Table Of Contents

ANALYSIS: Pesticides METHOD NO.: 8081B

ARDL Report(s) #: 6555 + 6556 MATRIX: Octopus

	PAGE
Organic Package Review Checklist	2
Case Narrative and/or Nonconformance Reports	5
Chain of Custody Information	8
Field Sample Form 1s	14
QC Summary Forms	39
Sample Preparation Information	46
Standard Preparation Information	68
Analytical Run Data	90
Example Calculation	355
Miscellaneous Additional Data	357

	By:	Date:
Package Preparation	lao	11-14-13
Analytical Review	BT	11/04/13
Final Review	[illegible]	11/19/13
QA Review	ASD	11/26/13

Rev. 1.0

Organic Package Review Checklist

Rev. 1.0

ORGANIC PACKAGE REVIEW CHECKLIST

METHOD: 8081B

	Initial	Date
Case Narrative and/or Nonconformance Reports		
Case Narrative / Analyst Comment Sheets	BT	11/15/13
Nonconformance / Noncompliance Reports (if applicable)	NA	
Chain-Of-Custody Information		
Copies of Original Chain-of-Custody Forms	BT	11/15/13
Cooler Receipt Form and Airbills	↓	↓
Phone Messages (If applicable)	↓	↓
Sample Form 1s	BT	11/15/13
QC Summary Forms		
Form 2 (Surrogate Summary, if applicable)	NA	
Form 3 (Spike and/or MS Summary, if applicable)	BT	11/15/13
Blank Form 1(s) & Form 4 (Blank Summary, if applicable)	↓	↓
Form 8 (ISTD Area Summary, if applicable)	NA	
Sample Preparation Information (if applicable)		
Total Solids Determination (If applicable)	NA	
Extraction Log (If applicable)	BT	11/15/13
Extraction Notebook Pages (If applicable)	↓	↓
Spiking Solutions Notebook Pages	↓	↓
MS/MSD's	↓	↓
Surrogate/ISTDs	↓	↓
Spiking Solutions Certificates Of Analyses	↓	↓
MS/MSD's	↓	↓
Surrogates/ISTDs	↓	↓
Certificates of Analysis (Vendor)	↓	↓
Standard Preparation Information		
Instrument Logs/Analysis Notebook Pages	BT	11/15/13
Certificates of Analysis (Vendor)	↓	↓
Analytical Run Number 1		
Calibration Information	BT	11/15/13
Tune Data	↓	↓
Initial Calibration	↓	↓
Continuing Calibration	↓	↓
Instrument Logs/Analysis Notebook Pages	↓	↓
Blank/Sample/Field QC Data	↓	↓
Analytical Run Number 2 (if required)		
Calibration Information	NA	
Tune Data	↓	↓
Initial Calibration	↓	↓
Continuing Calibration	↓	↓
Instrument Logs/Analysis Notebook Pages	↓	↓
Blank/Sample/Field QC Data	↓	↓

Rev. 1.0

ORGANIC PACKAGE REVIEW CHECKLIST (Continued)

METHOD: 8081B

	Initial	Date
Analytical Run Number 3 (if required)		
Calibration Information	NA	
Tune Data		
Initial Calibration		
Continuing Calibration		
Instrument Logs/Analysis Notebook Pages		
Blank/Sample/Field QC Data		
Analytical Run Number 4 (if required)		
Calibration Information		
Tune Data		
Initial Calibration		
Continuing Calibration		
Instrument Logs/Analysis Notebook Pages		
Blank/Sample/Field QC Data		
Analytical Run Number 5 (if required)		
Calibration Information		
Tune Data		
Initial Calibration		
Continuing Calibration		
Instrument Logs/Analysis Notebook Pages		
Blank/Sample/Field QC Data		
Analytical Run Number 6 (if required)		
Calibration Information		
Tune Data		
Initial Calibration		
Continuing Calibration		
Instrument Logs/Analysis Notebook Pages		
Blank/Sample/Field QC Data		
Example Calculation		
Example Calculation Sheet	BJ	11/15/13
Miscellaneous Additional Data (if applicable)	BJ	11/15/13

NA = Not Applicable

I have checked this package for completeness and verify the following:

1. Pencils, whiteout, whiteout tape, and dark highlighters were not used. — y
2. All notebook pages are signed.
3. All corrections contain the original data "struck through" with initials and date.
4. All comments found throughout the data are defined as required.
5. All pages are legible.
6. Manual integrations, if applicable, are printed out and include an explanation with signature of the analyst and date.

Package Completeness Checked By/Date: BJ 11/15/13

Rev. 1.0

Case Narrative and/or Nonconformance Reports

Rev. 1.0

ORGANIC ANALYSIS CASE NARRATIVE

Corps of Engineers – ERDC, Vicksburg **Date: 11/21/13**

ARDL Report No.: 6555, 6556 **Lab Name: ARDL, Inc.**

Project Name: MAKAU MILITARY RESERVATION OAHU (OCTOPUS)

Samples Received at ARDL: 10/23/2013

Lab ID No.	Sample ID No.	Date Collected	Date Extracted	Analysis Requested
006555-01	MAK001O	09/09/2013	10/30/13	OCP
006555-02	MAK002O	09/09/2013	10/30/13	OCP
006555-03	MAK003O	09/09/2013	10/30/13	OCP
006555-04	MAK004O	09/11/2013	10/30/13	OCP
006555-05	MAK005O	09/11/2013	10/30/13	OCP
006555-06	MAK006O	09/11/2013	10/30/13	OCP
006555-07	MAK021O	09/23/2013	10/30/13	OCP
006555-08	MAK008O	09/11/2013	10/30/13	OCP
006555-09	MAK009O	09/13/2013	10/30/13	OCP
006555-10	MAK010O	09/16/2013	10/30/13	OCP
006555-11	MAK011O	09/16/2013	10/30/13	OCP
006555-12	MAK012O	09/22/2013	10/30/13	OCP
006555-13	MAK013O	09/22/2013	10/30/13	OCP
006555-14	MAK014O	09/23/2013	10/31/13	OCP
006555-15	MAK015O	09/22/2013	10/31/13	OCP
006555-16	MAK016O	09/22/2013	10/31/13	OCP
006555-17	MAK017O	09/22/2013	10/31/13	OCP
006555-18	MAK018O	09/22/2013	10/31/13	OCP
006555-19	MAK019O	09/23/2013	10/31/13	OCP
006555-20	MAK020O	09/23/2013	10/31/13	OCP
006556-01	MAK007O	09/11/2013	10/31/13	OCP
006556-02	MAK022O	09/23/2013	10/31/13	OCP
006556-03	MAK023O	09/23/2013	10/31/13	OCP
006556-04	MAK024O	09/27/2013	10/31/13	OCP

ORGANOCHLORINE PESTICIDES FRACTION – METHOD 8081B

Twenty five (25) tissue (octopus) samples were received by ARDL, Inc. on October 23, 2013, for OCP analysis. One sample, MB-SO-HEE000-TEST, was provided for evaluation of test methods only. An abbreviated target list was requested for these analyses.

Due to sample matrix, 5.0 grams of sample were extracted. Method detection and reporting limits have been adjusted accordingly.

All samples were put through the Gel Permeation Cleanup procedure.

INITIAL CALIBRATION

The initial calibration was performed using a minimum of five (5) calibration points and met all criteria.

CONTINUING CALIBRATION

Continuing calibration was performed after the analysis of 10 samples or less. All calibration criteria were met.

SURROGATES

These samples were spiked with surrogate at a level of 40 ug/Kg. All samples met surrogate recovery criteria.

ORGANIC ANALYSIS CASE NARRATIVE

Corps of Engineers – ERDC, Vicksburg **Date: 11/21/13**

ARDL Report No.: 6555, 6556 **Lab Name: ARDL, Inc.**

Project Name: MAKAU MILITARY RESERVATION OAHU (OCTOPUS)

Samples Received at ARDL: 10/23/2013

INTERNAL STANDARD

Not applicable.

LCS

The LCS samples were spiked at a concentration of 40 ug/Kg. The LCS samples met recovery criteria.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The MS/MSD performed on samples MAK006O and MAK007O were spiked at a concentration of 40 ug/Kg. The MS/MSD met recovery criteria.

METHOD BLANKS

No target analytes were detected in the method blank above the method limit.

ORGANIC DATA REPORTING QUALIFIERS

The following organic data reporting qualifiers are used as required.

ND- Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. This flag is used when estimating a concentration of a compound that meets identification criteria but the result is less than the quantitation or reporting limit but greater than the method detection limit.

P - This flag is used for any two column confirmation methodology when there is greater than 40% difference for detected concentrations between the two columns. The primary column value is reported on the Form 1 and flagged with a "P".

B - This flag is used when the analyte is found above the reporting limit in the blank as well as the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Release of the data contained in this package has been authorized by the Technical Services Manager or his designee as verified by the following signature.

Dean S. Dickerson
Technical Services Manager

Chain-Of-Custody Information

Original in 6556 dlc 10-23-13

ARDL, Inc

P.O. Box 1566, 400 Aviation Drive, Mount Vernon, Illinois 62864
Phone (618) 244-3235, Fax (618) 244-1149

CHAIN OF CUSTODY RECORD

Project
ARDL / Makau Military Reservation Oahu, Hawaii Project

SAMPLERS (Signature)

SAMPLE NUMBER	DATE	TIME	Comp	Grab	# of Containers	Purgeable Organics 8260B	Explosives 8330	OCPs 8081	SVCOs 8270C	Continuous Sect								ARDL, Inc Remarks or Sample Location	PRESERVATION ICED	Specify Chemicals added and final pH if known
MAK009O	9/13/2013	1248		x	1	x	x	x	x	/								Octopus	x	
MAK010O	9/16/2013	1025		x	1	x	x	x	x	/								Octopus	x	
MAK011O	9/16/2013	1110		x	1	x	x	x	x	/								Octopus	x	
MAK012O	9/22/2013	1315		x	1	x	x	x	x	/								Octopus	x	
MAK013O	9/22/2013	1400		x	1	x	x	x	x	/								Octopus	x	
MAK014O	9/23/2013	820		x	1	x	x	x	x	/								Octopus	x	
MAK015O	9/22/2013	830		x	1	x	x	x	x	/								Octopus	x	
MAK016O	9/22/2013	1115		x	1	x	x	x	x	/								Octopus	x	
MAK017O	9/22/2013	1140		x	1	x	x	x	x	/								Octopus	x	
MAK018O	9/22/2013	1206		x	1	x	x	x	x	/								Octopus	x	
MAK019O	9/23/2013	833		x	1	x	x	x	x	/								Octopus	x	
MAK020O	9/23/2013	855		x	1	x	x	x	x	/								Octopus	x	
MAK021O	9/23/2013	927		x	1	x	x	x	x	/								Octopus	x	
MAK022O	9/23/2013	1020		x	1	x	x	x	x	/								Octopus	x	
MAK023O	9/23/2013	1136		x	1	x	x	x	x	/								Octopus	x	
MAK024O	9/27/2013	828		x	1	x	x	x	x	/								Octopus	x	
Trip Blank	10/8/2013			x	2	x													x	
Temp Blank																			x	

6555 dlc 10-23-13

6556

Relinquished by: (Signature)	Date	Time	Relinquished by: (Signature)
	10/22/13	1600	
Relinquished by: (Signature)	Date	Time	Relinquished by: (Signature)
Received for Laboratory by: (Signature)	Date	Time	Shipping Ticket No.
	10/23/13	0910	

REMARKS / SPECIAL INSTRUCTIONS:

Test samples - please process this group before or with the accompanying project samples.

Please send level 4 hardcopy report and excel edd to: Dean Dickerson, c/o ARDL, Inc. 400 Aviation Drive, Mount Vernon, IL 62864. Email questons to ddickerson@ardlinc.com.

original in 6556
dlc
10-23-13

ARDL, Inc

P.O. Box 1566, 400 Aviation Drive, Mount Vernon, Illinois 62864
Phone (618) 244-3235, Fax (618) 244-1149

CHAIN OF CUSTODY RECORD

Project
ARDL / Makau Military Reservation Oahu, Hawaii Project

SAMPLERS (Signature)

SAMPLE NUMBER	DATE	TIME	Comp	Grab	# of Containers	Purgeable Organics 8260B	Explosives 8330	OCPs 8081	SVCOs 8270C	Containers Left								Remarks or Sample Location	PRESERVATION: ICED	PRESERVATION: Specify Chemicals added and final pH if known
MAK001O	9/9/2013	1104		x	1	x	x	x	x	1								Octopus	x	
MAK002O	9/9/2013	1215		x	1	x	x	x	x	1								Octopus	x	
MAK003O	9/9/2013	1505		x	1	x	x	x	x	1								Octopus	x	
MAK004O	9/11/2013	1011		x	1	x	x	x	x	1								Octopus	x	
MAK005O	9/11/2013	1035		x	1	x	x	x	x	1								Octopus	x	
MAK006O	9/11/2013	1055		x	1	x	x	x	x	3	Extra Volume							Octopus	x	
6556-1 MAK007O	9/11/2013	1125		x	1	x	x	x	x	3	↓			↓				Octopus	x	
MAK008O	9/11/2013	1210		x	1	x	x	x	x	1								Octopus	x	

6555
dlc 10/23/13

Relinquished by: (Signature)	Date	Time	Relinquished by: (Signature)	REMARKS / SPECIAL INSTRUCTIONS:
[signature]	10/22/13	1600		
Relinquished by: (Signature)	Date	Time	Relinquished by: (Signature)	Project Samples. Please treat each matrix separately.
Received for Laboratory by: (Signature) [signature]	Date 10/23/13	Time 0910	Shipping Ticket No.	Please send level 4 hardcopy report and excel edd to: Dean Dickerson, c/o ARDL, Inc. 400 Aviation Drive, Mount Vernon, IL 62864. Email questons to ddickerson@ardlinc.com.

Original 6558
dle
10-23-13

COOLER RECEIPT REPORT
ARDL, INC.

ARDL #: 6555-6558

Cooler # NONE (1 of 2)
Number of Coolers in Shipment: 2

Project: MAKALI Military Reservation Oahu

Date Received: 10-23-13

A. **PRELIMINARY EXAMINATION PHASE:** Date cooler was opened: 10-23-13 (Signature) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... (YES) NO
   If YES, enter carrier name and airbill number here: Fed 9325 1887 7914
2. Were custody seals on outside of cooler? ..... YES (NO) N/A
   How many and where? _____, Seal Date: _____, Seal Name: _____
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO (N/A)
4. Did you screen samples for radioactivity using a Geiger Counter? ..... (YES) NO
5. Were custody papers sealed in a plastic bag ~~and taped inside to the lid~~? dle 10/23/13 ..... (YES) NO
6. Were custody papers filled out properly (ink, signed, etc.)? ..... (YES) NO N/A
7. Were custody papers signed in appropriate place by ARDL personnel? ..... (YES) NO N/A
8. Was project identifiable from custody papers? If YES, enter project name at the top of this form ..... (YES) NO N/A
9. Was a separate container provided for measuring temperature? YES____ NO ✓ Cooler Temp. -15.0 C

B. **LOG-IN PHASE:** Date samples were logged-in: 10-23-13 (Signature) [signature]

10. Describe type of packing in cooler: ice/bubble pack
11. Were all bottles ~~sealed~~ in separate plastic bags? dle 10/23/13 ..... (YES) NO N/A
12. Did all bottles arrive unbroken and were labels in good condition? ..... (YES) NO
13. Were bottle labels complete? ..... (YES) NO
14. Did all bottle labels agree with custody papers? ..... (YES) NO
15. Were correct containers used for the tests indicated? ..... (YES) NO
16. Was pH correct on preserved water samples? ..... YES NO (N/A)
17. Was a sufficient amount of sample sent for tests indicated? ..... (YES) NO
18. Were bubbles absent in VOA samples? If NO, list by sample #: _____ YES NO (N/A)
19. Was the ARDL project coordinator notified of any deficiencies? ..... YES NO (N/A)

Comments and/or Corrective Action:
(By: Signature) Date:

Sample Transfer	
Fraction: all	Fraction:
Area #: Freezer	Area #:
By: dle	By:
On: 10-23-12	On:

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COOLER RECEIPT REPORT
ARDL, INC.

Original in 6558 dlc 10-23-13

ARDL #: 6555-6558

Cooler # 2 of 2
Number of Coolers in Shipment: 2

Project: MAKAU Military Reservation Oahu

Date Received: 10-23-13

A. **PRELIMINARY EXAMINATION PHASE:** Date cooler was opened: 10-23-13 (Signature) LA Stearns

1. Did cooler come with a shipping slip (airbill, etc.)? ..... (YES) NO
   If YES, enter carrier name and airbill number here: FED-EX TRK# 9325 1887 7885
2. Were custody seals on outside of cooler? ..... YES (NO) N/A
   How many and where? NA, Seal Date: NA, Seal Name: NA
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO (NA)
4. Did you screen samples for radioactivity using a Geiger Counter? ..... (YES) NO
5. Were custody papers sealed in a plastic bag and taped inside to the lid? ..... YES (NO)
6. Were custody papers filled out properly (ink, signed, etc.)? ..... YES NO (N/A)
7. Were custody papers signed in appropriate place by ARDL personnel? ..... YES NO (N/A)
8. Was project identifiable from custody papers? If YES, enter project name at the top of this form ..... YES NO (N/A)
9. Was a separate container provided for measuring temperature? YES ____ NO ✓ Cooler Temp. 10.4 C

B. **LOG-IN PHASE:** Date samples were logged-in: 10-23-13 (Signature) LA Stearns

10. Describe type of packing in cooler: dry ice, bubble pack + bubble bags
11. Were all bottles sealed in separate plastic bags? ..... (YES) NO N/A
12. Did all bottles arrive unbroken and were labels in good condition? ..... (YES) NO
13. Were bottle labels complete? ..... (YES) NO
14. Did all bottle labels agree with custody papers? See #5 ..... YES NO (NA)
15. Were correct containers used for the tests indicated? ..... (YES) NO
16. Was pH correct on preserved water samples? ..... YES NO (N/A)
17. Was a sufficient amount of sample sent for tests indicated? ..... (YES) NO
18. Were bubbles absent in VOA samples? If NO, list by sample #: ____ YES NO (N/A)
19. Was the ARDL project coordinator notified of any deficiencies? ..... YES NO (N/A)

Comments and/or Corrective Action:
(By: Signature) Date:

Sample Transfer	
Fraction: ALL	Fraction:
Area #: Freezer	Area #:
By: las	By:
On: 10-23-13	On:

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Disposition 6558
dlc
10-23-13

ORIGIN ID:GRBA (920) 469-2436
SHIPPING
PACE ANALYTICAL
1241 BELLEVUE

GREEN BAY, WI 54302
UNITED STATES US

SHIP DATE: 22OCT13
ACTWGT: 25.0 LB MAN
CAD: 255289/CAFE2704

DRY ICE: 4.5 KGS
BILL THIRD PARTY

TO DEAN DICKERSON
ARDL
400 AVIATION DRIVE
P.O BOX 1566
MOUNT VERNON IL 62864
(618) 244-3235 REF:
INV:
PO: DEPT:

518C1/A81B/6F03

FedEx Express

J131113052301 26

TRK# 0201 9325 1887 7914

WED - 23 OCT AA
STANDARD OVERNIGHT
ICE

NA MVNA

62864
IL-US STL

Part # 156148-434 RIT2 03/12

ORIGIN ID:GRBA (920) 469-2436
SHIPPING
PACE ANALYTICAL
1241 BELLEVUE

GREEN BAY, WI 54302
UNITED STATES US

SHIP DATE: 22OCT13
ACTWGT: 35.0 LB MAN
CAD: 255289/CAFE2704

DRY ICE: 4.5 KGS
BILL THIRD PARTY

TO DEAN DICKERSON
ARDL
400 AVIATION DRIVE
P.O BOX 1566
MOUNT VERNON IL 62864
(618) 244-3235
DEPT: INT BILL REF 1301-9501

518C1/A81B/6F03

FedEx Express

J131113052301 26

TRK# 0201 9325 1887 7888

WED - 23 OCT AA
STANDARD OVERNIGHT
ICE

NA MVNA

62864
IL-US STL

Part # 156148-434 RIT2 03/12

Field Sample
Form 1s

Rev. 1.0

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK001O	ARDL Lab No.:	006555-01
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/09/2013	Received Date:	10/23/2013
Sample Time:	1104	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	63%
Decachlorobiphenyl	25-125	74%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-01, CHLORINATED PESTICIDES (8081)

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK002O	ARDL Lab No.:	006555-02
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/09/2013	Received Date:	10/23/2013
Sample Time:	1215	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	70%
Decachlorobiphenyl	25-125	88%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-02, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK003O	ARDL Lab No.:	006555-03
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/09/2013	Received Date:	10/23/2013
Sample Time:	1505	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	65%
Decachlorobiphenyl	25-125	80%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-03, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK004O	ARDL Lab No.:	006555-04
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/11/2013	Received Date:	10/23/2013
Sample Time:	1011	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	68%
Decachlorobiphenyl	25-125	83%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-04, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK005O	ARDL Lab No.:	006555-05
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/11/2013	Received Date:	10/23/2013
Sample Time:	1035	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	61%
Decachlorobiphenyl	25-125	79%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-05, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK006O	ARDL Lab No.:	006555-06
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/11/2013	Received Date:	10/23/2013
Sample Time:	1055	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	57%
Decachlorobiphenyl	25-125	75%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-06, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK021O	ARDL Lab No.:	006555-07
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/23/2013	Received Date:	10/23/2013
Sample Time:	0927	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	58%
Decachlorobiphenyl	25-125	76%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-07, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK008O	ARDL Lab No.:	006555-08
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/11/2013	Received Date:	10/23/2013
Sample Time:	1210	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	74%
Decachlorobiphenyl	25-125	96%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-08, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK009O	ARDL Lab No.:	006555-09
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/13/2013	Received Date:	10/23/2013
Sample Time:	1248	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	69%
Decachlorobiphenyl	25-125	83%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-09, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK010O	ARDL Lab No.:	006555-10
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/16/2013	Received Date:	10/23/2013
Sample Time:	1025	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	72%
Decachlorobiphenyl	25-125	90%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-10, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK011O	ARDL Lab No.:	006555-11
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/16/2013	Received Date:	10/23/2013
Sample Time:	1110	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	72%
Decachlorobiphenyl	25-125	91%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-11, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK012O	ARDL Lab No.:	006555-12
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/22/2013	Received Date:	10/23/2013
Sample Time:	1315	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	62%
Decachlorobiphenyl	25-125	79%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-12, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK013O	ARDL Lab No.:	006555-13
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/22/2013	Received Date:	10/23/2013
Sample Time:	1400	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	65%
Decachlorobiphenyl	25-125	82%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-13, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK014O	ARDL Lab No.:	006555-14
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/23/2013	Received Date:	10/23/2013
Sample Time:	0820	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	67%
Decachlorobiphenyl	25-125	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-14, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK015O	ARDL Lab No.:	006555-15
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/22/2013	Received Date:	10/23/2013
Sample Time:	0830	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	71%
Decachlorobiphenyl	25-125	82%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-15, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK016O	ARDL Lab No.:	006555-16
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/22/2013	Received Date:	10/23/2013
Sample Time:	1115	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	60%
Decachlorobiphenyl	25-125	71%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-16, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK017O	ARDL Lab No.:	006555-17
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/22/2013	Received Date:	10/23/2013
Sample Time:	1140	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	64%
Decachlorobiphenyl	25-125	78%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-17, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK018O	ARDL Lab No.:	006555-18
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/22/2013	Received Date:	10/23/2013
Sample Time:	1206	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	62%
Decachlorobiphenyl	25-125	75%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-18, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK019O	ARDL Lab No.:	006555-19
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/23/2013	Received Date:	10/23/2013
Sample Time:	0833	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	63%
Decachlorobiphenyl	25-125	79%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-19, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK020O	ARDL Lab No.:	006555-20
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/23/2013	Received Date:	10/23/2013
Sample Time:	0855	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	53%
Decachlorobiphenyl	25-125	70%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-20, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006556 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK007O	ARDL Lab No.:	006556-01
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/11/2013	Received Date:	10/23/2013
Sample Time:	1125	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	56%
Decachlorobiphenyl	25-125	81%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006556-01, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006556 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK022O	ARDL Lab No.:	006556-02
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/23/2013	Received Date:	10/23/2013
Sample Time:	1020	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	62%
Decachlorobiphenyl	25-125	80%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006556-02, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006556 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK023O	ARDL Lab No.:	006556-03
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/23/2013	Received Date:	10/23/2013
Sample Time:	1136	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	70%
Decachlorobiphenyl	25-125	88%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006556-03, CHLORINATED PESTICIDES (8081) Page 1 of 1

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006556 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK024O	ARDL Lab No.:	006556-04
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/27/2013	Received Date:	10/23/2013
Sample Time:	0828	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	62%
Decachlorobiphenyl	25-125	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006556-04, CHLORINATED PESTICIDES (8081) Page 1 of 1

QC Summary Forms

Form 2 (Surrogate Summary, if applicable)

Form 3 (Spike and/or MS Summary, if applicable)

Blank Form 1(s) & Form 4 (Blank Summary, if applicable)

Form 8 (ISTD Area Summary, if applicable)

Rev. 1.0

BLANK SPIKE/SPIKE DUPLICATE REPORT

ARDL, INC. 400 Aviation Drive; P.O. Box 1566 Mt. Vernon, IL 62864

Lab Report No: 006555

Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O
Project No.:

Analysis: CHLORINATED PESTICIDES (8081)

Analytical Method: 8081B
Prep Method: 3550A

Matrix: QC Material
Amount Used: 5 g

QC Batch: B10112
Level: LOW

Prep. Date: 10/30/2013
Analysis Date: 10/31/2013

Parameter	Spike Result	Spike Level	Spike % Rec	Duplicate Result	Duplicate Level	Duplicate % Rec	Recovery Limits	RPD	RPD Limit
alpha-BHC	39.1	40	98	--	--	--	53-113	--	--
gamma-BHC (Lindane)	37.9	40	95	--	--	--	53-107	--	--
delta-BHC	35.2	40	88	--	--	--	46-121	--	--
Heptachlor	38.4	40	96	--	--	--	44-114	--	--
Aldrin	38.2	40	96	--	--	--	49-102	--	--
Heptachlor Epoxide	33.7	40	84	--	--	--	54-110	--	--
p,p'-DDT	35.1	40	88	--	--	--	52-116	--	--
beta-BHC	37.4	40	93	--	--	--	46-121	--	--

SURROGATE RECOVERIES:	Spike %R	Duplicate %R	%R Limits
Tetrachloro-m-xylene	84.4	--	25-125
Decachlorobiphenyl	85.6	--	25-125

'*' indicates a recovery outside of standard limits.
Spike Blanks for 006555-06, CHLORINATED PESTICIDES (8081)

MATRIX SPIKE/SPIKE DUPLICATE REPORT

ARDL, INC. 400 Aviation Drive; P.O. Box 1566 Mt. Vernon, IL 62864

Lab Report No: 006555

Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O
Project No.:

Analysis: CHLORINATED PESTICIDES (8081)

Analytical Method: 8081B
Prep Method: 3550A

Field ID: MAK006O
Desc/Location: MAKAU MILITARY RESERV OAH
Sample Date: 09/11/2013
Sample Time: 1055
Matrix: TISSUE

Prep. Date: 10/30/2013
Amount Used: 5 g
% Moisture: No Moisture Present
QC Batch: B10112
Level: LOW

ARDL Lab No.: 006555-06
Lab Filename:
Received Date: 10/23/2013
Analysis Date: 10/31/2013

Parameter	Sample Result	MS Result	MS Level	MS % Rec	MSD Result	MSD Level	MSD % Rec	% Rec Limits	RPD	RPD Limit
alpha-BHC	ND	26.8	40	67	29.4	40	73.6	45-113	9.3	25
gamma-BHC (Lindane)	ND	25.9	40	64.9	28.7	40	71.7	51-112	10.1	25
delta-BHC	ND	20.9	40	52.2	23.2	40	58	48-118	10.5	25
Heptachlor	ND	27.8	40	69.5	31.6	40	79	52-114	12.8	25
Aldrin	ND	25.6	40	64	28.4	40	71	51-111	10.4	25
Heptachlor Epoxide	ND	25.9	40	64.8	30.4	40	75.9	53-110	15.9	25
p,p'-DDT	ND	26.7	40	66.8	32.7	40	81.8	55-122	20.1	25
beta-BHC	ND	26.1	40	65.1	30.3	40	75.7	50-111	15.1	25

SURROGATE RECOVERIES:	MS %R	MSD %R	%R Limits
Tetrachloro-m-xylene	63	71	25-125
Decachlorobiphenyl	76	93	25-125

'nc' indicates sample >4X spike level.
'*' indicates a recovery outside of standard limits.
Matrix Spikes for 006555-06, CHLORINATED PESTICIDES (8081)

Page 1 of 1

BLANK SPIKE/SPIKE DUPLICATE REPORT

ARDL, INC. 400 Aviation Drive; P.O. Box 1566 Mt. Vernon, IL 62864

Lab Report No: 006556

Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O
Project No.:

Analysis: CHLORINATED PESTICIDES (8081)

Analytical Method: 8081B
Prep Method: 3550A

Matrix: QC Material
Amount Used: 5 g

QC Batch: B10114
Level: LOW

Prep. Date: 10/31/2013
Analysis Date: 11/01/2013

Parameter	Spike Result	Spike Level	Spike % Rec	Duplicate Result	Duplicate Level	Duplicate % Rec	Recovery Limits	RPD	RPD Limit
alpha-BHC	35.5	40	89	--	--	--	53-113	--	--
gamma-BHC (Lindane)	35.3	40	88	--	--	--	53-107	--	--
delta-BHC	38	40	95	--	--	--	46-121	--	--
Heptachlor	37.7	40	94	--	--	--	44-114	--	--
Aldrin	35	40	87	--	--	--	49-102	--	--
Heptachlor Epoxide	32	40	80	--	--	--	54-110	--	--
p,p'-DDT	38.7	40	97	--	--	--	52-116	--	--
beta-BHC	36.3	40	91	--	--	--	46-121	--	--

SURROGATE RECOVERIES:	Spike %R	Duplicate %R	%R Limits
Tetrachloro-m-xylene	89	--	25-125
Decachlorobiphenyl	101.3	--	25-125

'*' indicates a recovery outside of standard limits.
Spike Blanks for 006556-01, CHLORINATED PESTICIDES (8081)

MATRIX SPIKE/SPIKE DUPLICATE REPORT

ARDL, INC. 400 Aviation Drive; P.O. Box 1566 Mt. Vernon, IL 62864

Lab Report No: 006556

Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O
Project No.:

Analysis: CHLORINATED PESTICIDES (8081)

Analytical Method: 8081B
Prep Method: 3550A

Field ID: MAK007O
Desc/Location: MAKAU MILITARY RESERV OAH
Sample Date: 09/11/2013
Sample Time: 1125
Matrix: TISSUE

Prep. Date: 10/31/2013
Amount Used: 5 g
% Moisture: No Moisture Present
QC Batch: B10114
Level: LOW

ARDL Lab No.: 006556-01
Lab Filename:
Received Date: 10/23/2013
Analysis Date: 11/01/2013

Parameter	Sample Result	MS Result	MS Level	MS % Rec	MSD Result	MSD Level	MSD % Rec	% Rec Limits	RPD	RPD Limit
alpha-BHC	ND	24.5	40	61.3	27.5	40	68.7	45-113	11.2	25
gamma-BHC (Lindane)	ND	24.5	40	61.3	26.7	40	66.9	51-112	8.7	25
delta-BHC	ND	32.8	40	81.9	34	40	85	48-118	3.6	25
Heptachlor	ND	29.6	40	74	29.6	40	73.9	52-114	0.2	25
Aldrin	ND	25.1	40	62.7	26	40	65	51-111	3.7	25
Heptachlor Epoxide	ND	25.8	40	64.6	28	40	70.1	53-110	8.2	25
p,p'-DDT	ND	29.1	40	72.7	31.7	40	79.2	55-122	8.5	25
beta-BHC	ND	24.7	40	61.8	26.9	40	67.3	50-111	8.6	25

SURROGATE RECOVERIES:	MS %R	MSD %R	%R Limits
Tetrachloro-m-xylene	59	65	25-125
Decachlorobiphenyl	75	80	25-125

'nc' indicates sample >4X spike level.
'*' indicates a recovery outside of standard limits.
Matrix Spikes for 006556-01, CHLORINATED PESTICIDES (8081)

METHOD BLANK REPORT
ARDL, Inc. 400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	NA	ARDL Lab No.:	006555-06B1
Desc/Location:	NA	Lab Filename:	
Sample Date:	NA	Received Date:	NA
Sample Time:	NA	Prep. Date:	10/30/2013
Matrix:	QC Material	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units
alpha-BHC	4.0	4.0	ND		UG/KG
gamma-BHC (Lindane)	4.0	4.0	ND		UG/KG
delta-BHC	4.0	4.0	ND		UG/KG
Heptachlor	4.0	4.0	ND		UG/KG
Aldrin	4.0	4.0	ND		UG/KG
Heptachlor Epoxide	4.0	4.0	ND		UG/KG
p,p'-DDT	4.0	4.0	ND		UG/KG
beta-BHC	4.0	4.0	ND		UG/KG

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	87%
Decachlorobiphenyl	25-125	104%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Blank for Run B10112, CHLORINATED PESTICIDES (8081)

METHOD BLANK REPORT
ARDL, Inc. 400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006556 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	NA	ARDL Lab No.:	006556-01B1
Desc/Location:	NA	Lab Filename:	
Sample Date:	NA	Received Date:	NA
Sample Time:	NA	Prep. Date:	10/31/2013
Matrix:	QC Material	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units
alpha-BHC	4.0	4.0	ND		UG/KG
gamma-BHC (Lindane)	4.0	4.0	ND		UG/KG
delta-BHC	4.0	4.0	ND		UG/KG
Heptachlor	4.0	4.0	ND		UG/KG
Aldrin	4.0	4.0	ND		UG/KG
Heptachlor Epoxide	4.0	4.0	ND		UG/KG
p,p'-DDT	4.0	4.0	ND		UG/KG
beta-BHC	4.0	4.0	ND		UG/KG

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	58%
Decachlorobiphenyl	25-125	66%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Blank for Run B10114, CHLORINATED PESTICIDES (8081)

Sample Preparation Information

(Not Applicable for VOA Purge and Trap Method)

Rev. 1.0

3550
8081 PEST Tissues

DATE : 10 / 30 / 2013 **BATCH # B10112**

CUST:Makau Military Reservation Oahu **ARDL # 6555**

SAMPLES: BLK, SP BLK, 6555-1 thru 13
QC SAMPLE: 6555-6ms/msd

SOLVENT USED: $MeCL_2$ # 0000057182 Hexane # 0000047072
REAGENTS USED: Na_2SO_4 # 0000047479

SURROGATE # 9002783 CONC 1 PPM __X__ AMOUNT 200 uL __X__

8080 SPIKE # 9002786 CONC 1 PPM __X__ AMOUNT 200 uL __X__

EXTRACTION METHOD: SONICATION ___X___ DILUTION _____ MED/LEV_____

FINAL VOLUME 1 mL

CLEAN-UP METHOD: GPC __X___ GPC CURVE DATE: 10 / 28 / 2013
FLORISIL _____ LOT #

EXTRACTION PERSONNEL: SMN, JAD

SPIKER: SMN **WITNESS: JAD**

SAMPLE #	WEIGHT / g	pH	Vf		SAMPLE #	WEIGHT / g	pH	Vf
BLK	5.00 g	-----	1 mL		6555-11	5.00 g	-----	1 mL
SP BLK	5.00 g	"	"		6555-12	5.04 g	"	"
6555-1	5.00 g	"	"		6555-13	5.03 g	"	"
6555-2	5.04 g	"	"					
6555-3	5.04 g	"	"					
6555-4	5.04 g	"	"					
6555-5	5.00 g	"	"					
6555-6	5.04 g	"	"					
6555-6ms	5.00 g	"	"					
6555-6msd	5.04 g	"	"					
6555-7	5.04 g	"	"					
6555-8	5.00 g	"	"					
6555-9	5.05 g	"	"					
6555-10	5.04 g	"	"					

RECEIVED BY: JDT **DELIVERED BY:** SMN

DATE: 10/31/13 DATE: 10/31/13

B10112 8081 - Pesticide - Tissues

Sample I.D.	W_F	V_f	Date:	Time:
BlK	5.00 g	1 mL	10/30/13	10:00
SpBlK	5.00 g	1 mL		
6555 -1	5.00 g	1 mL	Water Bath Temp: 97°C	
-2	5.04 g	1 mL		
-3	5.04 g	1 mL	GPC Curve Date: 10/28/13	
-4	5.04 g	1 mL		
-5	5.00 g	1 mL		
-6	5.04 g	1 mL		
-6MS	5.00 g	1 mL		
-6MSD	5.04 g	1 mL		
-7	5.04 g	1 mL		
-8	5.00 g	1 mL		
-9	5.05 g	1 mL		
-10	5.04 g	1 mL		
-11	5.00 g	1 mL		
-12	5.04 g	1 mL		
-13	5.03 g	1 mL		

All samples went thru GPC Cleanup.

All samples contain 200 ul of surrogate # 9002783 (1ppm).

SpBlK, MS, MSD contain 200 ul of spike # 9002786 (1ppm).

Solvents Used: $MeCl_2$ # 0000057182.
Hexane # 0000047072.

Reagent Used: Na_2SO_4 # 0000047479.

Spiker SMW Witness JTO Continued on Page

Read and Understood By

Steve Mwzorl 10/30/13 Signed Date

10/30/13 Signed Date

10/30/13

Position #	Sample I.D.	Batch #	Analysis
2	BLK	B10112	Pesticide
3	SBLK		
4	6555-1		
5	-2		
6	-3		
7	-4		
8	-5		
9	-6		
10	-6MS		
11	-6MSD		
12	-7		
13	-8		
14	-9		
15	-10		
16	-11		
17	-12		
18	-13		

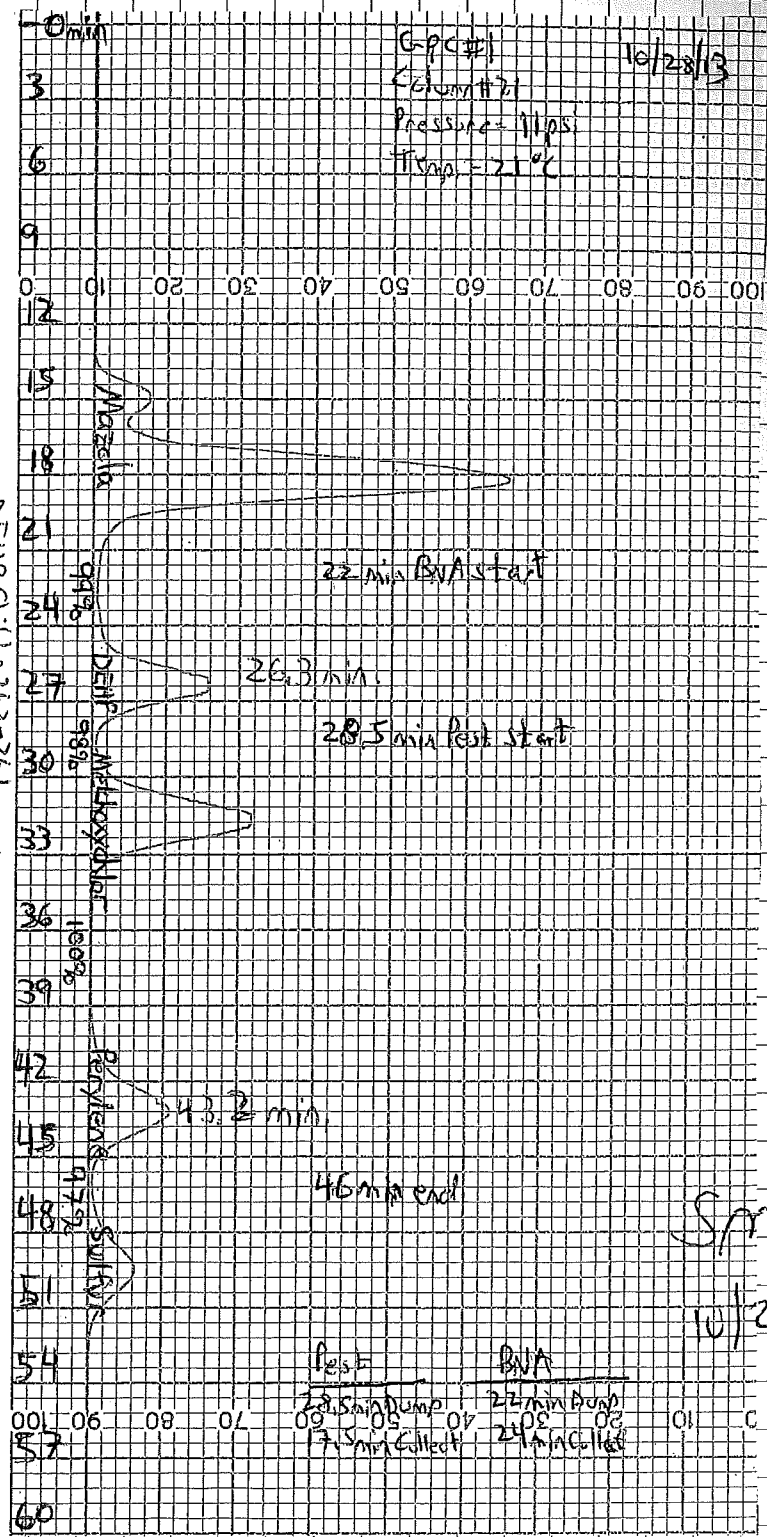
SMW

SMW
10/30/13

Continued on Page

Read and Understood By

Signed	Date	Signed	Date
Steve Mwcon	10/30/13	[illegible]	10/30/13



SMN
10/28/13

Continued on Page

Read and Understood By

Signed	Date	Signed	Date
Steve Newzal	10/28/13	[illegible]	10/29/13

3550
8081 PEST Tissues

DATE : 10 / 31 / 2013 **BATCH # B10114**

CUST:Makau Military Reservation Oahu **ARDL # 6555, 6556**

SAMPLES: BLK, SP BLK, 6555-14 thru 20; 6556-1 thru 5
QC SAMPLE: 6556-1ms/msd

SOLVENT USED: $MeCL_2$ # 0000057182 Hexane # 0000047072
REAGENTS USED: Na_2SO_4 # 0000056573

SURROGATE # 9002783 CONC 1 PPM __X__ AMOUNT 200 uL __X__

8080 SPIKE # 9002786 CONC 1 PPM __X__ AMOUNT 200 uL __X__

EXTRACTION METHOD: SONICATION ___X___ DILUTION _____ MED/LEV_____

FINAL VOLUME 1 mL

CLEAN-UP METHOD: GPC __X___ GPC CURVE DATE: 10 / 28 / 2013
FLORISIL _____ LOT #

EXTRACTION PERSONNEL: SMN, JAD

SPIKER: SMN **WITNESS: JAD**

SAMPLE #	WEIGHT / g	pH	Vf		SAMPLE #	WEIGHT / g	pH	Vf
BLK	5.00 g	-----	1 mL		6556-4	5.02 g	-----	1 mL
SP BLK	5.00 g	"	"		6556-5	5.00 g	"	"
6555-14	5.04 g	"	"					
6555-15	5.02 g	"	"					
6555-16	5.03 g	"	"					
6555-17	5.05 g	"	"					
6555-18	5.03 g	"	"					
6555-19	5.01 g	"	"					
6555-20	5.02 g	"	"					
6556-1	5.00 g	"	"					
6556-1ms	5.00 g	"	"					
6556-1msd	5.00 g	"	"					
6556-2	5.02 g	"	"					
6556-3	5.02 g	"	"					

RECEIVED BY: BT **DELIVERED BY:** SMN

DATE: 11/01/13 DATE: 11/1/13

B10114 8081-Pesticides-Tissues

Sample I.D.	W_I	V_f	Date:	Time:
BLK	5.00 g	1 mL	10/31/13	09:00
SpBLK	5.00 g	1 mL		
6555-14	5.04 g	1 mL	Water Bath Temp: 98°C	
-15	5.02 g	1 mL		
-16	5.03 g	1 mL	GPC Curve Date: 10/28/13	
-17	5.05 g	1 mL		
-18	5.03 g	1 mL		
-19	5.01 g	1 mL		
-20	5.02 g	1 mL		
6556-1	5.00 g	1 mL		
-1MS	5.00 g	1 mL		
-1MSD	5.00 g	1 mL		
-2	5.02 g	1 mL		
-3	5.02 g	1 mL		
-4	5.02 g	1 mL		
-5	5.00 g	1 mL		

All samples went thru GPC Cleanup.

All samples contain 200 ul of surrogate # 9W2783 (1ppm).

SpBLK, MS, MSD contain 200 ul of spike # 9W2786 (1 ppm).

Solvents Used: $MeCl_2$ #0000057182.
Hexane # 0000047077.

Reagent Used: Na_2SO_4 # 0000056573.

Spiker SM Witness JH

Continued on Page

Read and Understood By

Steve Kerzal — Signed — 10/31/13 Date

JH — Signed — 10/31/13 Date

10/31/13

Position #	Sample I.D.	Batch #	Analysis
2	BLK	B10114	Pesticide
3	SpBLK		
4	6555-14		
5	-15		
6	-16		
7	-17		
8	-18		
9	-19		
10	-20		
11	6556-1		
12	-1MS		
13	-1MSD		
14	-2		
15	-3		
16	-4		
17	-5		

SMN

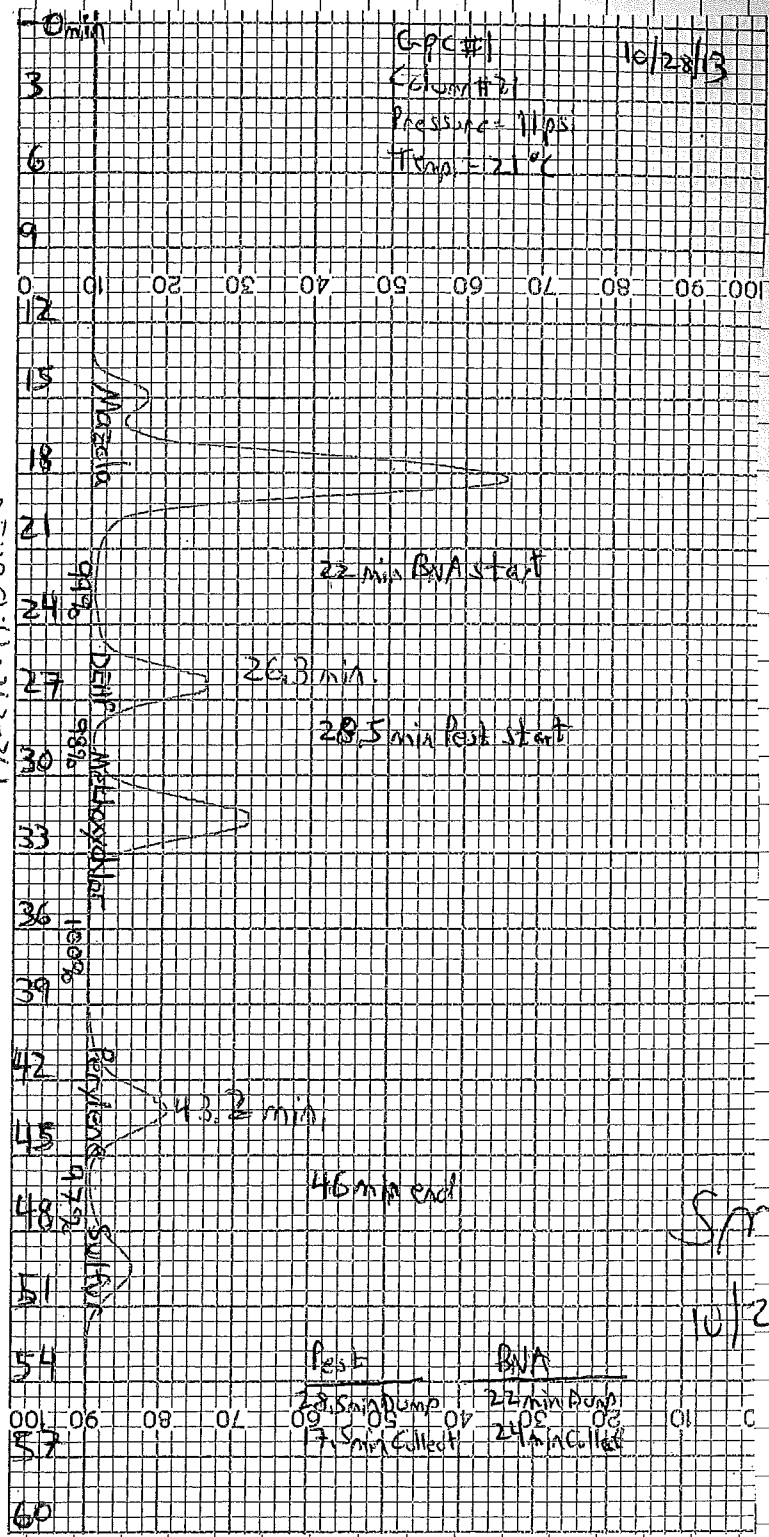
10/31/13 SMN

Continued on Page

Read and Understood By

Steve Newcom — Signed — 10/31/13 Date

GP — Signed — 10/31/13 Date



DEHP Shift = $\frac{26.3 - 26.1}{26.3} = 0.8\%$

Perylene Shift = $\frac{43.2 - 42.7}{43.2} = 1.2\%$

SMN
10/28/13

Continued on Page

Read and Understood By

Signed	Date	Signed	Date
Steve Newzal	10/28/13		10/29/13

PROJECT

Continued From Page

9002781 8015M - Diesel Spike 9/16/13
Diluted 500ul of stnd. # 51006 (20,000 ug/mL, lot #041912, exp: 04/19/17) from Absolute Exp: 12/16/13
into 10mL of Acetone (JTBaker # 000505 1403). Final conc. = 1000ppm SMW

9002782 BNA Matrix Spike Mix opened: 9/17/13 9/17/13
Cerilliant 8270 LCS Mix, cat. # ERS-077, lot # ER111711-01, 200 ug/mL, exp: 11/2016 SMW

9002783 Pest / PCB Surrogate 10/8/13
Diluted 125ul of stnd. # 20023 (lot # 020212, 200 ug/mL, exp: 02/02/17) from Absolute into Exp: 1/8/14
25mL of Acetone (JTBaker #51403). Final conc. = 1ppm SMW

9002784 8015M - Surrogate soln 10/9/13
Diluted 1mL of stnd. # 71225 (lot # 112912, 1000 ug/mL, exp: 11/29/17) from Absolute Exp: 1/9/14
into 5mL of Acetone (JTBaker # 51403). Final conc. = 200ppm SMW

9002785 PNA/SIM Surrogate soln 10/11/13
Diluted 250ul of stnd # 20006 (lot # 050613, 1000 ug/mL, exp: 05/06/18) from Absolute Exp: 1/11/14
into 5mL of MeOH (Mallinckrodt # K03E03). Final conc. = 50ppm SMW

10/23/13 SMW

Continued on Page

Read and Understood By

Steve Munzon 10/23/13 10/23/13
Signed Date Signed Date

CERTIFIED WEIGHT REPORT

Lot #

Part Number: 20023 **Solvent(s):** K25E41 Acetone

Lot Number: 020212

Description: CLP Pesticide Surrogate Standard
2 components

Expiration Date: 020217

Storage: 4 °C

Nominal Concentration (µg/mL): 200

5E-05 Balance Uncertainty

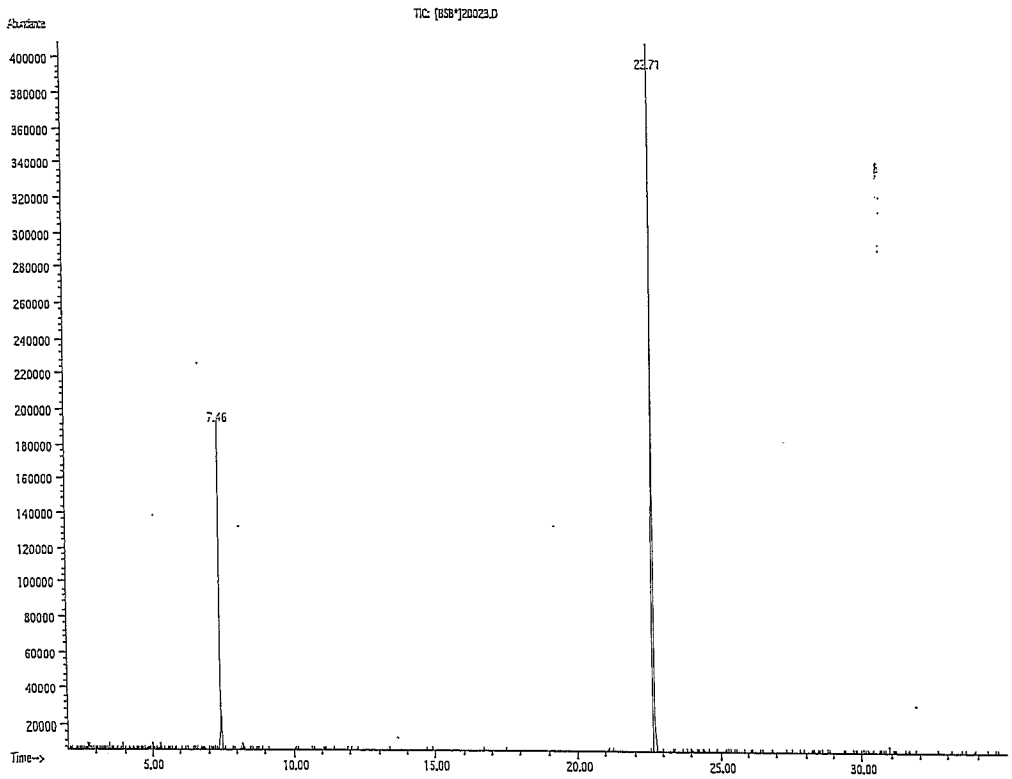
Weight(s) shown below were combined and diluted to: 500.0 0.058 Flask Uncertainty

Formulated By: Vincent K. Criscio, Jr. 020212 DATE

Reviewed By: Pedro L. Rentas 020212 DATE

MSDS Information
(Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. 2,4,5,6-Tetrachloro-m-xylene	273	052501	200	99.0	0.20	0.10102	0.10138	200.7	0.0042	00877-09-8	N/A	N/A
2. Decachlorobiphenyl (209)	103	33379-92	200	99.0	0.20	0.10102	0.10144	200.8	0.0042	02051-24-3	N/A	N/A



Method GC8MSD-7.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Candice Warren.

Name	MSD RT (min.)
2,4,5,6-Tetrachloro-m-xylene	7.45
Decachlorobiphenyl	22.70

90027786 Hawaii - Pesticide Spike soln 10/24/13

Diluted 1 mL of stnd. # 1008037 (10 µg/mL, exp: 1/22/14) into Exp: 1/22/14

10 mL of Acetone (JTBaker # 00000 55353). Final conc. = 1 ppm SMN

Continued on Page

Read and Understood By

Steve Newcom 11/6/13 [illegible] 11/6/13

Signed Date Signed Date

PROJECT

Continued From Page

1008034 4,4'-DDT

Part #: 79018 Laboratory Use Only - See MSDS
Lot #: 062413 Exp: 062418 Storage 4 °C
4,4'-DDT
1000 ug/mL in hexane 1 mL
ABSOLUTE STANDARDS, INC. • 800-368-1131

opened 10/22/13 DS

1008035 HEPTACHLOR

Part #: 79022 Laboratory Use Only - See MSDS
Lot #: 061710 Exp: 061715 Storage 4 °C
Heptachlor
1000 ug/mL in hexane 1 mL
ABSOLUTE STANDARDS, INC. • 800-368-1131

opened 10/22/13 DS

1008036 HEPTACHLOR EPOXIDE

Part #: 79050 Laboratory Use Only - See MSDS
Lot #: 030212 Exp: 030217 Storage 4 °C
Heptachlor epoxide
(Isomer B)
1000 ug/mL in hexane 1 mL
ABSOLUTE STANDARDS, INC. • 800-368-1131

opened 10/22/13 DS

1008037 PEST STOCK/SPIKE (HAWAII)

1008029	1000 ppm	a-BHC	exp	09/27/17
1008030		b-BHC	exp	09/22/15
1008031		d-BHC	exp	06/17/15
1008032		Lindane	exp	03/02/17
1008033		Aldrin	exp	06/24/18
1008034		4,4'-DDT	exp	06/24/18
1008035		Heptachlor	exp	06/17/15
1008036		Heptachlor Epoxide	exp	03/02/17

1000 mg/ml x 0.1 ml of each / 10 ml Acetone (Baker K51E72) = 10 ppm

exp 01/22/14 DS 10/22/13

DS 10/22/13

Continued on Page

Read and Understood By

DS 10/22/13 GD 10/28/13

Signed Date Signed Date

1008029 Alpha - BHC

Part #: 79016
Lot #: 092712
Laboratory Use Only - See MSDS
Exp: 092717 Storage 4 °C
a-BHC
1000 ug/mL in hexane 1 mL
ABSOLUTE STANDARDS, INC. • 800-368-1131

opened 10/22/13 RDS

1008030 Beta - BHC

Part #: 79175
Lot #: 092712
Laboratory Use Only - See MSDS
Exp: 092715 Storage 4 °C
beta-BHC
1000 ug/mL in acetone 1 mL
ABSOLUTE STANDARDS, INC. • 800-368-1131

opened 10/22/13 RDS

1008031 Delta - BHC

Part #: 79048
Lot #: 061710
Laboratory Use Only - See MSDS
Exp: 061715 Storage 4 °C
d-BHC
1000 ug/mL in hexane 1 mL
ABSOLUTE STANDARDS, INC. • 800-368-1131

opened 10/22/13 RDS

1008032 Gamma - BHC (Lindane)

Part #: 79049
Lot #: 030212
Laboratory Use Only - See MSDS
Exp: 030217 Storage 4 °C
gamma-BHC
[Lindane]
1000 ug/mL in hexane 1 mL
ABSOLUTE STANDARDS, INC. • 800-368-1131

opened 10/22/13 RDS

1008033 Aldrin

Part #: 79015
Lot #: 062413
Laboratory Use Only - See MSDS
Exp: 062418 Storage 4 °C
Aldrin
1000 ug/mL in hexane 1 mL
ABSOLUTE STANDARDS, INC. • 800-368-1131

opened 10/22/13 RDS

Continued on Page

Read and Understood By

RDS 10/22/13 JD 10/28/13

'RTIFIED WEIGHT REPORT

Part Number:	79016	**Solvent(s):**	Lot # K38E41	Hexane
Lot Number:	092712			
Description:	a-BHC			
Expiration Date:	092717			
Recommended Storage:	Refrigerate (4 °C)			
Nominal Concentration (µg/mL):	1000			

Formulated By: Paul Barron — DATE 092712

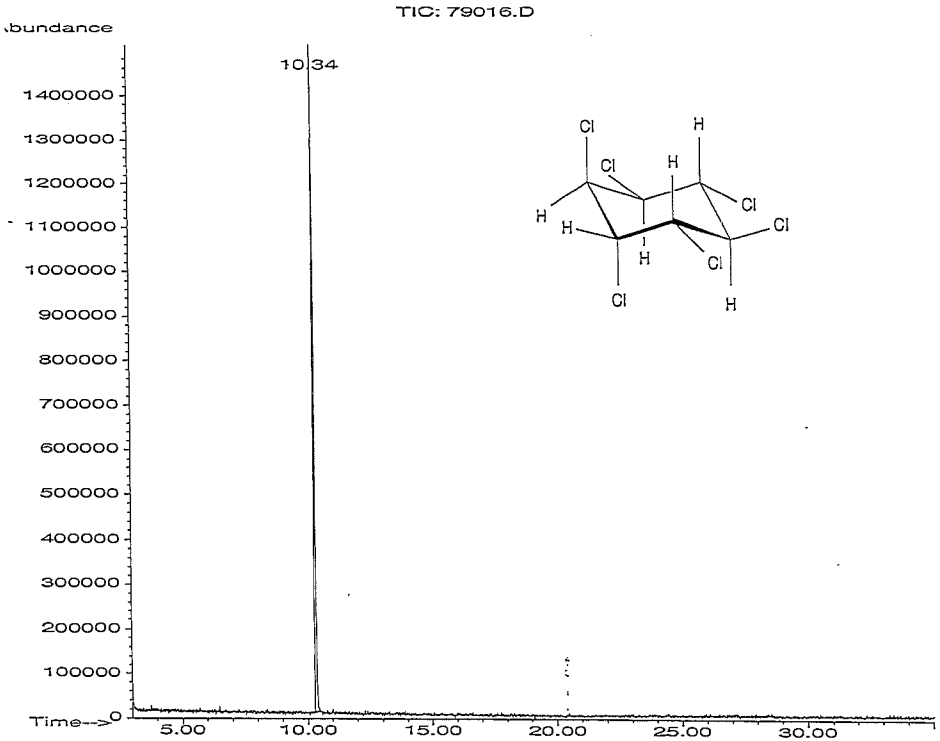
Reviewed By: Pedro L. Rentas — DATE 092712

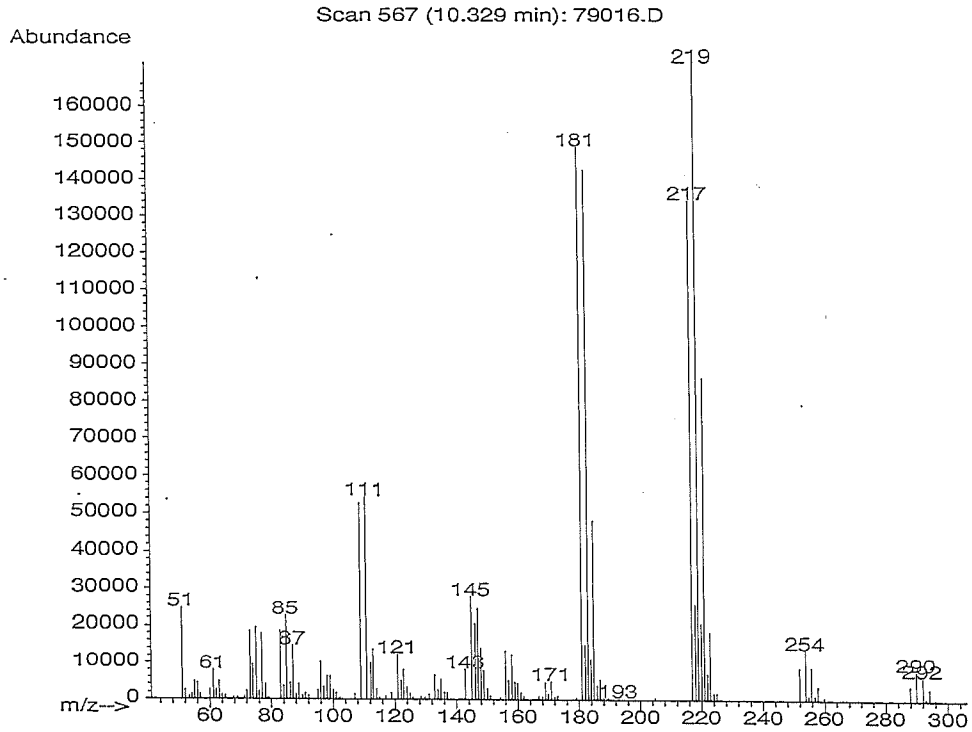
Weight(s) shown below were combined and diluted to: 25.0 — 5E-05 Balance Uncertainty; 0.002 Flask Uncertainty

MSDS Information (Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. a-BHC	38	27275-15	1000	99	0.2	0.02525	0.02527	1000.9	0.00566	00319-84-6	N/A	orl-rat 177mg/kg

Method GC7MSD-1.M: Column: SPB-608 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Nicole Davis.





ERTIFIED WEIGHT REPORT

Part Number:	79175	**Solvent(s):**	Lot # K42E09	Acetone
Lot Number:	092712			
Description:	b-BHC			
Expiration Date:	092715			
Recommended Storage:	Refrigerate (4 °C)			
Nominal Concentration (µg/mL):	1000			

Weight(s) shown below were combined and diluted to: 25.0 — 5E-05 Balance Uncertainty; 0.002 Flask Uncertainty

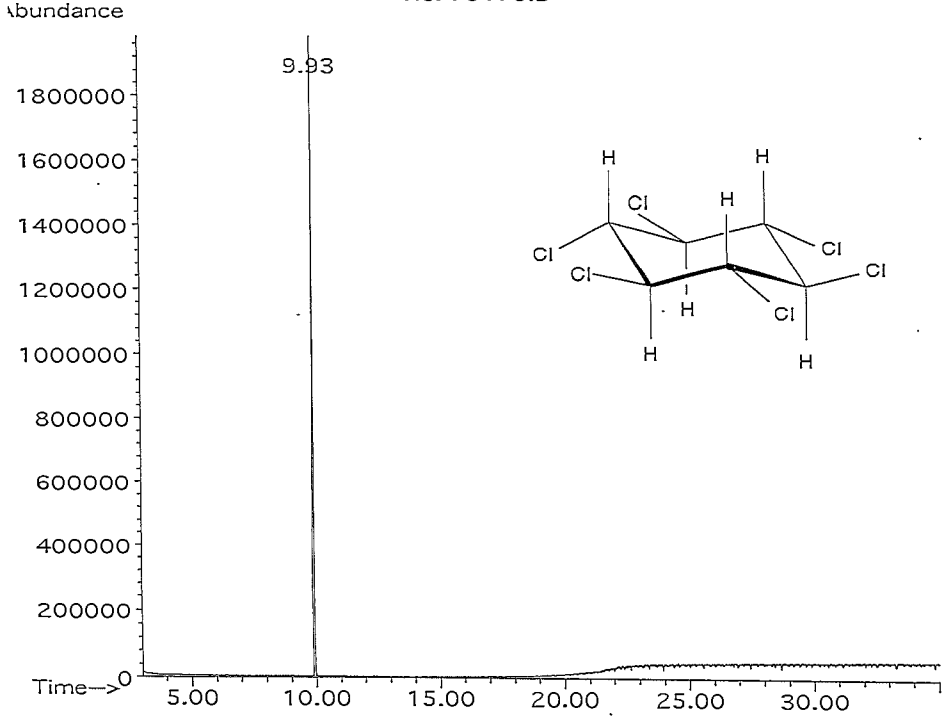
Formulated By:	Bryan Njeba	092712 DATE
Reviewed By:	Pedro L. Rentas	092712 DATE

MSDS Information
(Solvent Safety Info. On Attached pg.)

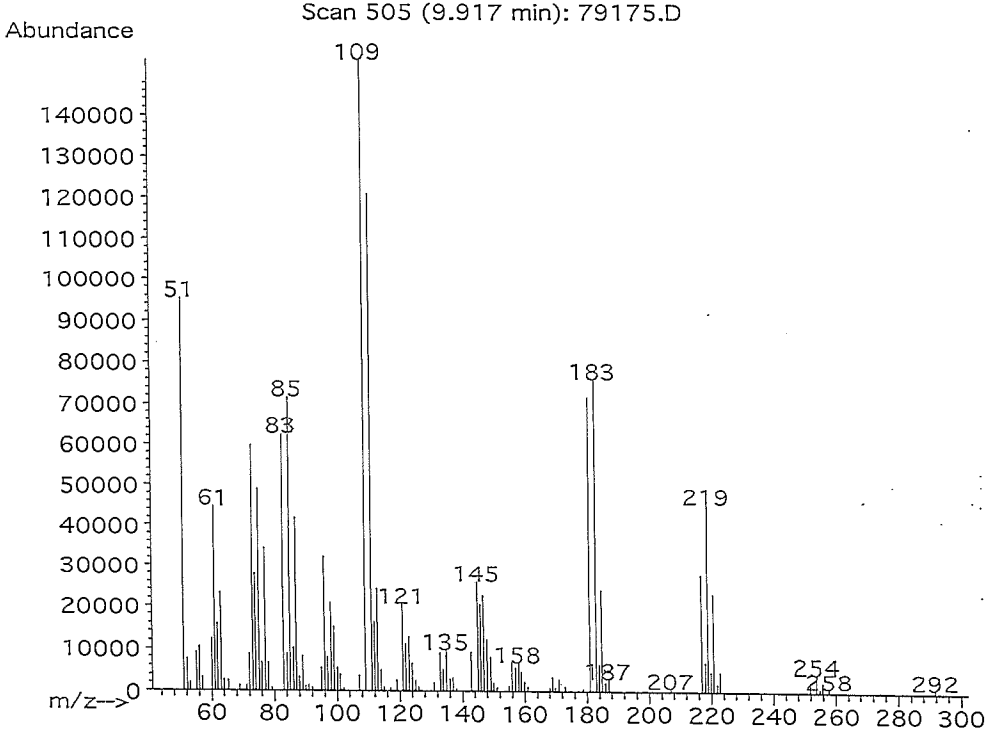
Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. b-BHC	39	ER052506-01	1000	99	0.2	0.02525	0.02526	1000.5	0.00566	00319-85-7	N/A	orl-rat 6000mg/kg

Method GC7MSD-1.M: Column: DB-35MS (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Gina McLane

TIC: 79175.D



Scan 505 (9.917 min): 79175.D



RTIFIED WEIGHT REPORT

Part Number:	79048	**Solvent(s):**	Lot # H33E08	Hexane
Lot Number:	061710			
Description:	d-BHC			
Expiration Date:	061715			
		Storage:	4 °C	
Nominal Concentration (µg/mL):	1000			

5E-05 Balance Uncertainty

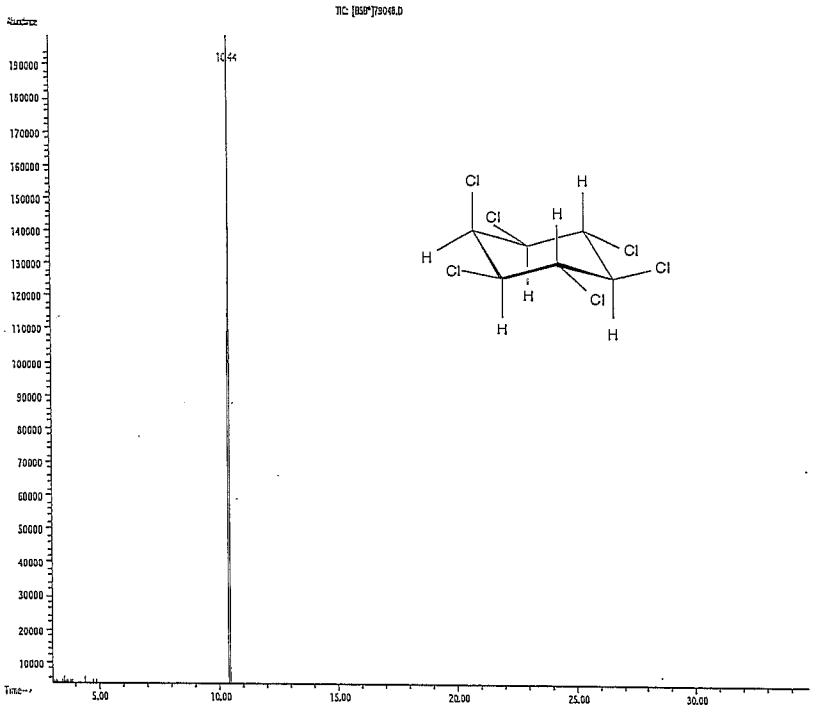
Weight(s) shown below were combined and diluted to: 25.0 0.004 Flask Uncertainty

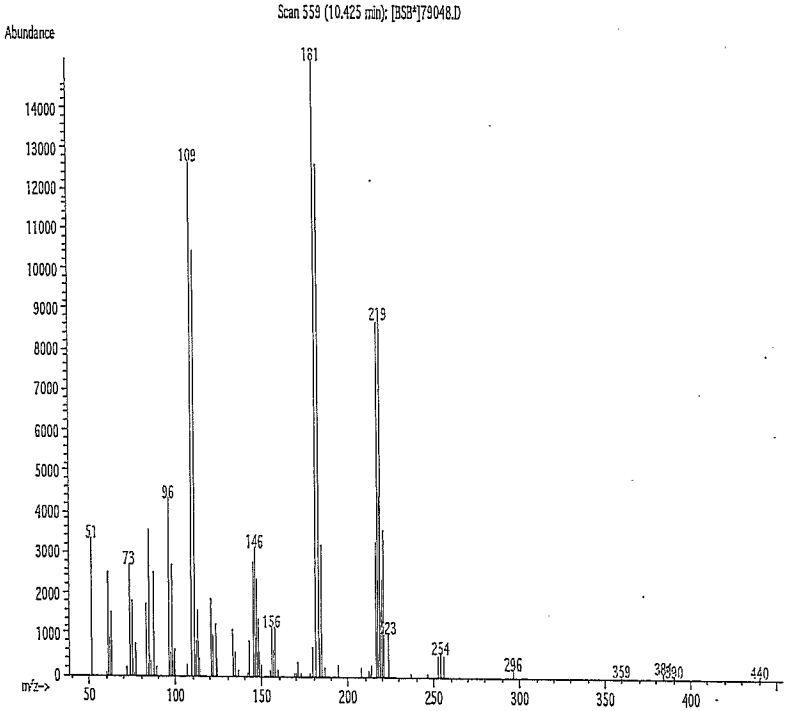
Formulated By:	Justin Dippold	061710 DATE
Reviewed By:	Pedro L. Rentas	061710 DATE

MSDS Information
(Solvent Safety Info. On Attached pg.)

	Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1.	d-BHC	40	ER051805-01	1000	99	0.2	0.02527	0.02535	1003.1	0.00566	00319-86-8	N/A	orl-rat 1000mg/kg

Method GC8MSD-7.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.





RTIFIED WEIGHT REPORT

Part Number:	79049	**Solvent(s):**	Lot # K38E41	Hexane
Lot Number:	030212			
Description:	g-BHC (Lindane)			
Expiration Date:	030217			
Recommended Storage:	Refrigerate (4 °C)			
Nominal Concentration (µg/mL):	1000			

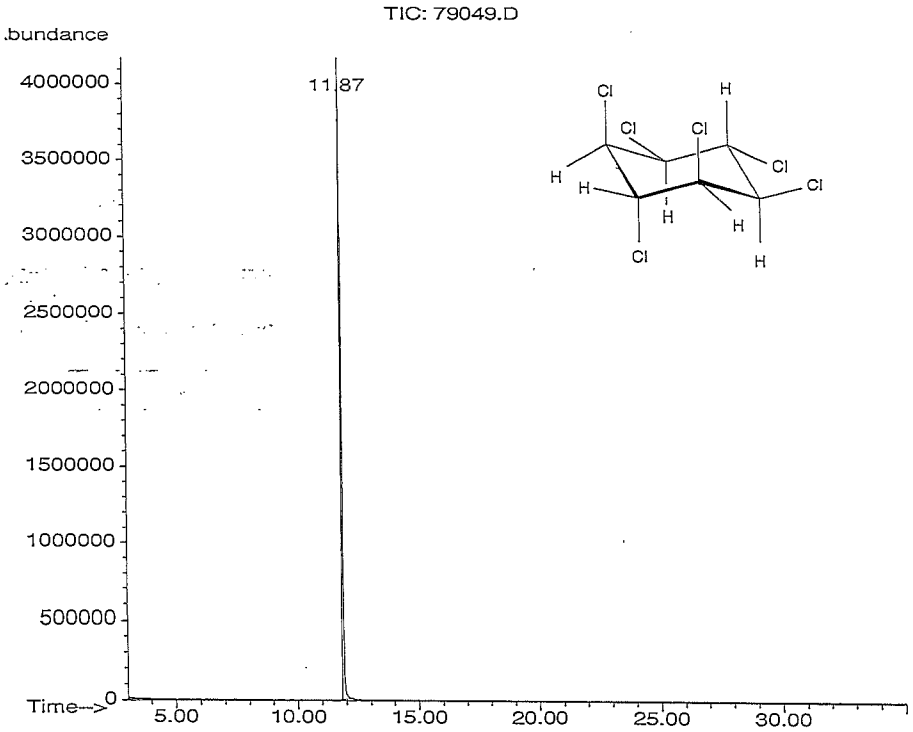
Formulated By:	Vincent K. Criscio, Jr.	030212	DATE
Reviewed By:	Pedro L. Rentas	030212	DATE

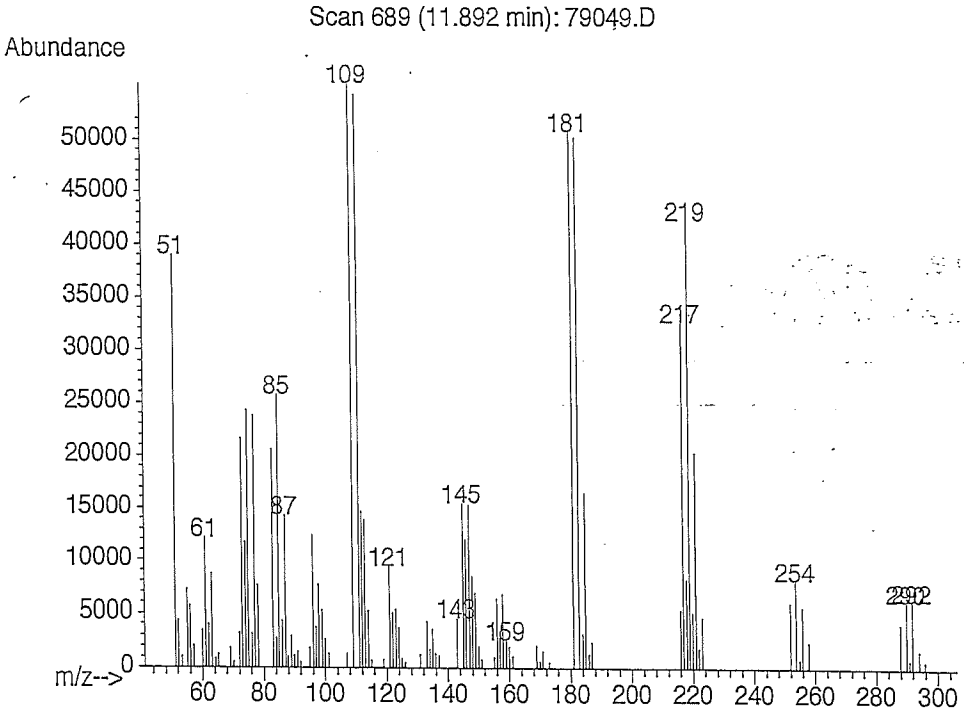
5E-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to: 25.0 0.002 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
											MSDS Information (Solvent Safety Info. On Attached pg.)	
1. g-BHC (Lindane)	41	46601	1000	99	0.2	0.02525	0.02531	1002.5	0.0057	00058-89-9	0.5mg/m3 (skin)	orl-rat 76mg/kg

Method GC7MSD-1.M: Column: SPB-608 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Nicole Poisson.





ERTIFIED WEIGHT REPORT

Part Number:	79015	**Solvent(s):**	Lot # 11493	Hexane
Lot Number:	062413			
Description:	Aldrin			
Expiration Date:	062418			
Recommended Storage:	Refrigerate (4 °C)			
Nominal Concentration (µg/mL):	1000			

Gabriel Helland 062413
Formulated By: Gabriel Helland DATE

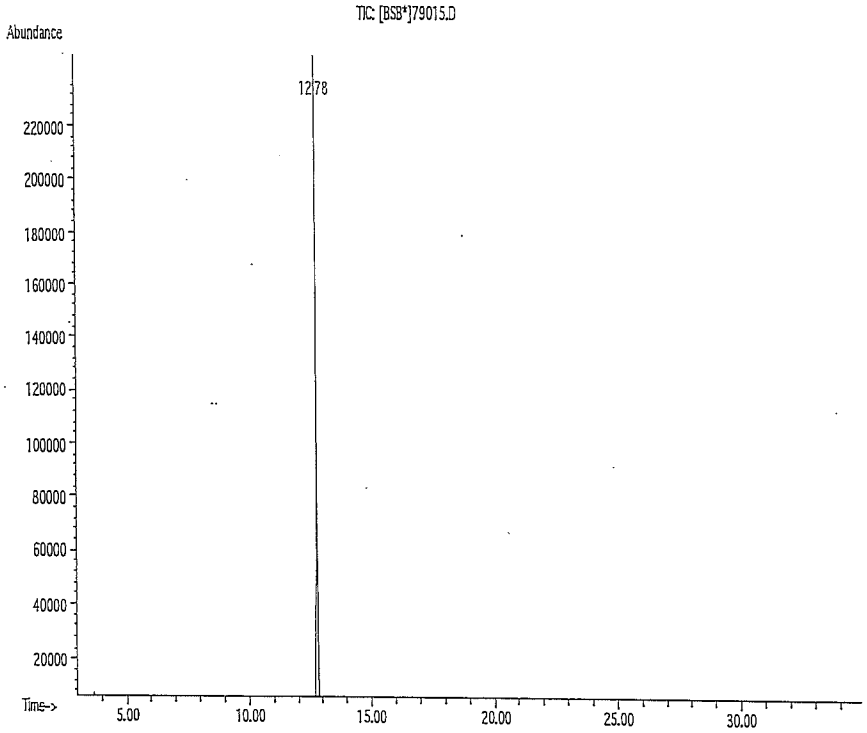
Pedro Rentas 062413
Reviewed By: Pedro L. Rentas DATE

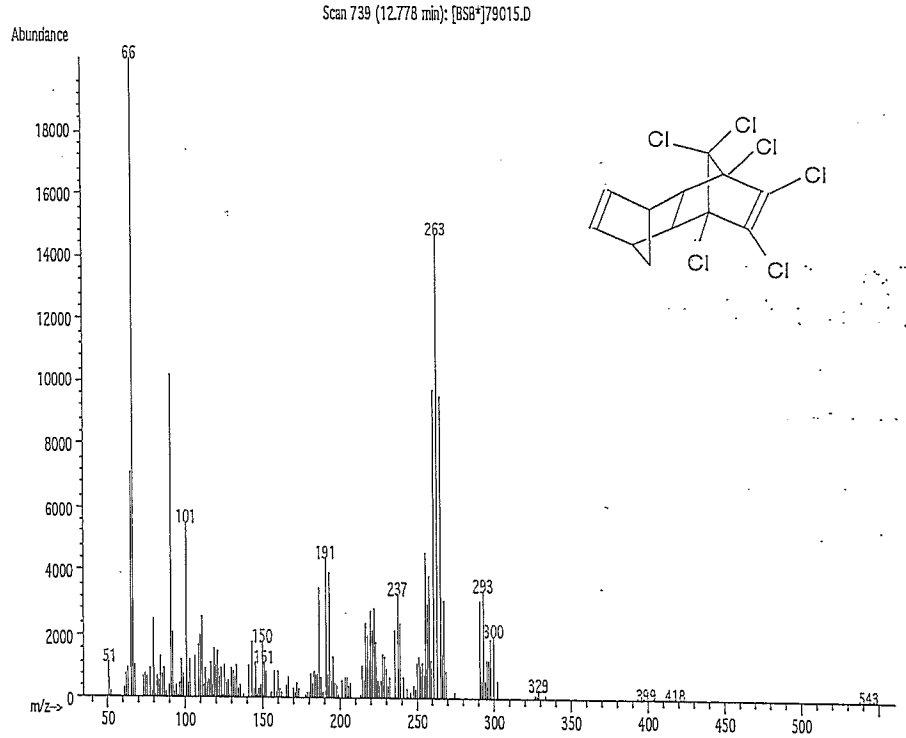
Weight(s) shown below were combined and diluted to: 25.0 — 5E-05 Balance Uncertainty; 0.002 Flask Uncertainty

MSDS Information (Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. Aldrin	9	122096	1000	99	0.2	0.02525	0.02533	1003.3	0.00565	00309-00-2	0.25mg/m3 (skin)	orl-rat 39mg/kg

Method GC8MSD-7.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.





ERTIFIED WEIGHT REPORT

Part Number: 79018
Lot Number: 062413
Description: 4,4'-DDT

Expiration Date: 062418
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000

Solvent(s): Lot # 11493 Hexane

Gabriel Helland 062413
Formulated By: Gabriel Helland DATE

Pedro Rentas 062413
Reviewed By: Pedro L. Rentas DATE

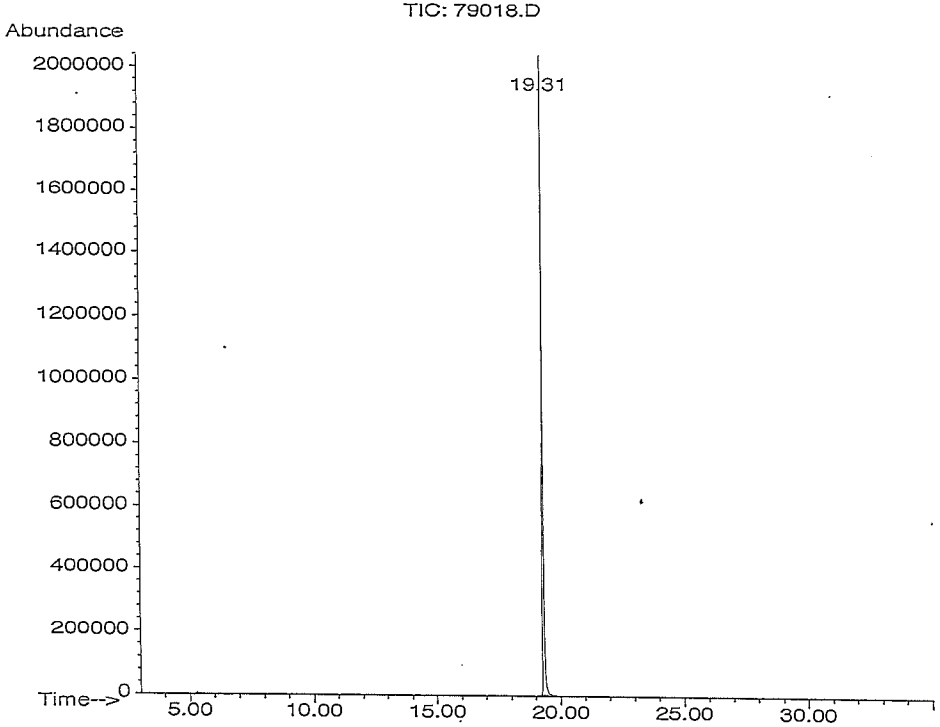
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to: 25.0 0.002 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. 4,4'-DDT	101	ER012306-03	1000	99	0.2	0.02525	0.02530	1002.1	0.0057	00050-29-3	N/A	orl-rat 87mg/kg

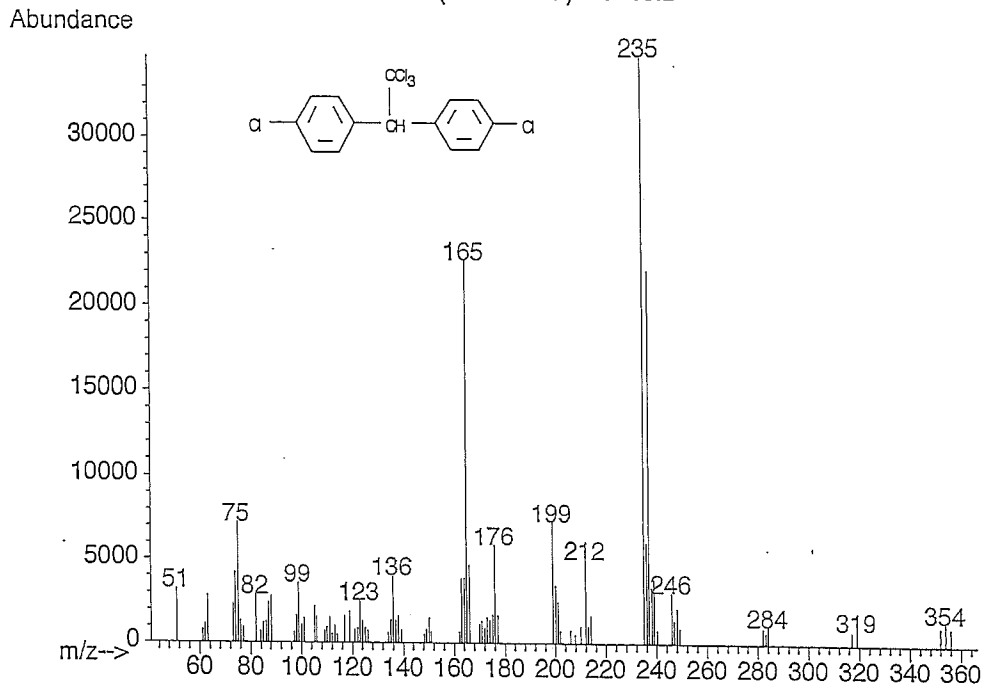
MSDS Information (Solvent Safety Info. On Attached pg.)

Method GC7MSD-1.M: Column: DB-35MS (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Gina McLane

TIC: 79018.D



Scan 1262 (19.270 min): 79018.D



CERTIFIED WEIGHT REPORT

Part Number: 79022
Lot Number: 061710
Description: Heptachlor

Expiration Date: 061715

Storage: 4 °C

Nominal Concentration (µg/mL): 1000

Solvent(s): Lot # H33E08 Hexane

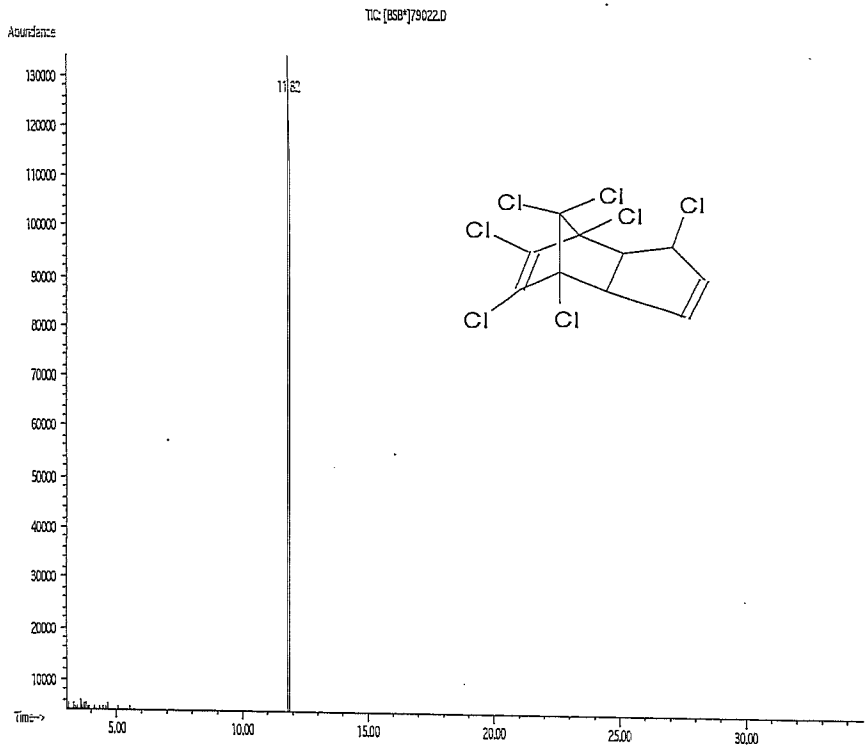
Formulated By: Justin Dippold — DATE 061710

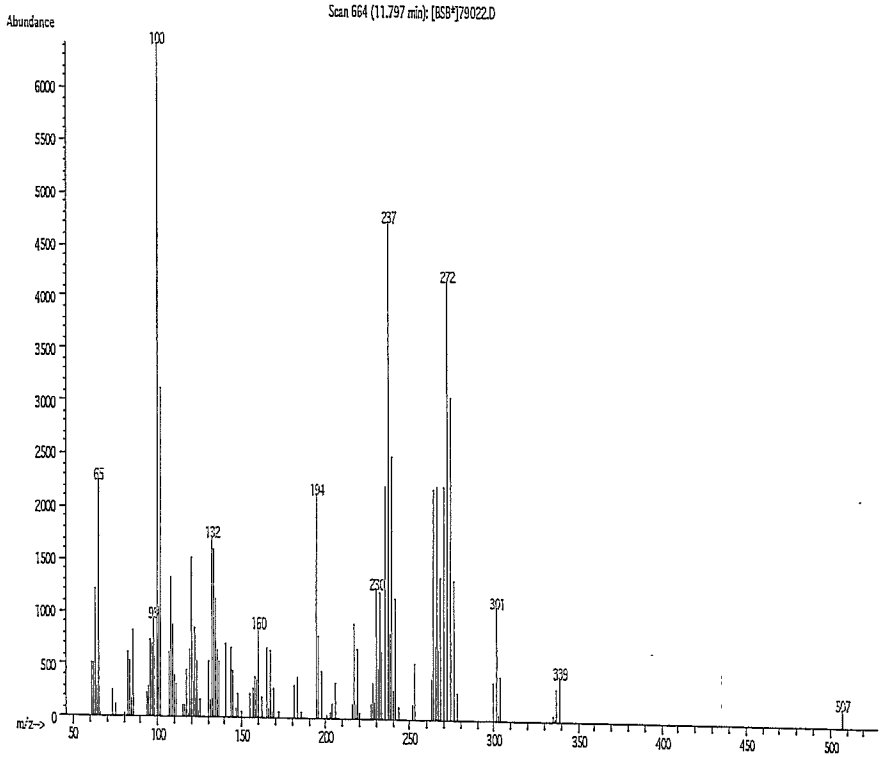
Reviewed By: Pedro L. Rentas — DATE 061710

Weight(s) shown below were combined and diluted to: 25.0 0.004 Flask Uncertainty 5E-05 Balance Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty ; Purity >	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Heptachlor	192	100705JD	1000	99	0.2	0.02527	0.02533	1002.3	0.0057	00076-44-8	0.5mg/m3 (skin)	orl-rat 40mg/kg

Method GC8MSD-7.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.





CERTIFIED WEIGHT REPORT

Part Number: 79050
Lot Number: 030212
Description: Heptachlor epoxide (isomer B)

Expiration Date: 030217
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000

Solvent(s): Lot # K38E41 Hexane

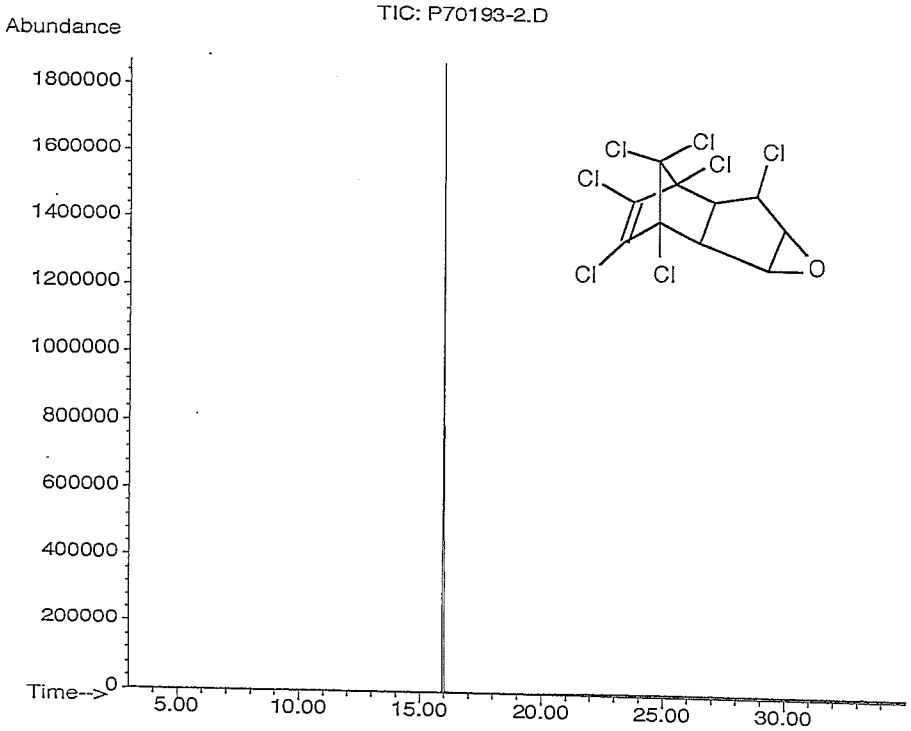
Formulated By: Vincent K. Criscio, Jr. 030212 DATE

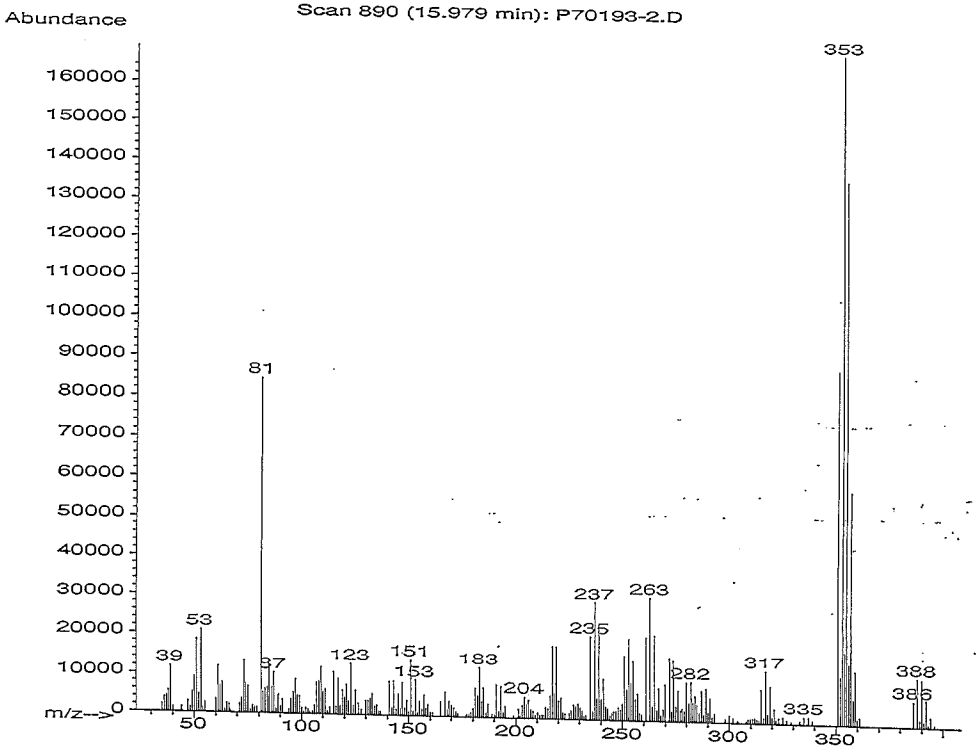
Reviewed By: Pedro L. Rentas 030212 DATE

Weight(s) shown below were combined and diluted to: 25.0 5E-05 Balance Uncertainty 0.002 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Heptachlor epoxide (isomer B)	193	060997	1000	98	0.2	0.02550	0.02556	1002.2	0.0057	01024-57-3	N/A	orl-rat 47mg/kg

Method GC7MSD-7.M: Column: SPB-608 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Lance R. Boynton.





