TCLP Extr 13 S 6010	ICP METALS	Hold:23-SEP-96		
TCLP Extr 13 S 6010	ICP TRACE	Hold:23-SEP-96		
TCLP Extr 13 S 7470	MERCURY	Hold:24-APR-96		
* L6712-15 TEMP 4 "TCLP=M" Location: 156TMP-1	BOH8V4	27-MAR-96	29-MAR-96	13-APR-96
Oil 6 S 1311	TCLP REG. EXTR.	Hold:10-APR-96		

0011
 0329596

9613471.2478

LOCKHEED ANALYTICAL SERVICES
 LOGIN CHAIN OF CUSTODY REPORT (ln01)
 Apr 03 1996, 08:00 am

Login Number: L6712
 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
TCLP Extr 13 S 6010	ICP METALS	Hold:23-SEP-96		
TCLP Extr 13 S 6010	ICP TRACE	Hold:23-SEP-96		
TCLP Extr 13 S 7470	MERCURY	Hold:24-APR-96		
* L6712-16 TEMP 4 "TCLP=M" Location: 156TMP-1	BOH8V5	27-MAR-96	29-MAR-96	13-APR-96
Oil 6 S 1311	TCLP REG. EXTR.	Hold:10-APR-96		
TCLP Extr 13 S 6010	ICP METALS	Hold:23-SEP-96		
TCLP Extr 13 S 6010	ICP TRACE	Hold:23-SEP-96		
TCLP Extr 13 S 7470	MERCURY	Hold:24-APR-96		
* L6712-17 TEMP 4 "TCLP=M" Location: 156TMP-1	BOH8V6	27-MAR-96	29-MAR-96	13-APR-96
Oil 6 S 1311	TCLP REG. EXTR.	Hold:10-APR-96		
TCLP Extr 13 S 6010	ICP METALS	Hold:23-SEP-96		
TCLP Extr 13 S 6010	ICP TRACE	Hold:23-SEP-96		
TCLP Extr 13 S 7470	MERCURY	Hold:24-APR-96		
L6712-18 Location:	REPORT TYPE	29-MAR-96	29-MAR-96	13-APR-96
Water 1 S	EDD - DISK DEL.			
Water 1 S	GERMANN			
Water 1 S	INORG TYPE 2 RPT			

* CHANGED 7000 FURNACE TO 6010 ICP TRACE
 PER K. HALL/PROJECT SUMMARY

Signature: A. Callison
 Date: 4-3-96 0012

032959

9613471.2479

LOCKHEED ANALYTICAL SERVICES
 LOGIN CHAIN OF CUSTODY REPORT (ln01)
 Mar 29 1996, 04:53 pm

Login Number: L6712
 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
L6712-1 TEMP 4 Location: 157 Oil 6 S SCREENING	BOH8T7	27-MAR-96	29-MAR-96	13-APR-96
L6712-2 TEMP 4 Location: 157 Oil 6 S SCREENING	BOH8T8	27-MAR-96	29-MAR-96	13-APR-96
L6712-3 TEMP 4 Location: 157 Oil 6 S SCREENING	BOH8V0	27-MAR-96	29-MAR-96	13-APR-96
L6712-4 TEMP 4 Location: 157 Oil 6 S SCREENING	BOH8V1	27-MAR-96	29-MAR-96	13-APR-96
L6712-5 TEMP 4 Location: 157 Oil 6 S SCREENING	BOH8V2	27-MAR-96	29-MAR-96	13-APR-96
L6712-6 TEMP 4 Location: 157 Oil 6 S SCREENING	BOH8V4	27-MAR-96	29-MAR-96	13-APR-96
L6712-7 TEMP 4 Location: 157 Oil 6 S SCREENING	BOH8V5	27-MAR-96	29-MAR-96	13-APR-96
L6712-8 TEMP 4 Location: 157 Oil 6 S SCREENING	BOH8V6	27-MAR-96	29-MAR-96	13-APR-96
L6712-9 TEMP 4 Location: 157 Oil 6 S 1010 IGNITABILITY	BOH8T7	27-MAR-96	29-MAR-96	13-APR-96 Hold:05-APR-96

