Lockheed Martin Maritime Systems & Sensors
9500 Godwin Drive Manassas, VA 20110-4157
Telephone 703·367·2121

LOCKHEED MARTIN

April 15, 2009

Ms. Vanessa Steigerwald Dick, Ph.D.
Ohio Environmental Protection Agency
Northeast District Office
2110 East Aurora Road
Twinsburg, Ohio 44087

Re: Stormwater Sampling Results

Dear Ms. Steigerwald Dick:

Attached is a report detailing the stormwater sampling conducted on March 25, 2009 in accordance with the *Stormwater Sampling and Analysis Plan*, revision 1. I am also sending this to you by email.

Because of the temporal and spatial variability that is inherent in stormwater sampling and analysis, no trends can be established and no conclusions can be made based on the data collected to date. Further interpretation of these results will continue as additional sampling episodes occur and Lockheed Martin will continue to implement the Plan and forward results of subsequent sampling to you.

Please let me know if you have any questions or need additional information.

Sincerely,

David Gunnarson
Lockheed Martin Corporation
1210 Massillon Road
Akron, Ohio 44315
330-796-8751

Attachment: URS Stormwater Sampling Report, April 13, 2009 (45 pages)

Copy by email
Phil Rhodes, Ohio EPA, Division of Surface Water
Steve Vardavas, Lockheed Martin
Norma Fox Horwitz, Summit County Port Authority
Terrence Finn, Roetzel & Andress

April 13, 2009

Mr. David Gunnarson
Lockheed Martin Corporation
1210 Massillon Road
Akron, Ohio 44315

Re: Interim Report
Stormwater Sampling – Event No. 2 (March 25, 2009)
Akron Airdock, Akron, Ohio

Dear Mr. Gunnarson:

URS conducted the second stormwater sampling event at the Akron Airdock on March 25, 2009. Sampling and analysis procedures followed the *Stormwater Sampling and Analysis Plan - Revision 1* (SAP), for the Akron Airdock dated November 17, 2008 that was previously provided to the Ohio Environmental Protection Agency (Ohio EPA).

This interim report transmits the results of the March 25, 2009 sampling. Because of temporal and spatial variability that is inherent in stormwater sampling and analysis, no trends can be established and no conclusions can be made based on a limited data set. Further interpretation of these results will continue as additional sampling episodes occur.

Weather and Sampling Conditions

A 0.15-inch rainfall occurred beginning on March 25, 2009 as reported by the weather station installed at the Akron Airdock facility. The rainfall event began at approximately 8:00 am on March 25, 2009 and ended by 6:30 pm on March 25, 2009 for a total duration of 10.5 hours. The weather station reported no measurable precipitation in the preceding 72 hours. Based upon the recorded weather data, the storm characteristics met the target rainfall criteria for stormwater sampling as discussed in the SAP.

In accordance with the SAP, the sampling event targeted "first flush" stormwater discharge. URS collected unfiltered samples at the designated sampling points (Temp001, Outfall 601, CB-1462, PAE-2, PAE-3, PAE-5, and PAE-7). Per recent Ohio EPA instruction, off-property samples at Temp001 and Outfall 601 were collected before the on-property locations. Samples were collected from Temp001 within the first 60 minutes of the initial discharge, and from Outfall 601 within the first 85 minutes of the initial discharge. Samples at the on-property points (CB-1462, PAE-2, PAE-3, PAE-5, and PAE-7) were collected within approximately 200 minutes of initial discharge. The longer sampling time in comparison to the first event is attributed to the combined effects of security, access, and logistical factors at the on- and off-property locations.

Sample collection, field measurements, and sample handling were conducted in accordance with the SAP. URS submitted the samples to TestAmerica, Inc. (TestAmerica) in North Canton, Ohio for laboratory analysis.

URS Corporation
36 East 7th Street, Suite 2300
Cincinnati, OH 45202
Tel: 513.651.3440
Fax: 513-651-3452
www.urscorp.com

Analytical Results

TestAmerica analyzed the unfiltered samples for polychlorinated biphenyls (PCBs) by United States Environmental Protection Agency (U.S. EPA) Method 8082-low level and total suspended solids (TSS) by Standard Methods (SM) 2540D. Table 1 presents the lab and field results; Figure 1 shows the sampling locations and a lab data summary. The complete laboratory report is attached in Appendix A.

URS' data review report of the lab results is attached as Appendix B. The data are considered usable for supporting project objectives.

As summarized below, concentrations of total PCBs in the March 25, 2009 on-property samples ranged from non-detect (0.2 U microgram per liter [µg/L]) at the west side location (PAW-7) to 0.48 J µg/L at the upstream east side location (CB-1462). Total PCB concentrations in both off-property locations were reported as non-detect (0.2 U µg/L) (Outfall 601, the Akron Airport location and Temp001, the Triplett Boulevard location).

Total PCB Summary – March 25, 2009 Samples

On-Property Locations					Off-Property Locations	
CB-1462	**PAE-2**	**PAE-3**	**PAE-5**	**PAW-7**	**Outfall 601**	**Temp 001**
0.48 µg/L	0.3 µg/L	0.059 J µg/L	0.095 J µg/L	0.20 U µg/L	0.20 U µg/L	0.20 U µg/L

U = The analyte was analyzed for, but was not detected. Value shown is the sample reporting limit.

J = Estimated concentration because the result was below the sample reporting limit or quality control criteria were not met.

