DEPARTMENT OF THE ARMY
CAMP STANLEY STORAGE ACTIVITY, RRAD
25800 RALPH FAIR ROAD, BOERNE, TX 78015-4800

October 11, 2005

U-003-06

Mr. Sonny Rayos
Texas Commission on Environmental Quality
Industrial and Hazardous Waste Section
PO Box 13087 (MC-127)
Austin, TX 78711-3087

Subject: Follow-up to September 16, 2004 Response to Building 40 letter dated July 21, 2004, Building 40 <90-day Container Storage Area, Camp Stanley Storage Activity, Boerne, Texas; TCEQ SWR No. 69026

Dear Mr. Rayos:

On September 16, 2004, Camp Stanley Storage Activity (CSSA) submitted analytical results on a final rinsate sample collected from Building 40 for site closure. This additional sample was analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), metals, and polychlorinated biphenyls (PCBs), as requested in the July 21, 2004 letter by Texas Commission on Environmental Quality (TCEQ). A copy of the September 16, 2004 letter and analytical results are provided for your review.

Also attached to this letter are the requested analytical results as an appendix to the *Addendum to the Building 40 Container Storage Area Closure Report.* As indicated in the September 16, 2004 letter, these results support the *Building 40 Container Storage Area Closure Report* conclusion that the site meets Risk Reduction Standard No. 1 (RRS1) requirements. TCEQ initially approved this closure on January 5, 2004. CSSA requests confirmation that TCEQ approves closure of this unit, given the additional results submitted in September 2004. If you have any questions or comments, please feel free to contact Glare Sanchez, Environmental Program Manager, at (210) 698-5208.

Sincerely,

Jason D. Shirley
Installation Manager

Attachments

cc: Mr. Greg Lyssy
EPA Region 6 (ltr)

Mr. Jorge Salazar
TCEQ Region 13 (ltr)

Mr. Jim Cannizzo
U.S. Army, Army Medical Command, Fort Sam Houston, Staff Judge Advocate (ltr)

Ms. Julie Burdey
Parsons (ltr)

DEPARTMENT OF THE ARMY
CAMP STANLEY STORAGE ACTIVITY, RRAD
25800 RALPH FAIR ROAD, BOERNE, TX 78015-4800

September 16, 2004

U-161-04

Mr. Sonny Rayos
Texas Commission on Environmental Quality
Industrial and Hazardous Waste Section
PO Box 13087 (MC-127)
Austin, TX 78711-3087

Subject: Response to the July 21, 2004 TCEQ Letter Concerning the SWMU Bldg 40 <90-day Container Storage Area, Camp Stanley Storage Activity, Boerne, Texas, TCEQ SWR No. 69026

Dear Mr. Rayos:

In your letter dated July 21, 2004, you reiterated Texas Commission on Environmental Quality's (TCEQ's) requirement that a final rinsate sample collected from Building 40 be analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), metals, and polychlorinated biphenyls (PCBs) for site closure.

In response to your request, Building 40 was pressure-washed for a second time on September 2, 2004 and a rinsate sample was collected for VOCs, SVOCs, metals, and PCB analyses. PCBs and SVOCs were not detected in the rinsate sample. No metals or VOCs were detected above maximum contaminant levels (MCLs). Four VOCs, bromodichloromethane, bromoform, chloroform, dibromochloromethane, which are all breakdown products of common bleach, were detected at concentrations slightly above reporting limits (RLs).

These results support the *Building 40 Container Storage Area Closure Report* conclusion that the site meets Risk Reduction Standard No. 1 (RRS1) requirements. Laboratory data currently available regarding this additional sampling effort are attached. A complete data package will be submitted with an *Addendum to the Building 40 Container Storage Area Closure Report*.

Sincerely,

Jason D. Shirley
Installation Manager

Attachments

cc: Mr. Greg Lyssy
EPA Region 6 (ltr)

Mr. Jorge Salazar
TCEQ Region 13 (ltr)

Mr. Kent Grubb
U.S. Army, Army Medical Command, Fort Sam Houston, Staff Judge Advocate (ltr)

Ms. Neyda Gutierrez
Air Force Center for Environmental Excellence (ltr)

Ms. Julie Burdey
Parsons (ltr)

AFCEE
INORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: SW 7470A Preparatory Method: 7470A AAB #: 040908A-78892
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: 040909
Date Received: 03-Sep-04 Date Prepared: 08-Sep-04 Date Analyzed: 09-Sep-04
Concentration Units: mg/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Mercury (Hg)	0.0001	0.001	0.0001	1	U

Comments: ARF: 45275

AFCEE
INORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: SW 7421 Preparatory Method: 3020A AAB #: 040908A-78955
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: 040911
Date Received: 03-Sep-04 Date Prepared: 07-Sep-04 Date Analyzed: 11-Sep-04
Concentration Units: mg/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Lead (Pb)	0.0008	0.005	0.0065	1	

Comments: ARF: 45275

AFCEE
INORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: SW 7131A Preparatory Method: 3020A AAB #: 040908A-78954
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: 040911
Date Received: 03-Sep-04 Date Prepared: 07-Sep-04 Date Analyzed: 11-Sep-04
Concentration Units: mg/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Cadmium (Cd)	0.0001	0.001	0.0001	1	U

Comments: ARF: 45275

AFCEE
INORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: SW 7060A Preparatory Method: 7060A AAB #: 040907A-78900
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: 040909
Date Received: 03-Sep-04 Date Prepared: 07-Sep-04 Date Analyzed: 09-Sep-04
Concentration Units: mg/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Arsenic (As)	0.0008	0.005	0.0008	1	U

Comments: ARF: 45275

AFCEE
INORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 6010B Preparatory Method: 3010A AAB #: 040909A-78981
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: 040913
Date Received: 03-Sep-04 Date Prepared: 09-Sep-04 Date Analyzed: 13-Sep-04
Concentration Units: mg/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Barium (Ba)	0.0003	0.005	0.0431	1	
Chromium (Cr)	0.001	0.01	0.001	1	U
Copper (Cu)	0.003	0.01	0.155	1	
Nickel (Ni)	0.001	0.01	0.001	1	U
Zinc (Zn)	0.008	0.05	0.021	1	F

Comments: ARF: 45275

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8270C Preparatory Method: 3510C AAB #: 040907A-78904

Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019

Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water

% Solids: NA Initial Calibration ID: L040908

Date Received: 03-Sep-04 Date Prepared: 07-Sep-04 Date Analyzed: 09-Sep-04

Concentration Units: ug/L

Internal Std	Qualifier
Acenaphthene-D10(IS)	
Chrysene-D12(IS)	
Naphthalene-D8(IS)	
Perylene-D12(IS)	
Phenanthrene-D10(IS)	

Comments: ARF: 45275

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 040907AM-78969
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: TB-1 Lab Sample ID: AP74822 Matrix: Water
% Solids: NA Initial Calibration ID: M040907
Date Received: 03-Sep-04 Date Prepared: 08-Sep-04 Date Analyzed: 08-Sep-04
Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dibromochloromethane	0.06	0.5	0.06	1		U
Dibromomethane	0.06	2.4	0.06	1		U
Dichlorodifluoromethane	0.11	1.0	0.11	1		U
Ethylbenzene	0.05	0.6	0.05	1		U
Hexachlorobutadiene	0.17	1.1	0.17	1		U
Isopropylbenzene	0.04	0.5	0.04	1		U
m&p-Xylene	0.07	0.5	0.07	1		U
Methylene chloride	0.51	1.0	0.51	1		U
n-Butylbenzene	0.17	1.1	0.17	1		U
n-Propylbenzene	0.03	0.4	0.03	1		U
Naphthalene	0.07	0.4	0.07	1		U
o-Xylene	0.06	1.1	0.06	1		U
p-Isopropyltoluene	0.05	1.2	0.05	1		U
Sec-Butylbenzene	0.05	1.3	0.05	1		U
Styrene	0.08	0.4	0.08	1		U
TCE	0.05	1.0	0.05	1		U
Tert-Butylbenzene	0.04	1.4	0.04	1		U
Tetrachloroethene	0.06	1.4	0.06	1		U
Toluene	0.06	1.1	0.06	1		U
Trans-1,2-DCE	0.08	0.6	0.08	1		U
Trans-1,3-Dichloropropene	0.04	1.0	0.04	1		U
Trichlorofluoromethane	0.07	0.8	0.07	1		U
Vinyl chloride	0.08	1.1	0.08	1		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	92.6	69-139	
4-Bromofluorobenzene(S)	96.7	75-125	
Dibromofluoromethane(S)	93.9	75-125	
Toluene-D8(S)	100	75-125	

Internal Std	Qualifier
1,4-Dichlorobenzene-D(IS)	
Chlorobenzene-D5(IS)	
Fluorobenzene(IS)	

Comments: ARF: 45275

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 040907AM-78969
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: TB-1 Lab Sample ID: AP74822 Matrix: Water
% Solids: NA Initial Calibration ID: M040907
Date Received: 03-Sep-04 Date Prepared: 08-Sep-04 Date Analyzed: 08-Sep-04
Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-Tetrachloroethane	0.09	0.5	0.09	1		U
1,1,1-TCA	0.03	0.8	0.03	1		U
1,1,2,2-Tetrachloroethane	0.07	0.4	0.07	1		U
1,1,2-TCA	0.06	1.0	0.06	1		U
1,1-DCA	0.07	0.4	0.07	1		U
1,1-DCE	0.12	1.2	0.12	1		U
1,1-Dichloropropene	0.10	1.0	0.10	1		U
1,2,3-Trichlorobenzene	0.24	0.3	0.24	1		U
1,2,3-Trichloropropane	0.17	3.2	0.17	1		U
1,2,4-Trichlorobenzene	0.16	0.4	0.16	1		U
1,2,4-Trimethylbenzene	0.04	1.3	0.04	1		U
1,2-DCA	0.05	0.6	0.05	1		U
1,2-DCB	0.02	0.3	0.02	1		U
1,2-Dibromo-3-chloropropane	0.76	2.6	0.76	1		U
1,2-Dichloropropane	0.06	0.4	0.06	1		U
1,2-EDB	0.06	0.6	0.06	1		U
1,3,5-Trimethylbenzene	0.04	0.5	0.04	1		U
1,3-DCB	0.03	1.2	0.03	1		U
1,3-Dichloropropane	0.05	0.4	0.05	1		U
1,4-DCB	0.07	0.3	0.07	1		U
1-Chlorohexane	0.04	0.5	0.04	1		U
2,2-Dichloropropane	0.10	3.5	0.10	1		U
2-Chlorotoluene	0.04	0.4	0.04	1		U
4-Chlorotoluene	0.04	0.6	0.04	1		U
Benzene	0.07	0.4	0.07	1		U
Bromobenzene	0.06	0.3	0.06	1		U
Bromochloromethane	0.11	0.4	0.11	1		U
Bromodichloromethane	0.06	0.8	0.06	1		U
Bromoform	0.13	1.2	0.13	1		U
Bromomethane	0.08	1.1	0.08	1		U
Carbon tetrachloride	0.06	2.1	0.06	1		U
Chlorobenzene	0.04	0.4	0.04	1		U
Chloroethane	0.07	1.0	0.07	1		U
Chloroform	0.06	0.3	0.06	1		U
Chloromethane	0.16	1.3	0.16	1		U
Cis-1,2-DCE	0.07	1.2	0.07	1		U
Cis-1,3-Dichloropropene	0.03	1.0	0.03	1		U

Comments: ARF: 45275

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8270C Preparatory Method: 3510C AAB #: 040907A-78904
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: L040908
Date Received: 03-Sep-04 Date Prepared: 07-Sep-04 Date Analyzed: 09-Sep-04
Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Bis (2-chloroethyl) ether	1.41	10.0	1.41	1		U
Bis (2-chloroisopropyl) ether	1.06	10.0	1.06	1		U
Bis (2-ethylhexyl) phthalate	1.71	10.0	1.71	1		U
Butylbenzylphthalate	1.73	10.0	1.73	1		U
Chrysene	1.60	10.0	1.60	1		U
Di-n-butylphthalate	2.22	10.0	2.22	1		U
Di-n-octylphthalate	1.78	10.0	1.78	1		U
Dibenz (a,h) anthracene	2.50	10.0	2.50	1		U
Dibenzofuran	1.62	10.0	1.62	1		U
Diethyl phthalate	1.75	10.0	1.75	1		U
Dimethylphthalate	1.92	10.0	1.92	1		U
Fluoranthene	2.33	10.0	2.33	1		U
Fluorene	1.76	10.0	1.76	1		U
Hexachlorobenzene	1.81	10.0	1.81	1		U
Hexachlorobutadiene	1.68	10.0	1.68	1		U
Hexachlorocyclopentadiene	1.13	10.0	1.13	1		U
Hexachloroethane	1.46	10.0	1.46	1		U
Indeno (1,2,3-cd) pyrene	2.40	10.0	2.40	1		U
Isophorone	1.27	10.0	1.27	1		U
n-Nitrosodi-n-propylamine	1.85	10.0	1.85	1		U
n-Nitrosodiphenylamine	5.21	10.0	5.21	1		U
Naphthalene	1.86	10.0	1.86	1		U
Nitrobenzene	1.57	10.0	1.57	1		U
Pentachlorophenol	2.71	50.0	2.71	1		U
Phenanthrene	1.98	10.0	1.98	1		U
Phenol	0.79	10.0	0.79	1		U
Pyrene	1.50	10.0	1.50	1		U

Surrogate	Recovery	Control Limits	Qualifier
2,4,6-Tribromophenol(S)	97.2	25-134	
2-Fluorobiphenyl(S)	107	43-125	
2-Fluorophenol(S)	62.3	25-125	
Nitrobenzene-D5(S)	119	32-125	
Phenol-D6(S)	33.8	25-125	
Terphenyl-D14(S)	116	42-126	

Internal Std	Qualifier
1,4-Dichlorobenzene-D4(IS)	

Comments: ARF: 45275

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8270C Preparatory Method: 3510C AAB #: 040907A-78904
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: L040908
Date Received: 03-Sep-04 Date Prepared: 07-Sep-04 Date Analyzed: 09-Sep-04
Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,2,4-Trichlorobenzene	1.48	10.0	1.48	1		U
1,2-DCB	1.59	10.0	1.59	1		U
1,3-DCB	1.23	10.0	1.23	1		U
1,4-DCB	1.60	10.0	1.60	1		U
2,4,5-Trichlorophenol	1.88	50.0	1.88	1		U
2,4,6-Trichlorophenol	1.77	10.0	1.77	1		U
2,4-Dichlorophenol	1.58	10.0	1.58	1		U
2,4-Dimethylphenol	1.23	10.0	1.23	1		U
2,4-Dinitrophenol	1.61	50.0	1.61	1		U
2,4-DNT	1.70	10.0	1.70	1		U
2,6-DNT	2.11	10.0	2.11	1		U
2-Chloronaphthalene	2.05	10.0	2.05	1		U
2-Chlorophenol	1.06	10.0	1.06	1		U
2-Methylnaphthalene	1.07	10.0	1.07	1		U
2-Methylphenol	1.43	10.0	1.43	1		U
2-Nitroaniline	2.00	50.0	2.00	1		U
2-Nitrophenol	1.88	10.0	1.88	1		U
3,3'-Dichlorobenzidine	2.62	20.0	2.62	1		U
3-Nitroaniline	2.39	50.0	2.39	1		U
4,6-Dinitro-2-methylphenol	2.03	50.0	2.03	1		U
4-Bromophenyl phenyl ether	2.02	10.0	2.02	1		U
4-Chloro-3-methylphenol	1.40	20.0	1.40	1		U
4-Chloroaniline	3.04	20.0	3.04	1		U
4-Chlorophenyl phenyl ether	1.85	10.0	1.85	1		U
4-Methylphenol	1.13	10.0	1.13	1		U
4-Nitroaniline	2.37	50.0	2.37	1		U
4-Nitrophenol	1.06	50.0	1.06	1		U
Accnaphthene	1.77	10.0	1.77	1		U
Acenaphthylene	1.44	10.0	1.44	1		U
Anthracene	2.22	10.0	2.22	1		U
Benz (a) anthracene	1.67	10.0	1.67	1		U
Benzo (a) pyrene	1.90	10.0	1.90	1		U
Benzo (b) fluoranthene	3.07	10.0	3.07	1		U
Benzo (g,h,i) perylene	2.47	10.0	2.47	1		U
Benzoic acid	2.40	50.0	2.40	1		U
Benzyl alcohol	1.23	20.0	1.23	1		U
Bis (2-chloroethoxy) methane	1.32	10.0	1.32	1		U