Standards Preparation Information

Rev. 1.0

PROJECT

Continued From Page

1007979 EVAL STOCK

RESTEK 110 Benner Circle Bellefonte, PA 16823 Made in USA

Catalog# 32417

Degradation Calibration Mixture

100 - 200 ug/mL each in MTBE

Lot# A095542 Exp. Date: 01/2017 Store: 10°C or colder

opened 09/13/13

BD

1007980 EVAL WORKING STOCK

STOCK 1007979 100(200) ppm EVAL exp 01/17

100(200) ug/ml X 0.05 ml / 5 ml Hex (Baker 1496) = 1(2) ppm

exp 06/13/14 BD 09/13/13

1007981 EVAL

STOCK 1007980 1(2) ppm EVAL exp 06/13/14

1(2) ug/ml X 0.5 ml / 5 ml Hex (Baker 1496) = 0.1(0.2) ppm

exp 12/13/13 BD 09/13/13

1007982-4 PEST Cal Std

STOCK 1007978-4 10 ppm Pest exp 12/12/13

10 ug/ml X 0.25 ml / 10 ml Hex (Baker 1496) = 0.25 ppm Pest

↓ X 0.1 ml / 10 ml = 0.1

(1007982-4) 0.25 ug/ml X 1.0 ml / 5 ml = 0.05

0.1 ug/ml X 0.5 ml / 5 ml = 0.01

↓ X 0.25 ml / 5 ml = 0.005

exp 12/12/13 BD 09/13/13

BD 09/13/13

Continued on Page

Read and Understood By

BD 09/13/13 [illegible] 9/13/13

Signed Date

RESTEK CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32417 **Lot No.:** A095542

Description : Degradation Calibration Mixture

System Evaluation Mix 100-200µg/mL, MTBE,1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2017 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Endrin CAS # 72-20-8 Purity 99%	(Lot LB88795V)	100.5 µg/mL	+/- 0.7126 µg/mL +/- 3.5670 µg/mL +/- 6.1296 µg/mL	Gravimetric Unstressed Stressed
2	4,4'-DDT CAS # 50-29-3 Purity 99%	(Lot ER012306-03)	200.5 µg/mL	+/- 1.4217 µg/mL +/- 7.1162 µg/mL +/- 12.2286 µg/mL	Gravimetric Unstressed Stressed

Solvent: MTBE
CAS # 1634-04-4
Purity 99%

1008038 OCP SURROGATE STOCK

1007977 200ppm OCP surrogate exp 02/02/17

200ug/ml x 0.25ml / 5ml Hex (Baker 14961) = 10ppm OCP surrogate

exp 01/22/14 [illegible] 10/22/13

1008039 PEST 2° STOCK (HAWAII)

1008037 10ppm PEST (HAWAII) exp 01/22/14
1008038 10ppm OCP Surrogate exp 01/22/14

10ug/ml x 0.5ml each / 5ml Hex (Baker 14961) = 1.0ppm

exp 01/22/14 [illegible] 10/22/13

1008040 PEST CAL STDS (HAWAII)

1008039 1.0ppm PEST (HAWAII) exp 01/22/14 [illegible] 11/20/13

1.0 ug/ml x 0.2ml / 0.8ml Hex = 0.25 ppm PST (HAWAII)
x 0.2ml / 1.0 Hex = 0.2
x 0.1ml / 0.8ml Hex = 0.125
x 0.1ml / 1.0 ml Hex = 0.1
x 0.05ml / 1.0 ml Hex = 0.05
(1008040) 0.25 ug/ml x 0.05ml / 0.5ml Hex = 0.025
& 0.1 ug/ml x 0.05ml / 0.5ml Hex = 0.01 in Hex (Baker 14961)

exp 01/22/14 [illegible] 10/22/13

1008041 HI Explos-Cal 2° STD

50 µL RDX Absolut (1000 ppm) Lot 111408 exp 11/2013
1,4 DNB (Surr) 1000 ppm ID No. 1007915 exp 04/2015
Nitroglycerine (1,000 ppm) ID No. 1007911-A exp 10/2017
50 µL 2,4-DNT (1,000 ppm) ID No. 1007912-AB 11/2015
0.5 Acetonitrile (Fisher 091039)
5.00 mL of 10 µg/mL each [illegible] 10/24/13

Continued on Page 14 [illegible] 11/14/13

Read and Understood By exp. 11/30/2013

[illegible] Signed 10/24/13 Date [illegible] Signed 10/28/13 Date 11/13/13

PROJECT

Continued From Page

1008034 4,4'-DDT

Part #: 79018 Laboratory Use Only - See MSDS
Lot #: 062413 Exp: 062418 Storage 4 °C
4,4'-DDT
1000 ug/mL in hexane 1 mL
ABSOLUTE STANDARDS, INC. • 800-368-1131

opened 10/22/13 DS

1008035 HEPTACHLOR

Part #: 79022 Laboratory Use Only - See MSDS
Lot #: 061710 Exp: 061715 Storage 4 °C
Heptachlor
1000 ug/mL in hexane 1 mL
ABSOLUTE STANDARDS, INC. • 800-368-1131

opened 10/22/13 DS

1008036 HEPTACHLOR EPOXIDE

Part #: 79050 Laboratory Use Only - See MSDS
Lot #: 030212 Exp: 030217 Storage 4 °C
Heptachlor epoxide
(Isomer B)
1000 ug/mL in hexane 1 mL
ABSOLUTE STANDARDS, INC. • 800-368-1131

opened 10/22/13 DS

1008037 PEST STOCK/SPIKE (HAWAII)

1008029	1000 ppm	a-BHC	exp	09/27/17
1008030		b-BHC	exp	09/27/15
1008031		d-BHC	exp	06/17/15
1008032		Lindane	exp	03/02/17
1008033		Aldrin	exp	06/24/18
1008034		4,4'-DDT	exp	06/24/18
1008035		Heptachlor	exp	06/17/15
1008036		Heptachlor Epoxide	exp	03/02/17

1000 mg/ml x 0.1 ml of each / 10 ml Acetone (Baker K51E12) = 10 ppm

exp 01/22/14 DS 10/22/13

DS 10/22/13

Continued on Page

Read and Understood By

DS 10/22/13 GM 10/28/13

Signed Date Signed Date

1008029 Alpha - BHC

Part #: 79016 Laboratory Use Only - See MSDS
Lot #: 092712 Exp: 092717 Storage 4 °C
a-BHC
1000 ug/mL in hexane 1 mL
ABSOLUTE STANDARDS, INC. • 800-368-1131

Opened 10/22/13 RDS

1008030 Beta - BHC

Part #: 79175 Laboratory Use Only - See MSDS
Lot #: 092712 Exp: 092715 Storage 4 °C
beta-BHC
1000 ug/mL in acetone 1 mL
ABSOLUTE STANDARDS, INC. • 800-368-1131

Opened 10/22/13 RDS

1008031 Delta - BHC

Part #: 79048 Laboratory Use Only - See MSDS
Lot #: 061710 Exp: 061715 Storage 4 °C
d-BHC
1000 ug/mL in hexane 1 mL
ABSOLUTE STANDARDS, INC. • 800-368-1131

Opened 10/22/13 RDS

1008032 Gamma - BHC (Lindane)

Part #: 79049 Laboratory Use Only - See MSDS
Lot #: 030212 Exp: 030217 Storage 4 °C
gamma-BHC
[Lindane]
1000 ug/mL in hexane 1 mL
ABSOLUTE STANDARDS, INC. • 800-368-1131

Opened 10/22/13 RDS

1008033 Aldrin

Part #: 79015 Laboratory Use Only - See MSDS
Lot #: 062413 Exp: 062418 Storage 4 °C
Aldrin
1000 ug/mL in hexane 1 mL
ABSOLUTE STANDARDS, INC. • 800-368-1131

Opened 10/22/13 RDS

Continued on Page

Read and Understood By

RDS 10/22/13 JS 10/28/13

ARDL Inc Signed Date Signed Date

CERTIFIED WEIGHT REPORT

				Lot #
Part Number:	79016	**Solvent(s):**	K38E41	Hexane
Lot Number:	092712			
Description:	a-BHC			
Expiration Date:	092717			
Recommended Storage:	Refrigerate (4 °C)			
Nominal Concentration (µg/mL):	1000			

Formulated By: Paul Barron 092712 DATE

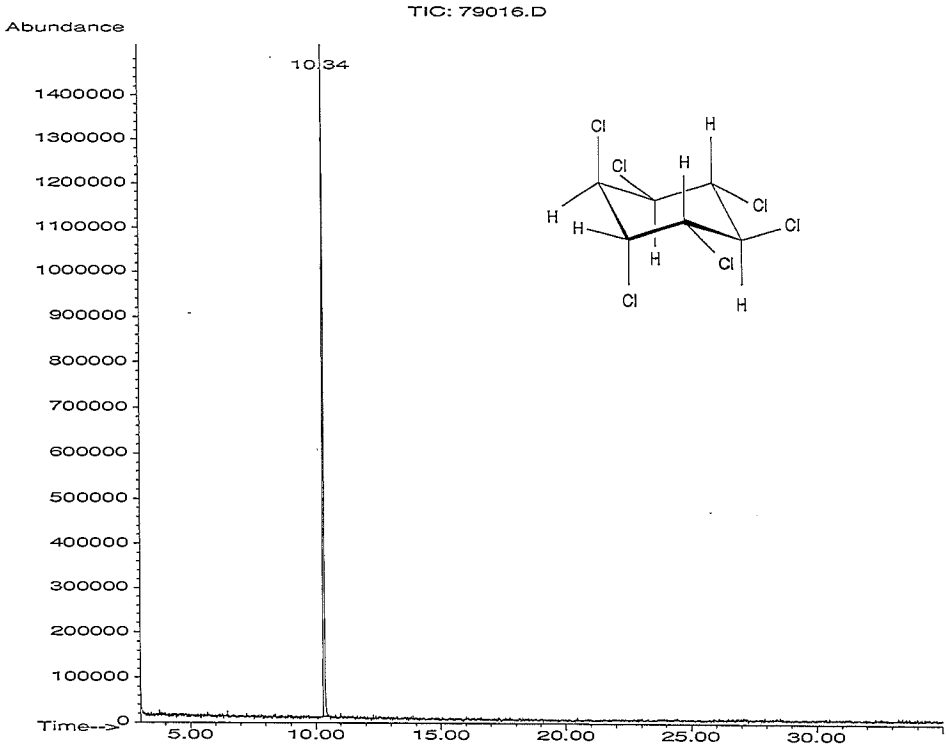
Reviewed By: Pedro L. Rentas 092712 DATE

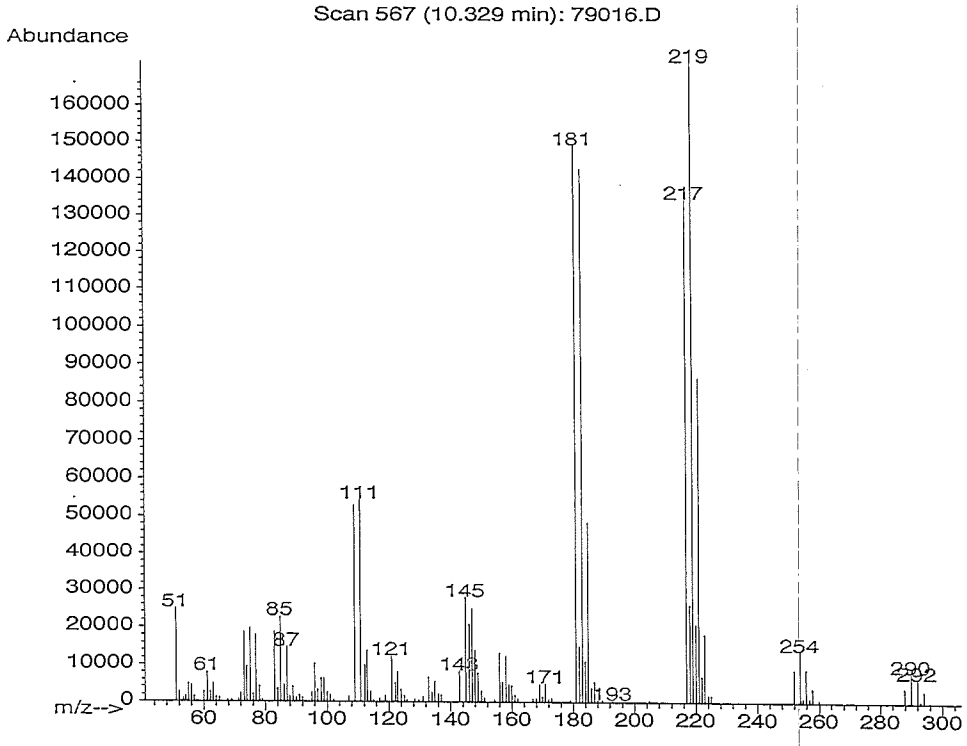
Weight(s) shown below were combined and diluted to: 25.0 — 5E-05 Balance Uncertainty; 0.002 Flask Uncertainty

MSDS Information
(Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. a-BHC	38	27275-15	1000	99	0.2	0.02525	0.02527	1000.9	0.00566	00319-84-6	N/A	orl-rat 177mg/kg

Method GC7MSD-1.M: Column: SPB-608 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Nicole Davis.





CERTIFIED WEIGHT REPORT

			Lot #
Part Number:	79175	**Solvent(s):**	K42E09 Acetone
Lot Number:	092712		
Description:	b-BHC		
Expiration Date:	092715		
Recommended Storage:	Refrigerate (4 °C)		
Nominal Concentration (µg/mL):	1000		

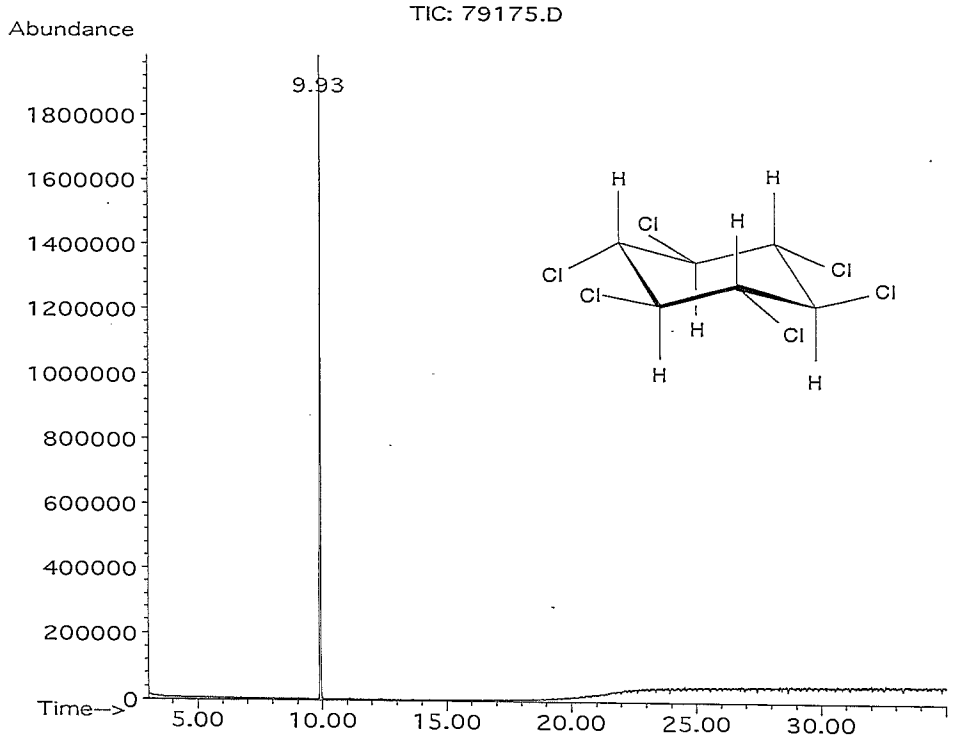
Formulated By: Bryan Njeba 092712 DATE

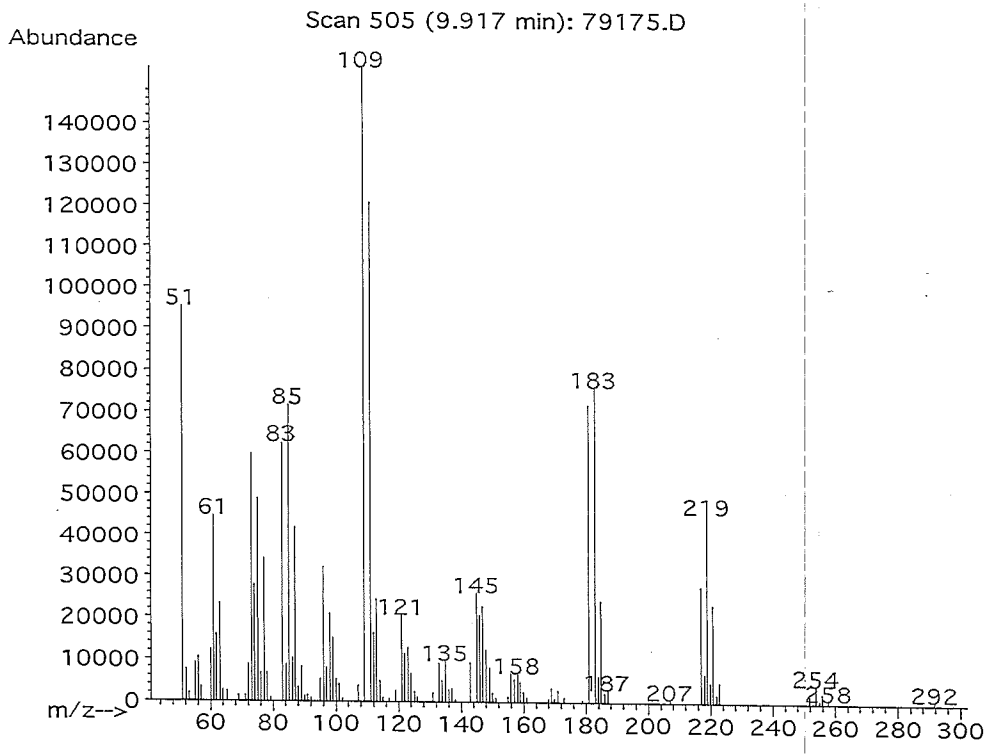
Reviewed By: Pedro L. Rentas 092712 DATE

Weight(s) shown below were combined and diluted to: 25.0 5E-05 Balance Uncertainty 0.002 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. b-BHC	39	ER052506-01	1000	99	0.2	0.02525	0.02526	1000.5	0.00566	00319-85-7	N/A	orl-rat 6000mg/kg

Method GC7MSD-1.M: Column: DB-35MS (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Gina McLane





CERTIFIED WEIGHT REPORT

Part Number:	79048	**Solvent(s):**	Lot # H33E08	Hexane
Lot Number:	061710			
Description:	d-BHC			
Expiration Date:	061715			
Storage:	4 °C			
Nominal Concentration (µg/mL):	1000			

5E-05 Balance Uncertainty

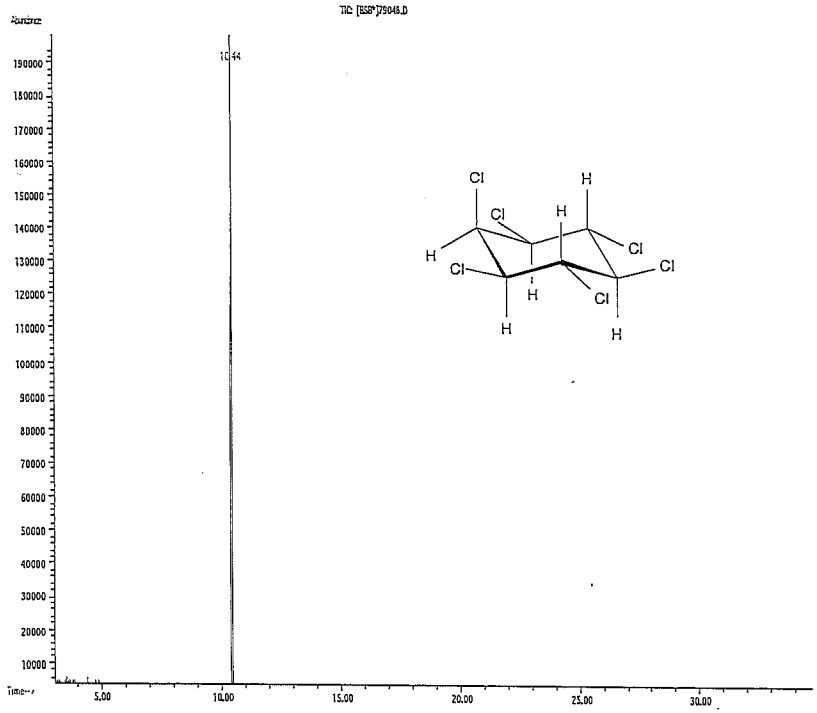
Weight(s) shown below were combined and diluted to: 25.0 0.004 Flask Uncertainty

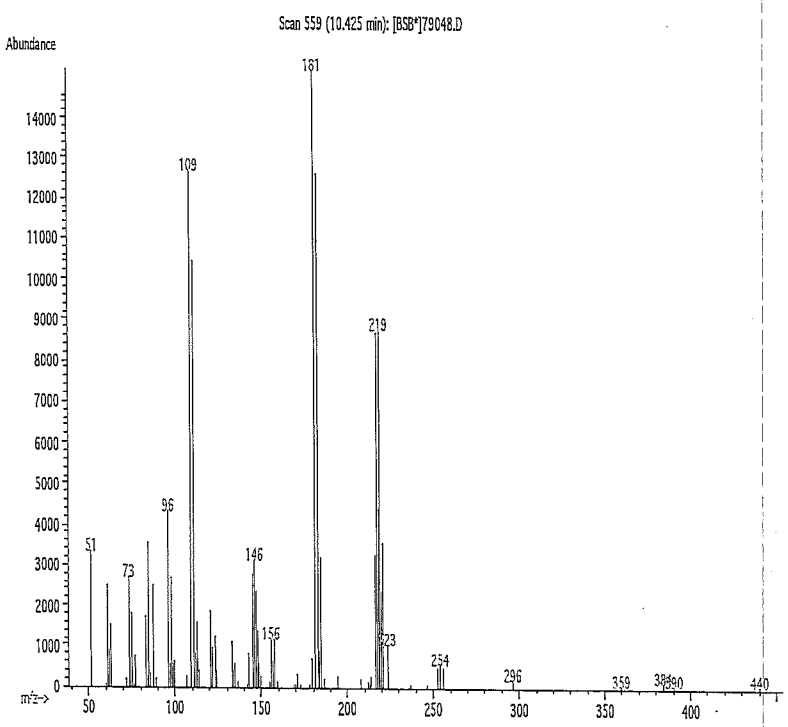
Formulated By:	Justin Dippold	061710 DATE
Reviewed By:	Pedro L. Rentas	061710 DATE

MSDS Information
(Solvent Safety Info. On Attached pg.)

	Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1.	d-BHC	40	ER051805-01	1000	99	0.2	0.02527	0.02535	1003.1	0.00566	00319-86-8	N/A	orl-rat 1000mg/kg

Method GC8MSD-7.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5min.), Rate = 8°C/min., Injector B= 200°C, Detector E = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.





CERTIFIED WEIGHT REPORT

				Lot #
Part Number:	79049	**Solvent(s):**	K38E41	Hexane
Lot Number:	030212			
Description:	g-BHC (Lindane)			
Expiration Date:	030217			
Recommended Storage:	Refrigerate (4 °C)			
Nominal Concentration (μg/mL):	1000			

Formulated By:	Vincent K. Criscio, Jr.	030212 DATE
Reviewed By:	Pedro L. Rentas	030212 DATE

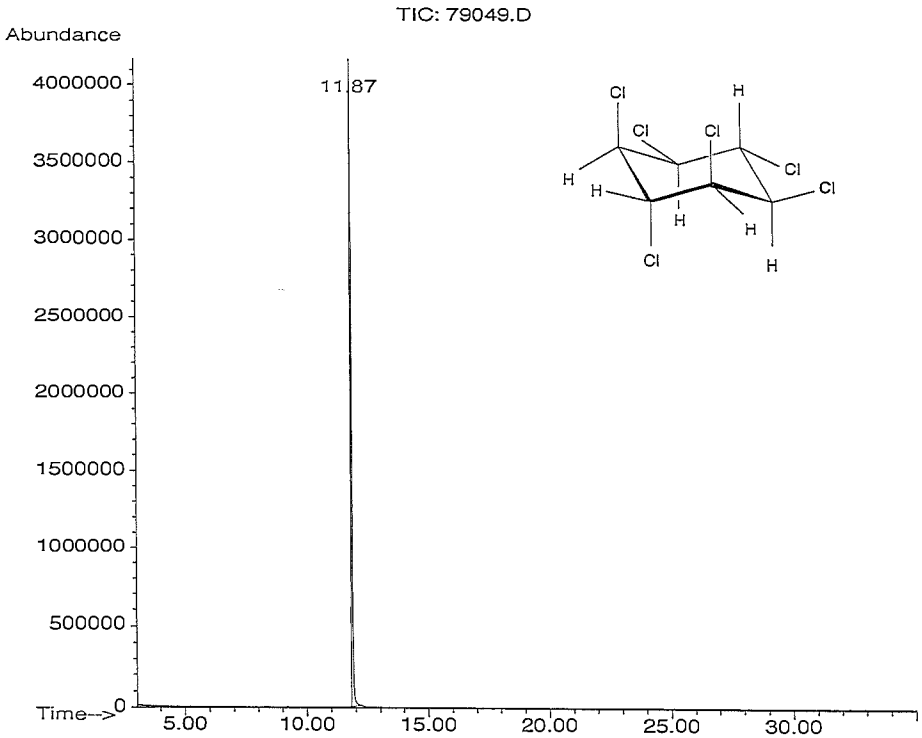
5E-05 Balance Uncertainty

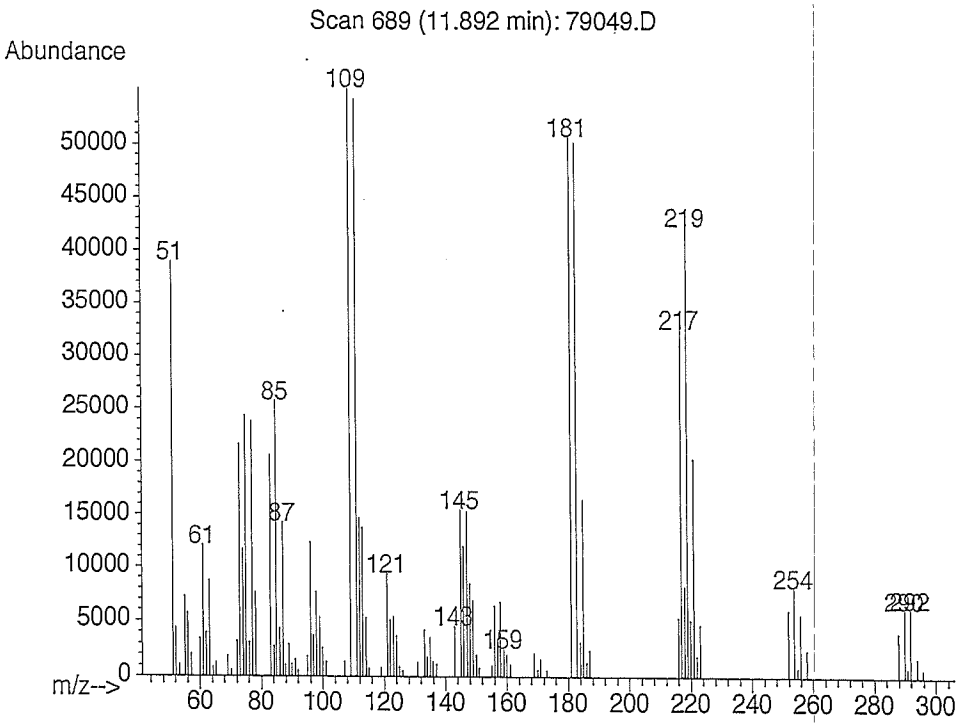
Weight(s) shown below were combined and diluted to: 25.0 0.002 Flask Uncertainty

MSDS Information (Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (μg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (μg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. g-BHC (Lindane)	41	46601	1000	99	0.2	0.02525	0.02531	1002.5	0.0057	00058-89-9	0.5mg/m3 (skin)	orl-rat 76mg/kg

Method GC7MSD-1.M: Column: SPB-608 (30m X 0.25mm ID X 0.25μm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Nicole Poisson.





CERTIFIED WEIGHT REPORT

Part Number:	79015	**Solvent(s):**	Lot # 11493	Hexane
Lot Number:	062413			
Description:	Aldrin			
Expiration Date:	062418			
Recommended Storage:	Refrigerate (4 °C)			
Nominal Concentration (µg/mL):	1000			

Gabriel Helland 062413
Formulated By: Gabriel Helland DATE

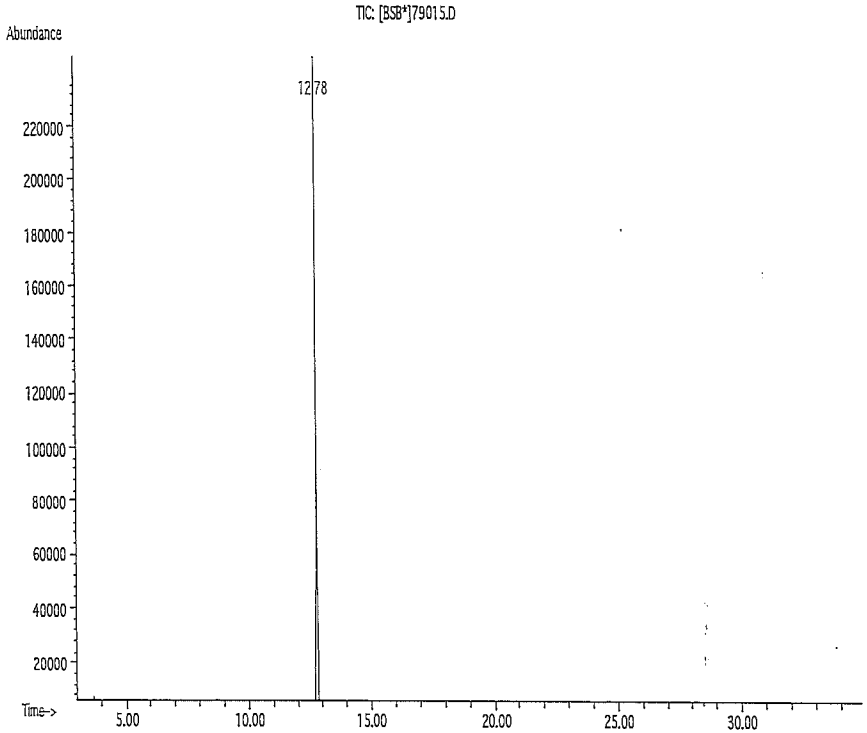
Pedro Rentas 062413
Reviewed By: Pedro L. Rentas DATE

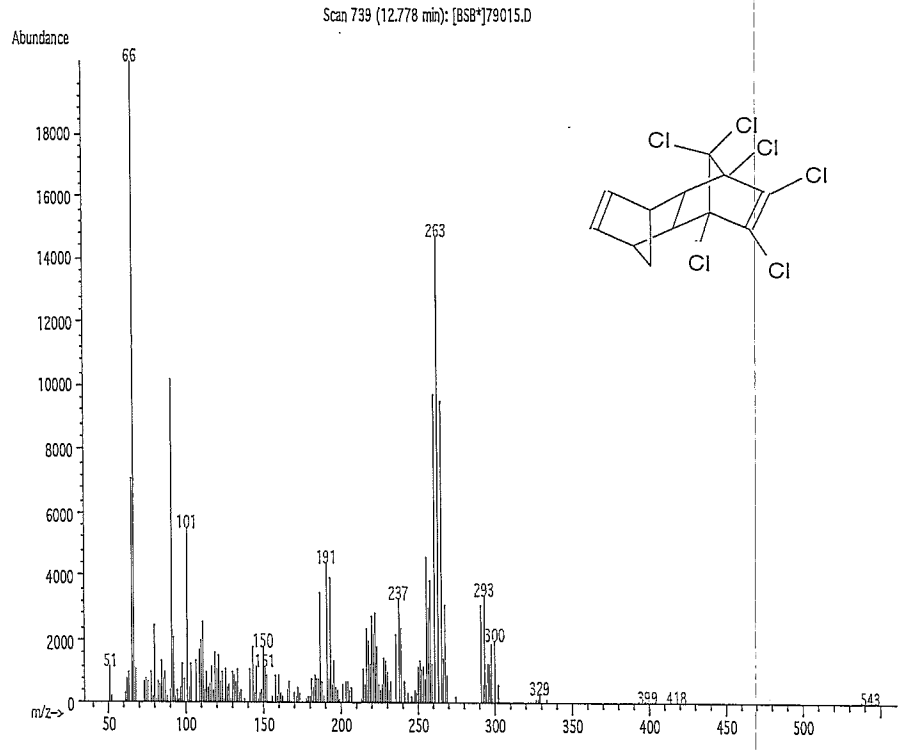
Weight(s) shown below were combined and diluted to: 25.0 — 5E-05 Balance Uncertainty; 0.002 Flask Uncertainty

MSDS Information (Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. Aldrin	9	122096	1000	99	0.2	0.02525	0.02533	1003.3	0.00565	00309-00-2	0.25mg/m3 (skin)	orl-rat 39mg/kg

Method GC8MSD-7.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.





CERTIFIED WEIGHT REPORT

				Lot #	
Part Number:	79018	**Solvent(s):**		11493	Hexane
Lot Number:	062413				
Description:	4,4'-DDT				
Expiration Date:	062418				
Recommended Storage:	Refrigerate (4 °C)				
Nominal Concentration (µg/mL):	1000				

Formulated By: Gabriel Helland — DATE 062413

Reviewed By: Pedro L. Rentas — DATE 062413

5E-05 Balance Uncertainty

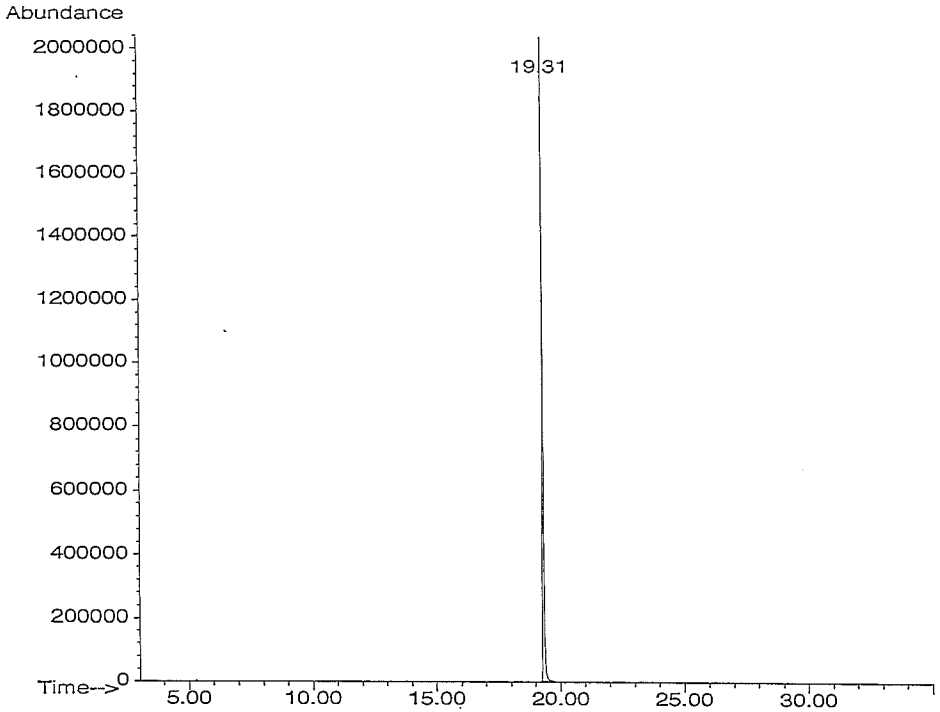
Weight(s) shown below were combined and diluted to: 25.0 0.002 Flask Uncertainty

MSDS Information (Solvent Safety Info. On Attached pg.)

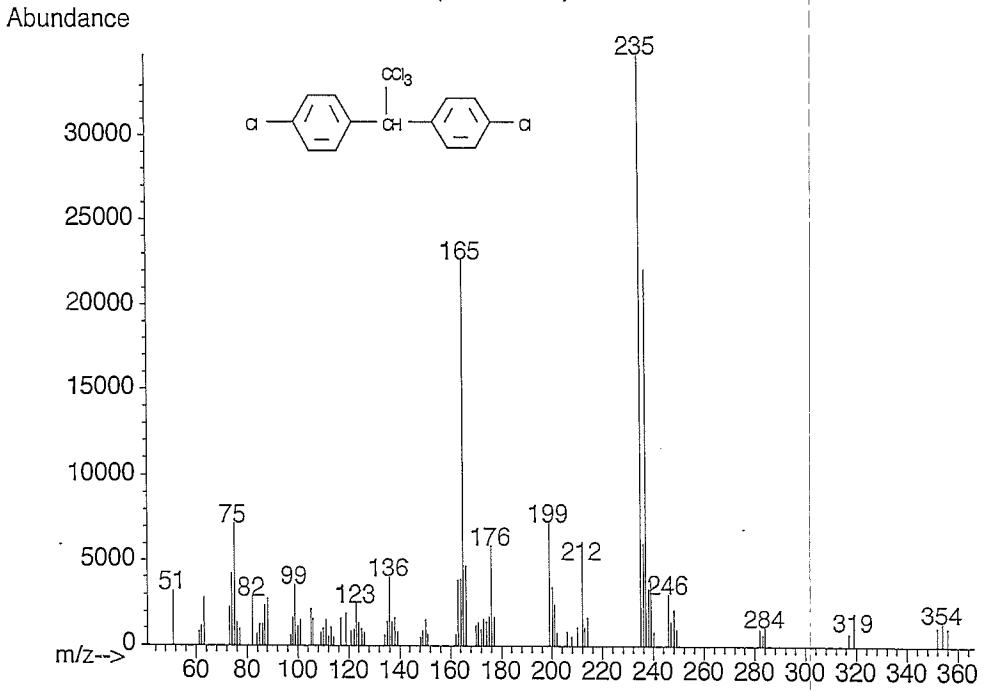
Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. 4,4'-DDT	101	ER012306-03	1000	99	0.2	0.02525	0.02530	1002.1	0.0057	00050-29-3	N/A	orl-rat 87mg/kg

Method GC7MSD-1.M: Column: DB-35MS (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Gina McLane

TIC: 79018.D



Scan 1262 (19.270 min): 79018.D



CERTIFIED WEIGHT REPORT

			Lot #	
Part Number:	79022	**Solvent(s):**	H33E08	Hexane
Lot Number:	061710			
Description:	Heptachlor			
Expiration Date:	061715			
		Storage:	4 °C	
Nominal Concentration (µg/mL):	1000			

5E-05 Balance Uncertainty

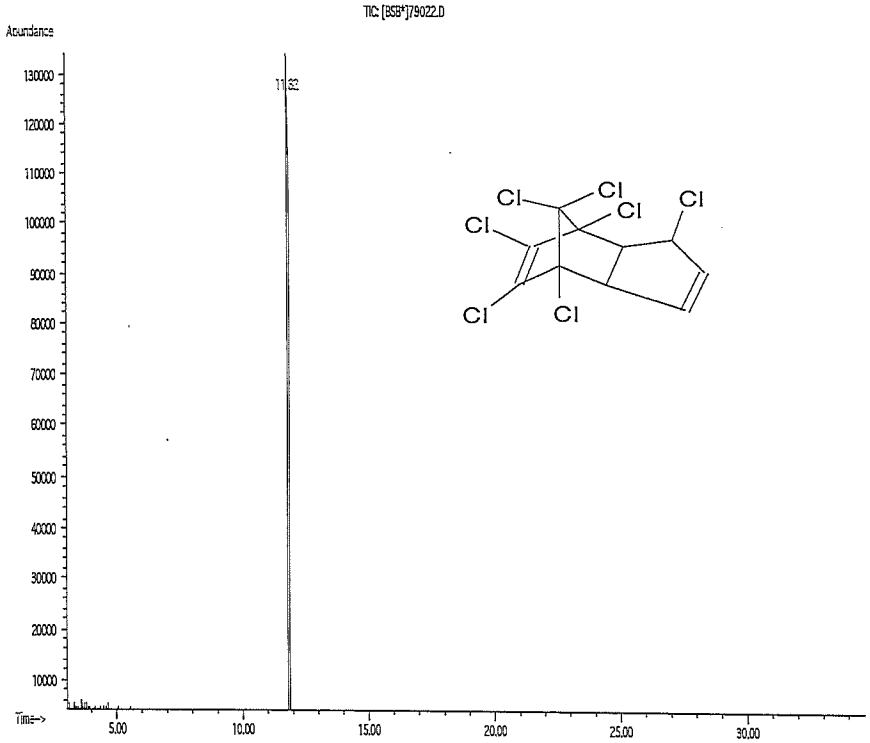
Weight(s) shown below were combined and diluted to: 25.0 0.004 Flask Uncertainty

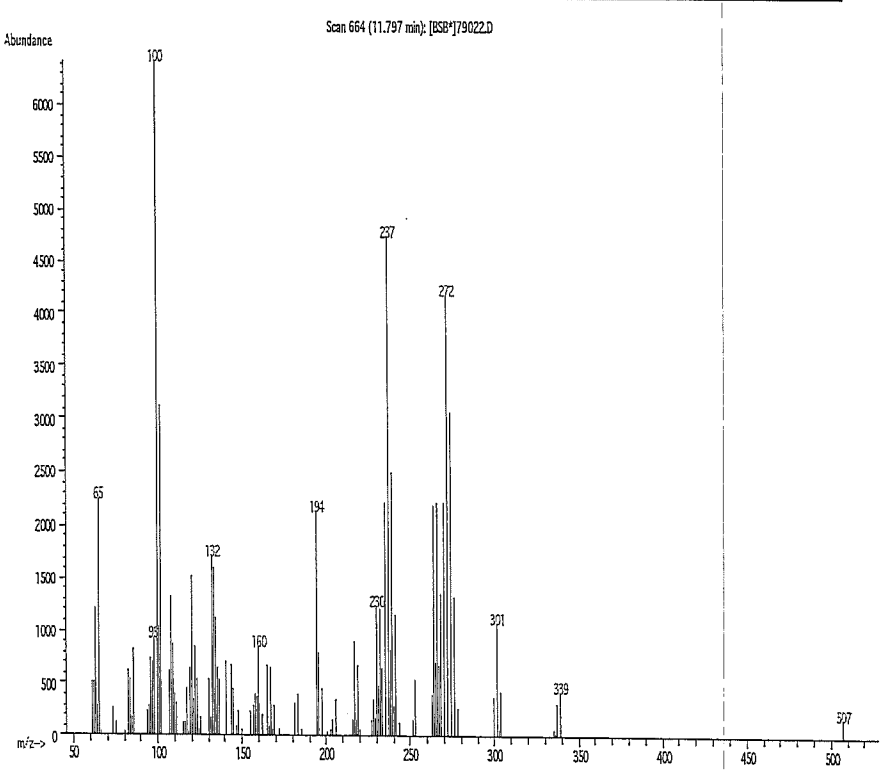
Formulated By:	Justin Dippold	061710 DATE
Reviewed By:	Pedro L. Rentas	061710 DATE

MSDS Information (Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. Heptachlor	192	100705JD	1000	99	0.2	0.02527	0.02533	1002.3	0.0057	00076-44-8	0.5mg/m3 (skin)	orl-rat 40mg/kg

Method GC8MSD-7.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.





CERTIFIED WEIGHT REPORT

Part Number: 79050
Lot Number: 030212
Description: Heptachlor epoxide (isomer B)

Solvent(s): Lot # K38E41 Hexane

Expiration Date: 030217
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000

Formulated By: Vincent K. Criscio, Jr. 030212 DATE

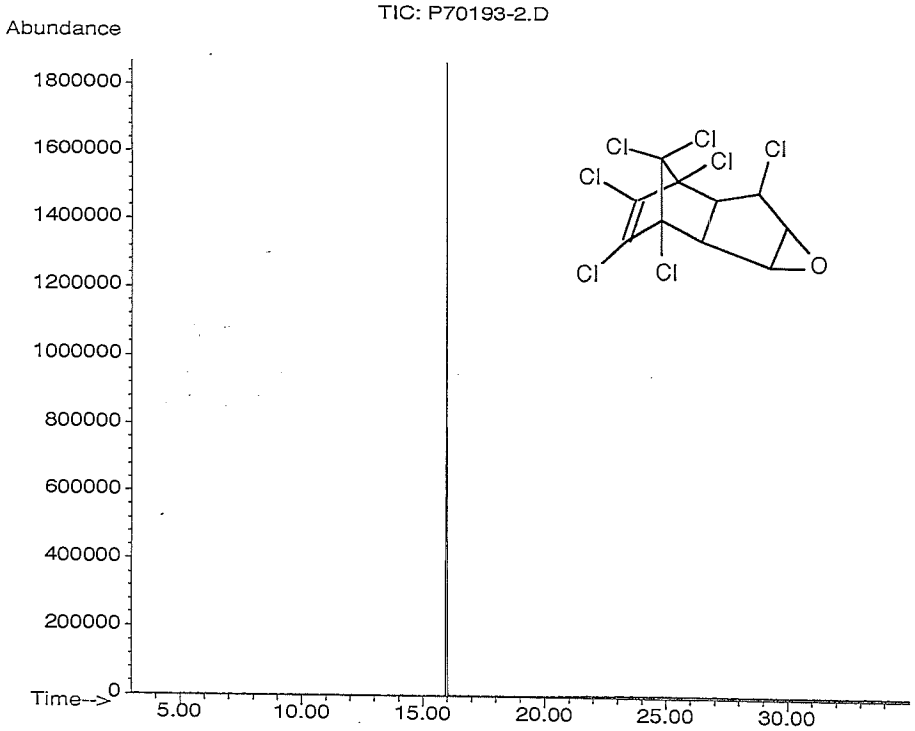
Reviewed By: Pedro L. Rentas 030212 DATE

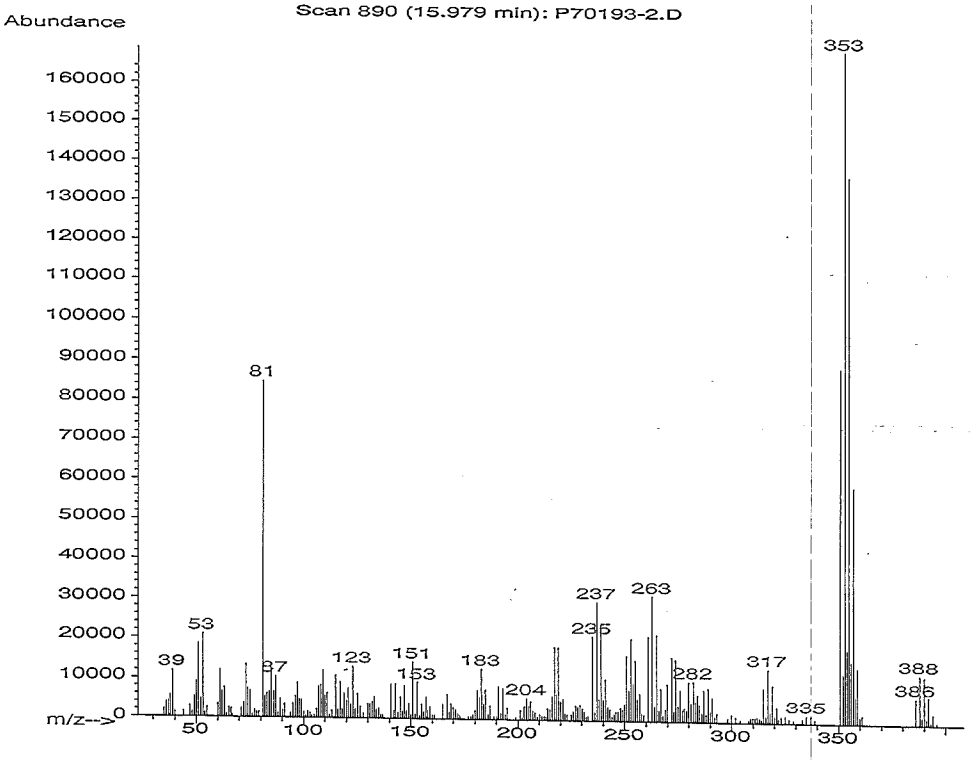
Weight(s) shown below were combined and diluted to: 25.0 5E-05 Balance Uncertainty 0.002 Flask Uncertainty

MSDS Information (Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. Heptachlor epoxide (isomer B)	193	060997	1000	98	0.2	0.02550	0.02556	1002.2	0.0057	01024-57-3	N/A	orl-rat 47mg/kg

Method GC7MSD-7.M: Column: SPB-608 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Lance R. Boynton.





1007975-4 HCPD/ISODRN STOCK

HCPD Ultra EPA-1127 5000ug/ml LOT CJ-1155 exp 05/31/14
ISODRN Ultra EPA-1131 5000ug/ml LOT CH-3190 exp 10/31/15

5000 ug/ml X 0.5ml each / 5ml Acetone (Baker KS1612) = 500ppm
05/31/14 DT
exp ~~06/12/14~~ 09/12/13 DT 09/12/13

1007976-4 PEST STOCK

Pest Mix Ultra PRM-808C 1000ug/ml LOT CH-3658 exp 12/31/13

1000 ug/ml X 0.5ml / 5ml Hex (Baker 1496) = 100ppm

exp 12/31/13 DT 09/12/13

~~1007977-4~~ ~~PMA PEST STOCK~~ ~~DT 09/12/13~~
~~STOCK 1007975-4 500ppm HCPD/ISODRN exp 05/31/14~~
~~STOCK 1007976-4 100ppm Pest mix exp 12/31/13~~
~~Surrogate~~

1007977 OCP SURR 200ppm

Part #: 20023 Laboratory Use Only - See MSDS
Lot #: 020212 Exp: 020217 Storage 4 °C
CLP - Pesticide Surrogate Spike Solution
2 components
200 ug/mL in acetone 1 mL
ABSOLUTE STANDARDS, INC. • 800-368-1131

opened 09/12/13
DT 09/12/13

1007978-4 PEST STOCK

STOCK 1007975-4 500ppm HCPD/ISODRN exp 05/31/14
STOCK 1007976-4 100ppm Pest mix exp 12/31/13
STOCK 1007977 200ppm OCP surrogate exp 02/02/17
500 ug/ml X 0.1ml
100 ug/ml X 0.5ml / 5ml Hex (Baker 1496) = 10ppm Pest
200 ug/ml X 0.25ml
DT 09/12/13
exp 12/12/13

Continued on Page

Read and Understood By

DT 09/12/13 9/13/13
Signed Date Signed Date

CERTIFIED WEIGHT REPORT

Part Number: 20023
Lot Number: 020212
Description: CLP Pesticide Surrogate Standard
2 components
Expiration Date: 020217
Storage: 4 °C
Nominal Concentration (µg/mL): 200

Solvent(s): Lot # K25E41 Acetone

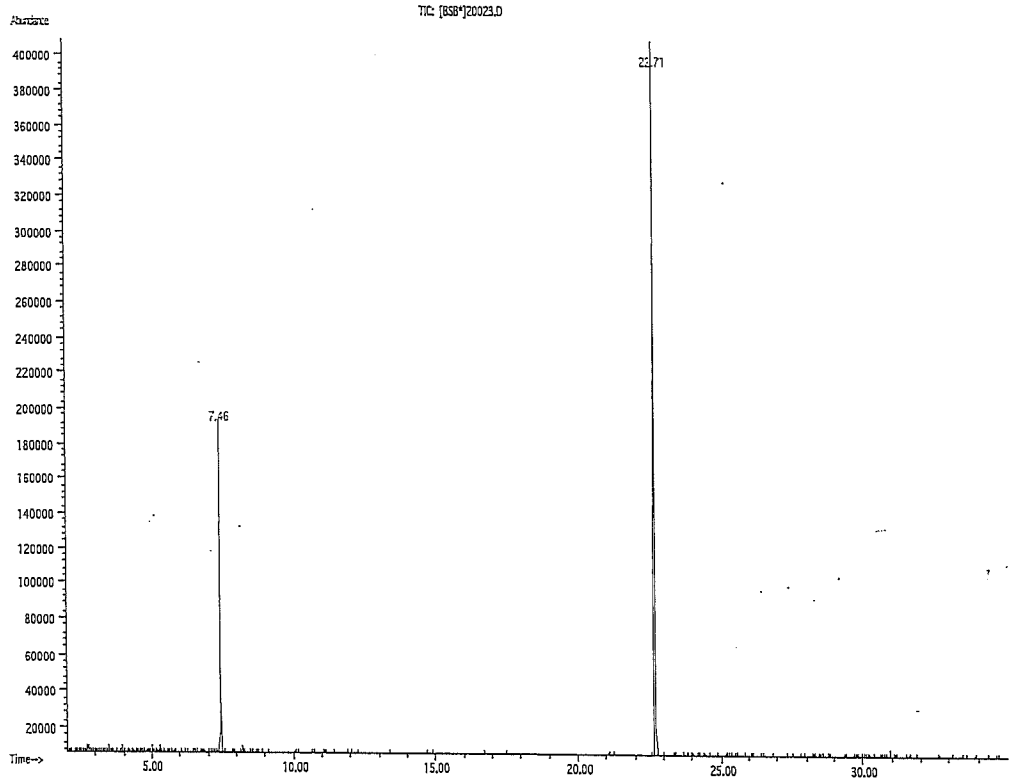
Formulated By: Vincent K. Criscio, Jr. DATE 020212

Reviewed By: Pedro L. Rentas DATE 020212

Weight(s) shown below were combined and diluted to: 500.0 5E-05 Balance Uncertainty 0.058 Flask Uncertainty

MSDS Information (Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. 2,4,5,6-Tetrachloro-m-xylene	273	052501	200	99.0	0.20	0.10102	0.10138	200.7	0.0042	00877-09-8	N/A	N/A
2. Decachlorobiphenyl (209)	103	33379-92	200	99.0	0.20	0.10102	0.10144	200.8	0.0042	02051-24-3	N/A	N/A



Method GC8MSD-7.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Candice Warren.

Name	MSD RT (min.)
2,4,5,6-Tetrachloro-m-xylene	7.45
Decachlorobiphenyl	22.70

PROJECT

Continued From Page

1007971-R/S PEST QC/SPIKE

STOCK 1007970-R/S 10ppm Pest QC exp 12/11/13

10 ug/ml X 0.5ml/5ml ~~Hex (Baker 4961)~~ Acetone (Baker 4LSTE(2)) = 1ppm Pest QC

DJ 09/11/13

exp 12/11/13 DJ 09/11/15

1007972-R/S PEST VERIFICATION

STOCK 1007971-R/S 1ppm Pest QC exp 12/11/13

1ug/ml X 0.5ml/5ml Hex (Baker 4961) = 0.1ppm Pest QC

exp 12/11/13 DJ 09/11/13

1007973 TPH Cal Std/Stock

o-terphenyl Accu Std GRH-SS 2000ppm LOT B607005O exp 07/10/16

Composite Diesel Restek 31258 50000ppm LOT A069478 exp 09/16

RESTEK 110 Banner Circle Bellefonte, PA 16823 Made in USA

Catalog# 31464

Motor Oil Composite Standard

50,000 ug/mL each in Methylene Chloride

Lot# A094493 Exp. Date: 05/2020 Store: 25°C nominal

2000ppm OTP X 0.1ml

50000ug/ml Dies X 0.1ml / 5ml MeCl (Baker 4556) = 10000 (1000)(40) ppm TPH

50000 ug/ml Oil X 1.0ml

exp 09/12/14 DJ 09/12/13

1007974 TPH Cal Stds

STOCK 1007973 10000 (1000)(40) ppm TPH exp 09/12/14

10000 (1000)(40) ug/ml X 0.3ml / 0.4ml MeCl (Baker 4556) = 7500 (750)(30)

X 0.25ml / 0.5ml = 5000 (500)(20)

X 0.1ml / 0.4ml = 2500 (250)(10)

X 0.05ml / 0.5ml = 1000 (100)(4)

exp 03/12/14 DJ 09/12/15

DJ 09/12/13

Continued on Page

Read and Understood By

DJ 09/12/13 Signed Date

DJ 9/12/13 Signed

1007967

EXPOLS - Cal Stds (1 CAL)

	mls of 1007937	Vf	Diluent	Final (µg/L)
1007967	—		—	0 (Blank)
68	0.025		5.0 mL	50 µg/L
69	0.050			100
70	0.100			200
71	0.200			400
72	0.400			800
1007973	0.500 mL		—	1,000 —

JR 8/31/13

1007968 EVAL

Restek 32417 Degradation Mix 100(200)ppm LOT A080346 exp 11/30/14

100(200)ug/ml X 0.01ml/10ml Hex (Baker 1496) = 0.1(0.2)ppm EVAL

exp 12/04/13 BS 09/04/13

1007969 TPH Lt STD

Restek 31637 1000ug/ml LOT A0589045 BS 09/20/13 exp 04/15

1000 ug/ml x 0.05ml/0.5ml MeCl (Baker 4556) = 100ppm

exp 09/11/14 BS 09/11/13

1007970-R/S REST QC STOCK

STOCK 1007900-R 100ppm Rest exp 03/10/14

STOCK 1007901-S 500ppm HCPD/ISD exp 03/10/14

100ug/ml X 0.5ml

500ug/ml x 0.1ml /5ml Hex (Baker 1496) = 10ppm Rest QC

BS 09/11/13

exp 12/11/13

Continued on Page

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BS 09/11/13 JR 9/12/13

PROJECT

Continued From Page

1007900-R PEST STOCK

Restek 32415 2000ppm Pest mix LOT A081212 exp 04/30/15

2000ug/ml X 0.25ml/5ml Hex (Baker 14961) = 100ppm Pest mix

exp 03/10/14 RJT 06/10/13

1007901-S HCPD/ISODRN STOCK

Supelco 4-0051 HCPD 5000ppm in MeOH LOT LB88854 exp 11/30/14
Supelco 4-0852 ISODRN 5000ppm in MeOH LOT LB85482 exp 06/30/14

5000ug/ml X 0.5ml each/5ml Acetone (Baker K51E12) = 500ppm

exp 03/10/14 RJT 06/10/13

1007902-R/S RMA PEST STOCK (SPIKE + QC - no surrogate)

1007900-R 100ppm Pest mix exp 03/10/14
1007901-S 500ppm HCPD/ISODRN exp 03/10/14
~~Surrogate Ultra ISM-320 200ppm LOT CG-3165 exp 10/31/13~~ Not used RJT 06/10/13
100ug/ml X 0.5ml
500ug/ml X 0.1ml /5ml Hex (Baker 14961) = 10ppm Pest Spike
exp 09/10/13 RJT 06/10/13

1007903-R/S RJT 06/10/13 ~~PEST SPIKE SOLUTION~~ PEST VERIFICATION
1007902-R/S 10ppm Pest Spike exp 09/10/13
Hex (Baker 14961) RJT 06/10/13
10 ug/ml X 0.05ml/5ml ~~Acetone (Baker K51E12)~~ = 0.1ppm Pest

exp 09/10/13 RJT 06/10/13

RJT 06/10/13

Continued on Page

Read and Understood By

RJT 06/10/13 6/24/13
Signed Date Signed

RESTEK

Certificate of Analysis

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

Catalog No. : 32415 **Lot No.:** A081212

Description : Organochlorine Pesticide Mix AB #3

Organochlorine Pesticide Mix AB #3, Hexane/Toluene(50:50), 1ml/ampule

Container Size : [5] 2 mL **Pkg Amt:** [5] > 1 mL

Expiration Date : [1] April 2015 **Storage:** 10°C or colder

Elution Order	Compound	CAS #	Percent Purity [2]	Grav. Conc. (weight/volume) [3]	% Grav.Uncert. (95% C.L.; K=2) [4]
1	alpha-BHC	319-84-6	99%	2,000.0 ug/mL	+/-0.59 %
2	gamma-BHC (Lindane)	58-89-9	99%	2,000.0 ug/mL	+/-0.59 %
3	beta-BHC	319-85-7	99%	2,000.0 ug/mL	+/-0.59 %
4	delta-BHC	319-86-8	99%	2,000.0 ug/mL	+/-0.59 %
5	Heptachlor	76-44-8	98%	2,000.2 ug/mL	+/-0.59 %
6	Aldrin	309-00-2	99%	2,000.0 ug/mL	+/-0.59 %
7	Heptachlor epoxide (isomer B)	1024-57-3	99%	2,000.0 ug/mL	+/-0.59 %
8	trans-Chlordane	5103-74-2	99%	2,000.0 ug/mL	+/-0.59 %
9	cis-Chlordane	5103-71-9	99%	2,000.0 ug/mL	+/-0.59 %
10	4,4'-DDE	72-55-9	99%	2,000.0 ug/mL	+/-0.59 %
11	Endosulfan I	959-98-8	98%	2,000.2 ug/mL	+/-0.59 %
12	Dieldrin	60-57-1	99%	2,000.0 ug/mL	+/-0.59 %
13	Endrin	72-20-8	98%	2,000.2 ug/mL	+/-0.59 %
14	4,4'-DDD	72-54-8	97%	2,000.1 ug/mL	+/-0.59 %
15	Endosulfan II	33213-65-9	99%	2,000.0 ug/mL	+/-0.59 %
16	4,4'-DDT	50-29-3	99%	2,000.0 ug/mL	+/-0.59 %
17	Endrin aldehyde	7421-93-4	97%	2,000.1 ug/mL	+/-0.59 %
18	Methoxychlor	72-43-5	99%	2,000.0 ug/mL	+/-0.59 %
19	Endosulfan sulfate	1031-07-8	99%	2,000.0 ug/mL	+/-0.59 %
20	Endrin ketone	53494-70-5	95%	1,999.8 ug/mL	+/-0.59 %

Certificate of Analysis

DESCRIPTION: Hexachlorocyclopentadiene

CATALOG NO.: 40051 MFG DATE: Nov-2011

LOT NO.: LB88854 EXPIRATION DATE: Nov-2014

SOLVENT: METHANOL

ANALYTE	CAS NUMBER	PERCENT PURITY(1)	WEIGHT(2)	ANALYTICAL(3) CONCENTRATION	STD DEV	SUPELCO LOT NO
HEXACHLOROCYCLOPENTADIENE	77-47-4	98.8	4997	4639	+/- 197.9	LB76931

(1) Determined by capillary GC-FID, unless otherwise noted.

(2) NIST traceable weights are used to verify balance calibration with the preparation of each lot. Concentration of analyte in solution is ug/ml +/- 0.5%, uncertainty based upon balance and Class A volumetric glassware. Weights are corrected for analytes less than 98% pure.

(3) Determined by chromatographic analysis against an independently prepared reference lot. Mean of replicate injections.

Elwood Doughty
Quality Control Supervisor

Supelco warrants that its products conform to the information contained in this publication. Purchaser must determine the suitability of the product for its particular use. Please see the latest catalog or order invoice and packing slip for additional terms and conditions of sale.

SUPELCO® Analytical
595 North Harrison Road
Bellefonte, PA 16823-0048 USA
Phone (814) 359-3441

Certificate of Analysis

DESCRIPTION: Isodrin

CATALOG NO.: 40856 MFG DATE: Jun-2011

LOT NO.: LB85482 EXPIRATION DATE: Jun-2014

ANALYTE	CAS NUMBER	PERCENT PURITY(1)	WEIGHT(2)	ANALYTICAL(3) CONCENTRATION		STD DEV	SUPELCO LOT NO
ISODRIN	465-73-6	96.5	5003	5040	+/-	26.8	LB23539

(1) Determined by capillary GC-FID, unless otherwise noted.

(2) NIST traceable weights are used to verify balance calibration with the preparation of each lot. Concentration of analyte in solution is ug/ml +/- 0.5%, uncertainty based upon balance and Class A volumetric glassware. Weights are corrected for analytes less than 98% pure.

(3) Determined by chromatographic analysis against an independently prepared reference lot. Mean of replicate injections.

Elwood Doughty
Quality Control Supervisor

Supelco warrants that its products conform to the information contained in this publication. Purchaser must determine the suitability of the product for its particular use. Please see the latest catalog or order invoice and packing slip for additional terms and conditions of sale.

SUPELCO Analytical
595 North Harrison Road
Bellefonte, PA 16823-0048 USA
Phone (814) 359-3441

Analytical Run Number _____

Calibration Information

Tune Data (If applicable)

Initial Calibration (If different than Initial Calibration in Run 1)
- Calibration Factor Summary
- Chromatogram
- Quant Report (If applicable)

Continuing Calibration
- Calibration Response Check
- Chromatogram
- Quant Report (If applicable)

Instrument Logs/Analysis Notebook Pages

Blank / Field Sample / QC Data

Form 1 (If required)
Chromatogram
Quant Report (If applicable)
Confirmation Analysis Quant Report / Chromatogram (If applicable)
Tentatively Identified Compounds (If required)

Rev. 1.0

Calibration Information

Tune Data (If applicable)

Initial Calibration (If different than Initial Calibration in Run 1)
- Calibration Factor Summary
- Chromatogram
- Quant Report (If applicable)

Continuing Calibration
- Calibration Response Check
- Chromatogram
- Quant Report (If applicable)

Rev. 1.0

File Name:
Version: 0

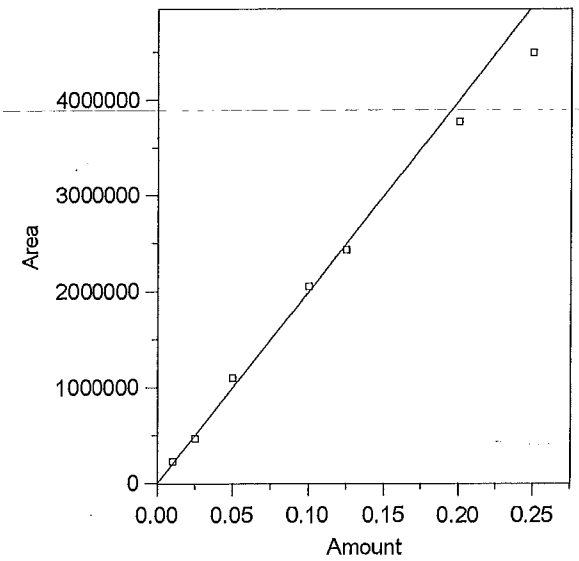
Creator: RDJ
Description: HP2 HAWAII PST 01B STX-CLP2

External standard calibration
Standard injection volume: 1
Standard sample weight: 1
Area reject threshold: 0
Reference peak area reject threshold: 0
Amount units: ug/mL
No default component

Method of calculating data point averages: Current update equal to cal data
No calibration update report

All levels are normal data points.

1 CL4XYL



Expected retention time:	8.36 minutes
Search window:	0.03 minutes
No retention time reference component	
Group number:	0
High alarm limit:	0
Low alarm limit:	0
Component constant:	0.1

Single peak quantification by area

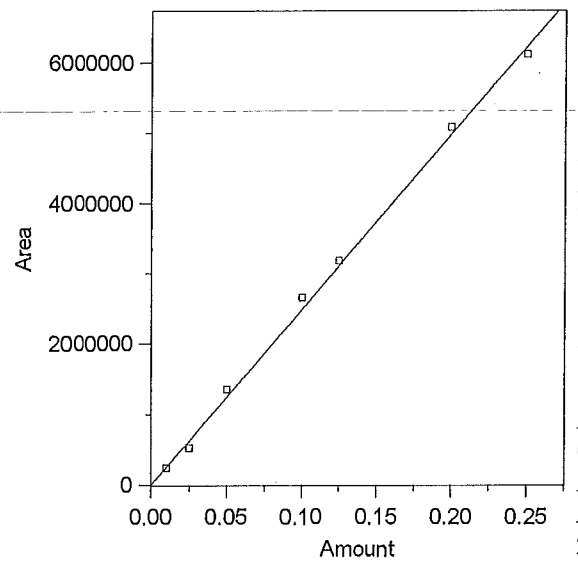
Y = 1.997036E+07 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9801546
Average error:	7.156%
Average CF:	
1.997036E+07	
RSD:	8.629%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.25	4495904	1.798362E+07	-9.948	G:\CP2\HP2\M1022B.0017.BND	10/24/13 11:26:21 AM
2	0.2	3772438	1.886219E+07	-5.549	G:\CP2\HP2\M1022B.0018.BND	10/24/13 11:26:28 AM
3	0.125	2427897	1.942318E+07	-2.740	G:\CP2\HP2\M1022B.0019.BND	10/24/13 11:26:36 AM
4	0.1	2049264	2.049264E+07	2.615	G:\CP2\HP2\M1022B.0020.BND	10/24/13 11:26:43 AM
5	0.05	1095127	2.190254E+07	9.675	G:\CP2\HP2\M1022B.0021.BND	10/24/13 11:26:49 AM
6	0.025	465274	1.861096E+07	-6.807	G:\CP2\HP2\M1022B.0022.BND	10/24/13 11:26:56 AM
7	0.01	225174	2.25174E+07	12.754	G:\CP2\HP2\M1022B.0023.BND	10/24/13 11:27:03 AM

2 ABHC



Expected retention time:	9.92 minutes
Search window:	0.03 minutes
No retention time reference component	
Group number:	0
High alarm limit:	0.25
Low alarm limit:	0.01
Component constant:	0.1

Single peak quantification by area

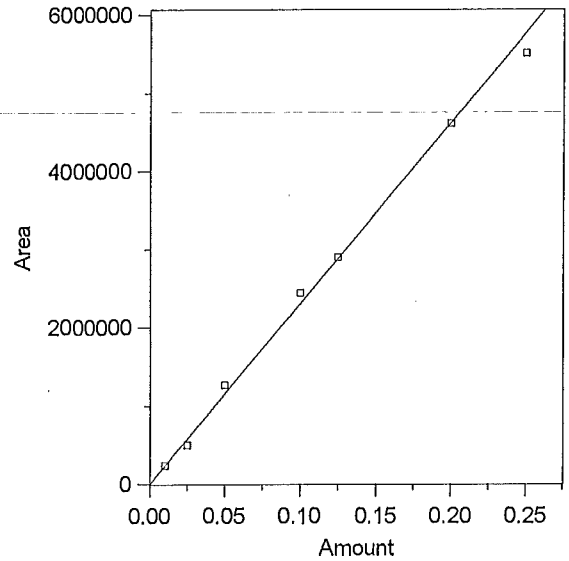
Y = 2.490567E+07 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.997453
Average error:	5.714%
Average CF:	
2.490567E+07	
RSD:	8.015%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.25	6123160	2.449264E+07	-1.658	G:\CP2\HP2\M1022B.0017.BND	10/24/13 11:26:21 AM
2	0.2	5089765	2.544882E+07	2.181	G:\CP2\HP2\M1022B.0018.BND	10/24/13 11:26:28 AM
3	0.125	3184436	2.547549E+07	2.288	G:\CP2\HP2\M1022B.0019.BND	10/24/13 11:26:36 AM
4	0.1	2657845	2.657845E+07	6.716	G:\CP2\HP2\M1022B.0020.BND	10/24/13 11:26:43 AM
5	0.05	1355036	2.710072E+07	8.813	G:\CP2\HP2\M1022B.0021.BND	10/24/13 11:26:49 AM
6	0.025	525750	2.103E+07	-15.561	G:\CP2\HP2\M1022B.0022.BND	10/24/13 11:26:56 AM
7	0.01	242135.4	2.421354E+07	-2.779	G:\CP2\HP2\M1022B.0023.BND	10/24/13 11:27:03 AM

3 LINDANE



Expected retention time:	10.77 minutes
Search window:	0.03 minutes
No retention time reference component	
Group number:	0
High alarm limit:	0.25
Low alarm limit:	0.01
Component constant:	0.1

Single peak quantification by area

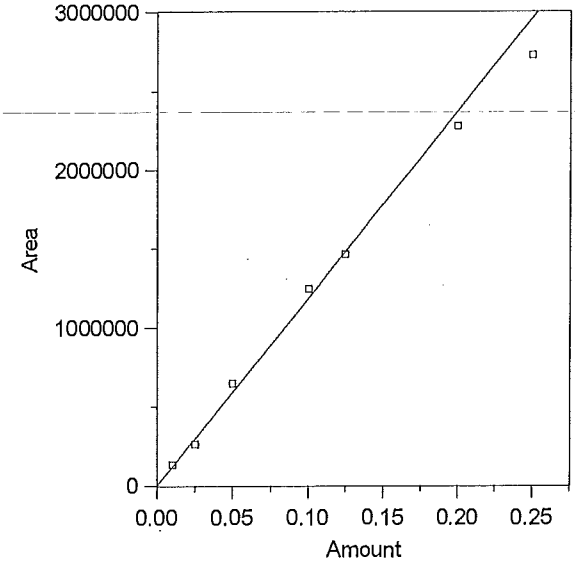
Y = 2.309965E+07 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9958403
Average error:	5.182%
Average CF:	
2.309965E+07	
RSD:	7.407%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.25	5516382	2.206553E+07	-4.477	G:\CP2\HP2\M1022B.0017.BND	10/24/13 11:26:21 AM
2	0.2	4614981	2.30749E+07	-0.107	G:\CP2\HP2\M1022B.0018.BND	10/24/13 11:26:28 AM
3	0.125	2900354	2.320283E+07	0.447	G:\CP2\HP2\M1022B.0019.BND	10/24/13 11:26:36 AM
4	0.1	2439610	2.43961E+07	5.612	G:\CP2\HP2\M1022B.0020.BND	10/24/13 11:26:43 AM
5	0.05	1261997	2.523994E+07	9.265	G:\CP2\HP2\M1022B.0021.BND	10/24/13 11:26:49 AM
6	0.025	499226.3	1.996905E+07	-13.553	G:\CP2\HP2\M1022B.0022.BND	10/24/13 11:26:56 AM
7	0.01	237491.7	2.374917E+07	2.812	G:\CP2\HP2\M1022B.0023.BND	10/24/13 11:27:03 AM

4 BBHC



Expected retention time:	10.97 minutes
Search window:	0.03 minutes
No retention time reference component	
Group number:	0
High alarm limit:	0.25
Low alarm limit:	0.01
Component constant:	0.1

Single peak quantification by area

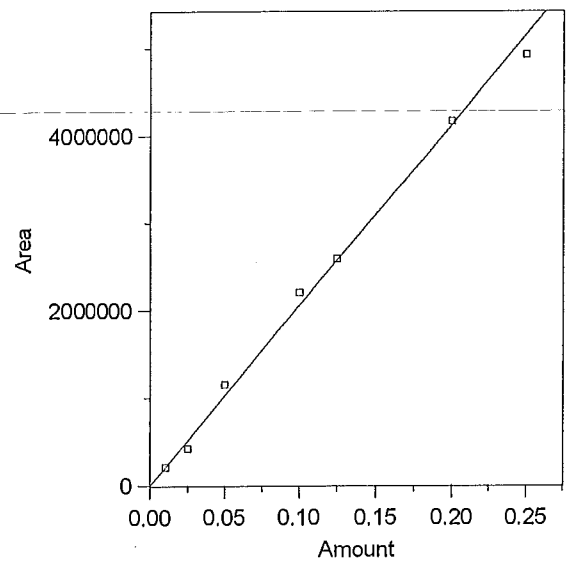
Y = 1.186792E+07 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9878473
Average error:	7.102%
Average CF:	
1.186792E+07	
RSD:	8.590%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.25	2731669	1.092668E+07	-7.931	G:\CP2\HP2\M1022B.0017.BND	10/24/13 11:26:21 AM
2	0.2	2282199	1.1411E+07	-3.850	G:\CP2\HP2\M1022B.0018.BND	10/24/13 11:26:28 AM
3	0.125	1463549	1.170839E+07	-1.344	G:\CP2\HP2\M1022B.0019.BND	10/24/13 11:26:36 AM
4	0.1	1244520	1.24452E+07	4.864	G:\CP2\HP2\M1022B.0020.BND	10/24/13 11:26:43 AM
5	0.05	646614.4	1.293229E+07	8.968	G:\CP2\HP2\M1022B.0021.BND	10/24/13 11:26:49 AM
6	0.025	261891.4	1.047566E+07	-11.731	G:\CP2\HP2\M1022B.0022.BND	10/24/13 11:26:56 AM
7	0.01	131762.5	1.317625E+07	11.024	G:\CP2\HP2\M1022B.0023.BND	10/24/13 11:27:03 AM

5 DBHC



Expected retention time: 11.64 minutes
Search window: 0.03 minutes
No retention time reference component
Group number: 0

High alarm limit: 0.25
Low alarm limit: 0.01
Component constant: 0.1

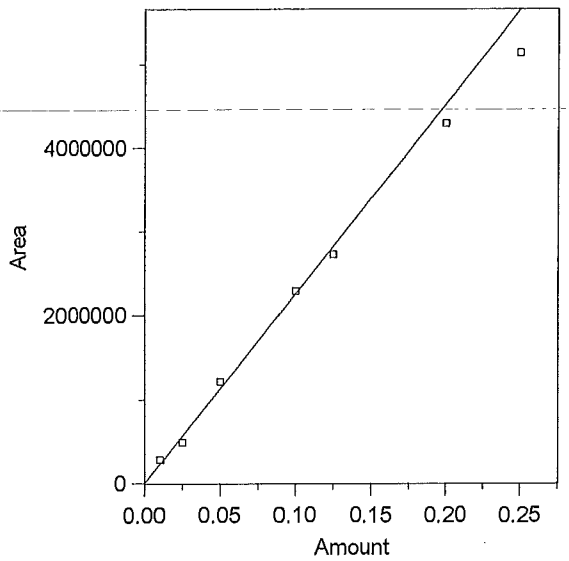
Single peak quantification by area

Y = 2.061646E+07 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9952006
Average error: 6.245%
Average CF:
2.061646E+07
RSD: 9.213%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.25	4928839	1.971536E+07	-4.371	G:\CP2\HP2\M1022B.0017.BND	10/24/13 11:26:21 AM
2	0.2	4167177	2.083588E+07	1.064	G:\CP2\HP2\M1022B.0018.BND	10/24/13 11:26:28 AM
3	0.125	2587707	2.070166E+07	0.413	G:\CP2\HP2\M1022B.0019.BND	10/24/13 11:26:36 AM
4	0.1	2200567	2.200567E+07	6.738	G:\CP2\HP2\M1022B.0020.BND	10/24/13 11:26:43 AM
5	0.05	1149823	2.299646E+07	11.544	G:\CP2\HP2\M1022B.0021.BND	10/24/13 11:26:49 AM
6	0.025	425287.8	1.701151E+07	-17.486	G:\CP2\HP2\M1022B.0022.BND	10/24/13 11:26:56 AM
7	0.01	210487	2.10487E+07	2.097	G:\CP2\HP2\M1022B.0023.BND	10/24/13 11:27:03 AM

6 HPCL



Expected retention time:	11.75 minutes
Search window:	0.03 minutes
No retention time reference component	
Group number:	0
High alarm limit:	0.25
Low alarm limit:	0.01
Component constant:	0.1

Single peak quantification by area

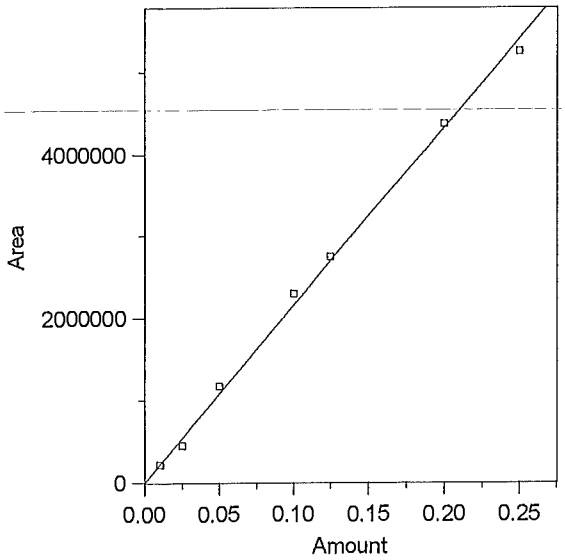
Y = 2.259658E+07 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9835613
Average error:	9.058%
Average CF:	
2.259658E+07	
RSD:	12.243%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.25	5137711	2.055084E+07	-9.053	G:\CP2\HP2\M1022B.0017.BND	10/24/13 11:26:21 AM
2	0.2	4291070	2.145535E+07	-5.050	G:\CP2\HP2\M1022B.0018.BND	10/24/13 11:26:28 AM
3	0.125	2720997	2.176798E+07	-3.667	G:\CP2\HP2\M1022B.0019.BND	10/24/13 11:26:36 AM
4	0.1	2293164	2.293164E+07	1.483	G:\CP2\HP2\M1022B.0020.BND	10/24/13 11:26:43 AM
5	0.05	1211007	2.422014E+07	7.185	G:\CP2\HP2\M1022B.0021.BND	10/24/13 11:26:49 AM
6	0.025	486216.4	1.944866E+07	-13.931	G:\CP2\HP2\M1022B.0022.BND	10/24/13 11:26:56 AM
7	0.01	278014.6	2.780146E+07	23.034	G:\CP2\HP2\M1022B.0023.BND	10/24/13 11:27:03 AM

7 ALDRN



Expected retention time: 12.46 minutes
Search window: 0.03 minutes
No retention time reference component
Group number: 0

High alarm limit: 0.25
Low alarm limit: 0.01
Component constant: 0.1

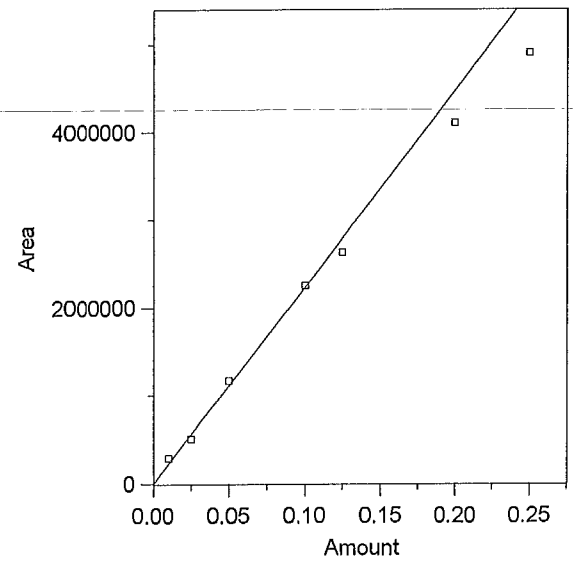
Single peak quantification by area

Y = 2.160105E+07 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.99725
Average error: 5.270%
Average CF:
2.160105E+07
RSD: 7.941%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.25	5254278	2.101711E+07	-2.703	G:\CP2\HP2\M1022B.0017.BND	10/24/13 11:26:21 AM
2	0.2	4372800	2.1864E+07	1.217	G:\CP2\HP2\M1022B.0018.BND	10/24/13 11:26:28 AM
3	0.125	2745746	2.196597E+07	1.689	G:\CP2\HP2\M1022B.0019.BND	10/24/13 11:26:36 AM
4	0.1	2295857	2.295857E+07	6.285	G:\CP2\HP2\M1022B.0020.BND	10/24/13 11:26:43 AM
5	0.05	1176228	2.352456E+07	8.905	G:\CP2\HP2\M1022B.0021.BND	10/24/13 11:26:49 AM
6	0.025	455019.8	1.820079E+07	-15.741	G:\CP2\HP2\M1022B.0022.BND	10/24/13 11:26:56 AM
7	0.01	216763.5	2.167635E+07	0.349	G:\CP2\HP2\M1022B.0023.BND	10/24/13 11:27:03 AM

8 HPCLE



Expected retention time:	13.67 minutes
Search window:	0.03 minutes
No retention time reference component	
Group number:	0
High alarm limit:	0.25
Low alarm limit:	0.01
Component constant:	0.1

Single peak quantification by area

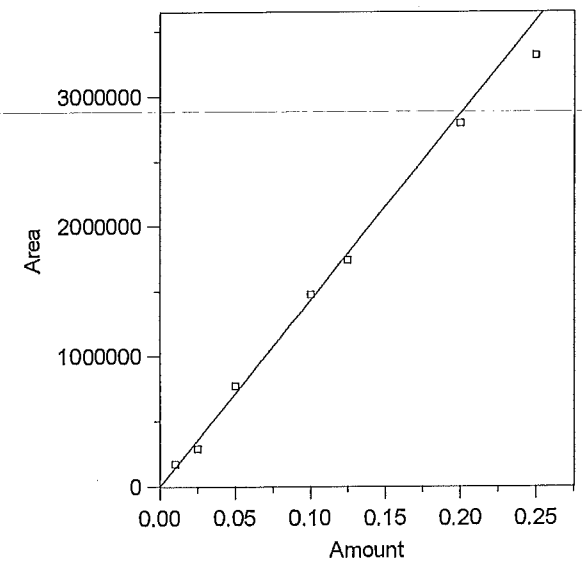
Y = 2.234877E+07 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9659612
Average error:	10.207%
Average CF:	
2.234877E+07	
RSD:	14.651%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.25	4906241	1.962496E+07	-12.188	G:\CP2\HP2\M1022B.0017.BND	10/24/13 11:26:21 AM
2	0.2	4103926	2.051963E+07	-8.185	G:\CP2\HP2\M1022B.0018.BND	10/24/13 11:26:28 AM
3	0.125	2626083	2.100866E+07	-5.996	G:\CP2\HP2\M1022B.0019.BND	10/24/13 11:26:36 AM
4	0.1	2251074	2.251074E+07	0.725	G:\CP2\HP2\M1022B.0020.BND	10/24/13 11:26:43 AM
5	0.05	1168188	2.336376E+07	4.542	G:\CP2\HP2\M1022B.0021.BND	10/24/13 11:26:49 AM
6	0.025	506447.6	2.02579E+07	-9.356	G:\CP2\HP2\M1022B.0022.BND	10/24/13 11:26:56 AM
7	0.01	291557.3	2.915573E+07	30.458	G:\CP2\HP2\M1022B.0023.BND	10/24/13 11:27:03 AM

9 PPDDT



Expected retention time:	16.42 minutes
Search window:	0.03 minutes
No retention time reference component	
Group number:	0
High alarm limit:	0.25
Low alarm limit:	0.01
Component constant:	0.1

Single peak quantification by area

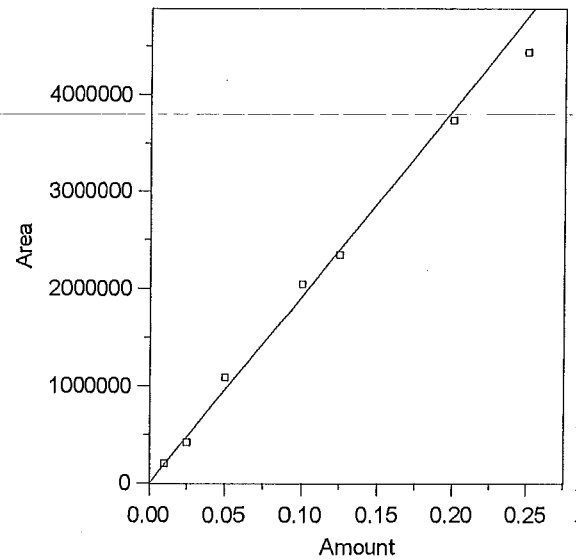
Y = 1.432359E+07 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9900259
Average error:	8.946%
Average CF:	
1.432359E+07	
RSD:	12.307%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.25	3316612	1.326645E+07	-7.380	G:\CP2\HP2\M1022B.0017.BND	10/24/13 11:26:21 AM
2	0.2	2794022	1.397011E+07	-2.468	G:\CP2\HP2\M1022B.0018.BND	10/24/13 11:26:28 AM
3	0.125	1739794	1.391835E+07	-2.829	G:\CP2\HP2\M1022B.0019.BND	10/24/13 11:26:36 AM
4	0.1	1473295	1.473295E+07	2.858	G:\CP2\HP2\M1022B.0020.BND	10/24/13 11:26:43 AM
5	0.05	772783.3	1.545567E+07	7.904	G:\CP2\HP2\M1022B.0021.BND	10/24/13 11:26:49 AM
6	0.025	291360.5	1.165442E+07	-18.635	G:\CP2\HP2\M1022B.0022.BND	10/24/13 11:26:56 AM
7	0.01	172671.9	1.726719E+07	20.551	G:\CP2\HP2\M1022B.0023.BND	10/24/13 11:27:03 AM

10 CL10BP



Expected retention time:	21.95 minutes
Search window:	0.03 minutes
No retention time reference component	
Group number:	0
High alarm limit:	0
Low alarm limit:	0
Component constant:	0.1

Single peak quantification by area

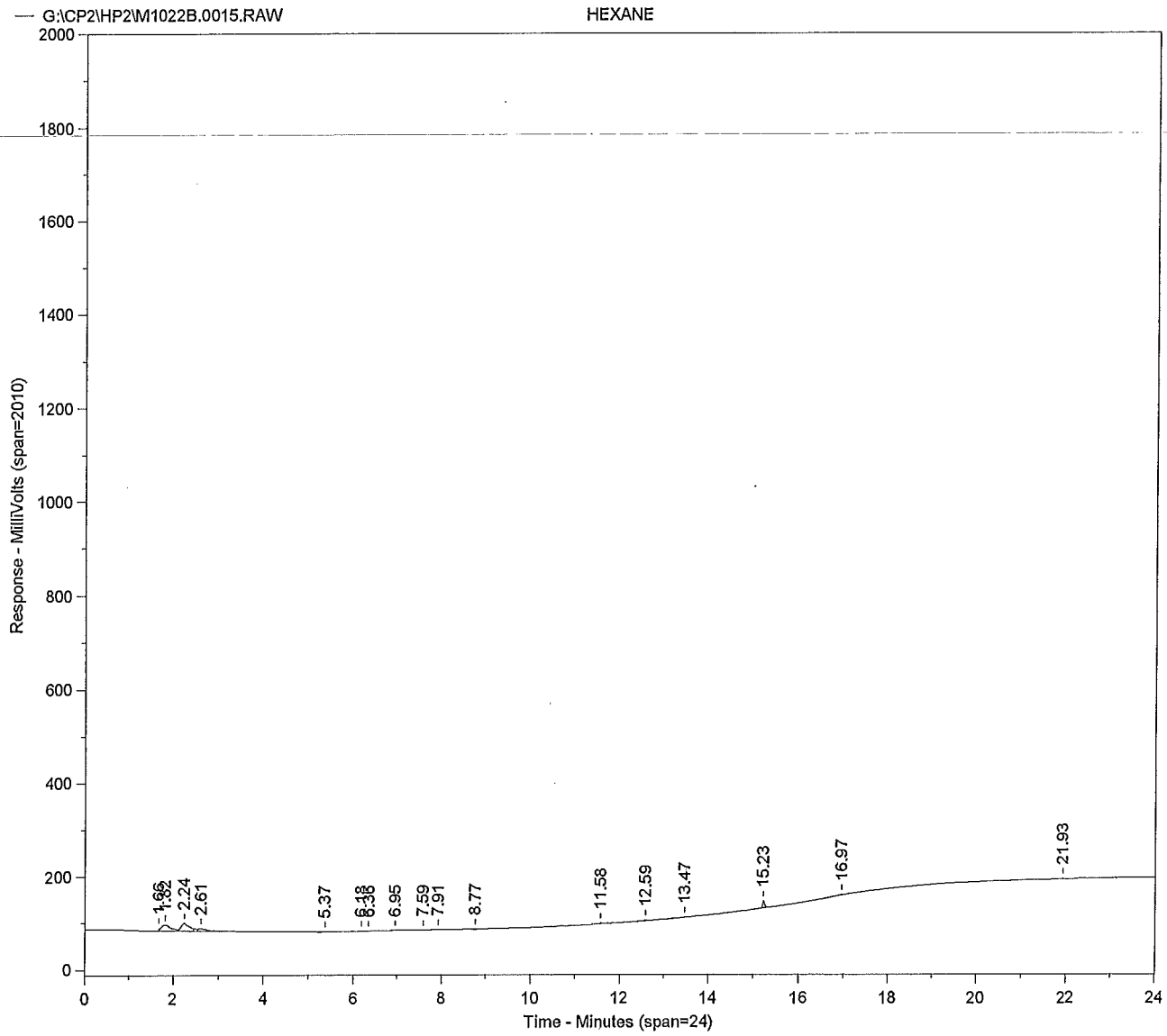
Y = 1.920408E+07 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9885496
Average error:	7.131%
Average CF:	
1.920408E+07	
RSD:	8.745%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.25	4437292	1.774917E+07	-7.576	G:\CP2\HP2\M1022B.0017.BND	10/24/13 11:26:21 AM
2	0.2	3737861	1.86893E+07	-2.681	G:\CP2\HP2\M1022B.0018.BND	10/24/13 11:26:28 AM
3	0.125	2344056	1.875245E+07	-2.352	G:\CP2\HP2\M1022B.0019.BND	10/24/13 11:26:36 AM
4	0.1	2040629	2.040629E+07	6.260	G:\CP2\HP2\M1022B.0020.BND	10/24/13 11:26:43 AM
5	0.05	1081977	2.163954E+07	12.682	G:\CP2\HP2\M1022B.0021.BND	10/24/13 11:26:49 AM
6	0.025	420806.2	1.683225E+07	-12.351	G:\CP2\HP2\M1022B.0022.BND	10/24/13 11:26:56 AM
7	0.01	203595.7	2.035957E+07	6.017	G:\CP2\HP2\M1022B.0023.BND	10/24/13 11:27:03 AM

Chrom Perfect Chromatogram Report



Sample Name = **HEXANE**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1022B.0015.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

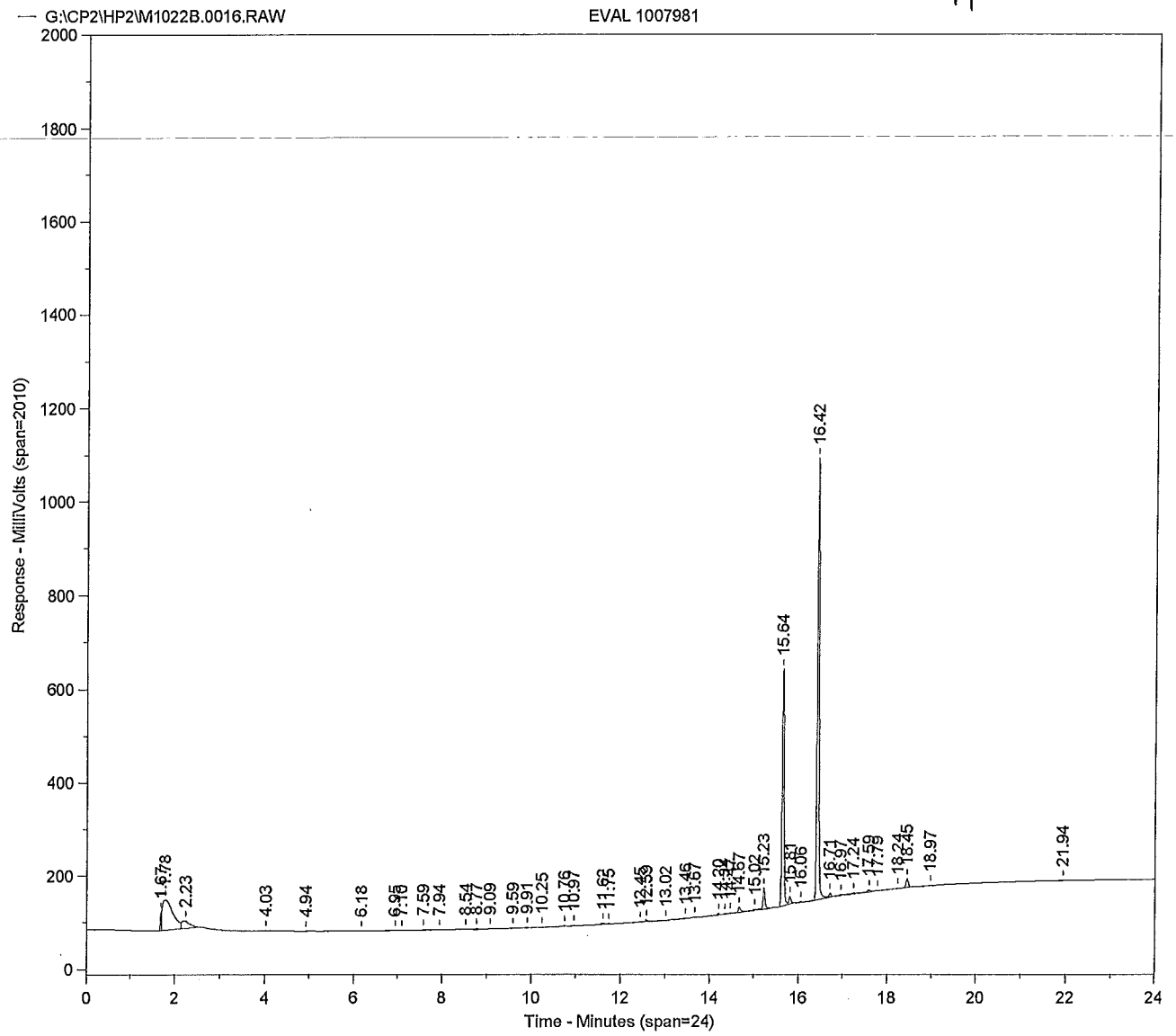
Date Taken (end) = 10/22/13 10:02:19 PM
Method Version = 170
Calibration Version = 4

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.66		0.00	0.000	7099	1.177	BV	0.02
2	1.82		0.00	0.000	185141	30.705	VV	0.19
3	2.24		0.00	0.000	199254	33.046	VV	0.17
4	2.61		0.00	0.000	73530	12.195	VB	0.21
5	5.37		0.00	0.000	2445	0.406	BB	0.17
6	6.18		0.00	0.000	8526	1.414	BB	0.31
7	6.36		0.00	0.000	1993	0.331	BB	0.17
8	6.95		0.00	0.000	2606	0.432	BB	0.11
9	7.59		0.00	0.000	3527	0.585	BV	0.12
10	7.91		0.00	0.000	12515	2.076	VB	0.25
11	8.77		0.00	0.000	7021	1.164	BB	0.20
12	11.58		0.00	0.000	5601	0.929	BB	0.06
13	12.59		0.00	0.000	14885	2.469	BB	0.25
14	13.47		0.00	0.000	12175	2.019	BB	0.22
15	15.23		0.00	0.000	48183	7.991	BB	0.05
16	16.97		0.00	0.000	15985	2.651	BB	0.27
17	21.93	CL10BP	0.00	100.000	2480	0.411	BB	0.12

Total Area = 602966.2 Total Height = 65987.56 Total Amount = 1.291509E-04

Chrom Perfect Chromatogram Report

10/24/17



Sample Name = **EVAL 1007981**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1022B.0016.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PST111B.cal

Date Taken (end) = 10/22/13 10:32:47 PM
Method Version = 170
Calibration Version = 11

