LOCKHEED MARTIN

DATE: 6/10/2008

TO: R.Singhvi, ERTC/EPA

FROM: Vinod Kansal, Analytical Section Leader Vinod Kansal

SUBJECT: Preliminary Results of Project Bell Fasco Forge WA# 0324

Attached please find the preliminary results of the above referenced project for the following samples.

Chain of Custody No.	Analyses
0324-05/20/08-0001	4 air samples for TO-15 analysis.
0324-05/20/08-0002	4 air samples for TO-15 analysis.
0324-05/20/08-0003	4 air samples for TO-15 analysis.
0324-05/20/08-0004	4 air samples for TO-15 analysis.
0324-05/20/08-0005	3 air samples for TO-15 analysis.

cc: Archives
Subcontracting
V. Kansal
Joseph Soroka
WAM: D. Mickunas
Task Leader: J.Wood

9812949

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **006-CS-052008**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-001

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01413

Date Collected: 5/21/08
Date Received: 5/23/08
Date Analyzed: 6/2/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.2 Final Pressure (psig): 3.0

Canister Dilution Factor: 1.42

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.036	ND	0.014	
75-35-4	1,1-Dichloroethene	ND	0.036	ND	0.0090	
156-60-5	trans-1,2-Dichloroethene	ND	0.036	ND	0.0090	L
156-59-2	cis-1,2-Dichloroethene	ND	0.036	ND	0.0090	
79-01-6	Trichloroethene	**3.7**	0.036	**0.69**	0.0066	
127-18-4	Tetrachloroethene	**1.3**	0.036	**0.20**	0.0052	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
L = Laboratory control sample recovery outside the specified limits; results may be biased high.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **005-CS-052008**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-002

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01468

Date Collected: 5/21/08
Date Received: 5/23/08
Date Analyzed: 6/2/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.7 Final Pressure (psig): 3.0

Canister Dilution Factor: 1.48

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.037	ND	0.014	
75-35-4	1,1-Dichloroethene	ND	0.037	ND	0.0093	
156-60-5	trans-1,2-Dichloroethene	ND	0.037	ND	0.0093	L
156-59-2	cis-1,2-Dichloroethene	ND	0.037	ND	0.0093	
79-01-6	Trichloroethene	**0.075**	0.037	**0.014**	0.0069	
127-18-4	Tetrachloroethene	**0.20**	0.037	**0.030**	0.0055	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
L = Laboratory control sample recovery outside the specified limits; results may be biased high.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **004-CS-052008**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-003

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00818

Date Collected: 5/21/08
Date Received: 5/23/08
Date Analyzed: 6/2/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.4 Final Pressure (psig): 3.0

Canister Dilution Factor: 1.44

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.036	ND	0.014	
75-35-4	1,1-Dichloroethene	ND	0.036	ND	0.0091	
156-60-5	trans-1,2-Dichloroethene	ND	0.036	ND	0.0091	L
156-59-2	cis-1,2-Dichloroethene	ND	0.036	ND	0.0091	
79-01-6	Trichloroethene	**0.17**	0.036	**0.032**	0.0067	
127-18-4	Tetrachloroethene	**0.18**	0.036	**0.027**	0.0053	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
L = Laboratory control sample recovery outside the specified limits; results may be biased high.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **003-CS-052008**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-004

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01348

Date Collected: 5/21/08
Date Received: 5/23/08
Date Analyzed: 6/2 - 6/3/08
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Initial Pressure (psig): -3.1 Final Pressure (psig): 3.0

Canister Dilution Factor: 1.53

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.038	ND	0.015	
75-35-4	1,1-Dichloroethene	ND	0.038	ND	0.0097	
156-60-5	trans-1,2-Dichloroethene	ND	0.038	ND	0.0097	L
156-59-2	cis-1,2-Dichloroethene	**0.071**	0.038	**0.018**	0.0097	
79-01-6	Trichloroethene	**130**	0.038	**25**	0.0071	
127-18-4	Tetrachloroethene	**2.2**	0.038	**0.32**	0.0056	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
L = Laboratory control sample recovery outside the specified limits; results may be biased high.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **015-CS-052008**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-005

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00173

Date Collected: 5/21/08
Date Received: 5/23/08
Date Analyzed: 6/2 - 6/3/08
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Initial Pressure (psig): -2.3 Final Pressure (psig): 3.0