Discussion

These interim sampling results represent the second data set of a planned 12-event program that is designed to provide post-remediation data that are representative of stormwater discharges from the 19-acre Airdock parcel. The objectives of the SAP include addressing certain programmatic elements of the Ohio EPA Voluntary Action Program (VAP) and Division of Surface Water (DSW), as well as the federal PCB rules under the Toxic Substances Control Act (TSCA). As with most environmental data, results from two sample event are insufficient on which to base conclusions and recommendations. An in-depth evaluation of the data will be performed going forward as additional sampling events occur and data patterns become apparent.

Future Activities

Monitoring is continuing under the current SAP. URS recommends no changes in the program at this time.

-oOo-

Please contact me if you have any questions or comments on the stormwater program or if further information is needed.

Sincerely,
URS Corporation

Jennifer J. Krueger, P.G., C.P.
Project Manager

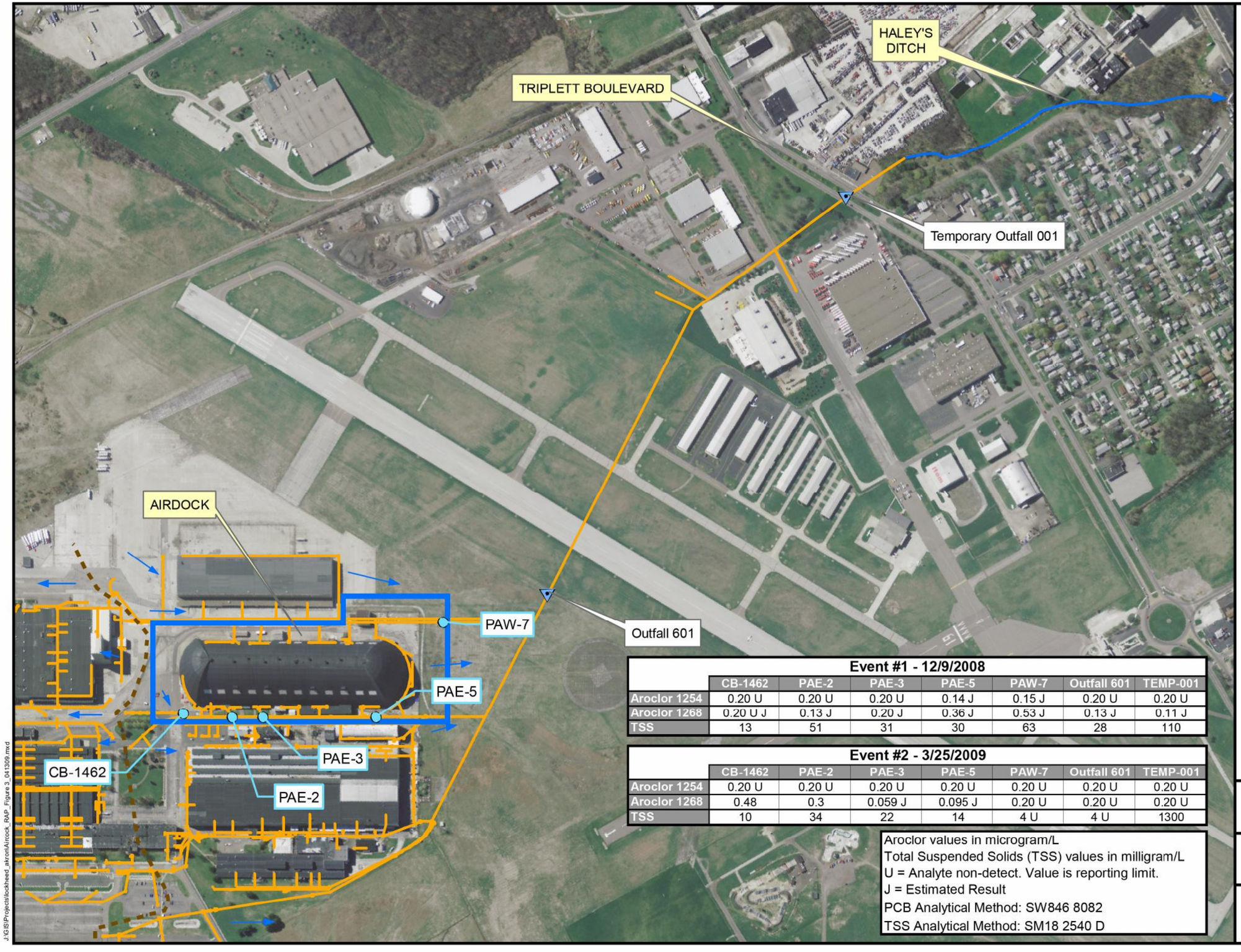
14947614.03000

Enclosures: Table 1 – Stormwater Sampling Results – March 25, 2009 Event No. 2
Figure 1 – March 25, 2009 Stormwater Sampling Results
Appendix A – Laboratory Report
Appendix B – Data Review Report

Table 1
Stormwater Sampling Results- March 25, 2009 Event No. 2
Akron Airdock
Akron, Ohio