Comments: ARF: 45275

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 040907AM-78969
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: M040907
Date Received: 03-Sep-04 Date Prepared: 08-Sep-04 Date Analyzed: 08-Sep-04
Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dibromochloromethane	0.06	0.5	4.32	1		
Dibromomethane	0.06	2.4	0.06	1		U
Dichlorodifluoromethane	0.11	1.0	0.11	1		U
Ethylbenzene	0.05	0.6	0.05	1		U
Hexachlorobutadiene	0.17	1.1	0.17	1		U
Isopropylbenzene	0.04	0.5	0.04	1		U
m&p-Xylene	0.07	0.5	0.07	1		U
Methylene chloride	0.51	1.0	0.51	1		U
n-Butylbenzene	0.17	1.1	0.17	1		U
n-Propylbenzene	0.03	0.4	0.03	1		U
Naphthalene	0.07	0.4	0.07	1		U
o-Xylene	0.06	1.1	0.06	1		U
p-Isopropyltoluene	0.05	1.2	0.05	1		U
Sec-Butylbenzene	0.05	1.3	0.05	1		U
Styrene	0.08	0.4	0.08	1		U
TCE	0.05	1.0	0.05	1		U
Tert-Butylbenzene	0.04	1.4	0.04	1		U
Tetrachloroethene	0.06	1.4	0.19	1		F
Toluene	0.06	1.1	0.06	1		U
Trans-1,2-DCE	0.08	0.6	0.08	1		U
Trans-1,3-Dichloropropene	0.04	1.0	0.04	1		U
Trichlorofluoromethane	0.07	0.8	0.07	1		U
Vinyl chloride	0.08	1.1	0.08	1		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	91.4	69-139	
4-Bromofluorobenzene(S)	99.8	75-125	
Dibromofluoromethane(S)	92.8	75-125	
Toluene-D8(S)	101	75-125	

Internal Std	Qualifier
1,4-Dichlorobenzene-D(IS)	
Chlorobenzene-D5(IS)	
Fluorobenzene(IS)	

Comments: ARF: 45275

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 040907AM-78969
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: M040907
Date Received: 03-Sep-04 Date Prepared: 08-Sep-04 Date Analyzed: 08-Sep-04
Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-Tetrachloroethane	0.09	0.5	0.09	1		U
1,1,1-TCA	0.03	0.8	0.03	1		U
1,1,2,2-Tetrachloroethane	0.07	0.4	0.07	1		U
1,1,2-TCA	0.06	1.0	0.06	1		U
1,1-DCA	0.07	0.4	0.07	1		U
1,1-DCE	0.12	1.2	0.12	1		U
1,1-Dichloropropene	0.10	1.0	0.10	1		U
1,2,3-Trichlorobenzene	0.24	0.3	0.24	1		U
1,2,3-Trichloropropane	0.17	3.2	0.17	1		U
1,2,4-Trichlorobenzene	0.16	0.4	0.16	1		U
1,2,4-Trimethylbenzene	0.04	1.3	0.04	1		U
1,2-DCA	0.05	0.6	0.05	1		U
1,2-DCB	0.02	0.3	0.02	1		U
1,2-Dibromo-3-chloropropane	0.76	2.6	0.76	1		U
1,2-Dichloropropane	0.06	0.4	0.06	1		U
1,2-EDB	0.06	0.6	0.06	1		U
1,3,5-Trimethylbenzene	0.04	0.5	0.04	1		U
1,3-DCB	0.03	1.2	0.03	1		U
1,3-Dichloropropane	0.05	0.4	0.05	1		U
1,4-DCB	0.07	0.3	0.07	1		U
1-Chlorohexane	0.04	0.5	0.04	1		U
2,2-Dichloropropane	0.10	3.5	0.10	1		U
2-Chlorotoluene	0.04	0.4	0.04	1		U
4-Chlorotoluene	0.04	0.6	0.04	1		U
Benzene	0.07	0.4	0.07	1		U
Bromobenzene	0.06	0.3	0.06	1		U
Bromochloromethane	0.11	0.4	0.11	1		U
Bromodichloromethane	0.06	0.8	2.02	1		
Bromoform	0.13	1.2	3.39	1		
Bromomethane	0.08	1.1	0.08	1		U
Carbon tetrachloride	0.06	2.1	0.06	1		U
Chlorobenzene	0.04	0.4	0.04	1		U
Chloroethane	0.07	1.0	0.07	1		U
Chloroform	0.06	0.3	0.67	1		
Chloromethane	0.16	1.3	0.16	1		U
Cis-1,2-DCE	0.07	1.2	0.07	1		U
Cis-1,3-Dichloropropene	0.03	1.0	0.03	1		U

Comments: ARF: 45275

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8082 Preparatory Method: 3510C LF 9/13/04 AAB #: 040907A-78953
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: 040811
Date Received: 03-Sep-04 Date Prepared: 07-Sep-04 Date Analyzed: 10-Sep-04
Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
PCB-1016	0.21	1.0	0.21	1		U
PCB-1221	0.17	1.0	0.17	1		U
PCB-1232	0.23	1.0	0.23	1		U
PCB-1242	0.25	1.0	0.25	1		U
PCB-1248	0.10	1.0	0.10	1		U
PCB-1254	0.24	1.0	0.24	1		U
PCB-1260	0.20	1.0	0.20	1		U
Surrogate: DCBP		34-133	75.2	1		

Comments: ARF: 45275

Leonard Fong

From: "Chang, Tammy" <Tammy.Chang@parsons.com>
To: "Leonard Fong" <lsfong@applinc.com>
Cc: "North, Eric" <Eric.North@parsons.com>
Sent: Monday, September 13, 2004 10:42 AM
Subject: RE: Parsons ARF 45275 & COC

Many thanks. Please cc mail to Eric North.

-----Original Message-----
From: Leonard Fong [mailto:lsfong@applinc.com]
Sent: Monday, September 13, 2004 12:41 PM
To: Chang, Tammy
Subject: Re: Parsons ARF 45275 & COC

We should have results later today.

Thanks

Leonard
----- Original Message -----
From: "Chang, Tammy" <Tammy.Chang@parsons.com>
To: <lsfong@applinc.com>
Sent: Monday, September 13, 2004 10:01 AM
Subject: FW: Parsons ARF 45275 & COC

Leonard:
Will you have this report ready today?

Tammy

-----Original Message-----
From: APPL Inc [mailto:sbonds@applinc.com]
Sent: Tuesday, September 07, 2004 10:44 AM
To: Chang, Tammy
Subject: Parsons ARF 45275 & COC

Scanned from toshiba_e550
Parsons
Scan2Email_Tammy
Date:2004/09/07
Pages:4
Resolution:150

ADDENDUM TO BUILDING 40 PARTIAL FACILITY CLOSURE REPORT

This document is an addendum to the **Building 40 Partial Facility Closure Report** completed in September 2003. The Closure Report described the results of previous fieldwork conducted at Building 40 and demonstrated accomplishment of clean closure at the site. The Texas Commission on Environmental Quality (TCEQ) initially granted closure of Building 40 in a letter dated January 5, 2004.

Subsequently, TCEQ submitted a letter on July 21, 2004 requesting additional sampling of rinsate waters from Building 40 for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), metals, and polychlorinated biphenyls (PCBs). This addendum report documents the results of the additional sampling.

On September 2, 2004, Building 40 was pressure-washed a second time so that an additional rinsate sample could be collected, per TCEQ's request. The rinsate sample results showed all contaminants of concern (COCs) were below maximum contaminant levels (MCLs). PCBs and SVOCs were not detected in the rinsate sample. No metals or VOCs were detected above MCLs. Four VOCs, bromodichloromethane, bromoform, chloroform, dibromochloromethane, which are all breakdown products of common bleach, were detected at concentrations slightly above reporting limits (RLs). The sampling results are presented in Appendix A.

A letter was submitted to TCEQ on September 16, 2004 stating that the requested sampling was complete and the attached analytical results showed no VOC, SVOC, PCB, or metals results above MCLs.

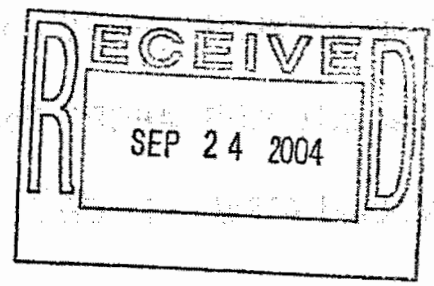
APPENDIX A: ANALYTICAL DATA REPORT

Laboratory Report

Parsons

Camp Stanley Storage Activity

Contract #: F41624-01-D-8544, TO 0019 - #42



01 September 2004 Organics and Inorganics

APPL, Inc.

Summary Data Package
For

Contract #: F41624-01-D-8544, TO 0019

ARF 45275

TABLE OF CONTENTS

LABORATORY NAME: *APPL, Inc.*

CASE NARRATIVE

Case Narrative

ARF: 45275

Project: CSSA 743345.03000

State Certification Number: CA1312

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sample Receipt Information:

The sample group was received September 3, 2004, at 4°C. The samples were assigned Analytical Request Form (ARF) number 45275. A revised COC was received via fax. The original and revised COCs are included. No other exceptions were noted.

Sample Table

CLIENT ID	APPL ID	Matrix	Date Sampled	Date Received
BLDG 40 WASH	AP74821	Water	09/01/04	09/03/04
TB-1	AP74822	Water	09/01/04	09/03/04

EPA Method 8082
PCBs

Sample Preparation:

The water sample was extracted according to EPA method 3510C, within acceptable holding time.

Analysis Information:

The sample was analyzed according to the method using Hewlett Packard GC/ECD.

Quality Control/Assurance

Calibrations:

Initial and continuing calibrations met all acceptance criteria.

Blanks:

The method blank contained no target analyte at or above the reporting limit.

Spikes and Duplicates:

A Laboratory Control Spike was used for quality assurance and met all acceptance criteria.

Surrogates:

All surrogate recoveries met acceptance criteria.

Summary:

All data were acceptable. No problems were encountered.

EPA Method 8270C
Semi-Volatile Organics

Sample Preparation:

The water sample was extracted according to EPA Method 3510C, within holding time.

Analysis

The sample was analyzed according to EPA Method 8270C using a Hewlett Packard GC/MS. The system's computer program inaccurately calculated the baseline on some of the peak integrations. These baselines were manually integrated for an accurate peak area count. Chromatograms for both before and after manual integration are contained in the report.

Quality Control/Assurance

Spike Recovery

A Laboratory Control Spike (LCS) was used for quality assurance. All other LCS recoveries met acceptance criteria.

Method blanks

Target analytes were not detected at or above the reporting limit.

Surrogates

All surrogate recoveries met acceptance criteria.

Calibration

The initial and continuing calibrations met method acceptance criteria. A second Source Verification was analyzed with the initial and continuing calibration. All AFCEE criteria were met.

Tuning:

The instrument was tuned using DFTPP. All method criteria were met.

Internal Standards

The internal standard area counts were compared to the mid-point of the initial calibration according to method 8270C. All internal standard recovery criteria were met.

Summary:

No problems were encountered. All data generated are acceptable.

EPA Method 8260B
Volatile Organics

Sample Preparation:

The water samples were purged according to EPA method 5030B. The pH of the samples were measured after analysis. All vials used for analysis were at pH of 2.

Analysis

The samples were analyzed according to EPA Method 8260B using a Hewlett Packard GC/MS.

Quality Control/Assurance

Spike Recovery

Laboratory Control Spikes (LCS/LCSD) were used for quality assurance. A second-source standard was used for the LCS/LCSD. Hexachlorobutadiene recovered above the 125% upper control limit at 139% for the LCS and 1,3,5-Trimethylbenzene recovered above the 112% upper control limit at 114% for the LCSD. For the second source criteria, the LCS recovered 1,2,3-Trichlorobenzene and Hexachlorobutadiene above the 25%D limit at 29.7%D and 38.9%D. All analytes passed for the second source criteria in the LCSD. Hexachlorobutadiene and 1,3,5-Trimethylbenzene were not detected in any of the samples. All other spike recovery criteria were met.

No sample was designated by the client for MS/MSD analysis.

Method blanks

No target compound was detected above the RLs for the method blank.

Surrogates

All surrogate recoveries were within control limits.

Calibration

The initial calibration met method acceptance criteria.

Tuning:

The instrument was tuned using BFB. All method criteria were met.

Internal Standards

The internal standard area counts were compared to the mid-point of the initial calibration according to method 8260. All method criteria were met.

Summary:

No additional problems were encountered.

EPA Method 6010B

Barium, Chromium, Copper, Nickel, and Zinc

Digestion Information:

The water sample was digested according to EPA method 3010A. No exception was encountered. All holding times were met.

Analysis Information:

Samples:

The samples were analyzed according to EPA Method 6010B using a Perkin Elmer Optima 4300DV ICAP.

Calibrations:

Calibrations were performed according to the method with no deviations from the initial calibration, the initial calibration verification and the continuing calibrations. A three-point calibration curve was performed with the lowest point in the curve at or below the reporting limit, therefore a LDL was not required. The initial calibration verification is prepared from a second source standard.

Blanks:

No target metal was detected at or above the reporting level.

Spikes:

The Laboratory Control Spikes (LCS/LCSD) met acceptance criteria.

Dilution Test:

Dilution tests are not required for water samples as per the CSSA QAPP.

Summary:

No analytical exception is noted.

EPA Method 7060A
Arsenic

Digestion Information:

The water sample was digested according to EPA method 7060A. No exception was encountered. All holding times were met.

Analysis Information:

Samples:

The sample was analyzed according to EPA method 7060A using a Perkin Elmer SIMAA 6000. All holding times were met.

Calibrations:

Calibrations were performed according to the method. All calibrations were within acceptable limits. The initial calibration verification is prepared from a second source standard.

Blanks:

Arsenic was not detected at or above the reporting level.

Spikes:

The Laboratory Control Spikes (LCS/LCSD) met acceptance criteria.

Dilution Test:

Dilution tests are not required for water samples as per the CSSA QAPP.