Canister Dilution Factor: 1.43

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.036	ND	0.014	
75-35-4	1,1-Dichloroethene	**0.042**	0.036	**0.011**	0.0090	
156-60-5	trans-1,2-Dichloroethene	ND	0.036	ND	0.0090	L
156-59-2	cis-1,2-Dichloroethene	ND	0.036	ND	0.0090	
79-01-6	Trichloroethene	**0.26**	0.036	**0.048**	0.0067	
127-18-4	Tetrachloroethene	**120**	0.036	**18**	0.0053	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
L = Laboratory control sample recovery outside the specified limits; results may be biased high.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **014-CS-052008**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-006

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01008

Date Collected: 5/21/08
Date Received: 5/23/08
Date Analyzed: 6/3/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.6 Final Pressure (psig): 3.0

Canister Dilution Factor: 1.46

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.037	ND	0.014	
75-35-4	1,1-Dichloroethene	ND	0.037	ND	0.0092	
156-60-5	trans-1,2-Dichloroethene	ND	0.037	ND	0.0092	L
156-59-2	cis-1,2-Dichloroethene	ND	0.037	ND	0.0092	
79-01-6	Trichloroethene	**0.24**	0.037	**0.044**	0.0068	
127-18-4	Tetrachloroethene	**0.19**	0.037	**0.028**	0.0054	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
L = Laboratory control sample recovery outside the specified limits; results may be biased high.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **012-CS-052008**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-008

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01245

Date Collected: 5/21/08
Date Received: 5/23/08
Date Analyzed: 6/3/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -3.3 Final Pressure (psig): 3.3

Canister Dilution Factor: 1.58

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.040	ND	0.015	
75-35-4	1,1-Dichloroethene	ND	0.040	ND	0.010	
156-60-5	trans-1,2-Dichloroethene	ND	0.040	ND	0.010	L
156-59-2	cis-1,2-Dichloroethene	ND	0.040	ND	0.010	
79-01-6	Trichloroethene	**30**	0.040	**5.5**	0.0074	
127-18-4	Tetrachloroethene	**3.1**	0.040	**0.46**	0.0058	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
L = Laboratory control sample recovery outside the specified limits; results may be biased high.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **010-CS-052008**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-012

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01024

Date Collected: 5/21/08
Date Received: 5/23/08
Date Analyzed: 6/3/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -3.1 Final Pressure (psig): 3.0

Canister Dilution Factor: 1.53

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.038	ND	0.015	
75-35-4	1,1-Dichloroethene	ND	0.038	ND	0.0097	
156-60-5	trans-1,2-Dichloroethene	ND	0.038	ND	0.0097	L
156-59-2	cis-1,2-Dichloroethene	ND	0.038	ND	0.0097	
79-01-6	Trichloroethene	**0.082**	0.038	**0.015**	0.0071	
127-18-4	Tetrachloroethene	**0.33**	0.038	**0.049**	0.0056	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
L = Laboratory control sample recovery outside the specified limits; results may be biased high.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **001-SS-052108**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-013

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01274

Date Collected: 5/22/08
Date Received: 5/23/08
Date Analyzed: 6/9/08
Volume(s) Analyzed: 0.70 Liter(s)

Initial Pressure (psig): -3.0 Final Pressure (psig): 3.1

Canister Dilution Factor: 1.52

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.054	ND	0.021	
75-35-4	1,1-Dichloroethene	ND	0.054	ND	0.014	
156-60-5	trans-1,2-Dichloroethene	ND	0.054	ND	0.014	
156-59-2	cis-1,2-Dichloroethene	**0.17**	0.054	**0.044**	0.014	
79-01-6	Trichloroethene	**0.082**	0.054	**0.015**	0.010	
127-18-4	Tetrachloroethene	**0.29**	0.054	**0.042**	0.0080	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **Method Blank**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P080602-MB

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 6/2/08
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.025	ND	0.0098	
75-35-4	1,1-Dichloroethene	ND	0.025	ND	0.0063	
156-60-5	trans-1,2-Dichloroethene	ND	0.025	ND	0.0063	L
156-59-2	cis-1,2-Dichloroethene	ND	0.025	ND	0.0063	
79-01-6	Trichloroethene	ND	0.025	ND	0.0047	
127-18-4	Tetrachloroethene	ND	0.025	ND	0.0037	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
L = Laboratory control sample recovery outside the specified limits; results may be biased high.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **Method Blank**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P080603-MB

