Investigation of Possible PCB Impact during the Akron Airdock May 18, 2006 Fire

Submitted to EPA Region 5 on June 23, 2006

Lockheed Martin
1210 Massillon Road
Akron, Ohio 44315

SUMMARY

Following the Akron Airdock fire on May, 18, 2006, two rounds of sampling were conducted by Lockheed Martin based on communications with U.S. EPA Region 5. The objectives of the sampling efforts were to determine if any PCB-containing siding had burned in the fire, and if so whether there was any downwind impact from PCBs or combustion products. Previous inspection of the fire damage revealed little impact to the PCB-containing siding material, as documented in a separate report to U.S. EPA Region 5. ount of PCBs we

re burned. Combustion products attributable to the fire were only detected in the immediate vicinity of the fire, at levels that are below the risk-based action levels commonly applied to PCB fires. No special action appears to be necessary beyond repair of the fire-damaged roofing material.

Off-site and downwind sample results showed no significant levels of by-products and no measurable PCBs; the insignificant levels of chemicals often attributed to PCB combustion were attributable to other sources. Measurable PCB levels found on site are attributed to known PCB contamination already present around the Airdock, which will be addressed as part of the exterior remediation project described to U.S. EPA in earlier communications.

BACKGROUND

This report presents both the results of sampling performed at the Akron Airdock in the weeks following the May 18, 2006 fire, and analyses as to whether the data indicate that PCBs were or were not burned during the fire.

Background information describing the Airdock, and ongoing efforts to upgrade the facility and manage the PCB-containing siding (known as Robertson Protected Metal or "RPM"), are contained in the report provided to U.S. EPA entitled "Akron Airdock Fire Report" dated June 7, 2006. Lockheed Martin has been working with the U.S. EPA to finalize a plan for addressing the PCBs in the Airdock interior, and, in a report submitted to the U.S. EPA on June 8, 2005, presented a preliminary plan that describes measures to clean the grounds and surrounding impacted areas.

The Airdock is currently being renovated in preparation for manuf

Post-fire sample analysis included PCB, dioxin, and furan analysis, depending on location. The choice of analysis depended in part on the following:

- Research associated with PCB fires has shown that no more than a small percentage of PCB converts to furans even under optimal conditions.
- Samples collected downwind from the fire (i.e. where smoke deposition may have occurred) but where hist

Second Sampling Round

Supplemental samples were collected in and around the Airdock on June 2, 2006, based on a sampling plan developed by Lockheed Martin and agreed to with U.S. EPA in e-mail communications dated June 8, 2006. Samples included wipe samples both in and around the siding work area containment and at locations remote from the fire roofing debris samples from the vicinity of the fire, and several additional soil samples. Lockheed Martin added four additional samples to the supplemental sample collection.

Table 2 presents the results of all the supplemental sampling, including TEQ results where applicable. The associated laboratory reports are contained in Appendix B.

OBSERVATIONS

Data Analysis Rationale

The objective of the sampling program was to determine whether any PCBs burned in the fire, and if so whether any of the resulting by-products were above generally accepted action levels.

When attempting to determine whether PCBs burned, the best indicator is whether the data show that furans were formed. Res

Background and Remote Sampling Results

The leaf PCB wipe sample results taken 1,000 to 5,000 feet downwind of the fire were all non-detect for PCB (see Appendix A). They were also non-detect for TEQ when the trace hexa- and octa-dioxin results were excluded.

The wipe samples collected from the rain protected areas of buildings immediately upwind (Plant E) and downwind (M Hangar) contained no measurable PCB.

A wipe sample (S-4) collected from the southwest door contained only trace amounts of TEQ (0.39 ng/m^2).

A soil sample (S-13) collected from a traffic island south of the Airdock contained no measurable PCB.

These results taken in total suggest that no significant off-site or downwind migration of PCB or combustion products occurred as a result of the fire.

Fire Area Debris and On-Site Wipe Samples

All four of the debris and foam samples collected from the Airdock roof contained measurable PCB and TEQ. However, only one of the ash/soot samples (S-7) contained elevated TEQ levels relative to the PCB levels, suggesting a small amount of PCB may have been burned. Nearby foam sample results showed no elevated TEQ results, suggesting that any PCB present in the foam was not burned.

Only one of the three wipe sample results taken in the vicinity of the fire (S-3, on the plastic work zone enclosure) showed elevated TEQ results relative to the PCB results. All of the TEQ and PCB wipe sample results were below the 25 ng/m^2 threshold value cited earlier, the highest sample result being sample S-1 at 5.63 ng/m^2. Taken together, these results show that the impact of any burned PCB is minimal and limited only to the immediate vicinity of the fire.

Soil and Water Samples

The soil PCB results from the north apron (3.9 – 7.4 ppm), i.e., near the fire, are consistent with other pre-fire PCB findings in the area.

All of the water samples were taken from standing water "puddles" or accumulations a day after the fire, presumably representing deluge water from firefighting combined with rainwater accumulated the night of the fire. Each sample was split and both filtered and unfiltered samples were analyzed.

The water PCB results ranged from 1 µg/L to 4.1 µg/L, with the highest result being closest to the fire location. The water PCB results are anomalous, however, for several reasons. First, the filtered samples should have less PCB than the unfiltered samples since the PCB is largely present as solid particles, but the opposite was found for the sample collected near the fire (1.1

µg/L unfiltered versus 4.1 µg/L filtered). Second, three of the four north and south water samples were reported at or slightly above 1 µg/L, but the reporting limit was also 1.0 µg/L, rendering these results suspect. The low reporting limit is attributed to the small sample volume, since these samples were collected from small puddles of water after the fire and subsequent rainfall. Unfortunately the remaining water has since evaporated, so there was no opportunity to resample after the results were received.

Some of the TEQ water and leaf samples contained tetrachlorodibenzofuran, which is an unlikely product of burning 1268, as noted earlier. They were nevertheless included in the TEQ calculations.

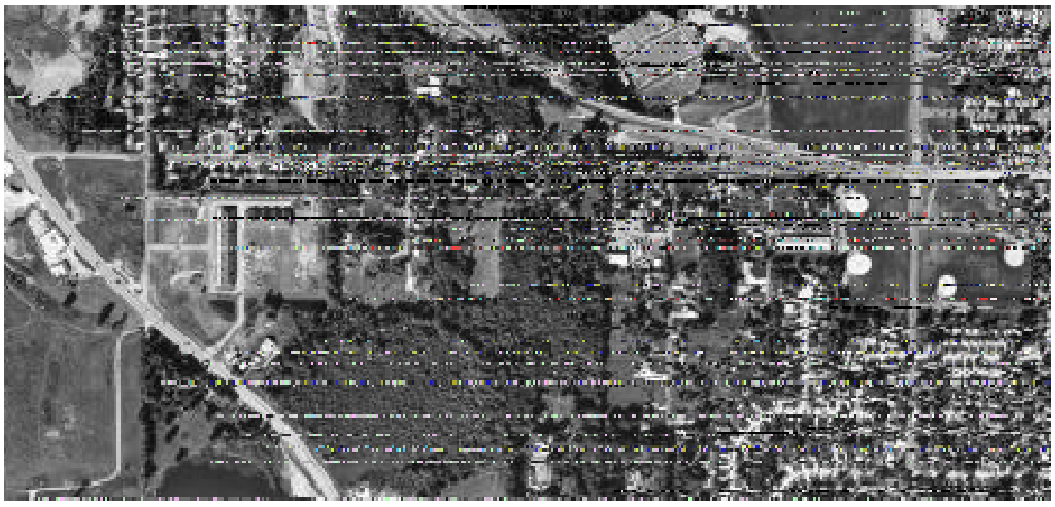
Table 2 – Second Sampling Round

Sample Number	Sample ID	Sample Type	Sample Location	Requested Analyses	Preliminary PCB Results µg/100 cm^2	TEQ Concentration ng/m^2	PCB/TEQ ratio
S-1	LMC-FI-001	Wipe	**Work Zone** Vertical steel plate at east end of northeast Airdock door (within enclosure)	Dioxins / Furans	NA	5.63	NA
S-2	LMC-FI-002A & LMC-FI-002B	Wipe	**Near Work Zone** Interior of nongalbestos siding panel (white) at Arch 13E (north of mandoor)	PCBs / Dioxins / Furans	0.99	0.12	825,000
S-3	LMC-FI-003A & LMC-FI-003B	Wipe	**Near Work Zone** Poly sheeting on top of container (West of Arch 13E) used for interior enclosure (outside enclosure)	PCBs / Dioxins / Furans	3.0	0.52	57,361
S-4	LMC-FI-010	Wipe	**Far from Work Zone** Identical vertical steel plate as Sample ID LMC-FI-001, except located on SW Airdock door (not in enclosure)	Dioxins / Furans	NA	0.39	NA
S-5	LMC-FI-012	Wipe	**Rain Protected Area of M Hangar Building (East of Airdock)** Grey steel panel otew6eAC BT/TT0 106 Tw 0 12 0.0002 T4301 168.36 ref367.1ectO6o10 461.51999 155.50809				

Sample Number	Sample ID	Sample Type	Sample Location	Requested Analyses	Preliminary PCB Results µg/100 cm^2	TEQ Concentration ng/m^2	PCB/TEQ ratio
S-6	LMC-FI-011	Wipe	**Rain protected Area of Building (West of Airdock)** Top portion of steel man-door located between loading docks 8 and 9 east side of Plant E	PCBs	ND	NA	NA
S-7	LMC-FI-008A & LMC-FI-008B	Bulk	**Debris Samples (Ash or Soot) from or Adjacent to Fire Impacted Area** Just above triangular section of affected RPM	PCBs / Dioxins / Furans	12	0.303	39,581
S-8	LMC-FI-008C & LMC-FI-008D	Bulk	**Undisturbed Foam from or Adjacent to Fire Impacted Area** Just above triangular section of affected RPM	PCBs / Dioxins / Furans	83	0.0007	118,000,000
S-9	LMC-FI-009A & LMC-FI-009B	Bulk	**Debris Samples(Ash or Soot) from or Adjacent to Fire impacted Area** At same approximate elevation as, and approximately 6 feet west of, sample locations LMC-FI-008A and LMC-FI-008B	PCBs / Dioxins / Furans	42	0.277	202,000

Notes:

1. NA = not applicable
2. ND = not detected. The analytical Results indicate concentrations were not detected above the laboratory detection limit.
3. J = Estimated result. Result is less than the reporting limit.
4. CON = Confirmation analysis.
5. Highlighted = TEQ results elevated above background in PCB sample
6. The PCB results reported are for Aroclor 1268. No other Aroclors were detected in any of the analyzed samples.
7. Dioxin and lower chlorinated furan results were included in the TEQ calculations, although dioxins are not a known product of PCB combustion and the lower chlorinated furans are not a likely product of burning Aroclor 1268.



Appendix A

First Sampling Round Laboratory Analysis Reports

Lot Number A6E220164: PCBs and Dioxin/Furans for water samples
Lot Number A6E220164-teqr2: PCBs and Dioxin/Furans for water samples
Lot Number A6E220167: Dioxin/Furans for leaves
Lot Number A6E220171: PCBs for leaves

Table of Contents

Return to Navigator

SEVERN TRENT STL

STL North Canton
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ANALYTICAL REPORT

PROJECT NO. 38032-001

LMC AIRDOCK, AKRON OH

Lot #: A6E220164

Brad Heim

Lockheed Martin Corporation
Maritime Systems and Sensors
1210 Massillon Road
Akron, OH 44315-0001

SEVERN TRENT LABORATORIES, INC.

Mark J. Loeb
Project Manager

May 31, 2006

A6E220164

The following report contains the analytical results for four water samples submitted to STL North Canton by Lockheed Martin Tactical Defense Systems from the LMC Airdock, Akron OH Site, project number 38032-001. The samples were received May 20, 2006, according to documented sample acceptance procedures.

The Dioxin analysis was performed at STL Sacramento.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Brad Heim, Dave Gunnarson, Dan Kemp, Mark Hurban, and Shawn Wolf on May 25, 2006, on May 26, 2006, and May 30, 2006. A summary of QC data for these analyses is included at the back of the report.

STL North Canton attests to the validity of the laboratory data generated by STL facilities reported herein. All analyses performed by STL facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. STL's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT." The total number of pages in this report is 38.