		On-Property Locations					Off-Property Locations	
		East Side	East Side	East Side	East Side	West Side	Airport	Triplett Blvd.
Lab Analyte	**Units**	**LM-SW-CB1462 3/25/09 10:33**	**LM-SW-PAE-2 3/25/09 11:23**	**LM-SW-PAE-3 3/25/09 11:15**	**LM-SW-PAE-5 3/25/09 11:05**	**LM-SW-PAW-7 3/25/09 09:48**	**LM-SW-601 3/25/09 09:25**	**LM-SW-TEMP001 3/25/09 09:00**
Aroclor 1016	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor 1221	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor 1232	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor 1242	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor 1248	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor 1254	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor 1260	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor 1268	ug/L	**0.48**	**0.3**	**0.059 J**	**0.095 J**	0.20 U	0.20 U	0.20 U
Total PCBs	ug/L	**0.48**	**0.3**	**0.059 J**	**0.095 J**	0.20 U	0.20 U	0.20 U
Total Suspended Solids	mg/L	**10**	**34**	**22**	**14**	**4.0 U**	**4.0 U**	**1300**
Field Parameters								
pH	S. U.	**9.55**	**7.37**	**7.59**	**7.63**	**7.6**	**7.75**	**7.86**
Dissolved Oxygen	mg/L	**8.49**	**7.43**	**8.14**	**7.62**	**9.22**	**8.56**	**12.20**
Temperature	℃	**8.04**	**6.61**	**7.52**	**6.86**	**7.55**	**9.21**	**7.85**
Conductivity	mS/cm	**5.56**	**1.83**	**0.562**	**0.4**	**0.549**	**0.439**	**0.574**
Total Dissolved Solids	mg/L	**0.36**	**1.17**	**0.36**	**0.26**	**0.352**	**0.285**	**6.7**
ORP	mV	**-20**	**53**	**150**	**200**	**209**	**198**	**196**
Turbidity	NTU	**71.9**	**76.4**	**27.7**	**29.6**	**30.5**	**52.4**	**-**
Salinity	%	**0.2**	**0.9**	**0.2**	**0.1**	**0.2**	**0.2**	**0.2**

U = The analyte was analyzed for, but was not detected. Value shown is the sample reporting limit.
UJ = The analyte was not detected at or above the sample reporting limit. However, the reporting limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
J = Estimated concentration because the result was below the sample reporting limit or quality control criteria were not met.
S.U. = Standard Units
ORP= Oxidation Reduction Potential
NTU= Nephelometric Turbidity Units
mV= millivolts
mS/cm= microSeimens per centimeter



Event #1 - 12/9/2008

	CB-1462	PAE-2	PAE-3	PAE-5	PAW-7	Outfall 601	TEMP-001
Aroclor 1254	0.20 U	0.20 U	0.20 U	0.14 J	0.15 J	0.20 U	0.20 U
Aroclor 1268	0.20 U J	0.13 J	0.20 J	0.36 J	0.53 J	0.13 J	0.11 J
TSS	13	51	31	30	63	28	110

Event #2 - 3/25/2009

	CB-1462	PAE-2	PAE-3	PAE-5	PAW-7	Outfall 601	TEMP-001
Aroclor 1254	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor 1268	0.48	0.3	0.059 J	0.095 J	0.20 U	0.20 U	0.20 U
TSS	10	34	22	14	4 U	4 U	1300

Aroclor values in microgram/L
Total Suspended Solids (TSS) values in milligram/L
U = Analyte non-detect. Value is reporting limit.
J = Estimated Result
PCB Analytical Method: SW846 8082
TSS Analytical Method: SM18 2540 D

LEGEND

- Outfall Location
- Voluntary Action Program Stormwater Sampling Point
- Approximate Watershed Boundary
- Haley's Ditch
- Storm Sewer
- Approximate Airdock Boundary

Note: Other branch lines to sewer system may exist.

0 500 1,000
Approximate Scale in Feet

N

SOURCES: MODIFIED FROM SUMMIT COUNTY GIS, 2004, OSIP AERIAL PHOTOGRAPH, 2006, AND TETRA TECH, 2007

AKRON AIRDOCK FACILITY
AKRON, OHIO

FIGURE 1
MARCH 25, 2009
STORMWATER SAMPLING RESULTS

URS
JOB NO. 14947615

J:\GIS\Projects\lockheed_akron\Airock_RAP_Figure 3_041309.mxd

APPENDIX A

LABORATORY REPORT

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

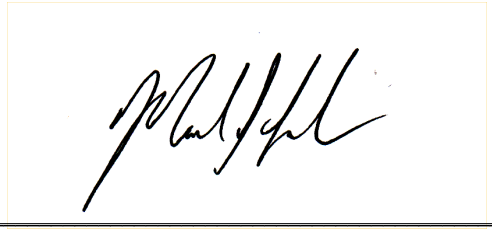
AIRDOCK EXTERIOR

Lot #: A9C250272

David Gunnarson

Lockheed Martin Tactical Defen
Maritime Systems and Sensors
MS2
1210 Massilon Road
Akron, OH 44315-0001

TESTAMERICA LABORATORIES, INC.



Approved for release.
Mark J. Loeb
Project Manager II
4/3/2009 1:07 PM

Mark J. Loeb
Project Manager
mark.loeb@testamericainc.com

April 3, 2009

CASE NARRATIVE

A9C250272

The following report contains the analytical results for seven water samples submitted to TestAmerica North Canton by Lockheed Martin Tactical Defense Systems from the Airdock Exterior Site. The samples were received March 25, 2009, according to documented sample acceptance procedures.

TestAmerica 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 David Gunnarson and Jennifer J. Krueger on April 01, 2009. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica'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.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

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."

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperatures of the coolers upon sample receipt were 4.7 and 5.0°C.