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 6/3/08
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.025	ND	0.0098	
75-35-4	1,1-Dichloroethene	ND	0.025	ND	0.0063	
156-60-5	trans-1,2-Dichloroethene	ND	0.025	ND	0.0063	L
156-59-2	cis-1,2-Dichloroethene	ND	0.025	ND	0.0063	
79-01-6	Trichloroethene	ND	0.025	ND	0.0047	
127-18-4	Tetrachloroethene	ND	0.025	ND	0.0037	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
L = Laboratory control sample recovery outside the specified limits; results may be biased high.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **Method Blank**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P080609-MB

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 6/9/08
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.025	ND	0.0098	
75-35-4	1,1-Dichloroethene	ND	0.025	ND	0.0063	
156-60-5	trans-1,2-Dichloroethene	ND	0.025	ND	0.0063	
156-59-2	cis-1,2-Dichloroethene	ND	0.025	ND	0.0063	
79-01-6	Trichloroethene	ND	0.025	ND	0.0047	
127-18-4	Tetrachloroethene	ND	0.025	ND	0.0037	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Lockheed Martin/REAC**
Client Sample ID: **Lab Control Sample**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P080602-LCS

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 6/02/08
Volume(s) Analyzed: NA Liter(s)

CAS #	Compound	Spike Amount pg	Result pg	% Recovery	CAS Acceptance Limits	Data Qualifier
75-01-4	Vinyl Chloride	495	**420**	**85**	64-125	
75-35-4	1,1-Dichloroethene	555	**552**	**99**	68-118	
156-60-5	trans-1,2-Dichloroethene	530	**591**	**112**	67-111	**L**
156-59-2	cis-1,2-Dichloroethene	540	**581**	**108**	62-121	
79-01-6	Trichloroethene	545	**522**	**96**	67-116	
127-18-4	Tetrachloroethene	520	**505**	**97**	56-133	

L = Laboratory control sample recovery outside the specified limits; results may be biased high.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Lockheed Martin/REAC**
Client Sample ID: **Lab Control Sample**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P080603-LCS

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 6/03/08
Volume(s) Analyzed: NA Liter(s)

CAS #	Compound	Spike Amount pg	Result pg	% Recovery	CAS Acceptance Limits	Data Qualifier
75-01-4	Vinyl Chloride	495	**445**	**90**	64-125	
75-35-4	1,1-Dichloroethene	555	**603**	**109**	68-118	
156-60-5	trans-1,2-Dichloroethene	530	**613**	**116**	67-111	**L**
156-59-2	cis-1,2-Dichloroethene	540	**606**	**112**	62-121	
79-01-6	Trichloroethene	545	**561**	**103**	67-116	
127-18-4	Tetrachloroethene	520	**542**	**104**	56-133	

L = Laboratory control sample recovery outside the specified limits; results may be biased high.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Lockheed Martin/REAC**
Client Sample ID: **Lab Control Sample**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P080609-LCS

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 6/09/08
Volume(s) Analyzed: NA Liter(s)

CAS #	Compound	Spike Amount pg	Result pg	% Recovery	CAS Acceptance Limits	Data Qualifier
75-01-4	Vinyl Chloride	495	**407**	**82**	64-125	
75-35-4	1,1-Dichloroethene	555	**490**	**88**	68-118	
156-60-5	trans-1,2-Dichloroethene	530	**472**	**89**	67-111	
156-59-2	cis-1,2-Dichloroethene	540	**474**	**88**	62-121	
79-01-6	Trichloroethene	545	**479**	**88**	67-116	
127-18-4	Tetrachloroethene	520	**480**	**92**	56-133	

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **Lockheed Martin/REAC**
Client Sample ID: **014-CS-052008**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-006DUP

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS7
Analyst: Liliana Marghitoiu
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01008

Date Collected: 5/21/08
Date Received: 5/23/08
Date Analyzed: 6/3/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.6 Final Pressure (psig): 3.0