The temperature of the cooler upon sample receipt was 7.4°C. with wet ice present.

See STL’s Cooler Receipt Form for additional information.

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in t0.00certain med fCATE1 th D6ore ae To2T

EXECUTIVE SUMMARY - Detection Highlights

A6E220164

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SOUTH FILTERED WATER (DISS) 05/19/06 16:04 001				
1,2,3,4,6,7,8-HpCDD	68		pg/L	EPA-5 1613B
Total HpCDD	140		pg/L	EPA-5 1613B
OCDD	740		pg/L	EPA-5 1613B
Total TCDF	12		pg/L	EPA-5 1613B
Total PeCDF	27		pg/L	EPA-5 1613B
Total HxCDF	56		pg/L	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	32 J		pg/L	EPA-5 1613B
Total HpCDF	33		pg/L	EPA-5 1613B
Aroclor 1268	1.2	1.0	ug/L	SW846 8082

SOUTH ULA 82

SOUTH PULA2802001

Pc i2 001

EXECUTIVE SUMMARY - Detection Highlights

A6E220164

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
NORTH UNFILTERED WATER 05/19/06 16:15 004				
Total PeCDF	1900		pg/L	EPA-5 1613B
1,2,3,4,7,8-HxCDF	330		pg/L	EPA-5 1613B
1,2,3,6,7,8-HxCDF	130		pg/L	EPA-5 1613B
2,3,4,6,7,8-HxCDF	240		pg/L	EPA-5 1613B
Total HxCDF	2200		pg/L	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	600		pg/L	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	40 J		pg/L	EPA-5 1613B
Total HpCDF	1100		pg/L	EPA-5 1613B
OCDF	770		pg/L	EPA-5 1613B
Aroclor 1268	1.0	1.0	ug/L	SW846 8082

ANALYTICAL METHODS SUMMARY

A6E220164

PARAMETER	ANALYTICAL METHOD
Dioxins/Furans, HRGC/HRMS	EPA-5 1613B
PCBs by SW-846 8082	SW846 8082

References:

EPA-5 "Method 1613: Tetra- through Octa- Chlorinated Dioxins and Furans by Isotope Dilution, HRGC/HRMS, Revision B", EPA, OCTOBER 1994

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A6E220164

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME

Lockheed Martin Tactical Defense Systems

Client Sample ID: SOUTH FILTERED WATER (DISS)

GC Semivolatiles

Lot-Sample #...:	A6E220164-001	**Work Order #...:**	H5XHM1AA	**Matrix.....:**	WG
Date Sampled...:	05/19/06 16:04	**Date Received..:**	05/20/06		
Prep Date.....:	05/23/06	**Analysis Date..:**	05/24/06		
Prep Batch #...:	6143066				
Dilution Factor:	1	Method.....:		Method.....:	

Lockheed Martin Tactical Defense Systems

Client Sample ID: SOUTH FILTERED WATER (DISS)

Trace Level Organic Compounds

Lot-Sample #...: A6E220164-001 **Work Order #...:** H5XHM1AC **Matrix.....:** WG
Date Sampled...: 05/19/06 16:04 **Date Received..:** 05/20/06
Prep Date.....: 05/23/06 **Analysis Date..:** 05/25/06
Prep Batch #...: 6143570
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	1.9	pg/L	EPA-5 1613B
Total TCDD	ND	2.2	pg/L	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	1.4	pg/L	EPA-5 1613B
Total PeCDD	ND	3.4	pg/L	EPA-5 1613B
1,2,3,4,7,8-HxCDD	ND	1.3	pg/L	EPA-5 1613B
1,2,3,6,7,8-HxCDD	ND	4.2	pg/L	EPA-5 1613B
1,2,3,7,8,9-HxCDD	ND	8.8	pg/L	EPA-5 1613B
Total HxCDD	ND	14	pg/L	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	**68**		**pg/L**	**EPA-5 1613B**
Total HpCDD	**140**		**pg/L**	**EPA-5 1613B**
OCDD	**740**		**pg/L**	**EPA-5 1613B**
2,3,7,8-TCDF	ND CON	2.4	pg/L	EPA-5 1613B
Total TCDF	**12**		**pg/L**	**EPA-5 1613B**
1,2,3,7,8-PeCDF	ND	2.6	pg/L	EPA-5 1613B
2,3,4,7,8-PeCDF	ND	5.1	pg/L	EPA-5 1613B
Total PeCDF	**27**		**pg/L**	**EPA-5 1613B**
1,2,3,4,7,8-HxCDF	ND	10	pg/L	EPA-5 1613B
1,2,3,6,7,8-HxCDF	ND	5.7	pg/L	EPA-5 1613B
2,3,4,6,7,8-HxCDF	ND	9.0	pg/L	EPA-5 1613B
1,2,3,7,8,9-HxCDF	ND	0.67	pg/L	EPA-5 1613B
Total HxCDF	**56**		**pg/L**	**EPA-5 1613B**
1,2,3,4,6,7,8-HpCDF	**32 J**		**pg/L**	**EPA-5 1613B**
1,2,3,4,7,8,9-HpCDF	ND	2.9	pg/L	EPA-5 1613B
Total HpCDF	**33**		**pg/L**	**EPA-5 1613B**
OCDF	ND	37	pg/L	EPA-5 1613B

(Continued on next page)

Lockheed Martin Tactical Defense Systems

Client Sample ID: SOUTH FILTERED WATER (DISS)

Trace Level Organic Compounds

Lot-Sample #...: A6E220164-001 **Work Order #...:** H5XHM1AC **Matrix.....:** WG

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	91	(25 - 164)
13C-1,2,3,7,8-PeCDD	116	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	110	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	77	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	105	(23 - 140)
13C-OCDD	133	(17 - 157)
13C-2,3,7,8-TCDF	97	(24 - 169)
13C-1,2,3,7,8-PeCDF	106	(24 - 185)
13C-2,3,4,7,8-PeCDF	106	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	77	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	87	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	98	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	93	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	116	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	76	(26 - 152)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	89	(35 - 197)

NOTE(S):

CON Confirmation analysis.

J Estimated result. Result is less than the reporting limit.

Lockheed Martin Tactical Defense Systems

Client Sample ID: SOUTH UNFILTERED WATER

GC Semivolatiles

Lot-Sample #...: A6E220164-002 **Work Order #...:** H5XHN1AA **Matrix.....:** WG
Date Sampled...: 05/19/06 16:04 **Date Received..:** 05/20/06
Prep Date.....: 05/23/06 **Analysis Date..:** 05/24/06
Prep Batch #...: 6143066
Dilution Factor: 1 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L
Aroclor 1268	**1.1**	**1.0**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	61	(35 - 130)
Decachlorobiphenyl	40	(10 - 110)

Lockheed Martin Tactical Defense Systems

Client Sample ID: SOUTH UNFILTERED WATER

Trace Level Organic Compounds

Lot-Sample #...: A6E220164-002 **Work Order #...:** H5XHN1AC **Matrix.....:** WG
Date Sampled...: 05/19/06 16:04 **Date Received..:** 05/20/06
Prep Date.....: 05/23/06 **Analysis Date..:** 05/25/06
Prep Batch #...: 6143498
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	4.8	pg/L	EPA-5 1613B
Total TCDD	ND	4.8	pg/L	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	5.1	pg/L	EPA-5 1613B
Total PeCDD	ND	8.4	pg/L	EPA-5 1613B
1,2,3,4,7,8-HxCDD	ND	3.6	pg/L	EPA-5 1613B
1,2,3,6,7,8-HxCDD	ND	9.4	pg/L	EPA-5 1613B
1,2,3,7,8,9-HxCDD	ND	20	pg/L	EPA-5 1613B
Total HxCDD	**85**		**pg/L**	**EPA-5 1613B**
1,2,3,4,6,7,8-HpCDD	**200**		**pg/L**	**EPA-5 1613B**
Total HpCDD	**410**		**pg/L**	**EPA-5 1613B**
OCDD	**2000**		**pg/L**	**EPA-5 1613B**
2,3,7,8-TCDF	**6.4 J,JA,CON**		**pg/L**	**EPA-5 1613B**
Total TCDF	**85**		**pg/L**	**EPA-5 1613B**
1,2,3,7,8-PeCDF	ND	5.3	pg/L	EPA-5 1613B
2,3,4,7,8-PeCDF	ND	13	pg/L	EPA-5 1613B
Total PeCDF	**130**		**pg/L**	**EPA-5 1613B**
1,2,3,4,7,8-HxCDF	ND	22	pg/L	EPA-5 1613B
1,2,3,6,7,8-HxCDF	ND	14	pg/L	EPA-5 1613B
2,3,4,6,7,8-HxCDF	ND	20	pg/L	EPA-5 1613B
1,2,3,7,8,9-HxCDF	ND	0.87	pg/L	EPA-5 1613B
Total HxCDF	**190**		**pg/L**	**EPA-5 1613B**
1,2,3,4,6,7,8-HpCDF	**74**		**pg/L**	**EPA-5 1613B**
1,2,3,4,7,8,9-HpCDF	ND	5.6	pg/L	EPA-5 1613B
Total HpCDF	**130**		**pg/L**	**EPA-5 1613B**
OCDF	**130**		**pg/L**	**EPA-5 1613B**

(Continued on next page)

Lockheed Martin Tactical Defense Systems

Client Sample ID: SOUTH UNFILTERED WATER

Trace Level Organic Compounds

Lot-Sample #...: A6E220164-002 **Work Order #...:** H5XHN1AC **Matrix.....:** WG

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	81	(25 - 164)
13C-1,2,3,7,8-PeCDD	105	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	102	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	73	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	91	(23 - 140)
13C-OCDD	119	(17 - 157)
13C-2,3,7,8-TCDF	86	(24 - 169)
13C-1,2,3,7,8-PeCDF	89	(24 - 185)
13C-2,3,4,7,8-PeCDF	94	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	71	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	77	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	82	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	84	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	105	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	74	(26 - 152)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	78	(35 - 197)

NOTE(S):

J Estimated result. Result is less than the reporting limit.

JA The analyte was positively identified, but the quantitation is an estimate.

CON Confirmation analysis.

Lockheed Martin Tactical Defense Systems

Client Sample ID: NORTH FILTERED WATER (DISS)

GC Semivolatiles

Lot-Sample #...: A6E220164-003 **Work Order #...:** H5XHP1AA **Matrix.....:** WG
Date Sampled...: 05/19/06 16:15 **Date Received..:** 05/20/06
Prep Date.....: 05/23/06 **Analysis Date..:** 05/24/06
Prep Batch #...: 6143066
Dilution Factor: 1 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L
Aroclor 1268	**4.1**	**1.0**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	77	(35 - 130)
Decachlorobiphenyl	121 *	(10 - 110)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Lockheed Martin Tactical Defense Systems

Client Sample ID: NORTH FILTERED WATER (DISS)

Trace Level Organic Compounds

Lot-Sample #...: A6E220164-003 **Work Order #...:** H5XHP1AC **Matrix.....:** WG
Date Sampled...: 05/19/06 16:15 **Date Received..:** 05/20/06
Prep Date.....: 05/23/06 **Analysis Date..:** 05/25/06
Prep Batch #...: 6143570
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	0.79	pg/L	EPA-5 1613B
Total TCDD	ND	0.79	pg/L	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	1.2	pg/L	EPA-5 1613B
Total PeCDD	ND	1.2	pg/L	EPA-5 1613B
1,2,3,4,7,8-HxCDD	ND	0.90	pg/L	EPA-5 1613B
1,2,3,6,7,8-HxCDD	ND	0.86	pg/L	EPA-5 1613B
1,2,3,7,8,9-HxCDD	ND	1.3	pg/L	EPA-5 1613B
Total HxCDD	ND	1.3	pg/L	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	ND	8.2	pg/L	EPA-5 1613B
Total HpCDD	ND	8.2	pg/L	EPA-5 1613B
OCDD	ND	21	pg/L	EPA-5 1613B
2,3,7,8-TCDF	**5.0 J,CON**		**pg/L**	**EPA-5 1613B**
Total TCDF	**43**		**pg/L**	**EPA-5 1613B**
1,2,3,7,8-PeCDF	ND	5.5	pg/L	EPA-5 1613B
2,3,4,7,8-PeCDF	ND	15	pg/L	EPA-5 1613B
Total PeCDF	ND	15	pg/L	EPA-5 1613B
1,2,3,4,7,8-HxCDF	ND	21	pg/L	EPA-5 1613B
1,2,3,6,7,8-HxCDF	ND	8.7	pg/L	EPA-5 1613B
2,3,4,6,7,8-HxCDF	ND	18	pg/L	EPA-5 1613B
1,2,3,7,8,9-HxCDF	ND	0.78	pg/L	EPA-5 1613B
Total HxCDF	ND	23	pg/L	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	**41 J**		**pg/L**	**EPA-5 1613B**
1,2,3,4,7,8,9-HpCDF	ND	3.6	pg/L	EPA-5 1613B
Total HpCDF	**41**		**pg/L**	**EPA-5 1613B**
OCDF	ND	13	pg/L	EPA-5 1613B

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Lockheed Martin Tactical Defense Systems

Client Sample ID: NORTH FILTERED WATER (DISS)

Trace Level Organic Compounds

Lot-Sample #...: A6E220164-003 **Work Order #...:** H5XHP1AC **Matrix.....:** WG

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	92	(25 - 164)
13C-1,2,3,7,8-PeCDD	119	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	91	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	73	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	107	(23 - 140)
13C-OCDD	139	(17 - 157)
13C-2,3,7,8-TCDF	98	(24 - 169)
13C-1,2,3,7,8-PeCDF	98	(24 - 185)
13C-2,3,4,7,8-PeCDF	89	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	67	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	85	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	96	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	87	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	121	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	65	(26 - 152)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	92	(35 - 197)

NOTE(S):

J Estimated result. Result is less than the reporting limit.