9613471.2480

LOCKHEED ANALYTICAL SERVICES
 LOGIN CHAIN OF CUSTODY REPORT (ln01)
 Mar 29 1996, 04:53 pm

Login Number: L6712
 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
L6712-10 TEMP 4 "TCLP=M" Location: 157	BOH8T7	27-MAR-96	29-MAR-96	13-APR-96
Oil 6 S 1311	TCLP REG. EXTR.	Hold:10-APR-96		
TCLP Extr 13 S 6010	ICP METALS	Hold:23-SEP-96		
TCLP Extr 13 S 7000	FURNACE METALS	Hold:23-SEP-96		
TCLP Extr 13 S 7470	MERCURY	Hold:24-APR-96		
L6712-11 TEMP 4 "TCLP=M" Location: 157	BOH8T8	27-MAR-96	29-MAR-96	13-APR-96
Oil 6 S 1311	TCLP REG. EXTR.	Hold:10-APR-96		
TCLP Extr 13 S 6010	ICP METALS	Hold:23-SEP-96		
TCLP Extr 13 S 7000	FURNACE METALS	Hold:23-SEP-96		
TCLP Extr 13 S 7470	MERCURY	Hold:24-APR-96		
L6712-12 TEMP 4 "TCLP=M" Location: 157	BOH8V0	27-MAR-96	29-MAR-96	13-APR-96
Oil 6 S 1311	TCLP REG. EXTR.	Hold:10-APR-96		
TCLP Extr 13 S 6010	ICP METALS	Hold:23-SEP-96		
TCLP Extr 13 S 7000	FURNACE METALS	Hold:23-SEP-96		
TCLP Extr 13 S 7470	MERCURY	Hold:24-APR-96		
L6712-13 TEMP 4 "TCLP=M" Location: 157	BOH8V1	27-MAR-96	29-MAR-96	13-APR-96
Oil 6 S 1311	TCLP REG. EXTR.	Hold:10-APR-96		
TCLP Extr 13 S 6010	ICP METALS	Hold:23-SEP-96		
TCLP Extr 13 S 7000	FURNACE METALS	Hold:23-SEP-96		
TCLP Extr 13 S 7470	MERCURY	Hold:24-APR-96		
L6712-14 TEMP 4 "TCLP=M" Location: 157	BOH8V2	27-MAR-96	29-MAR-96	13-APR-96
Oil 6 S 1311	TCLP REG. EXTR.	Hold:10-APR-96		
TCLP Extr 13 S 6010	ICP METALS	Hold:23-SEP-96		
TCLP Extr 13 S 7000	FURNACE METALS	Hold:23-SEP-96		
TCLP Extr 13 S 7470	MERCURY	Hold:24-APR-96		
L6712-15 TEMP 4 "TCLP=M" Location: 157	BOH8V4	27-MAR-96	29-MAR-96	13-APR-96
Oil 6 S 1311	TCLP REG. EXTR.	Hold:10-APR-96		

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LOCKHEED ANALYTICAL SERVICES
 LOGIN CHAIN OF CUSTODY REPORT (ln01)
 Mar 29 1996, 04:53 pm

Login Number: L6712

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
TCLP Extr 13 S 6010	ICP METALS	Hold:23-SEP-96		
TCLP Extr 13 S 7000	FURNACE METALS	Hold:23-SEP-96		
TCLP Extr 13 S 7470	MERCURY	Hold:24-APR-96		
L6712-16	BOH8V5	27-MAR-96	29-MAR-96	13-APR-96
TEMP 4	"TCLP=M"			
Location: 157				
Oil 6 S 1311	TCLP REG. EXTR.	Hold:10-APR-96		
TCLP Extr 13 S 6010	ICP METALS	Hold:23-SEP-96		
TCLP Extr 13 S 7000	FURNACE METALS	Hold:23-SEP-96		
TCLP Extr 13 S 7470	MERCURY	Hold:24-APR-96		
L6712-17	BOH8V6	27-MAR-96	29-MAR-96	13-APR-96
TEMP 4	"TCLP=M"			
Location: 157				
Oil 6 S 1311	TCLP REG. EXTR.	Hold:10-APR-96		
TCLP Extr 13 S 6010	ICP METALS	Hold:23-SEP-96		
TCLP Extr 13 S 7000	FURNACE METALS	Hold:23-SEP-96		
TCLP Extr 13 S 7470	MERCURY	Hold:24-APR-96		
L6712-18	REPORT TYPE	29-MAR-96	29-MAR-96	13-APR-96
Location:				
Water 1 S	EDD - DISK DEL.			
Water 1 S	GERMANN			
Water 1 S	INORG TYPE 2 RPT			

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Signature: Paul DavisDate: 3-29-96 0015

0329596

Bechtel Hanford, Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

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Data Turnaround

Priority
 Normal

Collector <i>Doug Bowers</i>	Company Contact W. S. Thompson	Telephone (509) 376-8031
Project Designation 181-N & 182-N Used Oil Waste Designation	Sampling Location 190-N 100N Area	SAF No. B96-098
Ice Chest No. <i>SML 527</i>	Field Logbook No. <i>EFL 1133-1</i>	Method of Shipment AIR
Shipped To Lockheed	Offsite Property No. <i>W96-0-0640-36</i>	Bill of Lading/Air Bill No. <i>290 4654 067</i>