Canister Dilution Factor: 1.46

CAS #	Compound	Sample Result µg/m³	Sample Result ppbV	Duplicate Sample Result µg/m³	Duplicate Sample Result ppbV	Average µg/m³	% RPD µg/m³	RPD Limit	Data Qualifier
75-01-4	Vinyl Chloride	ND	ND	ND	ND	-	-	25	
75-35-4	1,1-Dichloroethene	ND	ND	ND	ND	-	-	25	
156-60-5	trans-1,2-Dichloroethene	ND	ND	ND	ND	-	-	25	L
156-59-2	cis-1,2-Dichloroethene	ND	ND	ND	ND	-	-	25	
79-01-6	Trichloroethene	0.236	0.0440	0.233	0.0434	0.2345	1	25	
127-18-4	Tetrachloroethene	0.189	0.0280	0.183	0.0270	0.186	3	25	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **013-CS-052008**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-007

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Rusty Bravo
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00400

Date Collected: 5/21/08
Date Received: 5/23/08
Date Analyzed: 6/6/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -3.8 Final Pressure (psig): 3.2

Canister Dilution Factor: 1.64

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.16	ND	0.064	
75-35-4	1,1-Dichloroethene	ND	0.16	ND	0.041	
156-60-5	trans-1,2-Dichloroethene	ND	0.16	ND	0.041	
156-59-2	cis-1,2-Dichloroethene	**0.40**	0.16	**0.10**	0.041	
79-01-6	Trichloroethene	**9.4**	0.16	**1.7**	0.031	
127-18-4	Tetrachloroethene	**0.32**	0.16	**0.048**	0.024	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **007-CS-052008**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-009

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Rusty Bravo
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01372

Date Collected: 5/21/08
Date Received: 5/23/08
Date Analyzed: 6/6/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): 0.2 Final Pressure (psig): 3.4

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.12	ND	0.047	
75-35-4	1,1-Dichloroethene	ND	0.12	ND	0.031	
156-60-5	trans-1,2-Dichloroethene	ND	0.12	ND	0.031	
156-59-2	cis-1,2-Dichloroethene	ND	0.12	ND	0.031	
79-01-6	Trichloroethene	**1.3**	0.12	**0.24**	0.023	
127-18-4	Tetrachloroethene	**0.21**	0.12	**0.030**	0.018	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **008-CS-052008**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-010

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Rusty Bravo
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01148

Date Collected: 5/21/08
Date Received: 5/23/08
Date Analyzed: 6/6/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.7 Final Pressure (psig): 3.0

Canister Dilution Factor: 1.48

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.15	ND	0.058	
75-35-4	1,1-Dichloroethene	ND	0.15	ND	0.037	
156-60-5	trans-1,2-Dichloroethene	ND	0.15	ND	0.037	
156-59-2	cis-1,2-Dichloroethene	**0.25**	0.15	**0.063**	0.037	
79-01-6	Trichloroethene	**23**	0.15	**4.4**	0.028	
127-18-4	Tetrachloroethene	**0.58**	0.15	**0.085**	0.022	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **009-CS-052008**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-011

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Rusty Bravo
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01469

Date Collected: 5/21/08
Date Received: 5/23/08
Date Analyzed: 6/6/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.7 Final Pressure (psig): 3.0

Canister Dilution Factor: 1.48

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.15	ND	0.058	
75-35-4	1,1-Dichloroethene	ND	0.15	ND	0.037	
156-60-5	trans-1,2-Dichloroethene	ND	0.15	ND	0.037	
156-59-2	cis-1,2-Dichloroethene	ND	0.15	ND	0.037	
79-01-6	Trichloroethene	**21**	0.15	**3.9**	0.028	
127-18-4	Tetrachloroethene	**0.26**	0.15	**0.038**	0.022	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **002-CS-052008**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-014

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Rusty Bravo
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00656

Date Collected: 5/21/08
Date Received: 5/23/08
Date Analyzed: 6/6/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -1.0 Final Pressure (psig): 3.2

Canister Dilution Factor: 1.31

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.13	ND	0.051	
75-35-4	1,1-Dichloroethene	ND	0.13	ND	0.033	
156-60-5	trans-1,2-Dichloroethene	ND	0.13	ND	0.033	
156-59-2	cis-1,2-Dichloroethene	ND	0.13	ND	0.033	
79-01-6	Trichloroethene	ND	0.13	ND	0.024	
127-18-4	Tetrachloroethene	**1.5**	0.13	**0.23**	0.019	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **011-CS-052008**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-015

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Rusty Bravo
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00726

Date Collected: 5/21/08
Date Received: 5/23/08
Date Analyzed: 6/6/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -3.4 Final Pressure (psig): 3.3