CON Confirmation analysis.

Lockheed Martin Tactical Defense Systems

Client Sample ID: NORTH UNFILTERED WATER

GC Semivolatiles

Lot-Sample #...: A6E220164-004 **Work Order #...:** H5XHQ1AA **Matrix.....:** WG
Date Sampled...: 05/19/06 16:15 **Date Received..:** 05/20/06
Prep Date.....: 05/23/06 **Analysis Date..:** 05/24/06
Prep Batch #...: 6143066
Dilution Factor: 1 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L
Aroclor 1268	**1.0**	**1.0**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	75	(35 - 130)
Decachlorobiphenyl	54	(10 - 110)

Lockheed Martin Tactical Defense Systems

Client Sample ID: NORTH UNFILTERED WATER

Trace Level Organic Compounds

Lot-Sample #...: A6E220164-004 **Work Order #...:** H5XHQ1AC **Matrix.....:** WG
Date Sampled...: 05/19/06 16:15 **Date Received..:** 05/20/06
Prep Date.....: 05/23/06 **Analysis Date..:** 05/25/06
Prep Batch #...: 6143498
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	0.65	pg/L	EPA-5 1613B
Total TCDD	ND	0.81	pg/L	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	1.3	pg/L	EPA-5 1613B
Total PeCDD	ND	3.4	pg/L	EPA-5 1613B
1,2,3,4,7,8-HxCDD	ND	1.3	pg/L	EPA-5 1613B
1,2,3,6,7,8-HxCDD	ND	2.0	pg/L	EPA-5 1613B
1,2,3,7,8,9-HxCDD	ND	2.4	pg/L	EPA-5 1613B
Total HxCDD	ND	4.8	pg/L	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	**26 J**		**pg/L**	**EPA-5 1613B**
Total HpCDD	**26**		**pg/L**	**EPA-5 1613B**
OCDD	**130**		**pg/L**	**EPA-5 1613B**
2,3,7,8-TCDF	**90 CON**		**pg/L**	**EPA-5 1613B**
Total TCDF	**1400**		**pg/L**	**EPA-5 1613B**
1,2,3,7,8-PeCDF	**110**		**pg/L**	**EPA-5 1613B**
2,3,4,7,8-PeCDF	**260**		**pg/L**	**EPA-5 1613B**
Total PeCDF	**1900**		**pg/L**	**EPA-5 1613B**
1,2,3,4,7,8-HxCDF	**330**		**pg/L**	**EPA-5 1613B**
1,2,3,6,7,8-HxCDF	**130**		**pg/L**	**EPA-5 1613B**
2,3,4,6,7,8-HxCDF	**240**		**pg/L**	**EPA-5 1613B**
1,2,3,7,8,9-HxCDF	ND	7.2	pg/L	EPA-5 1613B
Total HxCDF	**2200**		**pg/L**	**EPA-5 1613B**
1,2,3,4,6,7,8-HpCDF	**600**		**pg/L**	**EPA-5 1613B**
1,2,3,4,7,8,9-HpCDF	**40 J**		**pg/L**	**EPA-5 1613B**
Total HpCDF	**1100**		**pg/L**	**EPA-5 1613B**
OCDF	**770**		**pg/L**	**EPA-5 1613B**

(Continued on next page)

Lockheed Martin Tactical Defense Systems

Client Sample ID: NORTH UNFILTERED WATER

Trace Level Organic Compounds

Lot-Sample #...: A6E220164-004 **Work Order #...:** H5XHQ1AC **Matrix.....:** WG

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	88	(25 - 164)
13C-1,2,3,7,8-PeCDD	111	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	105	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	80	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	102	(23 - 140)
13C-OCDD	139	(17 - 157)
13C-2,3,7,8-TCDF	93	(24 - 169)
13C-1,2,3,7,8-PeCDF	96	(24 - 185)
13C-2,3,4,7,8-PeCDF	105	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	75	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	82	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	94	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	94	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	116	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	78	(26 - 152)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	92	(35 - 197)

NOTE(S):

QUALITY CONTROL SECTION

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A6E220164 **Work Order #...:** H5X8Q1AA **Matrix.....:** WATER
MB Lot-Sample #: A6E230000-066
Prep Date.....: 05/23/06
Analysis Date..: 05/24/06 **Prep Batch #...:** 6143066
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1268	ND	1.0	ug/L	SW846 8082
Aroclor 1016	ND	1.0	ug/L	SW846 8082
Aroclor 1221	ND	1.0	ug/L	SW846 8082
Aroclor 1232	ND	1.0	ug/L	SW846 8082
Aroclor 1242	ND	1.0	ug/L	SW846 8082
Aroclor 1248	ND	1.0	ug/L	SW846 8082
Aroclor 1254	ND	1.0	ug/L	SW846 8082
Aroclor 1260	ND	1.0	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(35 - 130)
Decachlorobiphenyl	19	(10 - 110)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

Trace Level Organic Compounds

Client Lot #...: A6E220164 **Work Order #...:** H51P11AA **Matrix.....:** WATER
MB Lot-Sample #: G6E230000-498
Prep Date.....: 05/23/06
Analysis Date..:

METHOD BLANK REPORT

Trace Level Organic Compounds

Client Lot #...: A6E220164 **Work Order #...:** H51P11AA **Matrix.....:** WATER

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS		
13C-2,3,7,8-TCDD	78	(25 - 164)		
13C-1,2,3,7,8-PeCDD	108	(25 - 181)		
13C-1,2,3,4,7,8-HxCDD	102	(32 - 141)		
13C-1,2,3,6,7,8-HxCDD	81	(28 - 130)		
13C-1,2,3,4,6,7,8-HpCDD	97	(23 - 140)		
13C-OCDD	118	(17 - 157)		
13C-2,3,7,8-TCDF	81	(24 - 169)		
13C-1,2,3,7,8-PeCDF	84	(24 - 185)		
13C-2,3,4,7,8-PeCDF	96	(21 - 178)		
13C-1,2,3,6,7,8-HxCDF	75	(26 - 123)		
13C-2,3,4,6,7,8-HxCDF	84	(28 - 136)		
13C-1,2,3,7,8,9-HxCDF	90	(29 - 147)		
13C-1,2,3,4,6,7,8-HpCDF	90	(28 - 143)		
13C-1,2,3,4,7,8,9-HpCDF	107	(26 - 138)		
13C-1,2,3,4,7,8-HxCDF	75	(26 - 152)		
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
37Cl4-2,3,7,8-TCDD	90	(35 - 197)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

Trace Level Organic Compounds

Client Lot #...: A6E220164 **Work Order #...:** H51P11AE **Matrix.....:** WATER
MB Lot-Sample #: G6E230000-498
Prep Date.....: 05/23/06
Analysis Date..: 05/25/06 **Prep Batch #...:** 6143498
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	10	pg/L	EPA-5 1613B
2,3,7,8-TCDF	ND	10	pg/L	EPA-5 1613B

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	78	(25 - 164)
13C-2,3,7,8-TCDF	81	(24 - 169)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	90	(35 - 197)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

Trace Level Organic Compounds

Client Lot #...: A6E220164 **Work Order #...:** H511N1AA **Matrix.....:** WATER
MB Lot-Sample #: G6E230000-570
Prep Date.....: 05/23/06
Analysis Date..: 05/25/06 **Prep Batch #...:** 6143570
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	0.83	pg/L	EPA-5 1613B
Total TCDD	ND	0.83	pg/L	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	1.6	pg/L	EPA-5 1613B
Total PeCDD	ND	1.6	pg/L	EPA-5 1613B
1,2,3,4,7,8-HxCDD	ND	0.88	pg/L	EPA-5 1613B
1,2,3,6,7,8-HxCDD	ND	0.88	pg/L	EPA-5 1613B
1,2,3,7,8,9-HxCDD	ND	0.94	pg/L	EPA-5 1613B
Total HxCDD	ND	0.94	pg/L	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	ND	5.4	pg/L	EPA-5 1613B
Total HpCDD	ND	5.4	pg/L	EPA-5 1613B
OCDD	ND	15	pg/L	EPA-5 1613B
2,3,7,8-TCDF	ND	0.79	pg/L	EPA-5 1613B
Total TCDF	ND	0.79	pg/L	EPA-5 1613B
1,2,3,7,8-PeCDF	ND	0.84	pg/L	EPA-5 1613B
2,3,4,7,8-PeCDF	ND	0.89	pg/L	EPA-5 1613B
Total PeCDF	ND	0.89	pg/L	EPA-5 1613B
1,2,3,4,7,8-HxCDF	ND	1.9	pg/L	EPA-5 1613B
1,2,3,6,7,8-HxCDF	ND	0.68	pg/L	EPA-5 1613B
2,3,4,6,7,8-HxCDF	ND	1.4	pg/L	EPA-5 1613B
1,2,3,7,8,9-HxCDF	ND	0.60	pg/L	EPA-5 1613B
Total HxCDF	ND	1.9	pg/L	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	ND	6.4	pg/L	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	ND	1.0	pg/L	EPA-5 1613B
Total HpCDF	ND	6.4	pg/L	EPA-5 1613B
OCDF	ND	5.7	pg/L	EPA-5 1613B

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METHOD BLANK REPORT

Trace Level Organic Compounds

Client Lot #...: A6E220164 **Work Order #...:** H511N1AA **Matrix.....:** WATER

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	87	(25 - 164)
13C-1,2,3,7,8-PeCDD	116	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	106	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	78	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	105	(23 - 140)
13C-OCDD	133	(17 - 157)
13C-2,3,7,8-TCDF	93	(24 - 169)
13C-1,2,3,7,8-PeCDF	94	(24 - 185)
13C-2,3,4,7,8-PeCDF	98	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	76	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	88	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	93	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	93	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	116	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	77	(26 - 152)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	85	(35 - 197)

NOTE(S):

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A6E220164 **Work Order #...:** H5X8Q1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A6E230000-066 H5X8Q1AD-LCSD
Prep Date.....: 05/23/06 **Analysis Date..:** 05/24/06
Prep Batch #...: 6143066
Dilution Factor: 2

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1268	**54**	**(50 - 150)**			**SW846 8082**
	51	**(50 - 150)**	**6.1**	**(0-30)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	73	(35 - 130)
	79	(35 - 130)
Decachlorobiphenyl	24	(10 - 110)
	28	(10 - 110)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

Trace Level Organic Compounds

Client Lot #...:

LABORATORY CONTROL SAMPLE EVALUATION REPORT

Trace Level Organic Compounds

Client Lot #...: A6E220164 **Work Order #...:** H51P11AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: G6E230000-498 H51P11AD-LCSD