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.67		0.00	0.000	55339	0.885	BV	0.02
2	1.78		0.00	0.000	1111586	17.774	VV	0.24
3	2.23		0.00	0.000	199957	3.197	VB	0.19
4	4.03		0.00	0.000	10045	0.161	BB	0.24
5	4.94		0.00	0.000	1854	0.030	BB	0.19
6	6.18		0.00	0.000	1370	0.022	BB	0.04
7	6.95		0.00	0.000	4944	0.079	BB	0.12
8	7.10		0.00	0.000	3652	0.058	BB	0.18
9	7.59		0.00	0.000	3366	0.054	BV	0.12
10	7.94		0.00	0.000	13187	0.211	VB	0.25
11	8.54		0.00	0.000	3024	0.048	BB	0.12
12	8.77		0.00	0.000	10322	0.165	BV	0.16
13	9.09		0.00	0.000	2782	0.044	VB	0.11
14	9.59		0.00	0.000	3184	0.051	BB	0.22
15	9.91	ABHC	0.00	0.076	5934	0.095	BV	0.07
16	10.25		0.00	0.000	8617	0.138	VB	0.20
17	10.76	LINDANE	0.00	0.212	15394	0.246	BV	0.22
18	10.97	BBHC	0.00	0.130	4777	0.076	VB	0.07
19	11.62	DBHC	0.00	0.179	11871	0.190	BV	0.10
20	11.75	HPCL	0.00	0.061	3927	0.063	VB	0.04
21	12.45	ALDRN	0.00	0.146	10084	0.161	BV	0.17
22	12.59		0.00	0.000	14108	0.226	VV	0.06
23	13.02		0.00	0.000	17031	0.272	VB	0.24
24	13.46		0.00	0.000	21491	0.344	BV	0.26
25	13.67	HPCLE	0.00	0.139	8745	0.140	VV	0.09
26	14.20		0.00	0.000	20080	0.321	VB	0.14
27	14.34	ACLDAN	0.00	0.135	8238	0.132	BV	0.07
28	14.47	AENSLF	0.00	0.121	7073	0.113	VV	0.06
29	14.67	PPDDE	0.00	0.742	44199	0.707	VV	0.06
30	15.02	DLDRN	0.00	0.274	15573	0.249	VV	0.07
31	15.23		0.00	0.000	153878	2.460	VB	0.05
32	15.64	ENDRN	0.11	33.176	1507454	24.104	BV	0.04
33	15.81	PPDDD	0.00	1.275	54657	0.874	VB	0.05
34	16.06	BENSLF	0.00	0.107	5836	0.093	BB	0.10
35	16.42	PPDDT	0.20	60.510	2707785	43.297	BV	0.04
36	16.71	ENDRNA	0.00	0.718	31228	0.499	VB	0.05
37	16.97		0.00	0.000	10632	0.170	BV	0.10
38	17.24	ENSLFS04	0.00	0.389	18684	0.299	VV	0.13
39	17.59		0.00	0.000	24665	0.394	VV	0.11
40	17.79	MEXCLR	0.00	0.460	9527	0.152	VV	0.09
41	18.24		0.00	0.000	12036	0.192	VB	0.26
42	18.45	ENDRNK	0.00	1.076	64975	1.039	BB	0.06
43	18.97		0.00	0.000	6228	0.100	BB	0.17
44	21.94	CL10BP	0.00	0.074	4623	0.074	BB	0.08

Total Area = 6253966 Total Height = 1716844 Total Amount = 0.3234341

********** PESTICIDE ANALYSIS**********

Sample Name = **EVAL 1007981**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1022B.0016.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PST111B.cal

Date Taken (end) = 10/22/13 10:32:47 PM
Method Version = 170
Method Date = 10/23/13 3:50:54 PM
Calibration Version = 11
Calibration Date = 10/22/13 11:38:31 AM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

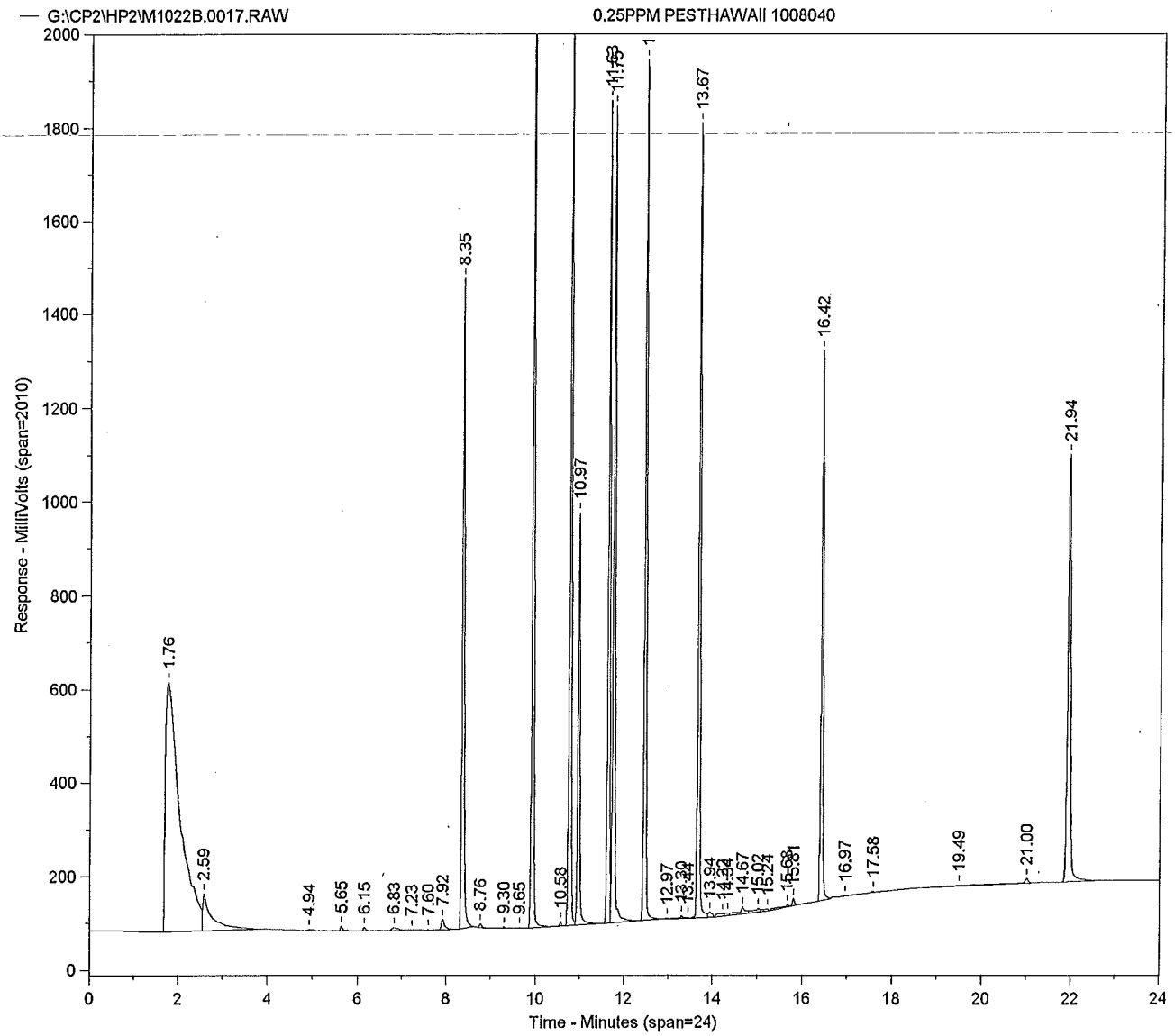
Operator =

Peak #	Ret. Time min.	Peak Name	Peak Area	Response ug/ml	Surrogate % Recovery	Amount ug/L
15	9.91	ABHC	5934	0.000	0.24	0.0002
17	10.76	LINDANE	15394	0.001	0.69	0.0007
18	10.97	BBHC	4777	0.000	0.42	0.0004
19	11.62	DBHC	11871	0.001	0.58	0.0006
20	11.75	HPCL	3927	0.000	0.20	0.0002
21	12.45	ALDRN	10084	0.000	0.47	0.0005
25	13.67	HPCLE	8745	0.000	0.45	0.0004
27	14.34	ACLDAN	8238	0.000	0.44	0.0004
28	14.47	AENSLF	7073	0.000	0.39	0.0004
29	14.67	PPDDE	44199	0.002	2.40	0.0024
30	15.02	DLDRN	15573	0.001	0.89	0.0009
32	15.64	ENDRN	1507454	0.107	107.30	0.1073
33	15.81	PPDDD	54657	0.004	4.12	0.0041
34	16.06	BENSLF	5836	0.000	0.35	0.0003
35	16.42	PPDDT	2707785	0.196	195.71	0.1957
36	16.71	ENDRNA	31228	0.002	2.32	0.0023
38	17.24	ENSLFS04	18684	0.001	1.26	0.0013
40	17.79	MEXCLR	9527	0.001	1.49	0.0015
42	18.45	ENDRNK	64975	0.003	3.48	0.0035
44	21.94	CL10BP	4623	0.000	0.24	0.0002

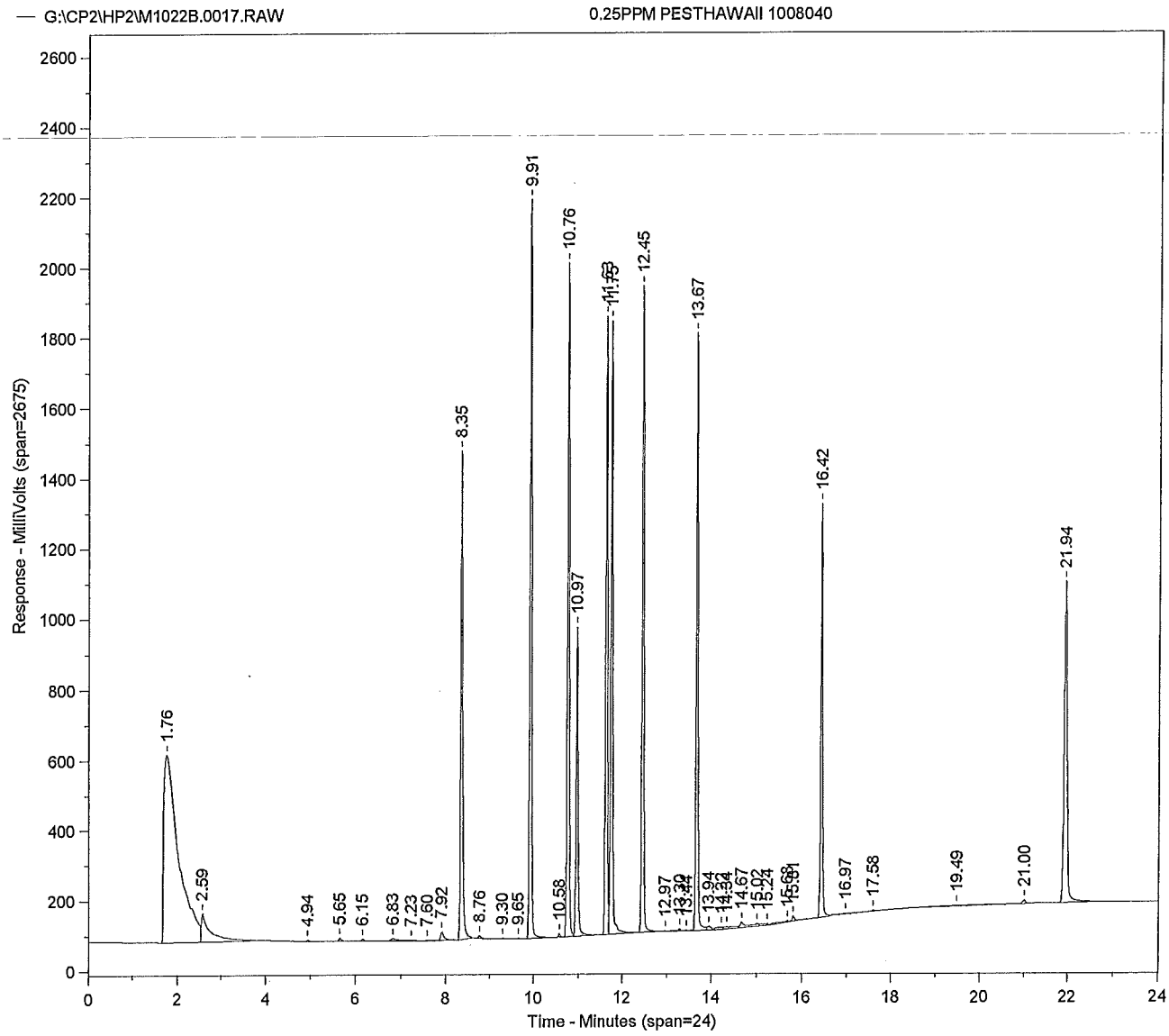
%DDT = (44199 + 54657)/ (98857 + 2707785) = 3.5%

%END = (31228 + 64975)/ (96203 + 1507454) = 6.0%

Checked By: BJ Date: 10/24/13


G:\CP2\HP2\M1022B.0017.RAW
0.25PPM PESTHAWAII 1008040
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
1.76
2.59
4.94
5.65
6.15
6.83
7.23
7.60
7.92
8.35
8.76
9.30
9.65
10.58
10.97
11.53
11.75
12.97
13.67
13.94
14.67
15.24
16.42
16.97
17.58
19.49
21.00
21.94

Chrom Perfect Chromatogram Report



Printed on 10/24/13 10:58:23 AM

Page 1 of 1

Sample Name = **0.25PPM PESTHAWAII 1008040**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

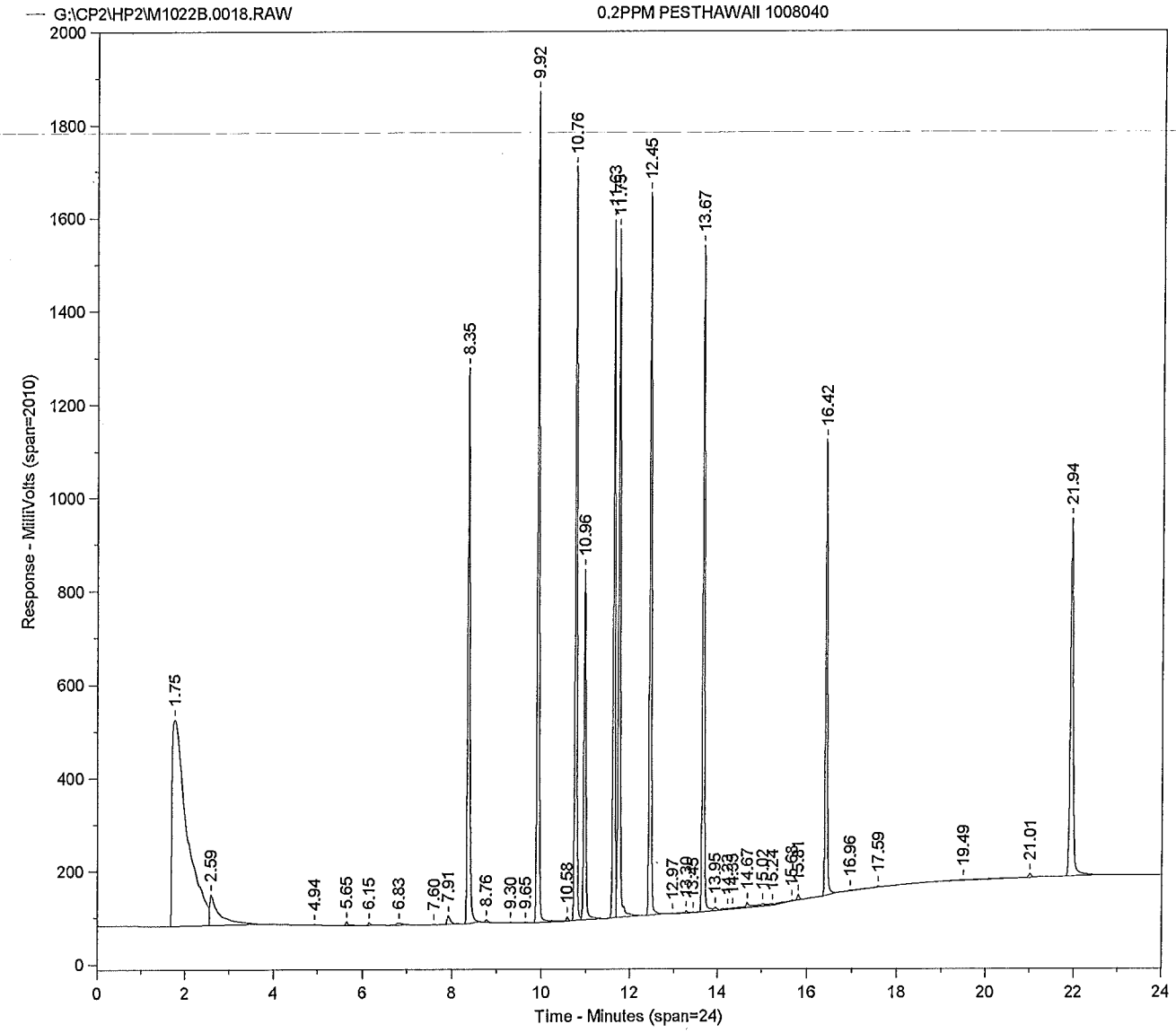
Raw File Name = **G:\CP2\HP2\M1022B.0017.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/22/13 11:03:17 PM
Method Version = 170
Calibration Version = 3

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.76		0.00	0.000	12687475	20.483	BV	0.33
2	2.59		0.00	0.000	1211752	1.956	VB	0.15
3	4.94		0.00	0.000	7577	0.012	BB	0.05
4	5.65		0.00	0.000	32770	0.053	BB	0.05
5	6.15		0.00	0.000	23655	0.038	BB	0.06
6	6.83		0.00	0.000	63804	0.103	BV	0.15
7	7.23		0.00	0.000	9584	0.015	VB	0.16
8	7.60		0.00	0.000	5163	0.008	BV	0.09
9	7.92		0.00	0.000	132642	0.214	VB	0.08
10	8.35	CL4XYL	0.23	9.711	4495904	7.258	BB	0.05
11	8.76		0.00	0.000	30391	0.049	BB	0.07
12	9.30		0.00	0.000	6016	0.010	BV	0.04
13	9.65		0.00	0.000	8320	0.013	VB	0.05
14	9.91	ABHC	0.25	10.605	6123160	9.885	BV	0.04
15	10.58		0.00	0.000	29948	0.048	VB	0.04
16	10.76	LINDANE	0.24	10.300	5516382	8.906	BV	0.04
17	10.97	BBHC	0.23	9.910	2731669	4.410	VB	0.04
18	11.63	DBHC	0.24	10.307	4928839	7.957	BV	0.04
19	11.75	HPCL	0.23	9.767	5137711	8.294	VB	0.04
20	12.45	ALDRN	0.24	10.428	5254278	8.483	BB	0.04
21	12.97		0.00	0.000	3386	0.005	BB	0.06
22	13.30		0.00	0.000	29468	0.048	BV	0.05
23	13.44		0.00	0.000	11097	0.018	VB	0.12
24	13.67	HPCLE	0.22	9.424	4906241	7.921	BV	0.04
25	13.94		0.00	0.000	66020	0.107	VB	0.12
26	14.22		0.00	0.000	67353	0.109	BV	0.19
27	14.34		0.00	0.000	37418	0.060	VV	0.06
28	14.67		0.00	0.000	163571	0.264	VV	0.07
29	15.02		0.00	0.000	77364	0.125	VV	0.08
30	15.24		0.00	0.000	29611	0.048	VB	0.12
31	15.68		0.00	0.000	75205	0.121	BV	0.32
32	15.81		0.00	0.000	53892	0.087	VB	0.05
33	16.42	PPDDT	0.22	9.344	3316612	5.354	BB	0.04
34	16.97		0.00	0.000	9928	0.016	BV	0.09
35	17.58		0.00	0.000	24839	0.040	VB	0.22
36	19.49		0.00	0.000	57390	0.093	BV	0.45
37	21.00		0.00	0.000	138673	0.224	VB	0.10
38	21.94	CL10BP	0.24	10.206	4437292	7.164	BB	0.07

Total Area = 6.19424E+07 Total Height = 1.620713E+07 Total Amount = 2.31839

Chrom Perfect Chromatogram Report



Sample Name = **0.2PPM PESTHAWAII 1008040**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

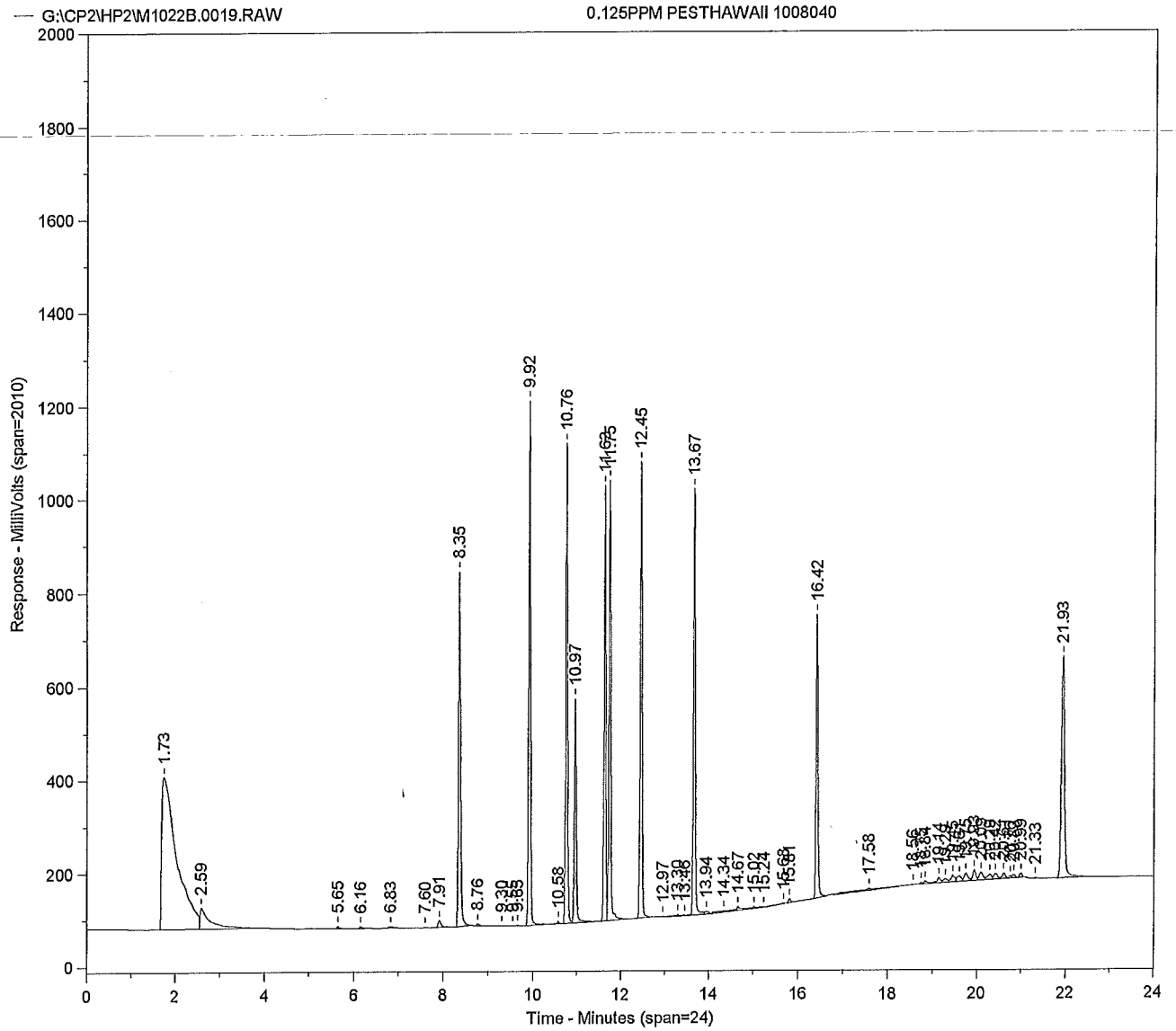
Raw File Name = **G:\CP2\HP2\M1022B.0018.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/22/13 11:33:44 PM
Method Version = 170
Calibration Version = 3

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.75		0.00	0.000	10835359	20.912	BV	0.34
2	2.59		0.00	0.000	982828	1.897	VB	0.16
3	4.94		0.00	0.000	5333	0.010	BB	0.05
4	5.65		0.00	0.000	28878	0.056	BB	0.05
5	6.15		0.00	0.000	18449	0.036	BB	0.06
6	6.83		0.00	0.000	45250	0.087	BB	0.16
7	7.60		0.00	0.000	5598	0.011	BV	0.13
8	7.91		0.00	0.000	97150	0.187	VB	0.08
9	8.35	CL4XYL	0.19	9.728	3772438	7.281	BB	0.05
10	8.76		0.00	0.000	25467	0.049	BB	0.07
11	9.30		0.00	0.000	4876	0.009	BV	0.04
12	9.65		0.00	0.000	5519	0.011	VB	0.05
13	9.92	ABHC	0.20	10.524	5089765	9.823	BV	0.04
14	10.58		0.00	0.000	23363	0.045	VB	0.04
15	10.76	LINDANE	0.20	10.287	4614981	8.907	BV	0.04
16	10.96	BBHC	0.19	9.884	2282199	4.405	VB	0.04
17	11.63	DBHC	0.20	10.404	4167177	8.043	BV	0.04
18	11.75	HPCL	0.19	9.739	4291070	8.282	VB	0.04
19	12.45	ALDRN	0.20	10.361	4372800	8.440	BB	0.04
20	12.97		0.00	0.000	3569	0.007	BB	0.07
21	13.30		0.00	0.000	24267	0.047	BV	0.06
22	13.45		0.00	0.000	8618	0.017	VB	0.12
23	13.67	HPCLE	0.18	9.411	4103926	7.921	BV	0.04
24	13.95		0.00	0.000	40966	0.079	VV	0.09
25	14.23		0.00	0.000	30748	0.059	VV	0.18
26	14.35		0.00	0.000	16204	0.031	VV	0.06
27	14.67		0.00	0.000	81848	0.158	VV	0.07
28	15.02		0.00	0.000	47959	0.093	VV	0.07
29	15.24		0.00	0.000	22114	0.043	VB	0.13
30	15.68		0.00	0.000	45058	0.087	BB	0.30
31	15.81		0.00	0.000	36152	0.070	BB	0.05
32	16.42	PPDDT	0.18	9.398	2794022	5.392	BB	0.04
33	16.96		0.00	0.000	12274	0.024	BV	0.12
34	17.59		0.00	0.000	20148	0.039	VB	0.19
35	19.49		0.00	0.000	39897	0.077	BV	0.43
36	21.01		0.00	0.000	79197	0.153	VB	0.09
37	21.94	CL10BP	0.20	10.264	3737861	7.214	BB	0.07

Total Area = 5.181332E+07 Total Height = 1.367167E+07 Total Amount = 1.941892

Chrom Perfect Chromatogram Report



Sample Name = **0.125PPM PESTHAWAII 1008040**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

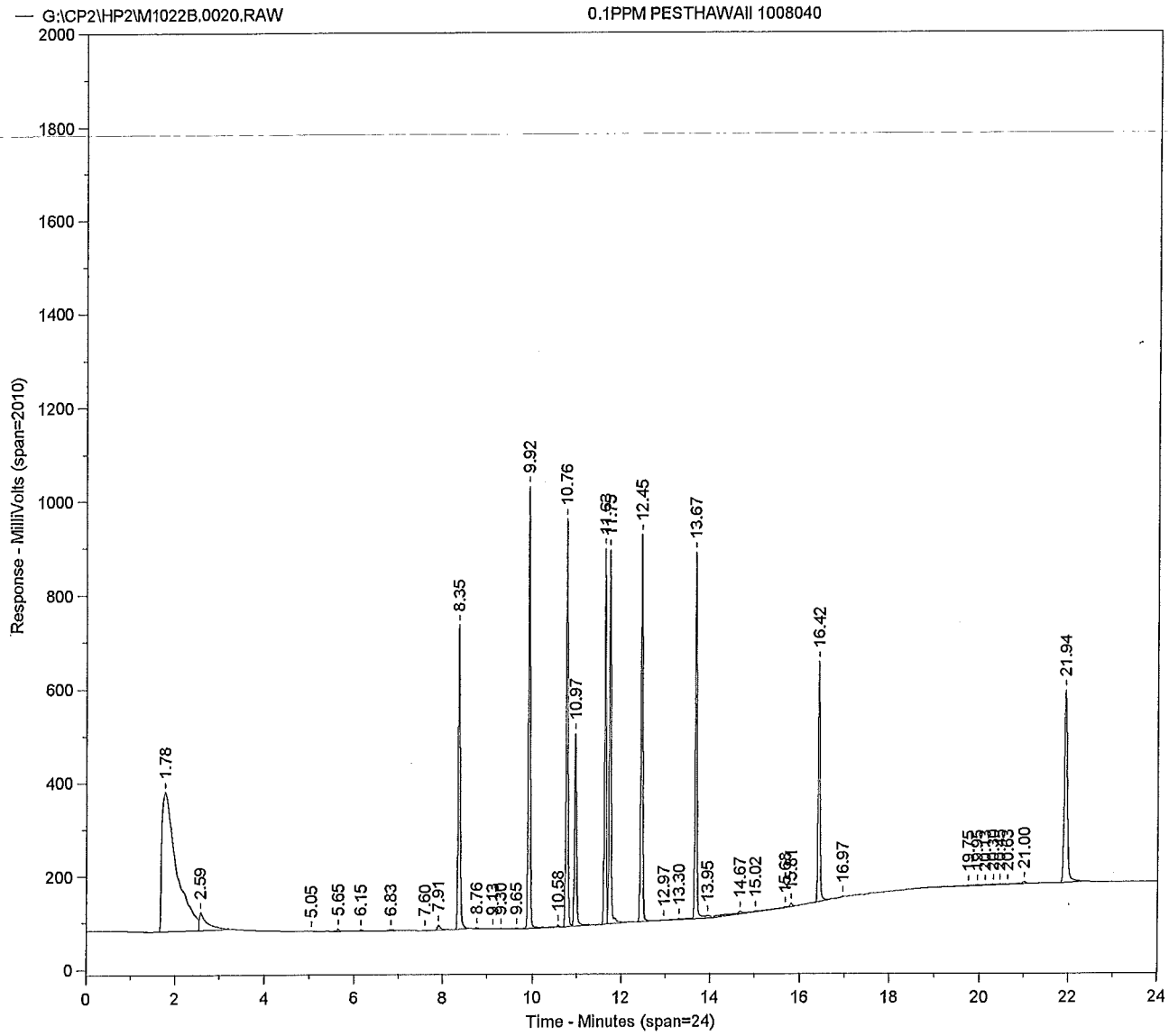
Raw File Name = **G:\CP2\HP2\M1022B.0019.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/23/13 12:04:08 AM
Method Version = 170
Calibration Version = 3

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.73		0.00	0.000	7892616	22.539	BV	0.33
2	2.59		0.00	0.000	783989	2.239	VB	0.18
3	5.65		0.00	0.000	18061	0.052	BB	0.05
4	6.16		0.00	0.000	11369	0.032	BB	0.06
5	6.83		0.00	0.000	31766	0.091	BB	0.15
6	7.60		0.00	0.000	5338	0.015	BV	0.11
7	7.91		0.00	0.000	82100	0.234	VB	0.07
8	8.35	CL4XYL	0.12	9.922	2427897	6.933	BB	0.05
9	8.76		0.00	0.000	19450	0.056	BB	0.07
10	9.30		0.00	0.000	2882	0.008	BB	0.05
11	9.55		0.00	0.000	2358	0.007	BV	0.08
12	9.65		0.00	0.000	2597	0.007	VB	0.04
13	9.92	ABHC	0.13	10.434	3184436	9.094	BV	0.04
14	10.58		0.00	0.000	13925	0.040	VB	0.04
15	10.76	LINDANE	0.13	10.246	2900354	8.282	BV	0.04
16	10.97	BBHC	0.12	10.045	1463549	4.179	VB	0.04
17	11.63	DBHC	0.13	10.239	2587707	7.390	BV	0.04
18	11.75	HPCL	0.12	9.787	2720997	7.770	VV	0.04
19	12.45	ALDRN	0.13	10.310	2745746	7.841	VB	0.04
20	12.97		0.00	0.000	1512	0.004	BB	0.10
21	13.30		0.00	0.000	13711	0.039	BV	0.08
22	13.46		0.00	0.000	4847	0.014	VB	0.10
23	13.67	HPCLE	0.12	9.544	2626083	7.499	BV	0.04
24	13.94		0.00	0.000	36900	0.105	VB	0.13
25	14.34		0.00	0.000	54357	0.155	BV	0.29
26	14.67		0.00	0.000	79688	0.228	VV	0.14
27	15.02		0.00	0.000	36822	0.105	VV	0.07
28	15.24		0.00	0.000	27297	0.078	VB	0.09
29	15.68		0.00	0.000	31567	0.090	BV	0.29
30	15.81		0.00	0.000	24909	0.071	VB	0.06
31	16.42	PPDDT	0.11	9.274	1739794	4.968	BB	0.04
32	17.58		0.00	0.000	88655	0.253	BV	0.44
33	18.56		0.00	0.000	66269	0.189	VB	0.47
34	18.75		0.00	0.000	8768	0.025	BV	0.06
35	18.84		0.00	0.000	28862	0.082	VV	0.08
36	19.14		0.00	0.000	71613	0.205	VV	0.08
37	19.29		0.00	0.000	48357	0.138	VV	0.08
38	19.45		0.00	0.000	85607	0.244	VV	0.11
39	19.61		0.00	0.000	81874	0.234	VV	0.09
40	19.75		0.00	0.000	94048	0.269	VV	0.07
41	19.93		0.00	0.000	112636	0.322	VV	0.07
42	20.09		0.00	0.000	103209	0.295	VV	0.08
43	20.29		0.00	0.000	79132	0.226	VV	0.08
44	20.42		0.00	0.000	73690	0.210	VV	0.08
45	20.61		0.00	0.000	62042	0.177	VV	0.07
46	20.76		0.00	0.000	17723	0.051	VV	0.06
47	20.83		0.00	0.000	34692	0.099	VV	0.07
48	20.99		0.00	0.000	37780	0.108	VB	0.07
49	21.33		0.00	0.000	4648	0.013	BB	0.08
50	21.93	CL10BP	0.12	10.200	2344056	6.694	BB	0.07

Total Area = 3.501828E+07 Total Height = 8847466 Total Amount = 1.225362

Chrom Perfect Chromatogram Report



Sample Name = **0.1PPM PESTHAWAII 1008040**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

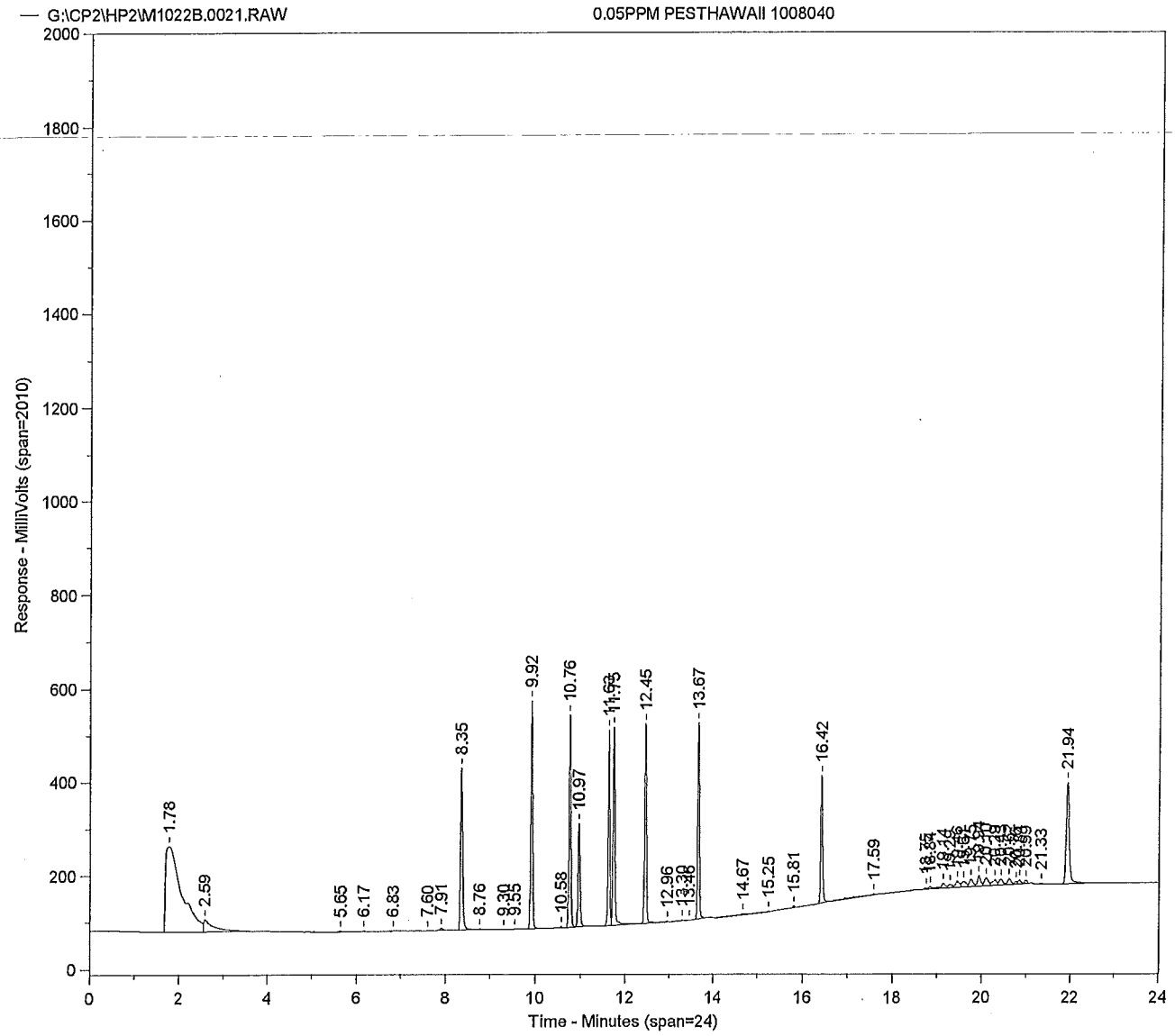
Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1022B.0020.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/23/13 12:34:18 AM
Method Version = 170
Calibration Version = 3

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.78		0.00	0.000	7029156	24.212	BV	0.32
2	2.59		0.00	0.000	482505	1.662	VB	0.15
3	5.05		0.00	0.000	2794	0.010	BB	0.06
4	5.65		0.00	0.000	14156	0.049	BB	0.05
5	6.15		0.00	0.000	10599	0.037	BB	0.07
6	6.83		0.00	0.000	22886	0.079	BB	0.15
7	7.60		0.00	0.000	4673	0.016	BV	0.14
8	7.91		0.00	0.000	55874	0.192	VB	0.08
9	8.35	CL4XYL	0.10	9.883	2049264	7.059	BB	0.05
10	8.76		0.00	0.000	12720	0.044	BB	0.07
11	9.13		0.00	0.000	1621	0.006	BB	0.09
12	9.30		0.00	0.000	2451	0.008	BV	0.05
13	9.65		0.00	0.000	5442	0.019	VB	0.06
14	9.92	ABHC	0.11	10.278	2657845	9.155	BV	0.04
15	10.58		0.00	0.000	11421	0.039	VB	0.05
16	10.76	LINDANE	0.11	10.171	2439610	8.403	BV	0.04
17	10.97	BBHC	0.10	10.081	1244520	4.287	VB	0.04
18	11.63	DBHC	0.11	10.276	2200567	7.580	BV	0.04
19	11.75	HPCL	0.10	9.734	2293164	7.899	VB	0.04
20	12.45	ALDRN	0.11	10.174	2295857	7.908	BB	0.04
21	12.97		0.00	0.000	1746	0.006	BB	0.08
22	13.30		0.00	0.000	16493	0.057	BV	0.12
23	13.67	HPCLE	0.10	9.655	2251074	7.754	VV	0.04
24	13.95		0.00	0.000	40205	0.138	VB	0.13
25	14.67		0.00	0.000	123697	0.426	BV	0.46
26	15.02		0.00	0.000	18625	0.064	VV	0.08
27	15.68		0.00	0.000	10490	0.036	VB	0.29
28	15.81		0.00	0.000	20807	0.072	BV	0.06
29	16.42	PPDDT	0.10	9.268	1473295	5.075	VB	0.04
30	16.97		0.00	0.000	5188	0.018	BB	0.11
31	19.75		0.00	0.000	92754	0.319	BV	0.71
32	19.95		0.00	0.000	17810	0.061	VV	0.11
33	20.13		0.00	0.000	18757	0.065	VV	0.14
34	20.30		0.00	0.000	15201	0.052	VV	0.12
35	20.45		0.00	0.000	10287	0.035	VV	0.11
36	20.63		0.00	0.000	9287	0.032	VV	0.11
37	21.00		0.00	0.000	28692	0.099	VB	0.08
38	21.94	CL10BP	0.11	10.480	2040629	7.029	BB	0.07

Total Area = 2.903215E+07 Total Height = 7419454 Total Amount = 1.038282


G:\CP2\HP2\M1022B.0021.RAW
0.05PPM PESTHAWAII 1008040
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
1.78
2.59
5.65
6.17
6.83
7.60
7.91
8.35
8.76
9.30
9.55
9.92
10.58
10.76
10.97
11.63
11.75
12.45
12.96
13.30
13.48
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15.25
15.81
16.42
17.59
18.35
18.64
19.14
21.33
21.94

Sample Name = **0.05PPM PESTHAWAII 1008040**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

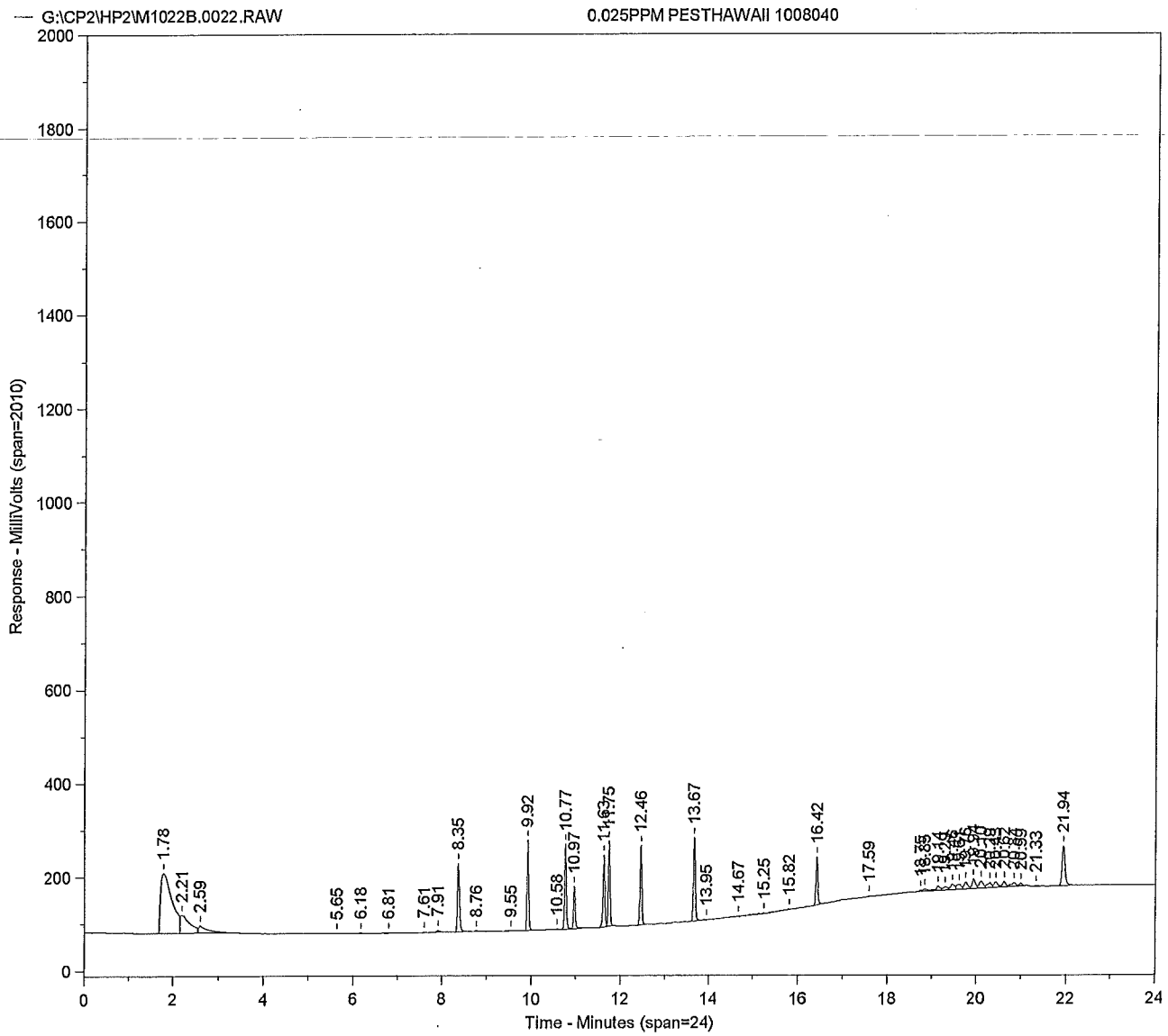
Raw File Name = **G:\CP2\HP2\M1022B.0021.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/23/13 1:04:33 AM
Method Version = 170
Calibration Version = 3

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.78		0.00	0.000	4631428	26.907	BV	0.34
2	2.59		0.00	0.000	446256	2.593	VB	0.20
3	5.65		0.00	0.000	6480	0.038	BB	0.05
4	6.17		0.00	0.000	6360	0.037	BB	0.07
5	6.83		0.00	0.000	4960	0.029	BB	0.13
6	7.60		0.00	0.000	4570	0.027	BV	0.12
7	7.91		0.00	0.000	30181	0.175	VB	0.09
8	8.35	CL4XYL	0.05	10.124	1095127	6.362	BB	0.05
9	8.76		0.00	0.000	9849	0.057	BB	0.07
10	9.30		0.00	0.000	1128	0.007	BB	0.05
11	9.55		0.00	0.000	1276	0.007	BB	0.08
12	9.92	ABHC	0.05	10.044	1355036	7.872	BB	0.04
13	10.58		0.00	0.000	5675	0.033	BB	0.05
14	10.76	LINDANE	0.05	10.085	1261997	7.332	BV	0.04
15	10.97	BBHC	0.05	10.040	646614	3.757	VB	0.04
16	11.63	DBHC	0.06	10.291	1149823	6.680	BV	0.04
17	11.75	HPCL	0.05	9.853	1211007	7.035	VV	0.04
18	12.45	ALDRN	0.05	9.991	1176228	6.833	VV	0.04
19	12.96		0.00	0.000	7010	0.041	VB	0.16
20	13.30		0.00	0.000	11408	0.066	BV	0.16
21	13.46		0.00	0.000	4714	0.027	VB	0.10
22	13.67	HPCLE	0.05	9.604	1168188	6.787	BB	0.04
23	14.67		0.00	0.000	66712	0.388	BV	0.37
24	15.25		0.00	0.000	35001	0.203	VB	0.28
25	15.81		0.00	0.000	10392	0.060	BB	0.07
26	16.42	PPDDT	0.05	9.318	772783	4.490	BB	0.04
27	17.59		0.00	0.000	71820	0.417	BB	0.60
28	18.75		0.00	0.000	9261	0.054	BV	0.07
29	18.84		0.00	0.000	27589	0.160	VV	0.08
30	19.14		0.00	0.000	72863	0.423	VV	0.08
31	19.29		0.00	0.000	48236	0.280	VV	0.08
32	19.46		0.00	0.000	83671	0.486	VV	0.11
33	19.61		0.00	0.000	81605	0.474	VV	0.09
34	19.75		0.00	0.000	93602	0.544	VV	0.07
35	19.94		0.00	0.000	112014	0.651	VV	0.07
36	20.10		0.00	0.000	103106	0.599	VV	0.08
37	20.29		0.00	0.000	78918	0.458	VV	0.08
38	20.43		0.00	0.000	76508	0.444	VV	0.08
39	20.62		0.00	0.000	63449	0.369	VV	0.07
40	20.76		0.00	0.000	17820	0.104	VV	0.05
41	20.84		0.00	0.000	37326	0.217	VV	0.07
42	20.99		0.00	0.000	29416	0.171	VB	0.07
43	21.33		0.00	0.000	3547	0.021	BB	0.07
44	21.94	CL10BP	0.06	10.651	1081977	6.286	BB	0.07

Total Area = 1.721293E+07 Total Height = 4082172 Total Amount = 0.5416852

Chrom Perfect Chromatogram Report



Sample Name = **0.025PPM PESTHAWAII 1008040**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

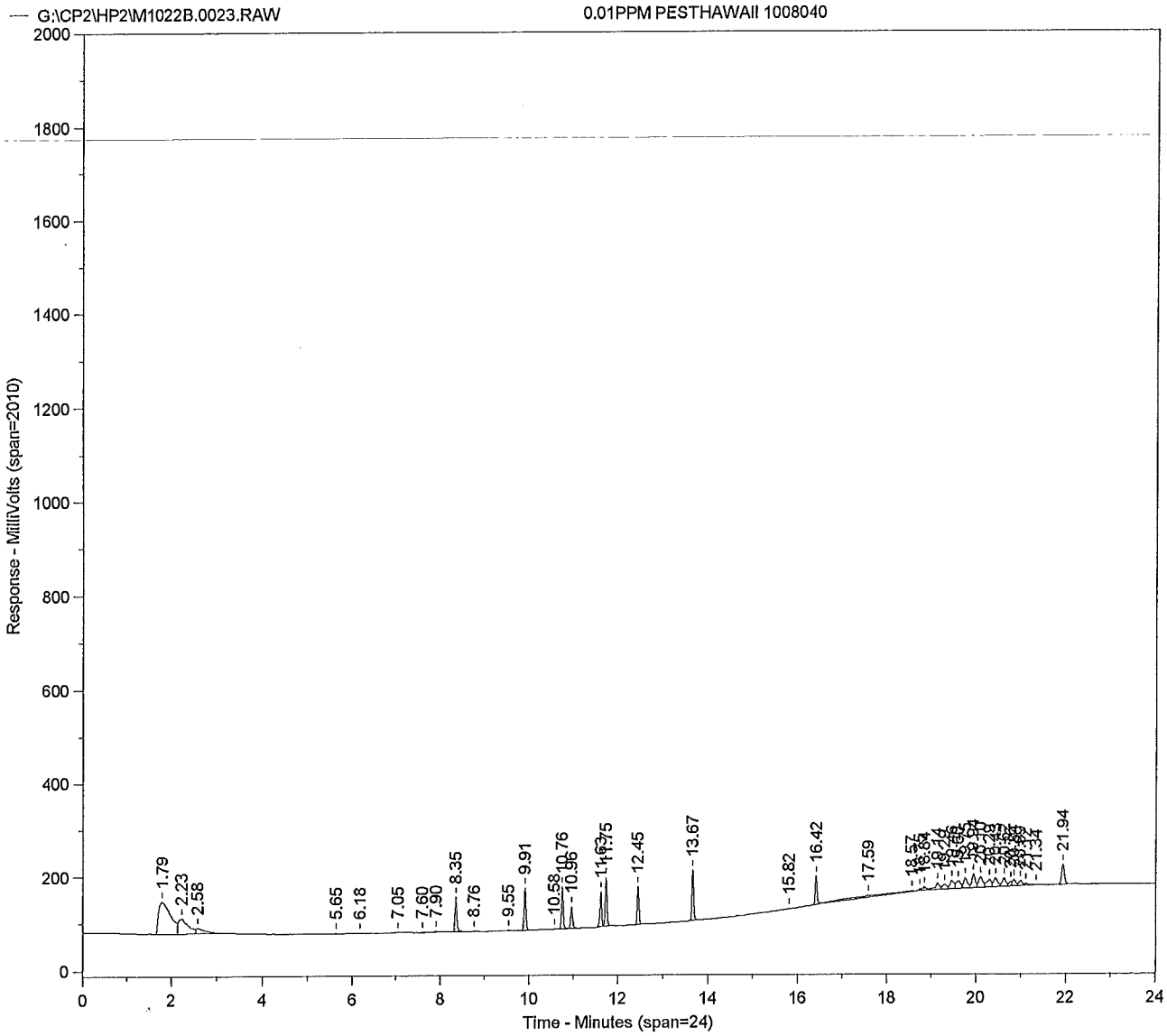
Raw File Name = **G:\CP2\HP2\M1022B.0022.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/23/13 1:34:45 AM
Method Version = 170
Calibration Version = 3

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.78		0.00	0.000	2340207	27.804	BV	0.30
2	2.21		0.00	0.000	568642	6.756	VV	0.18
3	2.59		0.00	0.000	209751	2.492	VB	0.19
4	5.65		0.00	0.000	2943	0.035	BB	0.05
5	6.18		0.00	0.000	3867	0.046	BB	0.06
6	6.81		0.00	0.000	3693	0.044	BB	0.18
7	7.61		0.00	0.000	3625	0.043	BB	0.10
8	7.91		0.00	0.000	16358	0.194	BB	0.08
9	8.35	CL4XYL	0.02	10.834	465274	5.528	BB	0.05
10	8.76		0.00	0.000	6543	0.078	BB	0.08
11	9.55		0.00	0.000	1622	0.019	BB	0.12
12	9.92	ABHC	0.02	9.816	525750	6.246	BB	0.04
13	10.58		0.00	0.000	2419	0.029	BB	0.06
14	10.77	LINDANE	0.02	10.049	499226	5.931	BV	0.04
15	10.97	BBHC	0.02	10.242	261891	3.111	VB	0.04
16	11.63	DBHC	0.02	9.588	425288	5.053	BV	0.04
17	11.75	HPCL	0.02	9.965	486216	5.777	VB	0.04
18	12.46	ALDRN	0.02	9.735	455020	5.406	BB	0.04
19	13.67	HPCLE	0.02	10.487	506448	6.017	BV	0.04
20	13.95		0.00	0.000	9885	0.117	VB	0.13
21	14.67		0.00	0.000	21400	0.254	BV	0.27
22	15.25		0.00	0.000	27699	0.329	VB	0.27
23	15.82		0.00	0.000	24197	0.287	BB	0.30
24	16.42	PPDDT	0.02	8.849	291361	3.462	BB	0.04
25	17.59		0.00	0.000	5460	0.065	BB	0.08
26	18.75		0.00	0.000	7218	0.086	BV	0.05
27	18.85		0.00	0.000	26593	0.316	VV	0.09
28	19.14		0.00	0.000	64969	0.772	VV	0.09
29	19.29		0.00	0.000	44806	0.532	VV	0.08
30	19.46		0.00	0.000	74257	0.882	VV	0.11
31	19.61		0.00	0.000	73325	0.871	VV	0.09
32	19.76		0.00	0.000	83334	0.990	VV	0.07
33	19.94		0.00	0.000	98609	1.172	VV	0.07
34	20.10		0.00	0.000	91087	1.082	VV	0.08
35	20.29		0.00	0.000	70905	0.842	VV	0.08
36	20.43		0.00	0.000	66406	0.789	VV	0.08
37	20.62		0.00	0.000	55344	0.658	VV	0.07
38	20.84		0.00	0.000	49224	0.585	VV	0.12
39	20.99		0.00	0.000	22067	0.262	VB	0.07
40	21.33		0.00	0.000	3186	0.038	BB	0.07
41	21.94	CL10BP	0.02	10.434	420806	5.000	BB	0.07

Total Area = 8416923 Total Height = 1805970 Total Amount = 0.2150504

Chrom Perfect Chromatogram Report



Sample Name = **0.01PPM PESTHAWAII 1008040**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1022B.0023.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

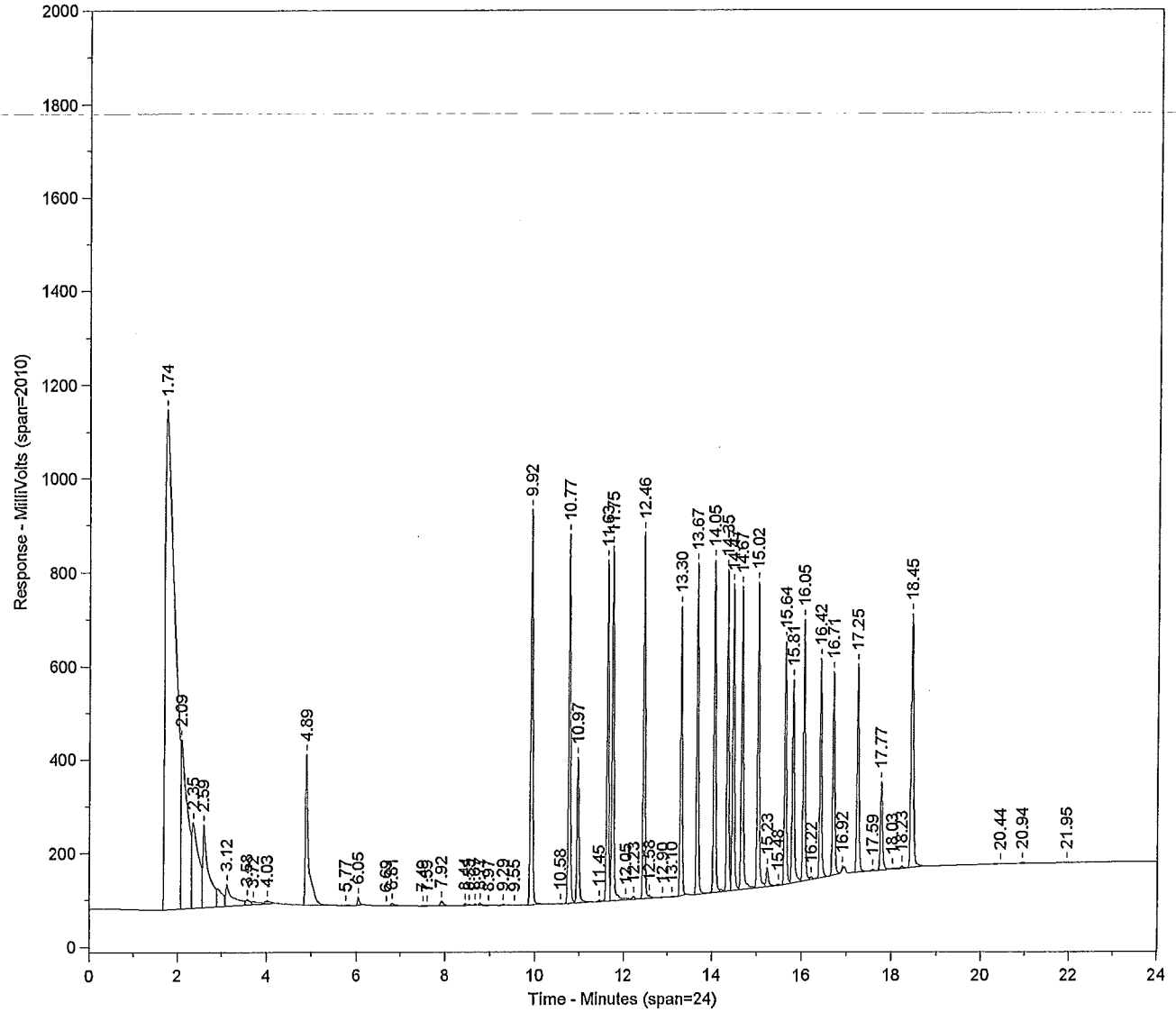
Date Taken (end) = 10/23/13 2:05:13 AM
Method Version = 170
Calibration Version = 3

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.79		0.00	0.000	1296398	22.262	BV	0.33
2	2.23		0.00	0.000	462815	7.948	VV	0.20
3	2.58		0.00	0.000	142414	2.446	VB	0.19
4	5.65		0.00	0.000	1393	0.024	BB	0.12
5	6.18		0.00	0.000	2641	0.045	BB	0.05
6	7.05		0.00	0.000	8814	0.151	BB	0.52
7	7.60		0.00	0.000	3322	0.057	BV	0.11
8	7.90		0.00	0.000	11368	0.195	VB	0.10
9	8.35	CL4XYL	0.01	10.259	225174	3.867	BB	0.05
10	8.76		0.00	0.000	5120	0.088	BB	0.09
11	9.55		0.00	0.000	2247	0.039	BB	0.10
12	9.91	ABHC	0.01	8.846	242135	4.158	BB	0.04
13	10.58		0.00	0.000	1382	0.024	BB	0.08
14	10.76	LINDANE	0.01	9.353	237492	4.078	BV	0.04
15	10.96	BBHC	0.01	10.083	131762	2.263	VB	0.04
16	11.63	DBHC	0.01	9.285	210487	3.615	BV	0.04
17	11.75	HPCL	0.01	11.149	278015	4.774	VB	0.04
18	12.45	ALDRN	0.01	9.074	216764	3.722	BB	0.04
19	13.67	HPCLE	0.01	11.813	291557	5.007	BB	0.04
20	15.82		0.00	0.000	2703	0.046	BB	0.07
21	16.42	PPDDT	0.01	10.261	172672	2.965	BB	0.04
22	17.59		0.00	0.000	132103	2.269	BV	0.57
23	18.57		0.00	0.000	102347	1.758	VB	0.52
24	18.75		0.00	0.000	11185	0.192	BV	0.06
25	18.84		0.00	0.000	38571	0.662	VV	0.08
26	19.14		0.00	0.000	97525	1.675	VV	0.08
27	19.29		0.00	0.000	67830	1.165	VV	0.08
28	19.46		0.00	0.000	113544	1.950	VV	0.10
29	19.60		0.00	0.000	113761	1.954	VV	0.09
30	19.75		0.00	0.000	133302	2.289	VV	0.07
31	19.94		0.00	0.000	155994	2.679	VV	0.07
32	20.10		0.00	0.000	149392	2.565	VV	0.08
33	20.29		0.00	0.000	124649	2.141	VV	0.08
34	20.43		0.00	0.000	119698	2.055	VV	0.08
35	20.62		0.00	0.000	108761	1.868	VV	0.07
36	20.76		0.00	0.000	38347	0.659	VV	0.05
37	20.84		0.00	0.000	72662	1.248	VV	0.07
38	20.99		0.00	0.000	59893	1.029	VV	0.06
39	21.12		0.00	0.000	25392	0.436	VV	0.09
40	21.34		0.00	0.000	8093	0.139	VB	0.07
41	21.94	CL10BP	0.01	9.878	203596	3.496	BB	0.07

Total Area = 5823319 Total Height = 1113309 Total Amount = 0.1099093

Pam 10/24/13

G:\CP2\HP2\M1022B.0024.RAW 0.1PPM PESTHAWAII VERIFICATION 1007972-R/S



Sample Name = **0.1PPM PESTHAWAII VERIFICATION 1007972-R/S**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1022B.0024.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/23/13 2:35:37 AM
Method Version = 170
Calibration Version = 4

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	17358990	27.021	BV	0.29
2	2.09		0.00	0.000	3636413	5.660	VV	0.10
3	2.35		0.00	0.000	1878775	2.924	VV	0.11
4	2.59		0.00	0.000	1664730	2.591	VV	0.08
5	3.12		0.00	0.000	536422	0.835	VV	0.08
6	3.58		0.00	0.000	78887	0.123	VV	0.07
7	3.72		0.00	0.000	66776	0.104	VV	0.07
8	4.03		0.00	0.000	60043	0.093	VB	0.14
9	4.89		0.00	0.000	1559192	2.427	BB	0.05
10	5.77		0.00	0.000	5386	0.008	BB	0.07
11	6.05		0.00	0.000	53693	0.084	BB	0.05
12	6.69		0.00	0.000	2618	0.004	BV	0.05
13	6.81		0.00	0.000	29194	0.045	VB	0.07
14	7.49		0.00	0.000	1661	0.003	BB	0.06
15	7.59		0.00	0.000	4356	0.007	BB	0.08
16	7.92		0.00	0.000	46037	0.072	BB	0.08
17	8.44		0.00	0.000	10066	0.016	BV	0.05
18	8.53		0.00	0.000	2483	0.004	VB	0.05
19	8.67		0.00	0.000	5220	0.008	BB	0.04
20	8.77		0.00	0.000	18585	0.029	BB	0.06
21	8.97		0.00	0.000	2208	0.003	BB	0.07
22	9.29		0.00	0.000	3771	0.006	BB	0.04
23	9.55		0.00	0.000	2671	0.004	BB	0.09
24	9.92	ABHC	0.10	13.256	2542022	3.957	BV	0.05
25	10.58		0.00	0.000	3529	0.005	VB	0.19
26	10.77	LINDANE	0.10	12.979	2308527	3.593	BV	0.04
27	10.97	BBHC	0.08	10.675	975484	1.518	VB	0.05
28	11.45		0.00	0.000	10096	0.016	BV	0.09
29	11.63	DBHC	0.10	13.036	2069377	3.221	VV	0.04
30	11.75	HPCL	0.10	12.776	2222828	3.460	VV	0.04
31	12.05		0.00	0.000	22161	0.034	VV	0.05
32	12.23		0.00	0.000	23693	0.037	VV	0.05
33	12.46	ALDRN	0.10	13.454	2237649	3.483	SBB	0.04
34	12.58		0.00	0.000	6532	0.010	TBB	0.06
35	12.90		0.00	0.000	2058	0.003	BB	0.06
36	13.10		0.00	0.000	3509	0.005	BB	0.07
37	13.30		0.00	0.000	1758620	2.737	BB	0.04
38	13.67	HPCLE	0.09	11.693	2012233	3.132	BV	0.04
39	14.05		0.00	0.000	2016726	3.139	VV	0.04
40	14.35		0.00	0.000	1914967	2.981	VV	0.04
41	14.47		0.00	0.000	1897254	2.953	VV	0.04
42	14.67		0.00	0.000	1926740	2.999	VV	0.04
43	15.02		0.00	0.000	1898201	2.955	VV	0.04
44	15.23		0.00	0.000	138117	0.215	VV	0.04
45	15.48		0.00	0.000	11609	0.018	VB	0.07
46	15.64		0.00	0.000	1536279	2.391	BV	0.04
47	15.81		0.00	0.000	1350432	2.102	VV	0.04
48	16.05		0.00	0.000	1665627	2.593	VV	0.04
49	16.22		0.00	0.000	18517	0.029	VV	0.05
50	16.42	PPDDT	0.09	12.110	1335558	2.079	VB	0.04
51	16.71		0.00	0.000	1316394	2.049	BB	0.05
52	16.92		0.00	0.000	12719	0.020	BB	0.04

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	17.25		0.00	0.000	1359307	2.116	BV	0.05
54	17.59		0.00	0.000	13367	0.021	VV	0.10
55	17.77		0.00	0.000	614133	0.956	VV	0.05
56	18.03		0.00	0.000	6005	0.009	VV	0.07
57	18.23		0.00	0.000	16124	0.025	VB	0.06
58	18.45		0.00	0.000	1943077	3.025	BB	0.05
59	20.44		0.00	0.000	7779	0.012	BB	0.32
60	20.94		0.00	0.000	14183	0.022	BB	0.09
61	21.95	CL10BP	0.00	0.022	3266	0.005	BB	0.15

Total Area = 6.424286E+07 Total Height = 1.477639E+07 Total Amount = 0.7699834

**********PESTICIDE ANALYSIS**********

Sample Name = **0.1PPM PESTHAWAII VERIFICATION 1007972-R/S**

Instrument = HP 2 Acquisition Port = 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Raw File Name = **G:\CP2\HP2\M1022B.0024.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/23/13 2:35:37 AM
Method Version = 170
Method Date = 10/23/13 3:50:54 PM
Calibration Version = 4
Calibration Date = 10/24/13 11:27:22 AM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

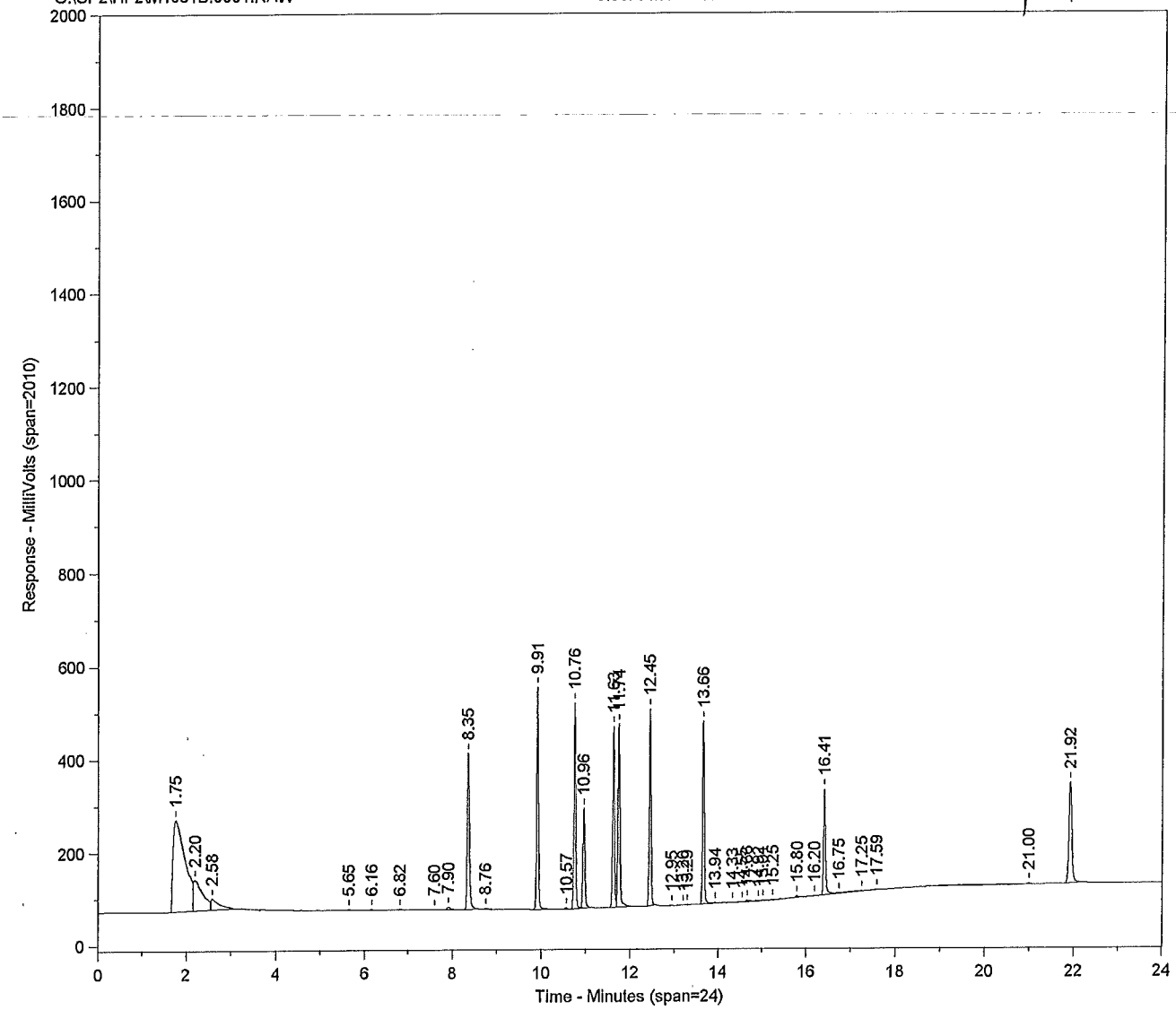
Peak #	Ret. Time min.	Peak Name	Peak Area	Response ug/ml	% Recovery	True Value (0.1 ppm)	CF
24	9.92	ABHC	2542022	0.10	102	0.10 ppm	24905666
26	10.77	LINDANE	2308527	0.10	100	0.10 ppm	23099646
27	10.97	BBHC	975484	0.08	82	0.10 ppm	11867922
29	11.63	DBHC	2069377	0.10	100	0.10 ppm	20616462
30	11.75	HPCL	2222828	0.10	98	0.10 ppm	22596580
33	12.46	ALDRN	2237649	0.10	104	0.10 ppm	21601050
38	13.67	HPCLE	2012233	0.09	90	0.10 ppm	22348770
50	16.42	PPDDT	1335558	0.09	93	0.10 ppm	14323591
61	21.95	CL10BP	3266	0.00	0	0.10 ppm	19204082

* Used Linear Regression

Checked By: BT Date: 10/24/13

10/31/13

G:\CP2\HP2\M1031B.0001.RAW 0.05PPM PESTHAWAII 1008040



Sample Name = **0.05PPM PESTHAWAII 1008040**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0001.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 9:51:30 AM
Method Version = 172
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.75		0.00	0.000	3756604	23.568	BV	0.33
2	2.20		0.00	0.000	979955	6.148	VV	0.19
3	2.58		0.00	0.000	303617	1.905	VB	0.18
4	5.65		0.00	0.000	7389	0.046	BB	0.05
5	6.16		0.00	0.000	5545	0.035	BB	0.07
6	6.82		0.00	0.000	12145	0.076	BB	0.14
7	7.60		0.00	0.000	4220	0.026	BV	0.11
8	7.90		0.00	0.000	31862	0.200	VB	0.07
9	8.35	CL4XYL	0.05	10.378	1097782	6.887	BB	0.05
10	8.76		0.00	0.000	12115	0.076	BB	0.08
11	9.91	ABHC	0.05	10.236	1350397	8.472	BB	0.04
12	10.57		0.00	0.000	7179	0.045	BB	0.04
13	10.76	LINDANE	0.05	10.190	1246849	7.822	BV	0.04
14	10.96	BBHC	0.05	10.107	635360	3.986	VB	0.04
15	11.63	DBHC	0.05	9.919	1083168	6.795	BV	0.04
16	11.74	HPCL	0.05	9.717	1162992	7.296	VB	0.04
17	12.45	ALDRN	0.05	10.223	1169747	7.339	BB	0.04
18	12.95		0.00	0.000	1297	0.008	BB	0.08
19	13.20		0.00	0.000	4818	0.030	BB	0.17
20	13.29		0.00	0.000	2138	0.013	BB	0.05
21	13.66	HPCLE	0.05	9.486	1122899	7.045	BV	0.04
22	13.94		0.00	0.000	4934	0.031	VB	0.05
23	14.33		0.00	0.000	2279	0.014	BB	0.09
24	14.55		0.00	0.000	3793	0.024	BB	0.12
25	14.66		0.00	0.000	10645	0.067	BV	0.07
26	14.92		0.00	0.000	4911	0.031	VV	0.10
27	15.01		0.00	0.000	3942	0.025	VV	0.07
28	15.25		0.00	0.000	5125	0.032	VB	0.10
29	15.80		0.00	0.000	12333	0.077	BB	0.06
30	16.20		0.00	0.000	6613	0.041	BB	0.21
31	16.41	PPDDT	0.05	9.305	705942	4.429	BV	0.04
32	16.75		0.00	0.000	10153	0.064	VV	0.10
33	17.25		0.00	0.000	25695	0.161	VV	0.33
34	17.59		0.00	0.000	1973	0.012	VB	0.11
35	21.00		0.00	0.000	81396	0.511	BB	0.97
36	21.92	CL10BP	0.06	10.439	1061912	6.662	BB	0.07

Total Area = 1.593972E+07 Total Height = 3835342 Total Amount = 0.5296886

**********PESTICIDE ANALYSIS**********

Sample Name = **0.05PPM PESTHAWAII 1008040**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0001.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 9:51:30 AM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 9
Calibration Date = 10/30/13 3:32:15 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Peak #	Ret. Time	Name	Response	Area	%D	CF
9	8.35	CL4XYL	0.055	1097782	9.9	19970360
11	9.91	ABHC	0.054	1350397	8.4	24905666
13	10.76	LINDANE	0.054	1246849	8.0	23099646
14	10.96	BBHC	0.054	635360	7.1	11867922
15	11.63	DBHC	0.053	1083168	5.1	20616462
16	11.74	HPCL	0.051	1162992	2.9	22596580
17	12.45	ALDRN	0.054	1169747	8.3	21601050
21	13.66	HPCLE	0.050	1122899	0.5	22348770
31	16.41	PPDDT	0.049	705942	-1.4	14323591
36	21.92	CL10BP	0.055	1061912	10.6	19204082

Checked By: _____ Date: 10/31/13

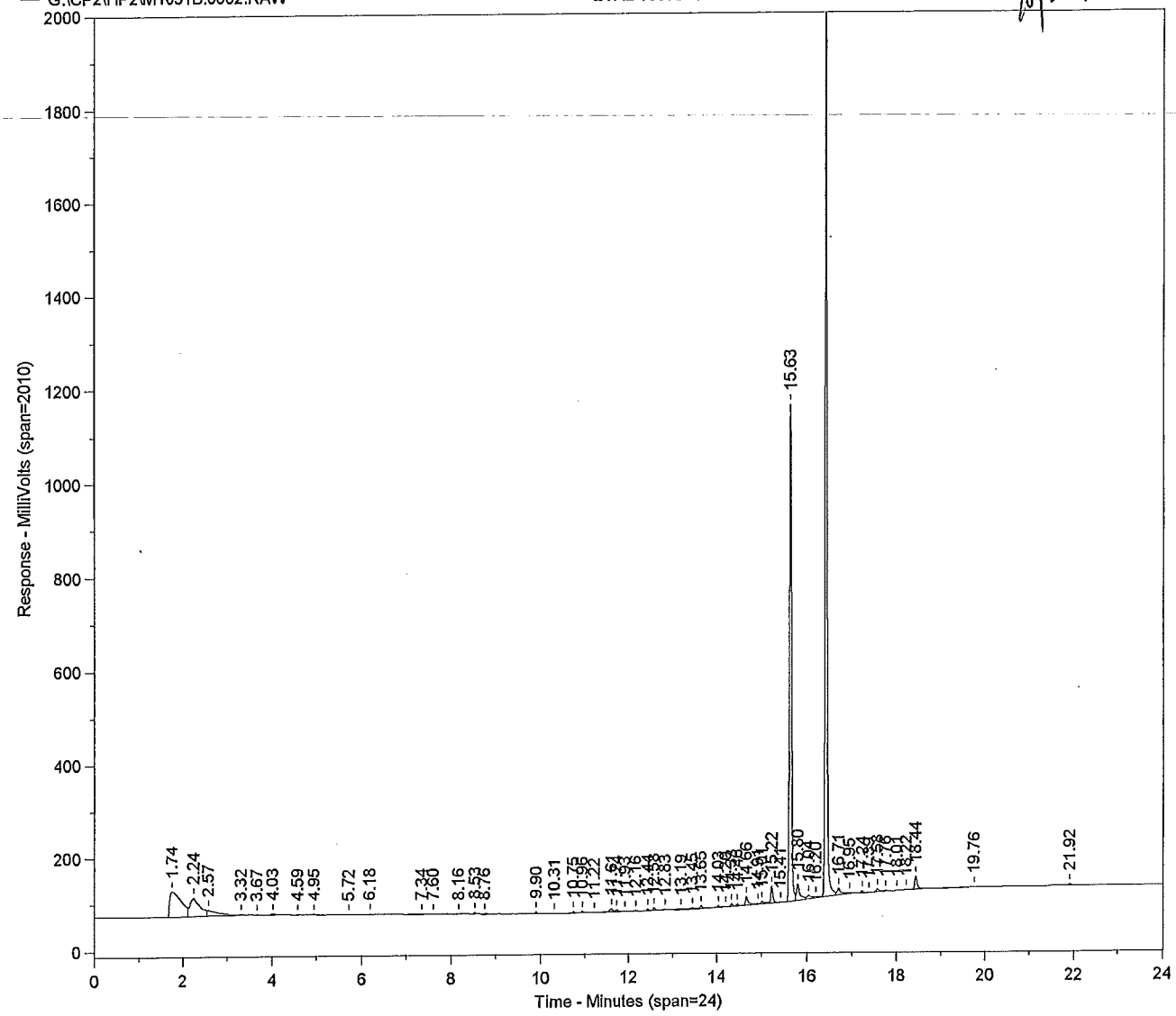
* Used Linear Regression

Chrom Perfect Chromatogram Report

10/31/13

G:\CP2\HP2\M1031B.0002.RAW

EVAL 1007981



Printed on 10/31/13 11:28:01 AM

Page 1 of 3

Sample Name = **EVAL 1007981**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0002.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 10:25:50 AM
Method Version = 172
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	1032293	8.515	BV	0.35
2	2.24		0.00	0.000	592613	4.888	VV	0.18
3	2.57		0.00	0.000	210845	1.739	VV	0.24
4	3.32		0.00	0.000	13328	0.110	VB	0.18
5	3.67		0.00	0.000	4843	0.040	BB	0.10
6	4.03		0.00	0.000	13925	0.115	BB	0.20
7	4.59		0.00	0.000	3106	0.026	BB	0.08
8	4.95		0.00	0.000	16647	0.137	BB	0.30
9	5.72		0.00	0.000	1546	0.013	BB	0.09
10	6.18		0.00	0.000	2314	0.019	BB	0.05
11	7.34		0.00	0.000	25006	0.206	BV	0.41
12	7.60		0.00	0.000	7735	0.064	VB	0.15
13	8.16		0.00	0.000	2200	0.018	BB	0.15
14	8.53		0.00	0.000	8857	0.073	BB	0.05
15	8.76		0.00	0.000	11932	0.098	BB	0.17
16	9.90	ABHC	0.00	0.096	10086	0.083	BB	0.04
17	10.31		0.00	0.000	8812	0.073	BV	0.21
18	10.75	LINDANE	0.00	0.156	15120	0.125	VV	0.05
19	10.96	BBHC	0.00	0.256	12752	0.105	VV	0.05
20	11.22		0.00	0.000	4307	0.036	VB	0.19
21	11.61	DBHC	0.00	0.415	35950	0.297	BV	0.08
22	11.74	HPCL	0.00	0.143	13575	0.112	VV	0.04
23	11.93		0.00	0.000	5968	0.049	VB	0.08
24	12.16		0.00	0.000	6427	0.053	BB	0.15
25	12.44	ALDRN	0.00	0.108	9768	0.081	BV	0.05
26	12.58		0.00	0.000	19046	0.157	VB	0.05
27	12.83		0.00	0.000	2827	0.023	BB	0.06
28	13.19		0.00	0.000	12416	0.102	BV	0.18
29	13.45		0.00	0.000	14254	0.118	VV	0.05
30	13.65	HPCLE	0.00	0.196	18409	0.152	VV	0.06
31	14.03		0.00	0.000	17097	0.141	VV	0.06
32	14.20		0.00	0.000	4837	0.040	VB	0.06
33	14.33		0.00	0.000	16855	0.139	BV	0.05
34	14.46		0.00	0.000	14253	0.118	VV	0.04
35	14.66	PPDDE	0.00	0.000	83190	0.686	VV	0.05
36	14.91		0.00	0.000	9696	0.080	VV	0.08
37	15.01		0.00	0.000	16954	0.140	VV	0.05
38	15.22		0.00	0.000	118223	0.975	VV	0.04
39	15.41		0.00	0.000	4240	0.035	VB	0.10
40	15.63	ENDRN	0.00	0.000	3244209	26.762	BV	0.05
41	15.80	PPDDD	0.00	0.000	180925	1.492	VV	0.05
42	16.04		0.00	0.000	47662	0.393	VV	0.05
43	16.20		0.00	0.000	16474	0.136	VV	0.05
44	16.41	PPDDT	0.41	98.458	5920362	48.837	VV	0.04
45	16.71	ENDRN ALD	0.00	0.000	76838	0.634	VV	0.05
46	16.95		0.00	0.000	9476	0.078	VB	0.06
47	17.24		0.00	0.000	11659	0.096	BB	0.05
48	17.39		0.00	0.000	2092	0.017	BB	0.09
49	17.58		0.00	0.000	31998	0.264	BV	0.08
50	17.76		0.00	0.000	8454	0.070	VV	0.06
51	18.01		0.00	0.000	4877	0.040	VV	0.11
52	18.22		0.00	0.000	3341	0.028	VB	0.11

12/31/13

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.44	ENDRN ICET	0.00	0.000	108991	0.899	BB	0.06
54	19.76		0.00	0.000	19252	0.159	BB	0.59
55	21.92	CL10BP	0.00	0.171	13779	0.114	BB	0.08

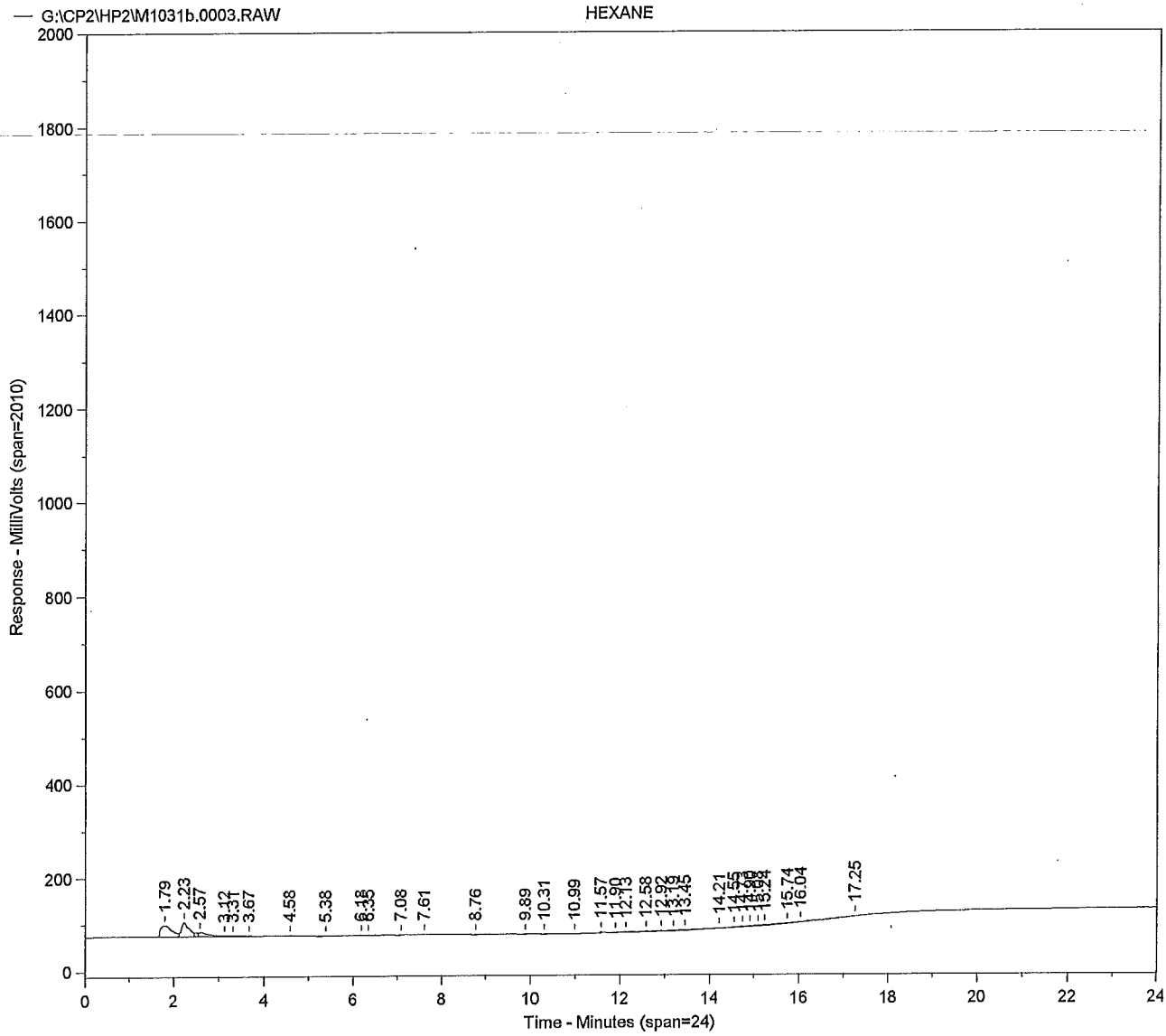
Total Area = 1.212264E+07 Total Height = 3441300 Total Amount = 0.4198014

$$\%\,DDT = \frac{83190 + 180925}{264115 + 5920362} \times 100 = 4.3\%$$

$$\%\,ENDRN = \frac{76838 + 108991}{185829 + 324609} \times 100 = 5.4\%$$

10/31/13

Chrom Perfect Chromatogram Report



Sample Name = **HEXANE**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031b.0003.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

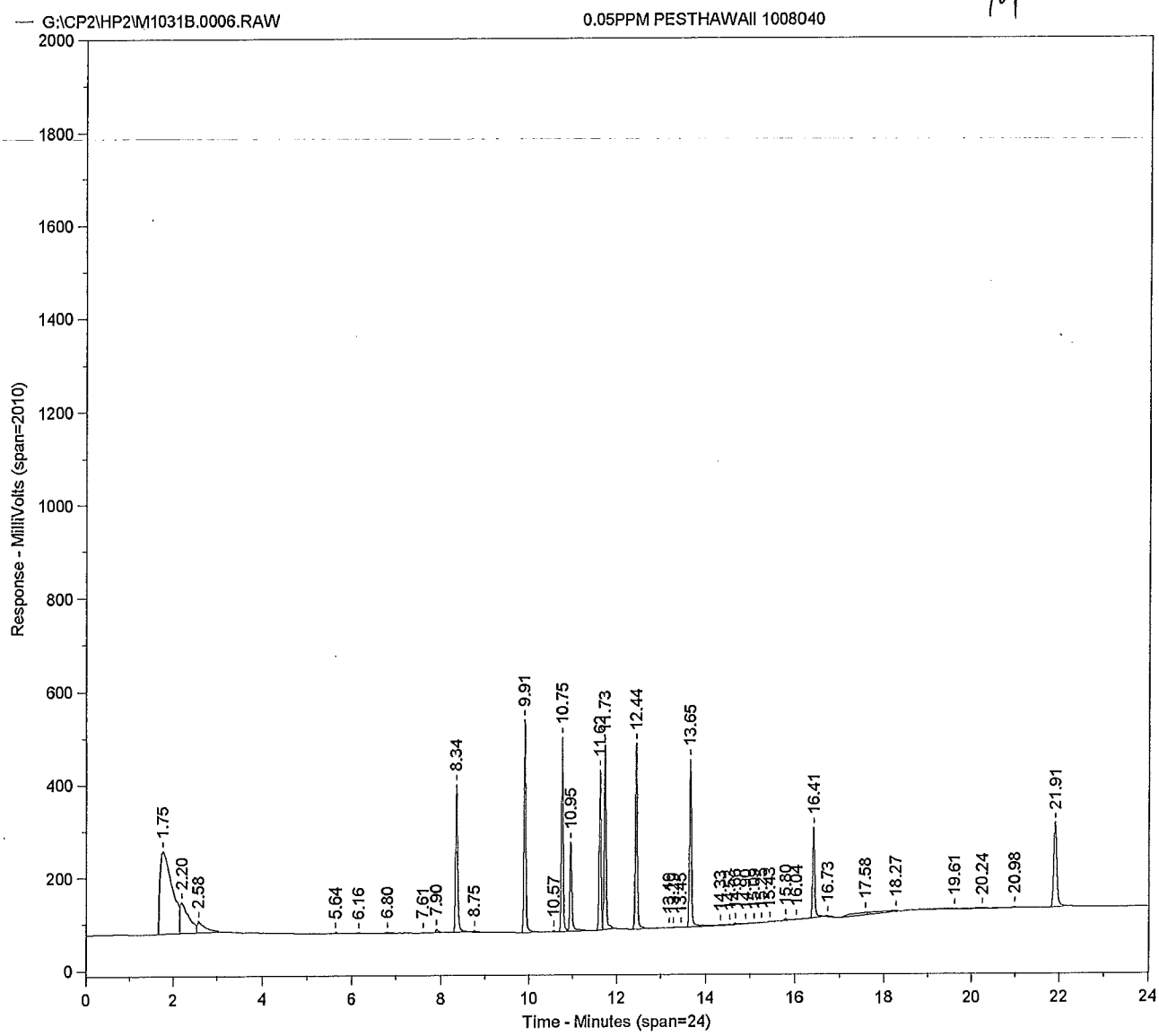
Date Taken (end) = 10/31/13 10:56:04 AM
Method Version = 172
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.79		0.00	0.000	427842	34.324	BV	0.31
2	2.23		0.00	0.000	357307	28.665	VV	0.16
3	2.57		0.00	0.000	146886	11.784	VV	0.23
4	3.12		0.00	0.000	7316	0.587	VV	0.07
5	3.31		0.00	0.000	32670	2.621	VB	0.37
6	3.67		0.00	0.000	6695	0.537	BB	0.18
7	4.58		0.00	0.000	4925	0.395	BB	0.09
8	5.38		0.00	0.000	7817	0.627	BB	0.25
9	6.18		0.00	0.000	2350	0.189	BB	0.04
10	6.35		0.00	0.000	1469	0.118	BB	0.09
11	7.08		0.00	0.000	6633	0.532	BB	0.19
12	7.61		0.00	0.000	2641	0.212	BB	0.12
13	8.76		0.00	0.000	11505	0.923	BB	0.22
14	9.89	ABHC	0.00	100.000	2445	0.196	BB	0.14
15	10.31		0.00	0.000	6679	0.536	BB	0.20
16	10.99		0.00	0.000	2834	0.227	BB	0.24
17	11.57		0.00	0.000	6735	0.540	BB	0.05
18	11.90		0.00	0.000	10660	0.855	BV	0.23
19	12.13		0.00	0.000	6408	0.514	VV	0.14
20	12.58		0.00	0.000	7190	0.577	VB	0.15
21	12.92		0.00	0.000	5660	0.454	BB	0.20
22	13.19		0.00	0.000	14500	1.163	BV	0.19
23	13.45		0.00	0.000	14480	1.162	VB	0.14
24	14.21		0.00	0.000	41323	3.315	BB	0.61
25	14.55		0.00	0.000	14250	1.143	BV	0.18
26	14.73		0.00	0.000	12310	0.988	VV	0.14
27	14.90		0.00	0.000	9496	0.762	VV	0.11
28	15.08		0.00	0.000	10563	0.847	VV	0.13
29	15.24		0.00	0.000	7449	0.598	VB	0.07
30	15.74		0.00	0.000	21628	1.735	BV	0.39
31	16.04		0.00	0.000	5004	0.401	VB	0.13
32	17.25		0.00	0.000	30824	2.473	BB	0.45

Total Area = 1246496 Total Height = 90953.99 Total Amount = 9.816503E-05

Chrom Perfect Chromatogram Report

10/31/13



Sample Name = **0.05PPM PESTHAWAII 1008040**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0006.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 12:26:57 PM
Method Version = 172
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.75		0.00	0.000	3478419	22.620	BV	0.34
2	2.20		0.00	0.000	917361	5.966	VV	0.18
3	2.58		0.00	0.000	297317	1.933	VB	0.17
4	5.64		0.00	0.000	7323	0.048	BB	0.05
5	6.16		0.00	0.000	6302	0.041	BB	0.07
6	6.80		0.00	0.000	14228	0.093	BB	0.14
7	7.61		0.00	0.000	3258	0.021	BV	0.10
8	7.90		0.00	0.000	29872	0.194	VB	0.07
9	8.34	CL4XYL	0.05	10.451	1047671	6.813	BB	0.05
10	8.75		0.00	0.000	14175	0.092	BB	0.08
11	9.91	ABHC	0.05	10.733	1341900	8.726	BB	0.04
12	10.57		0.00	0.000	7192	0.047	BB	0.05
13	10.75	LINDANE	0.05	10.491	1216507	7.911	BV	0.04
14	10.95	BBHC	0.05	10.524	626956	4.077	VB	0.05
15	11.62	DBHC	0.05	9.438	976747	6.352	BV	0.04
16	11.73	HPCL	0.05	10.409	1180708	7.678	VB	0.04
17	12.44	ALDRN	0.05	10.775	1168412	7.598	BV	0.04
18	13.19		0.00	0.000	5511	0.036	VV	0.16
19	13.29		0.00	0.000	2650	0.017	VV	0.05
20	13.45		0.00	0.000	3742	0.024	VB	0.13
21	13.65	HPCLE	0.05	9.593	1076155	6.998	BV	0.04
22	14.33		0.00	0.000	3835	0.025	VV	0.09
23	14.53		0.00	0.000	3628	0.024	VB	0.11
24	14.66		0.00	0.000	13897	0.090	BV	0.14
25	14.90		0.00	0.000	5607	0.036	VV	0.10
26	15.09		0.00	0.000	8287	0.054	VV	0.16
27	15.25		0.00	0.000	5995	0.039	VB	0.10
28	15.43		0.00	0.000	4177	0.027	BV	0.11
29	15.80		0.00	0.000	21539	0.140	VV	0.10
30	16.04		0.00	0.000	3051	0.020	VB	0.09
31	16.41	PPDDT	0.04	8.305	597112	3.883	BB	0.04
32	16.73		0.00	0.000	21630	0.141	BB	0.22
33	17.58		0.00	0.000	157684	1.025	BV	0.45
34	18.27		0.00	0.000	137509	0.894	VB	0.41
35	19.61		0.00	0.000	46180	0.300	BV	0.65
36	20.24		0.00	0.000	11776	0.077	VB	0.21
37	20.98		0.00	0.000	18426	0.120	BB	0.16
38	21.91	CL10BP	0.05	9.281	894682	5.818	BB	0.07

Total Area = 1.537742E+07 Total Height = 3573957 Total Amount = 0.5019792

**********PESTICIDE ANALYSIS**********

Sample Name = **0.05PPM PESTHAWAII 1008040**

Instrument = HP-2
Acquisition Port = 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Raw File Name = **G:\CP2\HP2\M1031B.0006.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 12:26:57 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 9
Calibration Date = 10/30/13 3:32:15 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Peak #	Ret. Time	Name	Response	Area	%D	CF
9	8.34	CL4XYL	0.052	1047671	4.9	19970360
11	9.91	ABHC	0.054	1341900	7.8	24905666
13	10.75	LINDANE	0.053	1216507	5.3	23099646
14	10.95	BBHC	0.053	626956	5.7	11867922
15	11.62	DBHC	0.047	976747	-5.2	20616462
16	11.73	HPCL	0.052	1180708	4.5	22596580
17	12.44	ALDRN	0.054	1168412	8.2	21601050
21	13.65	HPCLE	0.048	1076155	-3.7	22348770
31	16.41	PPDDT	0.042	597112	-16.6	14323591
38	21.91	CL10BP	0.047	894682	-6.8	19204082

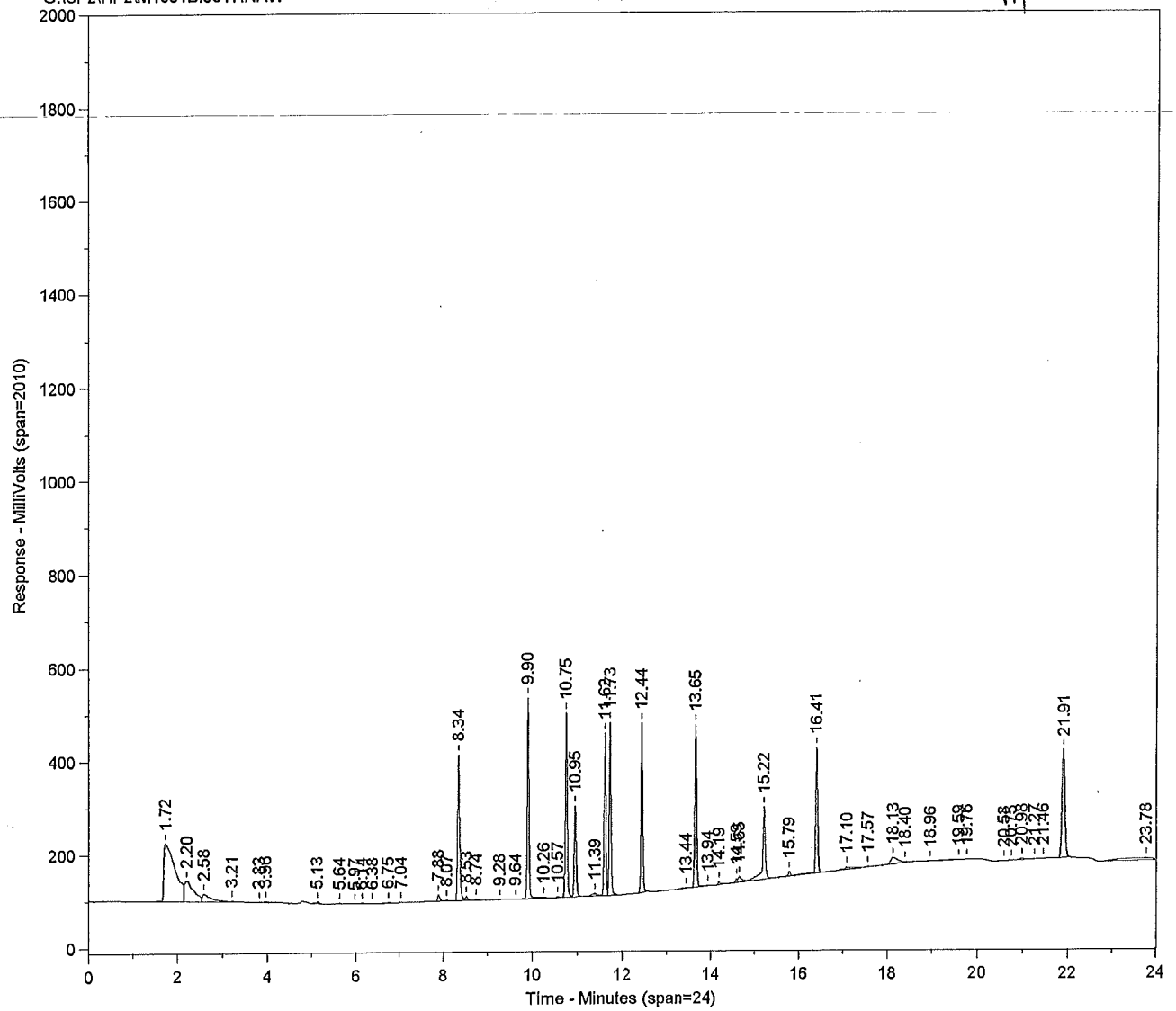
Checked By: _____ Date: 10/31/13

* Used Linear Regression

Chrom Perfect Chromatogram Report

For BD 11/01/13

G:\CP2\HP2\M1031B.0017.RAW 0.05PPM PESTHAWAII 1008040



Printed on 11/1/13 9:43:20 AM

Page 1 of 3

Sample Name = **0.05PPM PESTHAWAII 1008040**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0017.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 6:01:42 PM
Method Version = 172
Calibration Version = 10