Canister Dilution Factor: 1.59

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.16	ND	0.062	
75-35-4	1,1-Dichloroethene	ND	0.16	ND	0.040	
156-60-5	trans-1,2-Dichloroethene	ND	0.16	ND	0.040	
156-59-2	cis-1,2-Dichloroethene	ND	0.16	ND	0.040	
79-01-6	Trichloroethene	**1.7**	0.16	**0.31**	0.030	
127-18-4	Tetrachloroethene	**0.20**	0.16	**0.030**	0.023	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **016-CS-052108**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-016

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Rusty Bravo
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00909

Date Collected: 5/22/08
Date Received: 5/23/08
Date Analyzed: 6/6/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -3.0 Final Pressure (psig): 3.0

Canister Dilution Factor: 1.51

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.15	ND	0.059	
75-35-4	1,1-Dichloroethene	ND	0.15	ND	0.038	
156-60-5	trans-1,2-Dichloroethene	ND	0.15	ND	0.038	
156-59-2	cis-1,2-Dichloroethene	**0.42**	0.15	**0.11**	0.038	
79-01-6	Trichloroethene	**72**	0.15	**13**	0.028	
127-18-4	Tetrachloroethene	**0.72**	0.15	**0.11**	0.022	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **017-CS-052108**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-017

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Rusty Bravo
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01309

Date Collected: 5/22/08
Date Received: 5/23/08
Date Analyzed: 6/6/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -4.6 Final Pressure (psig): 1.4

Canister Dilution Factor: 1.59

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.16	ND	0.062	
75-35-4	1,1-Dichloroethene	ND	0.16	ND	0.040	
156-60-5	trans-1,2-Dichloroethene	ND	0.16	ND	0.040	
156-59-2	cis-1,2-Dichloroethene	ND	0.16	ND	0.040	
79-01-6	Trichloroethene	ND	0.16	ND	0.030	
127-18-4	Tetrachloroethene	ND	0.16	ND	0.023	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **000-TB-052208**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-018

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Rusty Bravo
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00762

Date Collected: 5/22/08
Date Received: 5/23/08
Date Analyzed: 6/6/08
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.10	ND	0.039	
75-35-4	1,1-Dichloroethene	ND	0.10	ND	0.025	
156-60-5	trans-1,2-Dichloroethene	ND	0.10	ND	0.025	
156-59-2	cis-1,2-Dichloroethene	ND	0.10	ND	0.025	
79-01-6	Trichloroethene	ND	0.10	ND	0.019	
127-18-4	Tetrachloroethene	ND	0.10	ND	0.015	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **000-FB-052208**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-019

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Rusty Bravo
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01101

Date Collected: 5/22/08
Date Received: 5/23/08
Date Analyzed: 6/6/08
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.10	ND	0.039	
75-35-4	1,1-Dichloroethene	ND	0.10	ND	0.025	
156-60-5	trans-1,2-Dichloroethene	ND	0.10	ND	0.025	
156-59-2	cis-1,2-Dichloroethene	ND	0.10	ND	0.025	
79-01-6	Trichloroethene	ND	0.10	ND	0.019	
127-18-4	Tetrachloroethene	ND	0.10	ND	0.015	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Lockheed Martin/REAC**
Client Sample ID: **Method Blank**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P080606-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Rusty Bravo
Sampling Media: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 6/6/08
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.10	ND	0.039	
75-35-4	1,1-Dichloroethene	ND	0.10	ND	0.025	
156-60-5	trans-1,2-Dichloroethene	ND	0.10	ND	0.025	
156-59-2	cis-1,2-Dichloroethene	ND	0.10	ND	0.025	
79-01-6	Trichloroethene	ND	0.10	ND	0.019	
127-18-4	Tetrachloroethene	ND	0.10	ND	0.015	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Lockheed Martin/REAC**
Client Sample ID: **Lab Control Sample**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P080606-LCS

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Rusty Bravo
Sampling Media: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 6/06/08
Volume(s) Analyzed: NA Liter(s)

CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
75-01-4	Vinyl Chloride	24.8	**24.7**	**100**	61-127	
75-35-4	1,1-Dichloroethene	27.8	**29.6**	**106**	77-116	
156-60-5	trans-1,2-Dichloroethene	26.5	**27.1**	**102**	74-118	
156-59-2	cis-1,2-Dichloroethene	27.0	**27.5**	**102**	74-117	
79-01-6	Trichloroethene	27.3	**26.8**	**98**	80-116	
127-18-4	Tetrachloroethene	26.0	**27.8**	**107**	77-118	