INTERNAL STANDARD	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	79	(25 - 164)
	78	(25 - 164)
13C-1,2,3,7,8-PeCDD	115	(25 - 181)
	114	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	109	(32 - 141)
	108	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	77	(28 - 130)
	83	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	103	(23 - 140)
	100	(23 - 140)
13C-OCDD	134	(17 - 157)
	125	(17 - 157)
13C-2,3,7,8-TCDF	82	(24 - 169)
	82	(24 - 169)
13C-1,2,3,7,8-PeCDF	91	(24 - 185)
	88	(24 - 185)
13C-2,3,4,7,8-PeCDF	98	(21 - 178)
	98	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	74	(26 - 123)
	76	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	83	(28 - 136)
	84	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	92	(29 - 147)
	93	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	91	(28 - 143)
	90	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	115	(26 - 138)
	111	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	76	(26 - 152)
	78	(26 - 152)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	90	(35 - 197)
	89	(35 - 197)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

Trace Level Organic Compounds

Client Lot #...: A6E220164 **Work Order #...:** H511N1AC **Matrix.....:** WATER
LCS Lot-Sample#: G6E230000-570
Prep Date.....: 05/23/06 **Analysis Date..:** 05/25/06
Prep Batch #...: 6143570
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,3,7,8-TCDD	**109**	**(67 - 158)**	**EPA-5 1613B**
1,2,3,7,8-PeCDD	**94** 5 109		

LABORATORY CONTROL SAMPLE EVALUATION REPORT

Trace Level Organic Compounds

Client Lot #...: A6E220164 **Work Order #...:** H511N1AC **Matrix.....:** WATER
LCS Lot-Sample#:

Lockheed Martin Tactical Defense Systems

Dioxins/Furans, HRGC/HRMS (1613B)

Client Sample ID: SOUTH FILTERED WATER

[redacted]

Lockheed Martin Tactical Defense Systems

Dioxins/Furans, HRGC/HRMS (1613B)

Lockheed Martin Tactical Defense Systems

Dioxins/Furans, HRGC/HRMS (1613B)

Client Sample ID: NORTH FILTERED WATER

Lot-Sample #...:	A6E220164 - 003	**Work Order #...:**	H5XHP1AC	**Matrix....:**	WATER
Date Sampled...:	05/19/06	**Date Received..:**	05/20/06	**Instrument:**	8D5
Prep Date.....:	05/23/06	**Analysis Date..:**	05/25/06	**Units.....:**	pg/L

Lockheed Martin Tactical Defense Systems

Dioxins/Furans, HRGC/HRMS (1613B)

Client Sample ID: NORTH FILTERED WATER

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
[redacted]	[redacted]	[redacted]

Lockheed Martin Tactical Defense Systems

Dioxins/Furans, HRGC/HRMS (1613B)

Client Sample ID: NORTH UNFILTERED WATER

Lockheed Martin Tactical Defense Systems

Dioxins/Furans, HRGC/HRMS (1613B)

Table of Contents

Return to Navigator

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www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. 38032-001 EXTERIOR

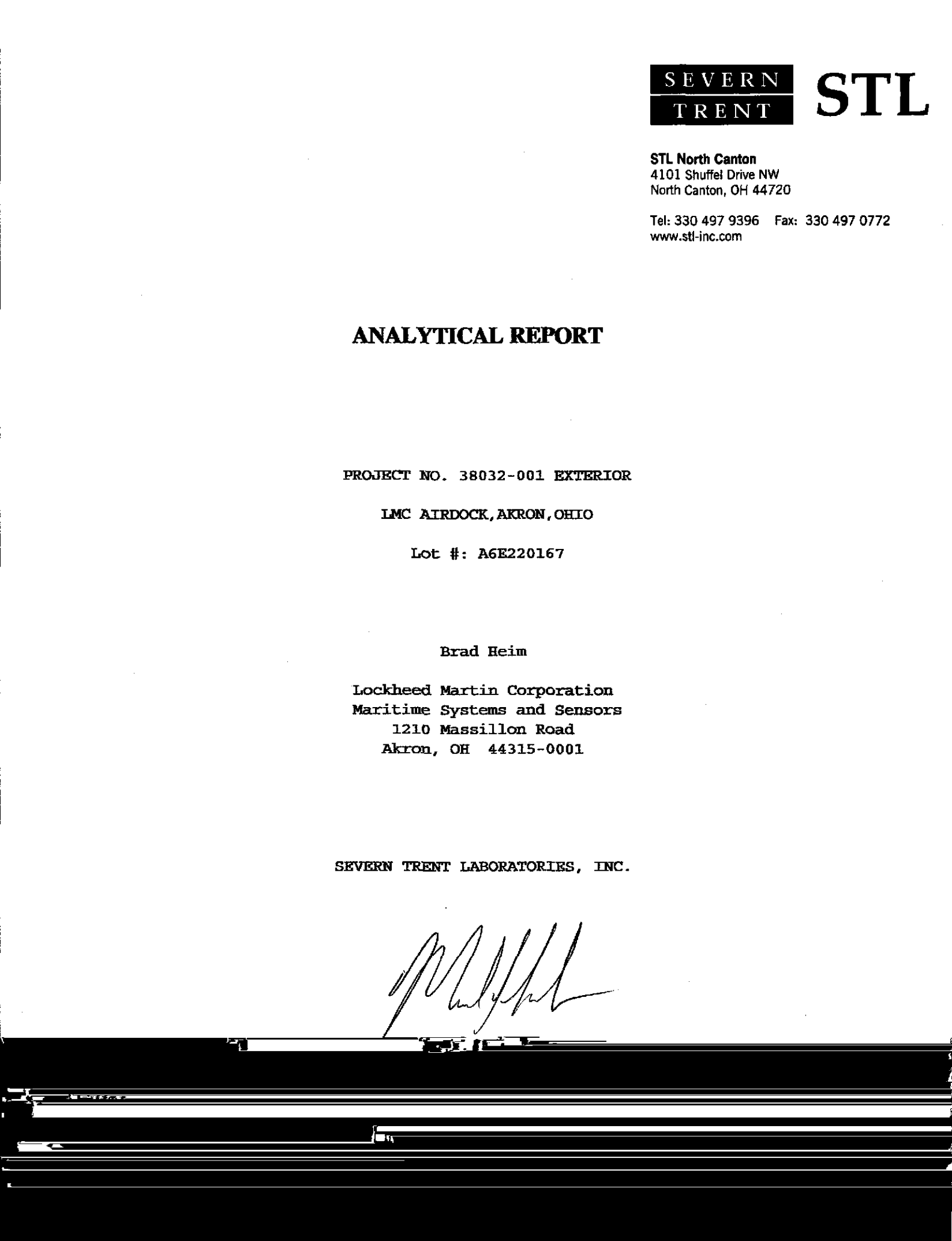
LMC AIRDOCK,AKRON,OHIO

Lot #: A6E220167

Brad Heim

Lockheed Martin Corporation
Maritime Systems and Sensors
1210 Massillon Road
Akron, OH 44315-0001

SEVERN TRENT LABORATORIES, INC.



A6E220167

The following report contains the analytical results for five wipe samples submitted to STL North Canton by Lockheed Martin Tactical Defense Systems from the LMC Airdock, Akron, Ohio Site, project number 38032-001 EXTERIOR. The samples were received May 22, 2006, according to documented sample acceptance procedures.

The Dioxin analysis was performed at STL Sacramento.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Brad Heim, Dave Gunnarson, Dan Kemp, Mark Hurban, and Shawn Wolf on May 30, 2006. A summary of QC data for these analyses is included at the back of the report.

STL North Canton attests to the validity of the laboratory data generated by STL facilities reported herein. All analyses performed by STL facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. STL's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Mark J. Loeb, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT." The total number of pages in this report is 25.

The samples were received at STL Sacramento at a temperature of 12°C. with blue ice that was thawed.

Sample LMC-LS-005 has internal standard (IS) 13C-2378-TCDD with the ion ratio outside limits; in this case its quantitation, as well as that of corresponding homologue series compounds, is based on a theoretical area count generated for the ion peak in question. The result is then qualified as "positively identified, but estimated quantitation" because the analyst believes the isomer to be present, but the quantitation is based on theoretical ratios. There is no adverse impact on data quality, so no corrective action is necessary.

The method blank associated with samples LMC-LS-001, LMC-LS-002, LMC-LS-003, LMC-LS-004, and LMC-LS-005 was contaminated with HpCDD and OCDD. The samples and method blank were reanalyzed and confirm contamination occurred after extractions. Re-extracts are free of contamination and have been reported.

EXECUTIVE SUMMARY - Detection Highlights

A6E220167

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
NO DETECTABLE PARAMETERS				

ANALYTICAL METHODS SUMMARY

A6E220167

PARAMETER	ANALYTICAL METHOD
Dioxins/Furans, HRGC/HRMS	EPA-5 1613B

References:

EPA-5 "Method 1613: Tetra- through Octa- Chlorinated Dioxins and Furans by Isotope Dilution, HRGC/HRMS, Revision B", EPA, OCTOBER 1994

SAMPLE SUMMARY

A6E220167

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
H5XJR	001	LMC-LS-001	05/21/06	14:05
H5XJT	002	LMC-LS-002	05/21/06	14:25
H5XJV	003	LMC-LS-003	05/21/06	14:45
H5XJW	004	LMC-LS-004	05/21/06	15:30
H5XJX	005	LMC-LS-005	05/21/06	15:50

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-LS-001

Trace Level Organic Compounds

Lot-Sample #...: A6E220167-001 **Work Order #...:** H5XJR2AA **Matrix.....:** SW
Date Sampled...: 05/21/06 14:05 **Date Received..:** 05/22/06
Prep Date.....: 05/23/06 **Analysis Date..:** 05/26/06
Prep Batch #...: 6146423
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	9.7	pg	EPA-5 1613B
Total TCDD	ND	9.7	pg	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	21	pg	EPA-5 1613B
Total PeCDD	ND	21	pg	EPA-5 1613B
1,2,3,4,7,8-HxCDD	ND	15	pg	EPA-5 1613B
1,2,3,6,7,8-HxCDD	ND	16	pg	EPA-5 1613B
1,2,3,7,8,9-HxCDD	ND	14	pg	EPA-5 1613B
Total HxCDD	ND	16	pg	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	ND	7.1	pg	EPA-5 1613B
Total HpCDD	ND	7.1	pg	EPA-5 1613B
OCDD	ND	30	pg	EPA-5 1613B
2,3,7,8-TCDF	ND	14	pg	EPA-5 1613B
Total TCDF	ND	14	pg	EPA-5 1613B
1,2,3,7,8-PeCDF	ND	11	pg	EPA-5 1613B
2,3,4,7,8-PeCDF	ND	11	pg	EPA-5 1613B
Total PeCDF	ND	19	pg	EPA-5 1613B
1,2,3,4,7,8-HxCDF	ND	22	pg	EPA-5 1613B
1,2,3,6,7,8-HxCDF	ND	22	pg	EPA-5 1613B
2,3,4,6,7,8-HxCDF	ND	15	pg	EPA-5 1613B
1,2,3,7,8,9-HxCDF	ND	13	pg	EPA-5 1613B
Total HxCDF	ND	22	pg	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	ND	7.6	pg	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	ND	8.5	pg	EPA-5 1613B
Total HpCDF	ND	8.5	pg	EPA-5 1613B
OCDF	ND	17	pg	EPA-5 1613B

(Continued on next page)

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-LS-001

Trace Level Organic Compounds

Lot-Sample #...: A6E220167-001 **Work Order #...:** H5XJR2AA **Matrix.....:** SW

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	98	(25 - 164)
13C-1,2,3,7,8-PeCDD	96	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	107	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	96	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	93	(23 - 140)
13C-OCDD	104	(17 - 157)
13C-2,3,7,8-TCDF	76	(24 - 169)
13C-1,2,3,7,8-PeCDF	89	(24 - 185)
13C-2,3,4,7,8-PeCDF	90	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	86	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	89	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	87	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	81	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	89	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	83	(26 - 152)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	85	(35 - 197)