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.72		0.00	0.000	2275754	15.612	BV	0.30
2	2.20		0.00	0.000	622946	4.274	VV	0.19
3	2.58		0.00	0.000	217776	1.494	VB	0.21
4	3.21		0.00	0.000	1849	0.013	BB	0.06
5	3.83		0.00	0.000	8305	0.057	BV	0.20
6	3.96		0.00	0.000	13657	0.094	VB	0.11
7	5.13		0.00	0.000	20533	0.141	BB	0.12
8	5.64		0.00	0.000	5120	0.035	BB	0.05
9	5.97		0.00	0.000	3513	0.024	BV	0.08
10	6.14		0.00	0.000	4048	0.028	VB	0.05
11	6.38		0.00	0.000	2196	0.015	BB	0.20
12	6.75		0.00	0.000	7804	0.054	BV	0.13
13	7.04		0.00	0.000	4546	0.031	VB	0.13
14	7.88		0.00	0.000	50587	0.347	BB	0.05
15	8.07		0.00	0.000	4567	0.031	BB	0.05
16	8.34	CL4XYL	0.05	10.284	999953	6.860	BV	0.05
17	8.53		0.00	0.000	25613	0.176	VB	0.05
18	8.74		0.00	0.000	14341	0.098	BB	0.07
19	9.28		0.00	0.000	4320	0.030	BB	0.06
20	9.64		0.00	0.000	1363	0.009	BB	0.10
21	9.90	ABHC	0.05	10.108	1225708	8.409	BV	0.04
22	10.26		0.00	0.000	19065	0.131	VB	0.16
23	10.57		0.00	0.000	9406	0.065	BV	0.08
24	10.75	LINDANE	0.05	9.961	1120325	7.686	VV	0.04
25	10.95	BBHC	0.05	9.849	569083	3.904	VV	0.04
26	11.39		0.00	0.000	48866	0.335	VV	0.14
27	11.62	DBHC	0.05	9.412	944793	6.482	VV	0.04
28	11.73	HPCL	0.05	9.408	1035053	7.101	VB	0.04
29	12.44	ALDRN	0.05	9.467	995615	6.830	BB	0.04
30	13.44		0.00	0.000	15354	0.105	BB	0.18
31	13.65	HPCLE	0.04	8.953	974229	6.683	BV	0.04
32	13.94		0.00	0.000	9939	0.068	VB	0.10
33	14.19		0.00	0.000	18338	0.126	BB	0.06
34	14.59		0.00	0.000	26172	0.180	BV	0.05
35	14.65		0.00	0.000	74535	0.511	VV	0.06
36	15.22		0.00	0.000	663372	4.551	VV	0.05
37	15.79		0.00	0.000	44916	0.308	VV	0.06
38	16.41	PPDDT	0.05	11.086	773103	5.304	VV	0.04
39	17.10		0.00	0.000	51200	0.351	VV	0.22
40	17.57		0.00	0.000	12145	0.083	VV	0.08
41	18.13		0.00	0.000	166231	1.140	VV	0.28
42	18.40		0.00	0.000	19382	0.133	VB	0.10
43	18.96		0.00	0.000	3451	0.024	BB	0.11
44	19.59		0.00	0.000	23318	0.160	BV	0.42
45	19.76		0.00	0.000	2201	0.015	VB	0.11
46	20.58		0.00	0.000	9076	0.062	BB	0.18
47	20.75		0.00	0.000	6627	0.045	BV	0.13
48	20.98		0.00	0.000	26772	0.184	VV	0.14
49	21.27		0.00	0.000	9743	0.067	VV	0.13
50	21.46		0.00	0.000	9146	0.063	VB	0.20
51	21.91	CL10BP	0.06	11.471	1072579	7.358	BB	0.07
52	23.78		0.00	0.000	308194	2.114	BB	1.45

Total Area = 1.457673E+07 Total Height = 3738633 Total Amount = 0.4868785

**********PESTICIDE ANALYSIS**********

Sample Name = **0.05PPM PESTHAWAII 1008040**

Instrument = HP-2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0017.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 6:01:42 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 10
Calibration Date = 10/31/13 4:15:29 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

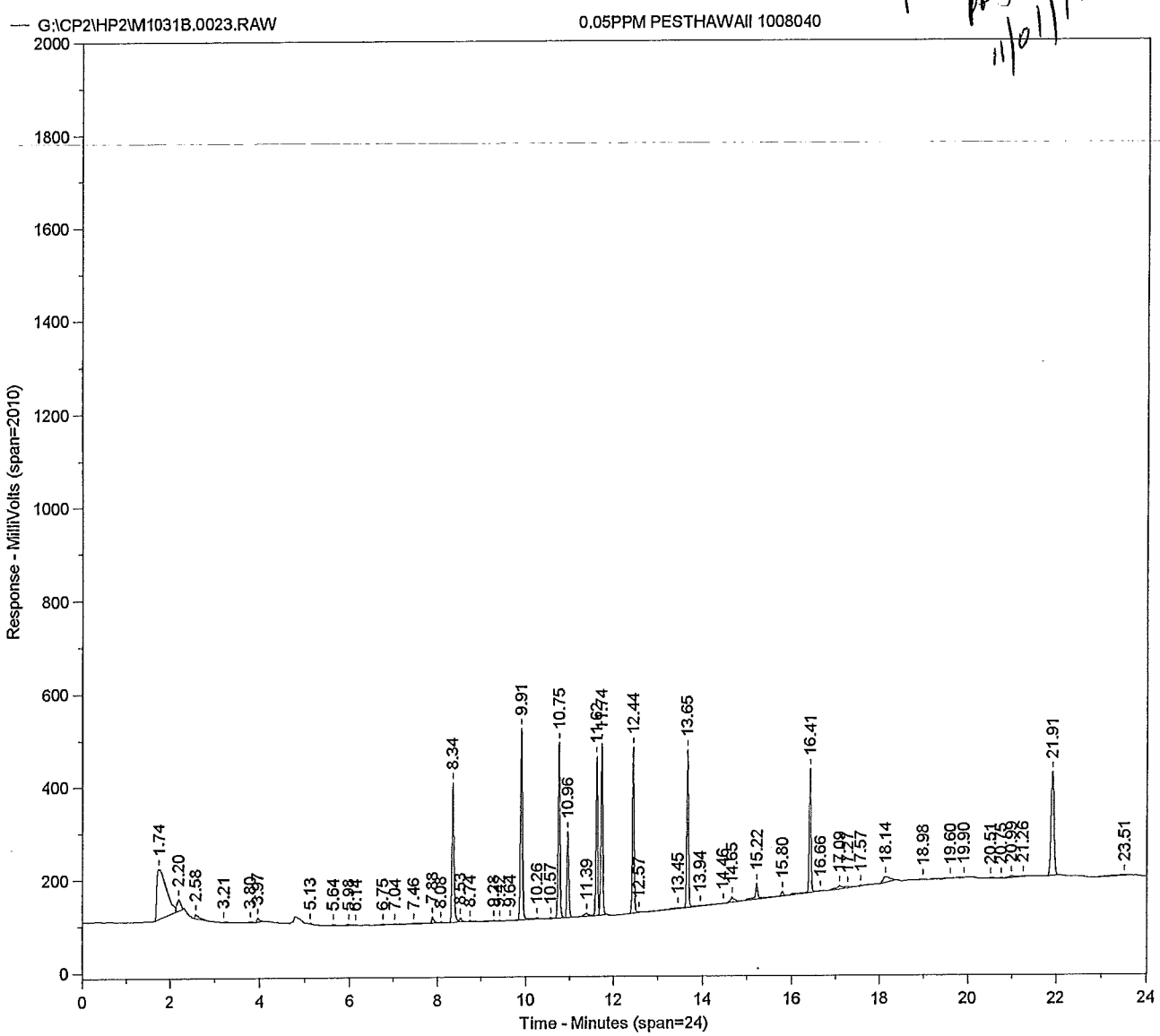
Peak #	Ret. Time	Name	Response	Area	%D	CF
16	8.34	CL4XYL	0.050	999953	0.1	19970360
21	9.90	ABHC	0.049	1225708	-1.6	24905666
24	10.75	LINDANE	0.048	1120325	-3.0	23099646
25	10.95	BBHC	0.048	569083	-4.1	11867922
27	11.62	DBHC	0.046	944793	-8.3	20616462
28	11.73	HPCL	0.046	1035053	-8.4	22596580
29	12.44	ALDRN	0.046	995615	-7.8	21601050
31	13.65	HPCLE	0.044	974229	-12.8	22348770
38	16.41	PPDDT	0.054	773103	7.9	14323591
51	21.91	CL10BP	0.056	1072579	11.7	19204082

Checked By: _____ Date: 11/01/13

* Used Linear Regression

Chrom Perfect Chromatogram Report

Pan 11/01/13



Sample Name = **0.05PPM PESTHAWAII 1008040**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0023.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 9:03:55 PM
Method Version = 172
Calibration Version = 10

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	1709365	13.889	BV	0.29
2	2.20		0.00	0.000	135353	1.100	VB	0.10
3	2.58		0.00	0.000	62689	0.509	BB	0.13
4	3.21		0.00	0.000	5652	0.046	BB	0.12
5	3.80		0.00	0.000	8747	0.071	BB	0.16
6	3.97		0.00	0.000	30284	0.246	BB	0.08
7	5.13		0.00	0.000	5260	0.043	BB	0.07
8	5.64		0.00	0.000	6591	0.054	BV	0.05
9	5.98		0.00	0.000	11394	0.093	VV	0.09
10	6.14		0.00	0.000	4442	0.036	VB	0.05
11	6.75		0.00	0.000	6996	0.057	BV	0.14
12	7.04		0.00	0.000	6942	0.056	VV	0.14
13	7.46		0.00	0.000	5619	0.046	VB	0.20
14	7.88		0.00	0.000	47790	0.388	BB	0.06
15	8.08		0.00	0.000	3598	0.029	BB	0.06
16	8.34	CL4XYL	0.05	10.205	960426	7.804	BV	0.05
17	8.53		0.00	0.000	24582	0.200	VB	0.05
18	8.74		0.00	0.000	13277	0.108	BB	0.08
19	9.28		0.00	0.000	5599	0.045	BB	0.11
20	9.42		0.00	0.000	1254	0.010	BB	0.05
21	9.64		0.00	0.000	2156	0.018	BV	0.11
22	9.91	ABHC	0.05	10.097	1185025	9.629	VV	0.04
23	10.26		0.00	0.000	33868	0.275	VB	0.15
24	10.57		0.00	0.000	6779	0.055	BV	0.06
25	10.75	LINDANE	0.05	9.805	1067308	8.672	VV	0.04
26	10.96	BBHC	0.05	9.634	538796	4.378	VB	0.04
27	11.39		0.00	0.000	41863	0.340	BB	0.17
28	11.62	DBHC	0.05	9.662	938699	7.627	BV	0.04
29	11.74	HPCL	0.04	9.471	1008543	8.195	VB	0.04
30	12.44	ALDRN	0.05	9.627	979996	7.963	BV	0.04
31	12.57		0.00	0.000	10577	0.086	VB	0.05
32	13.45		0.00	0.000	31389	0.255	BV	0.33
33	13.65	HPCLE	0.04	9.015	949449	7.714	VV	0.04
34	13.94		0.00	0.000	13430	0.109	VV	0.09
35	14.46		0.00	0.000	11245	0.091	VB	0.28
36	14.65		0.00	0.000	76702	0.623	BV	0.13
37	15.22		0.00	0.000	150372	1.222	VV	0.05
38	15.80		0.00	0.000	35206	0.286	VB	0.07
39	16.41	PPDDT	0.05	11.269	760674	6.181	BV	0.04
40	16.66		0.00	0.000	4871	0.040	VB	0.08
41	17.09		0.00	0.000	61936	0.503	BV	0.20
42	17.27		0.00	0.000	27728	0.225	VV	0.09
43	17.57		0.00	0.000	5884	0.048	VB	0.10
44	18.14		0.00	0.000	125598	1.021	BB	0.29
45	18.98		0.00	0.000	11289	0.092	BB	0.17
46	19.60		0.00	0.000	34758	0.282	BV	0.44
47	19.90		0.00	0.000	12361	0.100	VB	0.28
48	20.51		0.00	0.000	13637	0.111	BV	0.21
49	20.75		0.00	0.000	6376	0.052	VB	0.09
50	20.99		0.00	0.000	29695	0.241	BV	0.15
51	21.26		0.00	0.000	9464	0.077	VB	0.16
52	21.91	CL10BP	0.05	11.214	1014863	8.246	BB	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	23.51		0.00	0.000	51037	0.415	BB	0.58

Total Area = 1.230743E+07 Total Height = 3452174 Total Amount = 0.4712449

**********PESTICIDE ANALYSIS**********

Sample Name = **0.05PPM PESTHAWAII 1008040**

Instrument = HP-2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0023.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 9:03:55 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 10
Calibration Date = 10/31/13 4:15:29 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

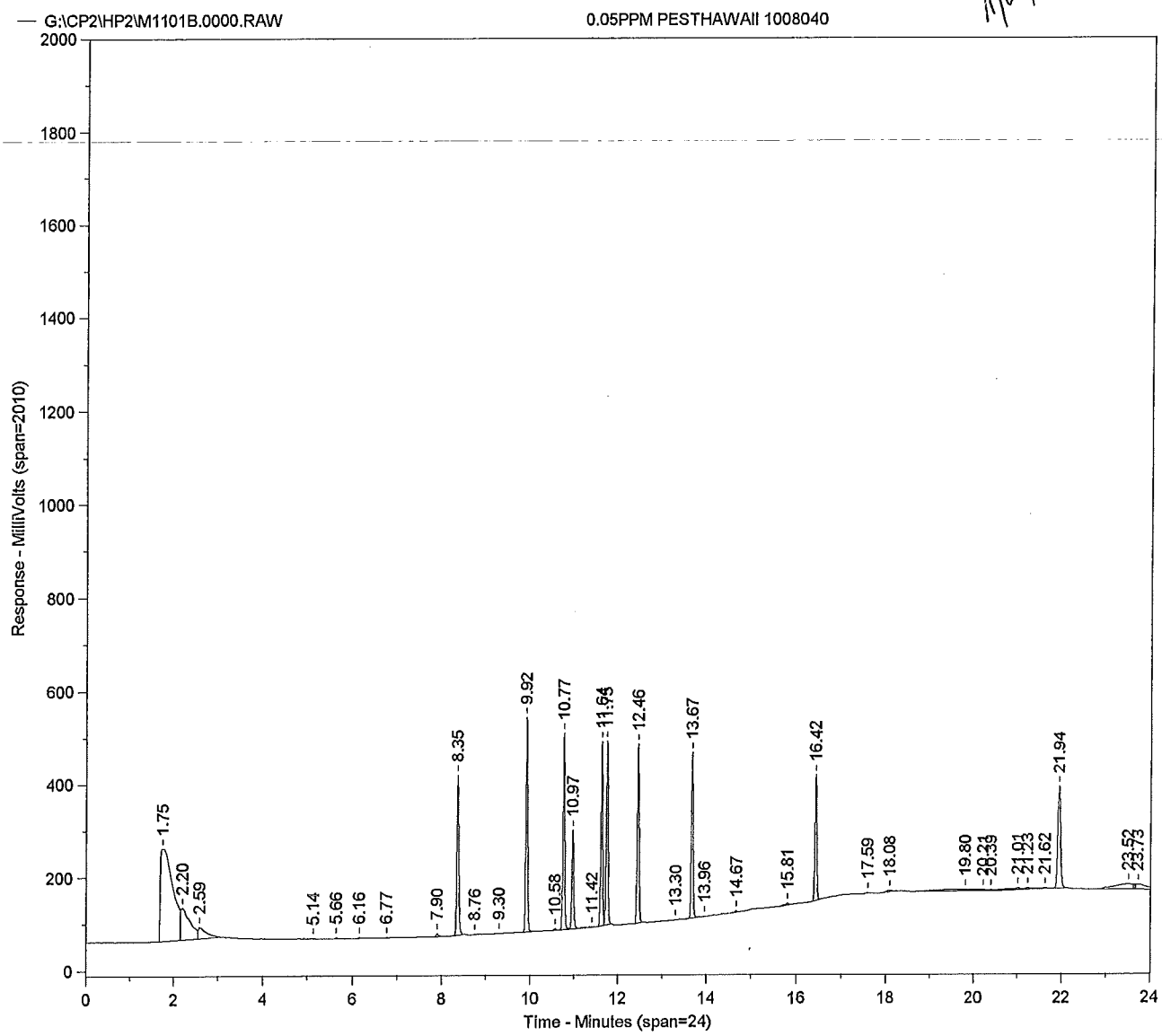
Peak #	Ret. Time	Name	Response	Area	%D	CF
16	8.34	CL4XYL	0.048	960426	-3.8	19970360
22	9.91	ABHC	0.048	1185025	-4.8	24905666
25	10.75	LINDANE	0.046	1067308	-7.6	23099646
26	10.96	BBHC	0.045	538796	-9.2	11867922
28	11.62	DBHC	0.046	938699	-8.9	20616462
29	11.74	HPCL	0.045	1008543	-10.7	22596580
30	12.44	ALDRN	0.045	979996	-9.3	21601050
33	13.65	HPCLE	0.042	949449	-15.0	22348770
39	16.41	PPDDT	0.053	760674	6.2	14323591
52	21.91	CL10BP	0.053	1014863	5.7	19204082

Checked By: _____ Date: 11/01/13

* Used Linear Regression

Chrom Perfect Chromatogram Report

11/01/13



Sample Name = **0.05PPM PESTHAWAII 1008040**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0000.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 8:49:38 AM
Method Version = 172
Calibration Version = 11

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.75		0.00	0.000	3999844	24.697	BV	0.35
2	2.20		0.00	0.000	1014127	6.262	VV	0.20
3	2.59		0.00	0.000	314358	1.941	VB	0.19
4	5.14		0.00	0.000	9367	0.058	BB	0.12
5	5.66		0.00	0.000	7244	0.045	BB	0.05
6	6.16		0.00	0.000	3935	0.024	BB	0.05
7	6.77		0.00	0.000	1194	0.007	BB	0.06
8	7.90		0.00	0.000	18477	0.114	BB	0.05
9	8.35	CL4XYL	0.05	10.512	1036930	6.403	BB	0.04
10	8.76		0.00	0.000	5580	0.034	BB	0.16
11	9.30		0.00	0.000	1876	0.012	BB	0.07
12	9.92	ABHC	0.05	10.095	1241934	7.668	BB	0.04
13	10.58		0.00	0.000	5237	0.032	BB	0.05
14	10.77	LINDANE	0.05	10.028	1144140	7.064	BV	0.04
15	10.97	BBHC	0.05	10.230	599716	3.703	VV	0.04
16	11.42		0.00	0.000	11962	0.074	VB	0.18
17	11.64	DBHC	0.05	10.226	1041367	6.430	BV	0.04
18	11.75	HPCL	0.05	9.435	1053097	6.502	VB	0.04
19	12.46	ALDRN	0.05	9.626	1027108	6.342	BB	0.04
20	13.30		0.00	0.000	8075	0.050	BB	0.28
21	13.67	HPCLE	0.04	8.816	973230	6.009	BV	0.04
22	13.96		0.00	0.000	7449	0.046	VB	0.09
23	14.67		0.00	0.000	7090	0.044	BB	0.07
24	15.81		0.00	0.000	22351	0.138	BB	0.10
25	16.42	PPDDT	0.05	10.223	723295	4.466	BB	0.04
26	17.59		0.00	0.000	2509	0.015	BB	0.07
27	18.08		0.00	0.000	31895	0.197	BB	0.25
28	19.80		0.00	0.000	175337	1.083	BV	1.01
29	20.21		0.00	0.000	42524	0.263	VV	0.26
30	20.39		0.00	0.000	10722	0.066	VB	0.11
31	21.01		0.00	0.000	65001	0.401	BV	0.37
32	21.23		0.00	0.000	30103	0.186	VV	0.30
33	21.62		0.00	0.000	8822	0.054	VB	0.12
34	21.94	CL10BP	0.05	10.808	1025211	6.330	BB	0.07
35	23.52		0.00	0.000	309878	1.913	BV	0.47
36	23.73		0.00	0.000	203857	1.259	VV	0.25
37	24.59		0.00	0.000	10820	0.067	VB	0.16

Total Area = 1.619566E+07 Total Height = 3811118 Total Amount = 0.493946

**********PESTICIDE ANALYSIS**********

Sample Name = **0.05PPM PESTHAWAII 1008040**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0000.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 8:49:38 AM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 11
Calibration Date = 11/1/13 9:52:54 AM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

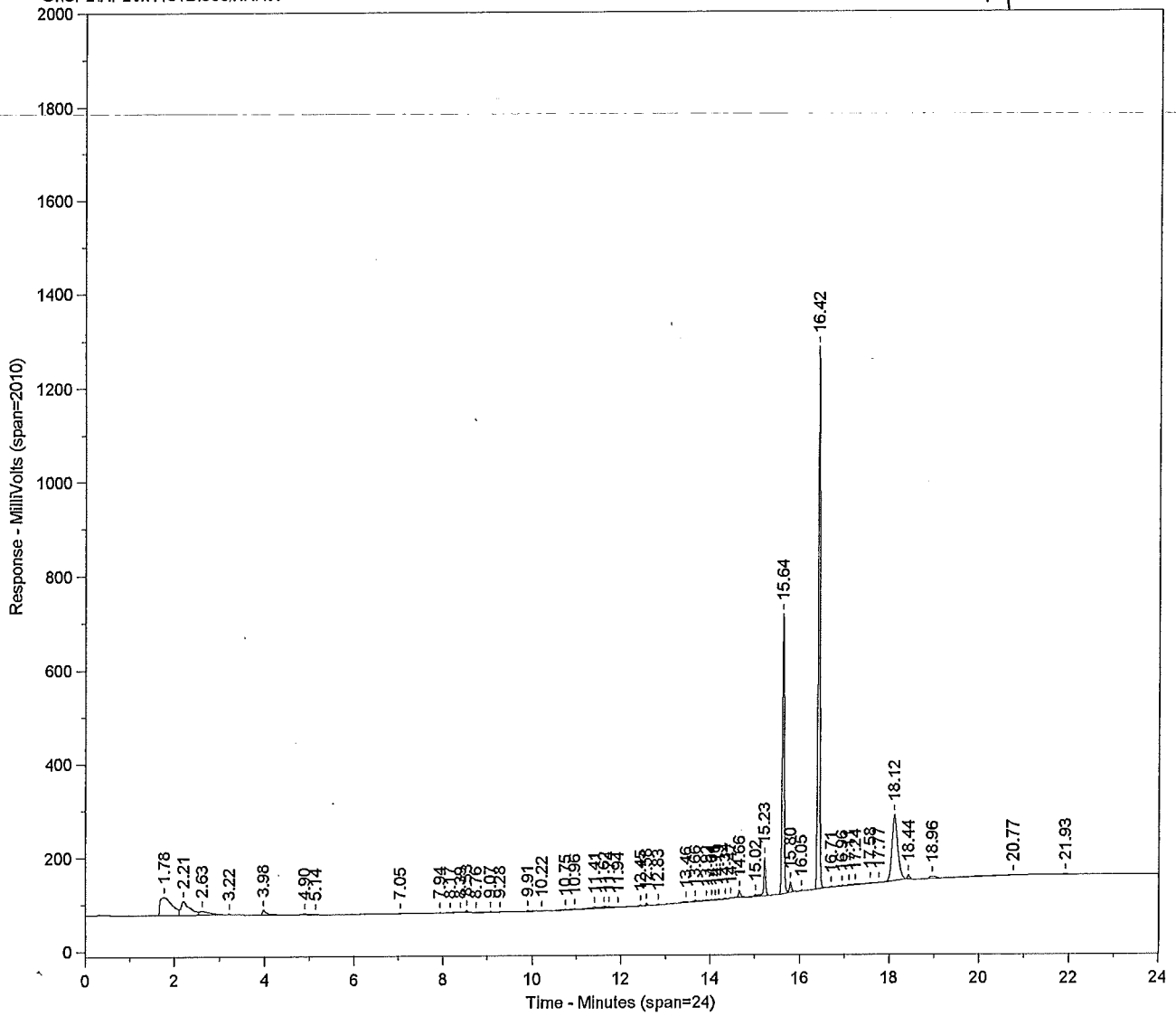
Peak #	Ret. Time	Name	Response	Area	%D	CF
9	8.35	CL4XYL	0.052	1036930	3.8	19970360
12	9.92	ABHC	0.050	1241934	-0.3	24905666
14	10.77	LINDANE	0.050	1144140	-0.9	23099646
15	10.97	BBHC	0.051	599716	1.1	11867922
17	11.64	DBHC	0.051	1041367	1.0	20616462
18	11.75	HPCL	0.047	1053097	-6.8	22596580
19	12.46	ALDRN	0.048	1027108	-4.9	21601050
21	13.67	HPCLE	0.044	973230	-12.9	22348770
25	16.42	PPDDT	0.050	723295	1.0	14323591
34	21.94	CL10BP	0.053	1025211	6.8	19204082

Checked By: _____ Date: 11/01/13

* Used Linear Regression

11/01/13

G:\CP2\HP2\M1101B.0001.RAW EVAL 1007981



Sample Name = **EVAL 1007981**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0001.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 9:22:04 AM
Method Version = 172
Calibration Version = 13

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.78		0.00	0.000	726490	8.851	BV	0.32
2	2.21		0.00	0.000	404554	4.929	VV	0.16
3	2.63		0.00	0.000	142970	1.742	VV	0.26
4	3.22		0.00	0.000	8662	0.106	VB	0.15
5	3.98		0.00	0.000	72763	0.887	BB	0.09
6	4.90		0.00	0.000	9908	0.121	BB	0.07
7	5.14		0.00	0.000	8360	0.102	BB	0.13
8	7.05		0.00	0.000	6908	0.084	BB	0.13
9	7.94		0.00	0.000	7839	0.096	BB	0.36
10	8.17		0.00	0.000	4666	0.057	BV	0.14
11	8.39		0.00	0.000	3488	0.042	VB	0.05
12	8.53		0.00	0.000	14286	0.174	BB	0.05
13	8.76		0.00	0.000	9882	0.120	BV	0.20
14	9.07		0.00	0.000	4125	0.050	VB	0.06
15	9.28		0.00	0.000	2459	0.030	BB	0.12
16	9.91	ABHC	0.00	0.089	4834	0.059	BV	0.05
17	10.22		0.00	0.000	5121	0.062	VB	0.21
18	10.75	LINDANE	0.00	0.111	5636	0.069	BB	0.09
19	10.96	BBHC	0.00	0.188	4881	0.059	BB	0.07
20	11.41		0.00	0.000	26941	0.328	BV	0.19
21	11.62	DBHC	0.00	0.341	15406	0.188	VV	0.08
22	11.74	HPCL	0.00	0.166	8237	0.100	VV	0.04
23	11.94		0.00	0.000	3798	0.046	VB	0.09
24	12.45	ALDRN	0.00	0.103	4890	0.060	BV	0.08
25	12.58		0.00	0.000	12006	0.146	VB	0.05
26	12.83		0.00	0.000	3530	0.043	BV	0.06
27	13.46		0.00	0.000	16450	0.200	VV	0.20
28	13.66	HPCLE	0.00	0.318	15569	0.190	VV	0.12
29	13.92		0.00	0.000	12548	0.153	VV	0.15
30	14.04		0.00	0.000	2754	0.034	VV	0.05
31	14.11		0.00	0.000	3417	0.042	VV	0.06
32	14.19		0.00	0.000	4905	0.060	VB	0.04
33	14.34		0.00	0.000	5141	0.063	BB	0.05
34	14.47		0.00	0.000	3738	0.046	BB	0.06
35	14.66	PPDDE	0.00	0.000	46314	0.564	BB	0.05
36	15.02		0.00	0.000	12776	0.156	BV	0.06
37	15.23		0.00	0.000	264435	3.222	VB	0.04
38	15.64	ENDRN	0.00	0.000	1708414	20.814	BV	0.04
39	15.80	PPDDD	0.00	0.000	65300	0.796	VB	0.04
40	16.05		0.00	0.000	7241	0.088	BB	0.09
41	16.42	PPDDT	0.22	98.568	3092568	37.678	BB	0.04
42	16.71	ENDRN ALD	0.00	0.000	7101	0.087	BV	0.10
43	16.96		0.00	0.000	12718	0.155	VV	0.17
44	17.11		0.00	0.000	11242	0.137	VV	0.09
45	17.24		0.00	0.000	12705	0.155	VV	0.07
46	17.58		0.00	0.000	14551	0.177	VV	0.11
47	17.77		0.00	0.000	5114	0.062	VB	0.09
48	18.12		0.00	0.000	1236364	15.063	BB	0.13
49	18.44	ENDRN KET	0.00	0.000	25663	0.313	BB	0.05
50	18.96		0.00	0.000	48686	0.593	BV	0.18
51	20.77		0.00	0.000	44721	0.545	VB	0.77
52	21.93	CL10BP	0.00	0.115	4832	0.059	BB	0.08

BT 11/01/13

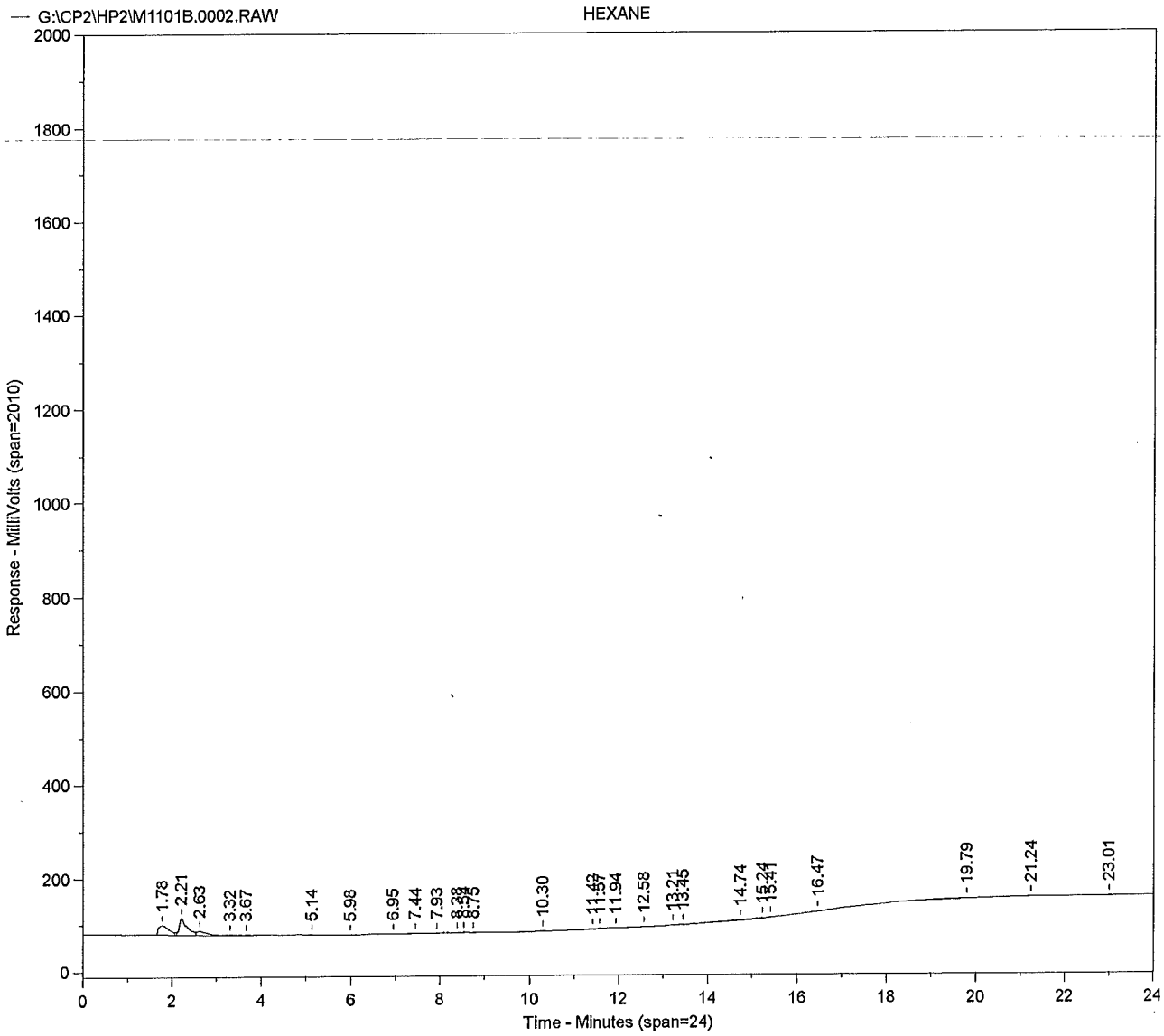
Printed on 11/1/13 10:26:47 AM

% DDT = $\frac{46314 + 65300}{111614 + 3092568} \times 100 = 3.5\%$

BT 11/01/13

% ENDRN = $\frac{71017 + 25663}{\ldots} \times 100 = 1.9\%$

Total Area = 8207905 Total Height = 2175350 Total Amount = 0.2190431


G:\CP2\HP2\M1101B.0002.RAW
HEXANE
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
1.78
2.21
2.63
3.32
3.67
5.14
5.98
6.95
7.44
7.93
8.75
10.30
11.94
12.58
14.74
16.47
19.79
21.24
23.01

Sample Name = **HEXANE**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0002.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 9:52:18 AM
Method Version = 172
Calibration Version = 13

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.78		0.00	N/A	338772	26.891	BV	0.28
2	2.21		0.00	N/A	445624	35.373	VV	0.13
3	2.63		0.00	N/A	141814	11.257	VB	0.26
4	3.32		0.00	N/A	20773	1.649	BB	0.40
5	3.67		0.00	N/A	5568	0.442	BB	0.06
6	5.14		0.00	N/A	11013	0.874	BB	0.11
7	5.98		0.00	N/A	3434	0.273	BB	0.32
8	6.95		0.00	N/A	1861	0.148	BB	0.09
9	7.44		0.00	N/A	3019	0.240	BB	0.21
10	7.93		0.00	N/A	8728	0.693	BV	0.27
11	8.38		0.00	N/A	4220	0.335	VB	0.05
12	8.54		0.00	N/A	4574	0.363	BB	0.05
13	8.75		0.00	N/A	6944	0.551	BB	0.21
14	10.30		0.00	N/A	9586	0.761	BB	0.28
15	11.42		0.00	N/A	13139	1.043	BV	0.20
16	11.57		0.00	N/A	4999	0.397	VB	0.04
17	11.94		0.00	N/A	1294	0.103	BB	0.07
18	12.58		0.00	N/A	7918	0.629	BB	0.28
19	13.21		0.00	N/A	17912	1.422	BV	0.37
20	13.45		0.00	N/A	13635	1.082	VB	0.14
21	14.74		0.00	N/A	44896	3.564	BV	0.67
22	15.24		0.00	N/A	26834	2.130	VB	0.26
23	15.41		0.00	N/A	12640	1.003	BV	0.12
24	16.47		0.00	N/A	15135	1.201	VB	0.47
25	19.79		0.00	N/A	77894	6.183	BV	0.66
26	21.24		0.00	N/A	16119	1.280	VB	0.32
27	23.01		0.00	N/A	1456	0.116	BB	0.13

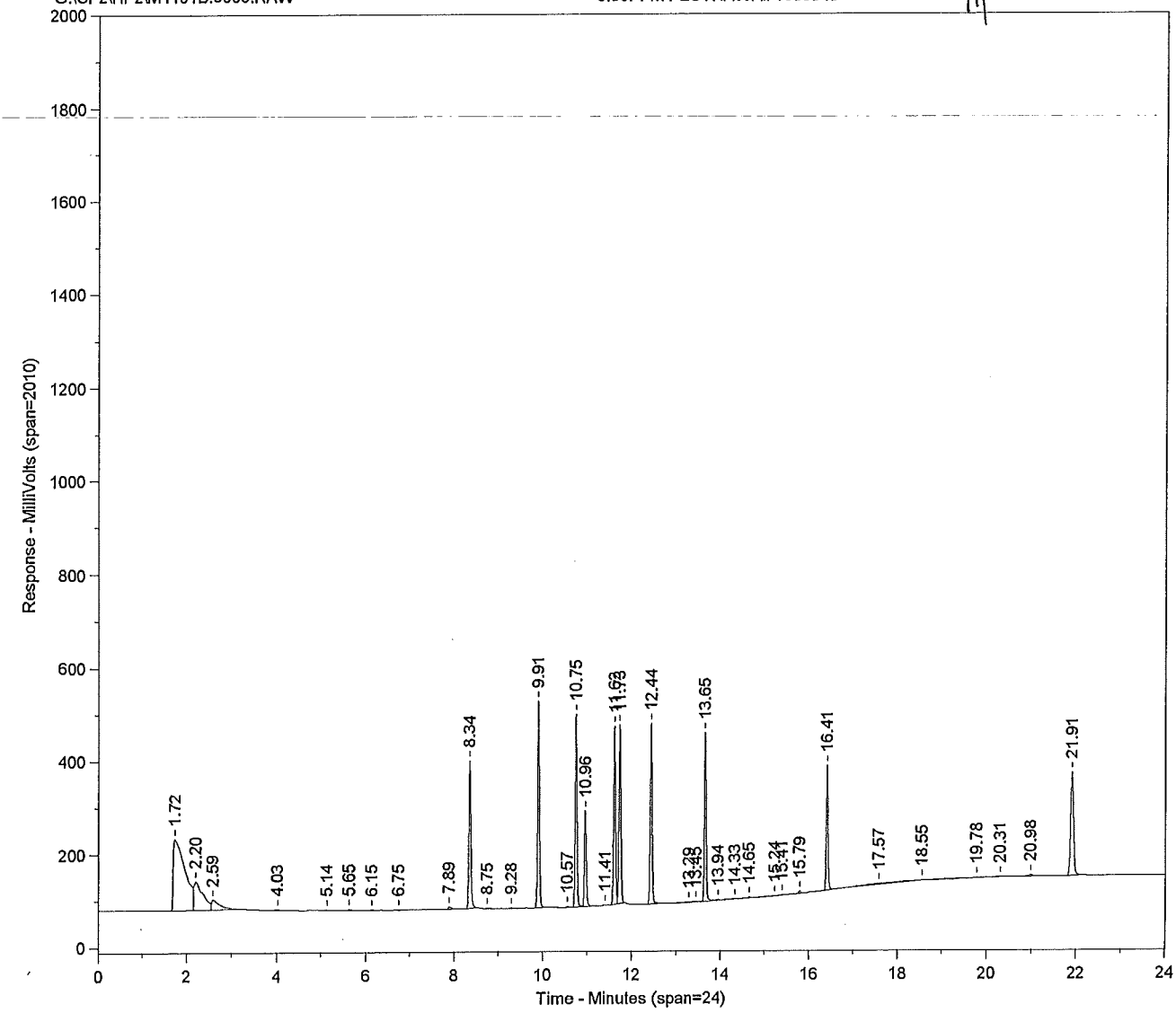
Total Area = 1259802 Total Height = 89687.69 Total Amount = 0

Chrom Perfect Chromatogram Report

11/01/13

G:\CP2\HP2\M1101B.0005.RAW

0.05PPM PESTHAWAII 1008040



Sample Name = **0.05PPM PESTHAWAII 1008040**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0005.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 11:22:34 AM
Method Version = 172
Calibration Version = 13

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.72		0.00	0.000	2874748	20.058	BV	0.32
2	2.20		0.00	0.000	870743	6.075	VV	0.20
3	2.59		0.00	0.000	284454	1.985	VB	0.20
4	4.03		0.00	0.000	6437	0.045	BB	0.13
5	5.14		0.00	0.000	8474	0.059	BB	0.12
6	5.65		0.00	0.000	5830	0.041	BB	0.05
7	6.15		0.00	0.000	4194	0.029	BB	0.05
8	6.75		0.00	0.000	2826	0.020	BB	0.17
9	7.89		0.00	0.000	21002	0.147	BB	0.07
10	8.34	CL4XYL	0.05	9.959	991795	6.920	BB	0.05
11	8.75		0.00	0.000	11525	0.080	BB	0.11
12	9.28		0.00	0.000	1971	0.014	BB	0.05
13	9.91	ABHC	0.05	10.024	1244876	8.686	BB	0.04
14	10.57		0.00	0.000	6196	0.043	BB	0.05
15	10.75	LINDANE	0.05	10.039	1156424	8.069	BV	0.04
16	10.96	BBHC	0.05	10.221	604865	4.220	VV	0.04
17	11.41		0.00	0.000	8433	0.059	VB	0.14
18	11.62	DBHC	0.05	10.205	1049116	7.320	BV	0.04
19	11.73	HPCL	0.05	9.399	1059047	7.389	VB	0.04
20	12.44	ALDRN	0.05	9.897	1066029	7.438	BB	0.04
21	13.29		0.00	0.000	7279	0.051	BV	0.15
22	13.45		0.00	0.000	6033	0.042	VB	0.13
23	13.65	HPCLE	0.05	9.047	1008254	7.035	BV	0.04
24	13.94		0.00	0.000	9547	0.067	VV	0.06
25	14.33		0.00	0.000	6256	0.044	VB	0.14
26	14.65		0.00	0.000	5445	0.038	BB	0.06
27	15.24		0.00	0.000	11626	0.081	BB	0.29
28	15.41		0.00	0.000	4174	0.029	BB	0.10
29	15.79		0.00	0.000	12832	0.090	BB	0.05
30	16.41	PPDDT	0.05	10.415	743894	5.190	BB	0.04
31	17.57		0.00	0.000	71779	0.501	BV	0.43
32	18.55		0.00	0.000	63701	0.444	VB	0.53
33	19.78		0.00	0.000	46371	0.324	BV	0.59
34	20.31		0.00	0.000	6279	0.044	VB	0.22
35	20.98		0.00	0.000	16157	0.113	BB	0.08
36	21.91	CL10BP	0.05	10.795	1033806	7.213	BB	0.07

Total Area = 1.433242E+07 Total Height = 3649216 Total Amount = 0.4986635

**********PESTICIDE ANALYSIS**********

Sample Name = **0.05PPM PESTHAWAII 1008040**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0005.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 11:22:34 AM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 13
Calibration Date = 11/1/13 10:22:42 AM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Peak #	Ret. Time	Name	Response	Area	%D	CF
10	8.34	CL4XYL	0.050	991795	-0.7	19970360
13	9.91	ABHC	0.050	1244876	0.0	24905666
15	10.75	LINDANE	0.050	1156424	0.1	23099646
16	10.96	BBHC	0.051	604865	1.9	11867922
18	11.62	DBHC	0.051	1049116	1.8	20616462
19	11.73	HPCL	0.047	1059047	-6.3	22596580
20	12.44	ALDRN	0.049	1066029	-1.3	21601050
23	13.65	HPCLE	0.045	1008254	-9.8	22348770
30	16.41	PPDDT	0.052	743894	3.9	14323591
36	21.91	CL10BP	0.054	1033806	7.7	19204082

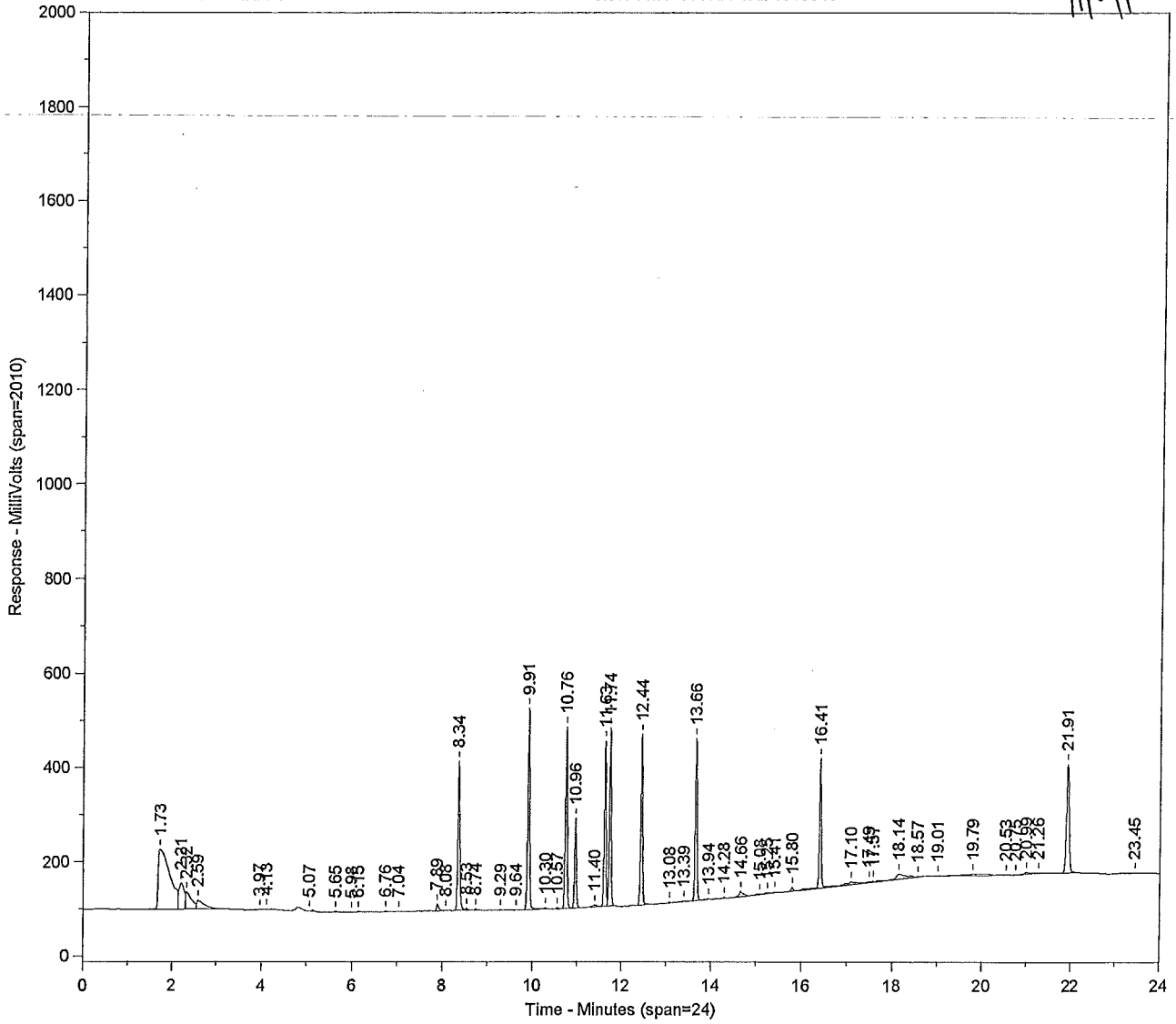
Checked By: _____ Date: 11/01/13

* Used Linear Regression

Chrom Perfect Chromatogram Report

11/04/13

G:\CP2\HP2\M1101B.0014.RAW 0.05PPM PESTHAWAII 1008040



Printed on 11/1/13 3:56:44 PM

Page 1 of 3

Sample Name = **0.05PPM PESTHAWAII 1008040**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0014.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 3:55:52 PM
Method Version = 172
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.73		0.00	0.000	2368798	17.276	BV	0.30
2	2.21		0.00	0.000	443732	3.236	VV	0.09
3	2.32		0.00	0.000	340504	2.483	VV	0.11
4	2.59		0.00	0.000	249419	1.819	VB	0.20
5	3.97		0.00	0.000	9409	0.069	BV	0.31
6	4.13		0.00	0.000	1405	0.010	VB	0.08
7	5.07		0.00	0.000	1372	0.010	BB	0.05
8	5.65		0.00	0.000	7856	0.057	BV	0.06
9	5.98		0.00	0.000	5429	0.040	VV	0.09
10	6.15		0.00	0.000	4905	0.036	VB	0.05
11	6.76		0.00	0.000	4725	0.034	BB	0.05
12	7.04		0.00	0.000	3542	0.026	BB	0.16
13	7.89		0.00	0.000	47431	0.346	BV	0.05
14	8.08		0.00	0.000	2620	0.019	VB	0.04
15	8.34	CL4XYL	0.05	10.258	978680	7.138	BV	0.05
16	8.53		0.00	0.000	12568	0.092	VB	0.05
17	8.74		0.00	0.000	12507	0.091	BB	0.05
18	9.29		0.00	0.000	2198	0.016	BB	0.05
19	9.64		0.00	0.000	6745	0.049	BV	0.14
20	9.91	ABHC	0.05	10.014	1191596	8.691	VV	0.04
21	10.30		0.00	0.000	27661	0.202	VB	0.19
22	10.57		0.00	0.000	6898	0.050	BV	0.06
23	10.76	LINDANE	0.05	9.645	1064393	7.763	VV	0.04
24	10.96	BBHC	0.05	9.652	547281	3.992	VB	0.04
25	11.40		0.00	0.000	32693	0.238	BV	0.19
26	11.63	DBHC	0.05	9.614	946966	6.907	VV	0.04
27	11.74	HPCL	0.04	9.373	1011863	7.380	VB	0.04
28	12.44	ALDRN	0.05	9.467	977018	7.126	BB	0.04
29	13.08		0.00	0.000	8116	0.059	BV	0.14
30	13.39		0.00	0.000	17297	0.126	VV	0.21
31	13.66	HPCLE	0.04	8.833	943087	6.878	VV	0.04
32	13.94		0.00	0.000	7471	0.054	VB	0.13
33	14.28		0.00	0.000	2445	0.018	BB	0.06
34	14.66		0.00	0.000	65863	0.480	BB	0.12
35	15.08		0.00	0.000	10850	0.079	BV	0.14
36	15.25		0.00	0.000	11379	0.083	VV	0.13
37	15.41		0.00	0.000	4238	0.031	VB	0.05
38	15.80		0.00	0.000	20860	0.152	BB	0.05
39	16.41	PPDDT	0.05	11.467	784734	5.723	BV	0.04
40	17.10		0.00	0.000	68808	0.502	VV	0.26
41	17.49		0.00	0.000	9615	0.070	VV	0.06
42	17.57		0.00	0.000	9611	0.070	VV	0.06
43	18.14		0.00	0.000	155825	1.136	VV	0.29
44	18.57		0.00	0.000	5380	0.039	VB	0.06
45	19.01		0.00	0.000	12817	0.093	BV	0.17
46	19.79		0.00	0.000	95088	0.694	VV	0.43
47	20.53		0.00	0.000	23878	0.174	VB	0.23
48	20.75		0.00	0.000	4794	0.035	BB	0.10
49	20.99		0.00	0.000	33717	0.246	BV	0.17
50	21.26		0.00	0.000	10836	0.079	VB	0.08
51	21.91	CL10BP	0.06	11.677	1071388	7.814	BB	0.07
52	23.45		0.00	0.000	22815	0.166	BB	0.51

Total Area = 1.371113E+07 Total Height = 3594371 Total Amount = 0.4777601

**********PESTICIDE ANALYSIS**********

Sample Name = **0.05PPM PESTHAWAII 1008040**

Instrument = HP 2 Acquisition Port = 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Raw File Name = **G:\CP2\HP2\M1101B.0014.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 3:55:52 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 14
Calibration Date = 11/1/13 1:28:12 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

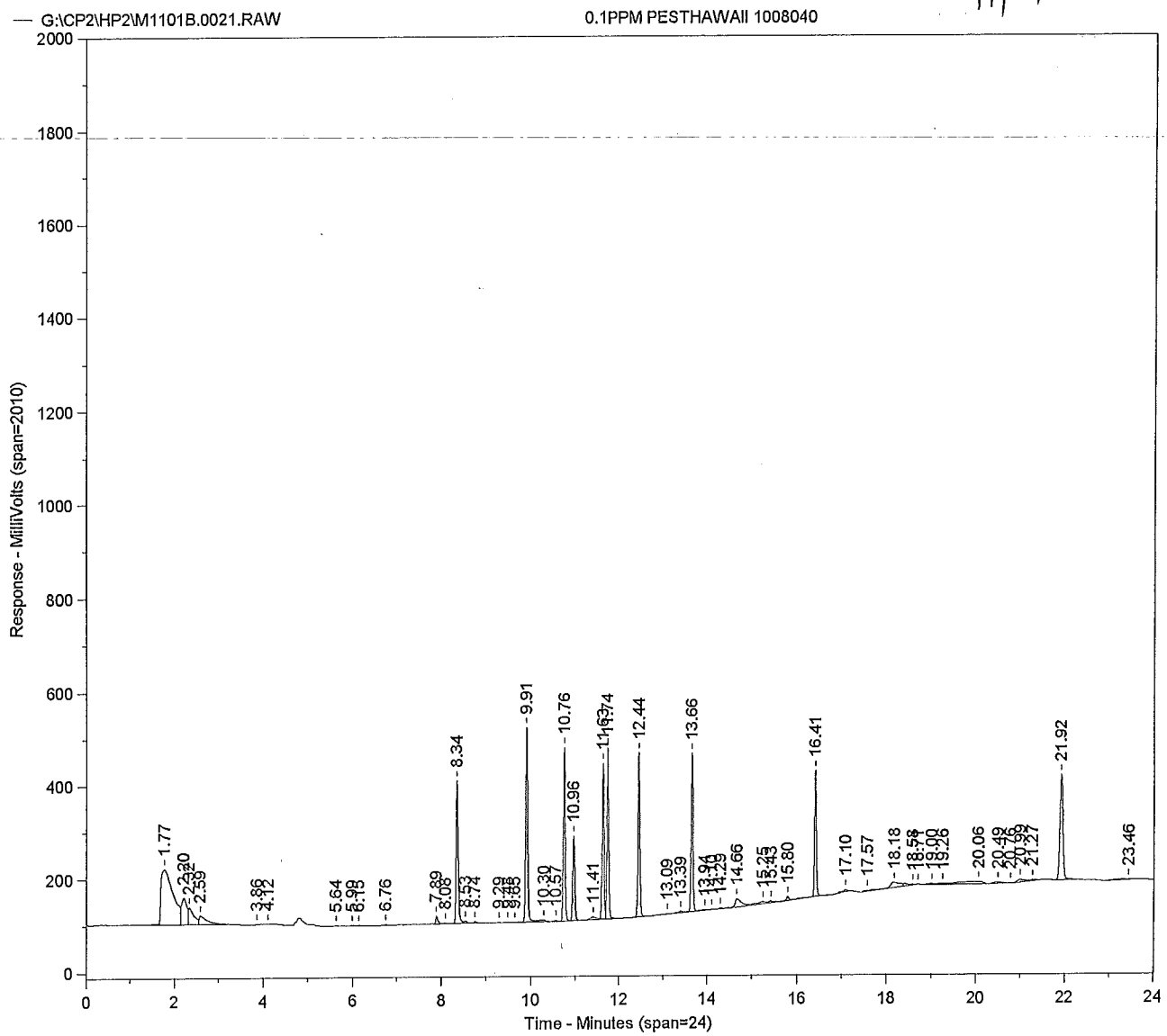
Dilution Factor = 1

Operator =

Peak #	Ret. Time	Name	Response	Area	%D	CF
15	8.34	CL4XYL	0.049	978680	-2.0	19970360
20	9.91	ABHC	0.048	1191596	-4.3	24905666
23	10.76	LINDANE	0.046	1064393	-7.8	23099646
24	10.96	BBHC	0.046	547281	-7.8	11867922
26	11.63	DBHC	0.046	946966	-8.1	20616462
27	11.74	HPCL	0.045	1011863	-10.4	22596580
28	12.44	ALDRN	0.045	977018	-9.5	21601050
31	13.66	HPCLE	0.042	943087	-15.6	22348770
39	16.41	PPDDT	0.055	784734	9.6	14323591
51	21.91	CL10BP	0.056	1071388	11.6	19204082

Checked By: _____ Date: 11/04/13

* Used Linear Regression


G:\CP2\HP2\M1101B.0021.RAW
0.1PPM PESTHAWAII 1008040
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
1.77
2.59
3.86
4.12
5.64
6.76
8.34
9.91
10.76
10.96
11.41
12.44
13.09
13.39
13.66
14.66
15.80
16.41
17.10
17.57
18.18
20.06
21.92
23.46

Sample Name = **0.1PPM PESTHAWAII 1008040**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0021.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 7:28:06 PM
Method Version = 172
Calibration Version = 15

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.77		0.00	0.000	2270465	16.257	BV	0.32
2	2.20		0.00	0.000	447165	3.202	VV	0.09
3	2.32		0.00	0.000	323889	2.319	VV	0.11
4	2.59		0.00	0.000	237300	1.699	VB	0.19
5	3.86		0.00	0.000	11267	0.081	BV	0.20
6	4.12		0.00	0.000	2236	0.016	VB	0.11
7	5.64		0.00	0.000	5838	0.042	BB	0.05
8	5.99		0.00	0.000	5739	0.041	BV	0.08
9	6.15		0.00	0.000	4525	0.032	VB	0.06
10	6.76		0.00	0.000	5982	0.043	BB	0.05
11	7.89		0.00	0.000	53740	0.385	BV	0.05
12	8.08		0.00	0.000	2622	0.019	VB	0.04
13	8.34	CL4XYL	0.05	10.246	964933	6.909	BV	0.05
14	8.53		0.00	0.000	13625	0.098	VB	0.06
15	8.74		0.00	0.000	12751	0.091	BB	0.05
16	9.29		0.00	0.000	2168	0.016	BB	0.05
17	9.48		0.00	0.000	10580	0.076	BV	0.17
18	9.65		0.00	0.000	7587	0.054	VV	0.08
19	9.91	ABHC	0.05	10.115	1188001	8.507	VV	0.04
20	10.30		0.00	0.000	37568	0.269	VB	0.17
21	10.57		0.00	0.000	8643	0.062	BV	0.05
22	10.76	LINDANE	0.04	9.517	1036775	7.424	VV	0.04
23	10.96	BBHC	0.04	9.482	530698	3.800	VB	0.04
24	11.41		0.00	0.000	63198	0.453	BV	0.19
25	11.63	DBHC	0.05	9.594	932784	6.679	VV	0.04
26	11.74	HPCL	0.05	9.567	1019510	7.300	VB	0.04
27	12.44	ALDRN	0.04	9.474	965167	6.911	BB	0.04
28	13.09		0.00	0.000	15537	0.111	BV	0.17
29	13.39		0.00	0.000	37890	0.271	VV	0.18
30	13.66	HPCLE	0.04	8.992	947727	6.786	VV	0.04
31	13.94		0.00	0.000	16051	0.115	VV	0.14
32	14.10		0.00	0.000	5913	0.042	VB	0.09
33	14.29		0.00	0.000	7691	0.055	BB	0.13
34	14.66		0.00	0.000	157084	1.125	BV	0.17
35	15.25		0.00	0.000	60142	0.431	VV	0.24
36	15.43		0.00	0.000	18633	0.133	VB	0.05
37	15.80		0.00	0.000	36623	0.262	BB	0.06
38	16.41	PPDDT	0.05	11.248	759807	5.441	BB	0.04
39	17.10		0.00	0.000	44059	0.315	BB	0.23
40	17.57		0.00	0.000	16991	0.122	BV	0.14
41	18.18		0.00	0.000	187142	1.340	VV	0.29
42	18.58		0.00	0.000	5032	0.036	VB	0.04
43	18.71		0.00	0.000	198	0.001	BB	0.04
44	19.00		0.00	0.000	17902	0.128	BV	0.17
45	19.26		0.00	0.000	33373	0.239	VV	0.25
46	20.06		0.00	0.000	204673	1.466	VB	0.66
47	20.49		0.00	0.000	47595	0.341	BB	0.24
48	20.76		0.00	0.000	5105	0.037	BB	0.11
49	20.99		0.00	0.000	49693	0.356	BV	0.17
50	21.27		0.00	0.000	13569	0.097	VB	0.13
51	21.92	CL10BP	0.06	11.765	1065525	7.630	BB	0.07
52	23.46		0.00	0.000	47047	0.337	BB	0.58

Total Area = 1.396576E+07 Total Height = 3526150 Total Amount = 0.4715984

**********PESTICIDE ANALYSIS**********

Sample Name = **0.1PPM PESTHAWAII 1008040**

Instrument = HP 2 Acquisition Port = 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Raw File Name = **G:\CP2\HP2\M1101B.0021.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 7:28:06 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 15
Calibration Date = 11/4/13 11:17:25 AM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Peak #	Ret. Time	Name	Response	Area	%D	CF
13	8.34	CL4XYL	0.048	964933	-3.4	19970360
19	9.91	ABHC	0.048	1188001	-4.6	24905666
22	10.76	LINDANE	0.045	1036775	-10.2	23099646
23	10.96	BBHC	0.045	530698	-10.6	11867922
25	11.63	DBHC	0.045	932784	-9.5	20616462
26	11.74	HPCL	0.045	1019510	-9.8	22596580
27	12.44	ALDRN	0.045	965167	-10.6	21601050
30	13.66	HPCLE	0.042	947727	-15.2	22348770
38	16.41	PPDDT	0.053	759807	6.1	14323591
51	21.92	CL10BP	0.055	1065525	11.0	19204082

Checked By: _____ Date: 11/04/13

* Used Linear Regression

Instrument Logs/
Analysis Notebook Pages

Rev. 1.0

TEMP PROG: 120°C – 10°C/min – 290°C
10/24/13

Chrom Perfect Sequence File

HAWAII PST 01B

1	M1022B15.raw	HEXANE	G:\CP2\HP2\PEST
2	M1022B16.raw	EVAL 1007981 Pass	G:\CP2\HP2\PEST
3	M1022B17.raw	0.25PPM PESTHAWAII 1008040	G:\CP2\HP2\PEST
4	M1022B18.raw	0.2PPM PESTHAWAII 1008040	G:\CP2\HP2\PEST
5	M1022B19.raw	0.125PPM PESTHAWAII 1008040	G:\CP2\HP2\PEST
6	M1022B20.raw	0.1PPM PESTHAWAII 1008040	G:\CP2\HP2\PEST
7	M1022B21.raw	0.05PPM PESTHAWAII 1008040	G:\CP2\HP2\PEST
8	M1022B22.raw	0.025PPM PESTHAWAII 1008040	G:\CP2\HP2\PEST
9	M1022B23.raw	0.01PPM PESTHAWAII 1008040	G:\CP2\HP2\PEST
10	M1022B24.raw	0.1PPM PESTHAWAII VERIFICATION 1007972-R/S Pass	G:\CP2\HP2\PEST

10/24/13

Continued on Page

Read and Understood By

Signed 10/24/13 Date Signed 11/6/13 Date

PROJECT HP2 Det B 10/31/13 8081B

Notebook No. 3311
Continued from Page

TEMP PROG: 120°C - 10°C/min - 290°C

11/01/13

Chrom Perfect Sequence File

1	M1031 1.raw	0.05PPM PESTHAWAII 1008040 Pass	G:\CP2\HP2\PEST
2	M1031 2.raw	EVAL 1007981 Pass	G:\CP2\HP2\PEST
3	M1031 3.raw	HEXANE	G:\CP2\HP2\PEST
4	M1031 4.raw	006555-06K1 B10112 SPIKE BLK1	G:\CP2\HP2\PEST
5	M1031 5.raw	006555-06B1 B10112 BLK1	G:\CP2\HP2\PEST
6	M1031 6.raw	0.05PPM PESTHAWAII 1008040 Pass	G:\CP2\HP2\PEST
7	M1031 7.raw	006555-01 B10112 MAK001O	G:\CP2\HP2\PEST
8	M1031 8.raw	006555-02 B10112 MAK002O	G:\CP2\HP2\PEST
9	M1031 9.raw	006555-03 B10112 MAK003O	G:\CP2\HP2\PEST
10	M1031 10.raw	006555-04 B10112 MAK004O	G:\CP2\HP2\PEST
11	M1031 11.raw	006555-05 B10112 MAK005O	G:\CP2\HP2\PEST
12	M1031 12.raw	006555-06 B10112 MAK006O	G:\CP2\HP2\PEST
13	M1031 13.raw	006555-06MS B10112 MAK006OMS	G:\CP2\HP2\PEST
14	M1031 14.raw	006555-06MD B10112 MAK006OMSD	G:\CP2\HP2\PEST
15	M1031 15.raw	006555-07 B10112 MAK021O	G:\CP2\HP2\PEST
16	M1031 16.raw	006555-08 B10112 MAK008O	G:\CP2\HP2\PEST
17	M1031 17.raw	0.05PPM PESTHAWAII 1008040 Pass	G:\CP2\HP2\PEST
18	M1031 18.raw	006555-09 B10112 MAK009O	G:\CP2\HP2\PEST
19	M1031 19.raw	006555-10 B10112 MAK010O	G:\CP2\HP2\PEST
20	M1031 20.raw	006555-11 B10112 MAK011O	G:\CP2\HP2\PEST
21	M1031 21.raw	006555-12 B10112 MAK012O	G:\CP2\HP2\PEST
22	M1031 22.raw	006555-13 B10112 MAK013O	G:\CP2\HP2\PEST
23	M1031 23.raw	0.05PPM PESTHAWAII 1008040 Pass	G:\CP2\HP2\PEST

B

PST HAWAII 01B

11/01/13

Continued on Page

Read and Understood By

Signed 11/01/13 Date

Signed 11/6/13 Date

TEMP PROG: 120°C - 10°C/min - 290°C

11/04/13

Chrom Perfect Sequence File

PST HAWAII 01B

1	M1101B0.raw	0.1PPM PESTHAWAII 1008040 Pass	G:\CP2\HP2\PEST
2	M11011.raw	EVAL 1007981 Pass	G:\CP2\HP2\PEST
3	M11012.raw	HEXANE	G:\CP2\HP2\PEST
4	M11013.raw	006556-01K1 B10114 SPIKE BLK1	G:\CP2\HP2\PEST
5	M11014.raw	006556-01B1 B10114 BLK1	G:\CP2\HP2\PEST
6	M11015.raw	0.05PPM PESTHAWAII 1008040 Pass	G:\CP2\HP2\PEST
7	M11016.raw	006555-14 B10114 MAK014O	G:\CP2\HP2\PEST
8	M11017.raw	006555-15 B10114 MAK015O	G:\CP2\HP2\PEST
9	M11018.raw	006555-16 B10114 MAK016O	G:\CP2\HP2\PEST
10	M11019.raw	006555-17 B10114 MAK017O	G:\CP2\HP2\PEST
11	M11010.raw	006555-18 B10114 MAK018O	G:\CP2\HP2\PEST
12	M11011.raw	006555-19 B10114 MAK019O	G:\CP2\HP2\PEST
13	M11012.raw	006555-20 B10114 MAK020O	G:\CP2\HP2\PEST
14	M11013.raw	006556-01 B10114 MAK007O	G:\CP2\HP2\PEST
15	M11014.raw	0.05PPM PESTHAWAII 1008040 Pass	G:\CP2\HP2\PEST
16	M11015.raw	006556-01MS B10114 MAK007OMS	G:\CP2\HP2\PEST
17	M11016.raw	006556-01MD B10114 MAK007OMSD	G:\CP2\HP2\PEST
18	M11017.raw	006556-02 B10114 MAK022O	G:\CP2\HP2\PEST
19	M11018.raw	006556-03 B10114 MAK023O	G:\CP2\HP2\PEST
20	M11019.raw	006556-04 B10114 MAK024O	G:\CP2\HP2\PEST
21	M11020.raw	006556-05 B10114 MB-SO-HEE000TEST	G:\CP2\HP2\PEST
22	M11021.raw	0.05PPM PESTHAWAII 1008040 Pass	G:\CP2\HP2\PEST

11/04/13

Continued on Page

Read and Understood By

Signed	Date	Signed	Date
	11/04/13		11/6/13

Blank / Field Sample / QC Data

Rev. 1.0

METHOD BLANK REPORT
ARDL, Inc. 400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

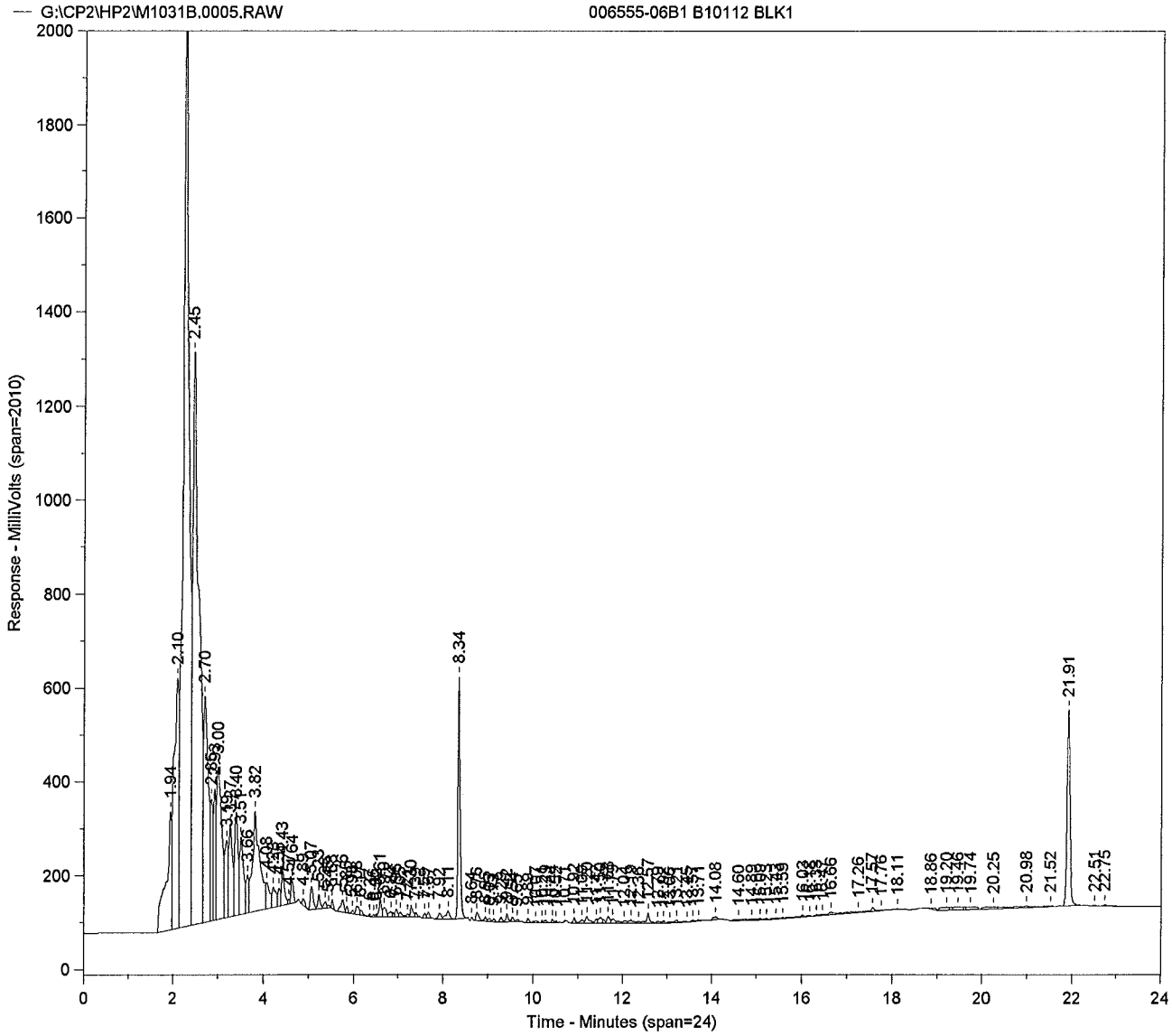
Field ID:	NA	ARDL Lab No.:	006555-06B1
Desc/Location:	NA	Lab Filename:	
Sample Date:	NA	Received Date:	NA
Sample Time:	NA	Prep. Date:	10/30/2013
Matrix:	QC Material	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units
alpha-BHC	4.0	4.0	ND		UG/KG
gamma-BHC (Lindane)	4.0	4.0	ND		UG/KG
delta-BHC	4.0	4.0	ND		UG/KG
Heptachlor	4.0	4.0	ND		UG/KG
Aldrin	4.0	4.0	ND		UG/KG
Heptachlor Epoxide	4.0	4.0	ND		UG/KG
p,p'-DDT	4.0	4.0	ND		UG/KG
beta-BHC	4.0	4.0	ND		UG/KG

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	87%
Decachlorobiphenyl	25-125	104%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Blank for Run B10112, CHLORINATED PESTICIDES (8081) Page 1 of 1


G:\CP2\HP2\M1031B.0005.RAW
006555-06B1 B10112 BLK1
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0
2
4
6
8
10
12
14
16
18
20
22
24
1.94
2.10
2.45
2.70
3.00
3.40
3.82
8.34
14.08
21.91
21.52
20.98
20.25
18.86
18.11
17.76
17.26
16.86
22.51
22.75

Sample Name = **006555-06B1 B10112 BLK1**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0005.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 11:56:40 AM
Method Version = 172
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.94		0.00	0.000	2152321	3.588	BV	0.08
2	2.10		0.00	0.000	4196492	6.996	VV	0.10
3	2.25		0.00	0.000	17910444	29.859	VV	0.09
4	2.45		0.00	0.000	11930244	19.889	VV	0.09
5	2.70		0.00	0.000	3560494	5.936	VV	0.09
6	2.85		0.00	0.000	991370	1.653	VV	0.05
7	2.93		0.00	0.000	1032318	1.721	VV	0.04
8	3.00		0.00	0.000	2540702	4.236	VV	0.11
9	3.19		0.00	0.000	851039	1.419	VV	0.06
10	3.27		0.00	0.000	1069618	1.783	VV	0.07
11	3.40		0.00	0.000	1158270	1.931	VV	0.06
12	3.51		0.00	0.000	1021939	1.704	VV	0.09
13	3.66		0.00	0.000	361478	0.603	VV	0.04
14	3.82		0.00	0.000	2365131	3.943	VV	0.11
15	4.08		0.00	0.000	332787	0.555	VV	0.06
16	4.23		0.00	0.000	264028	0.440	VV	0.05
17	4.35		0.00	0.000	147753	0.246	VV	0.04
18	4.43		0.00	0.000	342763	0.571	VV	0.06
19	4.57		0.00	0.000	27963	0.047	VV	0.04
20	4.64		0.00	0.000	195805	0.326	VB	0.06
21	4.89		0.00	0.000	59816	0.100	BB	0.10
22	5.07		0.00	0.000	223458	0.373	BV	0.07
23	5.23		0.00	0.000	113262	0.189	VV	0.05
24	5.38		0.00	0.000	56897	0.095	VV	0.06
25	5.45		0.00	0.000	19987	0.033	VB	0.06
26	5.53		0.00	0.000	48246	0.080	BB	0.05
27	5.76		0.00	0.000	135708	0.226	BV	0.07
28	5.85		0.00	0.000	39280	0.065	VV	0.05
29	5.98		0.00	0.000	25506	0.043	VV	0.05
30	6.08		0.00	0.000	93572	0.156	VV	0.08
31	6.17		0.00	0.000	45362	0.076	VB	0.07
32	6.37		0.00	0.000	13161	0.022	BB	0.04
33	6.46		0.00	0.000	13247	0.022	BV	0.06
34	6.52		0.00	0.000	16033	0.027	VV	0.03
35	6.61		0.00	0.000	135815	0.226	VV	0.05
36	6.70		0.00	0.000	106859	0.178	VV	0.09
37	6.84		0.00	0.000	52093	0.087	VV	0.07
38	6.96		0.00	0.000	62942	0.105	VV	0.04
39	7.05		0.00	0.000	40919	0.068	VV	0.07
40	7.21		0.00	0.000	26760	0.045	VV	0.05
41	7.30		0.00	0.000	85774	0.143	VV	0.04
42	7.39		0.00	0.000	28830	0.048	VB	0.06
43	7.59		0.00	0.000	33262	0.055	BV	0.06
44	7.67		0.00	0.000	47243	0.079	VB	0.06
45	7.92		0.00	0.000	59688	0.100	BV	0.07
46	8.11		0.00	0.000	107534	0.179	VB	0.08
47	8.34	CL4XYL	0.09	45.304	1744861	2.909	BB	0.05
48	8.64		0.00	0.000	1926	0.003	BB	0.03
49	8.76		0.00	0.000	77615	0.129	BV	0.08
50	8.95		0.00	0.000	32431	0.054	VV	0.04
51	9.03		0.00	0.000	27204	0.045	VV	0.06
52	9.13		0.00	0.000	23197	0.039	VB	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	9.29		0.00	0.000	44743	0.075	BV	0.06
54	9.42		0.00	0.000	57180	0.095	VV	0.04
55	9.54		0.00	0.000	31267	0.052	VV	0.04
56	9.65		0.00	0.000	18394	0.031	VB	0.08
57	9.89	ABHC	0.00	0.706	33896	0.057	BV	0.06
58	10.07		0.00	0.000	30249	0.050	VB	0.15
59	10.21		0.00	0.000	12276	0.020	BV	0.05
60	10.29		0.00	0.000	23675	0.039	VV	0.07
61	10.44		0.00	0.000	19224	0.032	VV	0.05
62	10.52		0.00	0.000	9776	0.016	VB	0.06
63	10.71		0.00	0.000	5255	0.009	BB	0.05
64	10.92		0.00	0.000	33915	0.057	BV	0.05
65	11.09		0.00	0.000	34226	0.057	VV	0.08
66	11.20		0.00	0.000	79222	0.132	VV	0.06
67	11.42		0.00	0.000	30519	0.051	VV	0.05
68	11.50		0.00	0.000	62207	0.104	VV	0.05
69	11.68		0.00	0.000	61838	0.103	VV	0.06
70	11.79		0.00	0.000	43065	0.072	VV	0.07
71	12.04		0.00	0.000	29123	0.049	VV	0.10
72	12.19		0.00	0.000	43947	0.073	VV	0.06
73	12.36		0.00	0.000	19545	0.033	VV	0.09
74	12.57		0.00	0.000	92723	0.155	VV	0.05
75	12.79		0.00	0.000	21620	0.036	VV	0.10
76	12.92		0.00	0.000	16322	0.027	VB	0.06
77	13.06		0.00	0.000	19535	0.033	BV	0.14
78	13.21		0.00	0.000	26999	0.045	VV	0.06
79	13.45		0.00	0.000	16050	0.027	VB	0.14
80	13.57		0.00	0.000	16872	0.028	BV	0.09
81	13.71		0.00	0.000	15932	0.027	VB	0.10
82	14.08		0.00	0.000	44494	0.074	BB	0.14
83	14.60		0.00	0.000	29037	0.048	BV	0.22
84	14.89		0.00	0.000	17368	0.029	VV	0.08
85	15.09		0.00	0.000	28149	0.047	VV	0.12
86	15.23		0.00	0.000	12273	0.020	VB	0.07
87	15.43		0.00	0.000	22880	0.038	BV	0.16
88	15.59		0.00	0.000	11890	0.020	VV	0.06
89	16.03		0.00	0.000	44859	0.075	VV	0.12
90	16.18		0.00	0.000	14332	0.024	VB	0.09
91	16.33		0.00	0.000	14896	0.025	BV	0.09
92	16.47		0.00	0.000	16430	0.027	VV	0.10
93	16.66		0.00	0.000	54712	0.091	VV	0.17
94	17.26		0.00	0.000	68528	0.114	VV	0.34
95	17.57		0.00	0.000	52103	0.087	VV	0.07
96	17.76		0.00	0.000	6372	0.011	VB	0.05
97	18.11		0.00	0.000	4157	0.007	BB	0.13
98	18.86		0.00	0.000	28792	0.048	BB	0.19
99	19.20		0.00	0.000	91165	0.152	BV	0.24
100	19.46		0.00	0.000	92480	0.154	VV	0.09
101	19.74		0.00	0.000	94650	0.158	VB	0.29
102	20.25		0.00	0.000	93022	0.155	BV	0.34
103	20.98		0.00	0.000	71822	0.120	VV	0.13
104	21.52		0.00	0.000	39508	0.066	VB	0.36
105	21.91	CL10BP	0.10	53.991	1999658	3.334	BB	0.07
106	22.51		0.00	0.000	4130	0.007	BB	0.12
107	22.75		0.00	0.000	20739	0.035	BB	0.11
108	24.79		0.00	0.000	4911	0.008	BB	0.16

Total Area = 5.99844E+07 Total Height = 8361029 Total Amount = 0.1928602

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-06B1 B10112 BLK1**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0005.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 11:56:40 AM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 9
Calibration Date = 10/30/13 3:32:15 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1744861	19970360	0.087	87.4	34.949		
9.89	ABHC	33896	24905666	0.001	1.4	0.544		UNDER
21.91	CL10BP	1999658	19204082	0.104	104.1	41.651		

* Linear regression

Checked By: _____ Date: 10/31/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

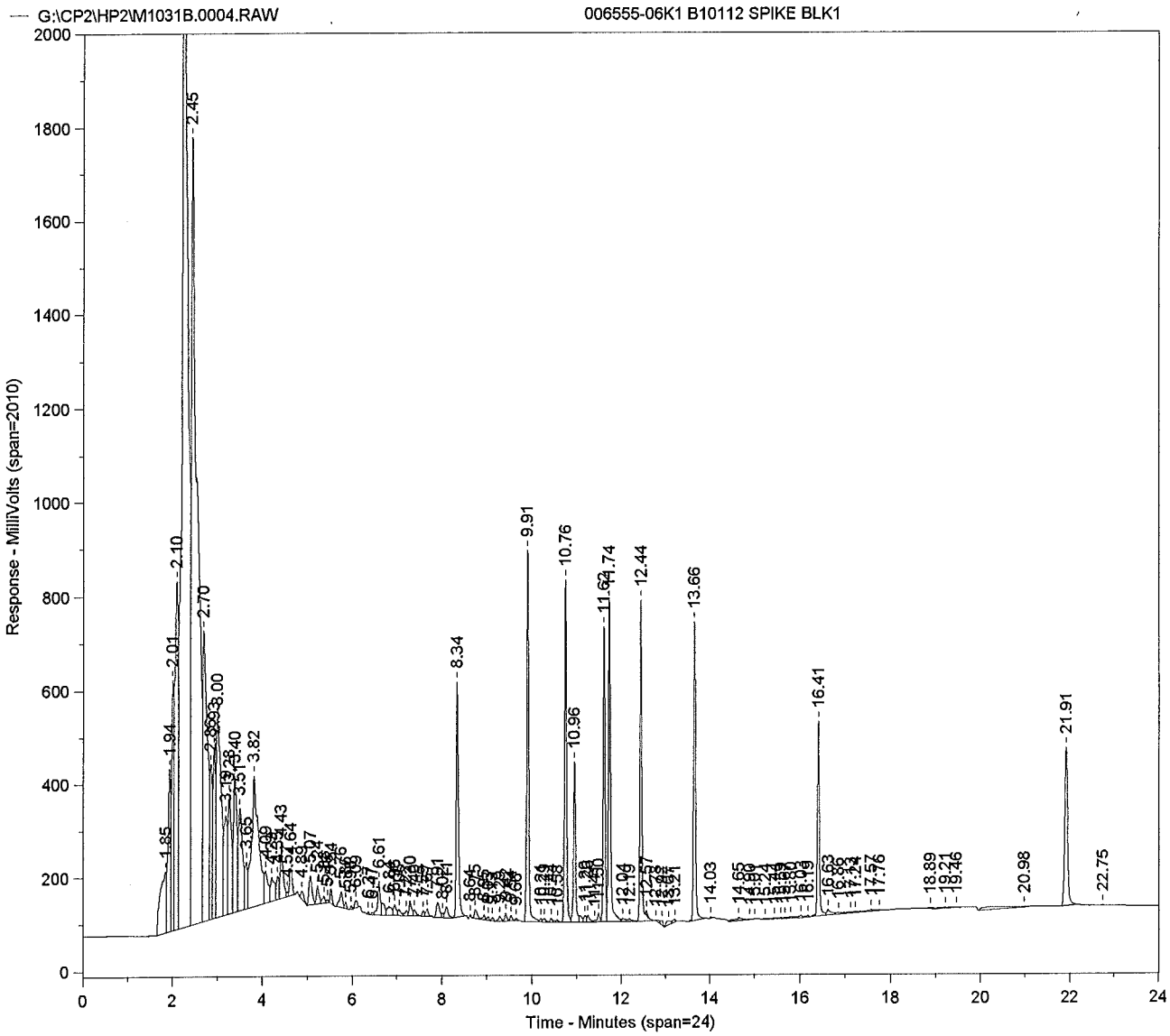
Field ID:	NA	ARDL Lab No.:	006555-06K1
Desc/Location:	NA	Lab Filename:	
Sample Date:	NA	Received Date:	NA
Sample Time:	NA	Prep. Date:	10/30/2013
Matrix:	QC Material	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units
alpha-BHC	4	4	39.1		UG/KG
gamma-BHC (Lindane)	4	4	37.9		UG/KG
delta-BHC	4	4	35.2		UG/KG
Heptachlor	4	4	38.4		UG/KG
Aldrin	4	4	38.2		UG/KG
Heptachlor Epoxide	4	4	33.7		UG/KG
p,p'-DDT	4	4	35.1		UG/KG
beta-BHC	4	4	37.4		UG/KG

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	84%
Decachlorobiphenyl	25-125	86%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Spike Blank for Run , CHLORINATED PESTICIDES (8081) Page 1 of 1


G:\CP2\HP2\M1031B.0004.RAW
006555-06K1 B10112 SPIKE BLK1
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2.45
2.10
2.01
1.94
1.85
2.70
3.00
3.40
3.82
3.65
8.34
9.91
10.76
10.96
11.74
12.44
13.66
16.41
21.91
14.03
18.89
19.21
19.46
20.98
22.75

Sample Name = **006555-06K1 B10112 SPIKE BLK1**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0004.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 11:26:21 AM
Method Version = 172
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.85		0.00	0.000	1275765	1.416	BV	0.18
2	1.94		0.00	0.000	1544424	1.714	VV	0.06
3	2.01		0.00	0.000	1540189	1.709	VV	0.04
4	2.10		0.00	0.000	4225081	4.689	VV	0.07
5	2.24		0.00	0.000	23421070	25.992	VV	0.08
6	2.45		0.00	0.000	15235184	16.908	VV	0.08
7	2.70		0.00	0.000	4440590	4.928	VV	0.08
8	2.86		0.00	0.000	1243945	1.381	VV	0.05
9	2.93		0.00	0.000	1315776	1.460	VV	0.04
10	3.00		0.00	0.000	3336297	3.703	VV	0.11
11	3.19		0.00	0.000	1112668	1.235	VV	0.06
12	3.28		0.00	0.000	1409390	1.564	VV	0.06
13	3.40		0.00	0.000	1538402	1.707	VV	0.06
14	3.51		0.00	0.000	1395839	1.549	VV	0.09
15	3.65		0.00	0.000	400554	0.445	VV	0.04
16	3.82		0.00	0.000	3112972	3.455	VV	0.12
17	4.09		0.00	0.000	404603	0.449	VV	0.07
18	4.23		0.00	0.000	313305	0.348	VV	0.07
19	4.35		0.00	0.000	184179	0.204	VV	0.05
20	4.43		0.00	0.000	467876	0.519	VV	0.06
21	4.57		0.00	0.000	27099	0.030	VV	0.03
22	4.64		0.00	0.000	239665	0.266	VB	0.07
23	4.89		0.00	0.000	81485	0.090	BB	0.11
24	5.07		0.00	0.000	298831	0.332	BV	0.08
25	5.24		0.00	0.000	150909	0.167	VV	0.05
26	5.38		0.00	0.000	57791	0.064	VV	0.07
27	5.46		0.00	0.000	17882	0.020	VB	0.05
28	5.54		0.00	0.000	86478	0.096	BB	0.05
29	5.76		0.00	0.000	159321	0.177	BV	0.07
30	5.86		0.00	0.000	35389	0.039	VB	0.06
31	5.98		0.00	0.000	16045	0.018	BB	0.05
32	6.09		0.00	0.000	64767	0.072	BB	0.08
33	6.37		0.00	0.000	11688	0.013	BB	0.05
34	6.47		0.00	0.000	18850	0.021	BV	0.05
35	6.61		0.00	0.000	298885	0.332	VV	0.05
36	6.84		0.00	0.000	139792	0.155	VV	0.10
37	6.96		0.00	0.000	95574	0.106	VV	0.05
38	7.06		0.00	0.000	60780	0.067	VV	0.06
39	7.22		0.00	0.000	46722	0.052	VV	0.05
40	7.30		0.00	0.000	122172	0.136	VV	0.05
41	7.40		0.00	0.000	48128	0.053	VV	0.06
42	7.59		0.00	0.000	39348	0.044	VV	0.06
43	7.67		0.00	0.000	58509	0.065	VB	0.07
44	7.91		0.00	0.000	163510	0.181	BV	0.08
45	8.02		0.00	0.000	29649	0.033	VV	0.04
46	8.11		0.00	0.000	112829	0.125	VB	0.08
47	8.34	CL4XYL	0.08	9.300	1684921	1.870	BB	0.05
48	8.64		0.00	0.000	2825	0.003	BB	0.03
49	8.75		0.00	0.000	84852	0.094	BB	0.08
50	8.95		0.00	0.000	33713	0.037	BV	0.04
51	9.03		0.00	0.000	23196	0.026	VV	0.06
52	9.13		0.00	0.000	19796	0.022	VB	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	9.29		0.00	0.000	41721	0.046	BV	0.06
54	9.42		0.00	0.000	50344	0.056	VV	0.04
55	9.54		0.00	0.000	31757	0.035	VV	0.04
56	9.66		0.00	0.000	15425	0.017	VB	0.07
57	9.91	ABHC	0.10	10.776	2434702	2.702	BV	0.04
58	10.21		0.00	0.000	23251	0.026	VV	0.05
59	10.29		0.00	0.000	33653	0.037	VV	0.08
60	10.44		0.00	0.000	24271	0.027	VV	0.04
61	10.58		0.00	0.000	16017	0.018	VB	0.06
62	10.76	LINDANE	0.09	10.431	2185934	2.426	BV	0.04
63	10.96	BBHC	0.09	10.296	1108494	1.230	VV	0.05
64	11.20		0.00	0.000	50424	0.056	VV	0.04
65	11.26		0.00	0.000	50629	0.056	VV	0.06
66	11.41		0.00	0.000	8917	0.010	VV	0.04
67	11.50		0.00	0.000	60754	0.067	VV	0.05
68	11.62	DBHC	0.09	9.697	1813687	2.013	VV	0.04
69	11.74	HPCL	0.10	10.575	2167855	2.406	VV	0.04
70	12.04		0.00	0.000	32972	0.037	VV	0.08
71	12.19		0.00	0.000	20957	0.023	VB	0.07
72	12.44	ALDRN	0.10	10.529	2063255	2.290	SBB	0.04
73	12.57		0.00	0.000	23322	0.026	TBB	0.06
74	12.78		0.00	0.000	23918	0.027	BV	0.08
75	12.92		0.00	0.000	37956	0.042	VB	0.07
76	13.07		0.00	0.000	63552	0.071	BV	0.13
77	13.21		0.00	0.000	27317	0.030	VB	0.05
78	13.66	HPCLE	0.08	9.285	1882550	2.089	BB	0.04
79	14.03		0.00	0.000	5164	0.006	BB	0.06
80	14.65		0.00	0.000	61139	0.068	BV	0.22
81	14.90		0.00	0.000	5583	0.006	VB	0.11
82	15.01		0.00	0.000	3220	0.004	BB	0.06
83	15.24		0.00	0.000	3314	0.004	BB	0.06
84	15.44		0.00	0.000	7391	0.008	BV	0.10
85	15.59		0.00	0.000	6229	0.007	VV	0.06
86	15.67		0.00	0.000	8147	0.009	VV	0.05
87	15.80		0.00	0.000	15900	0.018	VV	0.08
88	16.03		0.00	0.000	24823	0.028	VV	0.05
89	16.19		0.00	0.000	17755	0.020	VB	0.10
90	16.41	PPDDT	0.09	9.672	1256801	1.395	BV	0.04
91	16.63		0.00	0.000	84571	0.094	VV	0.06
92	16.86		0.00	0.000	23974	0.027	VV	0.07
93	17.13		0.00	0.000	48695	0.054	VV	0.18
94	17.24		0.00	0.000	18158	0.020	VV	0.10
95	17.57		0.00	0.000	39644	0.044	VV	0.13
96	17.76		0.00	0.000	8350	0.009	VB	0.06
97	18.89		0.00	0.000	10341	0.011	BB	0.18
98	19.21		0.00	0.000	35384	0.039	BV	0.30
99	19.46		0.00	0.000	14617	0.016	VB	0.08
100	20.98		0.00	0.000	214291	0.238	BB	1.09
101	21.91	CL10BP	0.09	9.439	1644494	1.825	BB	0.07
102	22.75		0.00	0.000	6691	0.007	BB	0.10

Total Area = 9.010783E+07 Total Height = 1.622391E+07 Total Amount = 0.9071987

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-06K1 B10112 SPIKE BLK1**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0004.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 11:26:21 AM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 9
Calibration Date = 10/30/13 3:32:15 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD
8.34	CL4XYL	1684921	19970360	0.084	84.4	33.748	
9.91	ABHC	2434702	24905666	0.098	97.8	39.103	
10.76	LINDANE	2185934	23099646	0.095	94.6	37.852	
10.96	BBHC	1108494	11867922	0.093	93.4	37.361	
11.62	DBHC	1813687	20616462	0.088	88.0	35.189	
11.74	HPCL	2167855	22596580	0.096	95.9	38.375	
12.44	ALDRN	2063255	21601050	0.096	95.5	38.207	
13.66	HPCLE	1882550	22348770	0.084	84.2	33.694	
16.41	PPDDT	1256801	14323591	0.088	87.7	35.097	
21.91	CL10BP	1644494	19204082	0.086	85.6	34.253	

* Linear regression

Checked By: _____ Date: 10/31/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

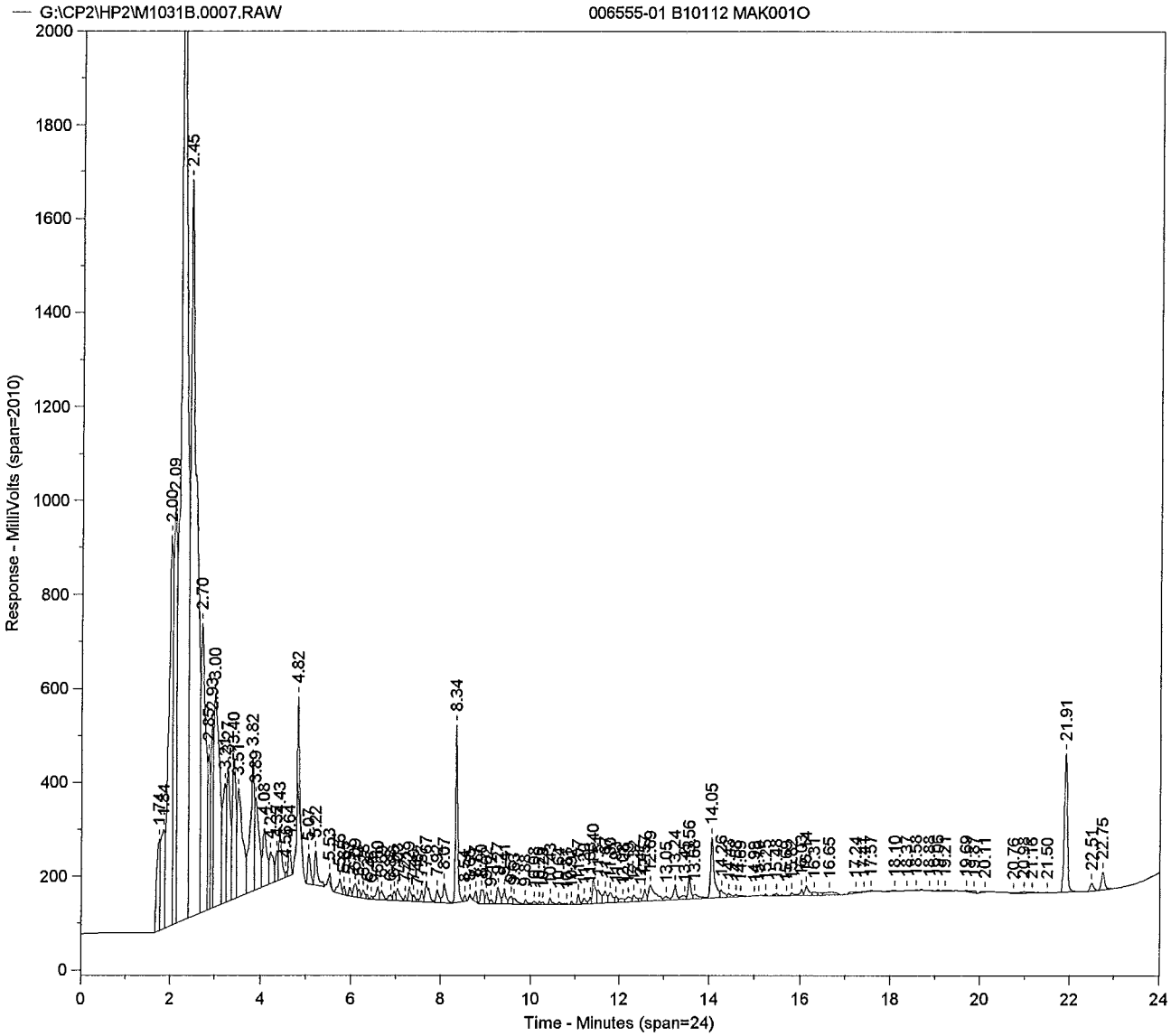
Field ID:	MAK001O	ARDL Lab No.:	006555-01
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/09/2013	Received Date:	10/23/2013
Sample Time:	1104	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	63%
Decachlorobiphenyl	25-125	74%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-01, CHLORINATED PESTICIDES (8081) Page 1 of 1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006555-01 B10112 MAK001O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2.45
2.09
2.70
3.00
4.82
8.34
14.05
21.91
22.51
22.75

Sample Name = **006555-01 B10112 MAK001O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0007.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 12:57:16 PM
Method Version = 172
Calibration Version = 10