Summary:

No analytical exception is noted.

EPA Method 7131A
Cadmium

Digestion Information:

The water sample was digested according to EPA method 3020A. No exception was encountered. All holding times were met.

Analysis Information:

Samples:

The samples were analyzed according to EPA method 7131A using a PE Perkin Elmer SIMAA 6000. All holding times were met.

Calibrations:

Calibrations were performed according to the method. All calibrations were within acceptable limits. The initial calibration verification is prepared from a second source standard.

Blanks:

Cadmium was not detected at or above the reporting level.

Spikes:

The Laboratory Control Spikes (LCS/LCSD) met acceptance criteria.

Dilution Test:

Dilution tests are not required for water samples as per the CSSA QAPP.

Summary:

No analytical exception is noted.

EPA Method 7421

Lead

Digestion Information:

The water sample was digested according to EPA method 3020A. No exception was encountered. All holding times were met.

Analysis Information:

Samples:

The samples were analyzed according to EPA method 7421 using a PE Perkin Elmer SIMAA 6000. All holding times were met.

Calibrations:

Calibrations were performed according to the method. All calibrations were within acceptable limits. The initial calibration verification is prepared from a second source standard.

Blanks:

Lead was not detected at or above the reporting level.

Spikes:

The Laboratory Control Spikes (LCS/LCSD) met acceptance criteria.

Dilution Test:

Dilution tests are not required for water samples as per the CSSA QAPP.

Summary:

No analytical exception is noted.

EPA Method 7470A
Mercury

Digestion Information:

The water sample was digested according to EPA method 7470A. No exception was encountered. All holding times were met.

Analysis Information:

Samples:

The sample was analyzed according to EPA method 7470A using a Perkin Elmer Cold Vapor Generator.

Calibrations:

Calibrations were performed according to the method with no deviations for the initial calibration, the initial calibration verification and the continuing calibrations. The ICV was prepared with a second source standard.

Blanks:

Mercury was not detected at or above the reporting level.

Spikes:

The Laboratory Control Spikes (LCS/LCSD) met acceptance criteria.

Summary:

No analytical exception is noted.

CERTIFICATION

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the hard copy has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

9/23/04

Leonard Fong, Ph.D, Laboratory Director / Date

CHAIN OF CUSTODY

AND ARF

APPL - Analysis Request Form 45275

Client: Parsons
Address: 8000 Centre Park Drive Ste 200
Austin, TX 78754
Attn: Tammy Chang
Phone: 512-719-6092 Fax: 512-719-6099
Job: 743345.03000 CSSA
PO #: NA
Chain of Custody (Y/N): Y # 090204APPFA
RAD Screen (Y/N): Y pH (Y/N): Y
Turn Around Type: 1 WEEK

Received by: CM
Date Received: 9/3/04 Time: 10:00
Delivered by: FED EX
Shuttle Custody Seals (Y/N): Y
Chest Temp(s): 4° HB 66636
Color: VOA/BLUPUR/ORGGRN
Samples Chilled until Placed in Refrig/Freezer: Y
Project Manager: DIANE ANDERSON
QC Report Type: AFCEE/TX
Due Date: 9/9/04

Comments:
pdf ARF to Tammy

Revised COC rec'd via fax. 9-7-04 rp

9-7 Pdfd ARF + COC

CSSA

Sample Distribution:
GC: 1-$827AW, 1-$82AW, 1-$PCBW
Extractions: 1- SEP004, 1- SEP009
VOA: 2-$826AW
Metals: 1-$ASAFW, 1-$CDAFW, 1-$HGAFW, 1-$MTAFW(Ba,Cr,Zn,Cu,Ni), 1-$PBAFW

Charges:

Invoice To:

Client ID	APPL ID	Sampled	Analyses Requested
1. BLDG 40 WASH	AP74821W	9/1/04 14:30	$826AW, $827AW, $82AW, $ASAFW, $CDAFW, $HGAFW, $MTAFW(Ba,Cr,Zn,Cu,Ni), $PBAFW, $PCBW
2. TB-1	AP74822W	9/1/04 12:00	$826AW

APPL Sample Receipt Form

AR# 45275

Sample	Container Type	Count	Sample	Container Type	Count	Sample	Container Type	Count
AP74821	[5] PL Liter - HNO3	2						
	[13] VOAs - HCL	3						
	[17] Amber Liter	4						
AP74822	[13] VOAs - HCL	2						

Camp Stanley Storage Activity Chain Of Custody

COC ID: 090204APPFa | Relinquish_Date: 9/2/2004 | Cooler ID: a
Project Location: cssa | Relinquished_By: kc | LabCode: APPF
Job Number: 743345.03000 | Relinquish_Time: 5:00 PM | Carrier: FedEx
Creation Date: 9/2/2004 | Collection Team: KC | Airbill Carrier: 829223976706
Sampler(s): K. L. Cordray

LOCID: BLDG 40 wash | LOGDATE: 9/1/2004 | MATRIX: WH | TBLOT: 01090401
SBD: 0 | LOGTIME: 14:30 | SACODE: N | SMCODE: G | ABLOT:
SED: 0 | FLDSAMPID BLDG 40 wash_090104_N1430 | EBLOT:
Remarks:
Containers: 9

Analysis Required:

~~SW60108~~	~~BARIUM~~	~~SW60108~~	~~CALCIUM~~
SW60108	CHROMIUM, TOTAL	SW60108	COPPER
~~SW60108~~	~~IRON~~	~~SW60108~~	~~POTASSIUM~~
~~SW60108~~	~~MAGNESIUM~~	~~SW60108~~	~~MANGANESE~~
~~SW60108~~	~~SODIUM~~	SW60108	NICKEL
SW60108	ZINC	SW7470A	MERCURY
SW8082	PCB, TOTAL	SW8260B	VOC Full List
SW8270C	SEMI-VOLATILE ORGAN	SW 7000s	lead, arsenic, cadmium

TC 9/7/04

LOCID: TB-1 | LOGDATE: 9/1/2004 | MATRIX: WQ | TBLOT:
SBD: 0 | LOGTIME: 12:00 | SACODE: TB | SMCODE: NA | ABLOT:
SED: 0 | FLDSAMPID TB-1_090104_TB1200 | EBLOT:
Remarks:
Containers: 2

Analysis Required:

SW8260B	ACETONE VOC Full List	SW8260B	TOLUENE
SW8260B	cis-1,2-DICHLOROETHY	SW8260B	trans-1,2-DICHLOROETH
SW8260B	ISOPROPANOL	~~SW8260B~~	METHYL ETHYL KETON
~~SW8260B~~	~~TETRACHLOROETHYLE~~	SW8260B	TRICHLOROFLUOROMETHANE

TC 9/7/04

Post-it® Fax Note 7671 | Date 9/7/04 | # of pages ▶ 1

To Renee Patterson	From Tammy C. Lamp
Co./Dept. KPPL	Co. Parsons
Phone # 559-275-2175	Phone # 512-719-8092
Fax # 559-275-9422	Fax # 512-719-8099

743345.03002

Relinquished by: K. L. Cordray Date 9-2-04 Time 17 00 | Relinquished by: _____ Date _____ Time _____ | Relinquished by: _____ Date _____ Time _____
Recieved by: _____ Date _____ Time _____ | Recieved by: _____ Date _____ Time _____ | Recieved by: _____ Date 9/3/04 Time 1000

Camp Stanley Storage Activity Chain Of Custody

OC ID: 090204APPFa
roject Location: cssa
ob Number:
reation Date: 9/2/2004

Relinquish_Date: 9/2/2004
Relinquished_By: kc
Relinquish_Time: 5:00 PM
Collection Team: KC

Cooler ID: a
LabCode: APPF
Carrier: FedEx
Airbill Carrier: 829223976706

Sampler(s):

OCID: BLDG 40 wash LOGDATE: 9/1/2004 MATRIX: WH TBLOT: 01090401
BD: 0 LOGTIME: 14:30 SACODE: N SMCODE: G ABLOT:
ED: 0 FLDSAMPID BLDG 40 wash_090104_N1430 EBLOT: Containers: 9
emarks:

Analysis Required:

SW6010B	BARIUM	SW6010B	CALCIUM
SW6010B	CHROMIUM, TOTAL	SW6010B	COPPER
SW6010B	IRON	SW6010B	POTASSIUM
SW6010B	MAGNESIUM	SW6010B	MANGANESE
SW6010B	SODIUM	SW6010B	NICKEL
SW6010B	ZINC	SW7470A	MERCURY
SW8082	PCB, TOTAL	SW8260B	VOC Full List
SW8270C	SEMI-VOLATILE ORGAN		

OCID: TB-1 LOGDATE: 9/1/2004 MATRIX: WQ TBLOT:
BD: 0 LOGTIME: 12:00 SACODE: TB SMCODE: NA ABLOT:
ED: 0 FLDSAMPID TB-1_090104_TB1200 EBLOT: Containers: 2
emarks:

Analysis Required:

SW8260B	ACETONE	SW8260B	TOLUENE
SW8260B	cis-1,2-DICHLOROETHY	SW8260B	trans-1,2-DICHLOROETH
SW8260B	ISOPROPANOL	SW8260B	METHYL ETHYL KETON
SW8260B	TETRACHLOROETHYLE	SW8260B	TRICHLOROETHYLENE

elinquished by: [signature] Date 9-2-04 Time 17 00
ecieved by: Date Time

Relinquished by: Date Time
Recieved by: Date Time

Relinquished by: Date Time
Recieved by: Date 9/3/04 Time 1000

COOLER RECEIPT FORM

Project: CSSA Date Received: 9-30-04 Number of Coolers: 1

1. Did cooler come with a shipping slip (air bill, etc.)? YES NO NA
   If yes, enter carrier name fed-ex enter air bill numbers: 1) 8292-2397-6706
   2)_____ 3)_____
2. If cooler belongs to APPL, has it been logged into the ice chest database? YES NO NA
3. Were custody seals on outside of cooler? YES NO NA
4. How many? 1 Date on seal? 9-30-04 Name on seal? See Below
5. Were custody seals unbroken and intact at the time of arrival? YES NO NA
6. Were samples screened for radioactivity? YES NO NA
7. Was a chain of custody received? YES NO NA
8. Were the custody papers filled out properly? YES NO NA
9. Were the custody papers signed in the appropriate places? YES NO NA
10. Was the project identifiable from custody papers? YES NO NA
11. Was a sufficient amount of holding time remaining to analyze the samples? YES NO NA
12. Is location where sample was taken listed on the COC? YES NO NA
13. If required, was enough ice used? Type of ice: Wetice YES NO NA
14. Shuttle temp(s):1) 4° 2)____ 3)____ Serial number of certified thermometer used: HB66636
15. Was a temperature blank included in the cooler? YES NO NA
16. Describe type of packing in cooler: Sample & Wetice
17. Were all containers sealed in separate bags? YES NO NA
18. Did all containers arrive unbroken and were labels in good condition? YES NO NA
19. Container labels complete (ID, date, time, signature, preservative, location, sample type, etc.)? YES NO NA
20. Did all container labels agree with custody papers? YES NO NA
21. Were correct containers used for the tests indicated? YES NO NA
22. Were correct preservatives added to the samples? YES NO NA
23. Was a sufficient amount of sample sent for tests indicated? YES NO NA
24. Were bubbles present in volatile samples? YES NO NA
    If yes, list by sample ID. The following VOAs were received with air bubbles:
    Larger than a pea: _____
    Smaller than a pea: TB-1 AP74822 w01-02 & BLDG 40 WASH AP74821 w01-03

Signature of personnel receiving samples: Chue Lue
Second reviewer: _____
Comments: _____

Name of project manager notified_____ Date and Time of notification_____
Name of client notified_____ Date and Time of notification_____
Information given to client_____ by whom (Initials): _____

CUSTODY SEAL
Person Collecting Sample (Signature) Sample No.
Date Collected 9-30-04 Time Collected

Chain of Custody

ARF: 45275
Sample Number: **AP74821**
Client ID: BLDG 40 WASH

Client: Parsons
ATTN: Tammy Chang
Project: 743345.03000 CSSA
PO: NA

Container	Moved To	Date - Time	User Name	Reason For Move
W01	VOA_Frig	09/03/2004 16:13:00	Moua, Chue	Container Received
	VOA	09/07/2004 15:54:26	Pham, Robert	VOA Key -> Robert Pham
	pH_Test	09/09/2004 10:23:05	Perez, JR	pH Verification: pH = 2
W02	VOA_Frig	09/03/2004 16:13:00	Moua, Chue	Container Received
	VOA	09/22/2004 15:46:11	Smith, Rebecca	VOA Key -> Rebecca Smith
W03	VOA_Frig	09/03/2004 16:13:00	Moua, Chue	Container Received
	VOA	09/22/2004 15:46:21	Smith, Rebecca	VOA Key -> Rebecca Smith
W04	BluePurple	09/03/2004 16:13:00	Moua, Chue	Container Received
	Extraction	09/07/2004 15:28:10	Trevarrow, Adam	Key #3 -> Adam Trevarrow
	Spent	09/07/2004 15:31:15	Trevarrow, Adam	Adam Trevarrow -> Adam Trevarrow
W05	BluePurple	09/03/2004 16:13:00	Moua, Chue	Container Received
W06	BluePurple	09/03/2004 16:13:00	Moua, Chue	Container Received
W07	BluePurple	09/03/2004 16:13:00	Moua, Chue	Container Received
	Spent	09/08/2004 08:14:08	Lee, Daniel	Daniel Lee -> Daniel Lee
W08	OrangeGreen	09/03/2004 16:13:00	Moua, Chue	Container Received
	OrangeGreen	09/07/2004 16:58:38	Vang, Shawnle	Shawnle Vang -> Key #2
	Metals	09/08/2004 08:39:01	Vang, Shawnle	Key #2 -> Shawnle Vang
	OrangeGreen	09/08/2004 16:28:11	Vang, Shawnle	Shawnle Vang -> Key #2
	OrangeGreen	09/09/2004 14:23:50	Vang, Shawnle	Shawnle Vang -> Key #2
	OrangeGreen	09/09/2004 14:25:42	Vang, Shawnle	Shawnle Vang -> Key #2
W09	OrangeGreen	09/03/2004 16:13:00	Moua, Chue	Container Received

Chain of Custody

ARF: 45275
Sample Number: **AP74822**
Client ID: TB-1

Client: Parsons
ATTN: Tammy Chang
Project: 743345.03000 CSSA
PO: NA

Container	Moved To	Date - Time	User Name	Reason For Move
W01	VOA_Frig	09/03/2004 16:13:00	Moua, Chue	Container Received
	VOA	09/07/2004 15:54:30	Pham, Robert	VOA Key -> Robert Pham
	pH_Test	09/09/2004 10:23:11	Perez, JR	pH Verification: pH = 2
W02	VOA_Frig	09/03/2004 16:13:00	Moua, Chue	Container Received
	VOA	09/22/2004 15:46:15	Smith, Rebecca	VOA Key -> Rebecca Smith

EPA METHOD 8082
Polychlorinated Biphenyls

APPL, INC.

EPA METHOD 8082
Polychlorinated Biphenyls
AFCEE Forms

AFCEE
ORGANIC ANALYSES DATA PACKAGE

Analytical Method: EPA 8082
Lab Name: APPL, Inc
Base/Command: CSSA

AAB #: 040907A-78953
Contract #: F41624-01-D-8544, TO 0019
Prime Contractor: Parsons Engineering Science, Inc.