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-LS-002

Trace Level Organic Compounds

Lot-Sample #...: A6E220167-002 **Work Order #...:** H5XJT2AA **Matrix.....:** SW
Date Sampled...: 05/21/06 14:25 **Date Received..:** 05/22/06
Prep Date.....: 05/23/06 **Analysis Date..:** 05/26/06
Prep Batch #...: 6146423
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	10	pg	EPA-5 1613B
Total TCDD	ND	10	pg	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	19	pg	EPA-5 1613B
Total PeCDD	ND	19	pg	EPA-5 1613B
1,2,3,4,7,8-HxCDD	ND	16	pg	EPA-5 1613B
1,2,3,6,7,8-HxCDD	ND	15	pg	EPA-5 1613B
1,2,3,7,8,9-HxCDD	ND	14	pg	EPA-5 1613B
Total HxCDD	ND	16	pg	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	ND	8.6	pg	EPA-5 1613B
Total HpCDD	ND	8.6	pg	EPA-5 1613B
OCDD	ND	27	pg	EPA-5 1613B
2,3,7,8-TCDF	ND	17	pg	EPA-5 1613B
Total TCDF	ND	17	pg	EPA-5 1613B
1,2,3,7,8-PeCDF	ND	12	pg	EPA-5 1613B
2,3,4,7,8-PeCDF	ND	12	pg	EPA-5 1613B
Total PeCDF	ND	17	pg	EPA-5 1613B
1,2,3,4,7,8-HxCDF	ND	23	pg	EPA-5 1613B
1,2,3,6,7,8-HxCDF	ND	21	pg	EPA-5 1613B
2,3,4,6,7,8-HxCDF	ND	14	pg	EPA-5 1613B
1,2,3,7,8,9-HxCDF	ND	12	pg	EPA-5 1613B
Total HxCDF	ND	23	pg	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	ND	7.5	pg	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	ND	8.9	pg	EPA-5 1613B
Total HpCDF	ND	8.9	pg	EPA-5 1613B
OCDF	ND	15	pg	EPA-5 1613B

(Continued on next page)

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-LS-002

Trace Level Organic Compounds

Lot-Sample #...: A6E220167-002 **Work Order #...:** H5XJT2AA **Matrix.....:** SW

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	98	(25 - 164)
13C-1,2,3,7,8-PeCDD	106	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	112	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	97	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	94	(23 - 140)
13C-OCDD	106	(17 - 157)
13C-2,3,7,8-TCDF	78	(24 - 169)
13C-1,2,3,7,8-PeCDF	90	(24 - 185)
13C-2,3,4,7,8-PeCDF	94	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	85	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	89	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	90	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	83	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	86	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	81	(26 - 152)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	81	(35 - 197)

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-LS-003

Trace Level Organic Compounds

Lot-Sample #...: A6E220167-003 **Work Order #...:** H5XJV2AA **Matrix.....:** SW
Date Sampled...: 05/21/06 14:45 **Date Received..:** 05/22/06
Prep Date.....: 05/23/06 **Analysis Date..:** 05/26/06
Prep Batch #...: 6146423
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	11	pg	EPA-5 1613B
Total TCDD	ND	11	pg	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	22	pg	EPA-5 1613B
Total PeCDD	ND	22	pg	EPA-5 1613B
1,2,3,4,7,8-HxCDD	ND	16	pg	EPA-5 1613B
1,2,3,6,7,8-HxCDD	ND	16	pg	EPA-5 1613B
1,2,3,7,8,9-HxCDD	ND	15	pg	EPA-5 1613B
Total HxCDD	ND	16	pg	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	ND	6.4	pg	EPA-5 1613B
Total HpCDD	ND	6.4	pg	EPA-5 1613B
OCDD	ND	29	pg	EPA-5 1613B
2,3,7,8-TCDF	ND	19	pg	EPA-5 1613B
Total TCDF	ND	19	pg	EPA-5 1613B
1,2,3,7,8-PeCDF	ND	10	pg	EPA-5 1613B
2,3,4,7,8-PeCDF	ND	11	pg	EPA-5 1613B
Total PeCDF	ND	18	pg	EPA-5 1613B
1,2,3,4,7,8-HxCDF	ND	22	pg	EPA-5 1613B
1,2,3,6,7,8-HxCDF	ND	20	pg	EPA-5 1613B
2,3,4,6,7,8-HxCDF	ND	15	pg	EPA-5 1613B
1,2,3,7,8,9-HxCDF	ND	12	pg	EPA-5 1613B
Total HxCDF	ND	22	pg	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	ND	6.0	pg	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	ND	7.3	pg	EPA-5 1613B
Total HpCDF	ND	7.3	pg	EPA-5 1613B
OCDF	ND	21	pg	EPA-5 1613B

(Continued on next page)

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-LS-003

Trace Level Organic Compounds

Lot-Sample #...: A6E220167-003 **Work Order #...:** H5XJV2AA **Matrix.....:** SW

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	94	(25 - 164)
13C-1,2,3,7,8-PeCDD	96	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	101	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	96	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	92	(23 - 140)
13C-OCDD	103	(17 - 157)
13C-2,3,7,8-TCDF	73	(24 - 169)
13C-1,2,3,7,8-PeCDF	87	(24 - 185)
13C-2,3,4,7,8-PeCDF	86	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	86	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	90	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	87	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	84	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	86	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	81	(26 - 152)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	82	(35 - 197)

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-LS-004

Trace Level Organic Compounds

Lot-Sample #...: A6E220167-004 **Work Order #...:** H5XJW2AA **Matrix.....:** SW
Date Sampled...: 05/21/06 15:30 **Date Received..:** 05/22/06
Prep Date.....: 05/23/06 **Analysis Date..:** 05/26/06
Prep Batch #...: 6146423
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	9.8	pg	EPA-5 1613B
Total TCDD	ND	9.8	pg	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	23	pg	EPA-5 1613B
Total PeCDD	ND	23	pg	EPA-5 1613B
1,2,3,4,7,8-HxCDD	ND	16	pg	EPA-5 1613B
1,2,3,6,7,8-HxCDD	ND	16	pg	EPA-5 1613B
1,2,3,7,8,9-HxCDD	ND	15	pg	EPA-5 1613B
Total HxCDD	ND	16	pg	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	ND	5.9	pg	EPA-5 1613B
Total HpCDD	ND	5.9	pg	EPA-5 1613B
OCDD	ND	31	pg	EPA-5 1613B
2,3,7,8-TCDF	ND	17	pg	EPA-5 1613B
Total TCDF	ND	17	pg	EPA-5 1613B
1,2,3,7,8-PeCDF	ND	11	pg	EPA-5 1613B
2,3,4,7,8-PeCDF	ND	11	pg	EPA-5 1613B
Total PeCDF	ND	19	pg	EPA-5 1613B
1,2,3,4,7,8-HxCDF	ND	23	pg	EPA-5 1613B
1,2,3,6,7,8-HxCDF	ND	21	pg	EPA-5 1613B
2,3,4,6,7,8-HxCDF	ND	14	pg	EPA-5 1613B
1,2,3,7,8,9-HxCDF	ND	13	pg	EPA-5 1613B
Total HxCDF	ND	23	pg	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	ND	7.8	pg	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	ND	8.8	pg	EPA-5 1613B
Total HpCDF	ND	8.8	pg	EPA-5 1613B
OCDF	ND	17	pg	EPA-5 1613B

(Continued on next page)

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-LS-004

Trace Level Organic Compounds

Lot-Sample #...: A6E220167-004 **Work Order #...:** H5XJW2AA **Matrix.....:** SW

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	94	(25 - 164)
13C-1,2,3,7,8-PeCDD	97	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	102	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	97	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	91	(23 - 140)
13C-OCDD	99	(17 - 157)
13C-2,3,7,8-TCDF	75	(24 - 169)
13C-1,2,3,7,8-PeCDF	87	(24 - 185)
13C-2,3,4,7,8-PeCDF	90	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	83	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	88	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	86	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	77	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	88	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	78	(26 - 152)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	82	(35 - 197)

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-LS-005

Trace Level Organic Compounds

Lot-Sample #...: A6E220167-005 **Work Order #...:** H5XJX2AA **Matrix.....:** SW
Date Sampled...: 05/21/06 15:50 **Date Received..:** 05/22/06
Prep Date.....: 05/23/06 **Analysis Date..:** 05/26/06
Prep Batch #...: 6146423
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	13	pg	EPA-5 1613B
Total TCDD	ND	13	pg	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	25	pg	EPA-5 1613B
Total PeCDD	ND	25	pg	EPA-5 1613B
1,2,3,4,7,8-HxCDD	ND	14	pg	EPA-5 1613B
1,2,3,6,7,8-HxCDD	ND	14	pg	EPA-5 1613B
1,2,3,7,8,9-HxCDD	ND	13	pg	EPA-5 1613B
Total HxCDD	ND	14	pg	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	ND	8.4	pg	EPA-5 1613B
Total HpCDD	ND	8.4	pg	EPA-5 1613B
OCDD	ND	47	pg	EPA-5 1613B
2,3,7,8-TCDF	ND	18	pg	EPA-5 1613B
Total TCDF	ND	18	pg	EPA-5 1613B
1,2,3,7,8-PeCDF	ND	15	pg	EPA-5 1613B
2,3,4,7,8-PeCDF	ND	15	pg	EPA-5 1613B
Total PeCDF	ND	20	pg	EPA-5 1613B
1,2,3,4,7,8-HxCDF	ND	22	pg	EPA-5 1613B
1,2,3,6,7,8-HxCDF	ND	20	pg	EPA-5 1613B
2,3,4,6,7,8-HxCDF	ND	14	pg	EPA-5 1613B
1,2,3,7,8,9-HxCDF	ND	12	pg	EPA-5 1613B
Total HxCDF	ND	22	pg	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	ND	7.6	pg	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	ND	8.7	pg	EPA-5 1613B
Total HpCDF	ND	8.7	pg	EPA-5 1613B
OCDF	ND	20	pg	EPA-5 1613B

(Continued on next page)

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-LS-005

Trace Level Organic Compounds

Lot-Sample #...: A6E220167-005 **Work Order #...:** H5XJX2AA **Matrix.....:** SW

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	93	(25 - 164)
13C-1,2,3,7,8-PeCDD	89	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	98	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	93	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	91	(23 - 140)
13C-OCDD	97	(17 - 157)
13C-2,3,7,8-TCDF	69	(24 - 169)
13C-1,2,3,7,8-PeCDF	83	(24 - 185)
13C-2,3,4,7,8-PeCDF	85	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	81	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	85	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	85	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	72	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	79	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	75	(26 - 152)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	80	(35 - 197)

QUALITY CONTROL SECTION

METHOD BLANK REPORT

Trace Level Organic Compounds

Client Lot #...: A6E220167 **Work Order #...:** H6AR21AA **Matrix.....:** WIPE
MB Lot-Sample #: G6E260000-423
Prep Date.....: 05/23/06
Analysis Date..: 05/26/06 **Prep Batch #...:** 6146423
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	8.3	pg	EPA-5 1613B
Total TCDD	ND	8.3	pg	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	21	pg	EPA-5 1613B
Total PeCDD	ND	21	pg	EPA-5 1613B
1,2,3,4,7,8-HxCDD	ND	15	pg	EPA-5 1613B
1,2,3,6,7,8-HxCDD	ND	15	pg	EPA-5 1613B
1,2,3,7,8,9-HxCDD	ND	14	pg	EPA-5 1613B
Total HxCDD	ND	15	pg	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	ND	8.4	pg	EPA-5 1613B
Total HpCDD	ND	8.4	pg	EPA-5 1613B
OCDD	ND	28	pg	EPA-5 1613B
2,3,7,8-TCDF	ND	16	pg	EPA-5 1613B
Total TCDF	ND	16	pg	EPA-5 1613B
1,2,3,7,8-PeCDF	ND	10	pg	EPA-5 1613B
2,3,4,7,8-PeCDF	ND	11	pg	EPA-5 1613B
Total PeCDF	ND	15	pg	EPA-5 1613B
1,2,3,4,7,8-HxCDF	ND	23	pg	EPA-5 1613B
1,2,3,6,7,8-HxCDF	ND	21	pg	EPA-5 1613B
2,3,4,6,7,8-HxCDF	ND	14	pg	EPA-5 1613B
1,2,3,7,8,9-HxCDF	ND	12	pg	EPA-5 1613B
Total HxCDF	ND	23	pg	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	ND	7.1	pg	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	ND	8.0	pg	EPA-5 1613B
Total HpCDF	ND	8.0	pg	EPA-5 1613B
OCDF	ND	15	pg	EPA-5 1613B

(Continued on next page)