Possible Sample Hazards/Remarks	Preservation	None	None	None															
Samples are oil samples for analysis.	Type of Container	G	G	G/P															
	No. of Container(s)	1	1	1															
Special Handling and/or Storage	Volume	125 ml.	250 ml.	20 ml															
SAMPLE ANALYSIS		EPA 1010 Ignitability	TCLP Metals (see Note #1)	Activity Scan															

Sample No.	Matrix*	Date Sampled	Time Sampled																
BOH8V5	OIL	3/27/96	1002		X	X													
BOH8V6	OIL	3/27/96	1055		X	X													

CHAIN OF POSSESSION	Sign/Print Names	SPECIAL INSTRUCTIONS	Matrix*
Relinquished By <i>Doug Bowers</i>	Date/Time 3-27-96/1431	Received By <i>K. Mapp/K. Trapp</i>	Date/Time 3/27/96
Relinquished By <i>K. Mapp/K. Trapp</i>	Date/Time 3/28/96 1130	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Note 1: Metals by ICP (TCLP) - 1311/6010A, Barium, Cadmium, Chromium, Silver; Arsenic (TCLP) - 1311/7060; Lead (TCLP) - 1311/7420; Selenium (TCLP) - 1311/7740; Mercury (TCLP) - 1311/7470.

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 <i>Paul Davis</i>	Title <i>Sample Custodian</i>	Date/Time <i>3-29-96/14:45</i>
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

06959C
0016

9613171
2482

Bechtel Hanford, Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

L6712

Page ___ of ___

Data Turnaround

Priority
 Normal

Collector Doug Bowers	Company Contact W. S. Thompson	Telephone (509) 376-8031
Project Designation 181-N & 182-N Used Oil Waste Designation	Sampling Location 190-N 100N Area	SAF No. B96-098
Ice Chest No. SML 527	Field Logbook No. EFL 1133-1	Method of Shipment AIR
Shipped To Lockheed	Offsite Property No. W96-0-0640-36	Bill of Lading/Air Bill No. 290 4654 067

Possible Sample Hazards/Remarks	Preservation	None	None	None
Samples are oil samples for analysis.	Type of Container	G	G	G/P
	No. of Container(s)	1	1	1
Special Handling and/or Storage	Volume	125 ml.	250 ml.	20 ml

SAMPLE ANALYSIS	EPA 1010 Ignitability	TCLP Metals (see Note #1)	Activity Scan

Sample No.	Matrix*	Date Sampled	Time Sampled										
BOH8T7	OIL	3/27/96	0812	X	X	X							
BOH8T8	OIL	3/27/96	0830		X	X							
BOH8V0	OIL	3/27/96	0850		X	X							
BOH8V1	OIL	3/27/96	0908		X	X							
BOH8V2	OIL	3/27/96	0935		X	X							
BOH8V4	OIL	3/27/96	1002		X	X							

CHAIN OF POSSESSION	Sign/Print Names	SPECIAL INSTRUCTIONS	Matrix*
Relinquished By <i>Doug Bowers</i>	Date/Time 3-27-96/1431	Received By <i>K. Trapp</i>	Date/Time 3/27/96
Relinquished By <i>K. Trapp</i>	Date/Time 3/28/96 1125	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Note 1: Metals by ICP (TCLP) - 1311/6010A, Barium, Cadmium, Chromium, Silver; Arsenic (TCLP) - 1311/7060; Lead (TCLP) - 1311/7420; Selenium (TCLP) - 1311/7740; Mercury (TCLP) - 1311/7470.

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 <i>Paula Davis</i>	Title Sample Custodian	Date/Time 3-29-96/14:45
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

0329596
017

0613471-2983

Customer ID: BOH8T7
 Lab Sample#: S96E000331

Sample Date: 03/27/96 08:12
 Recv. Date: 03/27/96 14:07

PARAMETER	RESULTS	UNITS
Total Activity by LSC	13.1	%Uncertainty
Total Act. by LSC: % Uncert.		
Total Activity by LSC (Solid)	< 8.19e-6	uCi/g

Customer ID: BOH8T8
 Lab Sample#: S96E000332

Sample Date: 03/27/96 08:30
 Recv. Date: 03/27/96 14:07

PARAMETER	RESULTS	UNITS
Total Activity by LSC	16.1	%Uncertainty
Total Act. by LSC: % Uncert.		
Total Activity by LSC (Solid)	< 8.94e-6	uCi/g