CASE NARRATIVE (continued)

POLYCHLORINATED BIPHENYLS-8082

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

There were no client requested Matrix Spike/Matrix Spike Duplicate (MS/MSD) samples in batch(es) 9085040. Therefore, the laboratory has included a Laboratory Control Sample Duplicate (LCSD) in the QC batch. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system.

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica 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. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- 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.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

EXECUTIVE SUMMARY - Detection Highlights

A9C250272

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
LM-SW-PAE-5 03/25/09 10:33 001				
Aroclor 1268	0.095 J	0.20	ug/L	SW846 8082
Total Suspended Solids	14	4.0	mg/L	SM18 2540 D
LM-SW-PAE-3 03/25/09 11:05 002				
Aroclor 1268	0.059 J	0.20	ug/L	SW846 8082
Total Suspended Solids	22	4.0	mg/L	SM18 2540 D
LM-SW-PAE-2 03/25/09 11:15 003				
Aroclor 1268	0.30	0.20	ug/L	SW846 8082
Total Suspended Solids	34	4.0	mg/L	SM18 2540 D
LM-SW-CB1462 03/25/09 11:23 004				
Aroclor 1268	0.48	0.20	ug/L	SW846 8082
Total Suspended Solids	10	4.0	mg/L	SM18 2540 D
LM-SW-TEMP001 03/25/09 09:00 007				
Total Suspended Solids	1300	8.0	mg/L	SM18 2540 D

ANALYTICAL METHODS SUMMARY

A9C250272

PARAMETER	ANALYTICAL METHOD
PCBs by SW-846 8082	SW846 8082
Total Suspended Solids	SM18 2540 D

References:

SM18 "Standard Methods for the Examination of Water and Wastewater", 18th Edition, 1992.

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

SAMPLE SUMMARY

A9C250272

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
K85FL	001	LM-SW-PAE-5	03/25/09	10:33
K85FX	002	LM-SW-PAE-3	03/25/09	11:05
K85F0	003	LM-SW-PAE-2	03/25/09	11:15
K85F1	004	LM-SW-CB1462	03/25/09	11:23
K85F3	005	LM-SW-PAW-7	03/25/09	09:48
K85F4	006	LM-SW-601	03/25/09	09:25
K85F5	007	LM-SW-TEMP001	03/25/09	09:00

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: LM-SW-PAE-5

GC Semivolatiles

Lot-Sample #...: A9C250272-001 **Work Order #...:** K85FL1AA **Matrix.....:** WG
Date Sampled...: 03/25/09 10:33 **Date Received..:** 03/25/09
Prep Date.....: 03/26/09 **Analysis Date..:** 03/30/09
Prep Batch #...: 9085040
Dilution Factor: 1 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1268	**0.095 J**	**0.20**	**ug/L**
Aroclor 1016	ND	0.20	ug/L
Aroclor 1221	ND	0.20	ug/L
Aroclor 1232	ND	0.20	ug/L
Aroclor 1242	ND	0.20	ug/L
Aroclor 1248	ND	0.20	ug/L
Aroclor 1254	ND	0.20	ug/L
Aroclor 1260	ND	0.20	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	89	(35 - 130)
Decachlorobiphenyl	33	(10 - 110)

NOTE(S):

J Estimated result. Result is less than RL.

Lockheed Martin Tactical Defense Systems

Client Sample ID: LM-SW-PAE-5

General Chemistry

Lot-Sample #...: A9C250272-001 **Work Order #...:** K85FL **Matrix.....:** WG
Date Sampled...: 03/25/09 10:33 **Date Received..:** 03/25/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Suspended Solids	**14**	**4.0**	**mg/L**	**SM18 2540 D**	**03/26/09**	**9085115**

Dilution Factor: 1

Lockheed Martin Tactical Defense Systems

Client Sample ID: LM-SW-PAE-3

GC Semivolatiles

Lot-Sample #...: A9C250272-002 **Work Order #...:** K85FX1AA **Matrix.....:** WG
Date Sampled...: 03/25/09 11:05 **Date Received..:** 03/25/09
Prep Date.....: 03/26/09 **Analysis Date..:** 03/30/09
Prep Batch #...: 9085040
Dilution Factor: 1 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1268	**0.059 J**	**0.20**	**ug/L**
Aroclor 1016	ND	0.20	ug/L
Aroclor 1221	ND	0.20	ug/L
Aroclor 1232	ND	0.20	ug/L
Aroclor 1242	ND	0.20	ug/L
Aroclor 1248	ND	0.20	ug/L
Aroclor 1254	ND	0.20	ug/L
Aroclor 1260	ND	0.20	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88	(35 - 130)
Decachlorobiphenyl	35	(10 - 110)

NOTE(S):

J Estimated result. Result is less than RL.