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	980243	1.162	BV	0.09
2	1.84		0.00	0.000	1335983	1.583	VV	0.07
3	2.00		0.00	0.000	5889199	6.980	VV	0.09
4	2.09		0.00	0.000	4544888	5.387	VV	0.05
5	2.24		0.00	0.000	22644142	26.839	VV	0.08
6	2.45		0.00	0.000	15184248	17.997	VV	0.09
7	2.70		0.00	0.000	4460774	5.287	VV	0.08
8	2.85		0.00	0.000	1195374	1.417	VV	0.05
9	2.93		0.00	0.000	1481293	1.756	VV	0.05
10	3.00		0.00	0.000	3660693	4.339	VV	0.11
11	3.21		0.00	0.000	1365653	1.619	VV	0.06
12	3.27		0.00	0.000	1584342	1.878	VV	0.07
13	3.40		0.00	0.000	1773213	2.102	VV	0.07
14	3.51		0.00	0.000	1979670	2.346	VV	0.10
15	3.82		0.00	0.000	1792935	2.125	VV	0.07
16	3.89		0.00	0.000	1265774	1.500	VV	0.08
17	4.08		0.00	0.000	825525	0.978	VV	0.07
18	4.22		0.00	0.000	411999	0.488	VV	0.09
19	4.37		0.00	0.000	250625	0.297	VV	0.05
20	4.43		0.00	0.000	487379	0.578	VV	0.06
21	4.56		0.00	0.000	31158	0.037	VV	0.03
22	4.64		0.00	0.000	214614	0.254	VB	0.07
23	4.82		0.00	0.000	447149	0.530	BB	0.05
24	5.07		0.00	0.000	293716	0.348	BV	0.07
25	5.22		0.00	0.000	346076	0.410	VB	0.06
26	5.53		0.00	0.000	44324	0.053	BB	0.05
27	5.76		0.00	0.000	159133	0.189	BV	0.06
28	5.85		0.00	0.000	54071	0.064	VB	0.06
29	5.97		0.00	0.000	64757	0.077	BV	0.06
30	6.09		0.00	0.000	138270	0.164	VV	0.08
31	6.17		0.00	0.000	63276	0.075	VV	0.06
32	6.28		0.00	0.000	74821	0.089	VV	0.05
33	6.37		0.00	0.000	26067	0.031	VB	0.05
34	6.46		0.00	0.000	22823	0.027	BV	0.06
35	6.60		0.00	0.000	128188	0.152	VV	0.06
36	6.69		0.00	0.000	91398	0.108	VV	0.09
37	6.88		0.00	0.000	62212	0.074	VV	0.08
38	6.96		0.00	0.000	67220	0.080	VV	0.04
39	7.03		0.00	0.000	134026	0.159	VV	0.08
40	7.21		0.00	0.000	36340	0.043	VV	0.04
41	7.29		0.00	0.000	122115	0.145	VV	0.06
42	7.40		0.00	0.000	50935	0.060	VV	0.06
43	7.48		0.00	0.000	16199	0.019	VV	0.04
44	7.57		0.00	0.000	89133	0.106	VV	0.05
45	7.67		0.00	0.000	248081	0.294	VV	0.09
46	7.92		0.00	0.000	118045	0.140	VV	0.06
47	8.07		0.00	0.000	223033	0.264	VB	0.07
48	8.34	CL4XYL	0.06	43.991	1252438	1.484	BV	0.05
49	8.54		0.00	0.000	44751	0.053	VB	0.06
50	8.65		0.00	0.000	11655	0.014	BB	0.04
51	8.77		0.00	0.000	74056	0.088	BB	0.06
52	8.90		0.00	0.000	171530	0.203	BV	0.10

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	9.02		0.00	0.000	98023	0.116	VV	0.06
54	9.12		0.00	0.000	35005	0.041	VV	0.07
55	9.27		0.00	0.000	151213	0.179	VV	0.07
56	9.41		0.00	0.000	154654	0.183	VV	0.05
57	9.57		0.00	0.000	85649	0.102	VV	0.07
58	9.63		0.00	0.000	72082	0.085	VV	0.08
59	9.88	ABHC	0.00	1.038	36840	0.044	VV	0.04
60	10.08		0.00	0.000	34336	0.041	VV	0.07
61	10.20		0.00	0.000	16981	0.020	VV	0.04
62	10.28		0.00	0.000	19699	0.023	VB	0.07
63	10.43		0.00	0.000	54181	0.064	BV	0.05
64	10.64		0.00	0.000	21216	0.025	VV	0.04
65	10.81		0.00	0.000	7142	0.008	VB	0.05
66	10.92		0.00	0.000	18122	0.021	BB	0.05
67	11.07		0.00	0.000	70795	0.084	BV	0.05
68	11.20		0.00	0.000	57137	0.068	VV	0.06
69	11.33		0.00	0.000	43049	0.051	VV	0.03
70	11.40		0.00	0.000	256407	0.304	VV	0.08
71	11.51		0.00	0.000	162165	0.192	VV	0.06
72	11.67		0.00	0.000	152397	0.181	VV	0.05
73	11.80		0.00	0.000	141430	0.168	VV	0.07
74	11.93		0.00	0.000	51357	0.061	VV	0.06
75	12.08		0.00	0.000	59257	0.070	VV	0.09
76	12.19		0.00	0.000	81649	0.097	VV	0.09
77	12.32		0.00	0.000	77455	0.092	VV	0.05
78	12.47	ALDRN	0.00	1.021	31453	0.037	VV	0.06
79	12.57		0.00	0.000	105474	0.125	VV	0.05
80	12.69		0.00	0.000	339222	0.402	VV	0.12
81	13.05		0.00	0.000	55831	0.066	VV	0.09
82	13.24		0.00	0.000	153670	0.182	VV	0.06
83	13.45		0.00	0.000	63839	0.076	VV	0.12
84	13.56		0.00	0.000	200366	0.237	VV	0.05
85	13.68	HPCLE	0.00	2.244	71505	0.085	VV	0.09
86	14.05		0.00	0.000	711680	0.844	VV	0.07
87	14.26		0.00	0.000	100020	0.119	VV	0.07
88	14.43		0.00	0.000	46103	0.055	VV	0.05
89	14.58		0.00	0.000	25382	0.030	VV	0.05
90	14.69		0.00	0.000	20473	0.024	VV	0.07
91	14.99		0.00	0.000	3648	0.004	VB	0.05
92	15.10		0.00	0.000	2229	0.003	BB	0.05
93	15.25		0.00	0.000	8988	0.011	BB	0.05
94	15.48		0.00	0.000	29585	0.035	BV	0.10
95	15.69		0.00	0.000	7055	0.008	VV	0.04
96	15.82		0.00	0.000	34402	0.041	VV	0.13
97	16.03		0.00	0.000	56643	0.067	VV	0.04
98	16.14		0.00	0.000	115494	0.137	VV	0.07
99	16.31		0.00	0.000	49627	0.059	VV	0.06
100	16.65		0.00	0.000	122000	0.145	VB	0.34
101	17.24		0.00	0.000	44206	0.052	BV	0.23
102	17.41		0.00	0.000	14579	0.017	VV	0.09
103	17.57		0.00	0.000	15163	0.018	VB	0.08
104	18.10		0.00	0.000	13891	0.016	BV	0.16
105	18.37		0.00	0.000	6483	0.008	VB	0.08
106	18.58		0.00	0.000	3765	0.004	BB	0.07
107	18.88		0.00	0.000	9375	0.011	BB	0.17
108	19.06		0.00	0.000	10869	0.013	BV	0.07
109	19.21		0.00	0.000	9712	0.012	VB	0.18
110	19.69		0.00	0.000	16843	0.020	BV	0.07
111	19.87		0.00	0.000	22761	0.027	VB	0.11
112	20.11		0.00	0.000	18293	0.022	BB	0.19
113	20.76		0.00	0.000	6828	0.008	BB	0.09
114	20.98		0.00	0.000	20496	0.024	BV	0.16
115	21.16		0.00	0.000	6897	0.008	VB	0.07
116	21.50		0.00	0.000	6233	0.007	BB	0.10

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	21.91	CL10BP	0.07	51.706	1415608	1.678	BB	0.07
118	22.51		0.00	0.000	83517	0.099	BV	0.08
119	22.75		0.00	0.000	201224	0.238	VB	0.08
120	24.40		0.00	0.000	96439	0.114	BB	0.36

Total Area = 8.43717E+07 Total Height = 1.250253E+07 Total Amount = 0.1425635

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-01 B10112 MAK001O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0007.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 12:57:16 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 10
Calibration Date = 10/31/13 4:15:29 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1252438	19970360	0.063	62.7	25.086		
9.88	ABHC	36840	24905666	0.001	1.5	0.592		UNDER
12.47	ALDRN	31453	21601050	0.001	1.5	0.582		UNDER
13.68	HPCLE	71505	22348770	0.003	3.2	1.280		UNDER
21.91	CL10BP	1415608	19204082	0.074	73.7	29.486		

* Linear regression

Checked By: _____ Date: 10/31/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

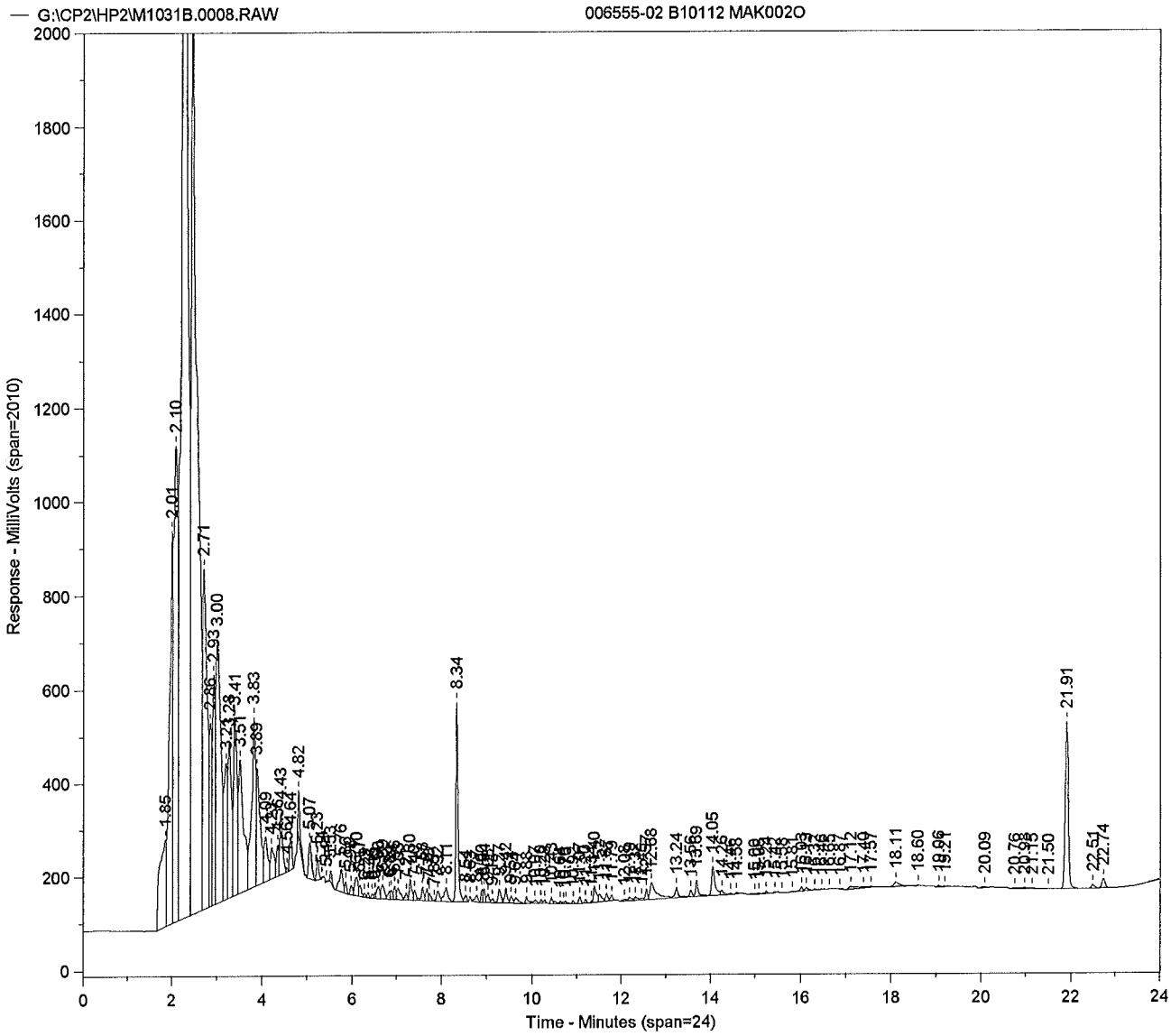
Field ID:	MAK002O	ARDL Lab No.:	006555-02
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/09/2013	Received Date:	10/23/2013
Sample Time:	1215	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	70%
Decachlorobiphenyl	25-125	88%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-02, CHLORINATED PESTICIDES (8081) Page 1 of 1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006555-02 B10112 MAK002O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
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2.01
2.10
2.71
2.86
2.93
3.00
3.23
3.28
3.41
3.51
3.83
3.89
4.09
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4.64
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8.11
8.34
13.24
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18.11
18.60
20.09
20.76
21.50
21.91
22.51
22.74

Sample Name = **006555-02 B10112 MAK002O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0008.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 1:27:34 PM
Method Version = 172
Calibration Version = 10

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.85		0.00	0.000	1888629	1.966	BV	0.20
2	2.01		0.00	0.000	4743978	4.937	VV	0.07
3	2.10		0.00	0.000	6426060	6.688	VV	0.07
4	2.25		0.00	0.000	28087062	29.232	VV	0.09
5	2.45		0.00	0.000	18579642	19.337	VV	0.09
6	2.71		0.00	0.000	5293830	5.510	VV	0.09
7	2.86		0.00	0.000	1422842	1.481	VV	0.04
8	2.93		0.00	0.000	1848204	1.924	VV	0.05
9	3.00		0.00	0.000	4477287	4.660	VV	0.11
10	3.21		0.00	0.000	1559971	1.624	VV	0.06
11	3.28		0.00	0.000	1847305	1.923	VV	0.07
12	3.41		0.00	0.000	2138827	2.226	VV	0.07
13	3.51		0.00	0.000	2214088	2.304	VV	0.09
14	3.83		0.00	0.000	2297995	2.392	VV	0.08
15	3.89		0.00	0.000	1537533	1.600	VV	0.07
16	4.09		0.00	0.000	605162	0.630	VV	0.09
17	4.23		0.00	0.000	387169	0.403	VV	0.08
18	4.36		0.00	0.000	240644	0.250	VV	0.05
19	4.43		0.00	0.000	574661	0.598	VV	0.06
20	4.56		0.00	0.000	20631	0.021	VB	0.04
21	4.64		0.00	0.000	267604	0.279	BB	0.07
22	4.82		0.00	0.000	275778	0.287	BB	0.05
23	5.07		0.00	0.000	349404	0.364	BB	0.07
24	5.23		0.00	0.000	165293	0.172	BB	0.05
25	5.34		0.00	0.000	6020	0.006	BB	0.03
26	5.44		0.00	0.000	5878	0.006	BB	0.03
27	5.53		0.00	0.000	63650	0.066	BB	0.06
28	5.76		0.00	0.000	265820	0.277	BV	0.07
29	5.86		0.00	0.000	71587	0.075	VB	0.06
30	5.98		0.00	0.000	76753	0.080	BV	0.07
31	6.10		0.00	0.000	205792	0.214	VV	0.08
32	6.17		0.00	0.000	92214	0.096	VV	0.06
33	6.29		0.00	0.000	28253	0.029	VV	0.05
34	6.37		0.00	0.000	34353	0.036	VB	0.06
35	6.46		0.00	0.000	31547	0.033	BV	0.06
36	6.53		0.00	0.000	33837	0.035	VV	0.03
37	6.60		0.00	0.000	115466	0.120	VV	0.06
38	6.69		0.00	0.000	156437	0.163	VV	0.09
39	6.84		0.00	0.000	65341	0.068	VV	0.04
40	6.89		0.00	0.000	56710	0.059	VV	0.04
41	6.96		0.00	0.000	100264	0.104	VV	0.04
42	7.03		0.00	0.000	133435	0.139	VV	0.09
43	7.21		0.00	0.000	53284	0.055	VV	0.05
44	7.30		0.00	0.000	166380	0.173	VV	0.05
45	7.40		0.00	0.000	75376	0.078	VV	0.06
46	7.58		0.00	0.000	104837	0.109	VV	0.05
47	7.67		0.00	0.000	91175	0.095	VV	0.04
48	7.73		0.00	0.000	57305	0.060	VV	0.06
49	7.85		0.00	0.000	8535	0.009	VV	0.03
50	7.92		0.00	0.000	99534	0.104	VV	0.07
51	8.11		0.00	0.000	188516	0.196	VB	0.09
52	8.34	CL4XYL	0.07	42.736	1394040	1.451	BV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	8.54		0.00	0.000	54325	0.057	VB	0.07
54	8.63		0.00	0.000	1060	0.001	BB	0.02
55	8.77		0.00	0.000	66841	0.070	BB	0.08
56	8.90		0.00	0.000	73906	0.077	BV	0.04
57	8.94		0.00	0.000	94029	0.098	VV	0.05
58	9.03		0.00	0.000	72171	0.075	VV	0.07
59	9.13		0.00	0.000	30603	0.032	VV	0.05
60	9.27		0.00	0.000	130094	0.135	VV	0.07
61	9.42		0.00	0.000	121270	0.126	VV	0.04
62	9.54		0.00	0.000	57965	0.060	VV	0.04
63	9.64		0.00	0.000	70002	0.073	VB	0.10
64	9.88	ABHC	0.00	1.290	52487	0.055	BV	0.05
65	10.07		0.00	0.000	33055	0.034	VB	0.10
66	10.20		0.00	0.000	19488	0.020	BV	0.05
67	10.28		0.00	0.000	23699	0.025	VB	0.07
68	10.43		0.00	0.000	37683	0.039	BV	0.05
69	10.64		0.00	0.000	17072	0.018	VV	0.05
70	10.70		0.00	0.000	11219	0.012	VV	0.03
71	10.75	LINDANE	0.00	0.447	16860	0.018	VV	0.05
72	10.92	BBHC	0.00	0.835	16184	0.017	VB	0.05
73	11.07		0.00	0.000	43384	0.045	BV	0.05
74	11.20		0.00	0.000	20856	0.022	VB	0.04
75	11.34		0.00	0.000	8435	0.009	BV	0.04
76	11.40		0.00	0.000	159199	0.166	VV	0.07
77	11.52		0.00	0.000	84640	0.088	VV	0.06
78	11.67		0.00	0.000	60736	0.063	VV	0.04
79	11.79		0.00	0.000	42847	0.045	VB	0.06
80	12.08		0.00	0.000	16761	0.017	BV	0.10
81	12.19		0.00	0.000	39884	0.042	VV	0.08
82	12.32		0.00	0.000	34082	0.035	VV	0.07
83	12.46	ALDRN	0.00	0.609	21477	0.022	VV	0.07
84	12.57		0.00	0.000	75903	0.079	VV	0.05
85	12.68		0.00	0.000	358569	0.373	VV	0.10
86	13.24		0.00	0.000	104688	0.109	VV	0.05
87	13.56		0.00	0.000	55245	0.057	VV	0.06
88	13.69		0.00	0.000	139901	0.146	VV	0.05
89	14.05		0.00	0.000	340427	0.354	VV	0.07
90	14.26		0.00	0.000	49964	0.052	VV	0.07
91	14.46		0.00	0.000	12716	0.013	VB	0.08
92	14.58		0.00	0.000	12787	0.013	BB	0.12
93	15.00		0.00	0.000	4180	0.004	BB	0.14
94	15.08		0.00	0.000	5299	0.006	BV	0.05
95	15.24		0.00	0.000	13706	0.014	VB	0.05
96	15.42		0.00	0.000	3630	0.004	BB	0.05
97	15.58		0.00	0.000	2631	0.003	BB	0.05
98	15.81		0.00	0.000	13234	0.014	BV	0.12
99	16.03		0.00	0.000	39074	0.041	VV	0.06
100	16.13		0.00	0.000	37380	0.039	VV	0.07
101	16.32		0.00	0.000	13706	0.014	VV	0.05
102	16.46		0.00	0.000	8533	0.009	VV	0.08
103	16.65		0.00	0.000	2167	0.002	VB	0.07
104	16.87		0.00	0.000	14209	0.015	BB	0.17
105	17.12		0.00	0.000	45684	0.048	BV	0.13
106	17.40		0.00	0.000	22015	0.023	VV	0.08
107	17.57		0.00	0.000	9109	0.009	VB	0.05
108	18.11		0.00	0.000	78706	0.082	BB	0.15
109	18.60		0.00	0.000	5433	0.006	BB	0.07
110	19.06		0.00	0.000	12653	0.013	BV	0.08
111	19.21		0.00	0.000	11979	0.012	VB	0.07
112	20.09		0.00	0.000	15295	0.016	BB	0.20
113	20.76		0.00	0.000	10079	0.010	BV	0.11
114	20.98		0.00	0.000	19328	0.020	VV	0.10
115	21.15		0.00	0.000	5831	0.006	VB	0.10
116	21.50		0.00	0.000	3656	0.004	BB	0.09

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	21.91	CL10BP	0.09	54.083	1696502	1.766	BB	0.07
118	22.51		0.00	0.000	39940	0.042	BV	0.08
119	22.74		0.00	0.000	102529	0.107	VB	0.08
120	24.39		0.00	0.000	133899	0.139	BB	0.42

Total Area = 9.608484E+07 Total Height = 1.406759E+07 Total Amount = 0.1633414

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-02 B10112 MAK0020**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0008.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 1:27:34 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 10
Calibration Date = 10/31/13 4:15:29 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1394040	19970360	0.070	69.8	27.922		
9.88	ABHC	52487	24905666	0.002	2.1	0.843		UNDER
10.75	LINDANE	16860	23099646	0.001	0.7	0.292		UNDER
10.92	BBHC	16184	11867922	0.001	1.4	0.545		UNDER
12.46	ALDRN	21477	21601050	0.001	1.0	0.398		UNDER
21.91	CL10BP	1696502	19204082	0.088	88.3	35.336		

* Linear regression

Checked By: _____ Date: 10/31/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

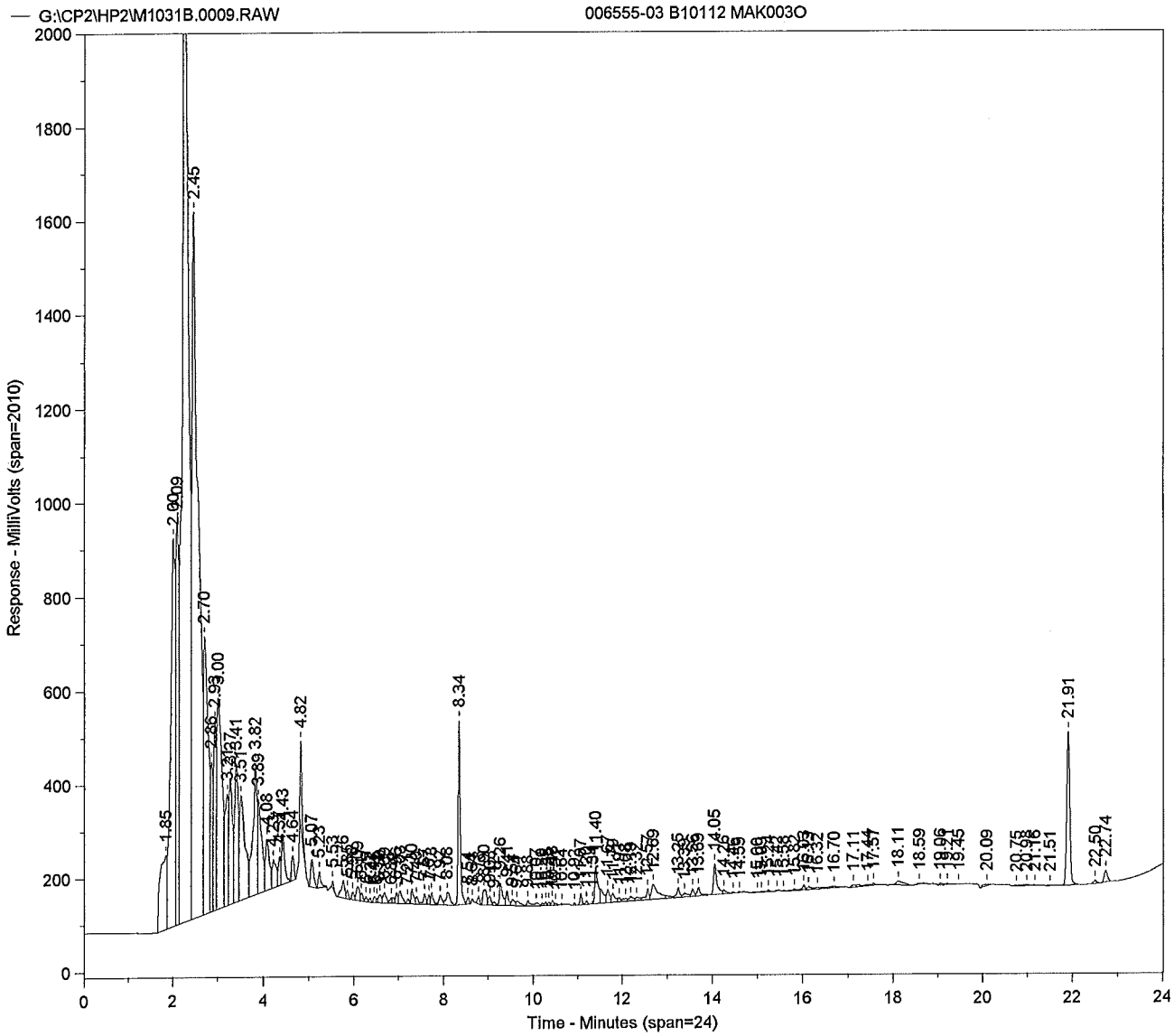
Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

Field ID:	MAK003O	ARDL Lab No.:	006555-03
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/09/2013	Received Date:	10/23/2013
Sample Time:	1505	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	65%
Decachlorobiphenyl	25-125	80%

Surrogate recoveries marked with '*' indicates they are outside standard limits.


G:\CP2\HP2\M1031B.0009.RAW
006555-03 B10112 MAK003O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2.45
2.00
2.70
4.82
8.34
21.91
1.85
3.82
1.40
14.05
16.70
17.11
18.11
18.59
20.09
21.51
22.14

Sample Name = **006555-03 B10112 MAK003O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0009.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 1:57:47 PM
Method Version = 172
Calibration Version = 10

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.85		0.00	0.000	1717290	2.115	BV	0.20
2	2.00		0.00	0.000	5750176	7.081	VV	0.09
3	2.09		0.00	0.000	4228134	5.207	VV	0.05
4	2.25		0.00	0.000	23005932	28.331	VV	0.09
5	2.45		0.00	0.000	14913085	18.365	VV	0.09
6	2.70		0.00	0.000	4358444	5.367	VV	0.09
7	2.86		0.00	0.000	1052227	1.296	VV	0.04
8	2.93		0.00	0.000	1662799	2.048	VV	0.05
9	3.00		0.00	0.000	3627929	4.468	VV	0.11
10	3.21		0.00	0.000	1240522	1.528	VV	0.06
11	3.27		0.00	0.000	1535158	1.890	VV	0.07
12	3.41		0.00	0.000	1722150	2.121	VV	0.07
13	3.51		0.00	0.000	1865188	2.297	VV	0.10
14	3.82		0.00	0.000	1833514	2.258	VV	0.08
15	3.89		0.00	0.000	1224018	1.507	VV	0.07
16	4.08		0.00	0.000	715241	0.881	VV	0.07
17	4.23		0.00	0.000	369646	0.455	VV	0.08
18	4.37		0.00	0.000	238454	0.294	VV	0.06
19	4.43		0.00	0.000	484050	0.596	VB	0.07
20	4.64		0.00	0.000	203688	0.251	BB	0.07
21	4.82		0.00	0.000	468406	0.577	BB	0.05
22	5.07		0.00	0.000	263875	0.325	BB	0.07
23	5.23		0.00	0.000	129395	0.159	BB	0.05
24	5.53		0.00	0.000	37759	0.046	BB	0.06
25	5.76		0.00	0.000	193879	0.239	BV	0.07
26	5.85		0.00	0.000	55309	0.068	VB	0.06
27	5.98		0.00	0.000	57762	0.071	BV	0.06
28	6.09		0.00	0.000	150508	0.185	VV	0.08
29	6.17		0.00	0.000	63361	0.078	VV	0.05
30	6.29		0.00	0.000	36849	0.045	VV	0.05
31	6.37		0.00	0.000	26688	0.033	VB	0.06
32	6.46		0.00	0.000	43144	0.053	BV	0.06
33	6.52		0.00	0.000	23866	0.029	VV	0.02
34	6.59		0.00	0.000	75205	0.093	VV	0.06
35	6.69		0.00	0.000	113507	0.140	VV	0.08
36	6.84		0.00	0.000	42980	0.053	VV	0.04
37	6.96		0.00	0.000	76955	0.095	VV	0.05
38	7.03		0.00	0.000	140983	0.174	VV	0.08
39	7.21		0.00	0.000	37043	0.046	VV	0.04
40	7.30		0.00	0.000	121871	0.150	VV	0.05
41	7.40		0.00	0.000	54819	0.068	VV	0.06
42	7.57		0.00	0.000	81964	0.101	VV	0.05
43	7.67		0.00	0.000	67865	0.084	VV	0.04
44	7.73		0.00	0.000	83714	0.103	VV	0.05
45	7.92		0.00	0.000	97358	0.120	VV	0.07
46	8.08		0.00	0.000	178316	0.220	VB	0.09
47	8.34	CL4XYL	0.06	43.773	1290648	1.589	BV	0.05
48	8.54		0.00	0.000	48560	0.060	VB	0.06
49	8.64		0.00	0.000	2214	0.003	BB	0.03
50	8.78		0.00	0.000	53159	0.065	BB	0.06
51	8.90		0.00	0.000	196774	0.242	BV	0.10
52	9.03		0.00	0.000	78032	0.096	VV	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	9.12		0.00	0.000	27025	0.033	VV	0.06
54	9.26		0.00	0.000	233320	0.287	VV	0.07
55	9.41		0.00	0.000	125270	0.154	VV	0.05
56	9.54		0.00	0.000	60726	0.075	VV	0.05
57	9.64		0.00	0.000	62271	0.077	VB	0.10
58	9.88	ABHC	0.00	1.154	42421	0.052	BV	0.05
59	10.07		0.00	0.000	31034	0.038	VV	0.09
60	10.20		0.00	0.000	14949	0.018	VV	0.05
61	10.28		0.00	0.000	19855	0.024	VV	0.04
62	10.35		0.00	0.000	21037	0.026	VV	0.04
63	10.43		0.00	0.000	30863	0.038	VV	0.04
64	10.51		0.00	0.000	11921	0.015	VB	0.06
65	10.64		0.00	0.000	4066	0.005	BB	0.04
66	10.92	BBHC	0.00	0.686	12025	0.015	BB	0.04
67	11.07		0.00	0.000	75950	0.094	BV	0.05
68	11.20		0.00	0.000	25029	0.031	VV	0.05
69	11.34		0.00	0.000	12192	0.015	VV	0.04
70	11.40		0.00	0.000	386061	0.475	VV	0.07
71	11.67		0.00	0.000	133491	0.164	VV	0.05
72	11.79		0.00	0.000	115129	0.142	VV	0.06
73	11.93		0.00	0.000	33708	0.042	VV	0.05
74	12.08		0.00	0.000	44603	0.055	VV	0.10
75	12.19		0.00	0.000	62879	0.077	VV	0.08
76	12.32		0.00	0.000	49252	0.061	VV	0.06
77	12.57		0.00	0.000	115645	0.142	VV	0.05
78	12.69		0.00	0.000	313434	0.386	VV	0.10
79	13.25		0.00	0.000	94379	0.116	VV	0.05
80	13.39		0.00	0.000	60848	0.075	VV	0.11
81	13.56		0.00	0.000	64168	0.079	VV	0.05
82	13.69		0.00	0.000	83749	0.103	VV	0.06
83	14.05		0.00	0.000	346164	0.426	VV	0.07
84	14.26		0.00	0.000	46026	0.057	VV	0.07
85	14.46		0.00	0.000	7777	0.010	VB	0.08
86	14.59		0.00	0.000	6288	0.008	BB	0.10
87	15.00		0.00	0.000	4773	0.006	BB	0.16
88	15.09		0.00	0.000	3307	0.004	BV	0.06
89	15.24		0.00	0.000	13150	0.016	VB	0.06
90	15.42		0.00	0.000	3520	0.004	BB	0.05
91	15.58		0.00	0.000	2300	0.003	BB	0.05
92	15.82		0.00	0.000	12581	0.015	BV	0.09
93	16.03		0.00	0.000	40779	0.050	VV	0.05
94	16.13		0.00	0.000	30108	0.037	VV	0.08
95	16.32		0.00	0.000	23156	0.029	VV	0.09
96	16.70		0.00	0.000	65538	0.081	VB	0.31
97	17.11		0.00	0.000	29632	0.036	BV	0.11
98	17.44		0.00	0.000	18327	0.023	VV	0.10
99	17.57		0.00	0.000	15094	0.019	VB	0.05
100	18.11		0.00	0.000	98606	0.121	BB	0.20
101	18.59		0.00	0.000	8544	0.011	BB	0.11
102	19.06		0.00	0.000	19417	0.024	BV	0.10
103	19.21		0.00	0.000	21793	0.027	VV	0.13
104	19.45		0.00	0.000	7524	0.009	VB	0.09
105	20.09		0.00	0.000	35404	0.044	BB	0.20
106	20.75		0.00	0.000	8278	0.010	BV	0.12
107	20.98		0.00	0.000	21652	0.027	VV	0.14
108	21.16		0.00	0.000	5895	0.007	VB	0.08
109	21.51		0.00	0.000	4828	0.006	BB	0.16
110	21.91	CL10BP	0.08	54.387	1542052	1.899	BB	0.07
111	22.50		0.00	0.000	32774	0.040	BB	0.09
112	22.74		0.00	0.000	124524	0.153	BB	0.08
113	24.40		0.00	0.000	97718	0.120	BB	0.36

Total Area = 8.120523E+07 Total Height = 1.172465E+07 Total Amount = 0.1476428

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-03 B10112 MAK003O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0009.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 1:57:47 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 10
Calibration Date = 10/31/13 4:15:29 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1290648	19970360	0.065	64.6	25.851		
9.88	ABHC	42421	24905666	0.002	1.7	0.681		UNDER
10.92	BBHC	12025	11867922	0.001	1.0	0.405		UNDER
21.91	CL10BP	1542052	19204082	0.080	80.3	32.119		

* Linear regression

Checked By: _____ Date: 10/31/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

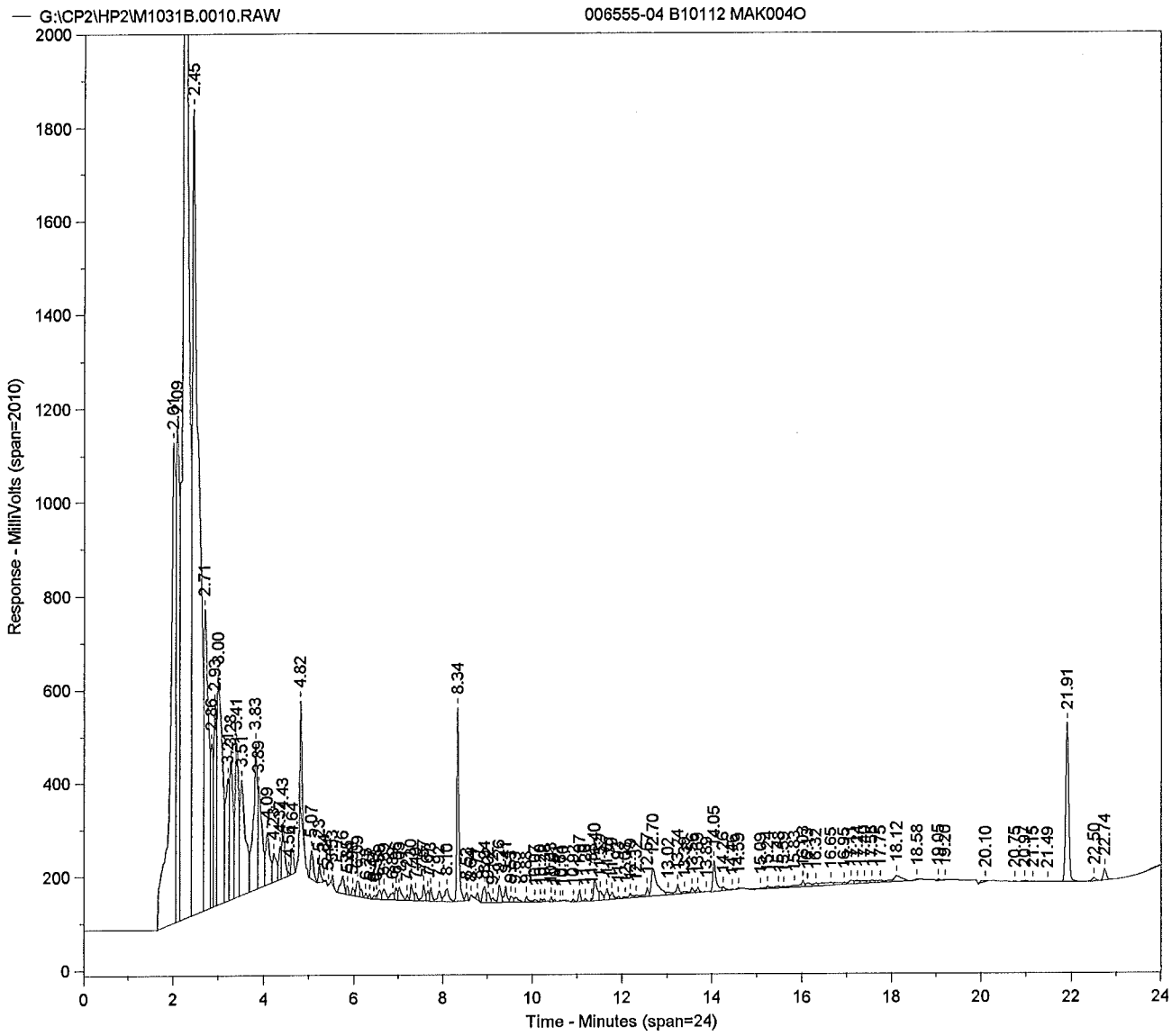
Field ID:	MAK004O	ARDL Lab No.:	006555-04
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/11/2013	Received Date:	10/23/2013
Sample Time:	1011	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	68%
Decachlorobiphenyl	25-125	83%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-04, CHLORINATED PESTICIDES (8081) Page 1 of 1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006555-04 B10112 MAK004O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2.45
2.09
2.71
3.00
2.93
2.86
3.41
3.83
3.51
4.82
8.34
21.91
12.70
14.05
18.12
18.58
20.10
22.74

Sample Name = **006555-04 B10112 MAK004O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0010.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 2:28:17 PM
Method Version = 172
Calibration Version = 10

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.01		0.00	0.000	8735628	9.692	BV	0.11
2	2.09		0.00	0.000	5362106	5.949	VV	0.05
3	2.25		0.00	0.000	25654260	28.464	VV	0.08
4	2.45		0.00	0.000	16325765	18.114	VV	0.09
5	2.71		0.00	0.000	4725141	5.243	VV	0.09
6	2.86		0.00	0.000	1215432	1.349	VV	0.04
7	2.93		0.00	0.000	1702786	1.889	VV	0.05
8	3.00		0.00	0.000	3908591	4.337	VV	0.11
9	3.21		0.00	0.000	1398903	1.552	VV	0.06
10	3.28		0.00	0.000	1649104	1.830	VV	0.07
11	3.41		0.00	0.000	1894210	2.102	VV	0.07
12	3.51		0.00	0.000	1988042	2.206	VV	0.09
13	3.83		0.00	0.000	2011468	2.232	VV	0.08
14	3.89		0.00	0.000	1354171	1.502	VV	0.08
15	4.09		0.00	0.000	713860	0.792	VV	0.07
16	4.23		0.00	0.000	361890	0.402	VV	0.08
17	4.37		0.00	0.000	271154	0.301	VV	0.06
18	4.43		0.00	0.000	518101	0.575	VV	0.06
19	4.56		0.00	0.000	19826	0.022	VB	0.04
20	4.64		0.00	0.000	206213	0.229	BB	0.07
21	4.82		0.00	0.000	606099	0.672	BB	0.05
22	5.07		0.00	0.000	267346	0.297	BB	0.07
23	5.23		0.00	0.000	127514	0.141	BV	0.05
24	5.34		0.00	0.000	5783	0.006	VB	0.03
25	5.44		0.00	0.000	4002	0.004	BB	0.03
26	5.53		0.00	0.000	43485	0.048	BB	0.06
27	5.76		0.00	0.000	215793	0.239	BV	0.07
28	5.85		0.00	0.000	58773	0.065	VB	0.06
29	5.98		0.00	0.000	64484	0.072	BV	0.06
30	6.09		0.00	0.000	175974	0.195	VV	0.08
31	6.28		0.00	0.000	36413	0.040	VV	0.04
32	6.37		0.00	0.000	28262	0.031	VB	0.05
33	6.47		0.00	0.000	25237	0.028	BV	0.05
34	6.53		0.00	0.000	24992	0.028	VV	0.03
35	6.59		0.00	0.000	88947	0.099	VV	0.06
36	6.69		0.00	0.000	124948	0.139	VV	0.08
37	6.89		0.00	0.000	89600	0.099	VV	0.08
38	6.96		0.00	0.000	90367	0.100	VV	0.04
39	7.03		0.00	0.000	137682	0.153	VV	0.08
40	7.21		0.00	0.000	39429	0.044	VV	0.04
41	7.30		0.00	0.000	133672	0.148	VV	0.06
42	7.40		0.00	0.000	62423	0.069	VV	0.06
43	7.57		0.00	0.000	129628	0.144	VV	0.05
44	7.67		0.00	0.000	72544	0.080	VV	0.04
45	7.73		0.00	0.000	91601	0.102	VV	0.04
46	7.92		0.00	0.000	112508	0.125	VV	0.06
47	8.10		0.00	0.000	188396	0.209	VB	0.09
48	8.34	CL4XYL	0.07	44.260	1362745	1.512	BV	0.05
49	8.53		0.00	0.000	60189	0.067	VB	0.06
50	8.64		0.00	0.000	834	0.001	BV	0.03
51	8.77		0.00	0.000	51529	0.057	VB	0.07
52	8.94		0.00	0.000	174077	0.193	BV	0.10

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	9.02		0.00	0.000	92983	0.103	VV	0.06
54	9.12		0.00	0.000	41642	0.046	VV	0.06
55	9.26		0.00	0.000	158329	0.176	VV	0.07
56	9.41		0.00	0.000	147267	0.163	VV	0.05
57	9.53		0.00	0.000	57340	0.064	VV	0.06
58	9.63		0.00	0.000	64942	0.072	VB	0.10
59	9.88	ABHC	0.00	1.133	43490	0.048	BV	0.05
60	10.07		0.00	0.000	25414	0.028	VB	0.09
61	10.20		0.00	0.000	14499	0.016	BV	0.05
62	10.28		0.00	0.000	17180	0.019	VB	0.07
63	10.43		0.00	0.000	23869	0.026	BV	0.04
64	10.51		0.00	0.000	11306	0.013	VB	0.05
65	10.64		0.00	0.000	4015	0.004	BV	0.04
66	10.70		0.00	0.000	2810	0.003	VB	0.03
67	10.92	BBHC	0.00	0.730	13363	0.015	BV	0.05
68	11.07		0.00	0.000	79030	0.088	VV	0.05
69	11.20		0.00	0.000	17179	0.019	VB	0.05
70	11.33		0.00	0.000	12255	0.014	BV	0.04
71	11.40		0.00	0.000	228922	0.254	VV	0.07
72	11.52		0.00	0.000	98371	0.109	VV	0.06
73	11.67		0.00	0.000	113922	0.126	VV	0.05
74	11.79		0.00	0.000	66709	0.074	VV	0.05
75	11.93		0.00	0.000	21552	0.024	VV	0.04
76	12.08		0.00	0.000	17802	0.020	VV	0.10
77	12.19		0.00	0.000	46863	0.052	VV	0.06
78	12.32		0.00	0.000	26528	0.029	VV	0.07
79	12.57		0.00	0.000	89586	0.099	VV	0.05
80	12.70		0.00	0.000	529562	0.588	VV	0.11
81	13.02		0.00	0.000	47171	0.052	VV	0.09
82	13.24		0.00	0.000	97544	0.108	VV	0.05
83	13.39		0.00	0.000	22504	0.025	VV	0.07
84	13.56		0.00	0.000	43119	0.048	VV	0.05
85	13.69		0.00	0.000	46281	0.051	VV	0.05
86	13.89		0.00	0.000	4529	0.005	VB	0.07
87	14.05		0.00	0.000	332836	0.369	BV	0.07
88	14.26		0.00	0.000	42175	0.047	VV	0.07
89	14.46		0.00	0.000	9440	0.010	VB	0.08
90	14.59		0.00	0.000	7506	0.008	BB	0.09
91	15.09		0.00	0.000	8304	0.009	BV	0.07
92	15.24		0.00	0.000	29229	0.032	VV	0.07
93	15.48		0.00	0.000	25192	0.028	VV	0.14
94	15.59		0.00	0.000	10869	0.012	VV	0.05
95	15.83		0.00	0.000	35657	0.040	VV	0.11
96	16.03		0.00	0.000	62434	0.069	VV	0.05
97	16.13		0.00	0.000	46520	0.052	VV	0.08
98	16.32		0.00	0.000	39105	0.043	VV	0.08
99	16.65		0.00	0.000	99698	0.111	VV	0.21
100	16.95		0.00	0.000	18811	0.021	VV	0.06
101	17.11		0.00	0.000	52751	0.059	VV	0.11
102	17.24		0.00	0.000	45321	0.050	VV	0.09
103	17.40		0.00	0.000	40193	0.045	VV	0.06
104	17.56		0.00	0.000	29911	0.033	VV	0.05
105	17.75		0.00	0.000	31364	0.035	VV	0.08
106	18.12		0.00	0.000	158895	0.176	VB	0.17
107	18.58		0.00	0.000	9156	0.010	BB	0.12
108	19.05		0.00	0.000	9972	0.011	BV	0.07
109	19.20		0.00	0.000	4727	0.005	VB	0.12
110	20.10		0.00	0.000	34743	0.039	BB	0.20
111	20.75		0.00	0.000	8818	0.010	BV	0.12
112	20.97		0.00	0.000	16944	0.019	VV	0.11
113	21.15		0.00	0.000	4790	0.005	VB	0.08
114	21.49		0.00	0.000	5261	0.006	BB	0.10
115	21.91	CL10BP	0.08	53.877	1595206	1.770	BB	0.07
116	22.50		0.00	0.000	33978	0.038	BB	0.09

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	22.74		0.00	0.000	114947	0.128	BB	0.08
118	24.40		0.00	0.000	124449	0.138	BB	0.40

Total Area = 9.012899E+07 Total Height = 1.309675E+07 Total Amount = 0.1541765

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-04 B10112 MAK004O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0010.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 2:28:17 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 10
Calibration Date = 10/31/13 4:15:29 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1362745	19970360	0.068	68.2	27.295		
9.88	ABHC	43490	24905666	0.002	1.7	0.698		UNDER
10.92	BBHC	13363	11867922	0.001	1.1	0.450		UNDER
21.91	CL10BP	1595206	19204082	0.083	83.1	33.226		

* Linear regression

Checked By: _____ Date: 10/31/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

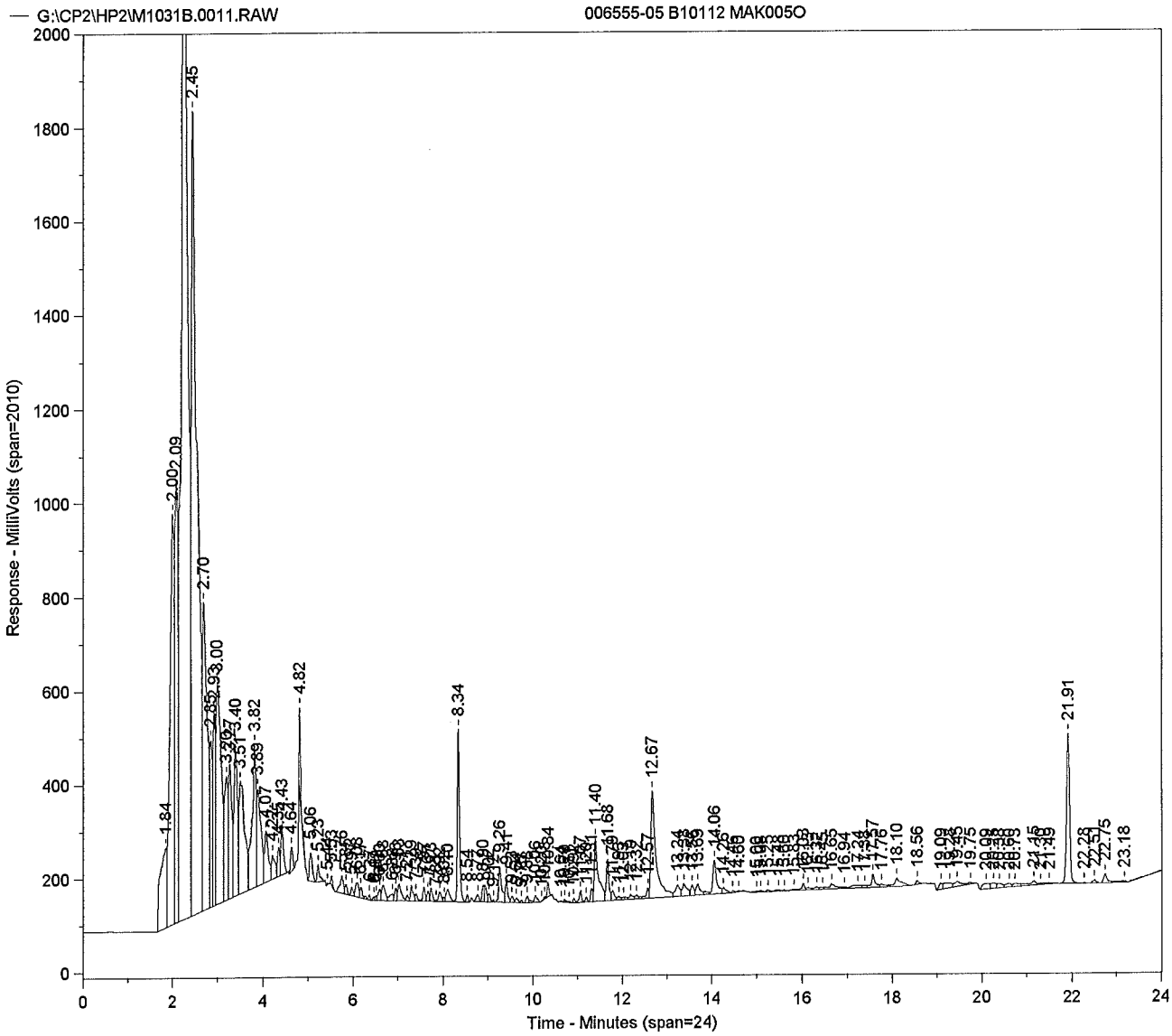
Field ID:	MAK005O	ARDL Lab No.:	006555-05
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/11/2013	Received Date:	10/23/2013
Sample Time:	1035	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	61%
Decachlorobiphenyl	25-125	79%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-05, CHLORINATED PESTICIDES (8081) Page 1 of 1


G:\CP2\HP2\M1031B.0011.RAW
006555-05 B10112 MAK005O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2.45
2.00
2.09
2.70
3.00
3.40
3.82
4.82
8.34
12.67
11.40
11.68
14.06
21.91
22.28
22.75
23.18
1.84
4.43
5.06
8.26
18.10
18.56

Sample Name = **006555-05 B10112 MAK005O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0011.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 2:58:49 PM
Method Version = 172
Calibration Version = 10

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.84		0.00	0.000	1729753	1.905	BV	0.20
2	2.00		0.00	0.000	6224892	6.856	VV	0.10
3	2.09		0.00	0.000	4601612	5.068	VV	0.05
4	2.25		0.00	0.000	24821872	27.337	VV	0.08
5	2.45		0.00	0.000	16355939	18.013	VV	0.09
6	2.70		0.00	0.000	4805874	5.293	VV	0.09
7	2.85		0.00	0.000	1360989	1.499	VV	0.05
8	2.93		0.00	0.000	1580867	1.741	VV	0.05
9	3.00		0.00	0.000	3689625	4.063	VV	0.11
10	3.20		0.00	0.000	1451698	1.599	VV	0.07
11	3.27		0.00	0.000	1523988	1.678	VV	0.07
12	3.40		0.00	0.000	1819402	2.004	VV	0.06
13	3.51		0.00	0.000	2138924	2.356	VV	0.11
14	3.82		0.00	0.000	1925275	2.120	VV	0.07
15	3.89		0.00	0.000	1309250	1.442	VV	0.08
16	4.07		0.00	0.000	653129	0.719	VV	0.07
17	4.22		0.00	0.000	286817	0.316	VV	0.05
18	4.35		0.00	0.000	226758	0.250	VV	0.06
19	4.43		0.00	0.000	421831	0.465	VB	0.06
20	4.64		0.00	0.000	177499	0.195	BB	0.07
21	4.82		0.00	0.000	343469	0.378	BB	0.04
22	5.06		0.00	0.000	260052	0.286	BB	0.07
23	5.23		0.00	0.000	140122	0.154	BB	0.05
24	5.44		0.00	0.000	5567	0.006	BB	0.04
25	5.53		0.00	0.000	45078	0.050	BB	0.05
26	5.76		0.00	0.000	195308	0.215	BV	0.07
27	5.85		0.00	0.000	68736	0.076	VV	0.06
28	5.97		0.00	0.000	63236	0.070	VV	0.06
29	6.08		0.00	0.000	153019	0.169	VV	0.08
30	6.17		0.00	0.000	88302	0.097	VV	0.06
31	6.37		0.00	0.000	26893	0.030	VB	0.06
32	6.47		0.00	0.000	22118	0.024	BV	0.05
33	6.52		0.00	0.000	26705	0.029	VV	0.03
34	6.60		0.00	0.000	97395	0.107	VV	0.06
35	6.68		0.00	0.000	173989	0.192	VV	0.08
36	6.88		0.00	0.000	92735	0.102	VV	0.08
37	6.96		0.00	0.000	91776	0.101	VV	0.05
38	7.03		0.00	0.000	183511	0.202	VV	0.07
39	7.21		0.00	0.000	42130	0.046	VV	0.04
40	7.29		0.00	0.000	128264	0.141	VV	0.05
41	7.39		0.00	0.000	52721	0.058	VV	0.06
42	7.57		0.00	0.000	109365	0.120	VV	0.05
43	7.67		0.00	0.000	72551	0.080	VV	0.04
44	7.73		0.00	0.000	95589	0.105	VV	0.05
45	7.85		0.00	0.000	9586	0.011	VV	0.04
46	7.92		0.00	0.000	90651	0.100	VV	0.06
47	8.02		0.00	0.000	27594	0.030	VV	0.04
48	8.10		0.00	0.000	157670	0.174	VV	0.10
49	8.34	CL4XYL	0.06	43.801	1223822	1.348	VV	0.05
50	8.54		0.00	0.000	49482	0.054	VB	0.05
51	8.77		0.00	0.000	62015	0.068	BV	0.08
52	8.90		0.00	0.000	108291	0.119	VV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	9.02		0.00	0.000	63919	0.070	VV	0.06
54	9.12		0.00	0.000	10840	0.012	VB	0.05
55	9.26		0.00	0.000	370806	0.408	BV	0.06
56	9.41		0.00	0.000	185905	0.205	VV	0.05
57	9.53		0.00	0.000	55625	0.061	VV	0.05
58	9.64		0.00	0.000	43169	0.048	VV	0.07
59	9.75		0.00	0.000	17514	0.019	VB	0.06
60	9.88		0.00	0.000	51136	0.056	BV	0.06
61	10.06		0.00	0.000	69484	0.077	VB	0.08
62	10.20		0.00	0.000	4694	0.005	BB	0.04
63	10.28		0.00	0.000	16141	0.018	BB	0.06
64	10.34		0.00	0.000	87806	0.097	BB	0.05
65	10.64		0.00	0.000	5906	0.007	BV	0.04
66	10.70		0.00	0.000	17394	0.019	VV	0.05
67	10.81		0.00	0.000	7093	0.008	VB	0.06
68	10.92		0.00	0.000	26625	0.029	BV	0.05
69	11.07		0.00	0.000	84590	0.093	VV	0.05
70	11.20		0.00	0.000	29211	0.032	VB	0.04
71	11.31		0.00	0.000	98149	0.108	BV	0.06
72	11.40		0.00	0.000	868182	0.956	VV	0.06
73	11.68		0.00	0.000	342650	0.377	VV	0.05
74	11.79		0.00	0.000	91249	0.100	VV	0.07
75	11.93		0.00	0.000	37407	0.041	VV	0.06
76	12.03		0.00	0.000	22215	0.024	VV	0.05
77	12.19		0.00	0.000	52090	0.057	VV	0.08
78	12.32		0.00	0.000	35433	0.039	VV	0.04
79	12.57		0.00	0.000	87669	0.097	VV	0.05
80	12.67		0.00	0.000	1825361	2.010	VV	0.09
81	13.24		0.00	0.000	166470	0.183	VV	0.09
82	13.38		0.00	0.000	190458	0.210	VV	0.06
83	13.56		0.00	0.000	103886	0.114	VV	0.05
84	13.69		0.00	0.000	148255	0.163	VV	0.07
85	14.06		0.00	0.000	425687	0.469	VV	0.07
86	14.26		0.00	0.000	69848	0.077	VB	0.10
87	14.46		0.00	0.000	15123	0.017	BV	0.08
88	14.60		0.00	0.000	7652	0.008	VB	0.10
89	15.00		0.00	0.000	11892	0.013	BV	0.09
90	15.08		0.00	0.000	11295	0.012	VB	0.06
91	15.25		0.00	0.000	21000	0.023	BV	0.09
92	15.48		0.00	0.000	18615	0.021	VV	0.11
93	15.60		0.00	0.000	7870	0.009	VV	0.06
94	15.83		0.00	0.000	24178	0.027	VV	0.12
95	16.03		0.00	0.000	60272	0.066	VV	0.05
96	16.13		0.00	0.000	30842	0.034	VV	0.10
97	16.32		0.00	0.000	35681	0.039	VV	0.09
98	16.45		0.00	0.000	25835	0.028	VV	0.07
99	16.65		0.00	0.000	119826	0.132	VV	0.09
100	16.94		0.00	0.000	12364	0.014	VV	0.06
101	17.24		0.00	0.000	79669	0.088	VV	0.25
102	17.38		0.00	0.000	31049	0.034	VV	0.05
103	17.57		0.00	0.000	152624	0.168	VV	0.05
104	17.76		0.00	0.000	39875	0.044	VV	0.07
105	18.10		0.00	0.000	170861	0.188	VB	0.12
106	18.56		0.00	0.000	35924	0.040	BB	0.13
107	19.09		0.00	0.000	63240	0.070	BV	0.09
108	19.28		0.00	0.000	134765	0.148	VV	0.17
109	19.45		0.00	0.000	110633	0.122	VV	0.07
110	19.75		0.00	0.000	32073	0.035	VB	0.10
111	20.09		0.00	0.000	123861	0.136	BV	0.19
112	20.25		0.00	0.000	93426	0.103	VV	0.06
113	20.38		0.00	0.000	77706	0.086	VV	0.11
114	20.60		0.00	0.000	70216	0.077	VV	0.10
115	20.73		0.00	0.000	71457	0.079	VV	0.12
116	21.15		0.00	0.000	62577	0.069	VV	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	21.30		0.00	0.000	33312	0.037	VV	0.13
118	21.49		0.00	0.000	22740	0.025	VB	0.12
119	21.91	CL10BP	0.08	56.199	1509956	1.663	BB	0.07
120	22.28		0.00	0.000	8555	0.009	BV	0.15
121	22.51		0.00	0.000	35181	0.039	VB	0.09
122	22.75		0.00	0.000	127201	0.140	BV	0.08
123	23.18		0.00	0.000	37428	0.041	VB	0.18
124	24.41		0.00	0.000	147116	0.162	BB	0.58

Total Area = 9.080049E+07 Total Height = 1.32292E+07 Total Amount = 0.1399088

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-05 B10112 MAK005O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0011.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST · DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 2:58:49 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 10
Calibration Date = 10/31/13 4:15:29 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD
8.34	CL4XYL	1223822	19970360	0.061	61.3	24.513	
21.91	CL10BP	1509956	19204082	0.079	78.6	31.451	

* Linear regression

Checked By: _____ Date: 10/31/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

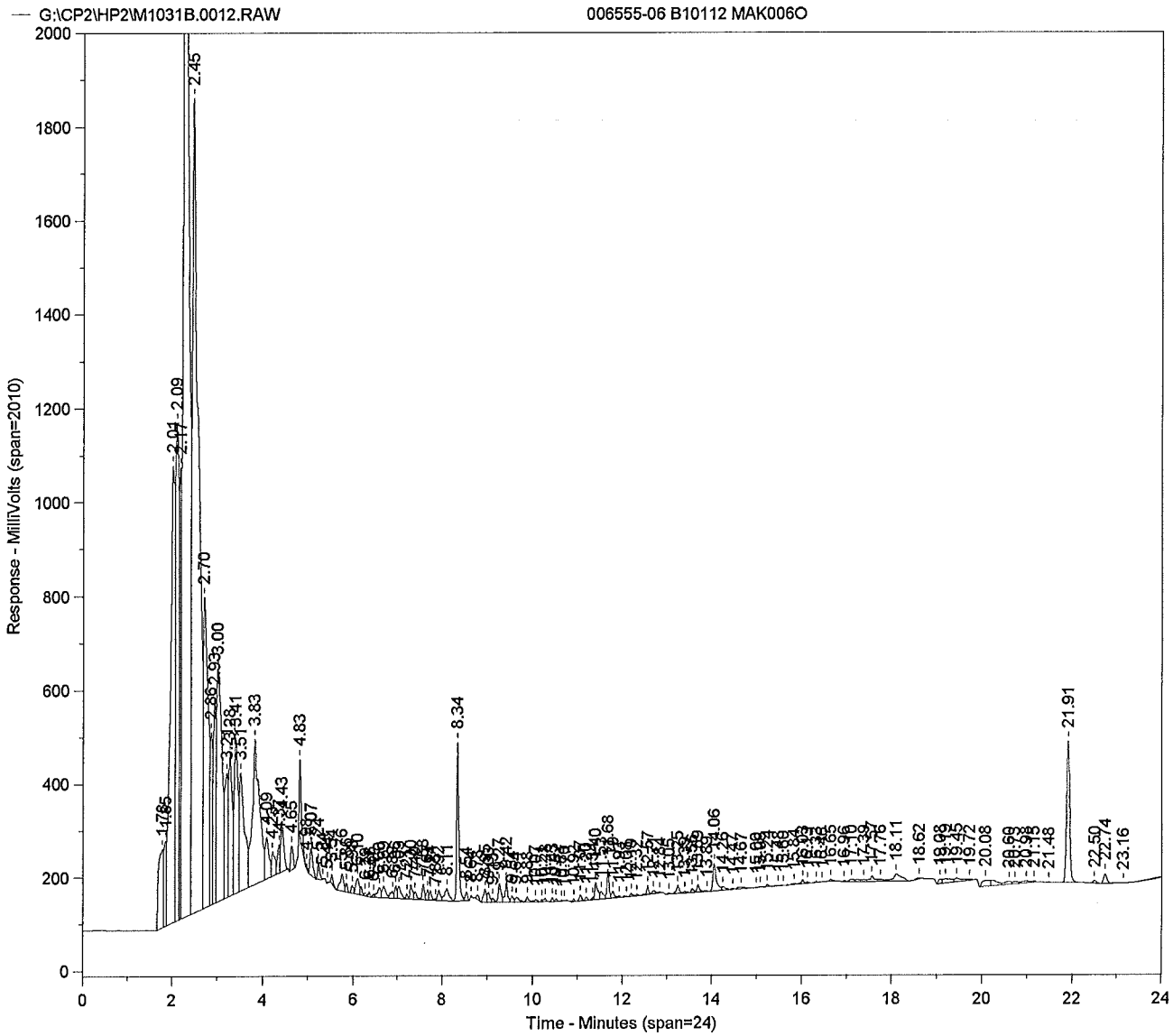
Field ID:	MAK006O	ARDL Lab No.:	006555-06
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/11/2013	Received Date:	10/23/2013
Sample Time:	1055	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	57%
Decachlorobiphenyl	25-125	75%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-06, CHLORINATED PESTICIDES (8081) Page 1 of 1


G:\CP2\HP2\M1031B.0012.RAW
006555-06 B10112 MAK006O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2.45
2.09
2.70
3.00
3.83
4.83
8.34
21.91
22.50
22.74
23.16

Sample Name = **006555-06 B10112 MAK006O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0012.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 3:29:09 PM
Method Version = 172
Calibration Version = 10

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.78		0.00	0.000	1339059	1.479	BV	0.14
2	1.85		0.00	0.000	668569	0.738	VV	0.04
3	2.01		0.00	0.000	6656551	7.351	VV	0.09
4	2.09		0.00	0.000	5550238	6.129	VV	0.05
5	2.17		0.00	0.000	2665154	2.943	VV	0.04
6	2.25		0.00	0.000	23349130	25.786	VV	0.08
7	2.45		0.00	0.000	16797642	18.550	VV	0.09
8	2.70		0.00	0.000	5014581	5.538	VV	0.09
9	2.86		0.00	0.000	1270086	1.403	VV	0.04
10	2.93		0.00	0.000	1670182	1.844	VV	0.05
11	3.00		0.00	0.000	4140065	4.572	VV	0.11
12	3.21		0.00	0.000	1402406	1.549	VV	0.06
13	3.28		0.00	0.000	1704941	1.883	VV	0.07
14	3.41		0.00	0.000	1980414	2.187	VV	0.07
15	3.51		0.00	0.000	2032499	2.245	VV	0.09
16	3.83		0.00	0.000	3446711	3.806	VV	0.12
17	4.09		0.00	0.000	541360	0.598	VV	0.08
18	4.23		0.00	0.000	293463	0.324	VV	0.08
19	4.37		0.00	0.000	215099	0.238	VV	0.05
20	4.43		0.00	0.000	465395	0.514	VB	0.07
21	4.65		0.00	0.000	195170	0.216	BB	0.07
22	4.83		0.00	0.000	521435	0.576	BB	0.06
23	4.98		0.00	0.000	17542	0.019	BB	0.04
24	5.07		0.00	0.000	248115	0.274	BB	0.07
25	5.24		0.00	0.000	115003	0.127	BB	0.05
26	5.34		0.00	0.000	3738	0.004	BB	0.03
27	5.44		0.00	0.000	3852	0.004	BB	0.03
28	5.54		0.00	0.000	52776	0.058	BB	0.06
29	5.76		0.00	0.000	199896	0.221	BV	0.07
30	5.86		0.00	0.000	59680	0.066	VB	0.06
31	5.98		0.00	0.000	64118	0.071	BV	0.07
32	6.10		0.00	0.000	177824	0.196	VV	0.07
33	6.29		0.00	0.000	27591	0.030	VV	0.05
34	6.38		0.00	0.000	28650	0.032	VB	0.06
35	6.47		0.00	0.000	21341	0.024	BV	0.05
36	6.60		0.00	0.000	117910	0.130	VV	0.07
37	6.69		0.00	0.000	141850	0.157	VV	0.09
38	6.89		0.00	0.000	75333	0.083	VV	0.09
39	6.96		0.00	0.000	91113	0.101	VV	0.05
40	7.03		0.00	0.000	131069	0.145	VV	0.08
41	7.21		0.00	0.000	31970	0.035	VV	0.04
42	7.30		0.00	0.000	122484	0.135	VV	0.06
43	7.40		0.00	0.000	65608	0.072	VV	0.06
44	7.58		0.00	0.000	117162	0.129	VV	0.05
45	7.67		0.00	0.000	72110	0.080	VV	0.04
46	7.74		0.00	0.000	62843	0.069	VV	0.05
47	7.85		0.00	0.000	9422	0.010	VV	0.04
48	7.92		0.00	0.000	89868	0.099	VV	0.06
49	8.11		0.00	0.000	177836	0.196	VB	0.10
50	8.34	CL4XYL	0.06	42.179	1130458	1.248	BV	0.05
51	8.54		0.00	0.000	62957	0.070	VB	0.06
52	8.64		0.00	0.000	2519	0.003	BB	0.03

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	8.78		0.00	0.000	38995	0.043	BB	0.10
54	8.95		0.00	0.000	121083	0.134	BV	0.08
55	9.03		0.00	0.000	84501	0.093	VV	0.07
56	9.13		0.00	0.000	27941	0.031	VV	0.05
57	9.27		0.00	0.000	170179	0.188	VV	0.06
58	9.42		0.00	0.000	172280	0.190	VV	0.04
59	9.54		0.00	0.000	53132	0.059	VV	0.05
60	9.64		0.00	0.000	53763	0.059	VV	0.07
61	9.88	ABHC	0.00	1.328	44403	0.049	VV	0.05
62	10.07		0.00	0.000	27611	0.030	VB	0.10
63	10.21		0.00	0.000	11858	0.013	BV	0.04
64	10.28		0.00	0.000	26691	0.029	VB	0.08
65	10.43		0.00	0.000	21200	0.023	BV	0.04
66	10.52		0.00	0.000	14824	0.016	VB	0.05
67	10.64		0.00	0.000	4395	0.005	BV	0.04
68	10.70		0.00	0.000	3394	0.004	VB	0.03
69	10.92	BBHC	0.00	0.850	13534	0.015	BB	0.05
70	11.07		0.00	0.000	44260	0.049	BV	0.06
71	11.20		0.00	0.000	22662	0.025	VB	0.05
72	11.34		0.00	0.000	12460	0.014	BV	0.04
73	11.40		0.00	0.000	171859	0.190	VV	0.07
74	11.53		0.00	0.000	82835	0.091	VV	0.06
75	11.68		0.00	0.000	212073	0.234	VV	0.04
76	11.79		0.00	0.000	57822	0.064	VV	0.06
77	11.93		0.00	0.000	13900	0.015	VB	0.06
78	12.08		0.00	0.000	8748	0.010	BB	0.10
79	12.19		0.00	0.000	26431	0.029	BV	0.08
80	12.32		0.00	0.000	9663	0.011	VB	0.06
81	12.57		0.00	0.000	60350	0.067	BV	0.05
82	12.71		0.00	0.000	36264	0.040	VV	0.10
83	12.84		0.00	0.000	6380	0.007	VB	0.04
84	13.05		0.00	0.000	5139	0.006	BB	0.08
85	13.25		0.00	0.000	71077	0.078	BV	0.06
86	13.39		0.00	0.000	12740	0.014	VV	0.05
87	13.56		0.00	0.000	28451	0.031	VV	0.06
88	13.69		0.00	0.000	60398	0.067	VV	0.05
89	13.89		0.00	0.000	4803	0.005	VB	0.07
90	14.06		0.00	0.000	321047	0.355	BV	0.07
91	14.26		0.00	0.000	42041	0.046	VB	0.07
92	14.47		0.00	0.000	11936	0.013	BV	0.09
93	14.67		0.00	0.000	45654	0.050	VV	0.22
94	15.00		0.00	0.000	3570	0.004	VV	0.07
95	15.08		0.00	0.000	5995	0.007	VV	0.06
96	15.24		0.00	0.000	18172	0.020	VV	0.07
97	15.48		0.00	0.000	10842	0.012	VV	0.13
98	15.60		0.00	0.000	2845	0.003	VB	0.09
99	15.84		0.00	0.000	21719	0.024	BV	0.14
100	16.03		0.00	0.000	35973	0.040	VV	0.05
101	16.13		0.00	0.000	16423	0.018	VB	0.07
102	16.33		0.00	0.000	12708	0.014	BV	0.10
103	16.46		0.00	0.000	3557	0.004	VB	0.04
104	16.65		0.00	0.000	23517	0.026	BB	0.08
105	16.96		0.00	0.000	6127	0.007	BV	0.08
106	17.10		0.00	0.000	32447	0.036	VV	0.12
107	17.39		0.00	0.000	26030	0.029	VV	0.05
108	17.57		0.00	0.000	81227	0.090	VV	0.06
109	17.76		0.00	0.000	35285	0.039	VV	0.10
110	18.11		0.00	0.000	193948	0.214	VB	0.17
111	18.62		0.00	0.000	15515	0.017	BB	0.14
112	19.08		0.00	0.000	45286	0.050	BV	0.08
113	19.19		0.00	0.000	124913	0.138	VV	0.22
114	19.45		0.00	0.000	69571	0.077	VV	0.08
115	19.72		0.00	0.000	13179	0.015	VB	0.09
116	20.08		0.00	0.000	149052	0.165	BV	0.21

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	20.60		0.00	0.000	68558	0.076	VV	0.15
118	20.73		0.00	0.000	40846	0.045	VV	0.10
119	20.98		0.00	0.000	55646	0.061	VV	0.12
120	21.15		0.00	0.000	17996	0.020	VB	0.09
121	21.48		0.00	0.000	3016	0.003	BB	0.10
122	21.91	CL10BP	0.07	55.643	1434068	1.584	BB	0.07
123	22.50		0.00	0.000	28536	0.032	BB	0.09
124	22.74		0.00	0.000	104504	0.115	BV	0.08
125	23.16		0.00	0.000	7832	0.009	VB	0.12
126	24.40		0.00	0.000	140809	0.156	BB	0.50

Total Area = 9.055126E+07 Total Height = 1.386031E+07 Total Amount = 0.1342052

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-06 B10112 MAK006O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0012.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 3:29:09 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 10
Calibration Date = 10/31/13 4:15:29 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1130458	19970360	0.057	56.6	22.643		
9.88	ABHC	44403	24905666	0.002	1.8	0.713		UNDER
10.92	BBHC	13534	11867922	0.001	1.1	0.456		UNDER
21.91	CL10BP	1434068	19204082	0.075	74.7	29.870		

* Linear regression

Checked By: _____ Date: 10/31/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

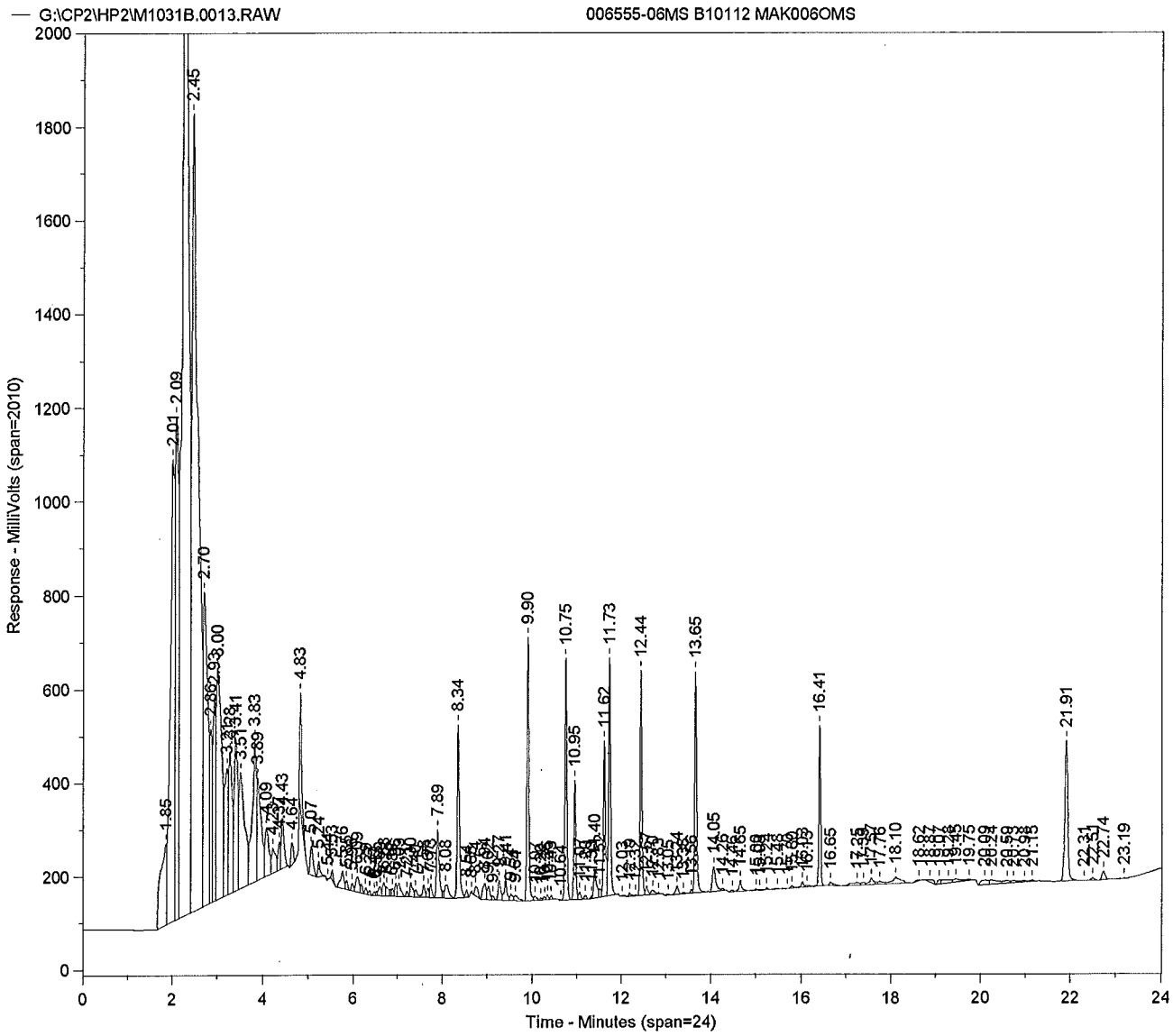
Field ID:	MAK006O	ARDL Lab No.:	006555-06MS
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/11/2013	Received Date:	10/23/2013
Sample Time:	1055	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	26.8		UG/KG	1
gamma-BHC (Lindane)	4	4	25.9		UG/KG	1
delta-BHC	4	4	20.9		UG/KG	1
Heptachlor	4	4	27.8		UG/KG	1
Aldrin	4	4	25.6		UG/KG	1
Heptachlor Epoxide	4	4	25.9		UG/KG	1
p,p'-DDT	4	4	26.7		UG/KG	1
beta-BHC	4	4	26.1		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	63%
Decachlorobiphenyl	25-125	76%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Matrix Spike for 006555-06, CHLORINATED PESTICIDES (8081)


G:\CP2\HP2\M1031B.0013.RAW
006555-06MS B10112 MAK006OMS
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0
2
4
6
8
10
12
14
16
18
20
22
24
1.85
2.01
2.09
2.45
2.70
3.00
3.83
3.89
4.09
4.43
4.64
4.83
5.07
7.89
8.03
8.34
9.90
10.75
10.95
11.40
11.62
11.73
12.03
12.44
13.05
13.65
14.05
14.85
16.41
16.65
18.10
19.75
21.91
22.31
22.74
23.19

Sample Name = **006555-06MS B10112 MAK006OMS**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0013.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 3:59:40 PM
Method Version = 172
Calibration Version = 10

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.85		0.00	0.000	1661854	1.630	BV	0.19
2	2.01		0.00	0.000	6801469	6.673	VV	0.09
3	2.09		0.00	0.000	5431112	5.328	VV	0.05
4	2.25		0.00	0.000	26002910	25.511	VV	0.09
5	2.45		0.00	0.000	16987314	16.666	VV	0.09
6	2.70		0.00	0.000	5009566	4.915	VV	0.09
7	2.86		0.00	0.000	1357910	1.332	VV	0.05
8	2.93		0.00	0.000	1676922	1.645	VV	0.05
9	3.00		0.00	0.000	4059612	3.983	VV	0.11
10	3.21		0.00	0.000	1480536	1.453	VV	0.06
11	3.28		0.00	0.000	1707066	1.675	VV	0.07
12	3.41		0.00	0.000	1928163	1.892	VV	0.07
13	3.51		0.00	0.000	2112702	2.073	VV	0.10
14	3.83		0.00	0.000	2003452	1.966	VV	0.08
15	3.89		0.00	0.000	1403396	1.377	VV	0.08
16	4.09		0.00	0.000	638917	0.627	VV	0.07
17	4.23		0.00	0.000	316037	0.310	VV	0.07
18	4.37		0.00	0.000	222916	0.219	VV	0.05
19	4.43		0.00	0.000	451757	0.443	VB	0.07
20	4.64		0.00	0.000	170141	0.167	BB	0.07
21	4.83		0.00	0.000	704114	0.691	BB	0.06
22	5.07		0.00	0.000	277577	0.272	BB	0.07
23	5.24		0.00	0.000	115696	0.114	BB	0.05
24	5.44		0.00	0.000	4332	0.004	BB	0.04
25	5.53		0.00	0.000	49468	0.049	BB	0.06
26	5.76		0.00	0.000	206071	0.202	BV	0.07
27	5.85		0.00	0.000	63418	0.062	VV	0.06
28	5.98		0.00	0.000	60113	0.059	VV	0.06
29	6.09		0.00	0.000	171005	0.168	VV	0.08
30	6.29		0.00	0.000	48681	0.048	VV	0.04
31	6.37		0.00	0.000	28717	0.028	VB	0.06
32	6.47		0.00	0.000	24552	0.024	BV	0.05
33	6.53		0.00	0.000	25187	0.025	VV	0.03
34	6.60		0.00	0.000	85677	0.084	VV	0.06
35	6.68		0.00	0.000	123146	0.121	VV	0.06
36	6.75		0.00	0.000	90463	0.089	VV	0.05
37	6.89		0.00	0.000	45393	0.045	VV	0.04
38	6.96		0.00	0.000	101503	0.100	VV	0.05
39	7.03		0.00	0.000	144449	0.142	VV	0.08
40	7.21		0.00	0.000	38226	0.038	VV	0.05
41	7.30		0.00	0.000	122146	0.120	VV	0.06
42	7.40		0.00	0.000	66932	0.066	VV	0.06
43	7.58		0.00	0.000	97887	0.096	VV	0.05
44	7.67		0.00	0.000	66707	0.065	VV	0.04
45	7.73		0.00	0.000	94216	0.092	VV	0.05
46	7.89		0.00	0.000	598455	0.587	VV	0.06
47	8.08		0.00	0.000	174254	0.171	VB	0.10
48	8.34	CL4XYL	0.06	9.636	1255969	1.232	BV	0.05
49	8.54		0.00	0.000	51171	0.050	VB	0.05
50	8.65		0.00	0.000	8835	0.009	BV	0.04
51	8.74		0.00	0.000	108122	0.106	VB	0.10
52	8.94		0.00	0.000	175417	0.172	BV	0.10

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	9.02		0.00	0.000	116141	0.114	VV	0.07
54	9.12		0.00	0.000	27604	0.027	VV	0.05
55	9.27		0.00	0.000	173128	0.170	VV	0.06
56	9.41		0.00	0.000	188278	0.185	VV	0.05
57	9.54		0.00	0.000	59677	0.059	VV	0.05
58	9.64		0.00	0.000	67668	0.066	VB	0.10
59	9.90	ABHC	0.07	10.266	1668713	1.637	BV	0.04
60	10.07		0.00	0.000	45214	0.044	VB	0.10
61	10.20		0.00	0.000	12482	0.012	BV	0.05
62	10.28		0.00	0.000	22810	0.022	VV	0.04
63	10.35		0.00	0.000	29457	0.029	VV	0.04
64	10.43		0.00	0.000	19679	0.019	VB	0.04
65	10.64		0.00	0.000	1779	0.002	BB	0.03
66	10.75	LINDANE	0.06	9.939	1498329	1.470	BV	0.04
67	10.95	BBHC	0.07	9.979	772950	0.758	VV	0.05
68	11.07		0.00	0.000	53553	0.053	VV	0.06
69	11.20		0.00	0.000	29605	0.029	VB	0.05
70	11.33		0.00	0.000	14793	0.015	BV	0.03
71	11.40		0.00	0.000	279343	0.274	VV	0.06
72	11.52		0.00	0.000	59939	0.059	VV	0.04
73	11.62	DBHC	0.05	7.995	1075703	1.055	VV	0.04
74	11.73	HPCL	0.07	10.650	1570606	1.541	VB	0.04
75	12.03		0.00	0.000	1945	0.002	BB	0.04
76	12.19		0.00	0.000	28389	0.028	BV	0.08
77	12.32		0.00	0.000	7855	0.008	VV	0.04
78	12.44	ALDRN	0.06	9.800	1381625	1.355	VV	0.04
79	12.57		0.00	0.000	67250	0.066	VV	0.05
80	12.70		0.00	0.000	58317	0.057	VV	0.08
81	12.83		0.00	0.000	10620	0.010	VB	0.05
82	13.05		0.00	0.000	7516	0.007	BB	0.10
83	13.24		0.00	0.000	74654	0.073	BV	0.06
84	13.38		0.00	0.000	16387	0.016	VB	0.10
85	13.56		0.00	0.000	21103	0.021	BV	0.05
86	13.65	HPCLE	0.06	9.921	1447089	1.420	VB	0.04
87	14.05		0.00	0.000	274971	0.270	BV	0.08
88	14.26		0.00	0.000	17301	0.017	VB	0.07
89	14.46		0.00	0.000	14661	0.014	BV	0.08
90	14.65		0.00	0.000	104887	0.103	VV	0.05
91	15.00		0.00	0.000	10508	0.010	VV	0.05
92	15.08		0.00	0.000	5680	0.006	VV	0.04
93	15.24		0.00	0.000	17220	0.017	VV	0.06
94	15.48		0.00	0.000	9594	0.009	VB	0.11
95	15.70		0.00	0.000	2226	0.002	BB	0.08
96	15.80		0.00	0.000	21613	0.021	BV	0.09
97	16.03		0.00	0.000	41534	0.041	VV	0.05
98	16.13		0.00	0.000	17911	0.018	VV	0.09
99	16.41	PPDDT	0.07	10.241	957386	0.939	VB	0.04
100	16.65		0.00	0.000	49402	0.048	BB	0.11
101	17.25		0.00	0.000	96974	0.095	BV	0.26
102	17.39		0.00	0.000	34952	0.034	VV	0.05
103	17.57		0.00	0.000	99179	0.097	VV	0.06
104	17.76		0.00	0.000	49814	0.049	VV	0.07
105	18.10		0.00	0.000	192602	0.189	VB	0.21
106	18.62		0.00	0.000	16129	0.016	BB	0.13
107	18.87		0.00	0.000	48077	0.047	BB	0.18
108	19.07		0.00	0.000	47643	0.047	BV	0.09
109	19.28		0.00	0.000	113678	0.112	VV	0.21
110	19.45		0.00	0.000	61995	0.061	VV	0.06
111	19.75		0.00	0.000	15322	0.015	VB	0.10
112	20.09		0.00	0.000	109454	0.107	BV	0.20
113	20.24		0.00	0.000	115870	0.114	VV	0.14
114	20.59		0.00	0.000	50471	0.050	VV	0.11
115	20.73		0.00	0.000	35216	0.035	VV	0.10
116	20.98		0.00	0.000	25481	0.025	VV	0.11

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	21.15		0.00	0.000	14269	0.014	VB	0.07
118	21.91	CL10BP	0.08	11.572	1450366	1.423	BB	0.07
119	22.31		0.00	0.000	2019	0.002	BB	0.08
120	22.51		0.00	0.000	28012	0.027	BB	0.08
121	22.74		0.00	0.000	92507	0.091	BB	0.08
122	23.19		0.00	0.000	4707	0.005	BB	0.13
123	24.40		0.00	0.000	116387	0.114	BB	0.38

Total Area = 1.019279E+08 Total Height = 1.660991E+07 Total Amount = 0.6526442

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-06MS B10112 MAK006OMS**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0013.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 3:59:40 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 10
Calibration Date = 10/31/13 4:15:29 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD
8.34	CL4XYL	1255969	19970360	0.063	62.9	25.157	
9.90	ABHC	1668713	24905666	0.067	67.0	26.801	
10.75	LINDANE	1498329	23099646	0.065	64.9	25.945	
10.95	BBHC	772950	11867922	0.065	65.1	26.052	
11.62	DBHC	1075703	20616462	0.052	52.2	20.871	
11.73	HPCL	1570606	22596580	0.070	69.5	27.803	
12.44	ALDRN	1381625	21601050	0.064	64.0	25.584	
13.65	HPCLE	1447089	22348770	0.065	64.8	25.900	
16.41	PPDDT	957386	14323591	0.067	66.8	26.736	
21.91	CL10BP	1450366	19204082	0.076	75.5	30.210	

* Linear regression

Checked By: _____ Date: 11/01/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

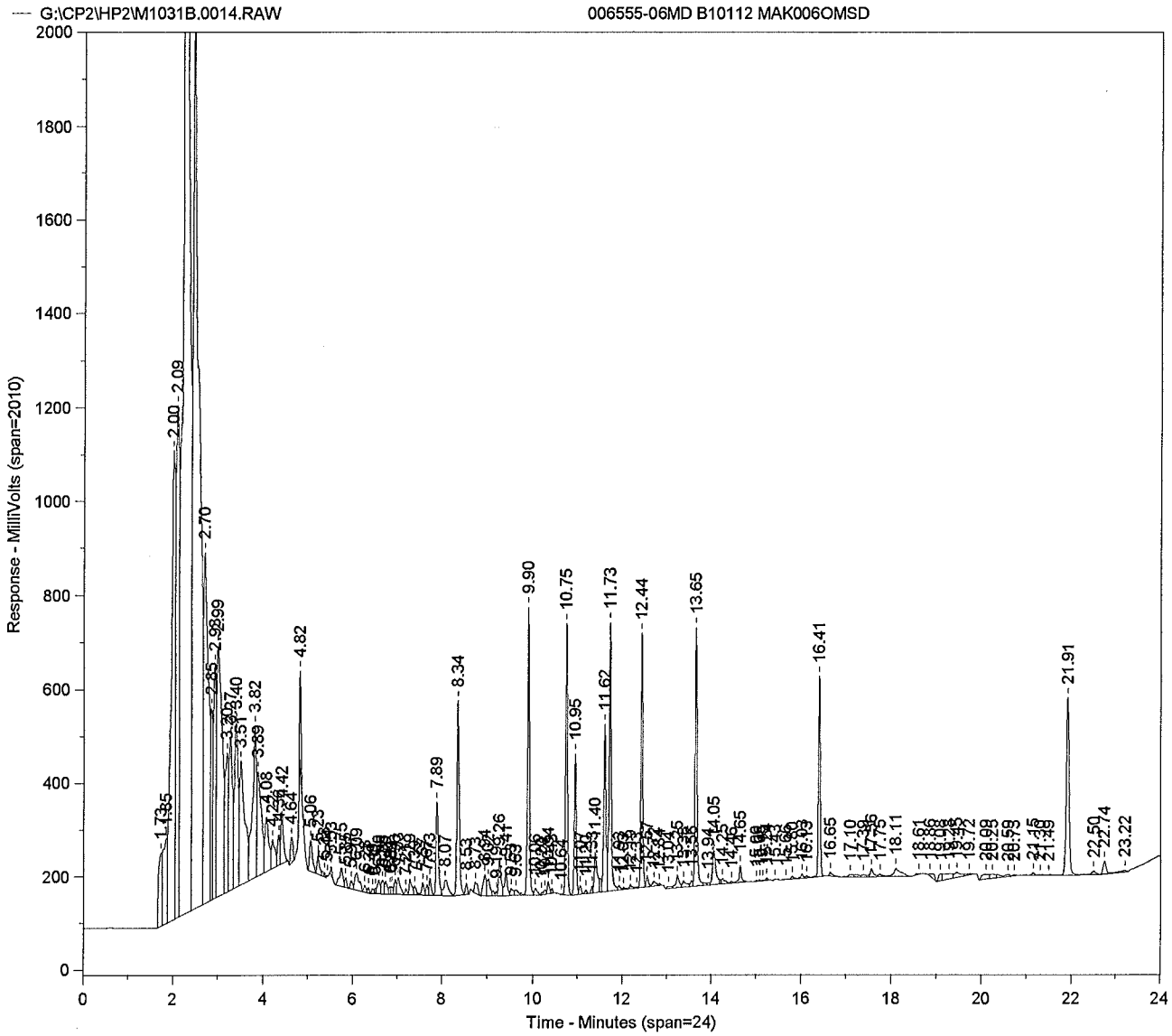
Field ID:	MAK006O	ARDL Lab No.:	006555-06MD
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/11/2013	Received Date:	10/23/2013
Sample Time:	1055	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	29.4		UG/KG	1
gamma-BHC (Lindane)	4	4	28.7		UG/KG	1
delta-BHC	4	4	23.2		UG/KG	1
Heptachlor	4	4	31.6		UG/KG	1
Aldrin	4	4	28.4		UG/KG	1
Heptachlor Epoxide	4	4	30.4		UG/KG	1
p,p'-DDT	4	4	32.7		UG/KG	1
beta-BHC	4	4	30.3		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	71%
Decachlorobiphenyl	25-125	93%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Matrix Spike Duplicate for 006555-06, CHLORINATED PESTICIDES (8081) Page 1 of 1


G:\CP2\HP2\M1031B.0014.RAW
006555-06MD B10112 MAK006OMSD
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0
2
4
6
8
10
12
14
16
18
20
22
24
2.00
2.09
2.70
3.40
3.82
4.82
7.89
8.34
9.90
10.75
10.95
11.62
11.73
12.44
13.65
14.05
16.41
21.91
22.14
22.50
23.22

Sample Name = **006555-06MD B10112 MAK006OMSD**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0014.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 4:30:10 PM
Method Version = 172
Calibration Version = 10

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.73		0.00	0.000	770280	0.701	BV	0.09
2	1.85		0.00	0.000	1176011	1.070	VV	0.05
3	2.00		0.00	0.000	6745476	6.137	VV	0.09
4	2.09		0.00	0.000	5528516	5.030	VV	0.05
5	2.24		0.00	0.000	27423296	24.949	VV	0.08
6	2.44		0.00	0.000	18264526	16.616	VV	0.09
7	2.70		0.00	0.000	5615454	5.109	VV	0.09
8	2.85		0.00	0.000	1349988	1.228	VV	0.04
9	2.93		0.00	0.000	2069763	1.883	VV	0.05
10	2.99		0.00	0.000	4263485	3.879	VV	0.11
11	3.20		0.00	0.000	1597298	1.453	VV	0.06
12	3.27		0.00	0.000	1808777	1.646	VV	0.07
13	3.40		0.00	0.000	2038454	1.855	VV	0.07
14	3.51		0.00	0.000	2176509	1.980	VV	0.09
15	3.82		0.00	0.000	2069528	1.883	VV	0.08
16	3.89		0.00	0.000	1469780	1.337	VV	0.09
17	4.08		0.00	0.000	720891	0.656	VV	0.07
18	4.22		0.00	0.000	333084	0.303	VV	0.07
19	4.36		0.00	0.000	228146	0.208	VV	0.05
20	4.42		0.00	0.000	452641	0.412	VB	0.06
21	4.64		0.00	0.000	189637	0.173	BB	0.07
22	4.82		0.00	0.000	419997	0.382	BB	0.04
23	5.06		0.00	0.000	308385	0.281	BV	0.07
24	5.23		0.00	0.000	159008	0.145	VV	0.05
25	5.38		0.00	0.000	20116	0.018	VB	0.04
26	5.44		0.00	0.000	5819	0.005	BB	0.03
27	5.53		0.00	0.000	38061	0.035	BB	0.05
28	5.75		0.00	0.000	221630	0.202	BV	0.07
29	5.85		0.00	0.000	64477	0.059	VV	0.06
30	5.97		0.00	0.000	64189	0.058	VV	0.06
31	6.09		0.00	0.000	254771	0.232	VV	0.13
32	6.28		0.00	0.000	48333	0.044	VV	0.04
33	6.37		0.00	0.000	29579	0.027	VB	0.06
34	6.46		0.00	0.000	30837	0.028	BV	0.06
35	6.52		0.00	0.000	25087	0.023	VV	0.03
36	6.60		0.00	0.000	118608	0.108	VV	0.06
37	6.68		0.00	0.000	117803	0.107	VV	0.05
38	6.75		0.00	0.000	105529	0.096	VV	0.05
39	6.84		0.00	0.000	38021	0.035	VV	0.03
40	6.88		0.00	0.000	46946	0.043	VV	0.04
41	6.96		0.00	0.000	104858	0.095	VV	0.05
42	7.03		0.00	0.000	171453	0.156	VV	0.08
43	7.21		0.00	0.000	33182	0.030	VV	0.04
44	7.29		0.00	0.000	130117	0.118	VV	0.06
45	7.39		0.00	0.000	69593	0.063	VV	0.06
46	7.57		0.00	0.000	88852	0.081	VV	0.05
47	7.67		0.00	0.000	70290	0.064	VV	0.04
48	7.73		0.00	0.000	108236	0.098	VV	0.04
49	7.89		0.00	0.000	765799	0.697	VV	0.06
50	8.07		0.00	0.000	229746	0.209	VB	0.09
51	8.34	CL4XYL	0.07	9.522	1427461	1.299	BV	0.05
52	8.53		0.00	0.000	71784	0.065	VB	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	8.73		0.00	0.000	122313	0.111	BB	0.10
54	8.94		0.00	0.000	221432	0.201	BV	0.09
55	9.02		0.00	0.000	154766	0.141	VV	0.06
56	9.19		0.00	0.000	20432	0.019	VV	0.03
57	9.26		0.00	0.000	321258	0.292	VV	0.06
58	9.41		0.00	0.000	224705	0.204	VV	0.05
59	9.53		0.00	0.000	62882	0.057	VV	0.06
60	9.63		0.00	0.000	58413	0.053	VV	0.08
61	9.90	ABHC	0.07	9.800	1832337	1.667	VV	0.04
62	10.06		0.00	0.000	65133	0.059	VB	0.08
63	10.20		0.00	0.000	13184	0.012	BV	0.04
64	10.28		0.00	0.000	34441	0.031	VV	0.05
65	10.34		0.00	0.000	80008	0.073	VV	0.04
66	10.43		0.00	0.000	27730	0.025	VB	0.05
67	10.64		0.00	0.000	3299	0.003	BV	0.03
68	10.75	LINDANE	0.07	9.555	1656987	1.507	VB	0.04
69	10.95	BBHC	0.08	10.089	898822	0.818	BV	0.04
70	11.07		0.00	0.000	58504	0.053	VV	0.06
71	11.20		0.00	0.000	26128	0.024	VB	0.05
72	11.33		0.00	0.000	41257	0.038	BV	0.04
73	11.40		0.00	0.000	408823	0.372	VV	0.06
74	11.62	DBHC	0.06	7.720	1194831	1.087	VV	0.04
75	11.73	HPCL	0.08	10.521	1784706	1.624	VV	0.04
76	11.93		0.00	0.000	33838	0.031	VV	0.05
77	12.03		0.00	0.000	14010	0.013	VV	0.05
78	12.19		0.00	0.000	38960	0.035	VV	0.06
79	12.33		0.00	0.000	11496	0.010	VV	0.06
80	12.44	ALDRN	0.07	9.454	1533110	1.395	VV	0.04
81	12.57		0.00	0.000	79835	0.073	VV	0.05
82	12.72		0.00	0.000	55739	0.051	VV	0.09
83	12.84		0.00	0.000	12900	0.012	VB	0.05
84	13.04		0.00	0.000	30913	0.028	BV	0.13
85	13.25		0.00	0.000	129248	0.118	VV	0.06
86	13.38		0.00	0.000	88286	0.080	VV	0.06
87	13.56		0.00	0.000	44004	0.040	VV	0.05
88	13.65	HPCLE	0.08	10.111	1696315	1.543	VV	0.04
89	13.94		0.00	0.000	18404	0.017	VV	0.03
90	14.05		0.00	0.000	384827	0.350	VV	0.07
91	14.25		0.00	0.000	61333	0.056	VV	0.07
92	14.46		0.00	0.000	19092	0.017	VV	0.07
93	14.65		0.00	0.000	139921	0.127	VB	0.05
94	15.00		0.00	0.000	5592	0.005	BV	0.06
95	15.08		0.00	0.000	4916	0.004	VB	0.04
96	15.15		0.00	0.000	3000	0.003	BV	0.05
97	15.24		0.00	0.000	14052	0.013	VB	0.05
98	15.43		0.00	0.000	2756	0.003	BB	0.05
99	15.66		0.00	0.000	4250	0.004	BB	0.14
100	15.80		0.00	0.000	26784	0.024	BV	0.08
101	16.03		0.00	0.000	33326	0.030	VV	0.06
102	16.13		0.00	0.000	19265	0.018	VB	0.08
103	16.41	PPDDT	0.08	10.897	1171729	1.066	BB	0.04
104	16.65		0.00	0.000	46075	0.042	BB	0.09
105	17.10		0.00	0.000	44289	0.040	BV	0.12
106	17.39		0.00	0.000	29900	0.027	VV	0.05
107	17.56		0.00	0.000	84944	0.077	VV	0.05
108	17.75		0.00	0.000	30943	0.028	VV	0.08
109	18.11		0.00	0.000	200666	0.183	VB	0.16
110	18.61		0.00	0.000	17231	0.016	BB	0.14
111	18.86		0.00	0.000	63855	0.058	BB	0.16
112	19.08		0.00	0.000	77314	0.070	BV	0.09
113	19.28		0.00	0.000	165953	0.151	VV	0.21
114	19.45		0.00	0.000	103368	0.094	VV	0.07
115	19.72		0.00	0.000	26217	0.024	VB	0.09
116	20.09		0.00	0.000	114178	0.104	BV	0.19