Field Sample ID	Lab Sample ID
BLDG 40 WASH	AP74821

Comments: ARF: 45275

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Diane Anderson Name: DIANE ANDERSON

Date: 23 Sept 2004 Title: Project Manager

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8082 Preparatory Method: 3510C ca 9/20/04 AAB #: 040907A-78953
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: 040811
Date Received: 03-Sep-04 Date Prepared: 07-Sep-04 Date Analyzed: 10-Sep-04
Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
PCB-1016	0.21	1.0	0.21	1		U
PCB-1221	0.17	1.0	0.17	1		U
PCB-1232	0.23	1.0	0.23	1		U
PCB-1242	0.25	1.0	0.25	1		U
PCB-1248	0.10	1.0	0.10	1		U
PCB-1254	0.24	1.0	0.24	1		U
PCB-1260	0.20	1.0	0.20	1		U
Surrogate: DCBP		34-133 %	75.2 %R	1		

TC 11/9/04

Comments: ARF: 45275

AFCEE
ORGANIC ANALYSES DATA SHEET 3
INITIAL MULTIPOINT CALIBRATION GC ANALYSIS

Analytical Method: 8082 — AAB #: 0409074.78953

Lab Name: AFFL, Inc. — Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Lucy — Date of Initial Calibration: 12 Aug-04 rp 9-22-04

Initial Calibration ID: 040811 — Concentration Units (ug/L or mg/kg): ug/L

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	Std 4	RF 4	Std 5	RF 5	Std 6	RF 6	Std 7	RF 7	Std 8	RF 8	Std 9	RF 9
PCB-1016	0.100	13965753.635	0.200	14515682.251	0.500	12429199.554	1.000	12677037.171	1.500	11729647.626	2.000	11800525.365						
PCB-1260	0.100	20775067.220	0.200	22007738.684	0.500	19531794.702	1.000	19990457.777	1.500	18681108.500	2.000	19125645.119						
HCBP	0.020	55616215.877	0.040	55521911.448	0.100	49120442.562	0.200	49432731.420	0.300	46244450.593	0.400	46327025.043						

Comments: Column #1

AFCEE
ORGANIC ANALYSES DATA SHEET I
INITIAL MULTIPOINT CALIBRATION-GC ANALYSIS

Analytical Method: 8082 — AAB #: 040907A-78953

Lab Name: APPL, Inc. — Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Lucy — Date of Initial Calibration: 12 / 16-Aug-04 / MP 9-22-04

Initial Calibration ID: 040811 — Concentration Units (ug/L or mg/kg): ug/L

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	Std 4	RF 4	Std 5	RF 5	Std 6	RF 6	Std 7	RF 7	Std 8	RF 8	Std 9	RF 9
PCB-1016 #2	0.100	14002255.567	0.200	14056771.582	0.500	12215626.785	1.000	12472562.568	1.500	11606804.308	2.000	11762389.005						
PCB-1260 #2	0.100	20664566.765	0.200	21237129.408	0.500	18921570.279	1.000	18963300.957	1.500	17773951.257	2.000	17977048.674						
DNTP #2	0.020	51152538.652	0.040	45792506.847	0.100	40169093.135	0.200	41513121.010	0.300	39127195.053	0.400	39732525.042						

Comments: Column #2

AFCEE
ORGANIC ANALYSES DATA SHEET 3
INITIAL MULTIPOINT CALIBRATION-GC ANALYSIS

Analytical Method: 8082 AAB #: 040907A-78953

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Lucy Date of Initial Calibration: 12-Aug-04 rp 9-22-04

Initial Calibration ID: 040811 Concentration Units (ug/L or mg/kg) ug/L

Analyte	% RSD	mean %RSD	r	COD	Q
PCB-1016	8.8				
PCB-1260	6.1				
DCBP	8.0				

Comments: column #1

AFCEE
ORGANIC ANALYSES DATA SHEET 3
INITIAL MULTIPOINT CALIBRATION-GC ANALYSIS

Analytical Method: 8082 AAB #: 040907A-78953

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Lucy Date of Initial Calibration: ~~11~~ 12-Aug-04
rp 9-22-04

Initial Calibration ID: 040811 Concentration Units (ug/L or mg/kg) ug/L

Analyte	% RSD	mean %RSD	r	COD	Q
PCB-1016 #2	8.6				
PCB-1260 #2	7.3				
DCBP #2	11.1				

Comments: column #2

AFCEE
ORGANIC ANALYSES DATA SHEET 4
SECOND SOURCE CALIBRATION VERIFICATION

Analytical Method: 8082 AAB #: 040907A-78953

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Lucy Initial Calibration ID: 040811

2nd Source ID: PCB 2ND SRC 7/19/04 Concentration Units (ug/L or mg/kg): ug/L

Analyte	Expected	Found	%D	Q
PCB-1016	0.500	0.507	1.4	
PCB-1260	0.500	0.464	7.2	

Comments: column #1

AFCEE FORM O-4 Page ___ of ____

AFCEE
ORGANIC ANALYSES DATA SHEET 4
SECOND SOURCE CALIBRATION VERIFICATION

Analytical Method: 8082 AAB #: 040907A-78953

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Lucy Initial Calibration ID: 040811

2nd Source ID: PCB 2ND SRC 7/19/04 Concentration Units (ug/L or mg/kg): ug/L

Analyte	Expected	Found	%D	Q
PCB-1016 #2	0.500	0.509	1.7	
PCB-1260 #2	0.500	0.466	6.8	

Comments: Column #2

AFCEE FORM O-4 Page ___ of ___

AFCEE
ORGANIC ANALYSES DATA SHEET 5
CALIBRATION VERIFICATION

Analytical Method: 8082 AAB #: 040907A-78953

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Lucy Initial Calibration ID: 040811

ICV ID: 0909045.D CCV #1 ID: 0909067.D CCV #2 ID:

Analyte	ICV %D or % drift	CCV#1 %D or % drift	CCV#2 %D or % drift	Q
PCB-1016	5.3	5.7		
PCB-1260	3.3	5.1		
DCBP	5.7	8.7		

Comments: column #1

AFCEE
ORGANIC ANALYSES DATA SHEET 5
CALIBRATION VERIFICATION

Analytical Method: 8082 AAB #: 040907A-78953

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Lucy Initial Calibration ID: 040811

ICV ID: 0909045.D CCV #1 ID: 0909067.D CCV #2 ID:

Analyte	ICV %D or % drift	CCV#1 %D or % drift	CCV#2 %D or % drift	Q
PCB-1016 #2	1.3	0.9		
PCB-1260 #2	0.8	0.8		
DCBP #2	1.6	6.7		

Comments: column #2

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ORGANIC ANALYSES DATA SHEET 6
BLANK

Analytical Method: EPA 8082
Lab Name: APPL, Inc
Concentration Units: ug/L
Initial Calibration ID: 040811

AAB #: 040907A-78953
Contract #: F41624-01-D-8544, TO 0019
Method Blank ID: 040907A-BLK ~~W0~~ S/1000
AA 9/13/04

Analyte	Method Blank	RL	Q
PCB-1016	< RL	1.0	
PCB-1221	< RL	1.0	
PCB-1232	< RL	1.0	
PCB-1242	< RL	1.0	
PCB-1248	< RL	1.0	
PCB-1254	< RL	1.0	
PCB-1260	< RL	1.0	
Surrogate: DCBP	79.3 %R	34-133	%R

TC 11/9/04

Comments: ARF: 45275, Sample: AP74821

AFCEE
ORGANIC ANALYSES DATA SHEET 7
LABORATORY CONTROL SAMPLE

Analytical Method: EPA 8082
Lab Name: APPL, Inc
LCS ID: 040907A LCS-3 2/1000 in 9/13/04
Concentration Units: ug/L

AAB #: 040907A-78953
Contract #: F41624-01-D-8544, TO 0019
Initial Calibration ID: 040811

Analyte	Expected	Found	% R	Control Limits	Q
PCB-1016	1.00	0.75	75.0	54-125	
PCB-1260	1.00	0.86	86.0	41-126	
Surrogate: DCBP	0.300	0.231	77.0	34-133	

Comments: ARF: 45275, Sample: AP74821

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ORGANIC ANALYSES DATA SHEET 9
HOLDING TIMES

Analytical Method: EPA 8082 AAB#: 040907A-78953

Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019

Field Sample ID	Date Collected	Date Received	Date Extracted	Max. Holding Time Ext	Time Held Ext	Date Analyze	Max. Holding Time A	Time Held Anal.	Q
BLDG 40 WASH	01-Sep-04	03-Sep-04	07-Sep-04	7	6	10-Sep-04	40	3	

Comments: ARF: 45275

AFCEE
ORGANIC ANALYSES DATA SHEET 10
INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method: 8082

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID #: Lucy ICAL ID: 040811

Field Sample ID/Std ID/ Blank ID/QC Sample ID	Date Analysis Started	Time Analysis Started	Date Analysis Completed	Time Analysis Completed
PCB-1B 8/2/04	12-Aug-04	8:22	12-Aug-04	8:35
PCB-1 8/2/04	12-Aug-04	8:36	12-Aug-04	8:50
PCB-2 8/2/04	12-Aug-04	8:51	12-Aug-04	9:05
PCB-3 6/18/04	12-Aug-04	9:06	12-Aug-04	9:19
PCB-4 8/2/04	12-Aug-04	9:20	12-Aug-04	9:34
PCB-5 8/2/04	12-Aug-04	9:35	12-Aug-04	9:49
PCB 2ND SRC 7/19/04	12-Aug-04	9:50	12-Aug-04	10:03
AR1254 3/16/04	12-Aug-04	10:04	12-Aug-04	10:18
AR1242 3/16/04	12-Aug-04	10:19	12-Aug-04	10:33
AR1248 3/16/04	12-Aug-04	10:34	12-Aug-04	10:47
AR1232 3/16/04	12-Aug-04	10:49	12-Aug-04	11:02
AR1221 3/16/04	12-Aug-04	11:03	12-Aug-04	11:17
PCB-3 6/18/04 (ICV)	10-Sep-04	2:50	10-Sep-04	3:04
040907A BLK 2/1000	10-Sep-04	3:34	10-Sep-04	3:48
040907A LCS-3 2/1000	10-Sep-04	3:49	10-Sep-04	4:02
AP74821W07 2/1030	10-Sep-04	4:04	10-Sep-04	4:17
PCB-3 6/18/04 (CCV)	10-Sep-04	8:13	10-Sep-04	8:26

Comments:

AFCEE FORM O-10 Page ___ of ____

Injection Log

Directory: G:\LUCY\DATA\040811\
G:\LUCY\DATA\040909\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	28	0811028.D	1	PCB-1B 8/2/04	WATER	8-12-04 8:22:12
2	29	0811029.D	1	PCB-1 8/2/04	WATER	8-12-04 8:36:51
3	30	0811030.D	1	PCB-2 8/2/04	WATER	8-12-04 8:51:29
4	31	0811031.D	1	PCB-3 6/18/04	WATER	8-12-04 9:06:09
5	32	0811032.D	1	PCB-4 8/2/04	WATER	8-12-04 9:20:48
6	33	0811033.D	1	PCB-5 8/2/04	WATER	8-12-04 9:35:35
7	34	0811034.D	1	PCB 2ND SRC 7/19/04	WATER	8-12-04 9:50:15
8	35	0811035.D	1	AR1254 3/16/04	WATER	8-12-04 10:04:53
9	36	0811036.D	1	AR1242 3/16/04	WATER	8-12-04 10:19:34
10	37	0811037.D	1	AR1248 3/16/04	WATER	8-12-04 10:34:20
11	38	0811038.D	1	AR1232 3/16/04	WATER	8-12-04 10:49:02
12	39	0811039.D	1	AR1221 3/16/04	WATER	8-12-04 11:03:44
13	45	0909045.D	1	PCB-3 6/18/04 (IcV)	WATER	9-10-04 2:50:42
14	48	0909048.D	2	040907A BLK 2/1000	WATER	9-10-04 3:34:48
15	49	0909049.D	2	040907A LCS-3 2/1000	WATER	9-10-04 3:49:25
16	50	0909050.D	1.94175	AP74821W07 2/1030	WATER	9-10-04 4:04:04
17	67	0909067.D	1	PCB-3 6/18/04 (ccV)	WATER	9-10-04 8:13:12

EPA METHOD 8270C
Semivolatile Organic Compounds

EPA METHOD 8270C
Semivolatile Organic Compounds
AFCEE Forms

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ORGANIC ANALYSES DATA PACKAGE

Analytical Method: EPA 8270C
Lab Name: APPL, Inc
Base/Command: CSSA

AAB #: 040907A-78904
Contract #: F41624-01-D-8544, TO 0019
Prime Contractor: Parsons Engineering Science, Inc.

Field Sample ID	Lab Sample ID
BLDG 40 WASH	AP74821

Comments: ARF: 45275

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Diane Anderson Name: DIANE ANDERSON

Date: 23 Sept 2004 Title: Project Manager

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8270C Preparatory Method: 3510C AAB #: 040907A-78904
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: L040908
Date Received: 03-Sep-04 Date Prepared: 07-Sep-04 Date Analyzed: 09-Sep-04
Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,2,4-Trichlorobenzene	1.48	10.0	1.48	1		U
1,2-DCB	1.59	10.0	1.59	1		U
1,3-DCB	1.23	10.0	1.23	1		U
1,4-DCB	1.60	10.0	1.60	1		U
2,4,5-Trichlorophenol	1.88	50.0	1.88	1		U
2,4,6-Trichlorophenol	1.77	10.0	1.77	1		U
2,4-Dichlorophenol	1.58	10.0	1.58	1		U
2,4-Dimethylphenol	1.23	10.0	1.23	1		U
2,4-Dinitrophenol	1.61	50.0	1.61	1		U
2,4-DNT	1.70	10.0	1.70	1		U
2,6-DNT	2.11	10.0	2.11	1		U
2-Chloronaphthalene	2.05	10.0	2.05	1		U
2-Chlorophenol	1.06	10.0	1.06	1		U
2-Methylnaphthalene	1.07	10.0	1.07	1		U
2-Methylphenol	1.43	10.0	1.43	1		U
2-Nitroaniline	2.00	50.0	2.00	1		U
2-Nitrophenol	1.88	10.0	1.88	1		U
3,3'-Dichlorobenzidine	2.62	20.0	2.62	1		U
3-Nitroaniline	2.39	50.0	2.39	1		U
4,6-Dinitro-2-methylphenol	2.03	50.0	2.03	1		U
4-Bromophenyl phenyl ether	2.02	10.0	2.02	1		U
4-Chloro-3-methylphenol	1.40	20.0	1.40	1		U
4-Chloroaniline	3.04	20.0	3.04	1		U
4-Chlorophenyl phenyl ether	1.85	10.0	1.85	1		U
4-Methylphenol	1.13	10.0	1.13	1		U
4-Nitroaniline	2.37	50.0	2.37	1		U
4-Nitrophenol	1.06	50.0	1.06	1		U
Acenaphthene	1.77	10.0	1.77	1		U
Acenaphthylene	1.44	10.0	1.44	1		U
Anthracene	2.22	10.0	2.22	1		U
Benz (a) anthracene	1.67	10.0	1.67	1		U
Benzo (a) pyrene	1.90	10.0	1.90	1		U
Benzo (b) fluoranthene	3.07	10.0	3.07	1		U
Benzo (g,h,i) perylene	2.47	10.0	2.47	1		U
Benzoic acid	2.40	50.0	2.40	1		U
Benzyl alcohol	1.23	20.0	1.23	1		U
Bis (2-chloroethoxy) methane	1.32	10.0	1.32	1		U