Lockheed Martin Tactical Defense Systems

Client Sample ID: LM-SW-PAE-3

General Chemistry

Lot-Sample #...: A9C250272-002 **Work Order #...:** K85FX **Matrix.....:** WG
Date Sampled...: 03/25/09 11:05 **Date Received..:** 03/25/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Suspended Solids	**22**	**4.0**	**mg/L**	**SM18 2540 D**	**03/26/09**	**9085115**

Dilution Factor: 1

Lockheed Martin Tactical Defense Systems

Client Sample ID: LM-SW-PAE-2

GC Semivolatiles

Lot-Sample #...: A9C250272-003 **Work Order #...:** K85F01AA **Matrix.....:** WG
Date Sampled...: 03/25/09 11:15 **Date Received..:** 03/25/09
Prep Date.....: 03/26/09 **Analysis Date..:** 03/30/09
Prep Batch #...: 9085040
Dilution Factor: 1 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1268	**0.30**	**0.20**	**ug/L**
Aroclor 1016	ND	0.20	ug/L
Aroclor 1221	ND	0.20	ug/L
Aroclor 1232	ND	0.20	ug/L
Aroclor 1242	ND	0.20	ug/L
Aroclor 1248	ND	0.20	ug/L
Aroclor 1254	ND	0.20	ug/L
Aroclor 1260	ND	0.20	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	64	(35 - 130)
Decachlorobiphenyl	26	(10 - 110)

Lockheed Martin Tactical Defense Systems

Client Sample ID: LM-SW-PAE-2

General Chemistry

Lot-Sample #...: A9C250272-003 **Work Order #...:** K85F0 **Matrix.....:** WG
Date Sampled...: 03/25/09 11:15 **Date Received..:** 03/25/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Suspended Solids	**34**	**4.0**	**mg/L**	**SM18 2540 D**	**03/26/09**	**9085115**

Dilution Factor: 1

Lockheed Martin Tactical Defense Systems

Client Sample ID: LM-SW-CB1462

GC Semivolatiles

Lot-Sample #...: A9C250272-004 **Work Order #...:** K85F11AA **Matrix.....:** WG
Date Sampled...: 03/25/09 11:23 **Date Received..:** 03/25/09
Prep Date.....: 03/26/09 **Analysis Date..:** 03/30/09
Prep Batch #...: 9085040
Dilution Factor: 1 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1268	**0.48**	**0.20**	**ug/L**
Aroclor 1016	ND	0.20	ug/L
Aroclor 1221	ND	0.20	ug/L
Aroclor 1232	ND	0.20	ug/L
Aroclor 1242	ND	0.20	ug/L
Aroclor 1248	ND	0.20	ug/L
Aroclor 1254	ND	0.20	ug/L
Aroclor 1260	ND	0.20	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(35 - 130)
Decachlorobiphenyl	30	(10 - 110)

Lockheed Martin Tactical Defense Systems

Client Sample ID: LM-SW-CB1462

General Chemistry

Lot-Sample #...: A9C250272-004 **Work Order #...:** K85F1 **Matrix.....:** WG
Date Sampled...: 03/25/09 11:23 **Date Received..:** 03/25/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Suspended Solids	**10**	**4.0**	**mg/L**	**SM18 2540 D**	**03/26/09**	**9085115**

Dilution Factor: 1

Lockheed Martin Tactical Defense Systems

Client Sample ID: LM-SW-PAW-7

GC Semivolatiles

Lot-Sample #...: A9C250272-005 **Work Order #...:** K85F31AA **Matrix.....:** WG
Date Sampled...: 03/25/09 09:48 **Date Received..:** 03/25/09
Prep Date.....: 03/26/09 **Analysis Date..:** 03/30/09
Prep Batch #...: 9085040
Dilution Factor: 1 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1268	ND	0.20	ug/L
Aroclor 1016	ND	0.20	ug/L
Aroclor 1221	ND	0.20	ug/L
Aroclor 1232	ND	0.20	ug/L
Aroclor 1242	ND	0.20	ug/L
Aroclor 1248	ND	0.20	ug/L
Aroclor 1254	ND	0.20	ug/L
Aroclor 1260	ND	0.20	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	97	(35 - 130)
Decachlorobiphenyl	33	(10 - 110)

Lockheed Martin Tactical Defense Systems

Client Sample ID: LM-SW-PAW-7

General Chemistry

Lot-Sample #...: A9C250272-005 **Work Order #...:** K85F3 **Matrix.....:** WG
Date Sampled...: 03/25/09 09:48 **Date Received..:** 03/25/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Suspended Solids	ND	4.0	mg/L	SM18 2540 D	03/26/09	9085115

Dilution Factor: 1

Lockheed Martin Tactical Defense Systems

Client Sample ID: LM-SW-601

GC Semivolatiles

Lot-Sample #...: A9C250272-006 **Work Order #...:** K85F41AA **Matrix.....:** WG
Date Sampled...: 03/25/09 09:25 **Date Received..:** 03/25/09
Prep Date.....: 03/26/09 **Analysis Date..:** 03/30/09
Prep Batch #...: 9085040
Dilution Factor: 1 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1268	ND	0.20	ug/L
Aroclor 1016	ND	0.20	ug/L
Aroclor 1221	ND	0.20	ug/L
Aroclor 1232	ND	0.20	ug/L
Aroclor 1242	ND	0.20	ug/L
Aroclor 1248	ND	0.20	ug/L
Aroclor 1254	ND	0.20	ug/L
Aroclor 1260	ND	0.20	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81	(35 - 130)
Decachlorobiphenyl	25	(10 - 110)

Lockheed Martin Tactical Defense Systems

Client Sample ID: LM-SW-601

General Chemistry

Lot-Sample #...: A9C250272-006 **Work Order #...:** K85F4 **Matrix.....:** WG
Date Sampled...: 03/25/09 09:25 **Date Received..:** 03/25/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Suspended Solids	ND	4.0	mg/L	SM18 2540 D	03/26/09	9085115