Customer ID: BOH8V0
 Lab Sample#: S96E000334

Sample Date: 03/27/96 08:50
 Recv. Date: 03/27/96 14:07

PARAMETER	RESULTS	UNITS
Total Activity by LSC	3.4	%Uncertainty
Total Act. by LSC: % Uncert.		
Total Activity by LSC (Solid)	< 1.74e-6	uCi/g

Customer ID: BOH8V1
 Lab Sample#: S96E000335

Sample Date: 03/27/96 09:08
 Recv. Date: 03/27/96 14:07

PARAMETER	RESULTS	UNITS
Total Activity by LSC	11.2	%Uncertainty
Total Act. by LSC: % Uncert.		
Total Activity by LSC (Solid)	1.82e-5	uCi/g

Customer ID: BOH8V2
 Lab Sample#: S96E000336

Sample Date: 03/27/96 09:35
 Recv. Date: 03/27/96 14:07

PARAMETER	RESULTS	UNITS
Total Activity by LSC	7.38	%Uncertainty
Total Act. by LSC: % Uncert.		
Total Activity by LSC (Solid)	1.98e-4	uCi/g

Customer ID: BOH8V4
 Lab Sample#: S96E000338

Sample Date: 03/27/96 10:00
 Recv. Date: 03/27/96 14:07

PARAMETER	RESULTS	UNITS
Total Activity by LSC	18.26	%Uncertainty
Total Act. by LSC: % Uncert.		
Total Activity by LSC (Solid)	< 1.07e-5	uCi/g

VALIDATED RESULTS SHORT REPORT

28 Mar 1

Customer ID: BOH8V5
Lab Sample#: S96E000339

Sample Date: 03/27/96 10:0
Recv. Date: 03/27/96 14:0

PARAMETER	RESULTS	UNITS
-----	-----	-----
Total Activity by LSC		
Total Act. by LSC: % Uncert.	16.5	%Uncertainty
Total Activity by LSC (Solid)	< 1.73e-5	uCi/g

Customer ID: BOH8V6
Lab Sample#: S96E000340

Sample Date: 03/27/96 10:5
Recv. Date: 03/27/96 14:0

PARAMETER	RESULTS	UNITS
-----	-----	-----
Total Activity by LSC		
Total Act. by LSC: % Uncert.	12.1	%Uncertainty
Total Activity by LSC (Solid)	< 1.01E-5	uCi/g

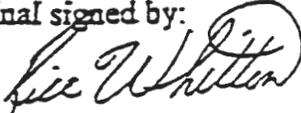
0019

0329594

NON-RADIOLOGICAL SHIPMENT RELEASE

The contents of this shipment # W96-0-0640-36 have been reviewed and contains no radioactive material and therefore, are not subject to radiological control requirements.

Original signed by:



Kris A. Smith, Manager
Project Radiological Controls

SAMPLE CHECK-IN LIST

Date/Time Received: 3-29-96 / 14:35

SDG#: NIA

Work Order Number: NIA

SAF #: 356-098

Shipping Container ID: 5ml 537

Chain of Custody #: NIA

- 1. Custody Seals on shipping container intact? Yes No
- 2. Custody Seals dated and signed? Yes No
- 3. Sample temperature 40
- 4. Vermiculite/packing materials is Wet Dry
- 5. Each sample is in a plastic bag? Yes No
- 6. Sample holding times exceeded? Yes No

7. Samples have:

tape hazard labels

custody seals appropriate sample labels

8. Samples are:

in good condition leaking

broken have air bubbles

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

Yes No

Notes: _____

Sample Custodian/Laboratory: Paul Dones/LAS Date: 3-29-96

Faxed

Telephoned To: Agnes Hall On 3-29-96 By Paul Dones

Pw 3-29-96

LOCKHEED MARTIN

**Sample Login
Login Review Checklist**

Lot Number L6712

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 from 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

	<u>YES</u>	<u>NO</u>	<u>N/A</u>	<u>Comment</u>
1. Are all sample ID's correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. Are all samples present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Are all matrices indicated correctly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. Are all analyses on the COC logged in for the appropriate samples?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. Are all analyses logged in for the correct container?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6. Are samples logged in according to LAS batching procedures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

LOGIN CHAIN OF CUSTODY

	<u>YES</u>	<u>NO</u>	<u>N/A</u>	<u>Comment</u>
1. Are the collect, receive, and due dates correct for every sample?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. Have all appropriate comments been indicated in the comment section?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

