



H1593

0056947

Analytical Report

Client: TNU HANFORD B02-004
LVL#: 0111L331
SDG/SAF#: H1593/B02-004

W.O.#: 11343-606-001-9999-00
Date Received: 11-13-01

PESTICIDE

One (1) water sample was collected on 11-12-01.

The sample and its associated QC samples were extracted on 11-14-01 and analyzed according to Lionville Laboratory OPs based on SW846, 3rd Edition procedures on 12-01,02-01. The extraction procedure was based on method 3520 and the extracts were analyzed based on method 8081.

The following is a summary of the QC results accompanying the sample results and a description of any problems encountered during their analyses:

1. The cooler temperature has been recorded on the chain-of-custody.
2. All required holding times for extraction and analysis have been met.
3. The method blank was below the reporting limits for all target compounds.
4. All surrogate recoveries were within acceptance criteria.
5. The blank spike recovery was within acceptance criteria.
6. All matrix spike recoveries were within acceptance criteria.
7. All initial calibrations associated with this data set were within acceptance criteria.
8. All continuing calibration standards analyzed prior to sample extracts were within acceptance criteria, with the exception of target compounds 4,4-DDD and 4,4-DDE analyzed on 12-01-01 at 15:21 and 16:10 on both columns. The data reflected an increase in instrument response, so the ability to identify the spiked compounds was not impaired. A copy of the Sample Discrepancy Report (SDR) has been enclosed.
9. I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, 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.

RECEIVED
APR 19 2002
EDMC


Iain Daniels
Deputy Laboratory Manager
Lionville Laboratory Incorporated

12/15/01
Date

pefr:\group\data\pest\11L-331.pes

The results presented in this report relate only to the analytical testing and conditions of the samples at receipt and during storage. All pages of this report are integral parts of the analytical data. Therefore, this report should only be reproduced in its entirety of 7 pages.

Lionville Laboratory Sample Discrepancy Report (SDR)

SDR #: 0166522

Initiator: Mikabel Batch: 0111L331 Parameter: 0608X
 Date: 12/4/01 Samples: 001, MS, MSD Matrix: Water
 Client: TNU Method: SW846/MCAWW/CLPI Prep Batch: 01LE136Y

1. Reason for SDR

a. COC Discrepancy Tech Profile Error Client Request Sampler Error on C-O-C
 Transcription Error Wrong Test Code Other _____

b. General Discrepancy

Missing Sample/Extract* Container Broken Wrong Sample Pulled Label ID's Illegible
 Hold Time Exceeded Insufficient Sample* Preservation Wrong Received Past Hold
 Improper Bottle Type Not Amenable to Analysis

Note*: Verified by [Log-In] or [Prep Group] (circle)...signature/date: _____

c. Problem (Include all relevant specific results; attach data if necessary)

increased PDD and DDE on both columns prior to samples. Samples clean of targets.

2. Known or Probable Causes(s)

3. Discussion and Proposed Action

Other Description: *Narrate.*

- Re-log
- Entire Batch
- Following Samples: _____
- Re-leach
- Re-extract
- Re-digest
- Revise EDD
- Change Test Code to _____
- Place On/Take Off Hold (circle)

4. Project Manager Instructions...signature/date:

[Signature] 12/5/01

- Concur with Proposed Action
- Disagree with Proposed Action; See Instruction
- Include in Case Narrative
- Client Contacted:
- Date/Person _____
- Add
- Cancel

5. Final Action...signature/date:

Other Explanation:

- Verified re-[log][leach][extract][digest][analysis] (circle)
- Included in Case Narrative
- Hard Copy COC Revised
- Electronic COC Revised
- EDD Corrections Completed

When Final Action has been recorded, forward original to QA Specialist for distribution and filing.

Route	Distribution of Completed SDR	Route	Distribution of Completed SDR
<input checked="" type="checkbox"/>	X Initiator	<input type="checkbox"/>	Metals: Beegle
<input checked="" type="checkbox"/>	X Lab General Manager: M. Taylor	<input type="checkbox"/>	Inorganic: Perrone
<input checked="" type="checkbox"/>	X Project Mgr: Stone/Johnson/Haslett	<input type="checkbox"/>	GC/LC: Kiger
<input checked="" type="checkbox"/>	X Technical Mgr: Wesson/Daniels	<input type="checkbox"/>	MS: Rychlak/Layman
<input checked="" type="checkbox"/>	X QA (file): Alberts	<input type="checkbox"/>	Log-in: Keppel
<input type="checkbox"/>	Data Management: Feldman	<input type="checkbox"/>	Admin: Soos
<input type="checkbox"/>	Sample Prep: Beegle/Kiger	<input type="checkbox"/>	Other: _____



GLOSSARY OF PESTICIDE/PCB DATA

DATA QUALIFIERS

- U** = Indicates that the compound was analyzed for but not detected. The minimum detection limit for the sample (not the method detection limit) is reported with the U (e.g., 10U).
- J** = Indicates an estimated value. This flag is used in cases where a target analyte is detected at a level less than the lower quantification level. If the limit of quantification is 10 ug/L and a concentration of 3 ug/L is calculated, it is reported as 3J.
- B** = This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination.
- E** = Indicates that the compound was detected beyond the calibration range and was subsequently analyzed at a dilution.
- I** = Interference.