METHOD BLANK REPORT

Trace Level Organic Compounds

Client Lot #...: A6E220167 **Work Order #...:** H6AR21AA **Matrix.....:** WIPE

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	103	(25 - 164)
13C-1,2,3,7,8-PeCDD	103	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	106	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	101	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	99	(23 - 140)
13C-OCDD	105	(17 - 157)
13C-2,3,7,8-TCDF	78	(24 - 169)
13C-1,2,3,7,8-PeCDF	98	(24 - 185)
13C-2,3,4,7,8-PeCDF	96	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	87	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	92	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	93	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	86	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	90	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	81	(26 - 152)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	87	(35 - 197)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

Trace Level Organic Compounds

Client Lot #...: A6E220167 **Work Order #...:** H6AR21AC **Matrix.....:** WIPE
LCS Lot-Sample#: G6E260000-423
Prep Date.....: 05/23/06 **Analysis Date..:** 05/26/06
Prep Batch #...: 6146423
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,3,7,8-TCDD	**90**	**(67 - 158)**	**EPA-5 1613B**
1,2,3,7,8-PeCDD	**99**	**(70 - 142)**	**EPA-5 1613B**
1,2,3,4,7,8-HxCDD	**96**	**(70 - 164)**	**EPA-5 1613B**
1,2,3,6,7,8-HxCDD	**103**	**(76 - 134)**	**EPA-5 1613B**
1,2,3,7,8,9-HxCDD	**101**	**(64 - 162)**	**EPA-5 1613B**
1,2,3,4,6,7,8-HpCDD	**100**	(70 - 140)	

LABORATORY CONTROL SAMPLE EVALUATION REPORT

Trace Level Organic Compounds

Client Lot #...: A6E220167 **Work Order #...:** H6AR21AC **Matrix.....:** WIPE
LCS Lot-Sample#: G6E260000-423

INTERNAL STANDARD	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	107	(25 - 164)
13C-1,2,3,7,8-PeCDD	103	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	103	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	93	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	94	(23 - 140)
13C-OCDD	107	(17 - 157)
13C-2,3,7,8-TCDF	80	(24 - 169)
13C-1,2,3,7,8-PeCDF	92	(24 - 185)
13C-2,3,4,7,8-PeCDF	97	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	86	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	92	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	88	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	82	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	88	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	78	(26 - 152)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	84	(35 - 197)

NOTE(S):

-1.31-342 -12 Calcu /Reons are performed before rComping to avoid rComp-off errors in calcu /Red resul

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Table of Contents

Return to Navigator

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STL North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

Tel: 330 497 9396 Fax: 330 497 0772
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ANALYTICAL REPORT

PROJECT NO. 38032-001 EXTERIOR

LMC AIRDOCK, AKRON, OH

Lot #: A6E220171

Dave Gunnarson

Lockheed Martin Corporation
Maritime Systems and Sensors
1210 Massillon Road
Akron, OH 44315-0001

SEVERN TRENT LABORATORIES, INC.

Mark J. Loeb
Project Manager

May 30, 2006

A6E220171

The following report contains the analytical results for five wipe samples submitted to STL North Canton by Lockheed Martin Tactical Defense Systems from the LMC Airdock, Akron, OH Site, project number 38032-001 EXTERIOR. The samples were received May 22, 2006, according to documented sample acceptance procedures.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assu

Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be include

EXECUTIVE SUMMARY - Detection Highlights

A6E220171

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD

NO DETECTABLE PARAMETERS

ANALYTICAL METHODS SUMMARY

A6E220171

SAMPLE SUMMARY

A6E220171

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
H5XKR	001	LMC-LS-001	05/21/06	11:27
H5XKW	002	LMC-LS-002	05/21/06	11:40
H5XK0	003	LMC-LS-003	05/21/06	12:00
H5XK1	004	LMC-LS-004	05/21/06	12:45
H5XK2	005	LMC-LS-005	05/21/06	13:05

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-LS-001

GC Semivolatiles

Lot-Sample #...: A6E220171-001 **Work Order #...:** H5XKR1AA **Matrix.....:** SW
Date Sampled...: 05/21/06 11:27 **Date Received..:** 05/22/06
Prep Date.....: 05/23/06 **Analysis Date..:** 05/23/06
Prep Batch #...: 6143042
Dilution Factor: 10 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	5.0	ug/wipe
Aroclor 1221	ND	5.0	ug/wipe
Aroclor 1232	ND	5.0	ug/wipe
Aroclor 1242	ND	5.0	ug/wipe
Aroclor 1248	ND	5.0	ug/wipe
Aroclor 1254	ND	5.0	ug/wipe
Aroclor 1260	ND	5.0	ug/wipe
Aroclor 1268	ND	5.0	ug/wipe

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	50 DIL,*	(52 - 171)
Decachlorobiphenyl	70 DIL	(39 - 187)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Elevated reporting limits. The reporting limits are elevated due to matrix interference.

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-LS-002

GC Semivolatiles

Lot-Sample #...: A6E220171-002 **Work Order #...:** H5XKW1AA **Matrix.....:** SW
Date Sampled...: 05/21/06 11:40 **Date Received..:** 05/22/06
Prep Date.....: 05/23/06 **Analysis Date..:** 05/23/06
Prep Batch #...: 6143042
Dilution Factor: 10 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	5.0	ug/wipe
Aroclor 1221	ND	5.0	ug/wipe
Aroclor 1232	ND	5.0	ug/wipe
Aroclor 1242	ND	5.0	ug/wipe
Aroclor 1248	ND	5.0	ug/wipe
Aroclor 1254	ND	5.0	ug/wipe
Aroclor 1260	ND	5.0	ug/wipe
Aroclor 1268	ND	5.0	ug/wipe

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	52 DIL	(52 - 171)
Decachlorobiphenyl	66 DIL	(39 - 187)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Elevated reporting limits. The reporting limits are elevated due to matrix interference.

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-LS-003

GC Semivolatiles

Lot-Sample #...: A6E220171-003 **Work Order #...:** H5XK01AA **Matrix.....:** SW
Date Sampled...: 05/21/06 12:00 **Date Received..:** 05/22/06
Prep Date.....: 05/23/06 **Analysis Date..:** 05/23/06
Prep Batch #...: 6143042
Dilution Factor: 10 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	5.0	ug/wipe
Aroclor 1221	ND	5.0	ug/wipe
Aroclor 1232	ND	5.0	ug/wipe
Aroclor 1242	ND	5.0	ug/wipe
Aroclor 1248	ND	5.0	ug/wipe
Aroclor 1254	ND	5.0	ug/wipe
Aroclor 1260	ND	5.0	ug/wipe
Aroclor 1268	ND	5.0	ug/wipe

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	60 DIL	(52 - 171)
Decachlorobiphenyl	75 DIL	(39 - 187)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Elevated reporting limits. The reporting limits are elevated due to matrix interference.

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-LS-004

GC Semivolatiles

Lot-Sample #...: A6E220171-004 **Work Order #...:** H5XK11AA **Matrix.....:** SW
Date Sampled...: 05/21/06 12:45 **Date Received..:** 05/22/06
Prep Date.....: 05/23/06 **Analysis Date..:** 05/23/06
Prep Batch #...: 6143042
Dilution Factor: 10 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	5.0	ug/wipe
Aroclor 1221	ND	5.0	ug/wipe
Aroclor 1232	ND	5.0	ug/wipe
Aroclor 1242	ND	5.0	ug/wipe
Aroclor 1248	ND	5.0	ug/wipe
Aroclor 1254	ND	5.0	ug/wipe
Aroclor 1260	ND	5.0	ug/wipe
Aroclor 1268	ND	5.0	ug/wipe

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	61 DIL	(52 - 171)
Decachlorobiphenyl	78 DIL	(39 - 187)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Elevated reporting limits. The reporting limits are elevated due to matrix interference.

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-LS-005

GC Semivolatiles

Lot-Sample #...: A6E220171-005 **Work Order #...:** H5XK21AA **Matrix.....:** SW
Date Sampled...: 05/21/06 13:05 **Date Received..:** 05/22/06
Prep Date.....: 05/23/06 **Analysis Date..:** 05/23/06
Prep Batch #...: 6143042
Dilution Factor: 10 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	5.0	ug/wipe
Aroclor 1221	ND	5.0	ug/wipe
Aroclor 1232	ND	5.0	ug/wipe
Aroclor 1242	ND	5.0	ug/wipe
Aroclor 1248	ND	5.0	ug/wipe
Aroclor 1254	ND	5.0	ug/wipe
Aroclor 1260	ND	5.0	ug/wipe
Aroclor 1268	ND	5.0	ug/wipe

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	60 DIL	(52 - 171)
Decachlorobiphenyl	79 DIL	(39 - 187)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Elevated reporting limits. The reporting limits are elevated due to matrix interference.

QUALITY CONTROL SECTION

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A6E220171 **Work Order #...:** H5X7P1AA **Matrix.....:** WIPE
MB Lot-Sample #: A6E230000-042
Prep Date.....: 05/23/06
Analysis Date..: 05/23/06 **Prep Batch #...:** 6143042
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	0.50	ug/wipe	SW846 8082
Aroclor 1221	ND	0.50	ug/wipe	SW846 8082
Aroclor 1232	ND	0.50	ug/wipe	SW846 8082
Aroclor 1242	ND	0.50	ug/wipe	SW846 8082
Aroclor 1248	ND	0.50	ug/wipe	SW846 8082
Aroclor 1254	ND	0.50	ug/wipe	SW846 8082
Aroclor 1260	ND	0.50	ug/wipe	SW846 8082
Aroclor 1268	ND	0.50	ug/wipe	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	61	(52 - 171)
Decachlorobiphenyl	76	(39 - 187)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A6E220171 **Work Order #...:** H5X7P1AC-LCS **Matrix.....:** WIPE
LCS Lot-Sample#: A6E230000-042 H5X7P1AD-LCSD
Prep Date.....: 05/23/06 **Analysis Date..:** 05/23/06
Prep Batch #...: 6143042
Dilution Factor: 1

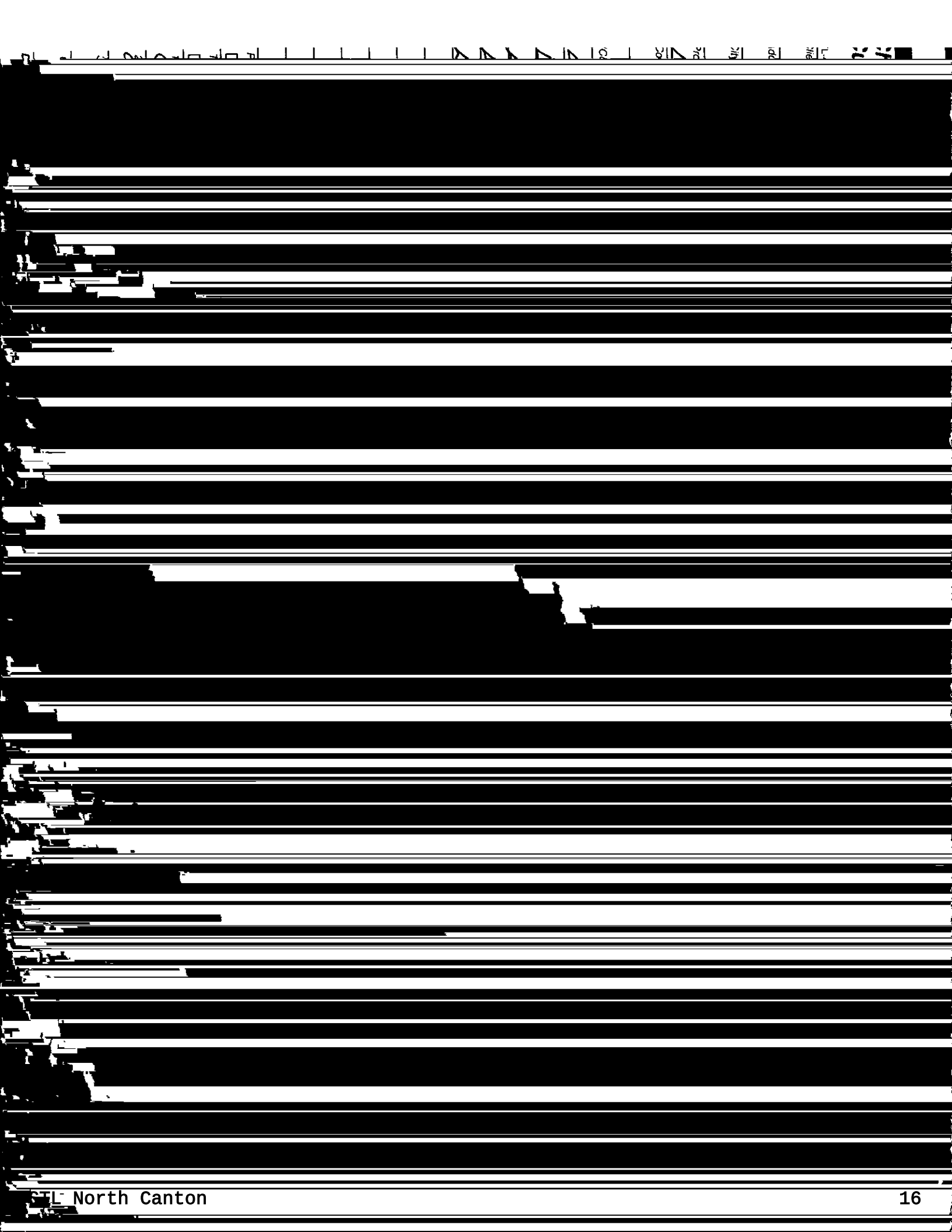
PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1268	**80**	**(68 - 110)**			**SW846 8082**
	80	**(68 - 110)**	**1.1**	**(0-30)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	52	(52 - 171)
	54	(52 - 171)
Decachlorobiphenyl	136	(39 - 187)
	134	(39 - 187)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters



STL Cooler Receipt Form/Narrative **Lot Number:** ALE20171

STL Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler	Temp	Method	Coolant
L494	4.4°C	IR	Ice
L493	5.2°C	I	I

Discrepancies Cont.