Comments: ARF: 45275

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8270C Preparatory Method: 3510C AAB #: 040907A-78904
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: L040908
Date Received: 03-Sep-04 Date Prepared: 07-Sep-04 Date Analyzed: 09-Sep-04
Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Bis (2-chloroethyl) ether	1.41	10.0	1.41	1		U
Bis (2-chloroisopropyl) ether	1.06	10.0	1.06	1		U
Bis (2-ethylhexyl) phthalate	1.71	10.0	1.71	1		U
Butylbenzylphthalate	1.73	10.0	1.73	1		U
Chrysene	1.60	10.0	1.60	1		U
Di-n-butylphthalate	2.22	10.0	2.22	1		U
Di-n-octylphthalate	1.78	10.0	1.78	1		U
Dibenz (a,h) anthracene	2.50	10.0	2.50	1		U
Dibenzofuran	1.62	10.0	1.62	1		U
Diethyl phthalate	1.75	10.0	1.75	1		U
Dimethylphthalate	1.92	10.0	1.92	1		U
Fluoranthene	2.33	10.0	2.33	1		U
Fluorene	1.76	10.0	1.76	1		U
Hexachlorobenzene	1.81	10.0	1.81	1		U
Hexachlorobutadiene	1.68	10.0	1.68	1		U
Hexachlorocyclopentadiene	1.13	10.0	1.13	1		U
Hexachloroethane	1.46	10.0	1.46	1		U
Indeno (1,2,3-cd) pyrene	2.40	10.0	2.40	1		U
Isophorone	1.27	10.0	1.27	1		U
n-Nitrosodi-n-propylamine	1.85	10.0	1.85	1		U
n-Nitrosodiphenylamine	5.21	10.0	5.21	1		U
Naphthalene	1.86	10.0	1.86	1		U
Nitrobenzene	1.57	10.0	1.57	1		U
Pentachlorophenol	2.71	50.0	2.71	1		U
Phenanthrene	1.98	10.0	1.98	1		U
Phenol	0.79	10.0	0.79	1		U
Pyrene	1.50	10.0	1.50	1		U

Surrogate	Recovery	Control Limits	Qualifier
2,4,6-Tribromophenol(S)	97.2	25-134	
2-Fluorobiphenyl(S)	107	43-125	
2-Fluorophenol(S)	62.3	25-125	
Nitrobenzene-D5(S)	119	32-125	
Phenol-D6(S)	33.8	25-125	
Terphenyl-D14(S)	116	42-126	

Internal Std	Qualifier
1,4-Dichlorobenzene-D4(IS)	

Comments: ARF: 45275

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8270C Preparatory Method: 3510C AAB #: 040907A-78904
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: L040908
Date Received: 03-Sep-04 Date Prepared: 07-Sep-04 Date Analyzed: 09-Sep-04
Concentration Units: ug/L

Internal Std	Qualifier
Acenaphthene-D10(IS)	
Chrysene-D12(IS)	
Naphthalene-D8(IS)	
Perylene-D12(IS)	
Phenanthrene-D10(IS)	

Comments: ARF: 45275

AFCEE
ORGANIC ANALYSES DATA SHEET 3A
INITIAL MULTIPOINT CALIBRATION-GC/MS ANALYSIS

Analytical Method: EPA 8270C AAB #: 040907A-78904

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Linus Date of Initial Calibration: 08-Sep-04

Initial Calibration ID: L040908 Concentration Units (ug/L or mg/kg): ug/L

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	Std 4	RF 4	Std 5	RF 5	Std 6	RF 6	Std 7	RF 7	Std 8	RF 8	Std 9	RF 9
Hexachlorocyclopentadiene *	5		10	0.230	20	0.239	40	0.256	50	0.261	60	0.268	80	0.299	100	0.296		
n-Nitrosodi-n-propylamine *	5	0.930	10	0.975	20	0.859	40	0.833	50	0.847	60	0.839	80	0.839	100	0.795		
2,4-Dinitrophenol *	5		10		20	0.127	40	0.155	50	0.164	60	0.170	80	0.167	100			
4-Nitrophenol *	5	0.233	10	0.246	20	0.238	40	0.258	50	0.245	60	0.261	80	0.272	100	0.281		
1,4-DCB #	5	1.747	10	1.846	20	1.685	40	1.636	50	1.600	60	1.616	80	1.607	100	1.576		
Acenaphthene #	5	1.295	10	1.386	20	1.238	40	1.226	50	1.195	60	1.250	80	1.205	100	1.213		
Benzo (a) pyrene #	5	1.268	10	1.367	20	1.260	40	1.234	50	1.215	60	1.242	80	1.195	100	1.304		
Di-n-octylphthalate #	5	1.445	10	1.521	20	1.359	40	1.409	50	1.323	60	1.346	80	1.31	100	1.377		
Fluoranthene #	5	1.311	10	1.399	20	1.287	40	1.316	50	1.215	60	1.222	80	1.322	100	1.275		
Hexachlorobutadiene #	5	0.158	10	0.167	20	0.149	40	0.144	50	0.145	60	0.148	80	0.146	100	0.143		
n-Nitrosodiphenylamine #	5	0.612	10	0.649	20	0.589	40	0.592	50	0.558	60	0.591	80	0.625	100	0.586		
2,4,6-Trichlorophenol #	5	0.363	10	0.397	20	0.363	40	0.374	50	0.357	60	0.367	80	0.38	100	0.372		
2,4-Dichlorophenol #	5	0.299	10	0.322	20	0.295	40	0.287	50	0.293	60	0.290	80	0.299	100	0.287		
2-Nitrophenol #	5	0.192	10	0.214	20	0.198	40	0.200	50	0.202	60	0.201	80	0.206	100	0.23		
4-Chloro-3-methylphenol #	5	0.307	10	0.329	20	0.303	40	0.303	50	0.286	60	0.292	80	0.299	100	0.289		
Pentachlorophenol #	5	0.094	10	0.118	20	0.123	40	0.140	50	0.133	60	0.146	80	0.148	100	0.159		
Phenol #	5	2.112	10	2.259	20	1.960	40	1.974	50	1.953	60	1.883	80	1.902	100	2.041		

* SPCCs # CCCs

Comments: _____

AFCEE FORM O-3A Page ___ of ___

AFCEE
ORGANIC ANALYSES DATA SHEET 3A
INITIAL MULTIPOINT CALIBRATION-GC/MS ANALYSIS

Analytical Method: EPA 8270C

AAB #: 040907A-78904

Lab Name: APPL, Inc.

Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Linus

Date of Initial Calibration: 08-Sep-04

Initial Calibration ID: L040908

Concentration Units (ug/L or mg/kg): ug/L

Analyte	% RSD	mean %RSD	r	COD	Q
Hexachlorocyclopentadiene *	10.0				
n-Nitrosodi-n-propylamine *	6.8				
2,4-Dinitrophenol *	13.7				
4-Nitrophenol *	6.6				
1,4-DCB #	5.3				
Acenaphthene #	5.0				
Benzo (a) pyrene #	4.3				
Di-n-octylphthalate #	5.1				
Fluoranthene #	4.6				
Hexachlorobutadiene #	5.4				
n-Nitrosodiphenylamine #	4.6				
2,4,6-Trichlorophenol #	3.3				
2,4-Dichlorophenol #	3.8				
2-Nitrophenol #	5.8				
4-Chloro-3-methylphenol #	4.5				
Pentachlorophenol #	15.5				
Phenol #	6.2				

* SPCCs # CCCs

Comments:

AFCEE FORM C-3A Page ____ of ____

AFCEE
ORGANIC ANALYSES DATA SHEET 3
INITIAL MULTIPOINT CALIBRATION-GC/MS ANALYSIS

Analytical Method: EPA 8270C

AAB #: 040907A-78904

Lab Name: APPL, Inc. rp 9-22-04

Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Linus

Date of Initial Calibration: 08-Sep-04

Initial Calibration ID: L040908

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	Std 4	RF 4	Std 5	RF 5	Std 6	RF 6	Std 7	RF 7	Std 8	RF 8	Std 9	RF 9
1,2,4-Trichlorobenzene	5	0.311	10	0.337	20	0.297	40	0.298	50	0.296	60.0	0.293	80	0.293	100	0.295		
1,2-DCB	5	1.588	10	1.715	20	1.548	40	1.533	50	1.479	60.0	1.470	80	1.491	100	1.533		
1,3-DCB	5	1.661	10	1.776	20	1.601	40	1.597	50	1.544	60.0	1.547	80	1.573	100	1.562		
2,4-DNT	5	0.388	10	0.458	20	0.429	40	0.451	50	0.411	60.0	0.454	80	0.468	100	0.442		
2,6-DNT	5	0.286	10	0.328	20	0.310	40	0.310	50	0.322	60.0	0.300	80	0.317	100	0.328		
2-Chloronaphthalene	5	1.293	10	1.322	20	1.187	40	1.181	50	1.181	60.0	1.169	80	1.209	100	1.250		
2-Methylnaphthalene	5	0.760	10	0.823	20	0.748	40	0.724	50	0.714	60.0	0.712	80	0.733	100	0.699		
2-Nitroaniline	5	0.410	10	0.464	20	0.437	40	0.449	50	0.421	60.0	0.419	80	0.431	100	0.455		
3-Nitroaniline	5	0.416	10	0.433	20	0.387	40	0.353	50	0.354	60.0	0.321	80	0.313	100	0.288		
3,3'-Dichlorobenzidine	5	0.462	10	0.472	20	0.446	40	0.429	50	0.418	60.0	0.448	80	0.386	100	0.434		
4-Bromophenyl phenyl ether	5	0.216	10	0.231	20	0.211	40	0.211	50	0.197	60.0	0.218	80	0.202	100	0.220		
4-Chloroaniline	5	0.070	10	0.078	20	0.071	40	0.069	50	0.072	60.0	0.070	80	0.068	100	0.065		
4-Chlorophenyl phenyl ether	5	0.564	10	0.700	20	0.621	40	0.637	50	0.610	60.0	0.593	80	0.656	100	0.635		
4-Nitroaniline	5	0.372	10	0.410	20	0.374	40	0.372	50	0.355	60.0	0.352	80	0.365	100	0.354		
Acenaphthylene	5	2.074	10	2.222	20	2.021	40	1.990	50	1.948	60.0	2.003	80	1.979	100	1.959		
Anthracene	5	1.332	10	1.430	20	1.354	40	1.291	50	1.295	60.0	1.253	80	1.356	100	1.301		
Benz (a) anthracene	5	1.337	10	1.396	20	1.250	40	1.245	50	1.217	60.0	1.239	80	1.177	100	1.287		
Benzo (b) fluoranthene	5	1.275	10	1.536	20	1.319	40	1.339	50	1.230	60.0	1.469	80	1.563	100	1.463		
Benzo (g,h,i) perylene	5	1.212	10	1.282	20	1.163	40	1.155	50	1.096	60.0	1.161	80	1.122	100	1.146		
Benzyl alcohol	5	1.144	10	1.264	20	1.133	40	1.144	50	1.142	60.0	1.117	80	1.127	100	1.167		
Bis (2-chloroethoxy) methane	5	0.420	10	0.457	20	0.387	40	0.403	50	0.378	60.0	0.382	80	0.378	100	0.390		
Bis (2-chloroethyl) ether	5	0.917	10	0.991	20	0.892	40	0.923	50	0.883	60.0	0.872	80	0.935	100	1.019		
Bis (2-chloroisopropyl) ether	5	1.890	10	2.081	20	1.841	40	1.806	50	1.748	60.0	1.746	80	1.707	100	1.687		
Bis (2-ethylhexyl) phthalate	5	0.908	10	0.977	20	0.880	40	0.854	50	0.856	60.0	0.917	80	0.830	100	0.881		
Butyl benzylphthalate	5	0.637	10	0.677	20	0.626	40	0.597	50	0.598	60.0	0.649	80	0.595	100	0.618		
Chrysene	5	1.313	10	1.388	20	1.207	40	1.159	50	1.225	60.0	1.186	80	1.240	100	1.196		
Di-n-butylphthalate	5	1.391	10	1.509	20	1.404	40	1.349	50	1.327	60.0	1.405	80	1.295	100	1.314		
Dibenz (a,h) anthracene	5	1.219	10	1.314	20	1.184	40	1.180	50	1.140	60.0	1.204	80	1.176	100	1.207		
Dibenzofuran	5	1.721	10	1.847	20	1.668	40	1.683	50	1.545	60.0	1.568	80	1.703	100	1.611		
Diethyl phthalate	5	1.332	10	1.433	20	1.273	40	1.243	50	1.274	60.0	1.209	80	1.209	100	1.318		
Dimethyl phthalate	5	1.351	10	1.468	20	1.320	40	1.304	50	1.246	60.0	1.315	80	1.349	100	1.265		
Fluorene	5	1.534	10	1.586	20	1.458	40	1.416	50	1.441	60.0	1.465	80	1.447	100	1.514		
Hexachlorobenzene	5	0.213	10	0.229	20	0.214	40	0.216	50	0.207	60.0	0.211	80	0.223	100	0.219		
Hexachloroethane	5	0.589	10	0.630	20	0.569	40	0.567	50	0.556	60.0	0.562	80	0.572	100	0.572		
Indeno (1,2,3-cd) pyrene	5	1.364	10	1.398	20	1.263	40	1.260	50	1.224	60.0	1.266	80	1.203	100	1.291		
Isophorone	5	0.702	10	0.736	20	0.662	40	0.655	50	0.654	60.0	0.652	80	0.652	100	0.658		
Naphthalene	5	1.171	10	1.258	20	1.117	40	1.105	50	1.130	60.0	1.117	80	1.058	100	1.134		
Nitrobenzene	5	0.362	10	0.381	20	0.341	40	0.336	50	0.356	60.0	0.338	80	0.363	100	0.332		
Phenanthrene	5	1.333	10	1.388	20	1.269	40	1.264	50	1.208	60.0	1.300	80	1.221	100	1.319		
Pyrene	5	1.480	10	1.560	20	1.383	40	1.334	50	1.356	60.0	1.449	80	1.297	100	1.520		
2,4,5-Trichlorophenol	5	0.382	10	0.424	20	0.394	40	0.396	50	0.382	60.0	0.388	80	0.412	100	0.399		
2,4-Dimethylphenol	5	0.346	10	0.374	20	0.338	40	0.340	50	0.325	60.0	0.334	80	0.331	100	0.334		
2-Chlorophenol	5	1.594	10	1.711	20	1.555	40	1.542	50	1.508	60.0	1.501	80	1.536	100	1.548		
2-Methylphenol	5	1.421	10	1.501	20	1.375	40	1.387	50	1.310	60.0	1.306	80	1.362	100	1.308		
4,6-Dinitro-2-methylphenol	5		10	0.137	20	0.145	40	0.163	50	0.150	60.0	0.158	80	0.168	100	0.174		
4-Methylphenol	5	1.791	10	1.933	20	1.755	40	1.775	50	1.663	60.0	1.760	80	1.778	100	1.677		
Benzoic acid	5	0.210	10	0.237	20	0.235	40	0.243	50	0.248	60.0	0.263	80	0.266	100	0.263		
2,4,6-Tribromophenol(S)	5		10		20	0.126	40	0.126	50	0.135	60.0	0.130	80	0.146	100	0.135		
2-Fluorobiphenyl(S)	5		10		20	1.302	40	1.276	50	1.298	60.0	1.298	80	1.314	100	1.299		
2-Fluorophenol (S)	5		10		20	1.307	40	1.324	50	1.288	60.0	1.292	80	1.327	100	1.351		
Nitrobenzene-D5(S)	5		10		20	0.335	40	0.344	50	0.346	60.0	0.336	80	0.351	100	0.355		
Phenol-D6 (S)	5		10		20	1.683	40	1.711	50	1.690	60.0	1.624	80	1.696	100	1.716		
Terphenyl-D14(S)	5		10		20	0.858	40	0.829	50	0.864	60.0	0.868	80	0.837	100	0.901		

AFCEE
ORGANIC ANALYSES DATA SHEET 3
INITIAL MULTIPOINT CALIBRATION-GC/MS ANALYSIS

Analytical Method: EPA 8270C rp 9-22-04

AAB #: 040907A-78904

Lab Name: APPL, Inc.

Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Linus

Date of Initial Calibration: 08-Sep-04

Initial Calibration ID: L040908

Concentration Units (ug/L or mg/kg): ug/L

Analyte	% RSD	mean %RSD	r	COD	Q
1,2,4-Trichlorobenzene	5.0				
1,2-DCB	5.1				
1,3-DCB	4.9				
2,4-DNT	6.1				
2,6-DNT	4.7				
2-Chloronaphthalene	4.2				
2-Methylnaphthalene	5.3				
2-Nitroaniline	4.3				
3-Nitroaniline	14.3				
3,3'-Dichlorobenzidine	6.2				
4-Bromophenyl phenyl ether	5.0				
4-Chloroaniline	5.3				
4-Chlorophenyl phenyl ether	5.3				
4-Nitroaniline	4.7				
Acenaphthylene	4.4				
Anthracene	4.1				
Benz (a) anthracene	5.5				
Benzo (b) fluoranthene	9.1				
Benzo (g,h,i) perylene	4.9				
Benzyl alcohol	4.0				
Bis (2-chloroethoxy) methane	6.7				
Bis (2-chloroethyl) ether	5.6				
Bis (2-chloroisopropyl) ether	7.0				
Bis (2-ethylhexyl) phthalate	5.2				
Butyl benzylphthalate	4.6				
Chrysene	6.1				
Di-n-butylphthalate	5.0				
Dibenz (a,h) anthracene	4.2				
Dibenzofuran	5.8				
Diethyl phthalate	5.8				
Dimethyl phthalate	5.1				
Fluorene	3.8				
Hexachlorobenzene	3.1				
Hexachloroethane	4.0				
Indeno (1,2,3-cd) pyrene	5.2				
Isophorone	4.7				
Naphthalene	5.4				
Nitrobenzene	4.9				
Phenanthrene	4.6				
Pyrene	6.6				
2,4,5-Trichlorophenol	3.7				
2,4-Dimethylphenol	4.4				
2-Chlorophenol	4.3				
2-Methylphenol	4.9				
4,6-Dinitro-2-methylphenol	8.9				
4-Methylphenol	4.7				
Benzoic acid	9.0				
2,4,6-Tribromophenol(S)	4.9				
2-Fluorobiphenyl(S)	0.9				
2-Fluorophenol (S)	1.8				
Nitrobenzene-D5(S)	2.2				
Phenol-D6 (S)	2.0				
Terphenyl-D14(S)	3.0				

*SPCCs #CCCs

AFCEE
ORGANIC ANALYSES DATA SHEET 4
SECOND SOURCE CALIBRATION VERIFICATION

Analytical Method: EPA 8270C

AAB #: 040907A-78904

Lab Name: APPL, Inc.

Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Linus

Initial Calibration ID: L040908

2nd Source ID: 8270 2ND SRC 7-20-04
L090811

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Expected	Found	%D	Q
1,2,4-Trichlorobenzene	50	46.76	6.5	
1,2-DCB	50	45.64	8.7	
1,3-DCB	50	45.89	8.2	
1,4-DCB	50	44.53	10.9	
2,4-DNT	50	48.55	2.9	
2,6-DNT	50	50.36	0.7	
2-Chloronaphthalene	50	46.18	7.6	
2-Methylnaphthalene	50	45.22	9.6	
2-Nitroaniline	50	48.54	2.9	
3-Nitroaniline	50	53.45	6.9	
3,3'-Dichlorobenzidine	50	41.57	16.9	
4-Bromophenyl phenyl ethe	50	44.87	10.3	
4-Chloroaniline	50	46.82	6.4	
4-Chlorophenyl phenyl ethe	50	46.89	6.2	
4-Nitroaniline	50	48.95	2.1	
Acenaphthylene	50	44.44	11.1	
Acenaphthene	50	43.57	12.9	
Anthracene	50	46.40	7.2	
Benz (a) anthracene	50	45.36	9.3	
Benzo (a) pyrene	50	43.98	12.0	
Benzo (b) fluoranthene	50	41.41	17.2	
Benzo (g,h,i) perylene	50	43.25	13.5	
Benzyl alcohol	50	42.43	15.1	
Bis (2-chloroethoxy) metha	50	49.66	0.7	
Bis (2-chloroethyl) ether	50	47.39	5.2	
Bis (2-chloroisopropyl) ethe	50	46.98	6.0	
Bis (2-ethylhexyl) phthalate	50	48.33	3.3	
Butyl benzylphthalate	50	46.57	6.9	
Chrysene	50	41.85	16.3	
Di-n-butylphthalate	50	45.97	8.1	
Di-n-octylphthalate	50	50.09	0.2	
Dibenz (a,h) anthracene	50	42.85	14.3	
Dibenzofuran	50	46.32	7.4	
Diethyl phthalate	50	47.96	4.1	
Dimethyl phthalate	50	45.73	8.5	
Fluoranthene	50	45.15	9.7	
Fluorene	50	44.09	11.8	
Hexachlorobenzene	50	45.12	9.8	
Hexachlorobutadiene	50	45.87	8.3	
Hexachlorocyclopentadiene	50	38.32	23.4	
Hexachloroethane	50	45.32	9.4	
Indeno (1,2,3-cd) pyrene	50	43.57	12.9	
Isophorone	50	45.67	8.7	
n-Nitrosodiphenylamine	50	46.98	6.0	
n-Nitrosodi-n-propylamine	50	45.56	8.9	
Naphthalene	50	45.57	8.9	
Nitrobenzene	50	45.03	9.9	
Phenanthrene	50	43.53	12.9	
Pyrene	50	44.19	11.6	
2,4,5-Trichlorophenol	50	47.13	5.7	
2,4,6-Trichlorophenol	50	41.23	17.5	
2,4-Dichlorophenol	50	41.64	16.7	

AFCEE
ORGANIC ANALYSES DATA SHEET 4
SECOND SOURCE CALIBRATION VERIFICATION

Analytical Method: EPA 8270C

AAB #: 040907A-78904

Lab Name: APPL, Inc.

Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Linus

Initial Calibration ID: L040908

2nd Source ID: 8270 2ND SRC 7-20-04
L090811

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Expected	Found	%D	Q
2,4-Dimethylphenol	50	37.67	24.7	
2,4-Dinitrophenol	50	44.83	10.3	
2-Chlorophenol	50	40.41	19.2	
2-Methylphenol	50	44.88	10.2	
2-Nitrophenol	50	40.89	18.2	
4,6-Dinitro-2-methylphenol	50	44.23	11.5	
4-Chloro-3-methylphenol	50	41.97	16.1	
4-Methylphenol	50	46.58	6.8	
4-Nitrophenol	50	41.35	17.3	
Benzoic acid	50	49.95	0.1	
Pentachlorophenol	50	42.96	14.1	
Phenol	50	40.18	19.6	

Comments:

AFCEE FORM O-4 Page ___ of ____

AFCEE
ORGANIC ANALYSES DATA SHEET 5
CALIBRATION VERIFICATION

Analytical Method: EPA 8270C

AAB #: 040907A-78904

Lab Name: APPL, Inc.

Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Linus

Initial Calibration ID: L040908

ICV ID: 8270 50ug/ml 09-08-04 L090836

CCV #1 ID:

CCV #2 ID:

Analyte	ICV %D or % drift	CCV#1 %D or % drift	CCV#2 %D or % drift	Q
1,2,4-Trichlorobenzene	4.0			
1,2-DCB	3.0			
1,3-DCB	3.6			
2,4-DNT	8.5			
2,6-DNT	9.1			
2-Chloronaphthalene	0.1			
2-Methylnaphthalene	6.7			
2-Nitroaniline	8.7			
3-Nitroaniline	6.2			
3,3'-Dichlorobenzidine	3.3			
4-Bromophenyl phenyl ether	5.1			
4-Chloroaniline	3.2			
4-Chlorophenyl phenyl ether	1.3			
4-Nitroaniline	8.8			
Acenaphthylene	7.6			
Anthracene	1.8			
Benz (a) anthracene	2.1			
Benzo (b) fluoranthene	0.2			
Benzo (g,h,i) perylene	1.6			
Benzyl alcohol	4.2			
Bis (2-chloroethoxy) methane	2.1			
Bis (2-chloroethyl) ether	2.3			
Bis (2-chloroisopropyl) ether	0.7			
Bis (2-ethylhexyl) phthalate	0.9			
Butyl benzylphthalate	1.6			
Chrysene	4.0			
Di-n-butylphthalate	4.3			
Dibenz (a,h) anthracene	0.0			
Dibenzofuran	2.7			
Diethyl phthalate	7.8			
Dimethyl phthalate	4.0			
Fluorene	2.4			
Hexachlorobenzene	1.0			
Hexachloroethane	4.7			
Indeno (1,2,3-cd) pyrene	3.4			
Isophorone	2.4			
Naphthalene	1.5			
Nitrobenzene	1.1			
Phenanthrene	2.6			
Pyrene	1.3			
2,4,5-Trichlorophenol	5.0			
2,4-Dimethylphenol	2.5			
2-Chlorophenol	5.1			
2-Methylphenol	2.3			
4,6-Dinitro-2-methylphenol	8.5			
4-Methylphenol	2.8			
Benzoic acid	5.3			

AFCEE
ORGANIC ANALYSES DATA SHEET 5A
CALIBRATION VERIFICATION-GC/MS ANALYSIS

Analytical Method: EPA 8270C AAB #: 040907A-78904

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Linus Initial Calibration ID: L040908

ICV ID: 8270 50ug/ml 09-08-04 CCV #1 ID: CCV #2 ID:
L090836

Analyte	ICV		CCV #1		CCV #2		
	RF	% D	RF	% D	RF	% D	Q
Hexachlorocyclopentadiene *	0.273595	3.55					
n-Nitrosodi-n-propylamine *	0.90211	4.35					
2,4-Dinitrophenol *	0.185528	15.20					
4-Nitrophenol *	0.251147	1.28					
1,4-DCB #	1.75726	5.49					
Acenaphthene #	1.34602	7.60					
Benzo (a) pyrene #	1.30163	3.24					
Di-n-octylphthalate #	1.40533	1.39					
Fluoranthene #	1.26772	2.00					
Hexachlorobutadiene #	0.158116	5.40					
n-Nitrosodiphenylamine #	0.605662	0.88					
2,4,6-Trichlorophenol #	0.39321	5.79					
2,4-Dichlorophenol #	0.301414	1.64					
2-Nitrophenol #	0.21129	2.84					
4-Chloro-3-methylphenol #	0.310758	3.26					
Pentachlorophenol #	0.131111	1.22					
Phenol #	2.0174	0.35					

* SPCCs # CCCs

Comments:

AFCEE FORM O-5A Page ___ of ___

AFCEE
ORGANIC ANALYSES DATA SHEET 6
BLANK

Analytical Method: EPA 8270C
Lab Name: APPL, Inc
Concentration Units: ug/L
Initial Calibration ID: L040908

AAB #: 040907A-78904
Contract #: F41624-01-D-8544, TO 0019
Method Blank ID: 040907A-BLK WL 1/1000
rp 9-22-04

Analyte	Method Blank	RL	Q
1,2,4-Trichlorobenzene	< RL	10.0	
1,2-DCB	< RL	10.0	
1,3-DCB	< RL	10.0	
1,4-DCB	< RL	10.0	
2,4,5-Trichlorophenol	< RL	50.0	
2,4,6-Trichlorophenol	< RL	10.0	
2,4-Dichlorophenol	< RL	10.0	
2,4-Dimethylphenol	< RL	10.0	
2,4-Dinitrophenol	< RL	50.0	
2,4-DNT	< RL	10.0	
2,6-DNT	< RL	10.0	
2-Chloronaphthalene	< RL	10.0	
2-Chlorophenol	< RL	10.0	
2-Methylnaphthalene	< RL	10.0	
2-Methylphenol	< RL	10.0	
2-Nitroaniline	< RL	50.0	
2-Nitrophenol	< RL	10.0	
3,3'-Dichlorobenzidine	< RL	20.0	
3-Nitroaniline	< RL	50.0	
4,6-Dinitro-2-methylphenol	< RL	50.0	
4-Bromophenyl phenyl ether	< RL	10.0	
4-Chloro-3-methylphenol	< RL	20.0	
4-Chloroaniline	< RL	20.0	
4-Chlorophenyl phenyl ether	< RL	10.0	
4-Methylphenol	< RL	10.0	
4-Nitroaniline	< RL	50.0	
4-Nitrophenol	< RL	50.0	
Acenaphthene	< RL	10.0	
Acenaphthylene	< RL	10.0	
Anthracene	< RL	10.0	
Benz (a) anthracene	< RL	10.0	
Benzo (a) pyrene	< RL	10.0	
Benzo (b) fluoranthene	< RL	10.0	
Benzo (g,h,i) perylene	< RL	10.0	
Benzoic acid	< RL	50.0	
Benzyl alcohol	< RL	20.0	
Bis (2-chloroethoxy) methane	< RL	10.0	
Bis (2-chloroethyl) ether	< RL	10.0	
Bis (2-chloroisopropyl) ether	< RL	10.0	
Bis (2-ethylhexyl) phthalate	< RL	10.0	
Butylbenzylphthalate	< RL	10.0	

Comments: ARF: 45275, Sample: AP74821

AFCEE
ORGANIC ANALYSES DATA SHEET 6
BLANK

Analytical Method: EPA 8270C
Lab Name: APPL, Inc
Concentration Units: ug/L
Initial Calibration ID: L040908

AAB #: 040907A-78904
Contract #: F41624-01-D-8544, TO 0019
Method Blank ID: 040907A-BLK WL 1/1000
rp 9-22-04