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **Lockheed Martin/REAC**
Client Sample ID: **013-CS-052008**
Client Project ID: **0-324**

CAS Project ID: P0801555
CAS Sample ID: P0801555-007DUP

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13
Analyst: Rusty Bravo
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00400

Date Collected: 5/21/08
Date Received: 5/23/08
Date Analyzed: 6/6/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -3.8 Final Pressure (psig): 3.2

Canister Dilution Factor: 1.64

Compound	Sample Result µg/m³	Sample Result ppbV	Duplicate Sample Result µg/m³	Duplicate Sample Result ppbV	Average µg/m³	% RPD	RPD Limit	Data Qualifier
Vinyl Chloride	ND	ND	ND	ND	-	-	25	
1,1-Dichloroethene	ND	ND	ND	ND	-	-	25	
trans-1,2-Dichloroethene	ND	ND	ND	ND	-	-	25	
cis-1,2-Dichloroethene	0.395	0.100	0.397	0.100	0.396	**0.5**	25	
Trichloroethene	9.39	1.75	9.55	1.78	9.47	**2**	25	
Tetrachloroethene	0.325	0.0479	0.305	0.0450	0.315	**6**	25	

= Compound was analyzed for, but not detected above the laboratory reporting limit.

**NO QC EVALUATION HAS BEEN PERFORMED.
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED
WITH DISCRETION**

Verified By:_____ Date:_____

P0801555

EPA / ERT
REAC, Edison, NJ
EPA Contract Number: EP-C-04-032

CHAIN OF CUSTODY RECORD
Site #: 0-324
Contact Name: John Johnson
Contact Phone: 732-321-4284

No: 0-324-052008-001
Lab: Columbia Analytical
Lab Phone: 805-526-7161

Lab #	Sample #	Location	Numb Cont	Container	Matrix	Analyses	Start Pressure	Stop Pressure	Volume	Vol Units	Stop_Date	Stop_Time	Total_Time	
1	006-CS-052008	Unit 006	1	Summa Canister	Soil Gas	TO-15 SIM	29	4.4	5.1	Liters	5/21/2008	11:14:00 AM	1436	-4.4
2	005-CS-052008	Unit 005	1	Summa Canister	Soil Gas	TO-15 SIM	29	6	4.8	Liters	5/21/2008	10:35:00 AM	1443	-5.5
3	004-CS-052008	Unit 004	1	Summa Canister	Soil Gas	TO-15 SIM	29	4.7	5	Liters	5/21/2008	10:10:00 AM	1460	-4.9
4	003-CS-052008	Unit 003	1	Summa Canister	Soil Gas	TO-15 SIM	29	6.4	4.7	Liters	5/21/2008	9:50:00 AM	1478	-6.4

05-22-08

Special Instructions: All analysis (TO-15 SIM)

QA/QC John Ward 5/22/08

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All analysis	[illegible]	05/22/08	[illegible]	[illegible]	0425						

P 080 1555

EPA / ERT
REAC, Edison, NJ
EPA Contract Number: EP-C-04-032

CHAIN OF CUSTODY RECORD
Site #: 0-324
Contact Name: John Johnson
Contact Phone: 732-321-4284

No: 0-324-052208-002

Lab: Columbia Analytical
Lab Phone: 805-526-7161

Lab #	Sample #	Location	Numb Cont	Container	Matrix	Analyses	Start Pressure	Stop Pressure	Volume	Vol Units	Stop_Date	Stop_Time	Total_Time	
5	015-CS-052008	Unit 015	1	Summa Canister	Soil Gas	TO-15 SIM	29	7.5	5.14	Liters	5/21/2008	7:02:00 PM	1381	-4.6
6	014-CS-052008	Unit 014	1	Summa Canister	Soil Gas	TO-15 SIM	29	6	5.18	Liters	5/21/2008	6:26:00 PM	1373	-5.2
7	013-CS-052008	Unit 013	1	Summa Canister	Soil Gas	TO-15 SIM	29	4	4.5	Liters	5/21/2008	6:07:00 PM	1375	-7.8
8	012-CS-052008	Unit 012	1	Summa Canister	Soil Gas	TO-15 SIM	29	5	4.7	Liters	5/21/2008	5:55:00 PM	1432	-6.8