ABBREVIATIONS

- BS** = Indicates blank spike in which reagent grade water is spiked with the CLP matrix spiking solutions and carried through all the steps in the method. Spike recoveries are reported.
- BSD** = Indicates blank spike duplicate.
- MS** = Indicates matrix spike.
- MSD** = Indicates matrix spike duplicate.
- DL** = Indicates that recoveries were not obtained because the extract had to be diluted for analysis.
- NA** = Not Applicable.
- DF** = Dilution Factor.
- NR** = Not Required.
- SP** = Indicates Spiked Compound.



GLOSSARY OF PESTICIDE/PCB DATA

- P** = This flag is used for an PESTICIDE/PCB target analyte when there is greater than 25% difference for detected concentrations between the two GC columns (see Form X). The lower of the two values is reported on Form 1 and flagged with a "P".
- D** = This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- C** = This flag applies to a compound that has been confirmed by GC/MS.

Cust ID: B139F4 B139F4 B139F4 PBLKWT PBLKWT BS
 Sample Information: RFW#: 001 001 MS 001 MSD 01LE1364-MB1 01LE1364-MB1
 Matrix: WATER WATER WATER WATER WATER
 D.F.: 1.00 1.00 1.00 1.00 1.00
 Units: ug/L ug/L ug/L ug/L ug/L

Surrogate:	Decachlorobiphenyl	Tetrachloro-m-xylene	91 %	98 %	75 %	95 %	101 %	92 %	93 %	85 %	88 %	88 %
4,4'-DDE	0.10	U	U	U	0.10	U	0.10	U	0.10	U	0.10	U
4,4'-DDD	0.10	U	U	0.10	U	0.10	0.10	U	0.10	U	0.10	U
4,4'-DDT	0.10	U	U	100 %	U	114 %	U	U	0.10	U	106 %	U

12-4-01
 [Signature]

U= Analyzed, not detected. J= Present below detection limit. B= Present in blank. NR= Not reported. NS= Not spiked.
 %= Percent recovery. D= Diluted out. I= Interference. NA= Not Applicable. *= Outside of EPA CLP GC

0111L331



FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

A-B

Client TNU-HANFORD B02-004

Est. Final Proj. Sampling Date 11-13-01 606-001-9999-00

Project # 11343-606-001-9999-00

Project Contact/Phone # OT

Lionville Laboratory Project Manager OT

QC Spec Del STO TAT 30 days

Date Rec'd 11-13-01 Date Due 12-13-01

Refrigerator #	Liquid	
	Solid	
#/Type Container	Liquid	
	Solid	
Volume	Liquid	
	Solid	
Preservatives		
ANALYSES REQUESTED	VOA	
	BNA	
ORGANIC	Pest/POB	
	Herb	
Metal	INORG	
	CN	

MATRIX CODES:	Lab ID	Client ID/Description	Matrix QC Chosen (✓)		Matrix Collected	Date Collected	Time Collected	MIS	MSD	W	M	S	SE	SL	W	O	A	DL	L	WI	X	F			
			✓	✓																					
	D01	B139F4	✓	✓		11/22/01	0820																		

Special Instructions: SAFE # B02-004

DATE/REVISIONS: 0608x 1. 4.4.DDD : 4.4.DDE - 4.4.DDT

Relinquished by <u>Edex</u>	Received by <u>Edex</u>	Date <u>11-13-01</u>	Time <u>0945</u>
-----------------------------	-------------------------	----------------------	------------------

Relinquished by	Received by	Date	Time

COMPOSITE ORIGINAL

WASTE REWRITTEN

Discrepancies Between Samples Labels and COC Record? Y or N

NOTES:

Lionville Laboratory Use Only

Samples were: or

1) Shipped Hand Delivered or N

Airbill # 215

2) Ambient or N

3) Received in Good Condition or N

4) Samples Properly Preserved or N

5) Received Within Holding Times or N

Tamper Resistant Seal was: or N

1) Present on Outer Package or N

2) Unbroken on Outer Package or N

3) Present on Sample or N

4) Unbroken on Sample or N

COC Record Present Upon Sample Rec't or N

Cooler Temp. 2.3 °C