SAMPLE RECEIVING CHECKLIST

	<u>YES</u>	<u>NO</u>	<u>N/A</u>	<u>Comment</u>
1. Are all discrepancies between the COC and the login noted (if applicable)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____

Paula Davis 3-29-26
primary review signature date

A. K. Miller
secondary review signature

3-29-2022
date

0329596

**Lockheed Analytical Services
Sample Receiving Checklist**

Client Name: *Bechtel Hanford*

Job No. *L6712*

Cooler ID: *N/A*

COOLER CONDITION UPON RECEIPT

Temperature of cooler upon receipt: *42*
 temperature of temp. blank upon receipt: *—*

	Yes	No	* Comments/Discrepancies
custody seals intact	<input checked="" type="checkbox"/>		
chain of custody present	<input checked="" type="checkbox"/>		
blue ice (or equiv.) present/frozen	<input checked="" type="checkbox"/>		
rad survey completed	<input checked="" type="checkbox"/>		

SAMPLE CONDITION UPON RECEIPT

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

MISCELLANEOUS ITEMS

	Yes	No	* Comments/Discrepancies
samples with short holding times		<input checked="" type="checkbox"/>	
samples to subcontract			<i>N/A</i>

ADDITIONAL COMMENTS/DISCREPANCIES

Completed by / date: *Paul Owens 3-29-96*

Sent to the client (date/initials): *Paul Owens* ♦♦ 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

9613471.2489

0329596
003300

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

Client Sample Number	LAL Sample Number	SDG Number	Matrix	Method
BOH8T7 -	L6712-1		Oil	SCREENING -
	L6712-9		Oil	1010 IGNITABILITY
	L6712-10		Oil	1311 TCLP REG. I
	L6712-10		TCLP Extr	6010 ICP METALS
	L6712-10		TCLP Extr	7000 FURNACE ME
	L6712-10		TCLP Extr	7470 MERCURY -
BOH8T8 -	L6712-2		Oil	SCREENING -
	L6712-11		Oil	1311 TCLP REG. I
	L6712-11		TCLP Extr	6010 ICP METALS
	L6712-11		TCLP Extr	7000 FURNACE ME
	L6712-11		TCLP Extr	7470 MERCURY-
BOH8V0 -	L6712-3		Oil	SCREENING -
	L6712-12		Oil	1311 TCLP REG. I
	L6712-12		TCLP Extr	6010 ICP METALS
	L6712-12		TCLP Extr	7000 FURNACE ME
	L6712-12		TCLP Extr	7470 MERCURY -
BOH8V1 -	L6712-4		Oil	SCREENING -
	L6712-13		Oil	1311 TCLP REG. I
	L6712-13		TCLP Extr	6010 ICP METALS
	L6712-13		TCLP Extr	7000 FURNACE ME
	L6712-13		TCLP Extr	7470 MERCURY -
BOH8V2 -	L6712-5		Oil	SCREENING -
	L6712-14		Oil	1311 TCLP REG. I
	L6712-14		TCLP Extr	6010 ICP METALS
	L6712-14		TCLP Extr	7000 FURNACE ME
	L6712-14		TCLP Extr	7470 MERCURY -
BOH8V4 -	L6712-6		Oil	SCREENING -
	L6712-15		Oil	1311 TCLP REG. I
	L6712-15		TCLP Extr	6010 ICP METALS
	L6712-15		TCLP Extr	7000 FURNACE ME
	L6712-15		TCLP Extr	7470 MERCURY -
BOH8V5 -	L6712-7		Oil	SCREENING -
	L6712-16		Oil	1311 TCLP REG. I
	L6712-16		TCLP Extr	6010 ICP METALS
	L6712-16		TCLP Extr	7000 FURNACE ME
	L6712-16		TCLP Extr	7470 MERCURY-
BOH8V6 -	L6712-8		Oil	SCREENING -
	L6712-17		Oil	1311 TCLP REG. I
	L6712-17		TCLP Extr	6010 ICP METALS
	L6712-17		TCLP Extr	7000 FURNACE ME
	L6712-17		TCLP Extr	7470 MERCURY -
REPORT TYPE -	L6712-18		Water	EDD - DISK DEL.
	L6712-18		Water	GERMANN
	L6712-18		Water	INORG TYPE 2 RP

9613471.2491

LOCKHEED ANALYTICAL SERVICES

Sample Results

Client Sample ID: BOH8T7	Date Collected: 27-MAR-96
Matrix: Oil	Date Received: 29-MAR-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. C	1010	0.00	N/A	NO FLASH	03-APR-96	35495	L6712-9

0026