Analyte	Method Blank	RL	Q
Chrysene	< RL	10.0	
Di-n-butylphthalate	< RL	10.0	
Di-n-octylphthalate	< RL	10.0	
Dibenz (a,h) anthracene	< RL	10.0	
Dibenzofuran	< RL	10.0	
Diethyl phthalate	< RL	10.0	
Dimethylphthalate	< RL	10.0	
Fluoranthene	< RL	10.0	
Fluorene	< RL	10.0	
Hexachlorobenzene	< RL	10.0	
Hexachlorobutadiene	< RL	10.0	
Hexachlorocyclopentadiene	< RL	10.0	
Hexachloroethane	< RL	10.0	
Indeno (1,2,3-cd) pyrene	< RL	10.0	
Isophorone	< RL	10.0	
n-Nitrosodi-n-propylamine	< RL	10.0	
n-Nitrosodiphenylamine	< RL	10.0	
Naphthalene	< RL	10.0	
Nitrobenzene	< RL	10.0	
Pentachlorophenol	< RL	50.0	
Phenanthrene	< RL	10.0	
Phenol	< RL	10.0	
Pyrene	< RL	10.0	

Surrogate	Recovery	Control Limits	Qualifier
2,4,6-Tribromophenol(S)	97.2	25-134	
2-Fluorobiphenyl(S)	94.0	43-125	
2-Fluorophenol(S)	75.9	25-125	
Nitrobenzene-D5(S)	116	32-125	
Phenol-D6(S)	48.6	25-125	
Terphenyl-D14(S)	113	42-126	

Internal Std	Qualifier
1,4-Dichlorobenzene-D4(IS)	
Acenaphthene-D10(IS)	
Chrysene-D12(IS)	
Naphthalene-D8(IS)	
Perylene-D12(IS)	
Phenanthrene-D10(IS)	

Comments: ARF: 45275, Sample: AP74821

AFCEE
ORGANIC ANALYSES DATA SHEET 7
LABORATORY CONTROL SAMPLE

Analytical Method: EPA 8270C
Lab Name: APPL, Inc
LCS ID: 040907A LCS 1/1000
Concentration Units: ug/L

AAB #: 040907A-78904
Contract #: F41624-01-D-8544, TO 0019
Initial Calibration ID: L040908

Analyte	Expected	Found	% R	Control Limits	Q
1,2,4-Trichlorobenzene	50.00	31.98	64.0	44-142	
1,2-DCB	50.00	30.60	61.2	42-155	
1,3-DCB	50.00	27.45	54.9	36-125	
1,4-DCB	50.00	28.47	56.9	30-125	
2,4,5-Trichlorophenol	50.00	49.59	99.2	25-175	
2,4,6-Trichlorophenol	50.00	50.67	101	39-128	
2,4-Dichlorophenol	50.00	49.50	99.0	46-125	
2,4-Dimethylphenol	50.00	49.56	99.1	45-139	
2,4-Dinitrophenol	50.00	53.74	107	30-151	
2,4-DNT	50.00	51.94	104	39-139	
2,6-DNT	50.00	50.05	100	51-125	
2-Chloronaphthalene	50.00	40.76	81.5	60-125	
2-Chlorophenol	50.00	48.41	96.8	41-125	
2-Methylnaphthalene	50.00	39.96	79.9	41-125	
2-Methylphenol	50.00	45.88	91.8	25-125	
2-Nitroaniline	50.00	53.79	108	50-125	
2-Nitrophenol	50.00	50.54	101	44-125	
3,3'-Dichlorobenzidine	50.00	43.98	88.0	29-175	
3-Nitroaniline	50.00	59.56	119	51-125	
4,6-Dinitro-2-methylphenol	50.00	53.26	107	26-134	
4-Bromophenyl phenyl ether	50.00	51.48	103	53-127	
4-Chloro-3-methylphenol	50.00	49.49	99.0	44-125	
4-Chloroaniline	50.00	53.87	108	45-136	
4-Chlorophenyl phenyl ether	50.00	46.12	92.2	51-132	
4-Methylphenol	50.00	41.47	82.9	33-125	
4-Nitroaniline	50.00	54.16	108	40-143	
4-Nitrophenol	50.00	22.38	44.8	25-131	
Acenaphthene	50.00	47.29	94.6	49-125	
Acenaphthylene	50.00	47.91	95.8	47-125	
Anthracene	50.00	47.81	95.6	45-165	
Benz (a) anthracene	50.00	48.05	96.1	51-133	
Benzo (a) pyrene	50.00	49.31	98.6	41-125	
Benzo (b) fluoranthene	50.00	47.09	94.2	37-125	
Benzo (g,h,i) perylene	50.00	47.29	94.6	34-149	
Benzoic acid	50.00	22.14	44.3	25-162	
Benzyl alcohol	50.00	49.54	99.1	35-125	
Bis (2-chloroethoxy) methane	50.00	48.66	97.3	49-125	
Bis (2-chloroethyl) ether	50.00	47.43	94.9	44-125	
Bis (2-chloroisopropyl) ether	50.00	46.59	93.2	36-166	
Bis (2-ethylhexyl) phthalate	50.00	47.10	94.2	33-129	

Comments: ARF: 45275, Sample: AP74821

AFCEE
ORGANIC ANALYSES DATA SHEET 7
LABORATORY CONTROL SAMPLE

Analytical Method: EPA 8270C
Lab Name: APPL, Inc
LCS ID: 040907A LCS 1/1000
Concentration Units: ug/L

AAB #: 040907A-78904
Contract #: F41624-01-D-8544, TO 0019
Initial Calibration ID: L040908

Analyte	Expected	Found	% R	Control Limits	Q
Butylbenzylphthalate	50.00	48.48	97.0	26-125	
Chrysene	50.00	48.09	96.2	55-133	
Di-n-butylphthalate	50.00	50.52	101	34-126	
Di-n-octylphthalate	50.00	48.51	97.0	38-127	
Dibenz (a,h) anthracene	50.00	47.45	94.9	50-125	
Dibenzofuran	50.00	46.77	93.5	52-125	
Diethyl phthalate	50.00	51.76	104	37-125	
Dimethylphthalate	50.00	50.27	101	25-175	
Fluoranthene	50.00	49.41	98.8	47-125	
Fluorene	50.00	48.48	97.0	48-139	
Hexachlorobenzene	50.00	48.51	97.0	46-133	
Hexachlorobutadiene	50.00	24.05	48.1	25-125	
Hexachlorocyclopentadiene	50.00	20.54	41.1	41-125	
Hexachloroethane	50.00	23.11	46.2	25-153	
Indeno (1,2,3-cd) pyrene	50.00	46.69	93.4	27-160	
Isophorone	50.00	50.03	100	26-175	
n-Nitrosodi-n-propylamine	50.00	50.44	101	37-125	
n-Nitrosodiphenylamine	50.00	48.54	97.1	27-125	
Naphthalene	50.00	41.00	82.0	50-125	
Nitrobenzene	50.00	51.08	102	46-133	
Pentachlorophenol	50.00	49.35	98.7	28-136	
Phenanthrene	50.00	51.06	102	54-125	
Phenol	50.00	22.00	44.0	25-125	
Pyrene	50.00	48.33	96.7	47-136	

Surrogate	Recovery	Control Limits	Qualifier
2,4,6-Tribromophenol(S)	112	25-134	
2-Fluorobiphenyl(S)	106	43-125	
2-Fluorophenol(S)	78.0	25-125	
Nitrobenzene-D5(S)	117	32-135	
Phenol-D6(S)	51.5	25-125	
Terphenyl-D14(S)	111	42-126	

Internal Std	Qualifier
1,4-Dichlorobenzene-D4(IS)	
Acenaphthene-D10(IS)	
Chrysene-D12(IS)	
Naphthalene-D8(IS)	
Perylene-D12(IS)	
Phenanthrene-D10(IS)	

Comments: ARF: 45275, Sample: AP74821

AFCEE
ORGANIC ANALYSES DATA SHEET 9
HOLDING TIMES

Analytical Method: EPA 8270C AAB#: 040907A-78904

Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019

Field Sample ID	Date Collected	Date Received	Date Extracted	Max. Holding Time Ext	Time Held Ext	Date Analyze	Max. Holding Time A	Time Held Anal.	Q
BLDG 40 WASH	01-Sep-04	03-Sep-04	07-Sep-04	7	6	09-Sep-04	40	2	

Comments: ARF: 45275

AFCEE
ORGANIC ANALYSES DATA SHEET 10
INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method: EPA 8270C

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID #: Linus ICAL ID: L040908

Field Sample ID/Std ID/ Blank ID/QC Sample ID	Date Analysis Started	Time Analysis Started	Date Analysis Completed	Time Analysis Completed
SVTUNE 06-22-04	8-Sep-04	12:19	8-Sep-04	12:29
8270 50ug/ml 09-08-04 std 5	8-Sep-04	12:38	8-Sep-04	12:55
8270 5ug/ml std 1	8-Sep-04	13:05	8-Sep-04	13:22
8270 10ug/ml 2	8-Sep-04	13:32	8-Sep-04	13:49
8270 20ug/ml 3	8-Sep-04	13:59	8-Sep-04	14:16
8270 40ug/ml 4	8-Sep-04	14:27	8-Sep-04	14:44
8270 60ug/ml 6	8-Sep-04	14:54	8-Sep-04	15:11
8270 80ug/ml 7	8-Sep-04	15:21	8-Sep-04	15:38
8270 100ug/ml 8	8-Sep-04	15:48	8-Sep-04	16:05
8270 2ND SRC 7-20-04	8-Sep-04	16:15	8-Sep-04	16:32
SVTUNE 06-22-04	9-Sep-04	9:38	9-Sep-04	9:48
8270 50ug/ml 09-08-04 (ICV)	9-Sep-04	10:26	9-Sep-04	10:44
040907A BLK 1/1000	9-Sep-04	12:06	9-Sep-04	12:23
040907A LCS 1/1000	9-Sep-04	13:14	9-Sep-04	13:31
AP74821W04 1/1040	9-Sep-04	13:41	9-Sep-04	13:58

Comments:

AFCEE FORM O-10 Page ___ of _____

Injection Log

Directory: M:\LINUS\DATA\L040908\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	L090802.D	1	SVTUNE 06-22-04		8 Sep 04 12:19
2	3	L090803.D	1	8270 50ug/ml 09-08-0 std 5		8 Sep 04 12:38
3	4	L090804.D	1	8270 5ug/ml std 1		8 Sep 04 13:05
4	5	L090805.D	1	8270 10ug/ml std 2		8 Sep 04 13:32
5	6	L090806.D	1	8270 20ug/ml std 3		8 Sep 04 13:59
6	7	L090807.D	1	8270 40ug/ml std 4		8 Sep 04 14:27
7	8	L090808.D	1	8270 60ug/ml std 6		8 Sep 04 14:54
8	9	L090809.D	1	8270 80ug/ml std 7		8 Sep 04 15:21
9	10	L090810.D	1	8270 100ug/ml std 8		8 Sep 04 15:48
10	11	L090811.D	1	8270 2ND SRC 7-20-04		8 Sep 04 16:15
11	34	L090834.D	1	SVTUNE 06-22-04	WATER	9 Sep 04 9:38
12	36	L090836.D	1	8270 50ug/ml 09-08-0 (ICV)	WATER	9 Sep 04 10:26
13	38	L090838.D	1	040907A BLK 1/1000	WATER	9 Sep 04 12:06
14	39	L090839.D	1	040907A LCS 1/1000	WATER	9 Sep 04 13:14
15	40	L090840.D	0.961538	AP74821W04 1/1040	WATER	9 Sep 04 13:41

AFCEE
ORGANIC ANALYSES DATA SHEET 11
INSTRUMENT PERFORMANCE CHECK
(BFB or DFTPP)

Analytical Method: EPA 8270C

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Linus Compound: DFTPP Injection Date/Time: 8 Sep 04 12:19

L090802

Initial Calibration ID: L040908

Mass	Ion Abundance Criteria	% Relative Abundance	Q
51	30 - 60% of mass 198	32.9	PASS
68	0 - 2% of mass 69	0.0	PASS
70	0 - 2% of mass 69	0.8	PASS
127	40 - 60% of mass 198	50.3	PASS
197	0 - 1% of mass 198	0.0	PASS
198	100 - 100% of mass 198	100.0	PASS
199	5 - 9% of mass 198	6.7	PASS
275	10 - 30.49% of mass 198	20.1	PASS
365	1 - 100% of mass 198	1.4	PASS
441	0.01 - 100.04% of mass 443	77.2	PASS
442	40 - 150% of mass 198	42.0	PASS
443	17 - 23% of mass 442	19.5	PASS

AFCEE FORM O-11 Page ___ of ____

AFCEE
ORGANIC ANALYSES DATA SHEET 11
INSTRUMENT PERFORMANCE CHECK
(BFB or DFTPP)

Analytical Method: EPA 8270C

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Linus Compound: DFTPP Injection Date/Time: 9 Sep 04 9:38
L090834

Initial Calibration ID: L040908

Mass	Ion Abundance Criteria	% Relative Abundance	Q
51	30 - 60% of mass 198	39.3	PASS
68	0 - 2% of mass 69	0.3	PASS
70	0 - 2% of mass 69	0.6	PASS
127	40 - 60% of mass 198	56.4	PASS
197	0 - 1% of mass 198	0.0	PASS
198	100 - 100% of mass 198	100.0	PASS
199	5 - 9% of mass 198	6.8	PASS
275	10 - 30.49% of mass 198	19.8	PASS
365	1 - 100% of mass 198	1.6	PASS
441	0.01 - 100.04% of mass 443	75.9	PASS
442	40 - 150% of mass 198	55.2	PASS
443	17 - 23% of mass 442	19.2	PASS

AFCEE FORM O-11 Page ___ of _____

8A

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: F41624-01-D-8544, TO 0019

Lab Code: _____ SDG No.: 45275

Lab File ID (Standard): L090803.D Date Analyzed: 8 Sep 04 12:38

Instrument ID: Linus Time Analyzed: 8 Sep 04 12:38

GC Column: DB-5MS ID: Heated Purge: (Y/N) _____

		1,4-dichlorobenzene-D4(IS)		Napthalene-D8(IS)		Acenaphthene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	539808	4.32	2212280	5.71	1227950	7.70
	UPPER LIMIT	1079616	4.82	4424560	6.21	2455900	8.20
	LOWER LIMIT	269904	3.82	1106140	5.21	613975	7.20
	SAMPLE NO.						
01	040907A BLK 1/1000	556712	4.32	2298760	5.70	1286710	7.71
02	040907A LCS 1/1000	571540	4.32	2369530	5.71	1318710	7.70
03	AP74821W04 1/1040	574480	4.32	2384340	5.70	1342900	7.71
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: F41624-01-D-8544, TO 0019

Lab Code: SDG No.: 45275

Lab File ID (Standard): L090803.D Date Analyzed: 8 Sep 04 12:38

Instrument ID: Linus Time Analyzed: 8 Sep 04 12:38

GC Column: DB-5MS ID: Heated Purge: (Y/N)

		Phenanthrene-D10(IS)		Chrysene-D12(IS)		Perylene-D12(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	1990540	9.41	1865850	12.48	1697890	14.01
	UPPER LIMIT	3981080	9.91	3731700	12.98	3395780	14.51
	LOWER LIMIT	995270	8.91	932925	11.98	848945	13.51
	SAMPLE NO.						
01	040907A BLK 1/1000	2075740	9.41	1943260	12.47	1776820	14.01
02	040907A LCS 1/1000	2083840	9.41	2018990	12.49	1814870	14.02
03	AP74821W04 1/1040	2151820	9.41	1973580	12.47	1794890	14.01
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

EPA METHOD 8260B
Volatile Organic Compounds

APPL, INC.