Dilution Factor: 1

Lockheed Martin Tactical Defense Systems

Client Sample ID: LM-SW-TEMP001

GC Semivolatiles

Lot-Sample #...: A9C250272-007 **Work Order #...:** K85F51AA **Matrix.....:** WG
Date Sampled...: 03/25/09 09:00 **Date Received..:** 03/25/09
Prep Date.....: 03/26/09 **Analysis Date..:** 03/30/09
Prep Batch #...: 9085040
Dilution Factor: 1 **Method.....:** SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1268	ND	0.20	ug/L
Aroclor 1016	ND	0.20	ug/L
Aroclor 1221	ND	0.20	ug/L
Aroclor 1232	ND	0.20	ug/L
Aroclor 1242	ND	0.20	ug/L
Aroclor 1248	ND	0.20	ug/L
Aroclor 1254	ND	0.20	ug/L
Aroclor 1260	ND	0.20	ug/L

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

Lockheed Martin Tactical Defense Systems

Client Sample ID: LM-SW-TEMP001

General Chemistry

Lot-Sample #...: A9C250272-007 **Work Order #...:** K85F5 **Matrix.....:** WG
Date Sampled...: 03/25/09 09:00 **Date Received..:** 03/25/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Suspended Solids	**1300**	**8.0**	**mg/L**	**SM18 2540 D**	**03/26/09**	**9085115**

Dilution Factor: 2

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QUALITY CONTROL SECTION

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A9C250272 **Work Order #...:** K851N1AA **Matrix.....:** WATER
MB Lot-Sample #: A9C260000-040

Prep Date.....: 03/26/09
Analysis Date..: 03/30/09 **Prep Batch #...:** 9085040
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1268	ND	0.20	ug/L	SW846 8082
Aroclor 1016	ND	0.20	ug/L	SW846 8082
Aroclor 1221	ND	0.20	ug/L	SW846 8082
Aroclor 1232	ND	0.20	ug/L	SW846 8082
Aroclor 1242	ND	0.20	ug/L	SW846 8082
Aroclor 1248	ND	0.20	ug/L	SW846 8082
Aroclor 1254	ND	0.20	ug/L	SW846 8082
Aroclor 1260	ND	0.20	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	105	(35 - 130)
Decachlorobiphenyl	67	(10 - 110)

NOTE(S):

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

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A9C250272 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Suspended Solids		Work Order #: K854N1AA		MB Lot-Sample #:	A9C260000-115	
	ND	4.0	mg/L	SM18 2540 D	03/26/09	9085115
		Dilution Factor: 1				

NOTE(S):

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A9C250272 **Work Order #...:** K851N1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9C260000-040 K851N1AD-LCSD
Prep Date.....: 03/26/09 **Analysis Date..:** 03/30/09
Prep Batch #...: 9085040
Dilution Factor: 5

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1268	**124**	**(50 - 150)**			**SW846 8082**
	129	**(50 - 150)**	**4.0**	**(0-30)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	84	(35 - 130)
	96	(35 - 130)
Decachlorobiphenyl	67	(10 - 110)
	72	(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

General Chemistry

Client Lot #...: A9C250272 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Suspended Solids		Work Order #: K854N1AC	LCS Lot-Sample#: A9C260000-115		
	92	(73 - 113)	SM18 2540 D	03/26/09	9085115
		Dilution Factor: 1			

NOTE(S):

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

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A9C250272 **Work Order #...:** K84M0-SMP K84M0-DUP **Matrix.....:** WATER

Date Sampled...: 03/24/09 **Date Received..:** 03/25/09

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Suspended Solids						SD Lot-Sample #: A9C250168-001		
	10	17	mg/L	52	(0-20)	SM18 2540 D	03/26/09	9085115

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A9C250272 **Work Order #...:** K8453-SMP K8453-DUP **Matrix.....:** WATER

Date Sampled...: 03/25/09 08:05 **Date Received..:** 03/25/09

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Suspended Solids						SD Lot-Sample #: A9C250223-002		
	21	18	mg/L	15	(0-20)	SM18 2540 D	03/26/09	9085116

Dilution Factor: 1

North Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
phone 330.966.9279 fax 330.497.0772

Chain of Custody Record

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TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Jennifer Krueger - URS CN	Site Contact: Craig Mulichak -URS Akron	Date: 3/25/09	COC No:
Lockheed Martin - Dave Gunnarson	Tel/Fax: 513-419-3401/513-419-3452	Lab Contact: Mark Loeb	Carrier: Chuck Arthbus	1 of 1 COCs
Address 1210 Massillon Road	Analysis Turnaround Time			Job No.
City/State/Zip Akron, Ohio 44315	Calendar (C) or Work Days (W) _____			
(330) 796-8751 Phone	TAT if different from Below _____			SDG No.
(330) 796-2388 FAX	■ 2 weeks			
Project Name: Airdock Exterior	☐ 1 week			
Site: Akron Airdock	☐ 2 days			
P O # 08T0130 Line Item 2	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	TSS by SM 2540D	PCBs plus 1268 by EPA 8082 Low Level	Sample Specific Notes:
LM-SW-PAE-5	3/25/09	1033	Grab	Water	3		X	X	Cooler 1 of 2
LM-SW-PAE-3		1105	Grab	Water	3		X	X	" 1 of 2
LM-SW-PAE-2		1115	Grab	Water	3		X	X	" 1 of 2
LM-SW-CB1462		1123	Grab	Water	3		X	X	" 1 of 2
LM-SW-PAW-7		0948	Grab	Water	3		X	X	" 2 of 2
LM-SW-601		0925	Grab	Water	3		X	X	" 2 of 2
LM-SW-Temp001		0900	Grab	Water	3		X	X	" 2 of 2