05-22-08

Special Instructions: All analysis (TO-15 SIM) QA/QC 5/22/08

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All analysis	[illegible]	05/22/08	[illegible]	5/22/08	0425						

R0801535

EPA / ERT
REAC, Edison, NJ
EPA Contract Number: EP-C-04-032

CHAIN OF CUSTODY RECORD
Site #: 0-324
Contact Name: John Johnson
Contact Phone: 732-321-4284

No: 0-324-052008-003
Lab: Columbia Analytical
Lab Phone: 805-526-7161

Lab #	Sample #	Location	Numb Cont	Container	Matrix	Analyses	Start Pressure	Stop Pressure	Volume	Vol Units	Stop_Date	Stop_Time	Total_Time	
9	007-CS-052008	Unit 007	1	Summa Canister	Soil Gas	TO-15 SIM	29	0.5	5.9	Liters	5/21/2008	11:22:00 AM	1406	+0.2
10	008-CS-052008	Unit 008	1	Summa Canister	Soil Gas	TO-15 SIM	29	5.2	4.9	Liters	5/21/2008	2:35:00 PM	1453	-5.5
11	009-CS-052008	Unit 009	1	Summa Canister	Soil Gas	TO-15 SIM	29	4.8	5	Liters	5/21/2008	3:08:00 PM	1432	-5.4
12	010-CS-052008	Unit 010	1	Summa Canister	Soil Gas	TO-15 SIM	29	6.1	4.7	Liters	5/21/2008	4:30:00 PM	1433	-6.3

05-22-08

Special Instructions: All analysis (TO-15 SIM) QA/QC 5/22/08

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All analysis	[illegible]	05/22/08	[illegible]	[illegible]	[illegible]						

P0801535

EPA / ERT
REAC, Edison, NJ
EPA Contract Number: EP-C-04-032

CHAIN OF CUSTODY RECORD
Site #: 0-324
Contact Name: John Johnson
Contact Phone: 732-321-4284

No: 0-324-052008-004
Lab: Columbia Analytical
Lab Phone: 805-526-7161

Lab #	Sample #	Location	Numb Cont	Container	Matrix	Analyses	Start Pressure	Stop Pressure	Volume	Vol Units	Stop_Date	Stop_Time	Total_Time	
13	001-SS-052108	Unit 001	1	Summa Canister	Soil Gas	TO-15 SIM	29	5.9	4.8	Liters	5/22/2008	8:37:00 AM	1405	-6.2
14	002-CS-052008	Unit 002	1	Summa Canister	Soil Gas	TO-15 SIM	29	2.1	5.5	Liters	5/21/2008	9:18:00 AM	1485	-2.1
15	011-CS-052008	Unit 011	1	Summa Canister	Soil Gas	TO-15 SIM	29	6.4	4.7	Liters	5/21/2008	5:18:00 PM	1446	-7.0
16	016-CS-052108	Unit 016	1	Summa Canister	Soil Gas	TO-15 SIM	29	5.8	4.8	Liters	5/22/2008	10:09:00 AM	1394	-6.2

05-22-08

Special Instructions: QA/QC John Ward 5/22/08

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All analyses	[illegible]	05/22/08	[illegible]	[illegible]	[illegible]						

8080 1555

EPA / ERT
REAC, Edison, NJ
EPA Contract Number: EP-C-04-032

CHAIN OF CUSTODY RECORD
Site #: 0-324
Contact Name: John Johnson
Contact Phone: 732-321-4284

No: 0-324-052208-005

Lab: Columbia Analytical
Lab Phone: 805-526-7161

Lab #	Sample #	Location	Numb Cont	Container	Matrix	Analyses	Pump #	OrificeID	Start Pressure	Stop Pressure	Volume	Vol Units	Stop_Date	Stop_Time	Total_Time	
17	017-CS-052108	Unit 017	1	Summa Canister	Soil Gas	TO-15 SIM	AC01309	FC00115	29	8.8	4.2	Liters	5/22/2008	4:16:00 PM	1372	-9.3
18	000-TB-052208	Trip Check	1	Summa Canister	NA		AC00762		29			Liters	5/22/2008			-28.8
19	000-FB-052208	Field Blank	1	Summa Canister			AC01101		29				5/22/2008			-28.9

05-22-08

Special Instructions: QA/QC

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All analysis	[illegible]	05/22/08	[illegible]	5/23/08	0925						