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	20.25		0.00	0.000	74723	0.068	VV	0.08
118	20.59		0.00	0.000	35130	0.032	VV	0.10
119	20.73		0.00	0.000	14720	0.013	VB	0.11
120	21.15		0.00	0.000	20332	0.018	BV	0.07
121	21.30		0.00	0.000	8164	0.007	VV	0.11
122	21.49		0.00	0.000	7203	0.007	VB	0.12
123	21.91	CL10BP	0.09	12.332	1777797	1.617	BB	0.07
124	22.50		0.00	0.000	54136	0.049	BB	0.10
125	22.74		0.00	0.000	129779	0.118	BV	0.08
126	23.22		0.00	0.000	32331	0.029	VB	0.20
127	24.41		0.00	0.000	89600	0.082	BB	0.36

Total Area = 1.099192E+08 Total Height = 1.851275E+07 Total Amount = 0.7507079

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-06MD B10112 MAK006OMSD**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0014.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 4:30:10 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 10
Calibration Date = 10/31/13 4:15:29 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD
8.34	CL4XYL	1427461	19970360	0.071	71.5	28.592	
9.90	ABHC	1832337	24905666	0.074	73.6	29.428	
10.75	LINDANE	1656987	23099646	0.072	71.7	28.693	
10.95	BBHC	898822	11867922	0.076	75.7	30.294	
11.62	DBHC	1194831	20616462	0.058	58.0	23.182	
11.73	HPCL	1784706	22596580	0.079	79.0	31.592	
12.44	ALDRN	1533110	21601050	0.071	71.0	28.390	
13.65	HPCLE	1696315	22348770	0.076	75.9	30.361	
16.41	PPDDT	1171729	14323591	0.082	81.8	32.722	
21.91	CL10BP	1777797	19204082	0.093	92.6	37.030	

* Linear regression

Checked By: _____ Date: 11/01/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

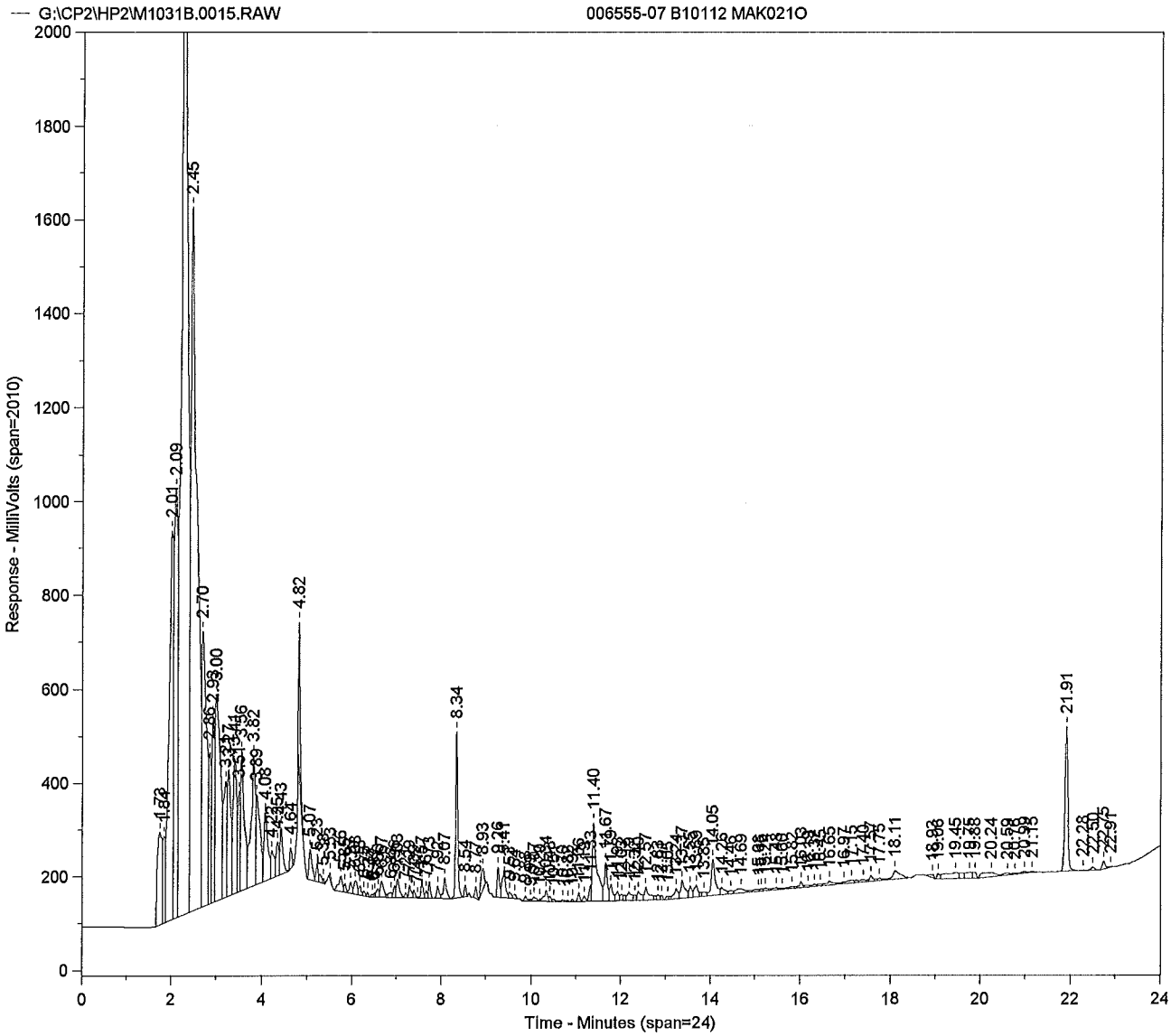
Field ID:	MAK021O	ARDL Lab No.:	006555-07
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/23/2013	Received Date:	10/23/2013
Sample Time:	0927	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	58%
Decachlorobiphenyl	25-125	76%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-07, CHLORINATED PESTICIDES (8081) Page 1 of 1


G:\CP2\HP2\M1031B.0015.RAW
006555-07 B10112 MAK021O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2.01
2.09
2.45
2.70
2.99
3.00
3.82
4.08
4.82
8.34
11.40
14.05
21.91

Sample Name = **006555-07 B10112 MAK021O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0015.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 5:00:41 PM
Method Version = 172
Calibration Version = 10

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.73		0.00	0.000	1576055	1.797	BV	0.14
2	1.84		0.00	0.000	692537	0.790	VV	0.04
3	2.01		0.00	0.000	5678042	6.475	VV	0.09
4	2.09		0.00	0.000	4839553	5.519	VV	0.05
5	2.25		0.00	0.000	23977164	27.342	VV	0.09
6	2.45		0.00	0.000	14878447	16.966	VV	0.09
7	2.70		0.00	0.000	4352407	4.963	VV	0.09
8	2.86		0.00	0.000	1067882	1.218	VV	0.04
9	2.93		0.00	0.000	1657566	1.890	VV	0.05
10	3.00		0.00	0.000	3598420	4.103	VV	0.11
11	3.21		0.00	0.000	1328479	1.515	VV	0.06
12	3.27		0.00	0.000	1490494	1.700	VV	0.07
13	3.41		0.00	0.000	1691661	1.929	VV	0.07
14	3.51		0.00	0.000	649898	0.741	VV	0.04
15	3.56		0.00	0.000	1702051	1.941	VV	0.07
16	3.82		0.00	0.000	1860500	2.122	VV	0.08
17	3.89		0.00	0.000	1206029	1.375	VV	0.09
18	4.08		0.00	0.000	878361	1.002	VV	0.07
19	4.22		0.00	0.000	318634	0.363	VV	0.05
20	4.35		0.00	0.000	313391	0.357	VV	0.06
21	4.43		0.00	0.000	432388	0.493	VB	0.06
22	4.64		0.00	0.000	149110	0.170	BB	0.06
23	4.82		0.00	0.000	729743	0.832	BB	0.05
24	5.07		0.00	0.000	302627	0.345	BV	0.07
25	5.23		0.00	0.000	134131	0.153	VV	0.05
26	5.38		0.00	0.000	17946	0.020	VB	0.04
27	5.53		0.00	0.000	28532	0.033	BB	0.05
28	5.76		0.00	0.000	185444	0.211	BV	0.07
29	5.85		0.00	0.000	58402	0.067	VV	0.06
30	5.97		0.00	0.000	92659	0.106	VV	0.05
31	6.08		0.00	0.000	149603	0.171	VV	0.07
32	6.18		0.00	0.000	84997	0.097	VV	0.07
33	6.28		0.00	0.000	35619	0.041	VV	0.05
34	6.37		0.00	0.000	24510	0.028	VB	0.06
35	6.47		0.00	0.000	16465	0.019	BV	0.05
36	6.52		0.00	0.000	21061	0.024	VV	0.03
37	6.60		0.00	0.000	69697	0.079	VV	0.06
38	6.67		0.00	0.000	177735	0.203	VV	0.07
39	6.88		0.00	0.000	55851	0.064	VV	0.07
40	6.96		0.00	0.000	80442	0.092	VV	0.05
41	7.03		0.00	0.000	190839	0.218	VV	0.08
42	7.21		0.00	0.000	33581	0.038	VV	0.04
43	7.29		0.00	0.000	103732	0.118	VV	0.05
44	7.39		0.00	0.000	53269	0.061	VV	0.06
45	7.47		0.00	0.000	5158	0.006	VV	0.02
46	7.57		0.00	0.000	120249	0.137	VV	0.05
47	7.67		0.00	0.000	50330	0.057	VV	0.04
48	7.73		0.00	0.000	102001	0.116	VB	0.04
49	7.92		0.00	0.000	108434	0.124	BV	0.06
50	8.07		0.00	0.000	218450	0.249	VB	0.07
51	8.34	CL4XYL	0.06	43.201	1155986	1.318	BB	0.05
52	8.54		0.00	0.000	73757	0.084	BB	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	8.77		0.00	0.000	84980	0.097	BB	0.06
54	8.93		0.00	0.000	233492	0.266	BB	0.12
55	9.26		0.00	0.000	235173	0.268	BV	0.06
56	9.41		0.00	0.000	355426	0.405	VV	0.08
57	9.53		0.00	0.000	53688	0.061	VV	0.06
58	9.64		0.00	0.000	34142	0.039	VB	0.08
59	9.88		0.00	0.000	41709	0.048	BV	0.05
60	9.99		0.00	0.000	9797	0.011	VV	0.03
61	10.07		0.00	0.000	49065	0.056	VV	0.10
62	10.20		0.00	0.000	11658	0.013	VV	0.04
63	10.34		0.00	0.000	126881	0.145	VV	0.05
64	10.43		0.00	0.000	39396	0.045	VV	0.05
65	10.51		0.00	0.000	22316	0.025	VV	0.06
66	10.70		0.00	0.000	15374	0.018	VV	0.04
67	10.82		0.00	0.000	8602	0.010	VB	0.05
68	10.92		0.00	0.000	16378	0.019	BV	0.05
69	11.06		0.00	0.000	62837	0.072	VV	0.05
70	11.19		0.00	0.000	48504	0.055	VV	0.06
71	11.33		0.00	0.000	106378	0.121	VV	0.05
72	11.40		0.00	0.000	1152551	1.314	VV	0.06
73	11.67		0.00	0.000	390584	0.445	VV	0.05
74	11.79		0.00	0.000	163601	0.187	VV	0.07
75	11.93		0.00	0.000	95028	0.108	VV	0.04
76	12.03		0.00	0.000	58038	0.066	VV	0.04
77	12.19		0.00	0.000	128872	0.147	VV	0.05
78	12.32		0.00	0.000	43976	0.050	VV	0.04
79	12.40		0.00	0.000	125015	0.143	VV	0.05
80	12.57		0.00	0.000	185150	0.211	VV	0.05
81	12.83		0.00	0.000	46157	0.053	VV	0.04
82	12.91		0.00	0.000	31566	0.036	VB	0.06
83	13.05		0.00	0.000	29682	0.034	BV	0.07
84	13.24		0.00	0.000	132787	0.151	VV	0.09
85	13.37		0.00	0.000	258259	0.294	VV	0.06
86	13.55		0.00	0.000	104877	0.120	VV	0.05
87	13.69		0.00	0.000	148054	0.169	VV	0.08
88	13.85		0.00	0.000	54860	0.063	VV	0.08
89	14.05		0.00	0.000	499997	0.570	VV	0.08
90	14.26		0.00	0.000	102502	0.117	VV	0.10
91	14.46		0.00	0.000	43905	0.050	VV	0.08
92	14.69		0.00	0.000	121983	0.139	VV	0.17
93	15.08		0.00	0.000	61534	0.070	VV	0.15
94	15.15		0.00	0.000	20231	0.023	VV	0.06
95	15.24		0.00	0.000	31093	0.035	VV	0.05
96	15.48		0.00	0.000	30607	0.035	VV	0.10
97	15.60		0.00	0.000	14672	0.017	VV	0.09
98	15.82		0.00	0.000	38190	0.044	VV	0.11
99	16.03		0.00	0.000	54118	0.062	VV	0.05
100	16.19		0.00	0.000	25111	0.029	VV	0.11
101	16.32		0.00	0.000	29411	0.034	VV	0.07
102	16.45		0.00	0.000	25550	0.029	VV	0.10
103	16.65		0.00	0.000	77015	0.088	VV	0.11
104	16.97		0.00	0.000	20291	0.023	VV	0.08
105	17.15		0.00	0.000	61552	0.070	VV	0.15
106	17.40		0.00	0.000	42118	0.048	VV	0.09
107	17.57		0.00	0.000	55406	0.063	VV	0.05
108	17.75		0.00	0.000	32130	0.037	VV	0.06
109	18.11		0.00	0.000	214716	0.245	VB	0.20
110	18.93		0.00	0.000	43304	0.049	BB	0.18
111	19.06		0.00	0.000	49291	0.056	BV	0.08
112	19.45		0.00	0.000	265253	0.302	VV	0.22
113	19.75		0.00	0.000	123065	0.140	VV	0.12
114	19.88		0.00	0.000	72790	0.083	VB	0.11
115	20.24		0.00	0.000	195550	0.223	BV	0.44
116	20.59		0.00	0.000	47937	0.055	VV	0.15

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	20.76		0.00	0.000	27478	0.031	VV	0.14
118	20.99		0.00	0.000	43379	0.049	VV	0.17
119	21.15		0.00	0.000	15707	0.018	VB	0.07
120	21.91	CL10BP	0.08	56.799	1461543	1.667	BB	0.07
121	22.28		0.00	0.000	7956	0.009	BV	0.13
122	22.50		0.00	0.000	44567	0.051	VB	0.09
123	22.75		0.00	0.000	83241	0.095	BV	0.09
124	22.91		0.00	0.000	13411	0.015	VB	0.11
125	24.42		0.00	0.000	73298	0.084	BB	0.26

Total Area = 8.769512E+07 Total Height = 1.302691E+07 Total Amount = 0.1339909

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-07 B10112 MAK021O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0015.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 5:00:41 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 10
Calibration Date = 10/31/13 4:15:29 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD
8.34	CL4XYL	1155986	19970360	0.058	57.9	23.154	
21.91	CL10BP	1461543	19204082	0.076	76.1	30.442	

* Linear regression

Checked By: _____ Date: 11/01/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

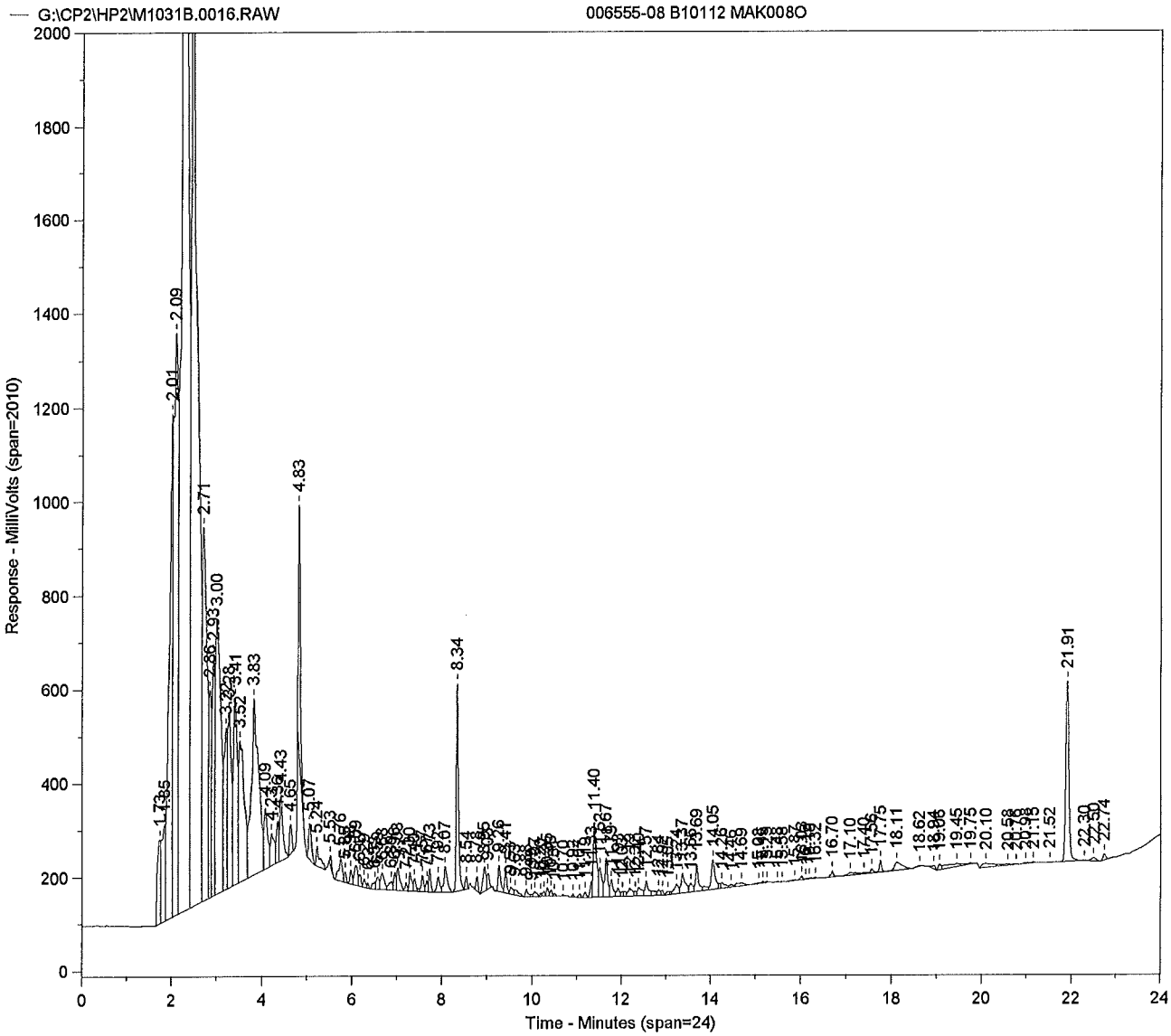
Field ID:	MAK008O	ARDL Lab No.:	006555-08
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/11/2013	Received Date:	10/23/2013
Sample Time:	1210	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	74%
Decachlorobiphenyl	25-125	96%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-08, CHLORINATED PESTICIDES (8081) Page 1 of 1


G:\CP2\HP2\M1031B.0016.RAW
006555-08 B10112 MAK008O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2.09
2.01
2.71
3.00
3.83
4.83
8.34
11.40
14.05
21.91

Sample Name = **006555-08 B10112 MAK008O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0016.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 5:31:14 PM
Method Version = 172
Calibration Version = 10

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.73		0.00	0.000	891435	0.783	BV	0.09
2	1.85		0.00	0.000	1267069	1.113	VV	0.05
3	2.01		0.00	0.000	5867344	5.153	VV	0.07
4	2.09		0.00	0.000	8199892	7.202	VV	0.05
5	2.25		0.00	0.000	32157642	28.244	VV	0.09
6	2.45		0.00	0.000	20541902	18.042	VV	0.10
7	2.71		0.00	0.000	6086474	5.346	VV	0.09
8	2.86		0.00	0.000	1529719	1.344	VV	0.04
9	2.93		0.00	0.000	1984681	1.743	VV	0.05
10	3.00		0.00	0.000	4942823	4.341	VV	0.12
11	3.22		0.00	0.000	1743429	1.531	VV	0.05
12	3.28		0.00	0.000	2115873	1.858	VV	0.07
13	3.41		0.00	0.000	2398697	2.107	VV	0.07
14	3.52		0.00	0.000	2752777	2.418	VV	0.12
15	3.83		0.00	0.000	4246293	3.729	VV	0.13
16	4.09		0.00	0.000	765826	0.673	VV	0.07
17	4.23		0.00	0.000	398632	0.350	VV	0.07
18	4.36		0.00	0.000	349240	0.307	VV	0.06
19	4.43		0.00	0.000	655602	0.576	VB	0.07
20	4.65		0.00	0.000	235479	0.207	BB	0.07
21	4.83		0.00	0.000	1487401	1.306	BB	0.05
22	5.07		0.00	0.000	337791	0.297	BB	0.08
23	5.24		0.00	0.000	235239	0.207	BB	0.06
24	5.53		0.00	0.000	45244	0.040	BB	0.05
25	5.76		0.00	0.000	274633	0.241	BV	0.07
26	5.85		0.00	0.000	66008	0.058	VB	0.06
27	5.98		0.00	0.000	101740	0.089	BV	0.06
28	6.09		0.00	0.000	218085	0.192	VV	0.07
29	6.17		0.00	0.000	101913	0.090	VV	0.06
30	6.29		0.00	0.000	68511	0.060	VV	0.05
31	6.37		0.00	0.000	31405	0.028	VB	0.05
32	6.53		0.00	0.000	76017	0.067	BV	0.08
33	6.59		0.00	0.000	120096	0.105	VV	0.06
34	6.68		0.00	0.000	202343	0.178	VV	0.08
35	6.89		0.00	0.000	112606	0.099	VV	0.07
36	6.96		0.00	0.000	129087	0.113	VV	0.05
37	7.03		0.00	0.000	233224	0.205	VV	0.07
38	7.21		0.00	0.000	58377	0.051	VV	0.04
39	7.30		0.00	0.000	160615	0.141	VV	0.06
40	7.40		0.00	0.000	97163	0.085	VV	0.06
41	7.57		0.00	0.000	134056	0.118	VV	0.05
42	7.67		0.00	0.000	81181	0.071	VV	0.04
43	7.73		0.00	0.000	143873	0.126	VB	0.05
44	7.92		0.00	0.000	154862	0.136	BV	0.07
45	8.07		0.00	0.000	308586	0.271	VB	0.08
46	8.34	CL4XYL	0.07	42.642	1473890	1.294	BV	0.05
47	8.54		0.00	0.000	87358	0.077	VB	0.05
48	8.78		0.00	0.000	97931	0.086	BB	0.06
49	8.95		0.00	0.000	250724	0.220	BV	0.09
50	9.03		0.00	0.000	118508	0.104	VB	0.06
51	9.26		0.00	0.000	229504	0.202	BV	0.06
52	9.41		0.00	0.000	183026	0.161	VV	0.04

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	9.53		0.00	0.000	70106	0.062	VV	0.07
54	9.63		0.00	0.000	73852	0.065	VB	0.10
55	9.88	ABHC	0.00	1.343	57877	0.051	BV	0.05
56	9.99		0.00	0.000	13135	0.012	VV	0.03
57	10.07		0.00	0.000	54215	0.048	VV	0.10
58	10.20		0.00	0.000	19152	0.017	VV	0.04
59	10.27		0.00	0.000	35617	0.031	VV	0.05
60	10.35		0.00	0.000	57829	0.051	VV	0.05
61	10.43		0.00	0.000	42990	0.038	VV	0.04
62	10.51		0.00	0.000	20103	0.018	VB	0.06
63	10.70		0.00	0.000	3949	0.003	BB	0.04
64	10.92	BBHC	0.00	0.831	17061	0.015	BV	0.05
65	11.07		0.00	0.000	25594	0.022	VB	0.06
66	11.19		0.00	0.000	41468	0.036	BV	0.06
67	11.33		0.00	0.000	100756	0.088	VV	0.04
68	11.40		0.00	0.000	813068	0.714	VV	0.06
69	11.52		0.00	0.000	322367	0.283	VV	0.06
70	11.67		0.00	0.000	369201	0.324	VV	0.05
71	11.79		0.00	0.000	160664	0.141	VV	0.06
72	11.93		0.00	0.000	79219	0.070	VV	0.04
73	12.03		0.00	0.000	39254	0.034	VV	0.05
74	12.19		0.00	0.000	115616	0.102	VV	0.09
75	12.32		0.00	0.000	38831	0.034	VV	0.04
76	12.40		0.00	0.000	121617	0.107	VV	0.06
77	12.57		0.00	0.000	151714	0.133	VV	0.05
78	12.84		0.00	0.000	48300	0.042	VV	0.04
79	12.92		0.00	0.000	31732	0.028	VB	0.06
80	13.05		0.00	0.000	30823	0.027	BV	0.09
81	13.24		0.00	0.000	131299	0.115	VV	0.11
82	13.37		0.00	0.000	268618	0.236	VV	0.06
83	13.56		0.00	0.000	90821	0.080	VV	0.05
84	13.69		0.00	0.000	256865	0.226	VV	0.05
85	14.05		0.00	0.000	360831	0.317	VV	0.08
86	14.26		0.00	0.000	69366	0.061	VV	0.07
87	14.46		0.00	0.000	26633	0.023	VV	0.07
88	14.69		0.00	0.000	73594	0.065	VB	0.20
89	15.08		0.00	0.000	7776	0.007	BB	0.07
90	15.15		0.00	0.000	8370	0.007	BV	0.05
91	15.25		0.00	0.000	5732	0.005	VB	0.05
92	15.48		0.00	0.000	3917	0.003	BB	0.05
93	15.58		0.00	0.000	2714	0.002	BB	0.09
94	15.87		0.00	0.000	14809	0.013	BV	0.15
95	16.03		0.00	0.000	29028	0.025	VV	0.06
96	16.12		0.00	0.000	6300	0.006	VV	0.05
97	16.19		0.00	0.000	8100	0.007	VV	0.05
98	16.32		0.00	0.000	7599	0.007	VB	0.05
99	16.70		0.00	0.000	52113	0.046	BB	0.05
100	17.10		0.00	0.000	51669	0.045	BV	0.14
101	17.40		0.00	0.000	21255	0.019	VV	0.08
102	17.56		0.00	0.000	35878	0.032	VV	0.05
103	17.75		0.00	0.000	90838	0.080	VB	0.05
104	18.11		0.00	0.000	198557	0.174	BB	0.24
105	18.62		0.00	0.000	11670	0.010	BB	0.12
106	18.94		0.00	0.000	39624	0.035	BB	0.16
107	19.06		0.00	0.000	51729	0.045	BV	0.09
108	19.45		0.00	0.000	152242	0.134	VV	0.24
109	19.75		0.00	0.000	15687	0.014	VB	0.12
110	20.10		0.00	0.000	138095	0.121	BV	0.35
111	20.58		0.00	0.000	27340	0.024	VV	0.10
112	20.76		0.00	0.000	15341	0.013	VV	0.11
113	20.98		0.00	0.000	20277	0.018	VV	0.16
114	21.15		0.00	0.000	9891	0.009	VB	0.06
115	21.52		0.00	0.000	3997	0.004	BB	0.14
116	21.91	CL10BP	0.10	55.184	1834208	1.611	BB	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	22.30		0.00	0.000	14371	0.013	BV	0.11
118	22.50		0.00	0.000	55795	0.049	VB	0.13
119	22.74		0.00	0.000	56717	0.050	BB	0.08
120	24.41		0.00	0.000	80474	0.071	BB	0.25

Total Area = 1.138581E+08 Total Height = 1.632127E+07 Total Amount = 0.1730766

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-08 B10112 MAK008O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0016.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 5:31:14 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 10
Calibration Date = 10/31/13 4:15:29 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1473890	19970360	0.074	73.8	29.522		
9.88	ABHC	57877	24905666	0.002	2.3	0.930		UNDER
10.92	BBHC	17061	11867922	0.001	1.4	0.575		UNDER
21.91	CL10BP	1834208	19204082	0.096	95.5	38.205		

* Linear regression

Checked By: _____ Date: 11/01/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

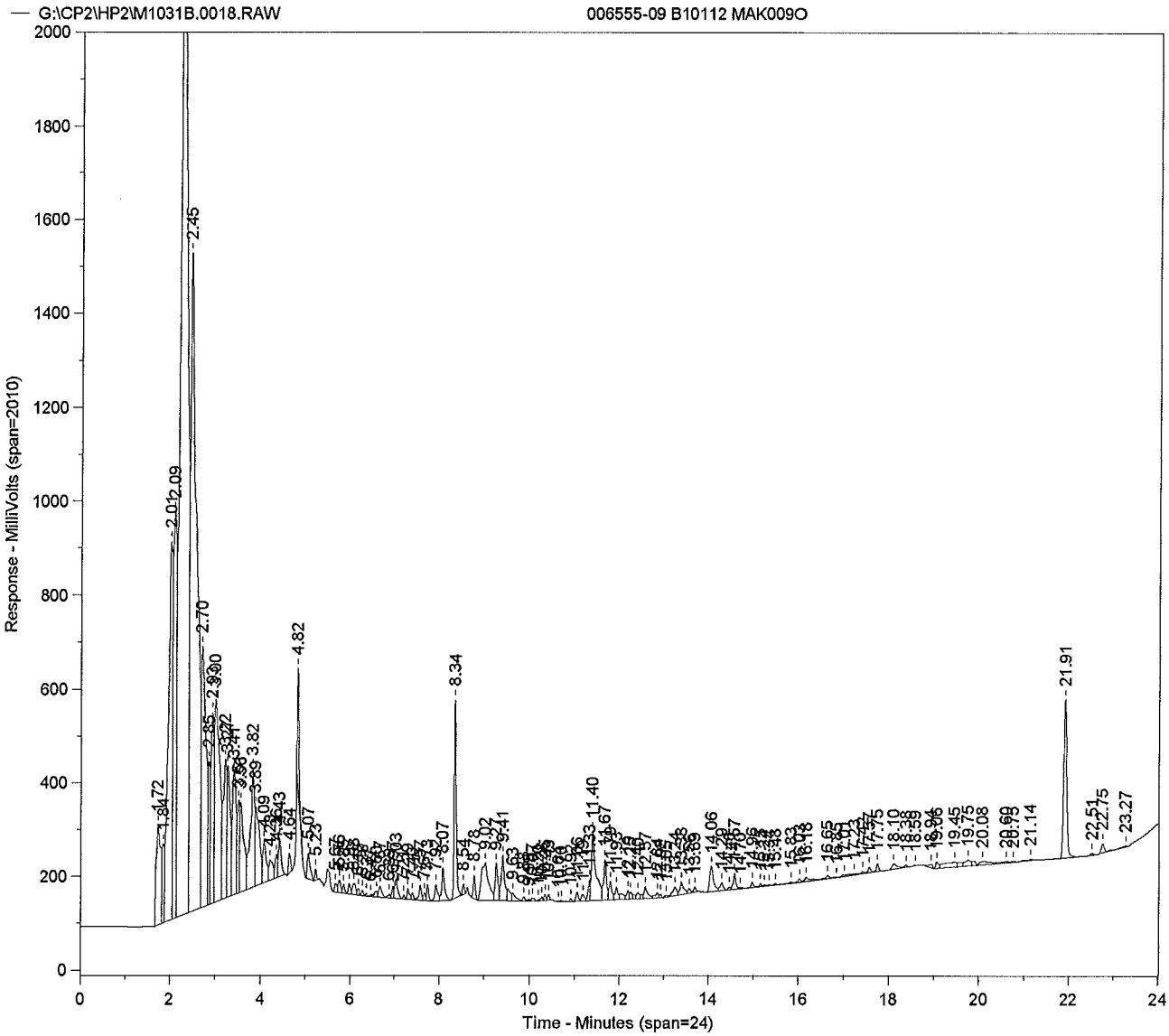
Field ID:	MAK009O	ARDL Lab No.:	006555-09
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/13/2013	Received Date:	10/23/2013
Sample Time:	1248	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	69%
Decachlorobiphenyl	25-125	83%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-09, CHLORINATED PESTICIDES (8081) Page 1 of 1


G:\CP2\HP2\M1031B.0018.RAW
006555-09 B10112 MAK009O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2.45
2.09
2.70
4.82
8.34
21.91
11.40
14.06
23.27

Sample Name = **006555-09 B10112 MAK009O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0018.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 6:32:10 PM
Method Version = 172
Calibration Version = 12

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.72		0.00	0.000	1497869	1.760	BV	0.14
2	1.84		0.00	0.000	624242	0.733	VV	0.04
3	2.01		0.00	0.000	5578010	6.553	VV	0.09
4	2.09		0.00	0.000	4444654	5.222	VV	0.05
5	2.24		0.00	0.000	25214762	29.622	VV	0.10
6	2.45		0.00	0.000	14053251	16.510	VV	0.10
7	2.70		0.00	0.000	4051681	4.760	VV	0.09
8	2.85		0.00	0.000	957569	1.125	VV	0.03
9	2.93		0.00	0.000	1812175	2.129	VV	0.06
10	3.00		0.00	0.000	3531028	4.148	VV	0.11
11	3.22		0.00	0.000	1603052	1.883	VV	0.05
12	3.27		0.00	0.000	1375766	1.616	VV	0.06
13	3.41		0.00	0.000	1580459	1.857	VV	0.07
14	3.51		0.00	0.000	709141	0.833	VV	0.05
15	3.56		0.00	0.000	1122507	1.319	VV	0.06
16	3.82		0.00	0.000	1642385	1.929	VV	0.08
17	3.89		0.00	0.000	1166965	1.371	VV	0.10
18	4.09		0.00	0.000	506006	0.594	VV	0.07
19	4.23		0.00	0.000	249037	0.293	VV	0.08
20	4.36		0.00	0.000	186043	0.219	VV	0.06
21	4.43		0.00	0.000	319803	0.376	VB	0.06
22	4.64		0.00	0.000	140341	0.165	BB	0.06
23	4.82		0.00	0.000	580939	0.682	BB	0.05
24	5.07		0.00	0.000	252019	0.296	BB	0.07
25	5.23		0.00	0.000	61722	0.073	BB	0.04
26	5.67		0.00	0.000	68681	0.081	BV	0.07
27	5.76		0.00	0.000	103943	0.122	VV	0.06
28	5.85		0.00	0.000	59469	0.070	VV	0.05
29	5.97		0.00	0.000	70907	0.083	VV	0.05
30	6.08		0.00	0.000	115615	0.136	VV	0.07
31	6.18		0.00	0.000	46787	0.055	VV	0.07
32	6.28		0.00	0.000	30396	0.036	VV	0.04
33	6.37		0.00	0.000	12766	0.015	VB	0.04
34	6.47		0.00	0.000	11532	0.014	BV	0.05
35	6.60		0.00	0.000	48706	0.057	VV	0.06
36	6.67		0.00	0.000	108134	0.127	VV	0.07
37	6.89		0.00	0.000	27270	0.032	VV	0.07
38	6.97		0.00	0.000	71886	0.084	VV	0.05
39	7.03		0.00	0.000	190555	0.224	VV	0.07
40	7.21		0.00	0.000	20157	0.024	VV	0.04
41	7.29		0.00	0.000	74569	0.088	VV	0.05
42	7.40		0.00	0.000	43082	0.051	VV	0.05
43	7.57		0.00	0.000	117085	0.138	VV	0.05
44	7.67		0.00	0.000	49968	0.059	VV	0.04
45	7.73		0.00	0.000	98729	0.116	VB	0.04
46	7.92		0.00	0.000	152091	0.179	BV	0.07
47	8.07		0.00	0.000	314740	0.370	VB	0.06
48	8.34	CL4XYL	0.07	44.486	1378655	1.620	BB	0.05
49	8.54		0.00	0.000	62039	0.073	BB	0.05
50	8.78		0.00	0.000	153895	0.181	BB	0.05
51	9.02		0.00	0.000	900530	1.058	BV	0.17
52	9.27		0.00	0.000	345565	0.406	VV	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	9.41		0.00	0.000	493345	0.580	VV	0.05
54	9.63		0.00	0.000	99499	0.117	VV	0.09
55	9.88	ABHC	0.00	0.843	32580	0.038	VV	0.05
56	9.99		0.00	0.000	8810	0.010	VV	0.03
57	10.07		0.00	0.000	32755	0.038	VB	0.09
58	10.20		0.00	0.000	5954	0.007	BV	0.04
59	10.28		0.00	0.000	22739	0.027	VV	0.04
60	10.35		0.00	0.000	40460	0.048	VV	0.05
61	10.43		0.00	0.000	33016	0.039	VB	0.05
62	10.64		0.00	0.000	2160	0.003	BV	0.03
63	10.70		0.00	0.000	8416	0.010	VB	0.04
64	10.92	BBHC	0.00	1.017	18723	0.022	BV	0.05
65	11.06		0.00	0.000	77862	0.091	VV	0.06
66	11.19		0.00	0.000	74740	0.088	VV	0.07
67	11.33		0.00	0.000	145116	0.170	VV	0.04
68	11.40		0.00	0.000	986086	1.158	VV	0.06
69	11.67		0.00	0.000	394984	0.464	VV	0.05
70	11.79		0.00	0.000	186369	0.219	VV	0.05
71	11.93		0.00	0.000	126924	0.149	VV	0.04
72	12.19		0.00	0.000	73029	0.086	VV	0.05
73	12.25		0.00	0.000	53687	0.063	VV	0.05
74	12.40		0.00	0.000	59040	0.069	VV	0.05
75	12.57		0.00	0.000	141506	0.166	VV	0.06
76	12.84		0.00	0.000	67934	0.080	VV	0.05
77	12.92		0.00	0.000	24381	0.029	VB	0.06
78	13.05		0.00	0.000	20757	0.024	BV	0.11
79	13.24		0.00	0.000	114601	0.135	VV	0.10
80	13.38		0.00	0.000	150856	0.177	VV	0.06
81	13.56		0.00	0.000	38137	0.045	VV	0.05
82	13.69		0.00	0.000	31486	0.037	VB	0.05
83	14.06		0.00	0.000	322559	0.379	BV	0.09
84	14.29		0.00	0.000	81514	0.096	VV	0.07
85	14.46		0.00	0.000	20492	0.024	VV	0.07
86	14.57		0.00	0.000	137947	0.162	VV	0.05
87	14.70		0.00	0.000	13012	0.015	VB	0.07
88	14.96		0.00	0.000	40554	0.048	BV	0.06
89	15.15		0.00	0.000	17244	0.020	VV	0.05
90	15.24		0.00	0.000	9068	0.011	VV	0.04
91	15.34		0.00	0.000	9975	0.012	VV	0.06
92	15.48		0.00	0.000	11037	0.013	VB	0.06
93	15.83		0.00	0.000	18023	0.021	BB	0.17
94	16.03		0.00	0.000	27468	0.032	BV	0.06
95	16.18		0.00	0.000	50209	0.059	VV	0.14
96	16.65		0.00	0.000	42215	0.050	VV	0.10
97	16.85		0.00	0.000	5407	0.006	VB	0.07
98	17.01		0.00	0.000	18780	0.022	BV	0.09
99	17.23		0.00	0.000	37748	0.044	VV	0.21
100	17.42		0.00	0.000	20891	0.025	VV	0.10
101	17.57		0.00	0.000	42833	0.050	VV	0.06
102	17.75		0.00	0.000	55917	0.066	VB	0.06
103	18.10		0.00	0.000	98309	0.115	BV	0.21
104	18.38		0.00	0.000	31276	0.037	VV	0.06
105	18.59		0.00	0.000	7401	0.009	VB	0.10
106	18.94		0.00	0.000	45076	0.053	BB	0.18
107	19.06		0.00	0.000	64772	0.076	BV	0.09
108	19.45		0.00	0.000	235534	0.277	VV	0.25
109	19.75		0.00	0.000	117804	0.138	VV	0.08
110	20.08		0.00	0.000	111418	0.131	VV	0.33
111	20.60		0.00	0.000	46386	0.054	VV	0.17
112	20.75		0.00	0.000	14241	0.017	VB	0.11
113	21.14		0.00	0.000	30630	0.036	BB	0.27
114	21.91	CL10BP	0.08	53.655	1598998	1.878	BB	0.07
115	22.51		0.00	0.000	20195	0.024	BB	0.14
116	22.75		0.00	0.000	98155	0.115	BV	0.08

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	23.27		0.00	0.000	31677	0.037	VB	0.21
118	24.44		0.00	0.000	81496	0.096	BB	0.22

Total Area = 8.512139E+07 Total Height = 1.260169E+07 Total Amount = 0.1551843

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-09 B10112 MAK009O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0018.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 6:32:10 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 12
Calibration Date = 11/1/13 10:11:05 AM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1378655	19970360	0.069	69.0	27.614		
9.88	ABHC	32580	24905666	0.001	1.3	0.523		UNDER
10.92	BBHC	18723	11867922	0.002	1.6	0.631		UNDER
21.91	CL10BP	1598998	19204082	0.083	83.3	33.305		

* Linear regression

Checked By: _____ Date: 11/01/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

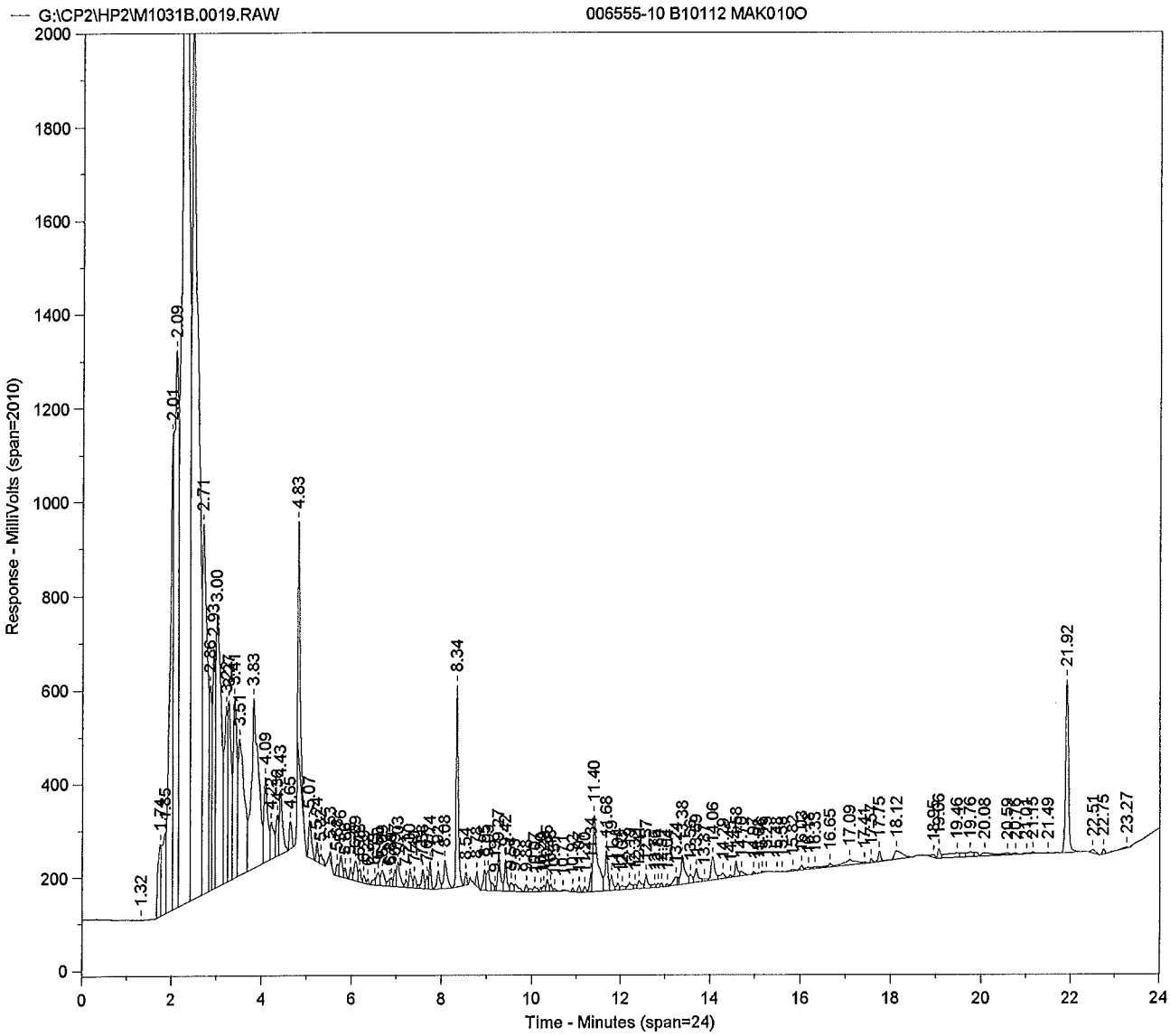
Field ID:	MAK010O	ARDL Lab No.:	006555-10
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/16/2013	Received Date:	10/23/2013
Sample Time:	1025	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	72%
Decachlorobiphenyl	25-125	90%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-10, CHLORINATED PESTICIDES (8081) Page 1 of 1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006555-10 B10112 MAK010O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
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1.74
2.01
2.09
2.71
3.00
3.83
4.09
4.43
4.65
4.83
5.07
8.34
11.40
11.68
14.38
16.65
17.09
17.75
18.12
19.46
19.76
20.08
21.49
21.92
22.51
22.75
23.27

Sample Name = **006555-10 B10112 MAK010O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0019.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 7:02:26 PM
Method Version = 172
Calibration Version = 12

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.32		0.00	0.000	1415	0.001	BB	0.04
2	1.74		0.00	0.000	796036	0.710	BV	0.09
3	1.85		0.00	0.000	1054244	0.941	VV	0.04
4	2.01		0.00	0.000	5171661	4.615	VV	0.06
5	2.09		0.00	0.000	7889749	7.040	VV	0.06
6	2.25		0.00	0.000	31553860	28.155	VV	0.09
7	2.45		0.00	0.000	19854090	17.716	VV	0.10
8	2.71		0.00	0.000	6019505	5.371	VV	0.09
9	2.86		0.00	0.000	1517847	1.354	VV	0.04
10	2.93		0.00	0.000	1966616	1.755	VV	0.05
11	3.00		0.00	0.000	4898500	4.371	VV	0.12
12	3.22		0.00	0.000	1970575	1.758	VV	0.05
13	3.27		0.00	0.000	2038959	1.819	VV	0.06
14	3.41		0.00	0.000	2288722	2.042	VV	0.07
15	3.51		0.00	0.000	2707372	2.416	VV	0.12
16	3.83		0.00	0.000	4083087	3.643	VV	0.13
17	4.09		0.00	0.000	1081756	0.965	VV	0.06
18	4.22		0.00	0.000	464841	0.415	VV	0.05
19	4.36		0.00	0.000	375412	0.335	VV	0.06
20	4.43		0.00	0.000	645527	0.576	VB	0.07
21	4.65		0.00	0.000	226086	0.202	BB	0.07
22	4.83		0.00	0.000	1554753	1.387	BB	0.06
23	5.07		0.00	0.000	360425	0.322	BV	0.07
24	5.24		0.00	0.000	129310	0.115	VV	0.05
25	5.32		0.00	0.000	99410	0.089	VB	0.10
26	5.53		0.00	0.000	43661	0.039	BB	0.05
27	5.68		0.00	0.000	93117	0.083	BV	0.06
28	5.76		0.00	0.000	200886	0.179	VV	0.06
29	5.86		0.00	0.000	68818	0.061	VV	0.06
30	5.98		0.00	0.000	91632	0.082	VV	0.06
31	6.09		0.00	0.000	213845	0.191	VV	0.07
32	6.18		0.00	0.000	113811	0.102	VV	0.07
33	6.29		0.00	0.000	55147	0.049	VV	0.05
34	6.38		0.00	0.000	29667	0.026	VB	0.05
35	6.53		0.00	0.000	66061	0.059	BV	0.09
36	6.60		0.00	0.000	122961	0.110	VV	0.06
37	6.69		0.00	0.000	175907	0.157	VV	0.09
38	6.84		0.00	0.000	63369	0.057	VV	0.04
39	6.89		0.00	0.000	50476	0.045	VV	0.04
40	6.97		0.00	0.000	119208	0.106	VV	0.05
41	7.03		0.00	0.000	265792	0.237	VV	0.08
42	7.21		0.00	0.000	53776	0.048	VV	0.04
43	7.30		0.00	0.000	154600	0.138	VV	0.05
44	7.40		0.00	0.000	92035	0.082	VV	0.06
45	7.58		0.00	0.000	151544	0.135	VV	0.05
46	7.67		0.00	0.000	88162	0.079	VV	0.04
47	7.74		0.00	0.000	172635	0.154	VB	0.05
48	7.92		0.00	0.000	173910	0.155	BV	0.07
49	8.08		0.00	0.000	323916	0.289	VB	0.07
50	8.34	CL4XYL	0.07	43.331	1440906	1.286	BV	0.05
51	8.54		0.00	0.000	77504	0.069	VB	0.05
52	8.78		0.00	0.000	99606	0.089	BB	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	8.95		0.00	0.000	180843	0.161	BV	0.07
54	9.03		0.00	0.000	206490	0.184	VV	0.07
55	9.19		0.00	0.000	26645	0.024	VV	0.02
56	9.27		0.00	0.000	351186	0.313	VV	0.06
57	9.42		0.00	0.000	252530	0.225	VV	0.04
58	9.54		0.00	0.000	92618	0.083	VV	0.06
59	9.63		0.00	0.000	105138	0.094	VB	0.10
60	9.88	ABHC	0.00	1.165	48321	0.043	BV	0.05
61	10.07		0.00	0.000	59646	0.053	VV	0.10
62	10.20		0.00	0.000	22957	0.020	VV	0.04
63	10.28		0.00	0.000	48864	0.044	VV	0.04
64	10.35		0.00	0.000	87718	0.078	VV	0.04
65	10.43		0.00	0.000	46925	0.042	VV	0.05
66	10.51		0.00	0.000	20361	0.018	VB	0.06
67	10.71		0.00	0.000	4142	0.004	BB	0.04
68	10.92	BBHC	0.00	1.293	25560	0.023	BV	0.05
69	11.07		0.00	0.000	51530	0.046	VB	0.06
70	11.20		0.00	0.000	45083	0.040	BV	0.06
71	11.34		0.00	0.000	132199	0.118	VV	0.05
72	11.40		0.00	0.000	1111282	0.992	VV	0.07
73	11.68		0.00	0.000	396008	0.353	VV	0.05
74	11.79		0.00	0.000	140888	0.126	VV	0.06
75	11.94		0.00	0.000	62515	0.056	VV	0.04
76	12.03		0.00	0.000	58292	0.052	VV	0.09
77	12.19		0.00	0.000	91628	0.082	VV	0.06
78	12.32		0.00	0.000	41871	0.037	VV	0.04
79	12.41		0.00	0.000	111259	0.099	VV	0.06
80	12.57		0.00	0.000	138364	0.123	VV	0.05
81	12.76		0.00	0.000	47555	0.042	VV	0.09
82	12.84		0.00	0.000	37709	0.034	VV	0.04
83	12.92		0.00	0.000	32176	0.029	VB	0.07
84	13.04		0.00	0.000	23861	0.021	BV	0.08
85	13.24		0.00	0.000	104600	0.093	VV	0.08
86	13.38		0.00	0.000	393389	0.351	VV	0.06
87	13.56		0.00	0.000	96555	0.086	VV	0.05
88	13.69		0.00	0.000	168770	0.151	VV	0.05
89	13.87		0.00	0.000	43571	0.039	VV	0.09
90	14.06		0.00	0.000	293262	0.262	VV	0.08
91	14.29		0.00	0.000	88034	0.079	VV	0.11
92	14.45		0.00	0.000	23174	0.021	VV	0.07
93	14.58		0.00	0.000	137577	0.123	VV	0.06
94	14.70		0.00	0.000	60525	0.054	VB	0.09
95	14.97		0.00	0.000	17171	0.015	BV	0.07
96	15.08		0.00	0.000	3142	0.003	VB	0.05
97	15.16		0.00	0.000	7615	0.007	BV	0.05
98	15.25		0.00	0.000	8051	0.007	VB	0.06
99	15.48		0.00	0.000	6008	0.005	BB	0.05
100	15.58		0.00	0.000	2816	0.003	BB	0.09
101	15.82		0.00	0.000	18757	0.017	BV	0.15
102	16.03		0.00	0.000	37842	0.034	VV	0.06
103	16.18		0.00	0.000	24911	0.022	VV	0.10
104	16.33		0.00	0.000	14646	0.013	VV	0.05
105	16.65		0.00	0.000	68724	0.061	VV	0.09
106	17.09		0.00	0.000	183566	0.164	VV	0.34
107	17.41		0.00	0.000	13496	0.012	VB	0.06
108	17.57		0.00	0.000	24843	0.022	BV	0.05
109	17.75		0.00	0.000	81374	0.073	VV	0.06
110	18.12		0.00	0.000	220371	0.197	VB	0.25
111	18.95		0.00	0.000	36031	0.032	BB	0.18
112	19.06		0.00	0.000	83359	0.074	BV	0.07
113	19.46		0.00	0.000	185985	0.166	VV	0.23
114	19.76		0.00	0.000	91569	0.082	VV	0.07
115	20.08		0.00	0.000	104839	0.094	VV	0.30
116	20.59		0.00	0.000	48899	0.044	VV	0.13

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	20.76		0.00	0.000	21523	0.019	VB	0.11
118	21.01		0.00	0.000	16879	0.015	BV	0.14
119	21.15		0.00	0.000	12664	0.011	VB	0.07
120	21.49		0.00	0.000	2922	0.003	BB	0.13
121	21.92	CL10BP	0.09	54.211	1733544	1.547	BB	0.07
122	22.51		0.00	0.000	52200	0.047	BB	0.18
123	22.75		0.00	0.000	45662	0.041	BV	0.08
124	23.27		0.00	0.000	37045	0.033	VB	0.24

Total Area = 1.120708E+08 Total Height = 1.611203E+07 Total Amount = 0.1665157

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-10 B10112 MAK010O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0019.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 7:02:26 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 12
Calibration Date = 11/1/13 10:11:05 AM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1440906	19970360	0.072	72.2	28.861		
9.88	ABHC	48321	24905666	0.002	1.9	0.776		UNDER
10.92	BBHC	25560	11867922	0.002	2.2	0.861		UNDER
21.92	CL10BP	1733544	19204082	0.090	90.3	36.108		

* Linear regression

Checked By: _____ Date: 11/01/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

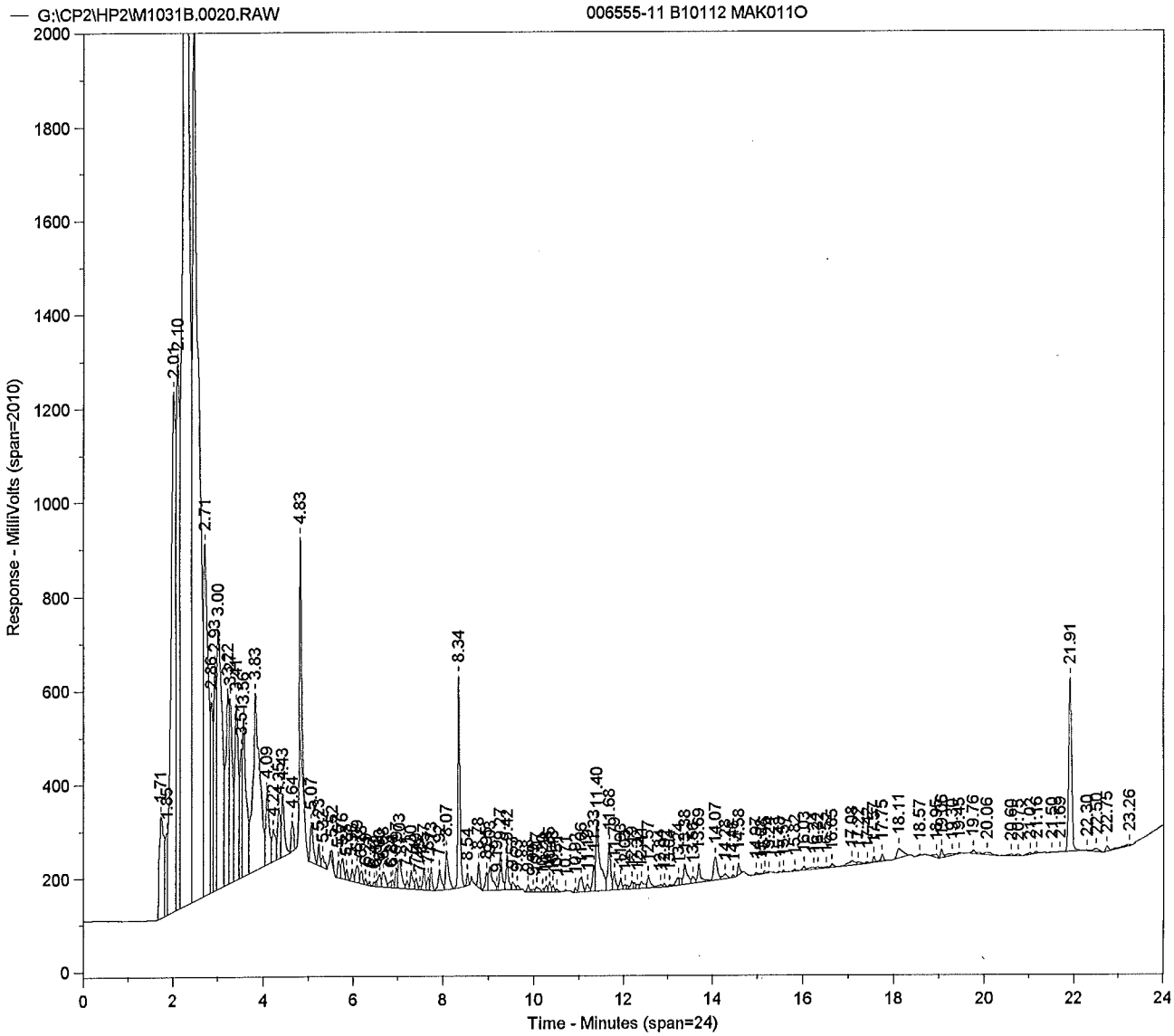
Field ID:	MAK011O	ARDL Lab No.:	006555-11
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/16/2013	Received Date:	10/23/2013
Sample Time:	1110	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	72%
Decachlorobiphenyl	25-125	91%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-11, CHLORINATED PESTICIDES (8081) Page 1 of 1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006555-11 B10112 MAK011O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0
2
4
6
8
10
12
14
16
18
20
22
24
2.10
2.71
3.00
3.83
4.83
8.34
11.40
14.07
21.91
23.26

Sample Name = **006555-11 B10112 MAK011O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0020.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 7:32:53 PM
Method Version = 172
Calibration Version = 12

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.71		0.00	0.000	1631006	1.493	BV	0.14
2	1.85		0.00	0.000	621591	0.569	VV	0.04
3	2.01		0.00	0.000	7634916	6.988	VV	0.10
4	2.10		0.00	0.000	5955793	5.451	VV	0.05
5	2.25		0.00	0.000	31039808	28.409	VV	0.09
6	2.45		0.00	0.000	18720746	17.134	VV	0.09
7	2.71		0.00	0.000	5481313	5.017	VV	0.09
8	2.86		0.00	0.000	1475026	1.350	VV	0.05
9	2.93		0.00	0.000	1833435	1.678	VV	0.05
10	3.00		0.00	0.000	4499813	4.118	VV	0.11
11	3.22		0.00	0.000	2202861	2.016	VV	0.05
12	3.27		0.00	0.000	1835584	1.680	VV	0.05
13	3.41		0.00	0.000	2156186	1.973	VV	0.06
14	3.51		0.00	0.000	870188	0.796	VV	0.04
15	3.56		0.00	0.000	1995929	1.827	VV	0.07
16	3.83		0.00	0.000	4100891	3.753	VV	0.12
17	4.09		0.00	0.000	877569	0.803	VV	0.06
18	4.22		0.00	0.000	368652	0.337	VV	0.04
19	4.35		0.00	0.000	484217	0.443	VV	0.06
20	4.43		0.00	0.000	587312	0.538	VB	0.06
21	4.64		0.00	0.000	236393	0.216	BB	0.07
22	4.83		0.00	0.000	1182299	1.082	BB	0.05
23	5.07		0.00	0.000	383621	0.351	BV	0.07
24	5.23		0.00	0.000	141170	0.129	VV	0.04
25	5.32		0.00	0.000	118741	0.109	VB	0.10
26	5.52		0.00	0.000	61530	0.056	BB	0.07
27	5.67		0.00	0.000	139044	0.127	BV	0.07
28	5.76		0.00	0.000	179220	0.164	VV	0.07
29	5.85		0.00	0.000	69701	0.064	VV	0.05
30	5.98		0.00	0.000	94806	0.087	VV	0.05
31	6.09		0.00	0.000	182066	0.167	VV	0.07
32	6.18		0.00	0.000	109744	0.100	VV	0.07
33	6.29		0.00	0.000	34987	0.032	VV	0.05
34	6.37		0.00	0.000	20296	0.019	VB	0.04
35	6.47		0.00	0.000	22959	0.021	BV	0.04
36	6.52		0.00	0.000	29848	0.027	VV	0.03
37	6.60		0.00	0.000	112822	0.103	VV	0.06
38	6.68		0.00	0.000	170891	0.156	VV	0.08
39	6.84		0.00	0.000	55364	0.051	VV	0.04
40	6.88		0.00	0.000	46295	0.042	VV	0.04
41	6.97		0.00	0.000	137994	0.126	VV	0.05
42	7.03		0.00	0.000	332405	0.304	VV	0.09
43	7.21		0.00	0.000	53568	0.049	VV	0.04
44	7.30		0.00	0.000	144466	0.132	VV	0.04
45	7.40		0.00	0.000	79725	0.073	VV	0.06
46	7.48		0.00	0.000	18182	0.017	VV	0.04
47	7.57		0.00	0.000	159048	0.146	VV	0.05
48	7.67		0.00	0.000	89260	0.082	VV	0.04
49	7.73		0.00	0.000	138805	0.127	VB	0.05
50	7.92		0.00	0.000	213550	0.195	BV	0.07
51	8.07		0.00	0.000	373861	0.342	VB	0.06
52	8.34	CL4XYL	0.07	43.323	1444017	1.322	BB	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	8.54		0.00	0.000	72111	0.066	BB	0.05
54	8.78		0.00	0.000	164985	0.151	BB	0.05
55	8.95		0.00	0.000	139418	0.128	BV	0.06
56	9.03		0.00	0.000	310002	0.284	VV	0.08
57	9.19		0.00	0.000	23513	0.022	VV	0.03
58	9.27		0.00	0.000	328758	0.301	VV	0.06
59	9.42		0.00	0.000	267584	0.245	VV	0.04
60	9.53		0.00	0.000	69116	0.063	VV	0.05
61	9.63		0.00	0.000	36853	0.034	VB	0.08
62	9.88	ABHC	0.00	1.157	48097	0.044	BV	0.05
63	9.99		0.00	0.000	15191	0.014	VV	0.03
64	10.07		0.00	0.000	65126	0.060	VV	0.10
65	10.20		0.00	0.000	19932	0.018	VV	0.04
66	10.28		0.00	0.000	49912	0.046	VV	0.05
67	10.35		0.00	0.000	73208	0.067	VV	0.04
68	10.43		0.00	0.000	44853	0.041	VV	0.04
69	10.51		0.00	0.000	21331	0.020	VB	0.06
70	10.71		0.00	0.000	5137	0.005	BB	0.05
71	10.92	BBHC	0.00	1.281	25377	0.023	BV	0.05
72	11.06		0.00	0.000	176318	0.161	VV	0.09
73	11.19		0.00	0.000	74927	0.069	VV	0.06
74	11.33		0.00	0.000	195403	0.179	VV	0.05
75	11.40		0.00	0.000	974340	0.892	VV	0.06
76	11.68		0.00	0.000	438988	0.402	VV	0.05
77	11.79		0.00	0.000	158424	0.145	VV	0.05
78	11.93		0.00	0.000	93879	0.086	VV	0.04
79	12.03		0.00	0.000	35913	0.033	VV	0.05
80	12.19		0.00	0.000	65716	0.060	VV	0.06
81	12.32		0.00	0.000	37878	0.035	VV	0.04
82	12.41		0.00	0.000	95161	0.087	VV	0.05
83	12.57		0.00	0.000	128641	0.118	VV	0.05
84	12.84		0.00	0.000	30843	0.028	VV	0.07
85	12.92		0.00	0.000	25114	0.023	VB	0.05
86	13.04		0.00	0.000	13857	0.013	BV	0.07
87	13.24		0.00	0.000	83986	0.077	VV	0.08
88	13.38		0.00	0.000	252607	0.231	VV	0.06
89	13.56		0.00	0.000	71587	0.066	VV	0.06
90	13.69		0.00	0.000	175605	0.161	VV	0.05
91	14.07		0.00	0.000	287725	0.263	VV	0.09
92	14.28		0.00	0.000	68628	0.063	VB	0.09
93	14.46		0.00	0.000	16337	0.015	BB	0.07
94	14.58		0.00	0.000	81341	0.074	BB	0.06
95	14.97		0.00	0.000	19539	0.018	BV	0.09
96	15.08		0.00	0.000	3524	0.003	VB	0.04
97	15.15		0.00	0.000	15375	0.014	BV	0.07
98	15.24		0.00	0.000	5902	0.005	VB	0.04
99	15.48		0.00	0.000	7838	0.007	BB	0.05
100	15.57		0.00	0.000	15032	0.014	BB	0.05
101	15.82		0.00	0.000	16923	0.015	BV	0.09
102	16.03		0.00	0.000	34049	0.031	VV	0.07
103	16.24		0.00	0.000	37807	0.035	VV	0.16
104	16.32		0.00	0.000	24960	0.023	VV	0.09
105	16.52		0.00	0.000	10486	0.010	VV	0.05
106	16.65		0.00	0.000	34571	0.032	VB	0.05
107	17.08		0.00	0.000	95033	0.087	BV	0.21
108	17.22		0.00	0.000	32019	0.029	VV	0.12
109	17.42		0.00	0.000	11040	0.010	VB	0.07
110	17.57		0.00	0.000	41772	0.038	BV	0.05
111	17.75		0.00	0.000	55651	0.051	VB	0.06
112	18.11		0.00	0.000	187960	0.172	BB	0.22
113	18.57		0.00	0.000	6368	0.006	BB	0.08
114	18.95		0.00	0.000	37972	0.035	BB	0.18
115	19.06		0.00	0.000	66977	0.061	BV	0.06
116	19.30		0.00	0.000	56959	0.052	VV	0.22

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	19.45		0.00	0.000	11118	0.010	VB	0.09
118	19.76		0.00	0.000	35651	0.033	BV	0.07
119	20.06		0.00	0.000	58068	0.053	VB	0.22
120	20.60		0.00	0.000	32218	0.029	BV	0.14
121	20.75		0.00	0.000	19211	0.018	VB	0.11
122	21.02		0.00	0.000	23922	0.022	BV	0.15
123	21.16		0.00	0.000	16961	0.016	VB	0.07
124	21.50		0.00	0.000	5180	0.005	BV	0.12
125	21.69		0.00	0.000	4497	0.004	VB	0.08
126	21.91	CL10BP	0.09	54.239	1738520	1.591	BB	0.07
127	22.30		0.00	0.000	12401	0.011	BV	0.13
128	22.50		0.00	0.000	58323	0.053	VB	0.19
129	22.75		0.00	0.000	51704	0.047	BV	0.09
130	23.26		0.00	0.000	62213	0.057	VB	0.26

Total Area = 1.09261E+08 Total Height = 1.650754E+07 Total Amount = 0.1669061

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-11 B10112 MAK0110**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0020.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 7:32:53 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 12
Calibration Date = 11/1/13 10:11:05 AM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1444017	19970360	0.072	72.3	28.923		
9.88	ABHC	48097	24905666	0.002	1.9	0.772		UNDER
10.92	BBHC	25377	11867922	0.002	2.1	0.855		UNDER
21.91	CL10BP	1738520	19204082	0.091	90.5	36.211		

* Linear regression

Checked By: BT Date: 11/01/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

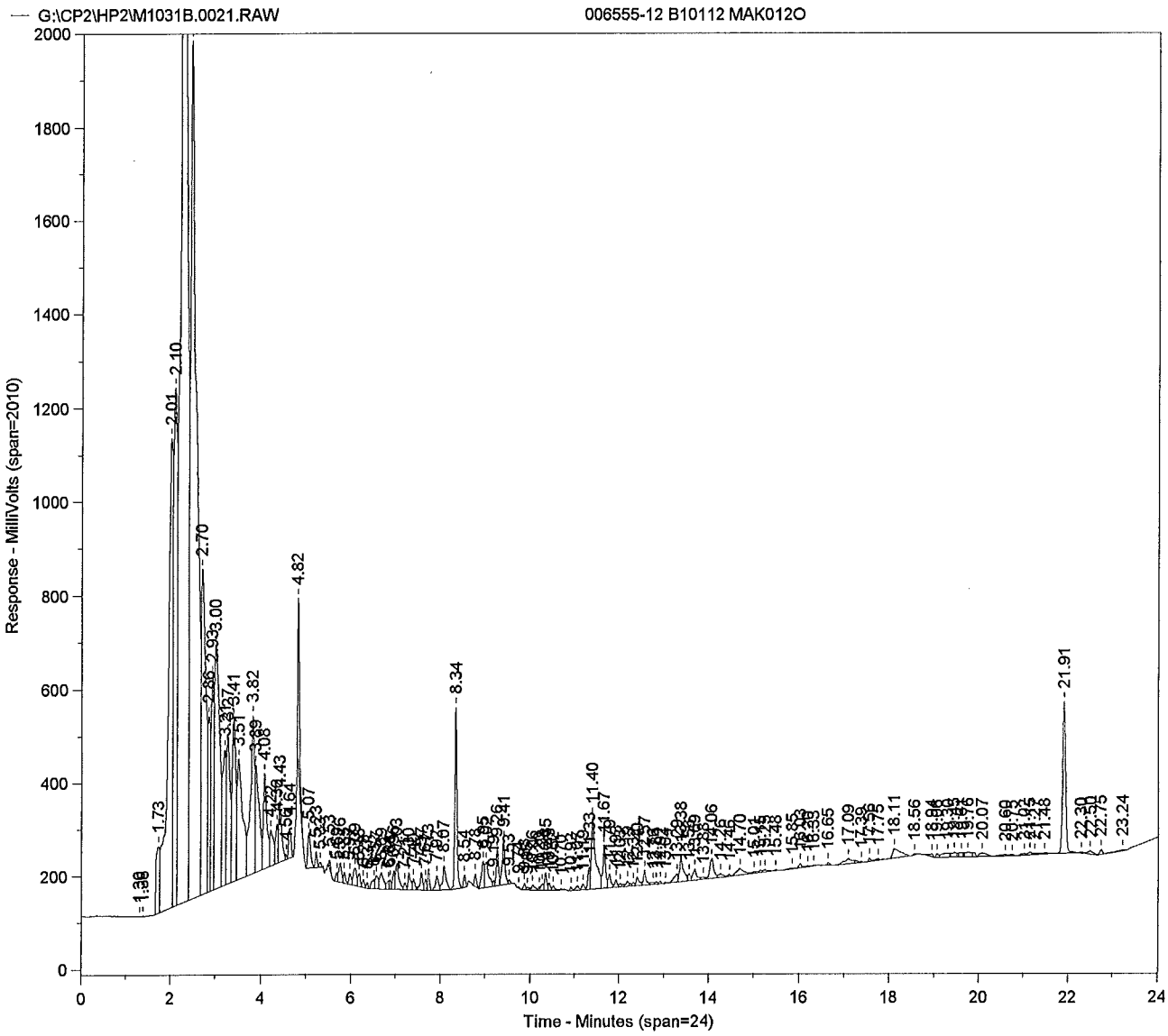
Field ID:	MAK012O	ARDL Lab No.:	006555-12
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/22/2013	Received Date:	10/23/2013
Sample Time:	1315	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	62%
Decachlorobiphenyl	25-125	79%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-12, CHLORINATED PESTICIDES (8081) Page 1 of 1


G:\CP2\HP2\M1031B.0021.RAW
006555-12 B10112 MAK012O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2.01
2.10
2.70
3.00
3.41
3.82
4.82
5.07
8.34
11.40
21.91
23.24

Sample Name = **006555-12 B10112 MAK012O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0021.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 8:03:08 PM
Method Version = 172
Calibration Version = 12

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.30		0.00	0.000	1227	0.001	BB	0.05
2	1.38		0.00	0.000	1303	0.001	BB	0.05
3	1.73		0.00	0.000	773976	0.766	BV	0.09
4	2.01		0.00	0.000	7765308	7.690	VV	0.09
5	2.10		0.00	0.000	5853856	5.797	VV	0.05
6	2.25		0.00	0.000	28722516	28.444	VV	0.09
7	2.45		0.00	0.000	17824246	17.652	VV	0.09
8	2.70		0.00	0.000	5117631	5.068	VV	0.09
9	2.86		0.00	0.000	1308195	1.296	VV	0.04
10	2.93		0.00	0.000	1834114	1.816	VV	0.05
11	3.00		0.00	0.000	4233771	4.193	VV	0.11
12	3.21		0.00	0.000	1547854	1.533	VV	0.06
13	3.27		0.00	0.000	1728240	1.712	VV	0.07
14	3.41		0.00	0.000	2049925	2.030	VV	0.07
15	3.51		0.00	0.000	2148017	2.127	VV	0.10
16	3.82		0.00	0.000	2159865	2.139	VV	0.08
17	3.89		0.00	0.000	1419632	1.406	VV	0.08
18	4.08		0.00	0.000	1134717	1.124	VV	0.06
19	4.22		0.00	0.000	456172	0.452	VV	0.07
20	4.36		0.00	0.000	320042	0.317	VV	0.05
21	4.43		0.00	0.000	582384	0.577	VV	0.06
22	4.56		0.00	0.000	27663	0.027	VV	0.03
23	4.64		0.00	0.000	242623	0.240	VB	0.06
24	4.82		0.00	0.000	858471	0.850	BB	0.05
25	5.07		0.00	0.000	336932	0.334	BB	0.07
26	5.23		0.00	0.000	96618	0.096	BV	0.04
27	5.33		0.00	0.000	32899	0.033	VB	0.06
28	5.53		0.00	0.000	35530	0.035	BB	0.05
29	5.69		0.00	0.000	60366	0.060	BV	0.05
30	5.76		0.00	0.000	182984	0.181	VV	0.06
31	5.85		0.00	0.000	72791	0.072	VV	0.06
32	5.97		0.00	0.000	89181	0.088	VV	0.05
33	6.09		0.00	0.000	188996	0.187	VV	0.07
34	6.18		0.00	0.000	114207	0.113	VV	0.07
35	6.28		0.00	0.000	54407	0.054	VV	0.05
36	6.37		0.00	0.000	31025	0.031	VB	0.05
37	6.52		0.00	0.000	98844	0.098	BV	0.09
38	6.57		0.00	0.000	130501	0.129	VV	0.06
39	6.69		0.00	0.000	208273	0.206	VV	0.08
40	6.84		0.00	0.000	66052	0.065	VV	0.04
41	6.88		0.00	0.000	54196	0.054	VV	0.04
42	6.96		0.00	0.000	133502	0.132	VV	0.05
43	7.03		0.00	0.000	272499	0.270	VV	0.07
44	7.21		0.00	0.000	52601	0.052	VV	0.04
45	7.30		0.00	0.000	141614	0.140	VV	0.06
46	7.40		0.00	0.000	83801	0.083	VV	0.06
47	7.57		0.00	0.000	147937	0.147	VV	0.05
48	7.67		0.00	0.000	83778	0.083	VV	0.04
49	7.73		0.00	0.000	129107	0.128	VB	0.04
50	7.92		0.00	0.000	141960	0.141	BV	0.07
51	8.07		0.00	0.000	281180	0.278	VB	0.07
52	8.34	CL4XYL	0.06	42.917	1246839	1.235	BB	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	8.54		0.00	0.000	78648	0.078	BB	0.05
54	8.78		0.00	0.000	88840	0.088	BB	0.06
55	8.95		0.00	0.000	246647	0.244	BV	0.07
56	9.02		0.00	0.000	319915	0.317	VV	0.08
57	9.19		0.00	0.000	34583	0.034	VV	0.03
58	9.26		0.00	0.000	278191	0.275	VV	0.05
59	9.41		0.00	0.000	415454	0.411	VV	0.05
60	9.53		0.00	0.000	27733	0.027	VB	0.05
61	9.74		0.00	0.000	6872	0.007	BB	0.06
62	9.88	ABHC	0.00	1.179	42705	0.042	BV	0.05
63	9.95		0.00	0.000	14710	0.015	VV	0.03
64	10.06		0.00	0.000	50080	0.050	VB	0.07
65	10.20		0.00	0.000	15539	0.015	BV	0.04
66	10.28		0.00	0.000	52499	0.052	VV	0.06
67	10.35		0.00	0.000	124028	0.123	VV	0.04
68	10.43		0.00	0.000	46553	0.046	VV	0.05
69	10.52		0.00	0.000	31703	0.031	VB	0.06
70	10.70		0.00	0.000	5147	0.005	BB	0.05
71	10.92	BBHC	0.00	1.322	22824	0.023	BV	0.05
72	11.07		0.00	0.000	43552	0.043	VV	0.06
73	11.19		0.00	0.000	47583	0.047	VV	0.06
74	11.33		0.00	0.000	168453	0.167	VV	0.06
75	11.40		0.00	0.000	1034809	1.025	VV	0.07
76	11.67		0.00	0.000	379236	0.376	VV	0.05
77	11.79		0.00	0.000	123897	0.123	VV	0.06
78	11.93		0.00	0.000	57746	0.057	VV	0.04
79	12.03		0.00	0.000	25101	0.025	VV	0.05
80	12.19		0.00	0.000	43749	0.043	VV	0.05
81	12.32		0.00	0.000	23900	0.024	VV	0.04
82	12.40		0.00	0.000	88531	0.088	VV	0.05
83	12.57		0.00	0.000	127427	0.126	VV	0.05
84	12.76		0.00	0.000	24536	0.024	VV	0.08
85	12.84		0.00	0.000	16367	0.016	VV	0.04
86	12.92		0.00	0.000	16813	0.017	VB	0.05
87	13.04		0.00	0.000	7879	0.008	BV	0.08
88	13.29		0.00	0.000	104307	0.103	VV	0.10
89	13.38		0.00	0.000	318058	0.315	VV	0.05
90	13.56		0.00	0.000	65116	0.064	VV	0.05
91	13.69		0.00	0.000	135997	0.135	VV	0.06
92	13.88		0.00	0.000	26820	0.027	VV	0.07
93	14.06		0.00	0.000	256818	0.254	VV	0.09
94	14.26		0.00	0.000	55245	0.055	VV	0.09
95	14.46		0.00	0.000	14766	0.015	VB	0.06
96	14.70		0.00	0.000	143651	0.142	BV	0.22
97	15.01		0.00	0.000	21789	0.022	VV	0.08
98	15.15		0.00	0.000	18215	0.018	VV	0.05
99	15.25		0.00	0.000	30393	0.030	VV	0.07
100	15.48		0.00	0.000	12102	0.012	VB	0.05
101	15.85		0.00	0.000	14856	0.015	BV	0.14
102	16.03		0.00	0.000	34091	0.034	VV	0.06
103	16.20		0.00	0.000	21869	0.022	VB	0.16
104	16.33		0.00	0.000	2968	0.003	BB	0.05
105	16.65		0.00	0.000	18662	0.018	BB	0.05
106	17.09		0.00	0.000	137580	0.136	BV	0.27
107	17.39		0.00	0.000	8057	0.008	VB	0.07
108	17.56		0.00	0.000	27436	0.027	BV	0.08
109	17.75		0.00	0.000	24359	0.024	VV	0.13
110	18.11		0.00	0.000	264489	0.262	VB	0.29
111	18.56		0.00	0.000	8596	0.009	BB	0.08
112	18.94		0.00	0.000	37112	0.037	BB	0.19
113	19.06		0.00	0.000	35470	0.035	BV	0.09
114	19.30		0.00	0.000	114550	0.113	VV	0.20
115	19.45		0.00	0.000	79653	0.079	VV	0.06
116	19.61		0.00	0.000	58840	0.058	VV	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	19.76		0.00	0.000	100057	0.099	VV	0.07
118	20.07		0.00	0.000	96086	0.095	VB	0.20
119	20.60		0.00	0.000	41677	0.041	BV	0.24
120	20.75		0.00	0.000	23058	0.023	VB	0.11
121	21.02		0.00	0.000	30267	0.030	BV	0.14
122	21.15		0.00	0.000	37399	0.037	VV	0.06
123	21.27		0.00	0.000	23988	0.024	VV	0.13
124	21.48		0.00	0.000	16798	0.017	VB	0.18
125	21.91	CL10BP	0.08	54.583	1524909	1.510	BB	0.07
126	22.30		0.00	0.000	15093	0.015	BV	0.09
127	22.50		0.00	0.000	51184	0.051	VB	0.18
128	22.75		0.00	0.000	40145	0.040	BB	0.08
129	23.24		0.00	0.000	30478	0.030	BB	0.25
130	24.45		0.00	0.000	42054	0.042	BB	0.23

Total Area = 1.009777E+08 Total Height = 1.485277E+07 Total Amount = 0.1454778

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-12 B10112 MAK012O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0021.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 8:03:08 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 12
Calibration Date = 11/1/13 10:11:05 AM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1246839	19970360	0.062	62.4	24.974		
9.88	ABHC	42705	24905666	0.002	1.7	0.686		UNDER
10.92	BBHC	22824	11867922	0.002	1.9	0.769		UNDER
21.91	CL10BP	1524909	19204082	0.079	79.4	31.762		

* Linear regression

Checked By: _____ Date: 11/01/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/01/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

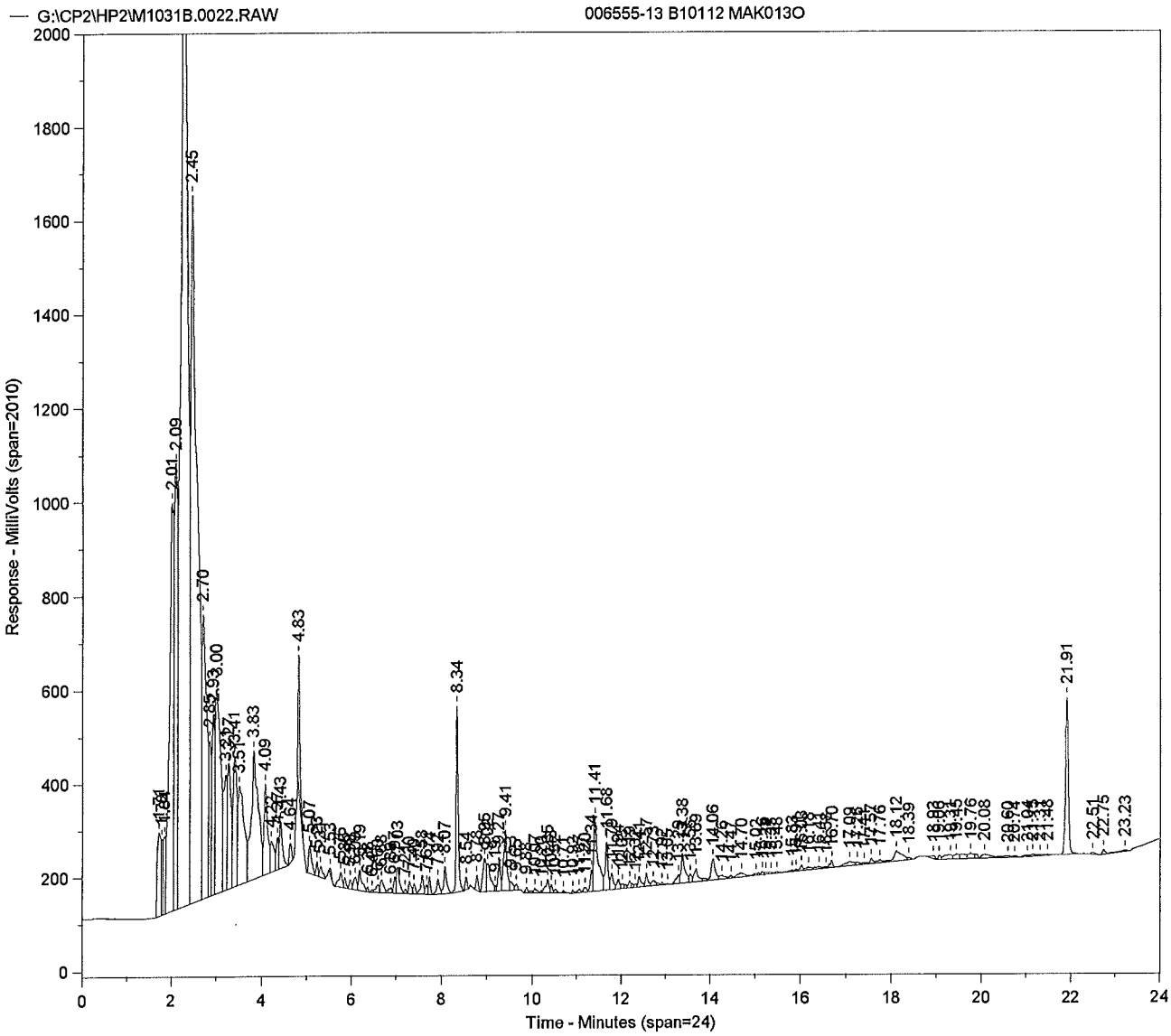
Field ID:	MAK013O	ARDL Lab No.:	006555-13
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/22/2013	Received Date:	10/23/2013
Sample Time:	1400	Prep. Date:	10/30/2013
Matrix:	TISSUE	Analysis Date:	10/31/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10112
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	65%
Decachlorobiphenyl	25-125	82%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-13, CHLORINATED PESTICIDES (8081) Page 1 of 1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006555-13 B10112 MAK013O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
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2.09
2.45
2.70
3.00
3.41
3.83
4.09
4.83
8.34
9.41
11.41
11.68
14.06
21.91
22.51
23.23

Sample Name = **006555-13 B10112 MAK013O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0022.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 8:33:26 PM
Method Version = 172
Calibration Version = 12

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.71		0.00	0.000	978823	1.084	BV	0.10
2	1.78		0.00	0.000	449973	0.498	VV	0.03
3	1.84		0.00	0.000	587019	0.650	VV	0.04
4	2.01		0.00	0.000	5891116	6.525	VV	0.09
5	2.09		0.00	0.000	4879075	5.404	VV	0.05
6	2.25		0.00	0.000	25242220	27.958	VV	0.10
7	2.45		0.00	0.000	15133771	16.762	VV	0.10
8	2.70		0.00	0.000	4541744	5.030	VV	0.09
9	2.85		0.00	0.000	1157840	1.282	VV	0.04
10	2.93		0.00	0.000	1553547	1.721	VV	0.05
11	3.00		0.00	0.000	3628449	4.019	VV	0.11
12	3.21		0.00	0.000	1337118	1.481	VV	0.05
13	3.27		0.00	0.000	1514367	1.677	VV	0.07
14	3.41		0.00	0.000	1680049	1.861	VV	0.07
15	3.51		0.00	0.000	1955431	2.166	VV	0.11
16	3.83		0.00	0.000	3089116	3.421	VV	0.12
17	4.09		0.00	0.000	1084589	1.201	VV	0.06
18	4.22		0.00	0.000	392458	0.435	VV	0.08
19	4.37		0.00	0.000	276465	0.306	VV	0.06
20	4.43		0.00	0.000	464277	0.514	VB	0.08
21	4.64		0.00	0.000	144029	0.160	BB	0.07
22	4.83		0.00	0.000	745198	0.825	BB	0.05
23	5.07		0.00	0.000	280695	0.311	BV	0.07
24	5.23		0.00	0.000	92560	0.103	VV	0.04
25	5.31		0.00	0.000	100485	0.111	VB	0.08
26	5.53		0.00	0.000	26254	0.029	BB	0.05
27	5.76		0.00	0.000	173053	0.192	BV	0.07
28	5.85		0.00	0.000	75604	0.084	VV	0.05
29	5.98		0.00	0.000	74206	0.082	VV	0.05
30	6.09		0.00	0.000	132150	0.146	VV	0.07
31	6.19		0.00	0.000	255243	0.283	VV	0.07
32	6.38		0.00	0.000	28825	0.032	VB	0.05
33	6.47		0.00	0.000	14807	0.016	BV	0.05
34	6.60		0.00	0.000	89917	0.100	VV	0.07
35	6.68		0.00	0.000	144786	0.160	VV	0.08
36	6.89		0.00	0.000	51522	0.057	VV	0.07
37	6.97		0.00	0.000	114422	0.127	VV	0.05
38	7.03		0.00	0.000	259992	0.288	VV	0.07
39	7.21		0.00	0.000	30446	0.034	VV	0.04
40	7.30		0.00	0.000	102845	0.114	VV	0.07
41	7.40		0.00	0.000	69469	0.077	VV	0.05
42	7.58		0.00	0.000	165402	0.183	VV	0.05
43	7.67		0.00	0.000	65683	0.073	VV	0.04
44	7.74		0.00	0.000	108159	0.120	VB	0.05
45	7.92		0.00	0.000	137475	0.152	BV	0.06
46	8.07		0.00	0.000	265718	0.294	VB	0.06
47	8.34	CL4XYL	0.06	42.266	1296544	1.436	BB	0.05
48	8.54		0.00	0.000	79597	0.088	BB	0.05
49	8.78		0.00	0.000	108105	0.120	BB	0.06
50	8.95		0.00	0.000	384674	0.426	BV	0.09
51	9.02		0.00	0.000	330007	0.366	VV	0.06
52	9.19		0.00	0.000	32944	0.036	VV	0.04

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	9.27		0.00	0.000	264588	0.293	VV	0.05
54	9.41		0.00	0.000	672880	0.745	VV	0.07
55	9.53		0.00	0.000	89146	0.099	VV	0.06
56	9.65		0.00	0.000	52401	0.058	VB	0.08
57	9.88	ABHC	0.00	0.886	33886	0.038	BV	0.05
58	10.07		0.00	0.000	41683	0.046	VV	0.09
59	10.20		0.00	0.000	11551	0.013	VV	0.04
60	10.35		0.00	0.000	152371	0.169	VV	0.05
61	10.43		0.00	0.000	53420	0.059	VV	0.05
62	10.52		0.00	0.000	30631	0.034	VB	0.06
63	10.71		0.00	0.000	11945	0.013	BB	0.04
64	10.92	BBHC	0.00	1.135	20693	0.023	BV	0.06
65	11.07		0.00	0.000	34341	0.038	VV	0.06
66	11.20		0.00	0.000	48359	0.054	VV	0.07
67	11.34		0.00	0.000	161095	0.178	VV	0.05
68	11.41		0.00	0.000	1104586	1.223	VV	0.07
69	11.68		0.00	0.000	443823	0.492	VV	0.05
70	11.79		0.00	0.000	158615	0.176	VV	0.07
71	11.94		0.00	0.000	90315	0.100	VV	0.04
72	12.03		0.00	0.000	43690	0.048	VV	0.04
73	12.19		0.00	0.000	61610	0.068	VV	0.05
74	12.32		0.00	0.000	26794	0.030	VV	0.04
75	12.41		0.00	0.000	111980	0.124	VV	0.05
76	12.57		0.00	0.000	121061	0.134	VV	0.05
77	12.73		0.00	0.000	68972	0.076	VV	0.08
78	12.92		0.00	0.000	17038	0.019	VV	0.04
79	13.05		0.00	0.000	3911	0.004	VB	0.04
80	13.29		0.00	0.000	97872	0.108	BV	0.09
81	13.38		0.00	0.000	374377	0.415	VV	0.05
82	13.56		0.00	0.000	78515	0.087	VV	0.05
83	13.69		0.00	0.000	172410	0.191	VV	0.07
84	14.06		0.00	0.000	279573	0.310	VV	0.09
85	14.26		0.00	0.000	67913	0.075	VV	0.13
86	14.47		0.00	0.000	23972	0.027	VV	0.06
87	14.70		0.00	0.000	100125	0.111	VV	0.21
88	15.02		0.00	0.000	24160	0.027	VV	0.08
89	15.16		0.00	0.000	25185	0.028	VV	0.07
90	15.24		0.00	0.000	20877	0.023	VV	0.04
91	15.35		0.00	0.000	21992	0.024	VV	0.07
92	15.48		0.00	0.000	21776	0.024	VV	0.05
93	15.83		0.00	0.000	39220	0.043	VV	0.13
94	15.91		0.00	0.000	14276	0.016	VV	0.04
95	16.03		0.00	0.000	50524	0.056	VV	0.05
96	16.18		0.00	0.000	52732	0.058	VV	0.11
97	16.41	PPDDT	0.00	2.307	50752	0.056	VV	0.16
98	16.58		0.00	0.000	18094	0.020	VV	0.08
99	16.70		0.00	0.000	69838	0.077	VB	0.05
100	17.09		0.00	0.000	122532	0.136	BV	0.26
101	17.26		0.00	0.000	36466	0.040	VV	0.07
102	17.41		0.00	0.000	20539	0.023	VV	0.08
103	17.57		0.00	0.000	44862	0.050	VV	0.06
104	17.76		0.00	0.000	44192	0.049	VV	0.12
105	18.12		0.00	0.000	268627	0.298	VV	0.23
106	18.39		0.00	0.000	22474	0.025	VB	0.08
107	18.93		0.00	0.000	36782	0.041	BB	0.18
108	19.06		0.00	0.000	35378	0.039	BV	0.08
109	19.31		0.00	0.000	116450	0.129	VV	0.20
110	19.45		0.00	0.000	82135	0.091	VV	0.10
111	19.76		0.00	0.000	102819	0.114	VV	0.07
112	20.08		0.00	0.000	113523	0.126	VV	0.27
113	20.60		0.00	0.000	55574	0.062	VV	0.15
114	20.74		0.00	0.000	23119	0.026	VB	0.12
115	21.04		0.00	0.000	30970	0.034	BV	0.16
116	21.15		0.00	0.000	25968	0.029	VV	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	21.31		0.00	0.000	22282	0.025	VV	0.14
118	21.48		0.00	0.000	15600	0.017	VB	0.19
119	21.91	CL10BP	0.08	53.407	1575438	1.745	BB	0.07
120	22.51		0.00	0.000	24771	0.027	BB	0.12
121	22.75		0.00	0.000	43305	0.048	BV	0.08
122	23.23		0.00	0.000	44878	0.050	VB	0.23
123	24.44		0.00	0.000	24050	0.027	BB	0.20

Total Area = 9.028657E+07 Total Height = 1.302611E+07 Total Amount = 0.1536075

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-13 B10112 MAK013O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1031B.0022.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 10/31/13 8:33:26 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 12
Calibration Date = 11/1/13 10:11:05 AM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1296544	19970360	0.065	64.9	25.969		
9.88	ABHC	33886	24905666	0.001	1.4	0.544		UNDER
10.92	BBHC	20693	11867922	0.002	1.7	0.697		UNDER
16.41	PPDDT	50752	14323591	0.004	3.5	1.417		UNDER
21.91	CL10BP	1575438	19204082	0.082	82.0	32.815		

* Linear regression

Checked By: _____ Date: 11/01/13

METHOD BLANK REPORT
ARDL, Inc. 400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006556 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

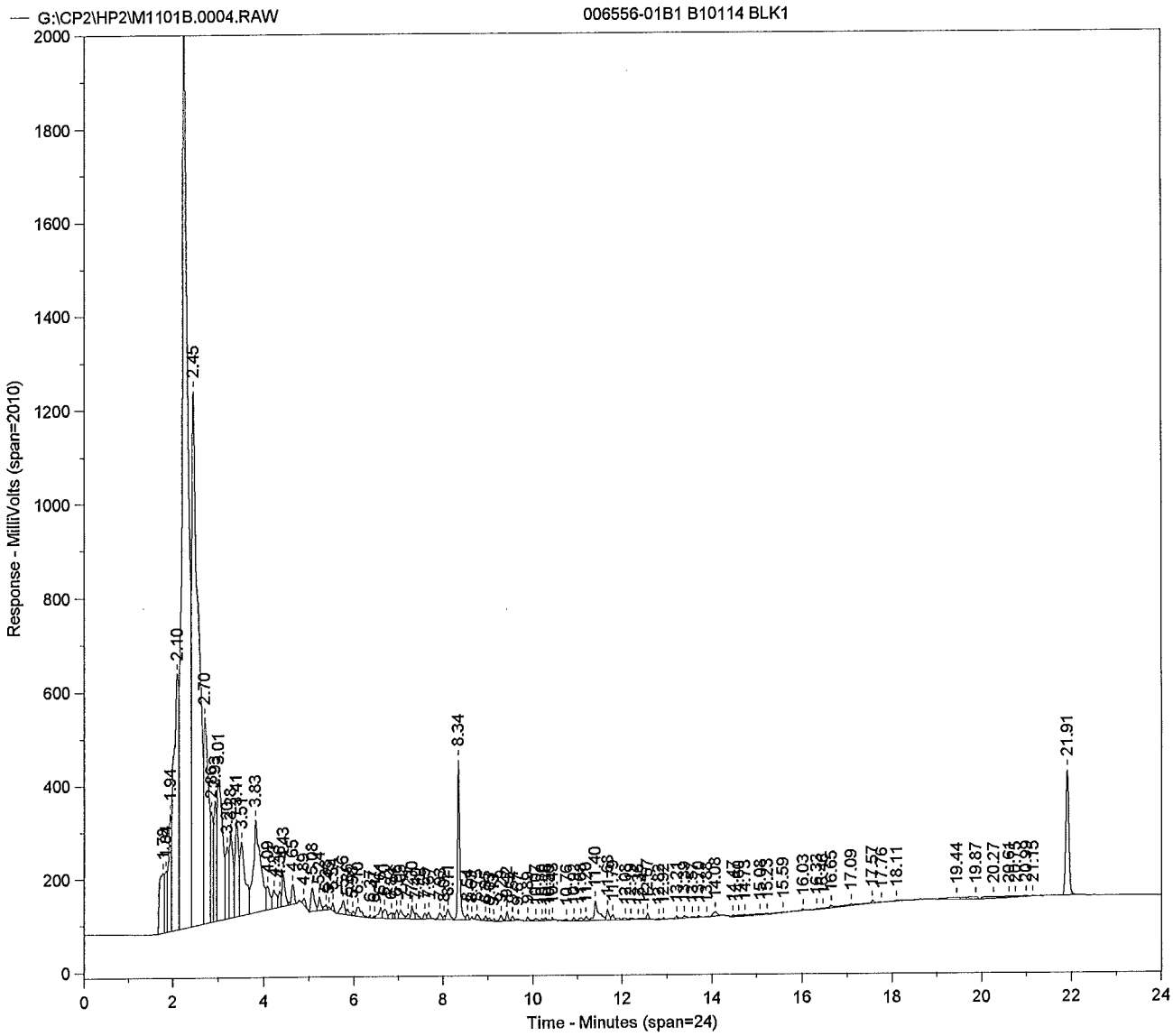
Field ID:	NA	ARDL Lab No.:	006556-01B1
Desc/Location:	NA	Lab Filename:	
Sample Date:	NA	Received Date:	NA
Sample Time:	NA	Prep. Date:	10/31/2013
Matrix:	QC Material	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units
alpha-BHC	4.0	4.0	ND		UG/KG
gamma-BHC (Lindane)	4.0	4.0	ND		UG/KG
delta-BHC	4.0	4.0	ND		UG/KG
Heptachlor	4.0	4.0	ND		UG/KG
Aldrin	4.0	4.0	ND		UG/KG
Heptachlor Epoxide	4.0	4.0	ND		UG/KG
p,p'-DDT	4.0	4.0	ND		UG/KG
beta-BHC	4.0	4.0	ND		UG/KG