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 1

Possible Hazard Identification
■ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ■ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **VAP Certified analyses for PCBs with reporting limit of 0.2 ug/L and method detection limit of 0.1 ug/L. Hold Samples Upon Receipt. Jennifer Krueger URS to provide direction on analysis within 36 hours of sample receipt. Provide e-copy of preliminary results and final report to Jennifer_Krueger@urscorp.com. Level III QA/QC data package with final results.**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	URS	3/25/09 4:10			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
			[signature]	TA NC	3/25/09 4:10

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 440256272
North Canton Facility

Client Lockheed Martin Project _____ By: Chris Lynch
Cooler Received on 3-25-09 Opened on 3-25-09 (Signature)
FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☒ TestAmerica Courier ☐ Other _____
TestAmerica Cooler # _____ Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other _____

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 2 Quantity Unsalvageable _____
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions? _____
2. Shippers' packing slip attached to the cooler(s)? Yes ☒ No ☐
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other _____
6. Cooler temperature upon receipt 6 ADJ °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐ _____
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☐ No ☐ NA ☒
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☐ NA ☒
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☐ No ☒ Were VOAs on the COC? Yes ☐ No ☒

Contacted PM _____ Date _____ by _____ via Verbal ☐ Voice Mail ☐ Other ☐
Concerning _____

14. CHAIN OF CUSTODY

The following discrepancies occurred:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot#* 100108-HNO_3; *Sulfuric Acid Lot#* 100108-H_2SO_4; *Sodium Hydroxide Lot#* 073007 -*NaOH; Hydrochloric Acid Lot#* 092006-*HCl; Sodium Hydroxide and Zinc Acetate Lot#* 050205-$(CH_3COO)_2ZN/NaOH$. What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant
L996	5.0	IR	Ice
L709	4.7	IR	Ice

Discrepancies Cont'd:

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END OF REPORT

APPENDIX B

DATA REVIEW REPORT

MARCH 25, 2009 STORMWATER SAMPLING EVENT
AKRON AIRDOCK
AKRON, OHIO

Data Review Report
Akron Airdock/Airdock Exterior
Akron, Ohio

Data Package: A9C250272

I. INTRODUCTION

Seven water samples were collected on March 25, 2009, at the Akron Airdock/Airdock Exterior site in Akron, Ohio. The samples were submitted to TestAmerica in North Canton, Ohio, for analysis of the parameters listed in Table 1.

Table 1
Sample ID Summary

Lab ID	Sample ID(1)	Matrix	Date Collected	Analyses Requested(1)
A9C250272001	LM-SW-PAE-5	Water	3/25/2009	PCBs, TSS
A9C250272002	LM-SW-PAE-3	Water	3/25/2009	PCBs, TSS
A9C250272003	LM-SW-PAE-2	Water	3/25/2009	PCBs, TSS
A9C250272004	LM-SW-CB1462	Water	3/25/2009	PCBs, TSS
A9C250272005	LM-SW-PAW-7	Water	3/25/2009	PCBs, TSS
A9C250272006	LM-SW-601	Water	3/25/2009	PCBs, TSS
A9C250272007	LM-SW-TEMP001	Water	3/25/2009	PCBs, TSS

(1) Definitions: PCBs = Polychlorinated Biphenyls as Aroclors [SW846 Method 8082]
TSS = Total Suspended Solids [SM18 Method 2540D]

References: SW846 = "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," Third Edition, November 1986 and its updates.
SM18 = "Standard Methods for the Examination of Water and Wastewater", 18th Edition, 1992.

A standard review for data quality was conducted by URS Corporation (URS) for all samples listed in Table 1. A standard review includes assessment of supporting quality control (QC) parameters and a review for compliance with the cited methods, but does not include reconstruction of the analytical data. The following information was reviewed:

- Case Narrative
- Chain-of-Custody documents
- Laboratory sample ID
- URS sample ID
- Sample matrix
- Sample results by sample, by analytical fraction
- Analytical method performed
- Units of measure

- Analysis detection limits
- Laboratory data qualifiers
- Date samples were extracted and/or analyzed
- Surrogate recoveries
- Laboratory Check Samples (LCS) results
- Laboratory Method Blank results
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) results, if applicable
- Laboratory Duplicate results
- Electronic Data

Guidance documents for the data review process included the referenced analytical methods and "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," (1999).

II. DATA REVIEW

This section describes each data quality element reviewed and discusses any findings. The data qualifiers used in this review are defined in Section III.

A. Sample Receiving

The Chain of Custody (COC) Record and Cooler Receipt Form indicate that samples were collected and transported to the laboratory by URS personnel. Samples were received at TestAmerica packed in wet ice and intact. The temperatures of the coolers were 4.7 and 5.0°C, within the acceptance range of 0 to 6°C.

B. Holding Time Criteria

The analyses were reviewed for compliance with the method-specified holding times. All sample preparation and analysis procedures were performed within the appropriate holding times.