Appendix B

ANALYTICAL REPORT

PROJECT NO. 38032-004

LMC AIRDOCK, AKRON, OH

EXECUTIVE SUMMARY - Detection Highlights

A6F030117

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
LMC-FI-002 A 06/02/06 08:17 001				
Aroclor 1268	0.99	0.50	ug/wipe	SW846 8082
LMC-FI-003 A 06/02/06 08:40 002				
Aroclor 1268	3.0	0.50	ug/wipe	SW846 8082
LMC-FI-005 06/02/06 09:32 003				
Aroclor 1268	40 J	49	ug/kg	SW846 8082
Percent Solids	66.9	10.0	%	MCAWW 160.3 MOD
LMC-FI-006 06/02/06 09:53 004				
Aroclor 1268	3900	430	ug/kg	SW846 8082
Percent Solids	76.1	10.0	%	MCAWW 160.3 MOD
LMC-FI-007 06/02/06 10:05 005				
Aroclor 1268	7400	900	ug/kg	SW846 8082
Percent Solids	73.4	10.0	%	MCAWW 160.3 MOD
LMC-FI-008 A 06/02/06 14:15 006				
Aroclor 1268	12000	1400	ug/kg	SW846 8082
Percent Solids	22.8	10.0	%	MCAWW 160.3 MOD
LMC-FI-008 C 06/02/06 14:25 007				
Aroclor 1268	83000	760	ug/kg	SW846 8082
Percent Solids	86.6	10.0	%	MCAWW 160.3 MOD
LMC-FI-009 A 06/02/06 14:50 008				
Aroclor 1268	42000	4100	ug/kg	SW846 8082
Percent Solids	15.9	10.0	%	MCAWW 160.3 MOD
LMC-FI-009 C 06/02/06 15:00 009				
Aroclor 1268	2000000	41000	ug/kg	SW846 8082
Percent Solids	80.0	10.0	%	MCAWW 160.3 MOD

ANALYTICAL METHODS SUMMARY

A6F030117

PARAMETER	ANALYTICAL METHOD
PCBs by SW-846 8082	SW846 8082
Total Residue as Percent Solids	MCAWW 160.3 MOD

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A6F030117

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
H6M93	001	LMC-FI-002 A	06/02/06	08:17
H6M94	002	LMC-FI-003 A	06/02/06	08:40
H6M95	003	LMC-FI-005	06/02/06	09:32
H6M97	004	LMC-FI-006	06/02/06	09:53
H6M98	005	LMC-FI-007	06/02/06	10:05
H6M99	006	LMC-FI-008 A	06/02/06	14:15
H6NAC	007	LMC-FI-008 C	06/02/06	14:25
H6NAD	008	LMC-FI-009 A	06/02/06	14:50
H6NAF	009	LMC-FI-009 C	06/02/06	15:00
H6NAG	010	LMC-FI-011	06/02/06	13:47
H6NAH	011	LMC-FI-012	06/02/06	13:55

NOTE(S):

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- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-FI-002 A

GC Semivolatiles

Lot-Sample #...: A6F030117-001 **Work Order #...:** H6M931AA **Matrix.....:** SW
Date Sampled...: 06/02/06 08:17 **Date Received..:** 06/02/06
Prep Date.....: 06/05/06 **Analysis Date..:** 06/06/06
Prep Batch #...: 6156027
Dilution Factor: 1 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	0.50	ug/wipe
Aroclor 1221	ND	0.50	ug/wipe
Aroclor 1232	ND	0.50	ug/wipe
Aroclor 1242	ND	0.50	ug/wipe
Aroclor 1248	ND	0.50	ug/wipe
Aroclor 1254	ND	0.50	ug/wipe
Aroclor 1260	ND	0.50	ug/wipe
Aroclor 1268	**0.99**	**0.50**	**ug/wipe**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	72	(52 - 171)
Decachlorobiphenyl	77	(39 - 187)

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-FI-003 A

GC Semivolatiles

Lot-Sample #...: A6F030117-002 **Work Order #...:** H6M941AA **Matrix.....:** SW
Date Sampled...: 06/02/06 08:40 **Date Received..:** 06/02/06
Prep Date.....: 06/05/06 **Analysis Date..:** 06/06/06
Prep Batch #...: 6156027
Dilution Factor: 1 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	0.50	ug/wipe
Aroclor 1221	ND	0.50	ug/wipe
Aroclor 1232	ND	0.50	ug/wipe
Aroclor 1242	ND	0.50	ug/wipe
Aroclor 1248	ND	0.50	ug/wipe
Aroclor 1254	ND	0.50	ug/wipe
Aroclor 1260	ND	0.50	ug/wipe
Aroclor 1268	**3.0**	**0.50**	**ug/wipe**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	68	(52 - 171)
Decachlorobiphenyl	324 *	(39 - 187)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-FI-005

GC Semivolatiles

Lot-Sample #...: A6F030117-003 **Work Order #...:** H6M951AC **Matrix.....:** SO
Date Sampled...: 06/02/06 09:32 **Date Received..:** 06/02/06
Prep Date.....: 06/05/06 **Analysis Date..:** 06/07/06
Prep Batch #...: 6156030
Dilution Factor: 1
% Moisture.....: 33 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	49	ug/kg
Aroclor 1221	ND	49	ug/kg
Aroclor 1232	ND	49	ug/kg
Aroclor 1242	ND	49	ug/kg
Aroclor 1248	ND	49	ug/kg
Aroclor 1254	ND	49	ug/kg
Aroclor 1260	ND	49	ug/kg
Aroclor 1268	40 J		

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-FI-005

General Chemistry

Lot-Sample #...: A6F030117-003 **Work Order #...:** H6M95 **Matrix.....:** SO
Date Sampled...: 06/02/06 09:32 **Date Received..:** 06/02/06
% Moisture.....: 33

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**66.9**	**10.0**	**%**	**MCAWW 160.3 MOD**	**06/03-06/05/06**	**6154078**

Dilution Factor: 1

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-FI-006

GC Semivolatiles

Lot-Sample #...: A6F030117-004 **Work Order #...:** H6M971AC **Matrix.....:** SO
Date Sampled...: 06/02/06 09:53 **Date Received..:** 06/02/06
Prep Date.....: 06/05/06 **Analysis Date..:** 06/07/06
Prep Batch #...: 6156030
Dilution Factor: 10
% Moisture.....: 24 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	430	ug/kg
Aroclor 1221	ND	430	ug/kg
Aroclor 1232	ND	430	ug/kg
Aroclor 1242	ND	430	ug/kg
Aroclor 1248	ND	430	ug/kg
Aroclor 1254	ND	430	ug/kg
Aroclor 1260	ND	430	ug/kg
Aroclor 1268	**3900**	**430**	**ug/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	104 DIL	(10 - 127)
Decachlorobiphenyl	1940 DIL,*	(40 - 138)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-FI-006

General Chemistry

Lot-Sample #...: A6F030117-004 **Work Order #...:** H6M97 **Matrix.....:** SO
Date Sampled...: 06/02/06 09:53 **Date Received..:** 06/02/06
% Moisture.....: 24

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**76.1**	**10.0**	**%**	**MCAWW 160.3 MOD**	**06/03-06/05/06**	**6154078**

Dilution Factor: 1

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-FI-007

GC Semivolatiles

Lot-Sample #...: A6F030117-005 **Work Order #...:** H6M981AC **Matrix.....:** SO
Date Sampled...: 06/02/06 10:05 **Date Received..:** 06/02/06
Prep Date.....: 06/05/06 **Analysis Date..:** 06/07/06
Prep Batch #...: 6156030
Dilution Factor: 20
% Moisture.....: 27 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	900	ug/kg
Aroclor 1221	ND	900	ug/kg
Aroclor 1232	ND	900	ug/kg
Aroclor 1242	ND	900	ug/kg
Aroclor 1248	ND	900	ug/kg
Aroclor 1254	ND	900	ug/kg
Aroclor 1260	ND	900	ug/kg
Aroclor 1268	**7400**	**900**	**ug/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94 DIL	(10 - 127)
Decachlorobiphenyl	4390 DIL,*	(40 - 138)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-FI-007

General Chemistry

Lot-Sample #...: A6F030117-005 **Work Order #...:** H6M98 **Matrix.....:** SO
Date Sampled...: 06/02/06 10:05 **Date Received..:** 06/02/06
% Moisture.....: 27

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**73.4**	**10.0**	**%**	**MCAWW 160.3 MOD**	**06/03-06/05/06**	**6154078**

Dilution Factor: 1

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-FI-008 A

GC Semivolatiles

Lot-Sample #...: A6F030117-006 **Work Order #...:** H6M991AC **Matrix.....:** SO
Date Sampled...: 06/02/06 14:15 **Date Received..:** 06/02/06
Prep Date.....: 06/05/06 **Analysis Date..:** 06/07/06
Prep Batch #...: 6156030
Dilution Factor: 10
% Moisture.....: 77 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	1400	ug/kg
Aroclor 1221	ND	1400	ug/kg
Aroclor 1232	ND	1400	ug/kg
Aroclor 1242	ND	1400	ug/kg
Aroclor 1248	ND	1400	ug/kg
Aroclor 1254	ND	1400	ug/kg
Aroclor 1260	ND	1400	ug/kg
Aroclor 1268	**12000**	**1400**	**ug/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	91 DIL	(10 - 127)
Decachlorobiphenyl	1900 DIL,*	(40 - 138)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-FI-008 A

General Chemistry

Lot-Sample #...: A6F030117-006 **Work Order #...:** H6M99 **Matrix.....:** SO
Date Sampled...: 06/02/06 14:15 **Date Received..:** 06/02/06
% Moisture.....: 77

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**22.8**	**10.0**	**%**	**MCAWW 160.3 MOD**	**06/03-06/05/06**	**6154078**

Dilution Factor: 1

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-FI-008 C

GC Semivolatiles

Lot-Sample #...: A6F030117-007 **Work Order #...:** H6NAC1AC **Matrix.....:** SO
Date Sampled...: 06/02/06 14:25 **Date Received..:** 06/02/06
Prep Date.....: 06/05/06 **Analysis Date..:** 06/07/06
Prep Batch #...: 6156030
Dilution Factor: 20
% Moisture.....: 13 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	760	ug/kg
Aroclor 1221	ND	760	ug/kg
Aroclor 1232	ND	760	ug/kg
Aroclor 1242	ND	760	ug/kg
Aroclor 1248	ND	760	ug/kg
Aroclor 1254	ND	760	ug/kg
Aroclor 1260	ND	760	ug/kg
Aroclor 1268	**83000**	**760**	**ug/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	103 DIL	(10 - 127)
Decachlorobiphenyl	8280 DIL,*	(40 - 138)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-FI-008 C