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	58%
Decachlorobiphenyl	25-125	66%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Blank for Run B10114, CHLORINATED PESTICIDES (8081) Page 1 of 1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006556-01B1 B10114 BLK1
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2.45
2.10
2.70
1.94
3.01
3.83
8.34
21.91
19.44
19.87
20.27
17.09
18.11
16.03
16.65
15.59
14.08

Sample Name = **006556-01B1 B10114 BLK1**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0004.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 10:52:06 AM
Method Version = 172
Calibration Version = 13

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.78		0.00	0.000	1015838	1.747	BV	0.14
2	1.84		0.00	0.000	490342	0.843	VV	0.05
3	1.94		0.00	0.000	1200694	2.065	VV	0.06
4	2.10		0.00	0.000	4279392	7.360	VV	0.10
5	2.25		0.00	0.000	18352450	31.562	VV	0.10
6	2.45		0.00	0.000	11235799	19.323	VV	0.10
7	2.70		0.00	0.000	3370201	5.796	VV	0.09
8	2.86		0.00	0.000	862135	1.483	VV	0.04
9	2.93		0.00	0.000	955505	1.643	VV	0.05
10	3.01		0.00	0.000	2514171	4.324	VV	0.12
11	3.20		0.00	0.000	786057	1.352	VV	0.05
12	3.28		0.00	0.000	1039854	1.788	VV	0.07
13	3.41		0.00	0.000	1181740	2.032	VV	0.06
14	3.51		0.00	0.000	1246025	2.143	VV	0.09
15	3.83		0.00	0.000	2270810	3.905	VV	0.12
16	4.09		0.00	0.000	308436	0.530	VV	0.07
17	4.23		0.00	0.000	240205	0.413	VV	0.07
18	4.36		0.00	0.000	132049	0.227	VV	0.05
19	4.43		0.00	0.000	326792	0.562	VV	0.06
20	4.65		0.00	0.000	175217	0.301	VB	0.07
21	4.89		0.00	0.000	56472	0.097	BB	0.10
22	5.08		0.00	0.000	263169	0.453	BV	0.08
23	5.24		0.00	0.000	113616	0.195	VV	0.05
24	5.38		0.00	0.000	44154	0.076	VV	0.04
25	5.45		0.00	0.000	15306	0.026	VB	0.06
26	5.54		0.00	0.000	42600	0.073	BB	0.06
27	5.76		0.00	0.000	158267	0.272	BV	0.07
28	5.86		0.00	0.000	54409	0.094	VV	0.05
29	5.98		0.00	0.000	36652	0.063	VV	0.05
30	6.10		0.00	0.000	156639	0.269	VV	0.13
31	6.37		0.00	0.000	15389	0.026	VB	0.05
32	6.47		0.00	0.000	14508	0.025	BV	0.05
33	6.61		0.00	0.000	113733	0.196	VV	0.06
34	6.70		0.00	0.000	112868	0.194	VV	0.09
35	6.84		0.00	0.000	57894	0.100	VV	0.07
36	6.96		0.00	0.000	67927	0.117	VV	0.04
37	7.05		0.00	0.000	98036	0.169	VV	0.07
38	7.21		0.00	0.000	47878	0.082	VV	0.05
39	7.30		0.00	0.000	108254	0.186	VV	0.05
40	7.40		0.00	0.000	55547	0.096	VB	0.07
41	7.59		0.00	0.000	44212	0.076	BV	0.07
42	7.67		0.00	0.000	48399	0.083	VB	0.06
43	7.93		0.00	0.000	67273	0.116	BV	0.08
44	8.02		0.00	0.000	22491	0.039	VV	0.04
45	8.11		0.00	0.000	114103	0.196	VV	0.08
46	8.34	CL4XYL	0.06	46.424	1156379	1.989	VV	0.05
47	8.54		0.00	0.000	38718	0.067	VB	0.07
48	8.63		0.00	0.000	1401	0.002	BB	0.02
49	8.75		0.00	0.000	56668	0.097	BB	0.09
50	8.95		0.00	0.000	34042	0.059	BV	0.04
51	9.03		0.00	0.000	18360	0.032	VV	0.07
52	9.13		0.00	0.000	12133	0.021	VB	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	9.29		0.00	0.000	52178	0.090	BV	0.07
54	9.42		0.00	0.000	61058	0.105	VV	0.04
55	9.54		0.00	0.000	27368	0.047	VV	0.04
56	9.67		0.00	0.000	12171	0.021	VB	0.07
57	9.89		0.00	0.000	35855	0.062	BV	0.05
58	10.07		0.00	0.000	34124	0.059	VB	0.14
59	10.20		0.00	0.000	10780	0.019	BV	0.05
60	10.28		0.00	0.000	17637	0.030	VV	0.05
61	10.36		0.00	0.000	4620	0.008	VB	0.04
62	10.43		0.00	0.000	11008	0.019	BB	0.04
63	10.76	LINDANE	0.00	0.564	16249	0.028	BB	0.09
64	10.92		0.00	0.000	20383	0.035	BV	0.05
65	11.08		0.00	0.000	30747	0.053	VV	0.08
66	11.20		0.00	0.000	36615	0.063	VV	0.05
67	11.40		0.00	0.000	279888	0.481	VV	0.06
68	11.68		0.00	0.000	88734	0.153	VV	0.05
69	11.79		0.00	0.000	46388	0.080	VV	0.05
70	12.08		0.00	0.000	17641	0.030	VV	0.08
71	12.19		0.00	0.000	22134	0.038	VV	0.11
72	12.36		0.00	0.000	7307	0.013	VV	0.08
73	12.47	ALDRN	0.00	0.296	7968	0.014	VV	0.05
74	12.57		0.00	0.000	37388	0.064	VB	0.05
75	12.82		0.00	0.000	9837	0.017	BV	0.11
76	12.92		0.00	0.000	6778	0.012	VB	0.05
77	13.21		0.00	0.000	17556	0.030	BV	0.05
78	13.39		0.00	0.000	26706	0.046	VB	0.09
79	13.57		0.00	0.000	12018	0.021	BV	0.07
80	13.70		0.00	0.000	15288	0.026	VV	0.06
81	13.88		0.00	0.000	2523	0.004	VB	0.10
82	14.08		0.00	0.000	59938	0.103	BB	0.13
83	14.47		0.00	0.000	14141	0.024	BV	0.09
84	14.60		0.00	0.000	16542	0.028	VV	0.09
85	14.73		0.00	0.000	15816	0.027	VV	0.10
86	15.08		0.00	0.000	33469	0.058	VV	0.16
87	15.23		0.00	0.000	10906	0.019	VB	0.07
88	15.59		0.00	0.000	19719	0.034	BV	0.27
89	16.03		0.00	0.000	12725	0.022	VB	0.13
90	16.33		0.00	0.000	10429	0.018	BV	0.08
91	16.46		0.00	0.000	10877	0.019	VV	0.09
92	16.65		0.00	0.000	31968	0.055	VV	0.10
93	17.09		0.00	0.000	50028	0.086	VV	0.21
94	17.57		0.00	0.000	55849	0.096	VV	0.09
95	17.76		0.00	0.000	3031	0.005	VB	0.09
96	18.11		0.00	0.000	3576	0.006	BB	0.09
97	19.44		0.00	0.000	98090	0.169	BV	0.47
98	19.87		0.00	0.000	68115	0.117	VB	0.25
99	20.27		0.00	0.000	97994	0.169	BV	0.44
100	20.61		0.00	0.000	27317	0.047	VV	0.12
101	20.75		0.00	0.000	20665	0.036	VV	0.14
102	20.99		0.00	0.000	18309	0.031	VV	0.10
103	21.15		0.00	0.000	4044	0.007	VB	0.07
104	21.91	CL10BP	0.07	52.716	1262736	2.172	BB	0.07

Total Area = 5.814642E+07 Total Height = 7864987 Total Amount = 0.1247305

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006556-01B1 B10114 BLK1**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0004.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 10:52:06 AM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 13
Calibration Date = 11/1/13 10:22:42 AM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1156379	19970360	0.058	57.9	23.162		
10.76	LINDANE	16249	23099646	0.001	0.7	0.281		UNDER
12.47	ALDRN	7968	21601050	0.000	0.4	0.148		UNDER
21.91	CL10BP	1262736	19204082	0.066	65.8	26.301		

* Linear regression

Checked By: _____ Date: 11/01/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006556 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

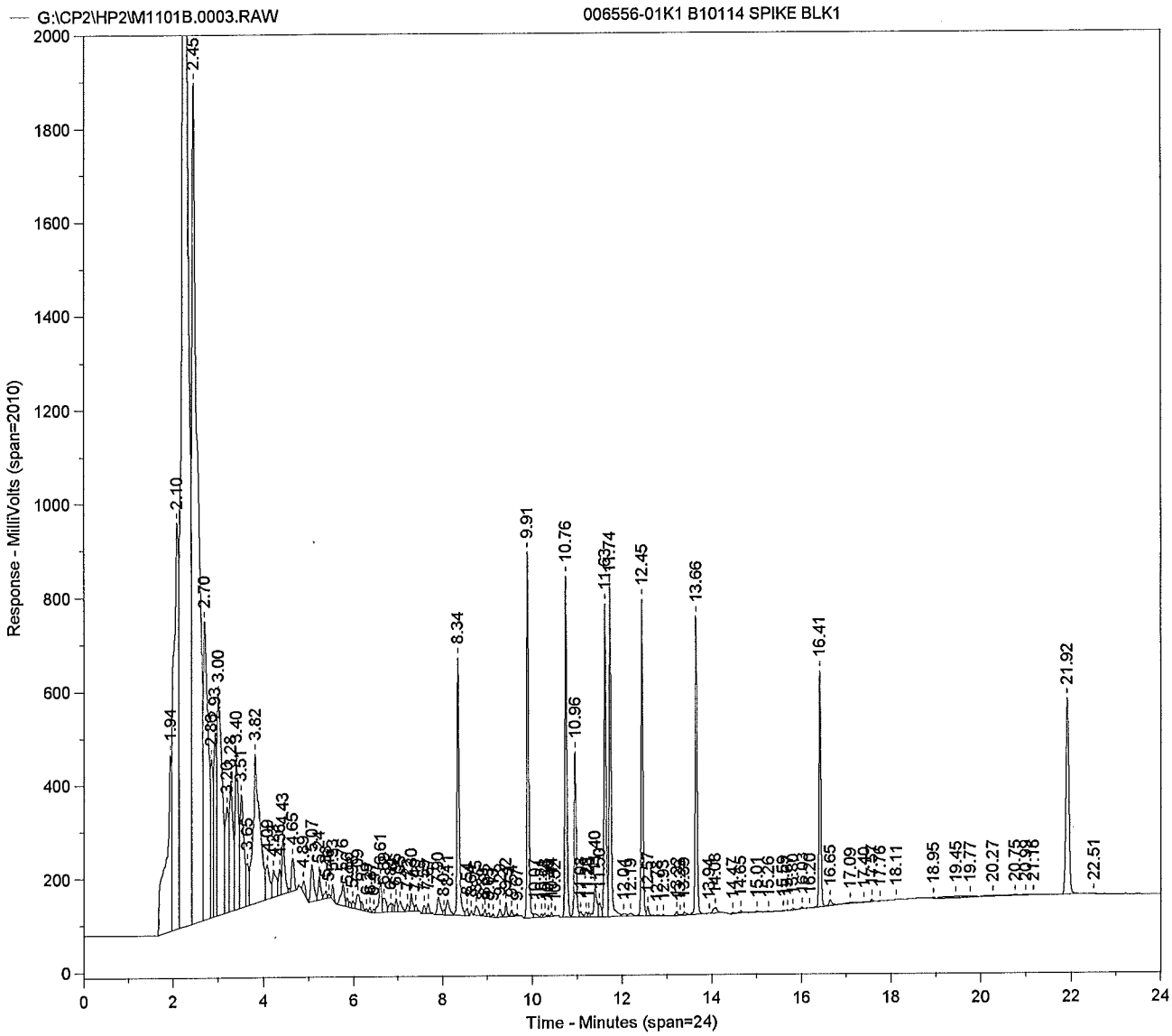
Field ID:	NA	ARDL Lab No.:	006556-01K1
Desc/Location:	NA	Lab Filename:	
Sample Date:	NA	Received Date:	NA
Sample Time:	NA	Prep. Date:	10/31/2013
Matrix:	QC Material	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units
alpha-BHC	4	4	35.5		UG/KG
gamma-BHC (Lindane)	4	4	35.3		UG/KG
delta-BHC	4	4	38		UG/KG
Heptachlor	4	4	37.7		UG/KG
Aldrin	4	4	35		UG/KG
Heptachlor Epoxide	4	4	32		UG/KG
p,p'-DDT	4	4	38.7		UG/KG
beta-BHC	4	4	36.3		UG/KG

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	89%
Decachlorobiphenyl	25-125	101%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Spike Blank for Run B10114, CHLORINATED PESTICIDES (8081)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006556-01K1 B10114 SPIKE BLK1
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2.45
2.10
1.94
2.70
3.00
3.82
3.40
8.34
9.91
10.76
10.96
12.45
13.66
16.41
21.92
22.51

Sample Name = **006556-01K1 B10114 SPIKE BLK1**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0003.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 10:21:49 AM
Method Version = 172
Calibration Version = 13

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.94		0.00	0.000	3355361	3.385	BV	0.08
2	2.10		0.00	0.000	6874934	6.936	VV	0.10
3	2.25		0.00	0.000	26814170	27.051	VV	0.09
4	2.45		0.00	0.000	16495719	16.642	VV	0.09
5	2.70		0.00	0.000	4728044	4.770	VV	0.09
6	2.86		0.00	0.000	1218907	1.230	VV	0.05
7	2.93		0.00	0.000	1482615	1.496	VV	0.05
8	3.00		0.00	0.000	3636509	3.669	VV	0.11
9	3.20		0.00	0.000	1214269	1.225	VV	0.07
10	3.28		0.00	0.000	1533837	1.547	VV	0.06
11	3.40		0.00	0.000	1753228	1.769	VV	0.06
12	3.51		0.00	0.000	1451866	1.465	VV	0.08
13	3.65		0.00	0.000	378651	0.382	VV	0.06
14	3.82		0.00	0.000	3433319	3.464	VV	0.12
15	4.09		0.00	0.000	430749	0.435	VV	0.07
16	4.23		0.00	0.000	357585	0.361	VV	0.07
17	4.36		0.00	0.000	203049	0.205	VV	0.05
18	4.43		0.00	0.000	514819	0.519	VV	0.06
19	4.65		0.00	0.000	290465	0.293	VB	0.07
20	4.89		0.00	0.000	94924	0.096	BB	0.10
21	5.07		0.00	0.000	382114	0.385	BV	0.08
22	5.24		0.00	0.000	197009	0.199	VV	0.05
23	5.38		0.00	0.000	67646	0.068	VV	0.06
24	5.46		0.00	0.000	21602	0.022	VB	0.05
25	5.53		0.00	0.000	86482	0.087	BB	0.05
26	5.76		0.00	0.000	251012	0.253	BV	0.07
27	5.86		0.00	0.000	58336	0.059	VV	0.03
28	5.98		0.00	0.000	57110	0.058	VV	0.05
29	6.09		0.00	0.000	169563	0.171	VV	0.08
30	6.29		0.00	0.000	16683	0.017	VV	0.05
31	6.37		0.00	0.000	26881	0.027	VB	0.06
32	6.47		0.00	0.000	21216	0.021	BV	0.05
33	6.61		0.00	0.000	295438	0.298	VV	0.05
34	6.69		0.00	0.000	160180	0.162	VV	0.08
35	6.84		0.00	0.000	88902	0.090	VV	0.08
36	6.96		0.00	0.000	91098	0.092	VV	0.04
37	7.05		0.00	0.000	106037	0.107	VV	0.07
38	7.22		0.00	0.000	60696	0.061	VV	0.05
39	7.30		0.00	0.000	131414	0.133	VV	0.04
40	7.40		0.00	0.000	44123	0.045	VB	0.06
41	7.59		0.00	0.000	62596	0.063	BV	0.07
42	7.67		0.00	0.000	72125	0.073	VB	0.06
43	7.90		0.00	0.000	183732	0.185	BV	0.08
44	8.02		0.00	0.000	27762	0.028	VV	0.03
45	8.11		0.00	0.000	167732	0.169	VV	0.07
46	8.34	CL4XYL	0.09	9.764	1777790	1.794	VV	0.05
47	8.54		0.00	0.000	54647	0.055	VB	0.08
48	8.64		0.00	0.000	2950	0.003	BB	0.03
49	8.75		0.00	0.000	99824	0.101	BV	0.09
50	8.89		0.00	0.000	9881	0.010	VV	0.04
51	8.95		0.00	0.000	40503	0.041	VV	0.04
52	9.03		0.00	0.000	26702	0.027	VV	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	9.13		0.00	0.000	17733	0.018	VB	0.05
54	9.29		0.00	0.000	66966	0.068	BV	0.06
55	9.42		0.00	0.000	95072	0.096	VV	0.04
56	9.54		0.00	0.000	38807	0.039	VV	0.04
57	9.67		0.00	0.000	16923	0.017	VB	0.06
58	9.91	ABHC	0.09	9.744	2212417	2.232	BV	0.04
59	10.07		0.00	0.000	42517	0.043	VB	0.11
60	10.21		0.00	0.000	17243	0.017	BV	0.05
61	10.28		0.00	0.000	26282	0.027	VV	0.05
62	10.36		0.00	0.000	7103	0.007	VB	0.04
63	10.44		0.00	0.000	17018	0.017	BV	0.04
64	10.52		0.00	0.000	3825	0.004	VB	0.04
65	10.76	LINDANE	0.09	9.690	2040708	2.059	BV	0.04
66	10.96	BBHC	0.09	9.957	1077309	1.087	VV	0.04
67	11.08		0.00	0.000	45749	0.046	VV	0.06
68	11.20		0.00	0.000	33487	0.034	VV	0.05
69	11.26		0.00	0.000	27719	0.028	VV	0.03
70	11.40		0.00	0.000	295996	0.299	VV	0.06
71	11.50		0.00	0.000	121093	0.122	VV	0.06
72	11.63	DBHC	0.09	10.417	1957928	1.975	VV	0.04
73	11.74	HPCL	0.09	10.327	2127553	2.146	VV	0.04
74	12.04		0.00	0.000	39066	0.039	VV	0.09
75	12.19		0.00	0.000	45601	0.046	VV	0.12
76	12.45	ALDRN	0.09	9.595	1889517	1.906	VV	0.04
77	12.57		0.00	0.000	70783	0.071	VV	0.05
78	12.78		0.00	0.000	8561	0.009	VB	0.09
79	12.93		0.00	0.000	6581	0.007	BB	0.04
80	13.22		0.00	0.000	27483	0.028	BV	0.05
81	13.29		0.00	0.000	6166	0.006	VV	0.03
82	13.39		0.00	0.000	30590	0.031	VV	0.08
83	13.66	HPCLE	0.08	8.778	1788484	1.804	VV	0.04
84	13.94		0.00	0.000	2326	0.002	VB	0.05
85	14.08		0.00	0.000	68672	0.069	BB	0.11
86	14.47		0.00	0.000	8374	0.008	BV	0.08
87	14.65		0.00	0.000	14518	0.015	VB	0.05
88	15.01		0.00	0.000	5043	0.005	BB	0.05
89	15.26		0.00	0.000	2767	0.003	BB	0.07
90	15.59		0.00	0.000	1933	0.002	BV	0.07
91	15.67		0.00	0.000	2543	0.003	VB	0.05
92	15.80		0.00	0.000	11353	0.011	BB	0.06
93	16.03		0.00	0.000	16278	0.016	BV	0.08
94	16.20		0.00	0.000	2063	0.002	VB	0.04
95	16.41	PPDDT	0.10	10.618	1386627	1.399	BV	0.04
96	16.65		0.00	0.000	55350	0.056	VB	0.06
97	17.09		0.00	0.000	17910	0.018	BV	0.18
98	17.40		0.00	0.000	15733	0.016	VV	0.11
99	17.57		0.00	0.000	18501	0.019	VV	0.05
100	17.76		0.00	0.000	7492	0.008	VV	0.09
101	18.11		0.00	0.000	5244	0.005	VB	0.12
102	18.95		0.00	0.000	12337	0.012	BB	0.18
103	19.45		0.00	0.000	88388	0.089	BV	0.46
104	19.77		0.00	0.000	33579	0.034	VV	0.15
105	20.27		0.00	0.000	45258	0.046	VV	0.32
106	20.75		0.00	0.000	12885	0.013	VV	0.10
107	20.99		0.00	0.000	10246	0.010	VV	0.07
108	21.16		0.00	0.000	3453	0.003	VB	0.06
109	21.92	CL10BP	0.10	11.111	1945396	1.963	BB	0.07
110	22.51		0.00	0.000	4413	0.004	BB	0.09

Total Area = 9.912382E+07 Total Height = 1.696183E+07 Total Amount = 0.9117026

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006556-01K1 B10114 SPIKE BLK1**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0003.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 10:21:49 AM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 13
Calibration Date = 11/1/13 10:22:42 AM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD
8.34	CL4XYL	1777790	19970360	0.089	89.0	35.609	
9.91	ABHC	2212417	24905666	0.089	88.8	35.533	
10.76	LINDANE	2040708	23099646	0.088	88.3	35.337	
10.96	BBHC	1077309	11867922	0.091	90.8	36.310	
11.63	DBHC	1957928	20616462	0.095	95.0	37.988	
11.74	HPCL	2127553	22596580	0.094	94.2	37.662	
12.45	ALDRN	1889517	21601050	0.087	87.5	34.989	
13.66	HPCLE	1788484	22348770	0.080	80.0	32.010	
16.41	PPDDT	1386627	14323591	0.097	96.8	38.723	
21.92	CL10BP	1945396	19204082	0.101	101.3	40.520	

* Linear regression

Checked By: BJ Date: 11/01/17

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

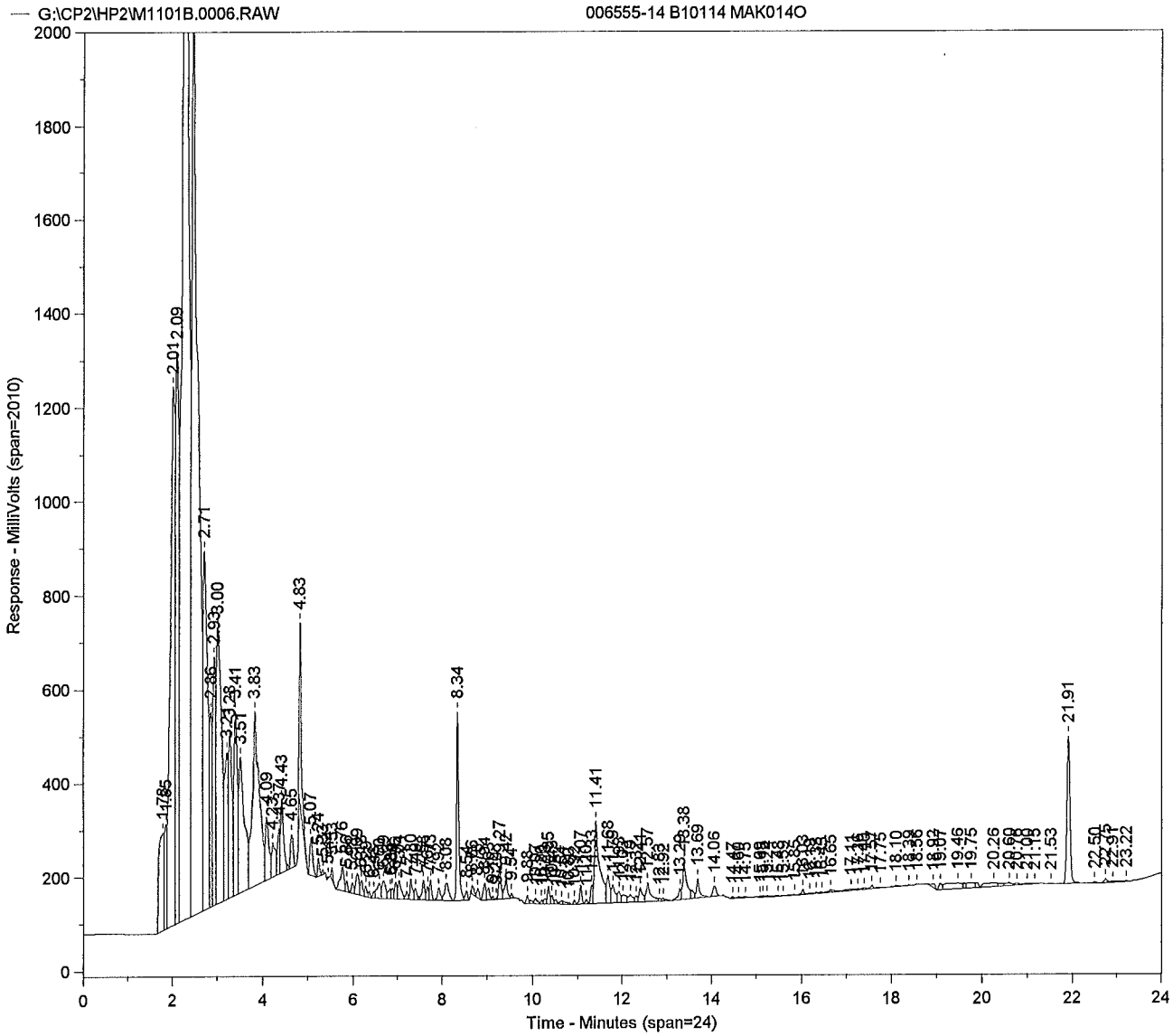
Field ID:	MAK014O	ARDL Lab No.:	006555-14
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/23/2013	Received Date:	10/23/2013
Sample Time:	0820	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	67%
Decachlorobiphenyl	25-125	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-14, CHLORINATED PESTICIDES (8081) Page 1 of 1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006555-14 B10114 MAK014O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2.09
2.71
3.00
3.83
4.83
8.34
11.41
21.91

Sample Name = **006555-14 B10114 MAK014O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0006.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 11:53:05 AM
Method Version = 172
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.78		0.00	0.000	1685342	1.542	BV	0.14
2	1.85		0.00	0.000	826932	0.757	VV	0.04
3	2.01		0.00	0.000	8106897	7.418	VV	0.10
4	2.09		0.00	0.000	6148421	5.626	VV	0.05
5	2.25		0.00	0.000	30435750	27.849	VV	0.08
6	2.45		0.00	0.000	19061648	17.442	VV	0.09
7	2.71		0.00	0.000	5719708	5.234	VV	0.09
8	2.86		0.00	0.000	1368517	1.252	VV	0.03
9	2.93		0.00	0.000	2183028	1.997	VV	0.05
10	3.00		0.00	0.000	4680046	4.282	VV	0.11
11	3.21		0.00	0.000	1685871	1.543	VV	0.05
12	3.28		0.00	0.000	1974573	1.807	VV	0.07
13	3.41		0.00	0.000	2219756	2.031	VV	0.06
14	3.51		0.00	0.000	2400691	2.197	VV	0.10
15	3.83		0.00	0.000	4019463	3.678	VV	0.12
16	4.09		0.00	0.000	779519	0.713	VV	0.06
17	4.23		0.00	0.000	457511	0.419	VV	0.07
18	4.37		0.00	0.000	363257	0.332	VV	0.05
19	4.43		0.00	0.000	706317	0.646	VV	0.07
20	4.65		0.00	0.000	285849	0.262	VB	0.07
21	4.83		0.00	0.000	1174267	1.074	BB	0.05
22	5.07		0.00	0.000	351382	0.322	BB	0.07
23	5.24		0.00	0.000	105641	0.097	BV	0.05
24	5.33		0.00	0.000	27318	0.025	VB	0.04
25	5.44		0.00	0.000	5477	0.005	BB	0.03
26	5.53		0.00	0.000	59758	0.055	BB	0.06
27	5.76		0.00	0.000	285746	0.261	BV	0.07
28	5.86		0.00	0.000	69944	0.064	VV	0.06
29	5.98		0.00	0.000	80098	0.073	VV	0.06
30	6.09		0.00	0.000	217050	0.199	VV	0.07
31	6.18		0.00	0.000	132437	0.121	VV	0.07
32	6.29		0.00	0.000	76440	0.070	VV	0.04
33	6.37		0.00	0.000	37115	0.034	VB	0.05
34	6.48		0.00	0.000	43112	0.039	BV	0.05
35	6.60		0.00	0.000	195026	0.178	VV	0.08
36	6.69		0.00	0.000	221558	0.203	VV	0.09
37	6.84		0.00	0.000	93866	0.086	VV	0.04
38	6.89		0.00	0.000	64743	0.059	VV	0.04
39	6.96		0.00	0.000	128674	0.118	VV	0.05
40	7.04		0.00	0.000	199921	0.183	VV	0.08
41	7.21		0.00	0.000	62040	0.057	VV	0.04
42	7.30		0.00	0.000	166334	0.152	VV	0.05
43	7.40		0.00	0.000	84395	0.077	VV	0.06
44	7.58		0.00	0.000	167388	0.153	VV	0.05
45	7.67		0.00	0.000	96240	0.088	VV	0.04
46	7.73		0.00	0.000	122621	0.112	VB	0.05
47	7.92		0.00	0.000	123776	0.113	BV	0.07
48	8.08		0.00	0.000	256532	0.235	VB	0.10
49	8.34	CL4XYL	0.07	45.948	1345883	1.231	BV	0.05
50	8.54		0.00	0.000	71168	0.065	VB	0.06
51	8.66		0.00	0.000	71984	0.066	BV	0.06
52	8.78		0.00	0.000	73915	0.068	VB	0.08

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	8.94		0.00	0.000	154307	0.141	BV	0.08
54	9.03		0.00	0.000	98397	0.090	VV	0.07
55	9.12		0.00	0.000	17042	0.016	VB	0.06
56	9.20		0.00	0.000	5187	0.005	BV	0.03
57	9.27		0.00	0.000	262152	0.240	VV	0.06
58	9.42		0.00	0.000	198641	0.182	VV	0.06
59	9.54		0.00	0.000	25170	0.023	VB	0.04
60	9.88	ABHC	0.00	1.373	50149	0.046	BV	0.05
61	10.07		0.00	0.000	50492	0.046	VV	0.07
62	10.20		0.00	0.000	19418	0.018	VV	0.04
63	10.28		0.00	0.000	40795	0.037	VV	0.05
64	10.35		0.00	0.000	129639	0.119	VV	0.05
65	10.43		0.00	0.000	60733	0.056	VV	0.05
66	10.52		0.00	0.000	35608	0.033	VV	0.06
67	10.64		0.00	0.000	33508	0.031	VV	0.07
68	10.80		0.00	0.000	12256	0.011	VB	0.05
69	10.92		0.00	0.000	27430	0.025	BV	0.05
70	11.07		0.00	0.000	139880	0.128	VV	0.05
71	11.20		0.00	0.000	32283	0.030	VV	0.04
72	11.33		0.00	0.000	148599	0.136	VV	0.06
73	11.41		0.00	0.000	1383965	1.266	VV	0.07
74	11.68		0.00	0.000	302315	0.277	VV	0.06
75	11.79		0.00	0.000	219630	0.201	VV	0.07
76	11.93		0.00	0.000	123815	0.113	VV	0.05
77	12.03		0.00	0.000	114677	0.105	VV	0.11
78	12.19		0.00	0.000	109196	0.100	VV	0.06
79	12.32		0.00	0.000	50638	0.046	VV	0.06
80	12.41		0.00	0.000	149554	0.137	VV	0.05
81	12.57		0.00	0.000	276256	0.253	VV	0.06
82	12.83		0.00	0.000	22886	0.021	VV	0.05
83	12.92		0.00	0.000	29270	0.027	VB	0.07
84	13.29		0.00	0.000	95803	0.088	BV	0.06
85	13.38		0.00	0.000	504129	0.461	VV	0.06
86	13.69		0.00	0.000	198026	0.181	VV	0.06
87	14.06		0.00	0.000	117699	0.108	VB	0.09
88	14.47		0.00	0.000	10939	0.010	BV	0.07
89	14.60		0.00	0.000	10146	0.009	VV	0.06
90	14.75		0.00	0.000	10057	0.009	VB	0.10
91	15.09		0.00	0.000	4927	0.005	BV	0.05
92	15.15		0.00	0.000	6869	0.006	VV	0.04
93	15.24		0.00	0.000	8474	0.008	VV	0.05
94	15.48		0.00	0.000	9966	0.009	VB	0.12
95	15.59		0.00	0.000	2587	0.002	BB	0.07
96	15.85		0.00	0.000	9833	0.009	BB	0.17
97	16.03		0.00	0.000	36016	0.033	BV	0.05
98	16.19		0.00	0.000	5887	0.005	VV	0.05
99	16.33		0.00	0.000	9795	0.009	VV	0.07
100	16.45		0.00	0.000	8882	0.008	VV	0.08
101	16.65		0.00	0.000	24401	0.022	VV	0.06
102	17.11		0.00	0.000	47327	0.043	VV	0.14
103	17.26		0.00	0.000	19336	0.018	VV	0.10
104	17.40		0.00	0.000	21006	0.019	VV	0.11
105	17.57		0.00	0.000	28804	0.026	VV	0.05
106	17.75		0.00	0.000	13751	0.013	VV	0.08
107	18.10		0.00	0.000	17898	0.016	VV	0.16
108	18.39		0.00	0.000	6445	0.006	VB	0.13
109	18.56		0.00	0.000	3206	0.003	BB	0.07
110	18.92		0.00	0.000	53147	0.049	BB	0.17
111	19.07		0.00	0.000	62077	0.057	BV	0.09
112	19.46		0.00	0.000	302089	0.276	VV	0.40
113	19.75		0.00	0.000	120169	0.110	VV	0.08
114	20.26		0.00	0.000	150132	0.137	VV	0.34
115	20.60		0.00	0.000	51373	0.047	VV	0.15
116	20.76		0.00	0.000	23866	0.022	VV	0.10

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	21.00		0.00	0.000	22954	0.021	VV	0.18
118	21.15		0.00	0.000	7972	0.007	VB	0.06
119	21.53		0.00	0.000	10200	0.009	BB	0.25
120	21.91	CL10BP	0.08	52.679	1483840	1.358	BB	0.07
121	22.50		0.00	0.000	10843	0.010	BB	0.08
122	22.75		0.00	0.000	41095	0.038	BV	0.09
123	22.91		0.00	0.000	17720	0.016	VV	0.14
124	23.22		0.00	0.000	17073	0.016	VB	0.11
125	24.44		0.00	0.000	37341	0.034	BB	0.22

Total Area = 1.092889E+08 Total Height = 1.592386E+07 Total Amount = 0.1466745

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-14 B10114 MAK014O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0006.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 11:53:05 AM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 14
Calibration Date = 11/1/13 1:28:12 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1345883	19970360	0.067	67.4	26.958		
9.88	ABHC	50149	24905666	0.002	2.0	0.805		UNDER
21.91	CL10BP	1483840	19204082	0.077	77.3	30.907		

* Linear regression

Checked By: ABT Date: 11/01/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

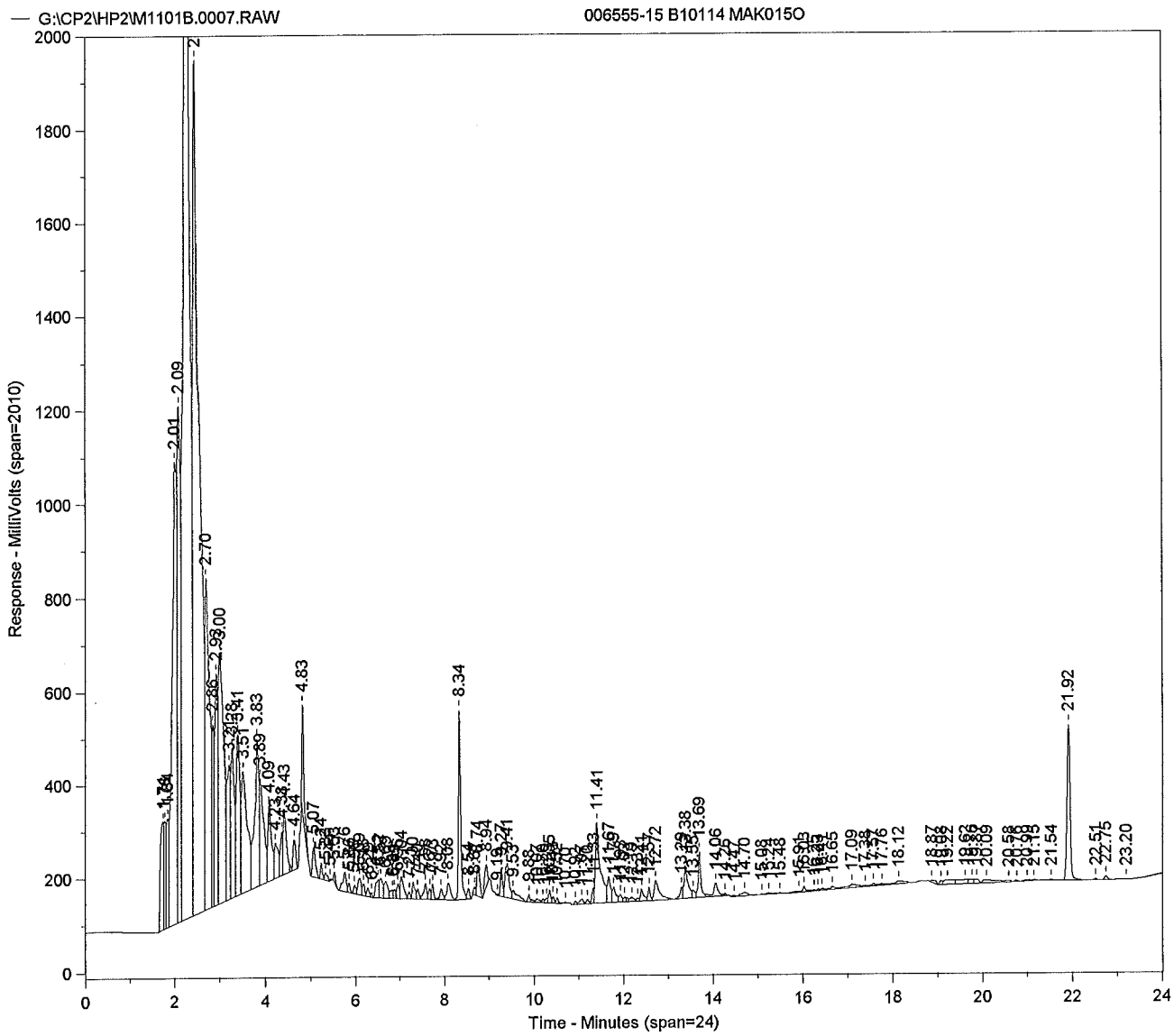
Field ID:	MAK015O	ARDL Lab No.:	006555-15
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/22/2013	Received Date:	10/23/2013
Sample Time:	0830	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	71%
Decachlorobiphenyl	25-125	82%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-15, CHLORINATED PESTICIDES (8081) Page 1 of 1


G:\CP2\HP2\M1101B.0007.RAW
006555-15 B10114 MAK015O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2.09
2.01
2.70
4.83
8.34
11.41
13.69
21.92
22.51
23.20

Sample Name = **006555-15 B10114 MAK015O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0007.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 12:23:24 PM
Method Version = 172
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	1165419	1.141	BV	0.09
2	1.78		0.00	0.000	771892	0.756	VV	0.04
3	1.84		0.00	0.000	827322	0.810	VV	0.05
4	2.01		0.00	0.000	6989689	6.843	VV	0.09
5	2.09		0.00	0.000	5773057	5.652	VV	0.05
6	2.25		0.00	0.000	27993920	27.407	VV	0.09
7	2.45		0.00	0.000	17642462	17.273	VV	0.09
8	2.70		0.00	0.000	5346820	5.235	VV	0.09
9	2.86		0.00	0.000	1141626	1.118	VV	0.03
10	2.93		0.00	0.000	2122954	2.078	VV	0.05
11	3.00		0.00	0.000	4407006	4.315	VV	0.11
12	3.21		0.00	0.000	1573579	1.541	VV	0.05
13	3.28		0.00	0.000	1825304	1.787	VV	0.07
14	3.41		0.00	0.000	2013402	1.971	VV	0.06
15	3.51		0.00	0.000	2242140	2.195	VV	0.10
16	3.83		0.00	0.000	2093991	2.050	VV	0.08
17	3.89		0.00	0.000	1466014	1.435	VV	0.08
18	4.09		0.00	0.000	937358	0.918	VV	0.06
19	4.23		0.00	0.000	473541	0.464	VV	0.08
20	4.38		0.00	0.000	349824	0.342	VV	0.05
21	4.43		0.00	0.000	656528	0.643	VV	0.07
22	4.64		0.00	0.000	259896	0.254	VB	0.07
23	4.83		0.00	0.000	649115	0.636	BB	0.05
24	5.07		0.00	0.000	292459	0.286	BV	0.07
25	5.24		0.00	0.000	101886	0.100	VV	0.04
26	5.33		0.00	0.000	77090	0.075	VB	0.11
27	5.44		0.00	0.000	5772	0.006	BB	0.03
28	5.53		0.00	0.000	48906	0.048	BB	0.06
29	5.76		0.00	0.000	238976	0.234	BV	0.07
30	5.86		0.00	0.000	62400	0.061	VV	0.05
31	5.98		0.00	0.000	67185	0.066	VV	0.06
32	6.09		0.00	0.000	182252	0.178	VV	0.08
33	6.18		0.00	0.000	101806	0.100	VV	0.06
34	6.29		0.00	0.000	69725	0.068	VV	0.04
35	6.37		0.00	0.000	26177	0.026	VB	0.05
36	6.52		0.00	0.000	208670	0.204	BV	0.09
37	6.57		0.00	0.000	212192	0.208	VV	0.07
38	6.69		0.00	0.000	217037	0.212	VV	0.09
39	6.84		0.00	0.000	85175	0.083	VV	0.04
40	6.89		0.00	0.000	61674	0.060	VV	0.04
41	6.96		0.00	0.000	106517	0.104	VV	0.05
42	7.04		0.00	0.000	259060	0.254	VV	0.07
43	7.21		0.00	0.000	54914	0.054	VV	0.04
44	7.30		0.00	0.000	146220	0.143	VV	0.06
45	7.40		0.00	0.000	81716	0.080	VV	0.06
46	7.58		0.00	0.000	167165	0.164	VV	0.05
47	7.67		0.00	0.000	78668	0.077	VV	0.04
48	7.73		0.00	0.000	95867	0.094	VV	0.05
49	7.92		0.00	0.000	113005	0.111	VV	0.07
50	8.08		0.00	0.000	228457	0.224	VB	0.09
51	8.34	CL4XYL	0.07	45.461	1420231	1.390	BV	0.05
52	8.54		0.00	0.000	78333	0.077	VB	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	8.67		0.00	0.000	46324	0.045	BV	0.05
54	8.74		0.00	0.000	303783	0.297	VB	0.08
55	8.94		0.00	0.000	214405	0.210	BB	0.11
56	9.19		0.00	0.000	4901	0.005	BV	0.03
57	9.27		0.00	0.000	199862	0.196	VV	0.06
58	9.41		0.00	0.000	459286	0.450	VV	0.09
59	9.53		0.00	0.000	161527	0.158	VB	0.17
60	9.88	ABHC	0.00	1.182	46045	0.045	BV	0.05
61	10.07		0.00	0.000	41672	0.041	VV	0.05
62	10.20		0.00	0.000	21549	0.021	VV	0.03
63	10.29		0.00	0.000	35343	0.035	VV	0.05
64	10.35		0.00	0.000	96268	0.094	VV	0.04
65	10.43		0.00	0.000	40676	0.040	VV	0.05
66	10.52		0.00	0.000	34433	0.034	VB	0.05
67	10.70		0.00	0.000	2506	0.002	BB	0.03
68	10.92		0.00	0.000	21567	0.021	BV	0.07
69	11.07		0.00	0.000	61371	0.060	VV	0.07
70	11.20		0.00	0.000	35867	0.035	VV	0.05
71	11.33		0.00	0.000	117602	0.115	VV	0.06
72	11.41		0.00	0.000	1304410	1.277	VV	0.07
73	11.67		0.00	0.000	275715	0.270	VV	0.05
74	11.79		0.00	0.000	176786	0.173	VV	0.07
75	11.93		0.00	0.000	71595	0.070	VV	0.06
76	12.03		0.00	0.000	35901	0.035	VV	0.04
77	12.19		0.00	0.000	61663	0.060	VV	0.08
78	12.32		0.00	0.000	24023	0.024	VV	0.05
79	12.41		0.00	0.000	126561	0.124	VV	0.05
80	12.57		0.00	0.000	99600	0.098	VV	0.04
81	12.72		0.00	0.000	361596	0.354	VB	0.10
82	13.29		0.00	0.000	95848	0.094	BV	0.05
83	13.38		0.00	0.000	430342	0.421	VV	0.06
84	13.55		0.00	0.000	71601	0.070	VV	0.06
85	13.69		0.00	0.000	387635	0.380	VV	0.05
86	14.06		0.00	0.000	157786	0.154	VV	0.08
87	14.26		0.00	0.000	9821	0.010	VB	0.06
88	14.47		0.00	0.000	7305	0.007	BV	0.06
89	14.70		0.00	0.000	69143	0.068	VV	0.20
90	15.08		0.00	0.000	2996	0.003	VV	0.05
91	15.24		0.00	0.000	14840	0.015	VV	0.10
92	15.48		0.00	0.000	8453	0.008	VB	0.08
93	15.91		0.00	0.000	23638	0.023	BV	0.19
94	16.03		0.00	0.000	42897	0.042	VV	0.05
95	16.25		0.00	0.000	15452	0.015	VV	0.09
96	16.33		0.00	0.000	13761	0.013	VV	0.07
97	16.41	PPDDT	0.00	0.995	22306	0.022	VV	0.09
98	16.65		0.00	0.000	57006	0.056	VV	0.14
99	17.09		0.00	0.000	121468	0.119	VV	0.31
100	17.38		0.00	0.000	10204	0.010	VV	0.05
101	17.57		0.00	0.000	28896	0.028	VV	0.06
102	17.76		0.00	0.000	24163	0.024	VV	0.11
103	18.12		0.00	0.000	82274	0.081	VB	0.29
104	18.87		0.00	0.000	43954	0.043	BB	0.18
105	19.08		0.00	0.000	36803	0.036	BV	0.08
106	19.22		0.00	0.000	132653	0.130	VV	0.23
107	19.62		0.00	0.000	140431	0.137	VV	0.11
108	19.76		0.00	0.000	61105	0.060	VV	0.07
109	19.87		0.00	0.000	52670	0.052	VV	0.12
110	20.09		0.00	0.000	125582	0.123	VV	0.48
111	20.58		0.00	0.000	27629	0.027	VV	0.16
112	20.76		0.00	0.000	11273	0.011	VB	0.09
113	20.99		0.00	0.000	21497	0.021	BV	0.16
114	21.15		0.00	0.000	7998	0.008	VB	0.07
115	21.54		0.00	0.000	10344	0.010	BB	0.19
116	21.92	CL10BP	0.08	52.362	1573065	1.540	BB	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	22.51		0.00	0.000	11683	0.011	BB	0.09
118	22.75		0.00	0.000	37889	0.037	BB	0.08
119	23.20		0.00	0.000	2878	0.003	BB	0.09
120	24.42		0.00	0.000	49932	0.049	BB	0.42

Total Area = 1.021405E+08 Total Height = 1.508195E+07 Total Amount = 0.156436

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-15 B10114 MAK015O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0007.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 12:23:24 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 14
Calibration Date = 11/1/13 1:28:12 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1420231	19970360	0.071	71.1	28.447		
9.88	ABHC	46045	24905666	0.002	1.8	0.740		UNDER
16.41	PPDDT	22306	14323591	0.002	1.6	0.623		UNDER
21.92	CL10BP	1573065	19204082	0.082	81.9	32.765		

* Linear regression

Checked By: _____ Date: 11/01/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

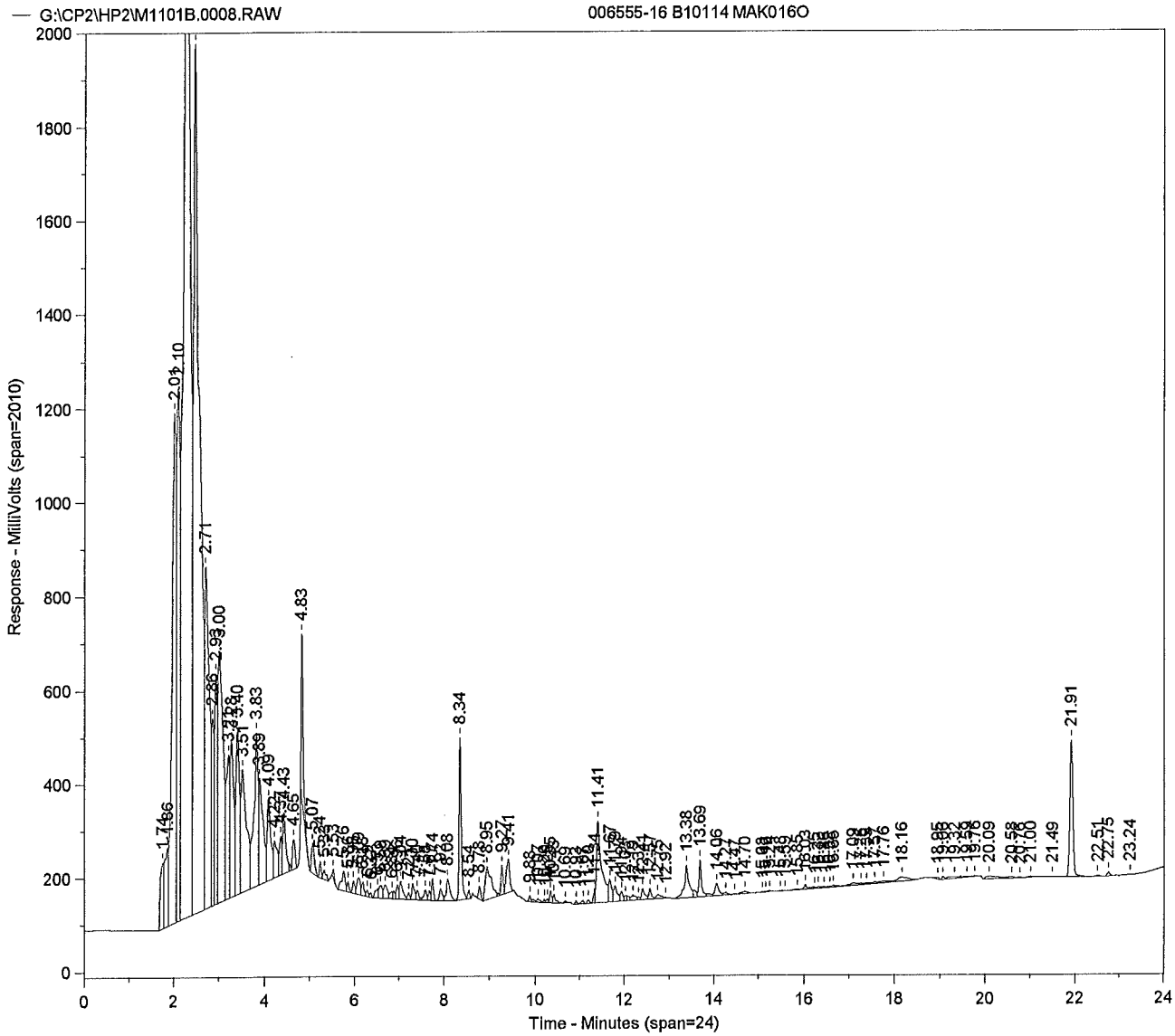
Field ID:	MAK016O	ARDL Lab No.:	006555-16
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/22/2013	Received Date:	10/23/2013
Sample Time:	1115	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	60%
Decachlorobiphenyl	25-125	71%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-16, CHLORINATED PESTICIDES (8081) Page 1 of 1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006555-16 B10114 MAK016O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
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2.10
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3.00
3.83
4.09
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4.65
4.83
5.07
8.34
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11.41
13.38
13.69
14.06
14.70
18.16
20.09
21.49
21.91
22.51
22.75
23.24

Sample Name = **006555-16 B10114 MAK016O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0008.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 12:53:44 PM
Method Version = 172
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	717192	0.717	BV	0.09
2	1.86		0.00	0.000	1031692	1.032	VV	0.05
3	2.01		0.00	0.000	7282724	7.283	VV	0.09
4	2.10		0.00	0.000	5761329	5.762	VV	0.05
5	2.25		0.00	0.000	28012294	28.015	VV	0.08
6	2.45		0.00	0.000	17728844	17.731	VV	0.09
7	2.71		0.00	0.000	5449570	5.450	VV	0.09
8	2.86		0.00	0.000	1312434	1.313	VV	0.04
9	2.93		0.00	0.000	2036262	2.036	VV	0.05
10	3.00		0.00	0.000	4261972	4.262	VV	0.11
11	3.21		0.00	0.000	1676646	1.677	VV	0.05
12	3.28		0.00	0.000	1780466	1.781	VV	0.07
13	3.40		0.00	0.000	2006352	2.007	VV	0.06
14	3.51		0.00	0.000	2214251	2.214	VV	0.10
15	3.83		0.00	0.000	2130234	2.130	VV	0.07
16	3.89		0.00	0.000	1493336	1.493	VV	0.08
17	4.09		0.00	0.000	971555	0.972	VV	0.06
18	4.22		0.00	0.000	468181	0.468	VV	0.06
19	4.37		0.00	0.000	328220	0.328	VV	0.06
20	4.43		0.00	0.000	590958	0.591	VV	0.06
21	4.65		0.00	0.000	253154	0.253	VB	0.07
22	4.83		0.00	0.000	982414	0.983	BB	0.05
23	5.07		0.00	0.000	276429	0.276	BB	0.07
24	5.24		0.00	0.000	98981	0.099	BV	0.04
25	5.33		0.00	0.000	87829	0.088	VB	0.11
26	5.53		0.00	0.000	39942	0.040	BB	0.05
27	5.76		0.00	0.000	238192	0.238	BV	0.07
28	5.86		0.00	0.000	65123	0.065	VV	0.06
29	5.98		0.00	0.000	89826	0.090	VV	0.05
30	6.09		0.00	0.000	182954	0.183	VV	0.07
31	6.18		0.00	0.000	120238	0.120	VV	0.07
32	6.29		0.00	0.000	41888	0.042	VV	0.05
33	6.37		0.00	0.000	26253	0.026	VB	0.06
34	6.53		0.00	0.000	100172	0.100	BV	0.09
35	6.59		0.00	0.000	131497	0.132	VV	0.06
36	6.69		0.00	0.000	169990	0.170	VV	0.09
37	6.84		0.00	0.000	70473	0.070	VV	0.04
38	6.96		0.00	0.000	105613	0.106	VV	0.05
39	7.04		0.00	0.000	195738	0.196	VV	0.07
40	7.21		0.00	0.000	48695	0.049	VV	0.04
41	7.30		0.00	0.000	136466	0.136	VV	0.06
42	7.40		0.00	0.000	73471	0.073	VV	0.06
43	7.58		0.00	0.000	97675	0.098	VV	0.05
44	7.67		0.00	0.000	68716	0.069	VV	0.04
45	7.74		0.00	0.000	140358	0.140	VB	0.04
46	7.92		0.00	0.000	120907	0.121	BV	0.07
47	8.08		0.00	0.000	260684	0.261	VB	0.08
48	8.34	CL4XYL	0.06	45.045	1190554	1.191	BV	0.05
49	8.54		0.00	0.000	59598	0.060	VB	0.05
50	8.78		0.00	0.000	93433	0.093	BB	0.06
51	8.95		0.00	0.000	615864	0.616	BV	0.16
52	9.27		0.00	0.000	211479	0.212	VV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	9.41		0.00	0.000	369548	0.370	VB	0.08
54	9.88	ABHC	0.00	1.080	35603	0.036	BV	0.05
55	10.07		0.00	0.000	31947	0.032	VB	0.10
56	10.20		0.00	0.000	14378	0.014	BV	0.05
57	10.28		0.00	0.000	24842	0.025	VV	0.04
58	10.35		0.00	0.000	76720	0.077	VV	0.05
59	10.43		0.00	0.000	68581	0.069	VB	0.06
60	10.69		0.00	0.000	11759	0.012	BB	0.07
61	10.93		0.00	0.000	18800	0.019	BV	0.05
62	11.07		0.00	0.000	31170	0.031	VB	0.07
63	11.20		0.00	0.000	27693	0.028	BV	0.06
64	11.34		0.00	0.000	88454	0.088	VV	0.04
65	11.41		0.00	0.000	1355614	1.356	VV	0.08
66	11.67		0.00	0.000	233113	0.233	VV	0.07
67	11.79		0.00	0.000	200781	0.201	VV	0.07
68	11.94		0.00	0.000	82587	0.083	VV	0.04
69	12.03		0.00	0.000	44962	0.045	VV	0.04
70	12.19		0.00	0.000	81194	0.081	VV	0.05
71	12.32		0.00	0.000	23990	0.024	VV	0.03
72	12.41		0.00	0.000	121528	0.122	VV	0.05
73	12.57		0.00	0.000	88146	0.088	VV	0.05
74	12.75		0.00	0.000	63032	0.063	VV	0.13
75	12.92		0.00	0.000	4906	0.005	VB	0.04
76	13.38		0.00	0.000	512343	0.512	BV	0.08
77	13.69		0.00	0.000	311772	0.312	VV	0.05
78	14.06		0.00	0.000	156949	0.157	VV	0.08
79	14.27		0.00	0.000	35489	0.035	VV	0.10
80	14.47		0.00	0.000	7999	0.008	VV	0.07
81	14.70		0.00	0.000	48459	0.048	VB	0.22
82	15.08		0.00	0.000	3272	0.003	BB	0.04
83	15.16		0.00	0.000	5384	0.005	BV	0.06
84	15.24		0.00	0.000	4969	0.005	VB	0.05
85	15.48		0.00	0.000	3137	0.003	BV	0.04
86	15.59		0.00	0.000	2246	0.002	VB	0.06
87	15.85		0.00	0.000	16892	0.017	BV	0.17
88	16.03		0.00	0.000	39682	0.040	VV	0.05
89	16.25		0.00	0.000	18957	0.019	VV	0.10
90	16.33		0.00	0.000	15667	0.016	VV	0.08
91	16.46		0.00	0.000	12909	0.013	VV	0.06
92	16.58		0.00	0.000	10304	0.010	VV	0.06
93	16.65		0.00	0.000	18713	0.019	VB	0.08
94	17.09		0.00	0.000	45760	0.046	BV	0.18
95	17.26		0.00	0.000	22411	0.022	VV	0.07
96	17.39		0.00	0.000	13086	0.013	VV	0.08
97	17.57		0.00	0.000	19269	0.019	VV	0.08
98	17.76		0.00	0.000	26899	0.027	VV	0.15
99	18.16		0.00	0.000	122605	0.123	VB	0.30
100	18.95		0.00	0.000	26189	0.026	BB	0.19
101	19.06		0.00	0.000	22196	0.022	BV	0.09
102	19.32		0.00	0.000	55725	0.056	VV	0.23
103	19.59		0.00	0.000	34342	0.034	VV	0.23
104	19.76		0.00	0.000	7676	0.008	VB	0.07
105	20.09		0.00	0.000	92716	0.093	BV	0.34
106	20.58		0.00	0.000	33004	0.033	VV	0.18
107	20.76		0.00	0.000	14094	0.014	VB	0.09
108	21.00		0.00	0.000	15767	0.016	BB	0.19
109	21.49		0.00	0.000	2531	0.003	BB	0.14
110	21.91	CL10BP	0.07	53.875	1369299	1.369	BB	0.07
111	22.51		0.00	0.000	12205	0.012	BB	0.08
112	22.75		0.00	0.000	34135	0.034	BB	0.07
113	23.24		0.00	0.000	4967	0.005	BB	0.15
114	24.43		0.00	0.000	41335	0.041	BB	0.26

Total Area = 9.998982E+07 Total Height = 1.47143E+07 Total Amount = 0.132348

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-16 B10114 MAK016O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0008.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 12:53:44 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 14
Calibration Date = 11/1/13 1:28:12 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1190554	19970360	0.060	59.6	23.846		
9.88	ABHC	35603	24905666	0.001	1.4	0.572		UNDER
21.91	CL10BP	1369299	19204082	0.071	71.3	28.521		

* Linear regression

Checked By: _____ Date: 11/01/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

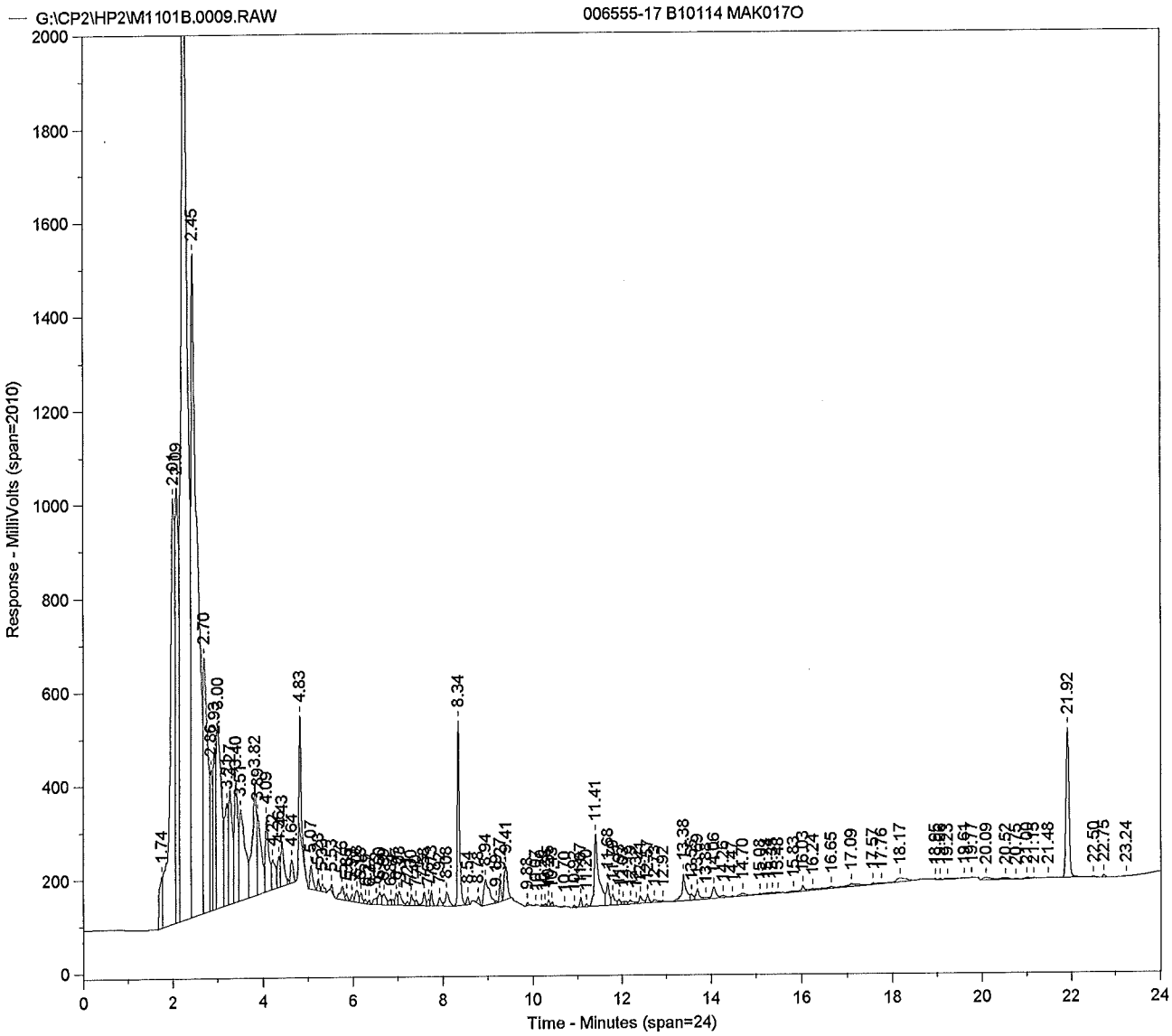
Field ID:	MAK017O	ARDL Lab No.:	006555-17
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/22/2013	Received Date:	10/23/2013
Sample Time:	1140	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	64%
Decachlorobiphenyl	25-125	78%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-17, CHLORINATED PESTICIDES (8081) Page 1 of 1


G:\CP2\HP2\M1101B.0009.RAW
006555-17 B10114 MAK017O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2.45
2.70
4.83
8.34
11.41
21.92
1.74
3.82
3.40
4.64
13.38
16.65
17.09
18.17
20.09
21.48
23.24

Sample Name = **006555-17 B10114 MAK017O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0009.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 1:24:09 PM
Method Version = 172
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	545632	0.685	BV	0.09
2	2.01		0.00	0.000	6977451	8.764	VV	0.10
3	2.09		0.00	0.000	4726423	5.936	VV	0.05
4	2.25		0.00	0.000	23158210	29.087	VV	0.09
5	2.45		0.00	0.000	13556325	17.027	VV	0.09
6	2.70		0.00	0.000	4035934	5.069	VV	0.09
7	2.86		0.00	0.000	1095248	1.376	VV	0.05
8	2.93		0.00	0.000	1334758	1.676	VV	0.05
9	3.00		0.00	0.000	3213426	4.036	VV	0.11
10	3.21		0.00	0.000	1179645	1.482	VV	0.06
11	3.27		0.00	0.000	1348010	1.693	VV	0.07
12	3.40		0.00	0.000	1471371	1.848	VV	0.07
13	3.51		0.00	0.000	1748901	2.197	VV	0.11
14	3.82		0.00	0.000	1635318	2.054	VV	0.08
15	3.89		0.00	0.000	1088857	1.368	VV	0.08
16	4.09		0.00	0.000	885537	1.112	VV	0.06
17	4.22		0.00	0.000	389659	0.489	VV	0.08
18	4.36		0.00	0.000	268142	0.337	VV	0.06
19	4.43		0.00	0.000	432859	0.544	VV	0.07
20	4.64		0.00	0.000	199784	0.251	VB	0.07
21	4.83		0.00	0.000	664400	0.834	BB	0.05
22	5.07		0.00	0.000	225750	0.284	BV	0.07
23	5.23		0.00	0.000	80191	0.101	VV	0.04
24	5.33		0.00	0.000	71858	0.090	VB	0.10
25	5.53		0.00	0.000	30567	0.038	BB	0.05
26	5.76		0.00	0.000	164192	0.206	BV	0.07
27	5.85		0.00	0.000	47534	0.060	VV	0.06
28	5.98		0.00	0.000	57640	0.072	VV	0.05
29	6.08		0.00	0.000	127376	0.160	VV	0.07
30	6.18		0.00	0.000	90351	0.113	VV	0.06
31	6.29		0.00	0.000	30842	0.039	VV	0.05
32	6.37		0.00	0.000	22224	0.028	VB	0.06
33	6.52		0.00	0.000	74041	0.093	BV	0.09
34	6.60		0.00	0.000	122951	0.154	VV	0.05
35	6.69		0.00	0.000	137899	0.173	VV	0.09
36	6.84		0.00	0.000	56574	0.071	VV	0.04
37	6.97		0.00	0.000	88573	0.111	VV	0.05
38	7.03		0.00	0.000	147222	0.185	VV	0.07
39	7.21		0.00	0.000	32986	0.041	VV	0.04
40	7.30		0.00	0.000	91183	0.115	VV	0.05
41	7.40		0.00	0.000	41963	0.053	VV	0.06
42	7.58		0.00	0.000	112905	0.142	VV	0.05
43	7.67		0.00	0.000	50780	0.064	VV	0.03
44	7.73		0.00	0.000	91946	0.115	VB	0.04
45	7.92		0.00	0.000	84086	0.106	BV	0.07
46	8.08		0.00	0.000	172508	0.217	VB	0.08
47	8.34	CL4XYL	0.06	44.871	1281782	1.610	BV	0.05
48	8.54		0.00	0.000	51534	0.065	VB	0.05
49	8.78		0.00	0.000	53629	0.067	BB	0.08
50	8.94		0.00	0.000	461295	0.579	BV	0.15
51	9.19		0.00	0.000	10591	0.013	VB	0.04
52	9.27		0.00	0.000	120200	0.151	BV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	9.41		0.00	0.000	363482	0.457	VB	0.08
54	9.88	ABHC	0.00	0.437	15577	0.020	BB	0.05
55	10.07		0.00	0.000	5653	0.007	BB	0.04
56	10.20		0.00	0.000	7614	0.010	BV	0.04
57	10.28		0.00	0.000	15263	0.019	VV	0.05
58	10.35		0.00	0.000	35136	0.044	VV	0.04
59	10.43		0.00	0.000	22695	0.029	VB	0.04
60	10.70		0.00	0.000	7873	0.010	BB	0.05
61	10.92		0.00	0.000	18890	0.024	BV	0.05
62	11.07		0.00	0.000	64617	0.081	VV	0.05
63	11.20		0.00	0.000	24291	0.031	VV	0.06
64	11.41		0.00	0.000	1098773	1.380	VV	0.08
65	11.68		0.00	0.000	246026	0.309	VV	0.05
66	11.79		0.00	0.000	127070	0.160	VV	0.07
67	11.93		0.00	0.000	48014	0.060	VV	0.04
68	12.03		0.00	0.000	24160	0.030	VV	0.03
69	12.19		0.00	0.000	52399	0.066	VV	0.04
70	12.32		0.00	0.000	14966	0.019	VV	0.03
71	12.41		0.00	0.000	80210	0.101	VV	0.05
72	12.57		0.00	0.000	71873	0.090	VV	0.05
73	12.73		0.00	0.000	35365	0.044	VV	0.09
74	12.92		0.00	0.000	9273	0.012	VB	0.05
75	13.38		0.00	0.000	374413	0.470	BV	0.07
76	13.55		0.00	0.000	62489	0.078	VV	0.06
77	13.69		0.00	0.000	116990	0.147	VV	0.05
78	13.88		0.00	0.000	28822	0.036	VV	0.10
79	14.06		0.00	0.000	141642	0.178	VV	0.08
80	14.26		0.00	0.000	33026	0.041	VB	0.10
81	14.47		0.00	0.000	7786	0.010	BV	0.07
82	14.70		0.00	0.000	53794	0.068	VV	0.20
83	15.08		0.00	0.000	8143	0.010	VV	0.12
84	15.24		0.00	0.000	15112	0.019	VV	0.12
85	15.35		0.00	0.000	9969	0.013	VV	0.08
86	15.48		0.00	0.000	5055	0.006	VB	0.05
87	15.83		0.00	0.000	20123	0.025	BV	0.19
88	16.03		0.00	0.000	42417	0.053	VV	0.05
89	16.24		0.00	0.000	30162	0.038	VV	0.11
90	16.65		0.00	0.000	63355	0.080	VV	0.17
91	17.09		0.00	0.000	63487	0.080	VV	0.15
92	17.57		0.00	0.000	11558	0.015	VV	0.09
93	17.76		0.00	0.000	18381	0.023	VV	0.15
94	18.17		0.00	0.000	122996	0.154	VB	0.35
95	18.95		0.00	0.000	8008	0.010	BB	0.12
96	19.06		0.00	0.000	8312	0.010	BV	0.06
97	19.23		0.00	0.000	21766	0.027	VV	0.19
98	19.61		0.00	0.000	15475	0.019	VV	0.16
99	19.77		0.00	0.000	4298	0.005	VB	0.07
100	20.09		0.00	0.000	72591	0.091	BV	0.25
101	20.52		0.00	0.000	55115	0.069	VV	0.25
102	20.75		0.00	0.000	12616	0.016	VB	0.10
103	21.00		0.00	0.000	21745	0.027	BV	0.17
104	21.15		0.00	0.000	5798	0.007	VB	0.06
105	21.48		0.00	0.000	3186	0.004	BB	0.15
106	21.92	CL10BP	0.08	54.691	1502352	1.887	BB	0.07
107	22.50		0.00	0.000	13883	0.017	BB	0.11
108	22.75		0.00	0.000	23682	0.030	BB	0.07
109	23.24		0.00	0.000	7356	0.009	BB	0.22
110	24.43		0.00	0.000	33597	0.042	BB	0.28

Total Area = 7.961778E+07 Total Height = 1.146423E+07 Total Amount = 0.1430405

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-17 B10114 MAK017O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0009.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 1:24:09 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 14
Calibration Date = 11/1/13 1:28:12 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1281782	19970360	0.064	64.2	25.674		
9.88	ABHC	15577	24905666	0.001	0.6	0.250		UNDER
21.92	CL10BP	1502352	19204082	0.078	78.2	31.292		

* Linear regression

Checked By: BJ Date: 11/01/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

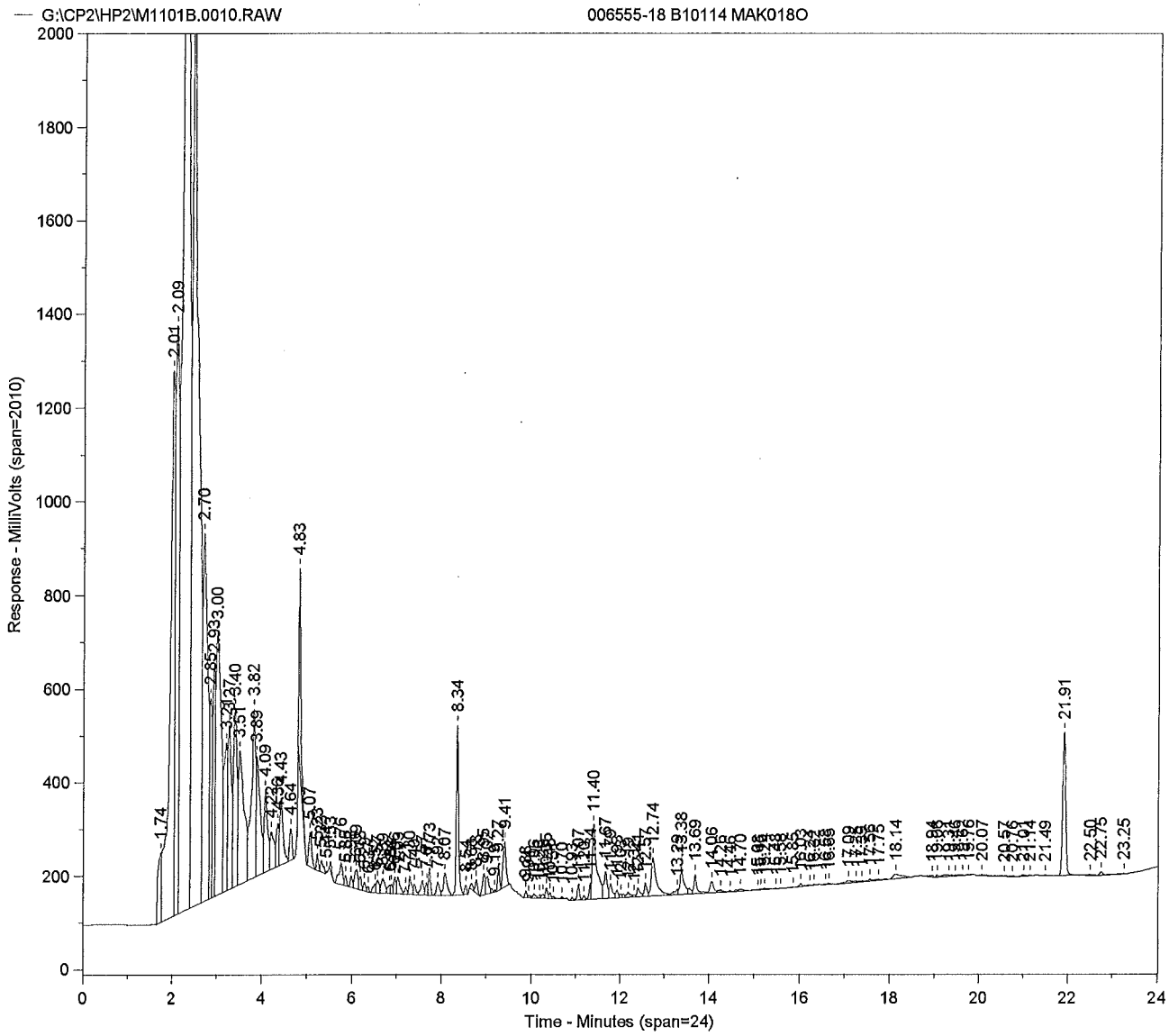
Field ID:	MAK018O	ARDL Lab No.:	006555-18
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/22/2013	Received Date:	10/23/2013
Sample Time:	1206	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	62%
Decachlorobiphenyl	25-125	75%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-18, CHLORINATED PESTICIDES (8081) Page 1 of 1


G:\CP2\HP2\M1101B.0010.RAW
006555-18 B10114 MAK018O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
1.74
2.01
2.09
2.70
2.85
2.93
3.00
3.40
3.51
3.82
3.89
4.09
4.43
4.64
4.83
5.07
8.34
9.41
11.40
12.74
13.38
13.69
14.06
14.70
18.14
20.07
21.91
21.49
22.50
22.75
23.25

Sample Name = **006555-18 B10114 MAK018O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0010.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 1:54:25 PM
Method Version = 172
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	722109	0.658	BV	0.09
2	2.01		0.00	0.000	9075307	8.269	VV	0.10
3	2.09		0.00	0.000	6633315	6.044	VV	0.05
4	2.25		0.00	0.000	31340372	28.556	VV	0.09
5	2.45		0.00	0.000	19813770	18.053	VV	0.09
6	2.70		0.00	0.000	5925896	5.399	VV	0.09
7	2.85		0.00	0.000	1483913	1.352	VV	0.04
8	2.93		0.00	0.000	1903379	1.734	VV	0.05
9	3.00		0.00	0.000	4615778	4.206	VV	0.11
10	3.21		0.00	0.000	1696476	1.546	VV	0.05
11	3.27		0.00	0.000	1966357	1.792	VV	0.07
12	3.40		0.00	0.000	2200305	2.005	VV	0.06
13	3.51		0.00	0.000	2519994	2.296	VV	0.10
14	3.82		0.00	0.000	2352030	2.143	VV	0.07
15	3.89		0.00	0.000	1669445	1.521	VV	0.08
16	4.09		0.00	0.000	997153	0.909	VV	0.06
17	4.22		0.00	0.000	469745	0.428	VV	0.05
18	4.36		0.00	0.000	381787	0.348	VV	0.06
19	4.43		0.00	0.000	689967	0.629	VV	0.07
20	4.64		0.00	0.000	269614	0.246	VB	0.07
21	4.83		0.00	0.000	1128699	1.028	BB	0.05
22	5.07		0.00	0.000	320612	0.292	BB	0.07
23	5.23		0.00	0.000	110305	0.101	BV	0.04
24	5.33		0.00	0.000	109474	0.100	VB	0.10
25	5.44		0.00	0.000	4481	0.004	BB	0.03
26	5.53		0.00	0.000	43933	0.040	BB	0.05
27	5.76		0.00	0.000	269862	0.246	BV	0.07
28	5.85		0.00	0.000	67583	0.062	VV	0.06
29	5.98		0.00	0.000	87037	0.079	VV	0.06
30	6.09		0.00	0.000	210767	0.192	VV	0.07
31	6.18		0.00	0.000	121009	0.110	VV	0.07
32	6.29		0.00	0.000	66941	0.061	VV	0.04
33	6.37		0.00	0.000	33206	0.030	VB	0.05
34	6.52		0.00	0.000	87141	0.079	BV	0.08
35	6.57		0.00	0.000	118357	0.108	VV	0.05
36	6.69		0.00	0.000	182092	0.166	VV	0.08
37	6.84		0.00	0.000	77547	0.071	VV	0.04
38	6.88		0.00	0.000	61373	0.056	VV	0.04
39	6.96		0.00	0.000	127796	0.116	VV	0.06
40	7.03		0.00	0.000	182699	0.166	VV	0.08
41	7.21		0.00	0.000	55042	0.050	VV	0.04
42	7.30		0.00	0.000	155576	0.142	VV	0.05
43	7.40		0.00	0.000	91758	0.084	VV	0.06
44	7.57		0.00	0.000	137757	0.126	VV	0.05
45	7.67		0.00	0.000	85091	0.078	VV	0.04
46	7.73		0.00	0.000	171021	0.156	VB	0.05
47	7.92		0.00	0.000	134980	0.123	BV	0.07
48	8.07		0.00	0.000	278253	0.254	VB	0.08
49	8.34	CL4XYL	0.06	44.624	1234885	1.125	BV	0.05
50	8.54		0.00	0.000	66401	0.061	VB	0.06
51	8.68		0.00	0.000	46291	0.042	BV	0.06
52	8.78		0.00	0.000	99628	0.091	VB	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	8.95		0.00	0.000	198745	0.181	BV	0.07
54	9.02		0.00	0.000	168441	0.153	VV	0.07
55	9.19		0.00	0.000	13977	0.013	VB	0.03
56	9.27		0.00	0.000	169160	0.154	BV	0.05
57	9.41		0.00	0.000	456819	0.416	VB	0.08
58	9.88	ABHC	0.00	1.215	41921	0.038	BV	0.05
59	9.94		0.00	0.000	16129	0.015	VV	0.03
60	10.06		0.00	0.000	40118	0.037	VB	0.10
61	10.20		0.00	0.000	17539	0.016	BV	0.04
62	10.28		0.00	0.000	34193	0.031	VV	0.05
63	10.35		0.00	0.000	71678	0.065	VV	0.04
64	10.43		0.00	0.000	37159	0.034	VV	0.05
65	10.51		0.00	0.000	12267	0.011	VB	0.06
66	10.70		0.00	0.000	14103	0.013	BB	0.05
67	10.93		0.00	0.000	17457	0.016	BV	0.05
68	11.07		0.00	0.000	114164	0.104	VV	0.05
69	11.20		0.00	0.000	30412	0.028	VV	0.05
70	11.34		0.00	0.000	100072	0.091	VV	0.04
71	11.40		0.00	0.000	1079225	0.983	VV	0.07
72	11.67		0.00	0.000	301661	0.275	VV	0.05
73	11.79		0.00	0.000	154786	0.141	VV	0.06
74	11.93		0.00	0.000	60520	0.055	VV	0.04
75	12.03		0.00	0.000	29218	0.027	VV	0.05
76	12.19		0.00	0.000	60607	0.055	VV	0.05
77	12.32		0.00	0.000	16039	0.015	VV	0.05
78	12.41		0.00	0.000	91553	0.083	VV	0.06
79	12.57		0.00	0.000	119037	0.108	VV	0.05
80	12.74		0.00	0.000	656347	0.598	VV	0.10
81	13.29		0.00	0.000	66164	0.060	VV	0.05
82	13.38		0.00	0.000	332819	0.303	VV	0.06
83	13.69		0.00	0.000	168887	0.154	VV	0.05
84	14.06		0.00	0.000	139912	0.127	VV	0.09
85	14.26		0.00	0.000	37192	0.034	VV	0.10
86	14.46		0.00	0.000	8945	0.008	VB	0.06
87	14.70		0.00	0.000	45723	0.042	BB	0.22
88	15.08		0.00	0.000	12546	0.011	BV	0.15
89	15.15		0.00	0.000	7955	0.007	VV	0.05
90	15.24		0.00	0.000	10752	0.010	VV	0.05
91	15.48		0.00	0.000	7953	0.007	VV	0.05
92	15.58		0.00	0.000	1746	0.002	VB	0.08
93	15.85		0.00	0.000	12450	0.011	BB	0.17
94	16.03		0.00	0.000	27224	0.025	BV	0.06
95	16.24		0.00	0.000	13465	0.012	VB	0.11
96	16.32		0.00	0.000	3301	0.003	BB	0.06
97	16.58		0.00	0.000	3746	0.003	BV	0.06
98	16.65		0.00	0.000	8566	0.008	VB	0.05
99	17.09		0.00	0.000	52111	0.047	BV	0.20
100	17.25		0.00	0.000	21819	0.020	VV	0.08
101	17.39		0.00	0.000	7885	0.007	VV	0.05
102	17.56		0.00	0.000	19440	0.018	VV	0.06
103	17.75		0.00	0.000	16640	0.015	VV	0.13
104	18.14		0.00	0.000	133199	0.121	VB	0.36
105	18.94		0.00	0.000	22992	0.021	BB	0.20
106	19.06		0.00	0.000	17671	0.016	BV	0.08
107	19.31		0.00	0.000	42917	0.039	VV	0.22
108	19.46		0.00	0.000	14999	0.014	VV	0.08
109	19.62		0.00	0.000	14769	0.013	VV	0.12
110	19.76		0.00	0.000	5671	0.005	VB	0.07
111	20.07		0.00	0.000	32518	0.030	BV	0.21
112	20.57		0.00	0.000	34415	0.031	VV	0.30
113	20.76		0.00	0.000	13103	0.012	VB	0.10
114	21.01		0.00	0.000	22799	0.021	BV	0.17
115	21.14		0.00	0.000	8054	0.007	VB	0.06
116	21.49		0.00	0.000	10331	0.009	BB	0.26

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	21.91	CL10BP	0.08	54.162	1441318	1.313	BB	0.07
118	22.50		0.00	0.000	11401	0.010	BB	0.07
119	22.75		0.00	0.000	32127	0.029	BV	0.08
120	23.25		0.00	0.000	12770	0.012	VB	0.21
121	24.44		0.00	0.000	35354	0.032	BB	0.25

Total Area = 1.097513E+08 Total Height = 1.58757E+07 Total Amount = 0.1385717

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-18 B10114 MAK018O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0010.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 1:54:25 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 14
Calibration Date = 11/1/13 1:28:12 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1234885	19970360	0.062	61.8	24.734		
9.88	ABHC	41921	24905666	0.002	1.7	0.673		UNDER
21.91	CL10BP	1441318	19204082	0.075	75.1	30.021		

* Linear regression

Checked By: BJ Date: 11/04/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

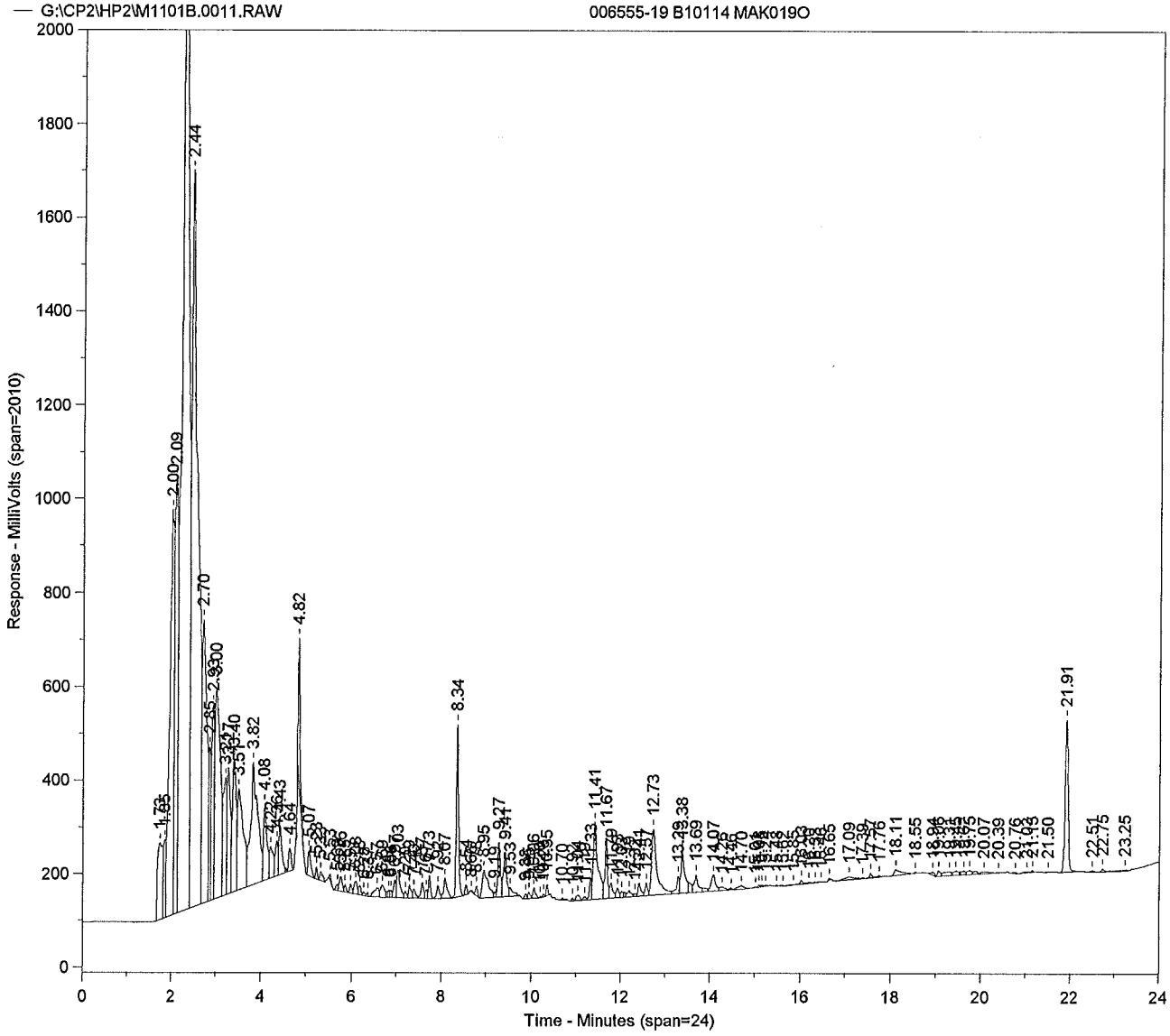
Field ID:	MAK019O	ARDL Lab No.:	006555-19
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/23/2013	Received Date:	10/23/2013
Sample Time:	0833	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	63%
Decachlorobiphenyl	25-125	79%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-19, CHLORINATED PESTICIDES (8081) Page 1 of 1


G:\CP2\HP2\M1101B.0011.RAW
006555-19 B10114 MAK019O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2.44
2.09
2.70
4.82
8.34
21.91
3.82
4.08
11.41
11.67
12.73
13.69
23.25

Sample Name = **006555-19 B10114 MAK019O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0011.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 2:24:57 PM
Method Version = 172
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.73		0.00	0.000	1322638	1.476	BV	0.14
2	1.85		0.00	0.000	585940	0.654	VV	0.04
3	2.00		0.00	0.000	6178804	6.894	VV	0.10
4	2.09		0.00	0.000	4745438	5.295	VV	0.05
5	2.24		0.00	0.000	24119818	26.912	VV	0.09
6	2.44		0.00	0.000	15485386	17.278	VV	0.09
7	2.70		0.00	0.000	4488649	5.008	VV	0.09
8	2.85		0.00	0.000	1029110	1.148	VV	0.03
9	2.93		0.00	0.000	1800972	2.009	VV	0.06
10	3.00		0.00	0.000	3689203	4.116	VV	0.11
11	3.21		0.00	0.000	1353563	1.510	VV	0.05
12	3.27		0.00	0.000	1468304	1.638	VV	0.07
13	3.40		0.00	0.000	1672348	1.866	VV	0.07
14	3.51		0.00	0.000	1937524	2.162	VV	0.11
15	3.82		0.00	0.000	3012412	3.361	VV	0.12
16	4.08		0.00	0.000	907209	1.012	VV	0.06
17	4.22		0.00	0.000	393204	0.439	VV	0.06
18	4.36		0.00	0.000	323983	0.361	VV	0.06
19	4.43		0.00	0.000	482363	0.538	VV	0.07
20	4.64		0.00	0.000	193208	0.216	VB	0.07
21	4.82		0.00	0.000	736071	0.821	BB	0.05
22	5.07		0.00	0.000	242652	0.271	BB	0.07
23	5.23		0.00	0.000	69915	0.078	BV	0.04
24	5.33		0.00	0.000	82693	0.092	VB	0.09
25	5.53		0.00	0.000	26032	0.029	BB	0.05
26	5.69		0.00	0.000	43485	0.049	BV	0.05
27	5.76		0.00	0.000	134891	0.151	VV	0.06
28	5.85		0.00	0.000	49294	0.055	VV	0.05
29	5.97		0.00	0.000	66976	0.075	VV	0.05
30	6.08		0.00	0.000	134339	0.150	VV	0.07
31	6.18		0.00	0.000	86783	0.097	VV	0.07
32	6.28		0.00	0.000	27151	0.030	VV	0.05
33	6.37		0.00	0.000	21518	0.024	VB	0.06
34	6.57		0.00	0.000	160533	0.179	BV	0.14
35	6.69		0.00	0.000	165055	0.184	VV	0.08
36	6.84		0.00	0.000	40870	0.046	VV	0.03
37	6.88		0.00	0.000	44254	0.049	VV	0.04
38	6.97		0.00	0.000	129872	0.145	VV	0.05
39	7.03		0.00	0.000	313692	0.350	VV	0.07
40	7.20		0.00	0.000	51078	0.057	VV	0.04
41	7.29		0.00	0.000	115418	0.129	VV	0.06
42	7.40		0.00	0.000	83888	0.094	VV	0.07
43	7.57		0.00	0.000	134758	0.150	VV	0.05
44	7.67		0.00	0.000	60007	0.067	VV	0.03
45	7.73		0.00	0.000	149213	0.166	VB	0.05
46	7.92		0.00	0.000	119527	0.133	BV	0.06
47	8.07		0.00	0.000	239949	0.268	VB	0.07
48	8.34	CL4XYL	0.06	44.191	1252338	1.397	BB	0.05
49	8.54		0.00	0.000	68339	0.076	BB	0.06
50	8.66		0.00	0.000	10728	0.012	BV	0.06
51	8.78		0.00	0.000	70812	0.079	VB	0.06
52	8.95		0.00	0.000	527640	0.589	BV	0.15

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	9.19		0.00	0.000	31987	0.036	VV	0.04
54	9.27		0.00	0.000	469827	0.524	VV	0.06
55	9.41		0.00	0.000	500559	0.559	VV	0.06
56	9.53		0.00	0.000	109186	0.122	VB	0.08
57	9.88		0.00	0.000	32275	0.036	BV	0.05
58	9.95		0.00	0.000	48879	0.055	VV	0.05
59	10.06		0.00	0.000	86186	0.096	VB	0.06
60	10.20		0.00	0.000	5736	0.006	BV	0.04
61	10.28		0.00	0.000	16840	0.019	VB	0.05
62	10.35		0.00	0.000	64449	0.072	BB	0.04
63	10.70		0.00	0.000	8872	0.010	BB	0.05
64	10.92		0.00	0.000	17996	0.020	BV	0.05
65	11.04		0.00	0.000	69487	0.078	VV	0.10
66	11.19		0.00	0.000	34593	0.039	VV	0.09
67	11.33		0.00	0.000	163498	0.182	VV	0.06
68	11.41		0.00	0.000	1202135	1.341	VV	0.07
69	11.67		0.00	0.000	522235	0.583	VV	0.05
70	11.79		0.00	0.000	161673	0.180	VV	0.07
71	11.93		0.00	0.000	89673	0.100	VV	0.04
72	12.03		0.00	0.000	50161	0.056	VV	0.04
73	12.19		0.00	0.000	84430	0.094	VV	0.06
74	12.32		0.00	0.000	23427	0.026	VV	0.05
75	12.41		0.00	0.000	131555	0.147	VV	0.05
76	12.57		0.00	0.000	113401	0.127	VV	0.05
77	12.73		0.00	0.000	1173481	1.309	VV	0.10
78	13.29		0.00	0.000	175781	0.196	VV	0.06
79	13.38		0.00	0.000	550392	0.614	VV	0.06
80	13.69		0.00	0.000	223727	0.250	VV	0.06
81	14.07		0.00	0.000	227738	0.254	VV	0.09
82	14.26		0.00	0.000	64469	0.072	VV	0.13
83	14.46		0.00	0.000	14946	0.017	VV	0.06
84	14.70		0.00	0.000	65277	0.073	VB	0.18
85	15.01		0.00	0.000	3322	0.004	BB	0.06
86	15.08		0.00	0.000	10697	0.012	BV	0.06
87	15.15		0.00	0.000	9904	0.011	VV	0.04
88	15.24		0.00	0.000	7527	0.008	VB	0.04
89	15.48		0.00	0.000	3674	0.004	BB	0.04
90	15.62		0.00	0.000	3585	0.004	BB	0.09
91	15.85		0.00	0.000	9602	0.011	BV	0.14
92	16.03		0.00	0.000	29152	0.033	VV	0.05
93	16.20		0.00	0.000	15430	0.017	VB	0.11
94	16.33		0.00	0.000	5028	0.006	BV	0.07
95	16.46		0.00	0.000	5104	0.006	VB	0.10
96	16.65		0.00	0.000	7731	0.009	BB	0.05
97	17.09		0.00	0.000	83875	0.094	BV	0.27
98	17.39		0.00	0.000	6544	0.007	VB	0.05
99	17.57		0.00	0.000	32261	0.036	BV	0.06
100	17.76		0.00	0.000	12861	0.014	VB	0.07
101	18.11		0.00	0.000	132441	0.148	BV	0.36
102	18.55		0.00	0.000	5182	0.006	VB	0.08
103	18.94		0.00	0.000	34227	0.038	BB	0.16
104	19.06		0.00	0.000	48698	0.054	BV	0.09
105	19.31		0.00	0.000	101473	0.113	VV	0.20
106	19.45		0.00	0.000	66634	0.074	VV	0.07
107	19.62		0.00	0.000	48873	0.055	VV	0.06
108	19.75		0.00	0.000	59268	0.066	VV	0.07
109	20.07		0.00	0.000	48049	0.054	VB	0.27
110	20.39		0.00	0.000	3835	0.004	BB	0.12
111	20.76		0.00	0.000	13800	0.015	BB	0.11
112	21.03		0.00	0.000	20567	0.023	BV	0.16
113	21.15		0.00	0.000	14207	0.016	VB	0.06
114	21.50		0.00	0.000	4911	0.005	BB	0.14
115	21.91	CL10BP	0.08	55.809	1520898	1.697	BB	0.07
116	22.51		0.00	0.000	11141	0.012	BB	0.08