C. Blanks

Blank samples, which can include field blanks and laboratory blanks, are evaluated to determine whether conditions exist resulting in reported sample concentrations which are not native to the sample (i.e., if samples were contaminated from external sources). Sample contamination is demonstrated if an analyte is detected in a blank, and the concentration in an associated sample is not significantly higher. Specifically, if the sample concentration is less than five times the blank concentration (or ten times for common contaminants such as acetone, methylene chloride, 2-butanone, and phthalate esters), it may be assumed that the sample concentration was due to external contamination and not actually present in the samples. The result is, therefore, qualified as non-detect (U) at the reported concentration or at the laboratory Reporting Limit (RL), whichever is higher. If the sample concentration is greater than five times the associated blank concentration (or

ten times for common contaminants), the amount attributable to contamination is negligible and the sample concentration is reported without qualification.

All laboratory blanks associated with the project samples presented in this report were acceptable and no qualifications were required. No field blanks were submitted for analysis.

D. Surrogate Recoveries

Surrogates are chemicals not normally found in nature, but chemically behave in a similar fashion as the target analytes. Surrogate spikes are added prior to sample preparation for organic analyses and are used to evaluate the effects of the sample matrix on the extraction efficiency and/or instrument response. Surrogate recoveries are evaluated against QC acceptance limits established by the laboratory.

The surrogate recoveries for all samples were within the laboratory's acceptance criteria. No qualification of data was necessary.

E. Laboratory Control Samples

A Laboratory Control Sample (LCS) is a "contaminant-free matrix" spiked with a known concentration of all analytes of interest or a representative subset of the target analytes. The LCS is carried through the complete sample preparation and analytical procedures and provides information on the method's performance. Percent recoveries are monitored to provide a continuous measure of each method's accuracy. The LCS recoveries are compared with established method performance criteria to determine data acceptability. Recoveries above QC limits indicate a positive bias. Therefore, associated positive concentrations are qualified as estimated (J). If recoveries are below QC limits, a negative bias is assumed. Consequently, associated non-detect and positive concentrations are qualified as estimated. If recoveries are significantly low (i.e., below 10%), positive concentrations are estimated and non-detect results are rejected.

An LCS and LCS Duplicate were prepared and analyzed with the project sample batch. The recoveries for Aroclor 1268 and the relative percent difference (RPD) between the two results were within the laboratory's QC acceptance limits.

F. Matrix Spike/Matrix Spike Duplicate Samples

A Matrix Spike is an aliquot of the matrix (water or soil) spiked with a known concentration of all compounds of interest or a representative subset of compounds. The Matrix Spike/Matrix Spike Duplicate (MS/MSD) samples are subjected to the entire analytical procedure in order to determine both accuracy and precision of the method for that matrix. This is accomplished by calculating the percent recovery and the RPD of the two spiked samples. The MS/MSDs do not control the analytical process, but are used to evaluate the effect of the matrix on analytical performance. Associated data (the spiked sample or samples with a like matrix) are qualified following criteria similar to the LCS.

MS/MSD analyses were not requested on project samples and additional volume was not provided. Therefore, the laboratory prepared and analyzed an LCS/LCS Duplicate pair as described above. No additional qualifications were necessary.

G. Duplicate/Replicate Samples

Duplicate or replicate samples are analyzed to estimate the precision of data generated. Duplicates may be laboratory duplicates, which monitor the precision of the analytical process, or field duplicates, which monitor the precision of the entire sampling and analytical system. If significant differences between analyses are identified, associated data are qualified as estimated.

Laboratory duplicate analyses on unrelated samples were performed for TSS at the appropriate frequency. The results have no relevance to the project samples. No field duplicate samples were submitted for analysis.

H. Reporting Limits

The reporting limit for each Aroclor was sufficiently sensitive to meet the Ohio Voluntary Action Program (VAP) unrestricted potable use standard of 0.5 µg/L for total PCBs. No dilutions were required.

J. Miscellaneous Comments

TestAmerica reported results below their reporting limit but above the method detection limit (MDL) with a qualifier ("J"), in accordance with USEPA Contract Laboratory Program (CLP) conventions. During the data assessment, the "J" qualifiers were retained with the numeric results unless otherwise noted.

III. DATA QUALIFIERS AND USABILITY

The following data qualifiers were used to note data usability:

U = The analyte was analyzed for, but was not detected. Value shown is the sample reporting limit.

J = Estimated concentration because the result was below the sample reporting limit or quality control criteria were not met.

The complete data set with qualifiers is presented in Table 2. All data are usable for supporting project objectives.

Table 2
Analytical Data Summary, March 2009
Akron Airdock/Airdock Exterior
Akron, Ohio

Analyte	Result Units	A9C250272001 LM-SW-PAE-5 03/25/2009	A9C250272002 LM-SW-PAE-3 03/25/2009	A9C250272003 LM-SW-PAE-2 03/25/2009	A9C250272004 LM-SW-CB1462 03/25/2009	A9C250272005 LM-SW-PAW-7 03/25/2009	A9C250272006 LM-SW-601 03/25/2009	A9C250272007 LM-SW-TEMP001 03/25/2009
Aroclor 1016	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor 1221	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor 1232	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor 1242	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor 1248	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor 1254	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor 1260	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor 1268	ug/L	**0.095 J**	**0.059 J**	**0.3**	**0.48**	0.20 U	0.20 U	0.20 U
Total Suspended Solids	mg/L	**14**	**22**	**34**	**10**	4.0 U	4.0 U	**1300**

U = The analyte was analyzed for, but was not detected. Value shown is the sample reporting limit.

J = Estimated concentration because the result was below the sample reporting limit or quality control criteria were not met.