General Chemistry

Lot-Sample #...: A6F030117-007 **Work Order #...:** H6NAC **Matrix.....:** SO
Date Sampled...: 06/02/06 14:25 **Date Received..:** 06/02/06
% Moisture.....: 13

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**86.6**	**10.0**	**%**	**MCAWW 160.3 MOD**	**06/03-06/05/06**	**6154078**

Dilution Factor: 1

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-FI-009 A

GC Semivolatiles

Lot-Sample #...: A6F030117-008 **Work Order #...:** H6NAD1AC **Matrix.....:** SO
Date Sampled...: 06/02/06 14:50 **Date Received..:** 06/02/06
Prepr:s42v

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-FI-009 A

General Chemistry

Lot-Sample #...: A6F030117-008 **Work Order #...:** H6NAD **Matrix.....:** SO
Date Sampled...: 06/02/06 14:50 **Date Received..:** 06/02/06
% Moisture.....: 84

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**15.9**	**10.0**	**%**	**MCAWW 160.3 MOD**	**06/03-06/05/06**	**6154078**

Dilution Factor: 1

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-FI-009 C

GC Semivolatiles

Lot-Sample #...: A6F030117-009 **Work Order #...:** H6NAF1AC **Matrix.....:** SO
Date Sampled...: 06/02/06 15:00 **Date Received..:** 06/02/06
Prep Date.....: 06/05/06 **Analysis Date..:** 06/07/06
Prep Batch #...: 6156030
Dilution Factor: 1000
% Moisture.....: 20 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	41000	ug/kg
Aroclor 1221	ND	41000	ug/kg
Aroclor 1232	ND	41000	ug/kg
Aroclor 1242	ND	41000	ug/kg
Aroclor 1248	ND	41000	ug/kg
Aroclor 1254	ND	41000	ug/kg
Aroclor 1260	ND	41000	ug/kg
Aroclor 1268	**2000000**	**41000**	**ug/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	0.0 DIL,*	(10 - 127)
Decachlorobiphenyl	23100 DIL,*	(40 - 138)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-FI-009 C

General Chemistry

Lot-Sample #...: A6F030117-009 **Work Order #...:** H6NAF **Matrix.....:** SO
Date Sampled...: 06/02/06 15:00 **Date Received..:** 06/02/06
% Moisture.....: 20

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**80.0**	**10.0**	**%**	**MCAWW 160.3 MOD**	**06/03-06/05/06**	**6154078**

Dilution Factor: 1

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-FI-011

GC Semivolatiles

Lot-Sample #...: A6F030117-010 **Work Order #...:** H6NAG1AA **Matrix.....:** SW
Date Sampled...: 06/02/06 13:47 **Date Received..:** 06/02/06
Prep Date.....: 06/05/06 **Analysis Date..:** 06/06/06
Prep Batch #...: 6156027
Dilution Factor: 1 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	0.50	ug/wipe
Aroclor 1221	ND	0.50	ug/wipe
Aroclor 1232	ND	0.50	ug/wipe
Aroclor 1242	ND	0.50	ug/wipe
Aroclor 1248	ND	0.50	ug/wipe
Aroclor 1254	ND	0.50	ug/wipe
Aroclor 1260	ND	0.50	ug/wipe
Aroclor 1268	ND	0.50	ug/wipe

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	70	(52 - 171)
Decachlorobiphenyl	71	(39 - 187)

Lockheed Martin Tactical Defense Systems

Client Sample ID: LMC-FI-012

GC Semivolatiles

Lot-Sample #...: A6F030117-011 **Work Order #...:** H6NAH1AA **Matrix.....:** SW
Date Sampled...: 06/02/06 13:55 **Date Received..:** 06/02/06
Prep Date.....: 06/05/06 **Analysis Date..:** 06/06/06
Prep Batch #...: 6156027
Dilution Factor: 1 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	0.50	ug/wipe
Aroclor 1221	ND	0.50	ug/wipe
Aroclor 1232	ND	0.50	ug/wipe
Aroclor 1242	ND	0.50	ug/wipe
Aroclor 1248	ND	0.50	ug/wipe
Aroclor 1254	ND	0.50	ug/wipe
Aroclor 1260	ND	0.50	ug/wipe
Aroclor 1268	ND	0.50	ug/wipe

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	68	(52 - 171)
Decachlorobiphenyl	64	(39 - 187)

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A6F030117 **Work Order #...:** H6PCF1AA **Matrix.....:** WIPE
MB Lot-Sample #: A6F050000-027
Prep Date.....: 06/05/06
Analysis Date..: 06/06/06 **Prep Batch #...:** 6156027
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	0.50	ug/wipe	SW846 8082
Aroclor 1221	ND	0.50	ug/wipe	SW846 8082
Aroclor 1232	ND	0.50	ug/wipe	SW846 8082
Aroclor 1242	ND	0.50	ug/wipe	SW846 8082
Aroclor 1248	ND	0.50	ug/wipe	SW846 8082
Aroclor 1254	ND	0.50	ug/wipe	SW846 8082
Aroclor 1260	ND	0.50	ug/wipe	SW846 8082
Aroclor 1268	ND	0.50	ug/wipe	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(52 - 171)
Decachlorobiphenyl	72	(39 - 187)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A6F030117 **Work Order #...:** H6PCK1AA **Matrix.....:** SOLID
MB Lot-Sample #: A6F050000-030

Prep Date.....: 06/05/06
Analysis Date..: 06/07/06 **Prep Batch #...:** 6156030
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	33	ug/kg	SW846 8082
Aroclor 1221	ND	33	ug/kg	SW846 8082
Aroclor 1232	ND	33	ug/kg	SW846 8082
Aroclor 1242	ND	33	ug/kg	SW846 8082
Aroclor 1248	ND	33	ug/kg	SW846 8082
Aroclor 1254	ND	33	ug/kg	SW846 8082
Aroclor 1260	ND	33	ug/kg	SW846 8082
Aroclor 1268	ND	33	ug/kg	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	78	(10 - 127)
Decachlorobiphenyl	109	(40 - 138)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A6F030117 **Work Order #...:** H6PCF1AC-LCS **Matrix.....:** WIPE
LCS Lot-Sample#: A6F050000-027 H6PCF1AD-LCSD
Prep Date.....: 06/05/06 **Analysis Date..:** 06/06/06
Prep Batch #...: 6156027
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1268	**70**	**(68 - 110)**			**SW846 8082**
	68	**(68 - 110)**	**1.6**	**(0-30)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88	(52 - 171)
	86	(52 - 171)
Decachlorobiphenyl	341 *	(39 - 187)
	330 *	(39 - 187)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A6F030117 **Work Order #...:** H6PCK1AC **Matrix.....:** SOLID
LCS Lot-Sample#: A6F050000-030
Prep Date.....: 06/05/06 **Analysis Date..:** 06/07/06
Prep Batch #...: 6156030
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Aroclor 1268	**86**	**(50 - 150)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(10 - 127)
Decachlorobiphenyl	430 *	(40 - 138)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A6F030117 **Work Order #...:** H6M951AD-MS **Matrix.....:** SO
MS Lot-Sample #: A6F030117-003 H6M951AE-MSD
Date Sampled...: 06/02/06 09:32 **Date Received..:** 06/02/06
Prep Date.....: 06/05/06 **Analysis Date..:** 06/07/06
Prep Batch #...: 6156030
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1268	**78**	**(50 - 150)**			**SW846 8082**
	88	**(50 - 150)**	**10**	**(0-30)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	89	(10 - 127)
	104	(10 - 127)
Decachlorobiphenyl	398 *	(40 - 138)
	446 *	(40 - 138)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A6F030117 **Work Order #...:** H6NAD-SMP H6NAD-DUP **Matrix.....:** SO

Date Sampled...: 06/02/06 14:50 **Date Received..:** 06/02/06

% Moisture.....: 84

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #: A6F030117-008		
	15.9	20.9	%	27	(0-20)	MCAWW 160.3 MOD	06/03-06/05/06	6154078

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A6F030117 **Work Order #...:** H6NA0-SMP **Matrix.....:** SOLID
H6NA0-DUP
Date Sampled...: 05/26/06 11:50 **Date Received..:** 06/03/06
% Moisture.....: 14

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #: A6F030121-005		
	86.3	86.8	%	0.49	(0-20)	MCAWW 160.3 MOD	06/03-06/05/06	6154078

Dilution Factor: 1

Lockheed Martin Tactical Defense Systems

Dioxins/Furans, HRGC/HRMS (1613B)

Client Sample ID: LMC-FI-001

Lot-Sample #...:	A6F050110 - 001	**Work Order #...:**	H6PJL1AA	**Matrix....:**	WIPE
Date Sampled...:	06/02/06	**Date Received..:**	06/02/06	**Instrument:**	1D5
Prep Date.....:	06/06/06	**Analysis Date..:**	06/07/06	**Units.....:**	pg
Prep Batch #...:	6157516	**Dilution Factor:**	1	**% Moisture:**	

PARAMETER	[redacted]	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
[redacted]				

Lockheed Martin Tactical Defense Systems

Dioxins/Furans, HRGC/HRMS (1613B)

Client Sample ID: LMC-FI-001

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS

Lockheed Martin Tactical Defense Systems

Dioxins/Furans, HRGC/HRMS (1613B)

Client Sample ID: LMC-FI-002B

Lot-Sample #...:	A6F050110 - 002	**Work Order #...:**	H6PJP1AA	**Matrix....:**	WIPE
Date Sampled...:	06/02/06	**Date Received..:**	06/02/06	**Instrument:**	1D5
Prep Date.....:	06/06/06	**Analysis Date..:**	06/07/06	**Units.....:**	pg
Prep Batch #...:	6157516	**Dilution Factor:**	1	**% Moisture:**	

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	ND	6.3	1.000	0
Total TCDD	ND	6.3		0
1,2,3,7,8-PeCDD	ND	15	0.500	0
Total PeCDD	ND	15		0
1,2,3,4,7,8-HxCDD	ND	13	0.100	0
1,2,3,6,7,8-HxCDD	ND	12	0.100	0
1,2,3,7,8,9-HxCDD	ND	11	0.100	0
Total HxCDD	ND	13		0
1,2,3,4,6,7,8-HpCDD	ND	18	0.010	0
Total HpCDD	ND	18		0
OCDD	ND	34	0.001	0

Lockheed Martin Tactical Defense Systems

Dioxins/Furans, HRGC/HRMS (1613B)

Client Sample ID: LMC-FI-002B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	99	35 - 197

Notes:

Lockheed Martin Tactical Defense Systems

Dioxins/Furans, HRGC/HRMS (1613B)

Client Sample ID: LMC-FI-003B

Lockheed Martin Tactical Defense Systems

Dioxins/Furans, HRGC/HRMS (1613B)

Client Sample ID: LMC-FI-008B

Lot-Sample #...:	A6F050110 - 004	**Work Order #...:**	H6PJR1AA	**Matrix....:**	SOLID
Date Sampled...:	06/02/06	**Date Received..:**	06/02/06	**Instrument:**	1D5
Prep Date.....:	06/06/06	**Analysis Date..:**	06/08/06	**Units.....:**	pg/g
Prep Batch #...:	6157510	**Dilution Factor:**	1	**% Moisture:**	

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	ND	2.6	1.000	0

Lockheed Martin Tactical Defense Systems

Dioxins/Furans, HRGC/HRMS (1613B)

Client Sample ID: LMC-FI-008B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	102	35 - 197

Notes:

TEF values are cited in U.S. Environmental Protection Agency. (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated

[redacted]

Lockheed Martin Tactical Defense Systems

Dioxins/Furans, HRGC/HRMS (1613B)

Client Sample ID: LMC-FL-009B

Lockheed Martin Tactical Defense Systems

Dioxins/Furans, HRGC/HRMS (1613B)

Client Sample ID: LMC-FI-010

Lot-Sample #...: A6F050110 - 008 Work Order #...: H6PJ11AA Matrix....: WIPE

Lockheed Martin Tactical Defense Systems

Dioxins/Furans, HRGC/HRMS (1613B)

Client Sample ID: LMC-FI-010

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	102	35 - 197

Notes:

TEF values are cited in U.S. Environmental Protection Agency, (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC; EPA/625/3-89/016

CON	Confirmation analysis.
J	Estimated result. Result is less than the reporting limit.