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	22.75		0.00	0.000	25579	0.029	BV	0.08
118	23.25		0.00	0.000	32989	0.037	VB	0.23

Total Area = 8.962377E+07 Total Height = 1.290282E+07 Total Amount = 0.1419064

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-19 B10114 MAK019O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0011.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 2:24:57 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 14
Calibration Date = 11/1/13 1:28:12 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD
8.34	CL4XYL	1252338	19970360	0.063	62.7	25.084	
21.91	CL10BP	1520898	19204082	0.079	79.2	31.679	

* Linear regression

Checked By: _____ Date: 11/04/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006555 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

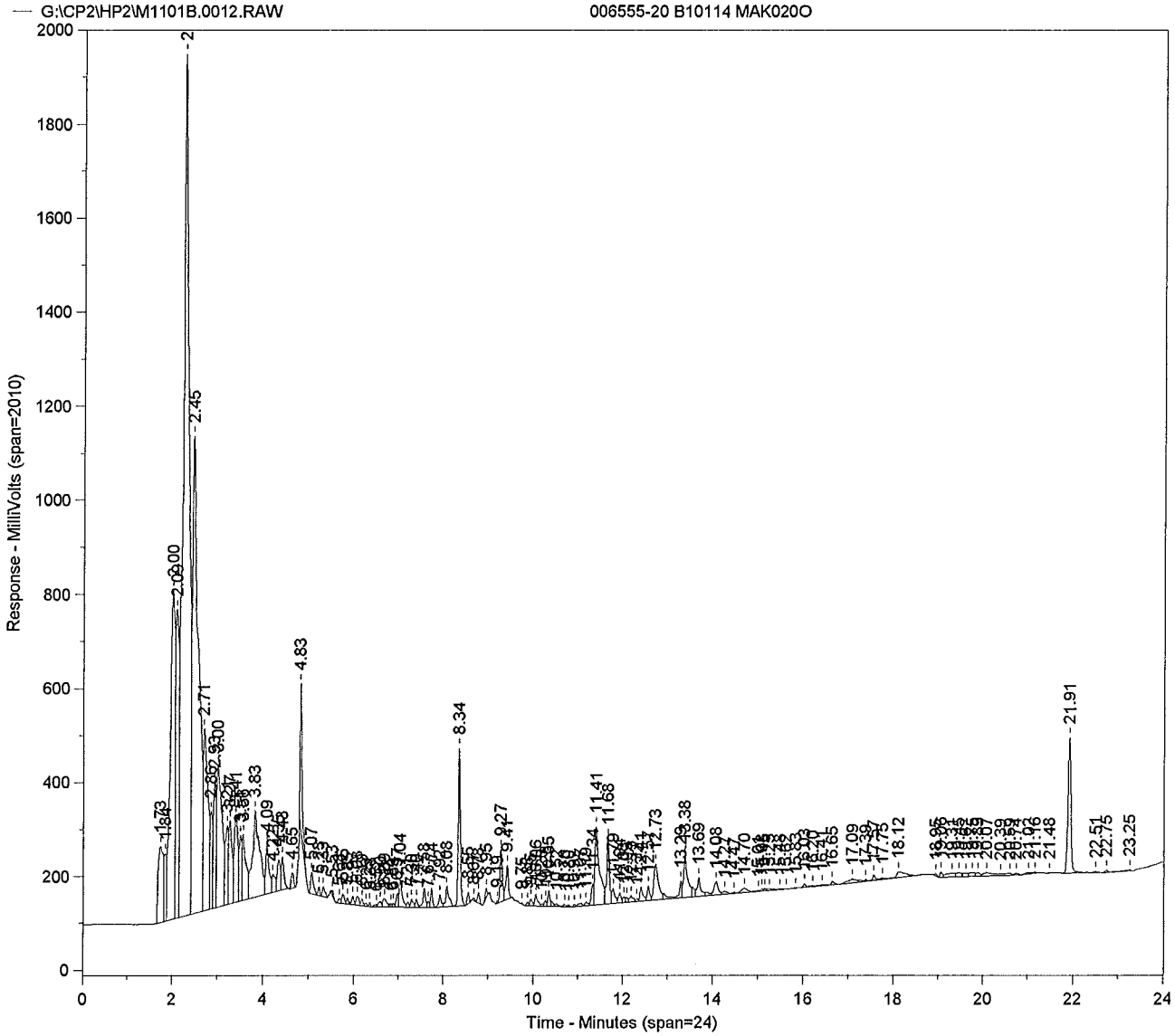
Field ID:	MAK020O	ARDL Lab No.:	006555-20
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/23/2013	Received Date:	10/23/2013
Sample Time:	0855	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	53%
Decachlorobiphenyl	25-125	70%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006555-20, CHLORINATED PESTICIDES (8081) Page 1 of 1


G:\CP2\HP2\M1101B.0012.RAW
006555-20 B10114 MAK020O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2.45
2.00
2.71
4.83
8.34
11.41
11.68
12.73
13.38
13.69
21.91
22.51
22.75
23.25

Sample Name = **006555-20 B10114 MAK020O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0012.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 2:55:16 PM
Method Version = 172
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.73		0.00	0.000	1333734	2.074	BV	0.15
2	1.84		0.00	0.000	512446	0.797	VV	0.04
3	2.00		0.00	0.000	5219423	8.116	VV	0.11
4	2.09		0.00	0.000	3129688	4.866	VV	0.05
5	2.25		0.00	0.000	17058890	26.525	VV	0.09
6	2.45		0.00	0.000	9736231	15.139	VV	0.09
7	2.71		0.00	0.000	2839344	4.415	VV	0.09
8	2.86		0.00	0.000	686393	1.067	VV	0.04
9	2.93		0.00	0.000	1102634	1.714	VV	0.05
10	3.00		0.00	0.000	2448210	3.807	VV	0.11
11	3.21		0.00	0.000	873548	1.358	VV	0.05
12	3.27		0.00	0.000	914329	1.422	VV	0.07
13	3.41		0.00	0.000	1100355	1.711	VV	0.07
14	3.51		0.00	0.000	516322	0.803	VV	0.05
15	3.56		0.00	0.000	812151	1.263	VV	0.06
16	3.83		0.00	0.000	2042899	3.177	VV	0.12
17	4.09		0.00	0.000	553925	0.861	VV	0.06
18	4.22		0.00	0.000	209884	0.326	VV	0.06
19	4.35		0.00	0.000	298278	0.464	VV	0.07
20	4.43		0.00	0.000	278583	0.433	VB	0.06
21	4.65		0.00	0.000	131516	0.204	BB	0.07
22	4.83		0.00	0.000	852273	1.325	BB	0.05
23	5.07		0.00	0.000	192341	0.299	BV	0.07
24	5.23		0.00	0.000	50658	0.079	VV	0.04
25	5.33		0.00	0.000	81874	0.127	VB	0.07
26	5.53		0.00	0.000	27211	0.042	BB	0.07
27	5.68		0.00	0.000	35988	0.056	BV	0.06
28	5.76		0.00	0.000	77794	0.121	VV	0.06
29	5.85		0.00	0.000	37122	0.058	VV	0.04
30	5.97		0.00	0.000	60975	0.095	VV	0.04
31	6.08		0.00	0.000	88625	0.138	VV	0.07
32	6.19		0.00	0.000	59909	0.093	VV	0.06
33	6.29		0.00	0.000	18250	0.028	VV	0.05
34	6.38		0.00	0.000	18528	0.029	VB	0.04
35	6.52		0.00	0.000	23085	0.036	BV	0.08
36	6.60		0.00	0.000	48592	0.076	VV	0.06
37	6.69		0.00	0.000	101172	0.157	VV	0.07
38	6.84		0.00	0.000	16913	0.026	VV	0.02
39	6.89		0.00	0.000	21146	0.033	VV	0.03
40	6.97		0.00	0.000	93935	0.146	VV	0.05
41	7.04		0.00	0.000	280542	0.436	VV	0.06
42	7.21		0.00	0.000	37278	0.058	VV	0.04
43	7.30		0.00	0.000	69953	0.109	VV	0.04
44	7.40		0.00	0.000	53462	0.083	VV	0.05
45	7.58		0.00	0.000	158225	0.246	VV	0.05
46	7.67		0.00	0.000	39187	0.061	VV	0.03
47	7.74		0.00	0.000	117503	0.183	VB	0.04
48	7.92		0.00	0.000	105881	0.165	BV	0.06
49	8.08		0.00	0.000	228681	0.356	VB	0.06
50	8.34	CL4XYL	0.05	42.529	1061591	1.651	BB	0.05
51	8.55		0.00	0.000	75713	0.118	BB	0.06
52	8.67		0.00	0.000	16096	0.025	BV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	8.78		0.00	0.000	78009	0.121	VB	0.06
54	8.95		0.00	0.000	66003	0.103	BB	0.08
55	9.19		0.00	0.000	10259	0.016	BV	0.04
56	9.27		0.00	0.000	413859	0.644	VV	0.06
57	9.41		0.00	0.000	301145	0.468	VB	0.06
58	9.75		0.00	0.000	6956	0.011	BB	0.06
59	9.88		0.00	0.000	25190	0.039	BV	0.05
60	9.95		0.00	0.000	56803	0.088	VV	0.05
61	10.06		0.00	0.000	107656	0.167	VV	0.05
62	10.20		0.00	0.000	14547	0.023	VV	0.03
63	10.28		0.00	0.000	40173	0.062	VV	0.05
64	10.35		0.00	0.000	111226	0.173	VV	0.04
65	10.52		0.00	0.000	29001	0.045	VV	0.07
66	10.70		0.00	0.000	23429	0.036	VV	0.05
67	10.80		0.00	0.000	11852	0.018	VB	0.06
68	10.92		0.00	0.000	14499	0.023	BV	0.05
69	11.07		0.00	0.000	40357	0.063	VV	0.10
70	11.19		0.00	0.000	40209	0.063	VV	0.11
71	11.34		0.00	0.000	160330	0.249	VV	0.06
72	11.41		0.00	0.000	1208391	1.879	VV	0.07
73	11.68		0.00	0.000	586516	0.912	VV	0.05
74	11.79		0.00	0.000	159230	0.248	VV	0.06
75	11.94		0.00	0.000	83912	0.130	VV	0.04
76	12.03		0.00	0.000	45650	0.071	VV	0.04
77	12.09		0.00	0.000	34843	0.054	VV	0.04
78	12.19		0.00	0.000	80674	0.125	VV	0.05
79	12.32		0.00	0.000	19528	0.030	VV	0.04
80	12.41		0.00	0.000	137321	0.214	VV	0.05
81	12.57		0.00	0.000	121966	0.190	VV	0.05
82	12.73		0.00	0.000	530642	0.825	VV	0.09
83	13.29		0.00	0.000	142655	0.222	VV	0.05
84	13.38		0.00	0.000	550297	0.856	VV	0.06
85	13.69		0.00	0.000	223248	0.347	VV	0.05
86	14.08		0.00	0.000	182016	0.283	VV	0.09
87	14.27		0.00	0.000	53680	0.083	VV	0.16
88	14.47		0.00	0.000	9544	0.015	VV	0.06
89	14.70		0.00	0.000	88818	0.138	VV	0.16
90	15.01		0.00	0.000	8729	0.014	VV	0.06
91	15.08		0.00	0.000	14603	0.023	VV	0.05
92	15.15		0.00	0.000	16690	0.026	VV	0.04
93	15.25		0.00	0.000	25660	0.040	VV	0.08
94	15.48		0.00	0.000	12132	0.019	VV	0.05
95	15.62		0.00	0.000	5069	0.008	VB	0.09
96	15.83		0.00	0.000	9917	0.015	BV	0.14
97	16.03		0.00	0.000	27854	0.043	VV	0.06
98	16.20		0.00	0.000	12433	0.019	VV	0.08
99	16.41	PPDDT	0.00	1.144	20487	0.032	VV	0.18
100	16.65		0.00	0.000	31266	0.049	VB	0.08
101	17.09		0.00	0.000	95363	0.148	BV	0.26
102	17.39		0.00	0.000	12383	0.019	VV	0.04
103	17.57		0.00	0.000	43377	0.067	VV	0.06
104	17.75		0.00	0.000	19472	0.030	VV	0.10
105	18.12		0.00	0.000	168660	0.262	VB	0.36
106	18.95		0.00	0.000	17992	0.028	BB	0.11
107	19.06		0.00	0.000	43450	0.068	BV	0.07
108	19.31		0.00	0.000	106366	0.165	VV	0.21
109	19.45		0.00	0.000	66615	0.104	VV	0.06
110	19.62		0.00	0.000	56816	0.088	VV	0.06
111	19.75		0.00	0.000	70033	0.109	VV	0.08
112	19.89		0.00	0.000	49370	0.077	VV	0.11
113	20.07		0.00	0.000	81222	0.126	VV	0.22
114	20.39		0.00	0.000	29589	0.046	VV	0.11
115	20.59		0.00	0.000	35686	0.055	VV	0.13
116	20.74		0.00	0.000	20900	0.032	VB	0.11

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	21.02		0.00	0.000	24114	0.037	BV	0.15
118	21.16		0.00	0.000	12907	0.020	VB	0.06
119	21.48		0.00	0.000	2614	0.004	BB	0.11
120	21.91	CL10BP	0.07	56.327	1352075	2.102	BB	0.07
121	22.51		0.00	0.000	7957	0.012	BB	0.08
122	22.75		0.00	0.000	15927	0.025	BB	0.07
123	23.25		0.00	0.000	34819	0.054	BB	0.24

Total Area = 6.431226E+07 Total Height = 9793548 Total Amount = 0.1249942

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006555-20 B10114 MAK020O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0012.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 2:55:16 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 14
Calibration Date = 11/1/13 1:28:12 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1061591	19970360	0.053	53.2	21.263		
16.41	PPDDT	20487	14323591	0.001	1.4	0.572		UNDER
21.91	CL10BP	1352075	19204082	0.070	70.4	28.162		

* Linear regression

Checked By: _____ Date: 11/04/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006556 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

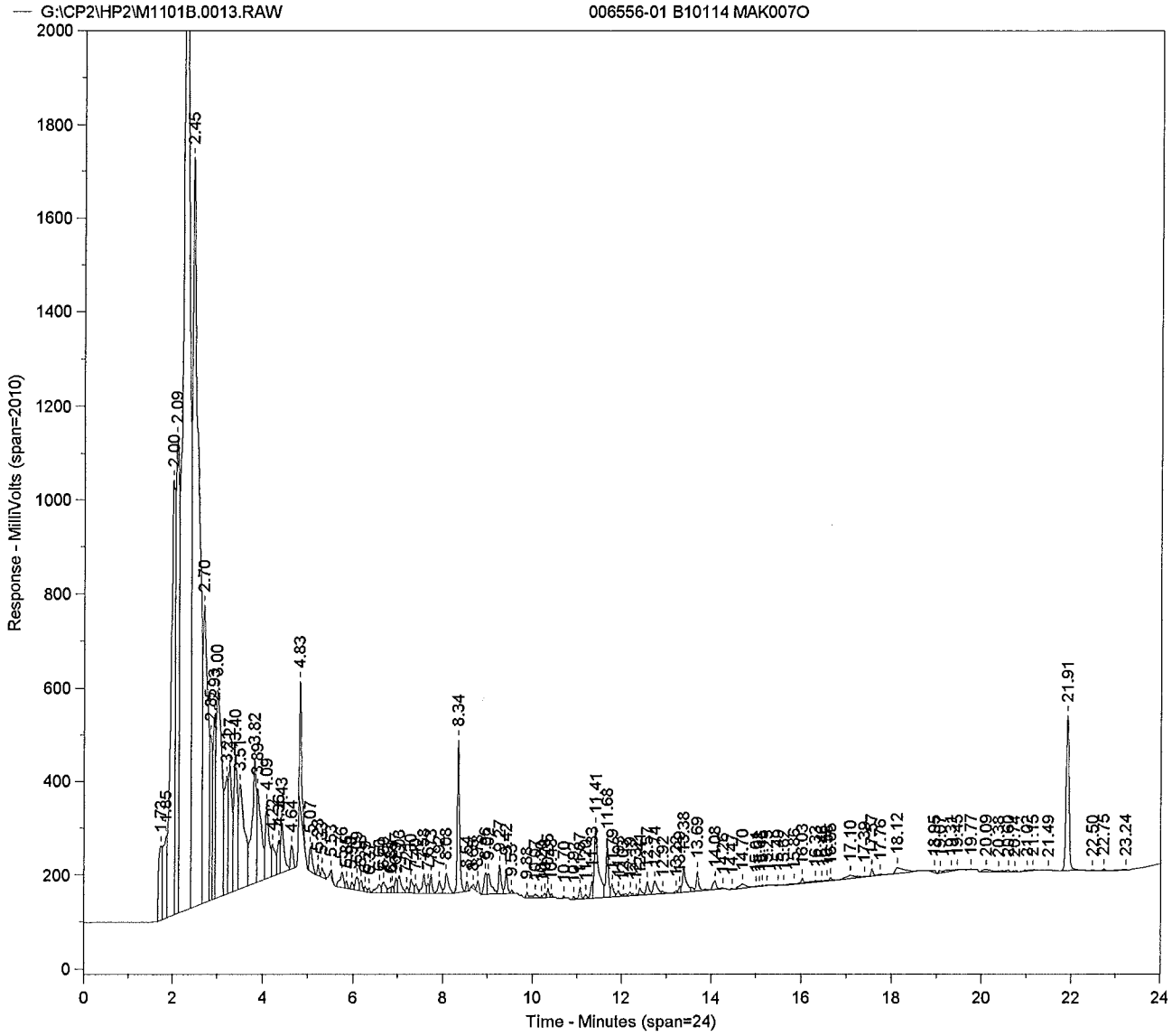
Field ID:	MAK007O	ARDL Lab No.:	006556-01
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/11/2013	Received Date:	10/23/2013
Sample Time:	1125	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	56%
Decachlorobiphenyl	25-125	81%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006556-01, CHLORINATED PESTICIDES (8081) Page 1 of 1


G:\CP2\HP2\M1101B.0013.RAW
006556-01 B10114 MAK007O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2.45
2.09
2.00
2.70
4.83
8.34
21.91
11.41
11.68
13.69
18.12
17.10
17.76
19.77
20.09
21.49
22.50
22.75
23.24

Sample Name = **006556-01 B10114 MAK007O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0013.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 3:25:33 PM
Method Version = 172
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.73		0.00	0.000	798109	0.895	BV	0.09
2	1.85		0.00	0.000	1102942	1.237	VV	0.04
3	2.00		0.00	0.000	6436916	7.220	VV	0.09
4	2.09		0.00	0.000	5198902	5.831	VV	0.05
5	2.25		0.00	0.000	24868492	27.894	VV	0.09
6	2.45		0.00	0.000	15894407	17.828	VV	0.10
7	2.70		0.00	0.000	4865099	5.457	VV	0.09
8	2.85		0.00	0.000	1229548	1.379	VV	0.04
9	2.93		0.00	0.000	1530272	1.716	VV	0.05
10	3.00		0.00	0.000	3729161	4.183	VV	0.11
11	3.21		0.00	0.000	1380482	1.548	VV	0.05
12	3.27		0.00	0.000	1579245	1.771	VV	0.07
13	3.40		0.00	0.000	1735249	1.946	VV	0.07
14	3.51		0.00	0.000	1971577	2.211	VV	0.10
15	3.82		0.00	0.000	1786563	2.004	VV	0.07
16	3.89		0.00	0.000	1356886	1.522	VV	0.09
17	4.09		0.00	0.000	919052	1.031	VV	0.06
18	4.22		0.00	0.000	404013	0.453	VV	0.06
19	4.36		0.00	0.000	290992	0.326	VV	0.05
20	4.43		0.00	0.000	544860	0.611	VV	0.08
21	4.64		0.00	0.000	210050	0.236	VB	0.07
22	4.83		0.00	0.000	800096	0.897	BB	0.05
23	5.07		0.00	0.000	237438	0.266	BB	0.07
24	5.23		0.00	0.000	68259	0.077	BV	0.04
25	5.33		0.00	0.000	79455	0.089	VB	0.09
26	5.53		0.00	0.000	31916	0.036	BB	0.05
27	5.76		0.00	0.000	184231	0.207	BV	0.07
28	5.85		0.00	0.000	47952	0.054	VV	0.05
29	5.98		0.00	0.000	56936	0.064	VV	0.06
30	6.09		0.00	0.000	141245	0.158	VV	0.07
31	6.18		0.00	0.000	96132	0.108	VV	0.07
32	6.29		0.00	0.000	38826	0.044	VV	0.04
33	6.37		0.00	0.000	24685	0.028	VB	0.06
34	6.60		0.00	0.000	121488	0.136	BV	0.12
35	6.69		0.00	0.000	132290	0.148	VV	0.08
36	6.84		0.00	0.000	55186	0.062	VV	0.04
37	6.89		0.00	0.000	42418	0.048	VV	0.03
38	6.97		0.00	0.000	110700	0.124	VV	0.05
39	7.03		0.00	0.000	189856	0.213	VV	0.08
40	7.21		0.00	0.000	48509	0.054	VV	0.04
41	7.30		0.00	0.000	125883	0.141	VV	0.06
42	7.40		0.00	0.000	71908	0.081	VV	0.06
43	7.58		0.00	0.000	169813	0.190	VV	0.05
44	7.67		0.00	0.000	67750	0.076	VV	0.03
45	7.73		0.00	0.000	119501	0.134	VV	0.05
46	7.92		0.00	0.000	120956	0.136	VV	0.07
47	8.08		0.00	0.000	237273	0.266	VB	0.08
48	8.34	CL4XYL	0.06	40.365	1115346	1.251	BV	0.05
49	8.54		0.00	0.000	61606	0.069	VB	0.05
50	8.68		0.00	0.000	28713	0.032	BV	0.06
51	8.78		0.00	0.000	85566	0.096	VB	0.07
52	8.96		0.00	0.000	210110	0.236	BV	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	9.02		0.00	0.000	265727	0.298	VV	0.07
54	9.27		0.00	0.000	231251	0.259	VV	0.05
55	9.42		0.00	0.000	181670	0.204	VV	0.05
56	9.53		0.00	0.000	19795	0.022	VB	0.04
57	9.88	ABHC	0.00	0.954	32888	0.037	BV	0.05
58	10.07		0.00	0.000	40024	0.045	VB	0.10
59	10.20		0.00	0.000	11635	0.013	BV	0.04
60	10.28		0.00	0.000	32328	0.036	VV	0.04
61	10.35		0.00	0.000	56721	0.064	VV	0.04
62	10.43		0.00	0.000	20303	0.023	VB	0.05
63	10.70		0.00	0.000	12733	0.014	BB	0.05
64	10.92		0.00	0.000	19479	0.022	BV	0.05
65	11.07		0.00	0.000	81870	0.092	VV	0.05
66	11.20		0.00	0.000	33817	0.038	VV	0.06
67	11.33		0.00	0.000	117241	0.132	VV	0.05
68	11.41		0.00	0.000	1014591	1.138	VV	0.07
69	11.68		0.00	0.000	458321	0.514	VV	0.05
70	11.79		0.00	0.000	122621	0.138	VV	0.07
71	11.93		0.00	0.000	49675	0.056	VV	0.04
72	12.03		0.00	0.000	15363	0.017	VV	0.04
73	12.19		0.00	0.000	31334	0.035	VV	0.05
74	12.32		0.00	0.000	8818	0.010	VV	0.04
75	12.41		0.00	0.000	68499	0.077	VV	0.06
76	12.57		0.00	0.000	124315	0.139	VV	0.06
77	12.74		0.00	0.000	185945	0.209	VV	0.08
78	12.92		0.00	0.000	27337	0.031	VB	0.06
79	13.22		0.00	0.000	18834	0.021	BV	0.06
80	13.29		0.00	0.000	39743	0.045	VV	0.04
81	13.38		0.00	0.000	314837	0.353	VV	0.06
82	13.69		0.00	0.000	158844	0.178	VV	0.05
83	14.08		0.00	0.000	98939	0.111	VV	0.09
84	14.26		0.00	0.000	11583	0.013	VB	0.08
85	14.47		0.00	0.000	7341	0.008	BB	0.06
86	14.70		0.00	0.000	86593	0.097	BB	0.20
87	15.01		0.00	0.000	3604	0.004	BV	0.06
88	15.08		0.00	0.000	4072	0.005	VB	0.05
89	15.15		0.00	0.000	3676	0.004	BV	0.04
90	15.25		0.00	0.000	4574	0.005	VB	0.08
91	15.49		0.00	0.000	3284	0.004	BB	0.06
92	15.62		0.00	0.000	2216	0.002	BB	0.09
93	15.86		0.00	0.000	11669	0.013	BV	0.18
94	16.03		0.00	0.000	40013	0.045	VV	0.06
95	16.33		0.00	0.000	30523	0.034	VV	0.10
96	16.46		0.00	0.000	11848	0.013	VV	0.06
97	16.58		0.00	0.000	10860	0.012	VV	0.06
98	16.65		0.00	0.000	29264	0.033	VB	0.07
99	17.10		0.00	0.000	92523	0.104	BV	0.24
100	17.39		0.00	0.000	7394	0.008	VV	0.04
101	17.57		0.00	0.000	50482	0.057	VV	0.05
102	17.76		0.00	0.000	14312	0.016	VB	0.08
103	18.12		0.00	0.000	158564	0.178	BB	0.35
104	18.95		0.00	0.000	28136	0.032	BB	0.17
105	19.07		0.00	0.000	22891	0.026	BV	0.08
106	19.31		0.00	0.000	48585	0.054	VV	0.22
107	19.45		0.00	0.000	10505	0.012	VB	0.07
108	19.77		0.00	0.000	4523	0.005	BB	0.09
109	20.09		0.00	0.000	76076	0.085	BV	0.29
110	20.38		0.00	0.000	22433	0.025	VV	0.12
111	20.60		0.00	0.000	28914	0.032	VV	0.14
112	20.74		0.00	0.000	18187	0.020	VB	0.11
113	21.02		0.00	0.000	19369	0.022	BV	0.15
114	21.15		0.00	0.000	9723	0.011	VB	0.06
115	21.49		0.00	0.000	8552	0.010	BB	0.15
116	21.91	CL10BP	0.08	58.681	1559227	1.749	BB	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	22.50		0.00	0.000	5335	0.006	BB	0.10
118	22.75		0.00	0.000	14864	0.017	BB	0.07
119	23.24		0.00	0.000	18403	0.021	BB	0.23
120	24.44		0.00	0.000	22714	0.025	BB	0.23

Total Area = 8.915318E+07 Total Height = 1.288289E+07 Total Amount = 0.138363

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006556-01 B10114 MAK007O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0013.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 3:25:33 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 14
Calibration Date = 11/1/13 1:28:12 PM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1115346	19970360	0.056	55.9	22.340		
9.88	ABHC	32888	24905666	0.001	1.3	0.528		UNDER
21.91	CL10BP	1559227	19204082	0.081	81.2	32.477		

* Linear regression

Checked By: _____ Date: 11/04/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006556 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

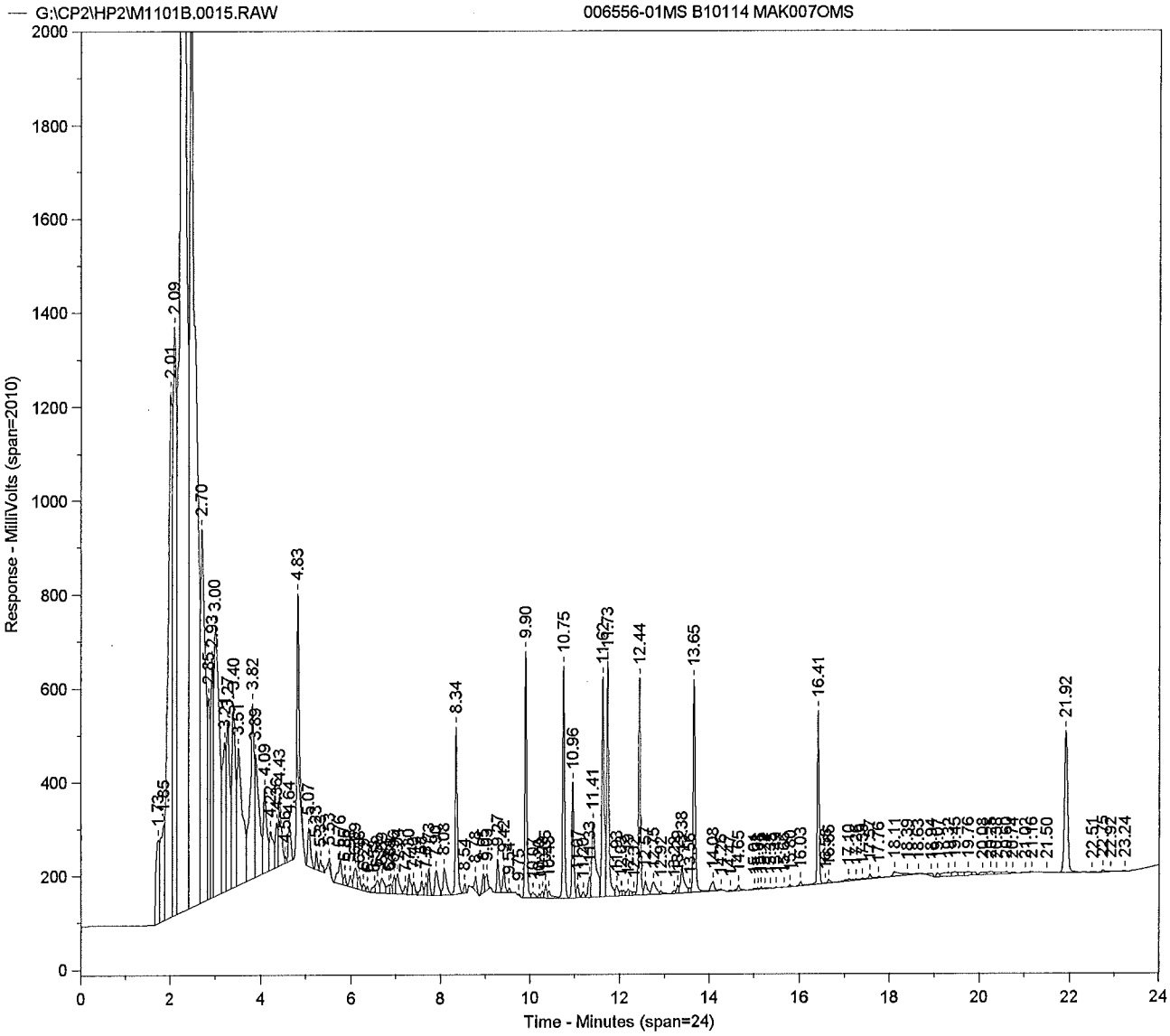
Field ID:	MAK007O	ARDL Lab No.:	006556-01MS
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/11/2013	Received Date:	10/23/2013
Sample Time:	1125	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	24.5		UG/KG	1
gamma-BHC (Lindane)	4	4	24.5		UG/KG	1
delta-BHC	4	4	32.8		UG/KG	1
Heptachlor	4	4	29.6		UG/KG	1
Aldrin	4	4	25.1		UG/KG	1
Heptachlor Epoxide	4	4	25.8		UG/KG	1
p,p'-DDT	4	4	29.1		UG/KG	1
beta-BHC	4	4	24.7		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	59%
Decachlorobiphenyl	25-125	75%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Matrix Spike for 006556-01, CHLORINATED PESTICIDES (8081) Page 1 of 1


G:\CP2\HP2\M1101B.0015.RAW
006556-01MS B10114 MAK007OMS
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2.09
2.01
2.70
3.00
3.82
4.83
8.34
9.90
10.75
10.96
11.41
12.44
13.65
16.41
21.92

Sample Name = **006556-01MS B10114 MAK007OMS**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0015.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 4:26:20 PM
Method Version = 172
Calibration Version = 15

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.73		0.00	0.000	903551	0.760	BV	0.09
2	1.85		0.00	0.000	1278672	1.075	VV	0.05
3	2.01		0.00	0.000	7736915	6.506	VV	0.10
4	2.09		0.00	0.000	6562513	5.518	VV	0.05
5	2.25		0.00	0.000	30535238	25.675	VV	0.08
6	2.45		0.00	0.000	19565650	16.452	VV	0.09
7	2.70		0.00	0.000	5826741	4.899	VV	0.09
8	2.85		0.00	0.000	1565543	1.316	VV	0.05
9	2.93		0.00	0.000	1919275	1.614	VV	0.05
10	3.00		0.00	0.000	4671962	3.928	VV	0.11
11	3.21		0.00	0.000	1705620	1.434	VV	0.05
12	3.27		0.00	0.000	1978260	1.663	VV	0.07
13	3.40		0.00	0.000	2228422	1.874	VV	0.06
14	3.51		0.00	0.000	2438916	2.051	VV	0.10
15	3.82		0.00	0.000	2405930	2.023	VV	0.08
16	3.89		0.00	0.000	1708495	1.437	VV	0.08
17	4.09		0.00	0.000	990326	0.833	VV	0.06
18	4.22		0.00	0.000	492105	0.414	VV	0.04
19	4.36		0.00	0.000	379298	0.319	VV	0.06
20	4.43		0.00	0.000	687712	0.578	VV	0.06
21	4.56		0.00	0.000	31763	0.027	VV	0.04
22	4.64		0.00	0.000	300113	0.252	VB	0.07
23	4.83		0.00	0.000	1008369	0.848	BB	0.05
24	5.07		0.00	0.000	359764	0.303	BB	0.07
25	5.23		0.00	0.000	114835	0.097	BV	0.04
26	5.33		0.00	0.000	95189	0.080	VB	0.09
27	5.53		0.00	0.000	45291	0.038	BB	0.05
28	5.76		0.00	0.000	287952	0.242	BV	0.07
29	5.85		0.00	0.000	70220	0.059	VV	0.05
30	5.98		0.00	0.000	96423	0.081	VV	0.06
31	6.09		0.00	0.000	220966	0.186	VV	0.07
32	6.18		0.00	0.000	119192	0.100	VV	0.07
33	6.29		0.00	0.000	52737	0.044	VV	0.04
34	6.37		0.00	0.000	33840	0.028	VB	0.06
35	6.53		0.00	0.000	67686	0.057	BV	0.08
36	6.59		0.00	0.000	119362	0.100	VV	0.06
37	6.69		0.00	0.000	190039	0.160	VV	0.07
38	6.84		0.00	0.000	82429	0.069	VV	0.04
39	6.89		0.00	0.000	59127	0.050	VV	0.04
40	6.96		0.00	0.000	144932	0.122	VV	0.06
41	7.04		0.00	0.000	209672	0.176	VV	0.08
42	7.21		0.00	0.000	68893	0.058	VV	0.05
43	7.30		0.00	0.000	172556	0.145	VV	0.05
44	7.40		0.00	0.000	92865	0.078	VV	0.06
45	7.58		0.00	0.000	122782	0.103	VV	0.05
46	7.67		0.00	0.000	91727	0.077	VV	0.04
47	7.73		0.00	0.000	169873	0.143	VB	0.05
48	7.90		0.00	0.000	278137	0.234	BV	0.08
49	8.08		0.00	0.000	310884	0.261	VB	0.08
50	8.34	CL4XYL	0.06	8.733	1176104	0.989	BV	0.05
51	8.54		0.00	0.000	62216	0.052	VB	0.05
52	8.78		0.00	0.000	109012	0.092	BB	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	8.95		0.00	0.000	146367	0.123	BV	0.06
54	9.03		0.00	0.000	132957	0.112	VB	0.07
55	9.27		0.00	0.000	255332	0.215	BV	0.05
56	9.42		0.00	0.000	193305	0.163	VV	0.05
57	9.54		0.00	0.000	26296	0.022	VB	0.04
58	9.75		0.00	0.000	8922	0.008	BB	0.06
59	9.90	ABHC	0.06	9.097	1527817	1.285	BV	0.04
60	10.07		0.00	0.000	61439	0.052	VV	0.10
61	10.20		0.00	0.000	22264	0.019	VV	0.05
62	10.28		0.00	0.000	49626	0.042	VV	0.04
63	10.35		0.00	0.000	89656	0.075	VV	0.04
64	10.43		0.00	0.000	65356	0.055	VV	0.05
65	10.75	LINDANE	0.06	9.091	1416051	1.191	VB	0.04
66	10.96	BBHC	0.06	9.158	732913	0.616	BV	0.04
67	11.07		0.00	0.000	92028	0.077	VV	0.05
68	11.20		0.00	0.000	42637	0.036	VV	0.05
69	11.33		0.00	0.000	153856	0.129	VV	0.05
70	11.41		0.00	0.000	1001189	0.842	VV	0.07
71	11.62	DBHC	0.08	12.149	1688965	1.420	VV	0.04
72	11.73	HPCL	0.07	10.976	1672472	1.406	VV	0.04
73	11.93		0.00	0.000	90276	0.076	VV	0.04
74	12.03		0.00	0.000	41249	0.035	VV	0.04
75	12.19		0.00	0.000	60290	0.051	VV	0.04
76	12.32		0.00	0.000	29345	0.025	VV	0.04
77	12.44	ALDRN	0.06	9.296	1354080	1.139	VV	0.04
78	12.57		0.00	0.000	136295	0.115	VV	0.05
79	12.75		0.00	0.000	182221	0.153	VV	0.09
80	12.92		0.00	0.000	36070	0.030	VB	0.07
81	13.22		0.00	0.000	23268	0.020	BV	0.07
82	13.29		0.00	0.000	56081	0.047	VV	0.05
83	13.38		0.00	0.000	317003	0.267	VV	0.06
84	13.56		0.00	0.000	33207	0.028	VV	0.03
85	13.65	HPCLE	0.06	9.577	1443295	1.214	VV	0.04
86	14.08		0.00	0.000	107833	0.091	VV	0.09
87	14.26		0.00	0.000	14875	0.013	VB	0.08
88	14.47		0.00	0.000	8858	0.007	BB	0.06
89	14.65		0.00	0.000	52686	0.044	BB	0.05
90	15.01		0.00	0.000	12849	0.011	BV	0.08
91	15.08		0.00	0.000	8390	0.007	VV	0.04
92	15.15		0.00	0.000	11116	0.009	VV	0.04
93	15.24		0.00	0.000	7689	0.006	VV	0.04
94	15.35		0.00	0.000	7447	0.006	VV	0.08
95	15.49		0.00	0.000	5617	0.005	VB	0.05
96	15.66		0.00	0.000	7044	0.006	BB	0.14
97	15.80		0.00	0.000	15865	0.013	BB	0.06
98	16.03		0.00	0.000	32968	0.028	BV	0.05
99	16.41	PPDDT	0.07	10.786	1041831	0.876	VV	0.04
100	16.58		0.00	0.000	7560	0.006	VV	0.05
101	16.65		0.00	0.000	36296	0.031	VB	0.07
102	17.10		0.00	0.000	50019	0.042	BV	0.22
103	17.26		0.00	0.000	21658	0.018	VV	0.08
104	17.39		0.00	0.000	23283	0.020	VV	0.10
105	17.57		0.00	0.000	40077	0.034	VV	0.05
106	17.76		0.00	0.000	24135	0.020	VV	0.06
107	18.11		0.00	0.000	103450	0.087	VV	0.23
108	18.39		0.00	0.000	31993	0.027	VV	0.13
109	18.63		0.00	0.000	10736	0.009	VB	0.16
110	18.94		0.00	0.000	36336	0.031	BB	0.17
111	19.07		0.00	0.000	39500	0.033	BV	0.09
112	19.32		0.00	0.000	117793	0.099	VV	0.20
113	19.45		0.00	0.000	76326	0.064	VV	0.07
114	19.76		0.00	0.000	72150	0.061	VV	0.09
115	20.08		0.00	0.000	62860	0.053	VV	0.16
116	20.25		0.00	0.000	59221	0.050	VV	0.08

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	20.38		0.00	0.000	41537	0.035	VV	0.08
118	20.60		0.00	0.000	43233	0.036	VV	0.13
119	20.74		0.00	0.000	23073	0.019	VB	0.12
120	21.02		0.00	0.000	16972	0.014	BV	0.17
121	21.16		0.00	0.000	10386	0.009	VB	0.06
122	21.50		0.00	0.000	5875	0.005	BB	0.13
123	21.92	CL10BP	0.08	11.138	1442436	1.213	BB	0.07
124	22.51		0.00	0.000	5690	0.005	BB	0.08
125	22.75		0.00	0.000	18086	0.015	BV	0.08
126	22.92		0.00	0.000	4921	0.004	VB	0.10
127	23.24		0.00	0.000	5148	0.004	BB	0.11
128	24.44		0.00	0.000	33683	0.028	BB	0.24

Total Area = 1.189277E+08 Total Height = 1.957147E+07 Total Amount = 0.6743443

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006556-01MS B10114 MAK007OMS**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0015.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 4:26:20 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 15
Calibration Date = 11/4/13 11:17:25 AM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD
8.34	CL4XYL	1176104	19970360	0.059	58.9	23.557	
9.90	ABHC	1527817	24905666	0.061	61.3	24.538	
10.75	LINDANE	1416051	23099646	0.061	61.3	24.521	
10.96	BBHC	732913	11867922	0.062	61.8	24.702	
11.62	DBHC	1688965	20616462	0.082	81.9	32.769	
11.73	HPCL	1672472	22596580	0.074	74.0	29.606	
12.44	ALDRN	1354080	21601050	0.063	62.7	25.074	
13.65	HPCLE	1443295	22348770	0.065	64.6	25.832	
16.41	PPDDT	1041831	14323591	0.073	72.7	29.094	
21.92	CL10BP	1442436	19204082	0.075	75.1	30.044	

* Linear regression

Checked By: _____ Date: 11/04/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006556 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

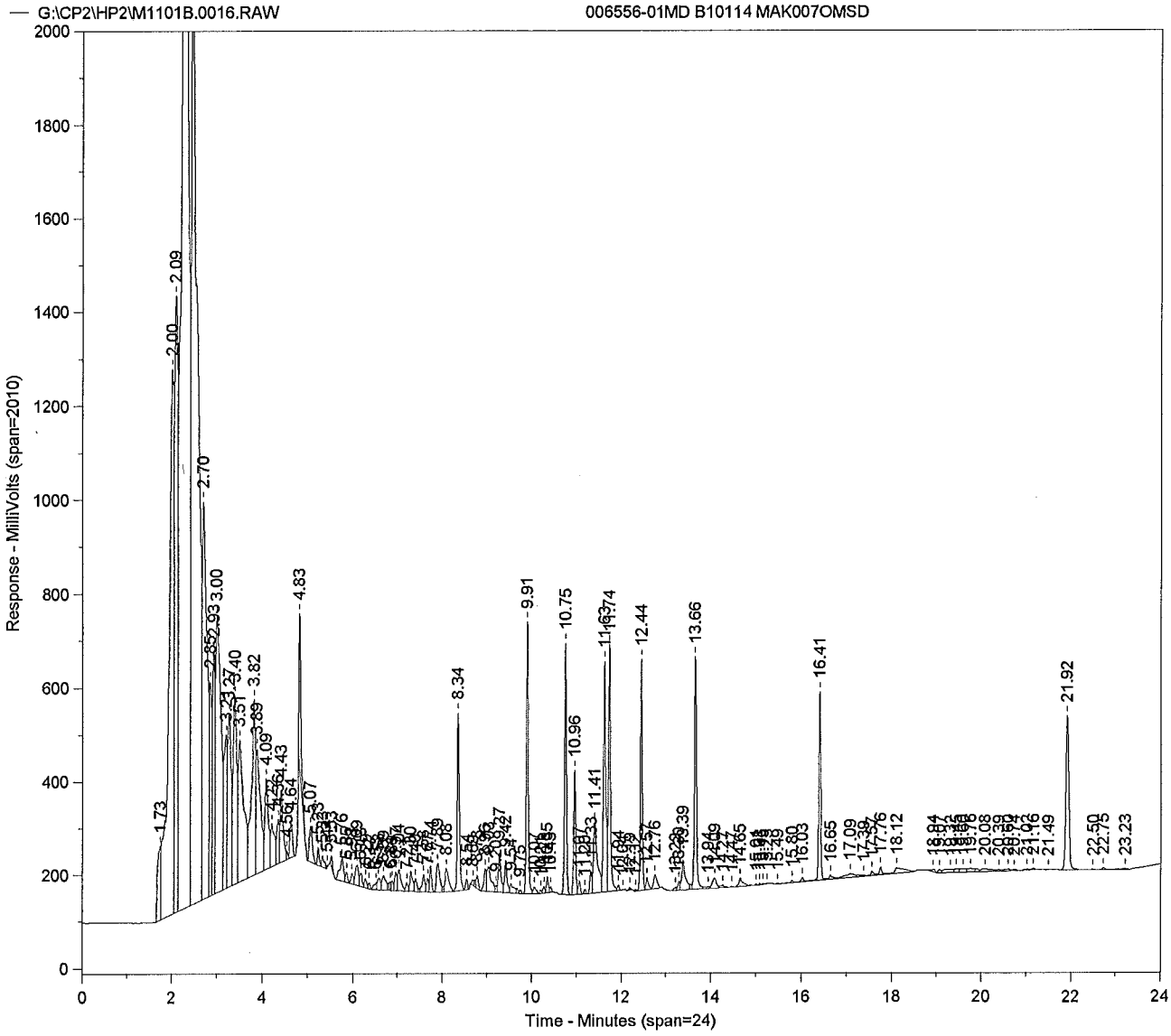
Field ID:	MAK007O	ARDL Lab No.:	006556-01MD
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/11/2013	Received Date:	10/23/2013
Sample Time:	1125	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	27.5		UG/KG	1
gamma-BHC (Lindane)	4	4	26.7		UG/KG	1
delta-BHC	4	4	34		UG/KG	1
Heptachlor	4	4	29.6		UG/KG	1
Aldrin	4	4	26		UG/KG	1
Heptachlor Epoxide	4	4	28		UG/KG	1
p,p'-DDT	4	4	31.7		UG/KG	1
beta-BHC	4	4	26.9		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	65%
Decachlorobiphenyl	25-125	80%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Matrix Spike Duplicate for 006556-01, CHLORINATED PESTICIDES (8081) Page 1 of 1


G:\CP2\HP2\M1101B.0016.RAW
006556-01MD B10114 MAK007OMSD
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
1.73
2.00
2.09
2.70
2.93
3.00
3.40
3.82
4.09
4.43
4.83
5.07
8.34
9.91
10.75
10.96
11.41
11.74
12.44
13.66
16.41
21.92
22.50
23.23

Sample Name = **006556-01MD B10114 MAK007OMSD**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0016.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 4:56:36 PM
Method Version = 172
Calibration Version = 15

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.73		0.00	0.000	737119	0.588	BV	0.08
2	2.00		0.00	0.000	9271900	7.390	VV	0.10
3	2.09		0.00	0.000	6872452	5.478	VV	0.05
4	2.24		0.00	0.000	32678966	26.047	VV	0.08
5	2.44		0.00	0.000	20985322	16.726	VV	0.08
6	2.70		0.00	0.000	6298631	5.020	VV	0.09
7	2.85		0.00	0.000	1660075	1.323	VV	0.04
8	2.93		0.00	0.000	1903045	1.517	VV	0.05
9	3.00		0.00	0.000	4818204	3.840	VV	0.11
10	3.21		0.00	0.000	1770177	1.411	VV	0.05
11	3.27		0.00	0.000	2063260	1.645	VV	0.07
12	3.40		0.00	0.000	2300934	1.834	VV	0.06
13	3.51		0.00	0.000	2561717	2.042	VV	0.10
14	3.82		0.00	0.000	2399296	1.912	VV	0.07
15	3.89		0.00	0.000	1791721	1.428	VV	0.08
16	4.09		0.00	0.000	1095487	0.873	VV	0.06
17	4.22		0.00	0.000	539200	0.430	VV	0.05
18	4.36		0.00	0.000	386085	0.308	VV	0.06
19	4.43		0.00	0.000	717317	0.572	VV	0.06
20	4.56		0.00	0.000	39396	0.031	VV	0.03
21	4.64		0.00	0.000	304896	0.243	VB	0.07
22	4.83		0.00	0.000	914727	0.729	BB	0.05
23	5.07		0.00	0.000	339401	0.271	BB	0.07
24	5.23		0.00	0.000	108579	0.087	BV	0.04
25	5.33		0.00	0.000	94655	0.075	VB	0.09
26	5.44		0.00	0.000	6533	0.005	BB	0.03
27	5.53		0.00	0.000	47048	0.037	BB	0.05
28	5.76		0.00	0.000	281921	0.225	BV	0.07
29	5.85		0.00	0.000	66912	0.053	VV	0.06
30	5.98		0.00	0.000	86024	0.069	VV	0.06
31	6.09		0.00	0.000	222285	0.177	VV	0.07
32	6.18		0.00	0.000	119067	0.095	VV	0.07
33	6.29		0.00	0.000	65392	0.052	VV	0.04
34	6.37		0.00	0.000	35013	0.028	VB	0.05
35	6.53		0.00	0.000	64175	0.051	BV	0.08
36	6.58		0.00	0.000	111614	0.089	VV	0.06
37	6.69		0.00	0.000	184609	0.147	VV	0.07
38	6.84		0.00	0.000	46163	0.037	VV	0.03
39	6.89		0.00	0.000	58127	0.046	VV	0.04
40	6.97		0.00	0.000	148633	0.118	VV	0.06
41	7.04		0.00	0.000	224273	0.179	VV	0.07
42	7.21		0.00	0.000	62684	0.050	VV	0.04
43	7.30		0.00	0.000	170076	0.136	VV	0.06
44	7.40		0.00	0.000	95733	0.076	VV	0.06
45	7.58		0.00	0.000	151723	0.121	VV	0.05
46	7.67		0.00	0.000	96939	0.077	VV	0.04
47	7.74		0.00	0.000	167444	0.133	VB	0.05
48	7.89		0.00	0.000	309713	0.247	BV	0.08
49	8.08		0.00	0.000	285484	0.228	VB	0.08
50	8.34	CL4XYL	0.06	8.965	1290021	1.028	BV	0.05
51	8.54		0.00	0.000	73135	0.058	VB	0.05
52	8.69		0.00	0.000	35149	0.028	BV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	8.78		0.00	0.000	92104	0.073	VB	0.07
54	8.96		0.00	0.000	180958	0.144	BV	0.06
55	9.03		0.00	0.000	349788	0.279	VV	0.08
56	9.20		0.00	0.000	39062	0.031	VV	0.03
57	9.27		0.00	0.000	367314	0.293	VV	0.05
58	9.42		0.00	0.000	273075	0.218	VV	0.05
59	9.54		0.00	0.000	121368	0.097	VV	0.04
60	9.75		0.00	0.000	26314	0.021	VB	0.06
61	9.91	ABHC	0.07	9.529	1709979	1.363	BV	0.04
62	10.07		0.00	0.000	67495	0.054	VB	0.08
63	10.21		0.00	0.000	18102	0.014	BV	0.04
64	10.28		0.00	0.000	48141	0.038	VV	0.04
65	10.35		0.00	0.000	103299	0.082	VV	0.04
66	10.43		0.00	0.000	31965	0.025	VB	0.05
67	10.75	LINDANE	0.07	9.277	1544193	1.231	BB	0.04
68	10.96	BBHC	0.07	9.338	798516	0.636	BV	0.04
69	11.07		0.00	0.000	89310	0.071	VV	0.05
70	11.20		0.00	0.000	25449	0.020	VB	0.05
71	11.33		0.00	0.000	163315	0.130	BV	0.06
72	11.41		0.00	0.000	945260	0.753	VV	0.07
73	11.63	DBHC	0.08	11.791	1751642	1.396	VV	0.04
74	11.74	HPCL	0.07	10.256	1669806	1.331	VV	0.04
75	11.94		0.00	0.000	32324	0.026	VB	0.04
76	12.04		0.00	0.000	2418	0.002	BB	0.04
77	12.19		0.00	0.000	12947	0.010	BB	0.05
78	12.32		0.00	0.000	8919	0.007	BV	0.05
79	12.44	ALDRN	0.07	9.026	1404894	1.120	VV	0.04
80	12.57		0.00	0.000	100768	0.080	VV	0.05
81	12.76		0.00	0.000	159295	0.127	VB	0.08
82	13.22		0.00	0.000	25651	0.020	BV	0.07
83	13.30		0.00	0.000	62252	0.050	VV	0.05
84	13.39		0.00	0.000	359715	0.287	VV	0.06
85	13.66	HPCLE	0.07	9.726	1566220	1.248	VV	0.04
86	13.94		0.00	0.000	15188	0.012	VV	0.04
87	14.09		0.00	0.000	139420	0.111	VV	0.09
88	14.27		0.00	0.000	33305	0.027	VV	0.08
89	14.47		0.00	0.000	10258	0.008	VB	0.06
90	14.65		0.00	0.000	113405	0.090	BB	0.08
91	15.01		0.00	0.000	5404	0.004	BB	0.05
92	15.08		0.00	0.000	5678	0.005	BV	0.05
93	15.15		0.00	0.000	4425	0.004	VV	0.04
94	15.25		0.00	0.000	4151	0.003	VB	0.07
95	15.49		0.00	0.000	3643	0.003	BB	0.05
96	15.80		0.00	0.000	18902	0.015	BB	0.08
97	16.03		0.00	0.000	34555	0.028	BV	0.06
98	16.41	PPDDT	0.08	10.988	1134052	0.904	VV	0.04
99	16.65		0.00	0.000	57192	0.046	VV	0.07
100	17.09		0.00	0.000	116967	0.093	VV	0.27
101	17.39		0.00	0.000	11264	0.009	VV	0.04
102	17.57		0.00	0.000	33311	0.027	VV	0.06
103	17.76		0.00	0.000	59132	0.047	VV	0.05
104	18.12		0.00	0.000	167612	0.134	VB	0.34
105	18.94		0.00	0.000	32196	0.026	BB	0.18
106	19.07		0.00	0.000	29703	0.024	BV	0.09
107	19.32		0.00	0.000	105785	0.084	VV	0.24
108	19.45		0.00	0.000	47611	0.038	VV	0.06
109	19.60		0.00	0.000	62664	0.050	VV	0.11
110	19.76		0.00	0.000	80463	0.064	VV	0.09
111	20.08		0.00	0.000	96949	0.077	VV	0.20
112	20.39		0.00	0.000	26576	0.021	VV	0.12
113	20.60		0.00	0.000	38377	0.031	VV	0.12
114	20.74		0.00	0.000	19629	0.016	VB	0.12
115	21.02		0.00	0.000	19799	0.016	BV	0.15
116	21.16		0.00	0.000	13321	0.011	VB	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	21.49		0.00	0.000	4523	0.004	BB	0.12
118	21.92	CL10BP	0.08	11.104	1536583	1.225	BB	0.07
119	22.50		0.00	0.000	5285	0.004	BB	0.09
120	22.75		0.00	0.000	19757	0.016	BV	0.07
121	23.23		0.00	0.000	19018	0.015	VB	0.13
122	24.45		0.00	0.000	25725	0.021	BB	0.22

Total Area = 1.254622E+08 Total Height = 2.042747E+07 Total Amount = 0.7205535

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006556-01MD B10114 MAK007OMSD**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0016.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 4:56:36 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 15
Calibration Date = 11/4/13 11:17:25 AM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD
8.34	CL4XYL	1290021	19970360	0.065	64.6	25.839	
9.91	ABHC	1709979	24905666	0.069	68.7	27.463	
10.75	LINDANE	1544193	23099646	0.067	66.8	26.740	
10.96	BBHC	798516	11867922	0.067	67.3	26.913	
11.63	DBHC	1751642	20616462	0.085	85.0	33.985	
11.74	HPCL	1669806	22596580	0.074	73.9	29.559	
12.44	ALDRN	1404894	21601050	0.065	65.0	26.015	
13.66	HPCLE	1566220	22348770	0.070	70.1	28.032	
16.41	PPDDT	1134052	14323591	0.079	79.2	31.669	
21.92	CL10BP	1536583	19204082	0.080	80.0	32.005	

* Linear regression

Checked By: _____ Date: 11/04/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006556 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

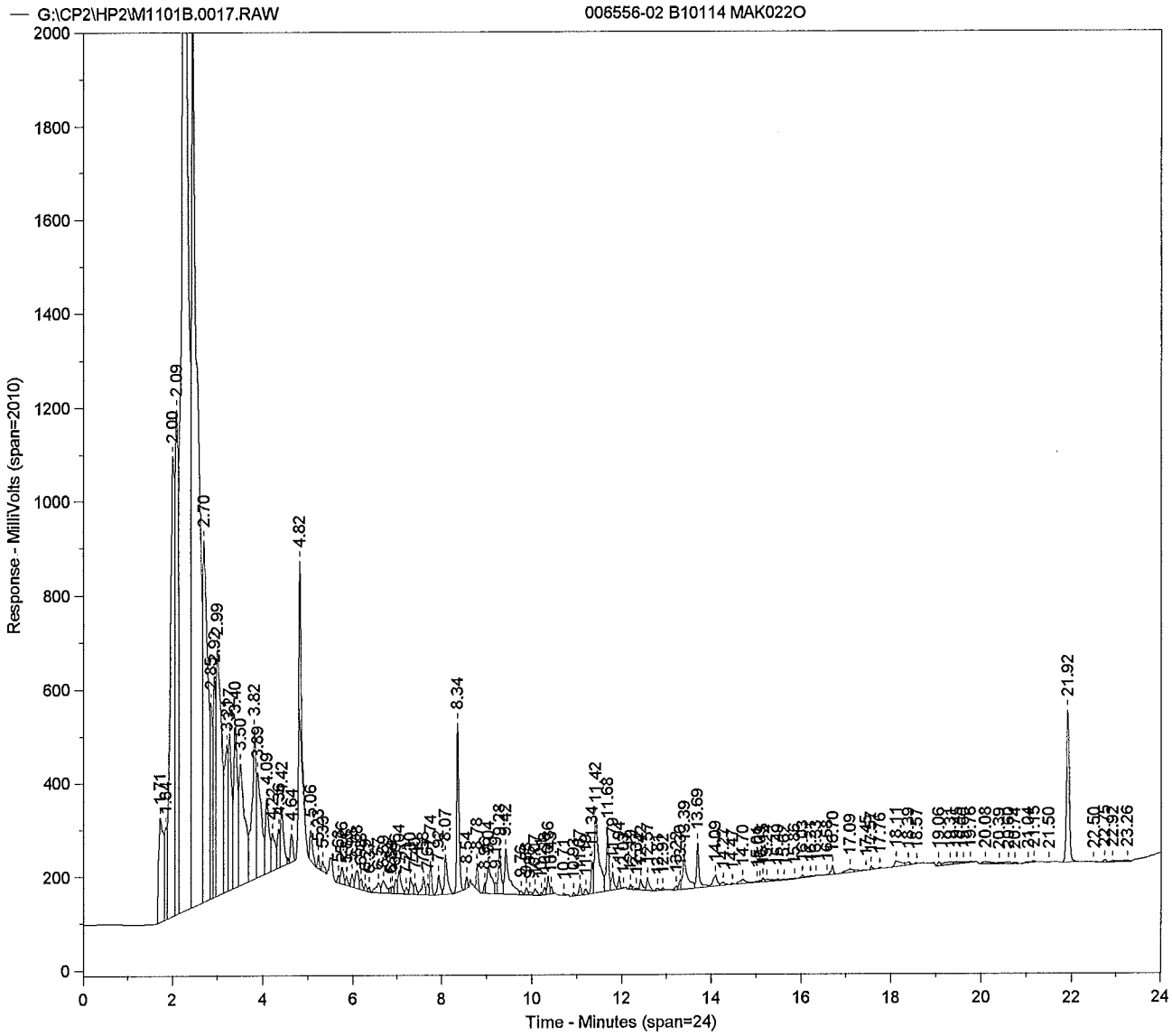
Field ID:	MAK022O	ARDL Lab No.:	006556-02
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/23/2013	Received Date:	10/23/2013
Sample Time:	1020	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	62%
Decachlorobiphenyl	25-125	80%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006556-02, CHLORINATED PESTICIDES (8081) Page 1 of 1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006556-02 B10114 MAK022O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0
2
4
6
8
10
12
14
16
18
20
22
24
2.00
2.09
2.70
2.99
3.40
3.50
3.82
4.09
4.42
4.64
4.82
5.06
8.34
9.42
9.28
11.42
11.68
13.69
21.92

Sample Name = **006556-02 B10114 MAK022O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0017.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 5:27:02 PM
Method Version = 172
Calibration Version = 15

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.71		0.00	0.000	1653326	1.610	BV	0.14
2	1.84		0.00	0.000	695072	0.677	VV	0.04
3	2.00		0.00	0.000	6778151	6.600	VV	0.10
4	2.09		0.00	0.000	5472571	5.329	VV	0.05
5	2.24		0.00	0.000	28060582	27.322	VV	0.08
6	2.44		0.00	0.000	18622296	18.132	VV	0.09
7	2.70		0.00	0.000	5668364	5.519	VV	0.09
8	2.85		0.00	0.000	1523745	1.484	VV	0.05
9	2.92		0.00	0.000	1810971	1.763	VV	0.05
10	2.99		0.00	0.000	4329005	4.215	VV	0.11
11	3.21		0.00	0.000	1733025	1.687	VV	0.05
12	3.27		0.00	0.000	1788799	1.742	VV	0.06
13	3.40		0.00	0.000	1957819	1.906	VV	0.06
14	3.50		0.00	0.000	2290269	2.230	VV	0.10
15	3.82		0.00	0.000	2110646	2.055	VV	0.08
16	3.89		0.00	0.000	1612583	1.570	VV	0.10
17	4.09		0.00	0.000	951405	0.926	VV	0.06
18	4.22		0.00	0.000	464296	0.452	VV	0.07
19	4.36		0.00	0.000	334858	0.326	VV	0.06
20	4.42		0.00	0.000	592386	0.577	VV	0.06
21	4.64		0.00	0.000	240179	0.234	VB	0.07
22	4.82		0.00	0.000	835111	0.813	BB	0.05
23	5.06		0.00	0.000	273071	0.266	BB	0.07
24	5.23		0.00	0.000	77870	0.076	BV	0.04
25	5.33		0.00	0.000	81713	0.080	VB	0.08
26	5.68		0.00	0.000	55047	0.054	BV	0.06
27	5.76		0.00	0.000	150828	0.147	VV	0.06
28	5.85		0.00	0.000	64721	0.063	VV	0.05
29	5.98		0.00	0.000	100644	0.098	VV	0.05
30	6.08		0.00	0.000	199418	0.194	VV	0.07
31	6.18		0.00	0.000	93923	0.091	VV	0.07
32	6.29		0.00	0.000	44371	0.043	VV	0.04
33	6.37		0.00	0.000	28836	0.028	VB	0.06
34	6.57		0.00	0.000	144936	0.141	BV	0.12
35	6.69		0.00	0.000	175976	0.171	VV	0.08
36	6.84		0.00	0.000	34744	0.034	VV	0.04
37	6.89		0.00	0.000	44644	0.043	VV	0.03
38	6.96		0.00	0.000	115993	0.113	VV	0.06
39	7.04		0.00	0.000	254123	0.247	VV	0.07
40	7.21		0.00	0.000	51588	0.050	VV	0.04
41	7.30		0.00	0.000	145289	0.141	VV	0.07
42	7.40		0.00	0.000	85792	0.084	VV	0.06
43	7.58		0.00	0.000	169234	0.165	VV	0.05
44	7.67		0.00	0.000	76866	0.075	VV	0.04
45	7.74		0.00	0.000	223230	0.217	VB	0.05
46	7.92		0.00	0.000	187357	0.182	BV	0.07
47	8.07		0.00	0.000	396811	0.386	VB	0.06
48	8.34	CL4XYL	0.06	41.745	1235856	1.203	BB	0.05
49	8.54		0.00	0.000	73894	0.072	BB	0.06
50	8.78		0.00	0.000	172905	0.168	BB	0.05
51	8.96		0.00	0.000	63893	0.062	BV	0.04
52	9.04		0.00	0.000	432478	0.421	VV	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	9.19		0.00	0.000	78318	0.076	VV	0.03
54	9.28		0.00	0.000	420257	0.409	VV	0.05
55	9.42		0.00	0.000	695109	0.677	VV	0.07
56	9.76		0.00	0.000	27735	0.027	VV	0.06
57	9.88	ABHC	0.00	1.428	52726	0.051	VV	0.05
58	9.95		0.00	0.000	31761	0.031	VV	0.07
59	10.07		0.00	0.000	60807	0.059	VB	0.07
60	10.21		0.00	0.000	12335	0.012	BV	0.04
61	10.28		0.00	0.000	52835	0.051	VV	0.05
62	10.36		0.00	0.000	124439	0.121	VV	0.05
63	10.43		0.00	0.000	39758	0.039	VB	0.05
64	10.71		0.00	0.000	11383	0.011	BB	0.04
65	10.93		0.00	0.000	23545	0.023	BV	0.05
66	11.07		0.00	0.000	78894	0.077	VB	0.05
67	11.19		0.00	0.000	47779	0.047	BV	0.07
68	11.34		0.00	0.000	225539	0.220	VV	0.06
69	11.42		0.00	0.000	1153828	1.123	VV	0.07
70	11.68		0.00	0.000	513619	0.500	VV	0.05
71	11.79		0.00	0.000	153964	0.150	VV	0.05
72	11.94		0.00	0.000	72840	0.071	VV	0.04
73	12.03		0.00	0.000	3117	0.003	VB	0.04
74	12.19		0.00	0.000	32687	0.032	BV	0.05
75	12.33		0.00	0.000	12971	0.013	VV	0.04
76	12.42	ALDRN	0.00	3.061	98011	0.095	VV	0.05
77	12.57		0.00	0.000	119879	0.117	VB	0.06
78	12.81		0.00	0.000	21757	0.021	BV	0.09
79	12.92		0.00	0.000	17485	0.017	VB	0.04
80	13.22		0.00	0.000	28937	0.028	BV	0.07
81	13.30		0.00	0.000	56962	0.055	VV	0.04
82	13.39		0.00	0.000	500978	0.488	VV	0.06
83	13.69		0.00	0.000	381670	0.372	VV	0.05
84	14.09		0.00	0.000	149900	0.146	VV	0.10
85	14.27		0.00	0.000	34835	0.034	VV	0.07
86	14.47		0.00	0.000	10391	0.010	VB	0.06
87	14.70		0.00	0.000	88312	0.086	BV	0.20
88	15.01		0.00	0.000	10057	0.010	VV	0.06
89	15.09		0.00	0.000	9810	0.010	VV	0.05
90	15.15		0.00	0.000	25823	0.025	VV	0.05
91	15.24		0.00	0.000	26655	0.026	VV	0.05
92	15.49		0.00	0.000	13284	0.013	VV	0.05
93	15.62		0.00	0.000	4434	0.004	VB	0.09
94	15.86		0.00	0.000	10313	0.010	BB	0.15
95	16.03		0.00	0.000	21936	0.021	BV	0.07
96	16.21		0.00	0.000	5976	0.006	VB	0.09
97	16.33		0.00	0.000	3493	0.003	BB	0.05
98	16.58		0.00	0.000	3375	0.003	BV	0.05
99	16.70		0.00	0.000	71175	0.069	VB	0.05
100	17.09		0.00	0.000	89700	0.087	BV	0.23
101	17.45		0.00	0.000	15933	0.016	VB	0.13
102	17.57		0.00	0.000	22750	0.022	BV	0.06
103	17.76		0.00	0.000	12959	0.013	VB	0.10
104	18.11		0.00	0.000	120818	0.118	BV	0.23
105	18.39		0.00	0.000	36310	0.035	VB	0.11
106	18.57		0.00	0.000	7058	0.007	BB	0.09
107	19.06		0.00	0.000	32308	0.031	BV	0.09
108	19.31		0.00	0.000	72913	0.071	VV	0.21
109	19.45		0.00	0.000	29355	0.029	VV	0.06
110	19.60		0.00	0.000	20180	0.020	VV	0.12
111	19.76		0.00	0.000	8745	0.009	VB	0.08
112	20.08		0.00	0.000	74603	0.073	BV	0.29
113	20.39		0.00	0.000	24823	0.024	VV	0.11
114	20.60		0.00	0.000	42562	0.041	VV	0.13
115	20.74		0.00	0.000	21198	0.021	VB	0.13
116	21.04		0.00	0.000	22338	0.022	BV	0.14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	21.15		0.00	0.000	16962	0.017	VB	0.06
118	21.50		0.00	0.000	6574	0.006	BB	0.09
119	21.92	CL10BP	0.08	53.766	1530684	1.490	BB	0.07
120	22.50		0.00	0.000	6351	0.006	BB	0.09
121	22.75		0.00	0.000	21151	0.021	BV	0.07
122	22.92		0.00	0.000	15036	0.015	VV	0.14
123	23.26		0.00	0.000	27651	0.027	VB	0.18

Total Area = 1.027022E+08 Total Height = 1.518915E+07 Total Amount = 0.1482451

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006556-02 B10114 MAK022O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0017.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 5:27:02 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 15
Calibration Date = 11/4/13 11:17:25 AM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1235856	19970360	0.062	61.9	24.754		
9.88	ABHC	52726	24905666	0.002	2.1	0.847		UNDER
12.42	ALDRN	98011	21601050	0.005	4.5	1.815		UNDER
21.92	CL10BP	1530684	19204082	0.080	79.7	31.882		

* Linear regression

Checked By: _____ Date: 11/04/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006556 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

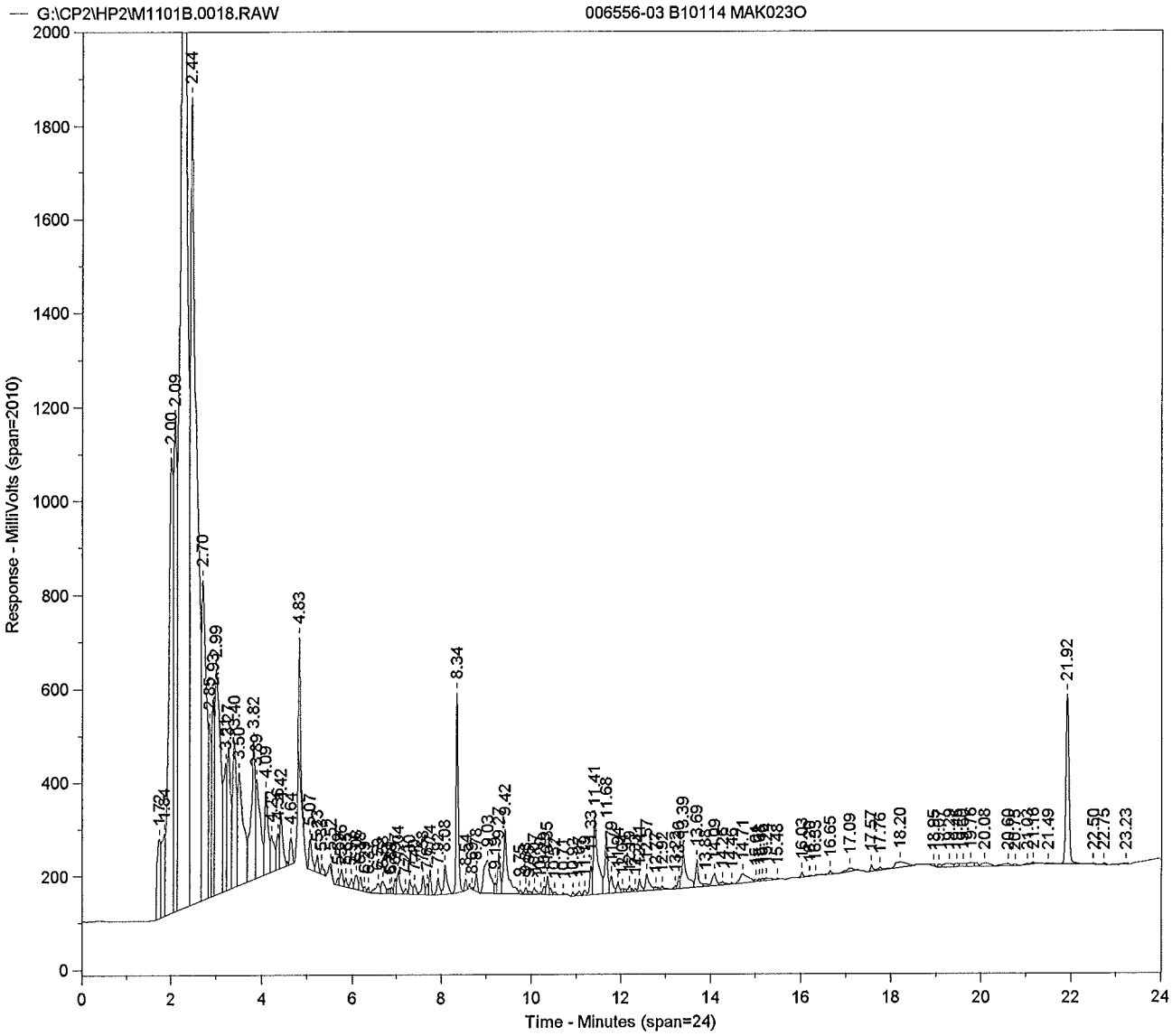
Field ID:	MAK023O	ARDL Lab No.:	006556-03
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/23/2013	Received Date:	10/23/2013
Sample Time:	1136	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	70%
Decachlorobiphenyl	25-125	88%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006556-03, CHLORINATED PESTICIDES (8081) Page 1 of 1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006556-03 B10114 MAK023O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)

Sample Name = **006556-03 B10114 MAK023O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0018.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 5:57:15 PM
Method Version = 172
Calibration Version = 15

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.72		0.00	0.000	895000	0.905	BV	0.09
2	1.84		0.00	0.000	1069527	1.082	VV	0.05
3	2.00		0.00	0.000	6673057	6.750	VV	0.10
4	2.09		0.00	0.000	5383598	5.445	VV	0.05
5	2.24		0.00	0.000	27781732	28.100	VV	0.09
6	2.44		0.00	0.000	17172688	17.370	VV	0.09
7	2.70		0.00	0.000	5082345	5.141	VV	0.09
8	2.85		0.00	0.000	1364779	1.380	VV	0.05
9	2.93		0.00	0.000	1628336	1.647	VV	0.05
10	2.99		0.00	0.000	3957308	4.003	VV	0.11
11	3.21		0.00	0.000	1471570	1.488	VV	0.05
12	3.27		0.00	0.000	1677153	1.696	VV	0.07
13	3.40		0.00	0.000	1844373	1.866	VV	0.07
14	3.50		0.00	0.000	2058085	2.082	VV	0.10
15	3.82		0.00	0.000	1951164	1.974	VV	0.08
16	3.89		0.00	0.000	1439648	1.456	VV	0.09
17	4.09		0.00	0.000	995805	1.007	VV	0.06
18	4.22		0.00	0.000	452926	0.458	VV	0.07
19	4.36		0.00	0.000	312722	0.316	VV	0.06
20	4.42		0.00	0.000	529949	0.536	VV	0.07
21	4.64		0.00	0.000	224087	0.227	VB	0.07
22	4.83		0.00	0.000	714529	0.723	BB	0.05
23	5.07		0.00	0.000	294715	0.298	BV	0.07
24	5.23		0.00	0.000	147632	0.149	VV	0.06
25	5.33		0.00	0.000	83969	0.085	VB	0.08
26	5.52		0.00	0.000	27009	0.027	BB	0.05
27	5.69		0.00	0.000	53545	0.054	BV	0.05
28	5.76		0.00	0.000	149023	0.151	VV	0.06
29	5.85		0.00	0.000	68501	0.069	VV	0.05
30	5.97		0.00	0.000	81511	0.082	VV	0.05
31	6.08		0.00	0.000	159883	0.162	VV	0.07
32	6.18		0.00	0.000	120536	0.122	VV	0.06
33	6.29		0.00	0.000	33216	0.034	VV	0.05
34	6.37		0.00	0.000	28136	0.028	VB	0.05
35	6.59		0.00	0.000	135085	0.137	BV	0.11
36	6.68		0.00	0.000	149920	0.152	VV	0.08
37	6.84		0.00	0.000	31190	0.032	VV	0.03
38	6.89		0.00	0.000	38034	0.038	VV	0.03
39	6.97		0.00	0.000	119457	0.121	VV	0.06
40	7.04		0.00	0.000	226281	0.229	VV	0.07
41	7.21		0.00	0.000	44026	0.045	VV	0.04
42	7.30		0.00	0.000	122486	0.124	VV	0.06
43	7.40		0.00	0.000	72339	0.073	VV	0.06
44	7.58		0.00	0.000	158760	0.161	VV	0.05
45	7.67		0.00	0.000	82019	0.083	VV	0.04
46	7.74		0.00	0.000	157085	0.159	VB	0.05
47	7.92		0.00	0.000	152889	0.155	BV	0.06
48	8.08		0.00	0.000	319347	0.323	VB	0.07
49	8.34	CL4XYL	0.07	42.624	1405041	1.421	BB	0.05
50	8.54		0.00	0.000	71632	0.072	BB	0.05
51	8.69		0.00	0.000	7214	0.007	BV	0.03
52	8.78		0.00	0.000	133021	0.135	VB	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	9.03		0.00	0.000	727485	0.736	BV	0.16
54	9.19		0.00	0.000	72417	0.073	VV	0.03
55	9.27		0.00	0.000	358128	0.362	VV	0.05
56	9.42		0.00	0.000	916944	0.927	VV	0.07
57	9.75		0.00	0.000	30365	0.031	VV	0.06
58	9.88	ABHC	0.00	1.256	51635	0.052	VV	0.05
59	9.95		0.00	0.000	33050	0.033	VV	0.06
60	10.07		0.00	0.000	65763	0.067	VV	0.07
61	10.20		0.00	0.000	14998	0.015	VV	0.04
62	10.29		0.00	0.000	67630	0.068	VV	0.06
63	10.35		0.00	0.000	135074	0.137	VV	0.04
64	10.52		0.00	0.000	24599	0.025	VB	0.07
65	10.71		0.00	0.000	9012	0.009	BB	0.04
66	10.92		0.00	0.000	25578	0.026	BV	0.05
67	11.07		0.00	0.000	41356	0.042	VV	0.07
68	11.19		0.00	0.000	41781	0.042	VV	0.07
69	11.33		0.00	0.000	229565	0.232	VV	0.06
70	11.41		0.00	0.000	1140692	1.154	VV	0.07
71	11.68		0.00	0.000	547642	0.554	VV	0.05
72	11.79		0.00	0.000	174074	0.176	VV	0.06
73	11.94		0.00	0.000	85179	0.086	VV	0.04
74	12.04		0.00	0.000	28560	0.029	VV	0.05
75	12.19		0.00	0.000	46265	0.047	VV	0.04
76	12.33		0.00	0.000	15099	0.015	VV	0.05
77	12.41	ALDRN	0.00	2.818	100474	0.102	VV	0.05
78	12.57		0.00	0.000	202312	0.205	VV	0.07
79	12.77		0.00	0.000	24548	0.025	VV	0.04
80	12.92		0.00	0.000	20480	0.021	VB	0.04
81	13.22		0.00	0.000	22278	0.023	BV	0.06
82	13.30		0.00	0.000	81771	0.083	VV	0.05
83	13.39		0.00	0.000	554831	0.561	VV	0.06
84	13.69		0.00	0.000	253306	0.256	VV	0.05
85	13.88		0.00	0.000	33840	0.034	VV	0.08
86	14.09		0.00	0.000	169424	0.171	VV	0.09
87	14.26		0.00	0.000	36502	0.037	VV	0.07
88	14.46		0.00	0.000	11821	0.012	VB	0.05
89	14.71		0.00	0.000	255715	0.259	BV	0.26
90	15.01		0.00	0.000	20873	0.021	VV	0.05
91	15.08		0.00	0.000	16216	0.016	VV	0.04
92	15.15		0.00	0.000	19568	0.020	VV	0.04
93	15.24		0.00	0.000	53517	0.054	VV	0.14
94	15.48		0.00	0.000	10580	0.011	VB	0.05
95	16.03		0.00	0.000	33697	0.034	BV	0.05
96	16.20		0.00	0.000	8937	0.009	VB	0.09
97	16.33		0.00	0.000	3808	0.004	BB	0.07
98	16.65		0.00	0.000	30569	0.031	BB	0.08
99	17.09		0.00	0.000	69441	0.070	BB	0.26
100	17.57		0.00	0.000	46481	0.047	BV	0.06
101	17.76		0.00	0.000	37564	0.038	VV	0.07
102	18.20		0.00	0.000	200362	0.203	VB	0.43
103	18.95		0.00	0.000	27990	0.028	BB	0.16
104	19.07		0.00	0.000	29505	0.030	BV	0.09
105	19.29		0.00	0.000	98369	0.099	VV	0.23
106	19.46		0.00	0.000	40867	0.041	VV	0.06
107	19.60		0.00	0.000	65062	0.066	VV	0.13
108	19.76		0.00	0.000	73811	0.075	VV	0.11
109	20.08		0.00	0.000	89465	0.090	VV	0.23
110	20.60		0.00	0.000	64515	0.065	VV	0.27
111	20.75		0.00	0.000	21772	0.022	VB	0.12
112	21.03		0.00	0.000	19887	0.020	BV	0.14
113	21.16		0.00	0.000	15183	0.015	VB	0.07
114	21.49		0.00	0.000	6187	0.006	BB	0.09
115	21.92	CL10BP	0.09	53.302	1689624	1.709	BB	0.07
116	22.50		0.00	0.000	6409	0.006	BB	0.14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	22.75		0.00	0.000	14341	0.015	BB	0.08
118	23.23		0.00	0.000	29288	0.030	BB	0.17
119	24.46		0.00	0.000	17662	0.018	BB	0.23

Total Area = 9.886562E+07 Total Height = 1.435007E+07 Total Amount = 0.1650634

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006556-03 B10114 MAK023O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0018.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 5:57:15 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 15
Calibration Date = 11/4/13 11:17:25 AM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1405041	19970360	0.070	70.4	28.143		
9.88	ABHC	51635	24905666	0.002	2.1	0.829		UNDER
12.41	ALDRN	100474	21601050	0.005	4.7	1.861		UNDER
21.92	CL10BP	1689624	19204082	0.088	88.0	35.193		

* Linear regression

Checked By: _____ Date: 11/04/13

ARDL, INC.
400 Aviation Drive; P.O. Box 1566
Mt. Vernon, Illinois 62864

Lab Report No: 006556 Report Date: 11/04/2013

Project Name: MAKAU MILITARY RES O Analysis: CHLORINATED PESTICIDES (8081)
Project No.: Analytical Method: 8081B
NELAC Certified - IL100308 Prep Method: 3550A

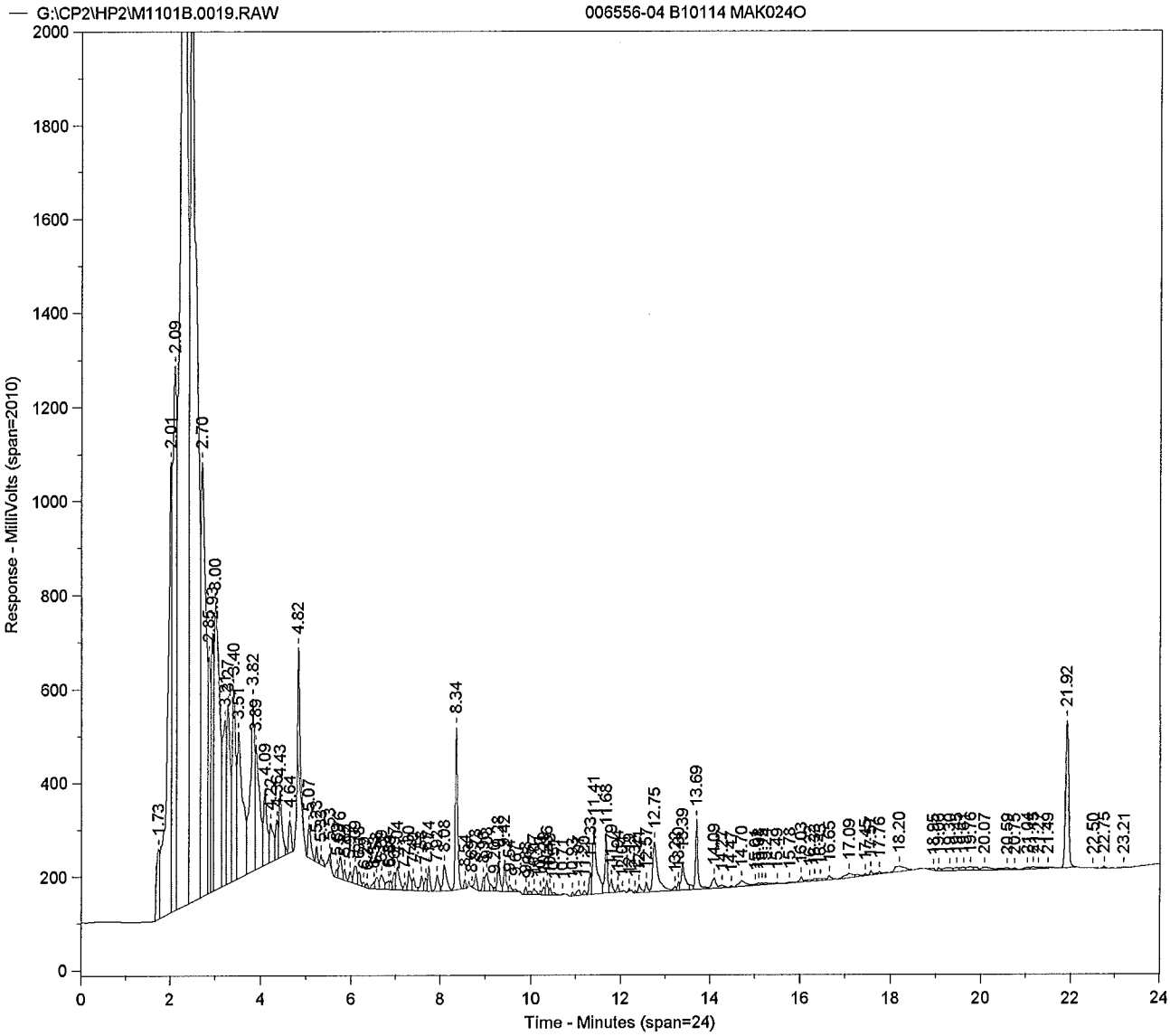
Field ID:	MAK024O	ARDL Lab No.:	006556-04
Desc/Location:	MAKAU MILITARY RESERV OAHU	Lab Filename:	
Sample Date:	09/27/2013	Received Date:	10/23/2013
Sample Time:	0828	Prep. Date:	10/31/2013
Matrix:	TISSUE	Analysis Date:	11/01/2013
Amount Used:	5 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B10114
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
alpha-BHC	4	4	ND		UG/KG	1
gamma-BHC (Lindane)	4	4	ND		UG/KG	1
delta-BHC	4	4	ND		UG/KG	1
Heptachlor	4	4	ND		UG/KG	1
Aldrin	4	4	ND		UG/KG	1
Heptachlor Epoxide	4	4	ND		UG/KG	1
p,p'-DDT	4	4	ND		UG/KG	1
beta-BHC	4	4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Tetrachloro-m-xylene	25-125	62%
Decachlorobiphenyl	25-125	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

Sample 006556-04, CHLORINATED PESTICIDES (8081) Page 1 of 1


G:\CP2\HP2\M1101B.0019.RAW
006556-04 B10114 MAK024O
Response - MilliVolts (span=2010)
Time - Minutes (span=24)
1.73
2.01
2.09
2.70
3.00
3.40
3.82
4.09
4.43
4.64
4.82
5.07
8.34
11.41
11.68
12.75
13.69
17.09
18.20
20.07
21.92
22.50
22.75
23.21

Sample Name = **006556-04 B10114 MAK024O**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0019.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 6:27:40 PM
Method Version = 172
Calibration Version = 15

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.73		0.00	0.000	735527	0.640	BV	0.09
2	2.01		0.00	0.000	6135033	5.341	VV	0.07
3	2.09		0.00	0.000	7595851	6.613	VV	0.06
4	2.24		0.00	0.000	32205476	28.038	VV	0.09
5	2.45		0.00	0.000	22554926	19.636	VV	0.09
6	2.70		0.00	0.000	6881641	5.991	VV	0.09
7	2.85		0.00	0.000	1849245	1.610	VV	0.05
8	2.93		0.00	0.000	2136979	1.860	VV	0.04
9	3.00		0.00	0.000	4986770	4.341	VV	0.11
10	3.21		0.00	0.000	1996955	1.739	VV	0.06
11	3.27		0.00	0.000	2132107	1.856	VV	0.07
12	3.40		0.00	0.000	2316961	2.017	VV	0.06
13	3.51		0.00	0.000	2686280	2.339	VV	0.10
14	3.82		0.00	0.000	2449147	2.132	VV	0.08
15	3.89		0.00	0.000	1853687	1.614	VV	0.09
16	4.09		0.00	0.000	904450	0.787	VV	0.06
17	4.22		0.00	0.000	502077	0.437	VV	0.05
18	4.36		0.00	0.000	337824	0.294	VV	0.06
19	4.43		0.00	0.000	658035	0.573	VV	0.06
20	4.64		0.00	0.000	271999	0.237	VB	0.07
21	4.82		0.00	0.000	728016	0.634	BB	0.05
22	5.07		0.00	0.000	321425	0.280	BV	0.07
23	5.23		0.00	0.000	94346	0.082	VV	0.04
24	5.33		0.00	0.000	77160	0.067	VB	0.08
25	5.53		0.00	0.000	42864	0.037	BB	0.05
26	5.69		0.00	0.000	52832	0.046	BV	0.05
27	5.76		0.00	0.000	202762	0.177	VV	0.06
28	5.85		0.00	0.000	69724	0.061	VV	0.05
29	5.97		0.00	0.000	82584	0.072	VV	0.05
30	6.09		0.00	0.000	200601	0.175	VV	0.08
31	6.18		0.00	0.000	121648	0.106	VV	0.07
32	6.29		0.00	0.000	32656	0.028	VV	0.05
33	6.37		0.00	0.000	27473	0.024	VB	0.06
34	6.53		0.00	0.000	61771	0.054	BV	0.08
35	6.58		0.00	0.000	113788	0.099	VV	0.06
36	6.69		0.00	0.000	178899	0.156	VV	0.08
37	6.84		0.00	0.000	82666	0.072	VV	0.07
38	6.89		0.00	0.000	55917	0.049	VV	0.04
39	6.97		0.00	0.000	144630	0.126	VV	0.06
40	7.04		0.00	0.000	259542	0.226	VV	0.08
41	7.21		0.00	0.000	56227	0.049	VV	0.04
42	7.30		0.00	0.000	170910	0.149	VV	0.07
43	7.40		0.00	0.000	115500	0.101	VV	0.06
44	7.58		0.00	0.000	129174	0.112	VV	0.05
45	7.67		0.00	0.000	97768	0.085	VV	0.04
46	7.74		0.00	0.000	170936	0.149	VB	0.05
47	7.92		0.00	0.000	160920	0.140	BV	0.07
48	8.08		0.00	0.000	312169	0.272	VB	0.08
49	8.34	CL4XYL	0.06	42.952	1239592	1.079	BB	0.05
50	8.54		0.00	0.000	56495	0.049	BB	0.05
51	8.69		0.00	0.000	5612	0.005	BV	0.03
52	8.78		0.00	0.000	121745	0.106	VB	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	8.96		0.00	0.000	107166	0.093	BV	0.05
54	9.03		0.00	0.000	203991	0.178	VV	0.08
55	9.20		0.00	0.000	24148	0.021	VV	0.04
56	9.28		0.00	0.000	263942	0.230	VV	0.05
57	9.42		0.00	0.000	253498	0.221	VV	0.05
58	9.54		0.00	0.000	54755	0.048	VV	0.05
59	9.67		0.00	0.000	22933	0.020	VB	0.08
60	9.88	ABHC	0.00	1.518	54619	0.048	BV	0.05
61	9.95		0.00	0.000	35124	0.031	VV	0.07
62	10.07		0.00	0.000	65248	0.057	VV	0.08
63	10.20		0.00	0.000	24292	0.021	VV	0.05
64	10.29		0.00	0.000	65991	0.057	VV	0.05
65	10.36		0.00	0.000	99299	0.086	VV	0.04
66	10.43		0.00	0.000	44179	0.038	VV	0.05
67	10.51		0.00	0.000	21160	0.018	VB	0.07
68	10.71		0.00	0.000	5494	0.005	BB	0.05
69	10.93		0.00	0.000	24408	0.021	BV	0.05
70	11.07		0.00	0.000	60753	0.053	VV	0.09
71	11.20		0.00	0.000	34545	0.030	VV	0.06
72	11.33		0.00	0.000	163678	0.142	VV	0.06
73	11.41		0.00	0.000	871608	0.759	VV	0.07
74	11.68		0.00	0.000	432250	0.376	VV	0.04
75	11.79		0.00	0.000	109660	0.095	VV	0.06
76	11.94		0.00	0.000	43249	0.038	VB	0.04
77	12.04		0.00	0.000	2484	0.002	BB	0.04
78	12.19		0.00	0.000	14231	0.012	BB	0.05
79	12.32		0.00	0.000	10757	0.009	BV	0.06
80	12.41	ALDRN	0.00	2.257	70453	0.061	VV	0.05
81	12.57		0.00	0.000	72140	0.063	VV	0.05
82	12.75		0.00	0.000	813712	0.708	VV	0.10
83	13.22		0.00	0.000	37776	0.033	VV	0.06
84	13.30		0.00	0.000	56553	0.049	VV	0.05
85	13.39		0.00	0.000	330248	0.288	VV	0.06
86	13.69		0.00	0.000	528281	0.460	VV	0.05
87	14.09		0.00	0.000	130871	0.114	VV	0.09
88	14.27		0.00	0.000	42796	0.037	VB	0.14
89	14.47		0.00	0.000	9658	0.008	BB	0.06
90	14.70		0.00	0.000	124581	0.108	BV	0.20
91	15.01		0.00	0.000	12444	0.011	VV	0.05
92	15.08		0.00	0.000	16335	0.014	VV	0.04
93	15.15		0.00	0.000	13589	0.012	VV	0.04
94	15.24		0.00	0.000	22573	0.020	VV	0.11
95	15.49		0.00	0.000	7540	0.007	VB	0.04
96	15.78		0.00	0.000	17723	0.015	BV	0.16
97	16.03		0.00	0.000	45892	0.040	VV	0.06
98	16.22		0.00	0.000	22718	0.020	VV	0.09
99	16.33		0.00	0.000	22675	0.020	VV	0.07
100	16.45		0.00	0.000	28814	0.025	VV	0.08
101	16.65		0.00	0.000	63634	0.055	VB	0.07
102	17.09		0.00	0.000	107024	0.093	BV	0.25
103	17.45		0.00	0.000	12660	0.011	VV	0.04
104	17.57		0.00	0.000	30689	0.027	VV	0.06
105	17.76		0.00	0.000	33758	0.029	VV	0.07
106	18.20		0.00	0.000	191805	0.167	VB	0.37
107	18.95		0.00	0.000	23617	0.021	BB	0.16
108	19.06		0.00	0.000	25982	0.023	BV	0.08
109	19.30		0.00	0.000	77379	0.067	VV	0.21
110	19.45		0.00	0.000	45107	0.039	VV	0.06
111	19.61		0.00	0.000	50616	0.044	VV	0.11
112	19.76		0.00	0.000	70541	0.061	VV	0.08
113	20.07		0.00	0.000	89256	0.078	VV	0.22
114	20.59		0.00	0.000	63600	0.055	VV	0.26
115	20.75		0.00	0.000	22284	0.019	VB	0.12
116	21.04		0.00	0.000	34347	0.030	BV	0.15

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	21.15		0.00	0.000	27775	0.024	VV	0.07
118	21.27		0.00	0.000	26853	0.023	VV	0.14
119	21.49		0.00	0.000	15127	0.013	VB	0.11
120	21.92	CL10BP	0.08	53.274	1478478	1.287	BB	0.07
121	22.50		0.00	0.000	5030	0.004	BB	0.12
122	22.75		0.00	0.000	12927	0.011	BB	0.07
123	23.21		0.00	0.000	14380	0.013	BB	0.17
124	24.44		0.00	0.000	20420	0.018	BB	0.23

Total Area = 1.148634E+08 Total Height = 1.637595E+07 Total Amount = 0.1445139

**********PESTICIDE/PCB ANALYSIS**********

Sample Name = **006556-04 B10114 MAK0240**

Instrument = HP 2
Heading 1 = STX-CLP2 SERIAL # 1126697
Heading 2 =

Acquisition Port = 2

Raw File Name = **G:\CP2\HP2\M1101B.0019.RAW**
Method File Name = G:\CP2\HP2\PESTB.met
Method Description = RMA PEST - DET A & B
Calibration File Name = H:\CP2\HP2\PESTHAWAII01B.cal

Date Taken (end) = 11/1/13 6:27:40 PM
Method Version = 172
Method Date = 10/29/13 4:32:29 PM
Calibration Version = 15
Calibration Date = 11/4/13 11:17:25 AM

Run Time = 25
Amount Injected = 1
Sample Weight = 1

Dilution Factor = 1

Operator =

Ret. Time	Peak Name	Peak Area	CF	Response ug/mL	%Recovery	Amount ug/Kg	%RPD	
8.34	CL4XYL	1239592	19970360	0.062	62.1	24.829		
9.88	ABHC	54619	24905666	0.002	2.2	0.877		UNDER
12.41	ALDRN	70453	21601050	0.003	3.3	1.305		UNDER
21.92	CL10BP	1478478	19204082	0.077	77.0	30.795		

* Linear regression

Checked By: _____ Date: 11/04/13

Example Calculation

EXAMPLE CALCULATIONS

As is appropriate for each analyte, use the values either for the average calibration factor (CF) or the linear regression equation from the full initial calibration. Calculate the apparent concentration in the samples using the relationship given below:

1) ug analyte/mL = (peak area)/(average CF)

Sample: MAK006OMS

Compound: ALDRN

$$\frac{(1381625)}{(21601050)} = 0.0640 \text{ ug/mL}$$

2) ug analyte/mL -= $\frac{\text{(peak area)} - b}{m}$

Sample: _____

Compound: _____

$$\frac{(_____) - (_____)}{(_____)} = _____ \text{ug/mL}$$

Where: m is the slope of the initial calibration curve, and b is the zero intercept of that curve.

$$\text{Concentration (ug/L) of analyte} = \frac{(A)\,(Vt)\,(Df)(GPC)}{(Vi)(TS)}$$

Where: A = Concentration of the analyte in the sample extract in ug/mL
Vi = Initial sample volume (L) or initial sample weight (Kg)
Vt = Volume of final extract (ml)
Df = Dilution factor
TS = Total solids (soils only)
GPC = Correction factor of 2 for all samples put through GPC cleanup

SAMPLE CALCULATIONS

Sample: MAK006OMS

Compound: ALDRN

Matrix: TISSUE

$$\text{Concentration (ug/L) or (ug/Kg)} = \frac{(0.0640)(_1_)(_1_)(2)}{(0.005)(___)} = 25.6$$

Example Calculations Performed By: [signature] Date: 11/04/13

Miscellaneous Additional Data
(If applicable)

None

ASD 11/26/13

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