EPA METHOD 8260B
Volatile Organic Compounds
AFCEE Forms

APPL, INC.

AFCEE
ORGANIC ANALYSES DATA PACKAGE

Analytical Method: EPA 8260B
Lab Name: APPL, Inc
Base/Command: CSSA

AAB #: 040907AM-78969
Contract #: F41624-01-D-8544, TO 0019
Prime Contractor: Parsons Engineering Science, Inc.

Field Sample ID	Lab Sample ID
BLDG 40 WASH	AP74821
TB-1	AP74822

Comments: ARF: 45275

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Diane Anderson Name: DIANE ANDERSON

Date: 23 Sept 2004 Title: Project Manager

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 040907AM-78969
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: M040907
Date Received: 03-Sep-04 Date Prepared: 08-Sep-04 Date Analyzed: 08-Sep-04
Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-Tetrachloroethane	0.09	0.5	0.09	1		U
1,1,1-TCA	0.03	0.8	0.03	1		U
1,1,2,2-Tetrachloroethane	0.07	0.4	0.07	1		U
1,1,2-TCA	0.06	1.0	0.06	1		U
1,1-DCA	0.07	0.4	0.07	1		U
1,1-DCE	0.12	1.2	0.12	1		U
1,1-Dichloropropene	0.10	1.0	0.10	1		U
1,2,3-Trichlorobenzene	0.24	0.3	0.24	1		U
1,2,3-Trichloropropane	0.17	3.2	0.17	1		U
1,2,4-Trichlorobenzene	0.16	0.4	0.16	1		U
1,2,4-Trimethylbenzene	0.04	1.3	0.04	1		U
1,2-DCA	0.05	0.6	0.05	1		U
1,2-DCB	0.02	0.3	0.02	1		U
1,2-Dibromo-3-chloropropane	0.76	2.6	0.76	1		U
1,2-Dichloropropane	0.06	0.4	0.06	1		U
1,2-EDB	0.06	0.6	0.06	1		U
1,3,5-Trimethylbenzene	0.04	0.5	0.04	1		U
1,3-DCB	0.03	1.2	0.03	1		U
1,3-Dichloropropane	0.05	0.4	0.05	1		U
1,4-DCB	0.07	0.3	0.07	1		U
1-Chlorohexane	0.04	0.5	0.04	1		U
2,2-Dichloropropane	0.10	3.5	0.10	1		U
2-Chlorotoluene	0.04	0.4	0.04	1		U
4-Chlorotoluene	0.04	0.6	0.04	1		U
Benzene	0.07	0.4	0.07	1		U
Bromobenzene	0.06	0.3	0.06	1		U
Bromochloromethane	0.11	0.4	0.11	1		U
Bromodichloromethane	0.06	0.8	2.02	1		
Bromoform	0.13	1.2	3.39	1		
Bromomethane	0.08	1.1	0.08	1		U
Carbon tetrachloride	0.06	2.1	0.06	1		U
Chlorobenzene	0.04	0.4	0.04	1		U
Chloroethane	0.07	1.0	0.07	1		U
Chloroform	0.06	0.3	0.67	1		
Chloromethane	0.16	1.3	0.16	1		U
Cis-1,2-DCE	0.07	1.2	0.07	1		U
Cis-1,3-Dichloropropene	0.03	1.0	0.03	1		U

Comments: ARF: 45275

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 040907AM-78969
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: M040907
Date Received: 03-Sep-04 Date Prepared: 08-Sep-04 Date Analyzed: 08-Sep-04
Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dibromochloromethane	0.06	0.5	4.32	1		
Dibromomethane	0.06	2.4	0.06	1		U
Dichlorodifluoromethane	0.11	1.0	0.11	1		U
Ethylbenzene	0.05	0.6	0.05	1		U
Hexachlorobutadiene	0.17	1.1	0.17	1		U
Isopropylbenzene	0.04	0.5	0.04	1		U
m&p-Xylene	0.07	0.5	0.07	1		U
Methylene chloride	0.51	1.0	0.51	1		U
n-Butylbenzene	0.17	1.1	0.17	1		U
n-Propylbenzene	0.03	0.4	0.03	1		U
Naphthalene	0.07	0.4	0.07	1		U
o-Xylene	0.06	1.1	0.06	1		U
p-Isopropyltoluene	0.05	1.2	0.05	1		U
Sec-Butylbenzene	0.05	1.3	0.05	1		U
Styrene	0.08	0.4	0.08	1		U
TCE	0.05	1.0	0.05	1		U
Tert-Butylbenzene	0.04	1.4	0.04	1		U
Tetrachloroethene	0.06	1.4	0.19	1		F
Toluene	0.06	1.1	0.06	1		U
Trans-1,2-DCE	0.08	0.6	0.08	1		U
Trans-1,3-Dichloropropene	0.04	1.0	0.04	1		U
Trichlorofluoromethane	0.07	0.8	0.07	1		U
Vinyl chloride	0.08	1.1	0.08	1		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	91.4	69-139	
4-Bromofluorobenzene(S)	99.8	75-125	
Dibromofluoromethane(S)	92.8	75-125	
Toluene-D8(S)	101	75-125	

Internal Std	Qualifier
1,4-Dichlorobenzene-D(IS)	
Chlorobenzene-D5(IS)	
Fluorobenzene(IS)	

Comments: ARF: 45275

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 040907AM-78969
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: TB-1 Lab Sample ID: AP74822 Matrix: Water
% Solids: NA Initial Calibration ID: M040907
Date Received: 03-Sep-04 Date Prepared: 08-Sep-04 Date Analyzed: 08-Sep-04
Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-Tetrachloroethane	0.09	0.5	0.09	1		U
1,1,1-TCA	0.03	0.8	0.03	1		U
1,1,2,2-Tetrachloroethane	0.07	0.4	0.07	1		U
1,1,2-TCA	0.06	1.0	0.06	1		U
1,1-DCA	0.07	0.4	0.07	1		U
1,1-DCE	0.12	1.2	0.12	1		U
1,1-Dichloropropene	0.10	1.0	0.10	1		U
1,2,3-Trichlorobenzene	0.24	0.3	0.24	1		U
1,2,3-Trichloropropane	0.17	3.2	0.17	1		U
1,2,4-Trichlorobenzene	0.16	0.4	0.16	1		U
1,2,4-Trimethylbenzene	0.04	1.3	0.04	1		U
1,2-DCA	0.05	0.6	0.05	1		U
1,2-DCB	0.02	0.3	0.02	1		U
1,2-Dibromo-3-chloropropane	0.76	2.6	0.76	1		U
1,2-Dichloropropane	0.06	0.4	0.06	1		U
1,2-EDB	0.06	0.6	0.06	1		U
1,3,5-Trimethylbenzene	0.04	0.5	0.04	1		U
1,3-DCB	0.03	1.2	0.03	1		U
1,3-Dichloropropane	0.05	0.4	0.05	1		U
1,4-DCB	0.07	0.3	0.07	1		U
1-Chlorohexane	0.04	0.5	0.04	1		U
2,2-Dichloropropane	0.10	3.5	0.10	1		U
2-Chlorotoluene	0.04	0.4	0.04	1		U
4-Chlorotoluene	0.04	0.6	0.04	1		U
Benzene	0.07	0.4	0.07	1		U
Bromobenzene	0.06	0.3	0.06	1		U
Bromochloromethane	0.11	0.4	0.11	1		U
Bromodichloromethane	0.06	0.8	0.06	1		U
Bromoform	0.13	1.2	0.13	1		U
Bromomethane	0.08	1.1	0.08	1		U
Carbon tetrachloride	0.06	2.1	0.06	1		U
Chlorobenzene	0.04	0.4	0.04	1		U
Chloroethane	0.07	1.0	0.07	1		U
Chloroform	0.06	0.3	0.06	1		U
Chloromethane	0.16	1.3	0.16	1		U
Cis-1,2-DCE	0.07	1.2	0.07	1		U
Cis-1,3-Dichloropropene	0.03	1.0	0.03	1		U

Comments: ARF: 45275

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 8260B Preparatory Method: 5030B AAB #: 040907AM-78969
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: TB-1 Lab Sample ID: AP74822 Matrix: Water
% Solids: NA Initial Calibration ID: M040907
Date Received: 03-Sep-04 Date Prepared: 08-Sep-04 Date Analyzed: 08-Sep-04
Concentration Units: ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dibromochloromethane	0.06	0.5	0.06	1		U
Dibromomethane	0.06	2.4	0.06	1		U
Dichlorodifluoromethane	0.11	1.0	0.11	1		U
Ethylbenzene	0.05	0.6	0.05	1		U
Hexachlorobutadiene	0.17	1.1	0.17	1		U
Isopropylbenzene	0.04	0.5	0.04	1		U
m&p-Xylene	0.07	0.5	0.07	1		U
Methylene chloride	0.51	1.0	0.51	1		U
n-Butylbenzene	0.17	1.1	0.17	1		U
n-Propylbenzene	0.03	0.4	0.03	1		U
Naphthalene	0.07	0.4	0.07	1		U
o-Xylene	0.06	1.1	0.06	1		U
p-Isopropyltoluene	0.05	1.2	0.05	1		U
Sec-Butylbenzene	0.05	1.3	0.05	1		U
Styrene	0.08	0.4	0.08	1		U
TCE	0.05	1.0	0.05	1		U
Tert-Butylbenzene	0.04	1.4	0.04	1		U
Tetrachloroethene	0.06	1.4	0.06	1		U
Toluene	0.06	1.1	0.06	1		U
Trans-1,2-DCE	0.08	0.6	0.08	1		U
Trans-1,3-Dichloropropene	0.04	1.0	0.04	1		U
Trichlorofluoromethane	0.07	0.8	0.07	1		U
Vinyl chloride	0.08	1.1	0.08	1		U

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	92.6	69-139	
4-Bromofluorobenzene(S)	96.7	75-125	
Dibromofluoromethane(S)	93.9	75-125	
Toluene-D8(S)	100	75-125	

Internal Std	Qualifier
1,4-Dichlorobenzene-D(IS)	
Chlorobenzene-D5(IS)	
Fluorobenzene(IS)	

Comments: ARF: 45275

APCEE
ORGANIC ANALYSES DATA SHEET 3A
INITIAL MULTIPOINT CALIBRATION-GC/MS ANALYSIS

Analytical Method: EPA METHOD 8260B

AAB #: 040907AM-78969

Lab Name: APPL, Inc.

Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Max

Date of Initial Calibration: 7-Sep-04

Initial Calibration ID: M040907

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	Std 4	RF 4	Std 5	RF 5	Std 6	RF 6	Std 7	RF 7	Std 8	RF 8	Std 9	RF 9
Chloromethane *	40.0	1.550	0.5	1.621	1.0	1.580	2.0	1.551	5	1.407	10	1.460	0.3		100.000	1.483	20.000	1.453
Vinyl chloride #	40.0	1.060	0.5	1.221	1.0	1.131	2.0	1.155	5	1.009	10	1.085	0.3		100.000	0.965	20.000	1.014
1,1-DCE #	40.0	0.871	0.5	0.919	1.0	0.842	2.0	0.860	5	0.849	10	0.813	0.3		100.000	0.829	20.000	0.806
1,1-DCA *	40.0	1.363	0.5	1.250	1.0	1.159	2.0	1.105	5	1.171	10	1.194	0.3	1.547	100.000	1.344	20.000	1.237
Chloroform #	40.0	1.229	0.5	1.266	1.0	1.271	2.0	1.205	5	1.194	10	1.166	0.3	1.453	100.000	1.19	20.000	1.163
1,2-Dichloropropane #	40.0	0.708	0.5	0.849	1.0	0.719	2.0	0.728	5	0.733	10	0.708	0.3	0.739	100.000	0.672	20.000	0.710
Toluene #	40.0	2.441	0.5	2.595	1.0	2.443	2.0	2.430	5	2.427	10	2.400	0.3		100.000	2.252	20.000	2.358
Chlorobenzene *	40.0	3.179	0.5	3.445	1.0	3.292	2.0	3.285	5	3.348	10	3.231	0.3	3.648	100.000	3.051	20.000	3.250
Ethylbenzene #	40.0	5.045	0.5	4.983	1.0	4.917	2.0	4.917	5	4.998	10	4.878	0.3		100.000	4.918	20.000	4.950
Bromoform *	40.0	0.270	0.5	0.226	1.0	0.211	2.0	0.257	5	0.245	10	0.254	0.3		100.000	0.273	20.000	0.278
1,1,2,2-Tetrachloroethane *	40.0	0.660	0.5	0.626	1.0	0.697	2.0	0.702	5	0.686	10	0.626	0.3	0.782	100.000	0.606	20.000	0.660

* SPCCs # CCCs

Comments: _____

APCEE FORM O-3A Page ___ of ___

AFCEE
ORGANIC ANALYSES DATA SHEET 3A
INITIAL MULTIPOINT CALIBRATION-GC/MS ANALYSIS

Analytical Method: EPA METHOD 8260B

AAB #: 040907AM-78969

Lab Name: APPL, Inc.

Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Max

Date of Initial Calibration: 7-Sep-04

Initial Calibration ID: M040907

Concentration Units (ug/L or mg/kg): ug/L

Analyte	% RSD	mean % RSD	r	COD	Q
Chloromethane *	8.4				
1,1-DCA *	10.7				
Bromoform *	9.4				
Chlorobenzene *	5.1				
1,1,2,2-TCA *	7.9				
1,1-DCE #	4.3				
Chloroform #	7.3				
1,2-DCP #	6.7				
Toluene #	4.0				
Ethylbenzene #	1.1				
Vinyl chloride #	7.9				

* SPCCs # CCCs

Comments:

AFCEE FORM O-3A Page ___ of ___

AFCEE
ORGANIC ANALYSES DATA SHEET 3
INITIAL MULTIPOINT CALIBRATION-GC/MS ANALYSIS

Analytical Method: EPA METHOD 8260B

AAB #: 040907AM-78969

Lab Name: AFFL, Inc.

Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Max

Date of Initial Calibration: 7-Sep-04

Initial Calibration ID: M040907

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	Std 4	RF 4	Std 5	RF 5	Std 6	RF 6	Std 7	RF 7	Std 8	RF 8	Std 9	RF 9
1,1,1,2-Tetrachloroethane	40.000	0.866	0.500	0.925	1.000	0.858	2.000	0.901	5.000	0.935	10.000	0.849	0.300		100.000	0.942	20.000	0.975
1,1,1-TCA	40.000	1.336	0.500	1.278	1.000	1.233	2.000	1.211	5.000	1.217	10.000	1.195	0.300		100.000	1.311	20.000	1.211
1,1,2-TCA	40.000	0.264	0.500	0.371	1.000	0.314	2.000	0.295	5.000	0.293	10.000	0.288	0.300		100.000	0.282	20.000	0.291
1,1-Dichloropropene	40.000	1.027	0.500	0.997	1.000	0.934	2.000	1.043	5.000	0.955	10.000	0.965	0.300		100.000	0.960	20.000	0.954
1,2,3-Trichlorobenzene	40.000	1.482	0.500	2.054	1.000	1.848	2.000	1.704	5.000	1.621	10.000	1.513	0.300		100.000	1.303	20.000	1.560
1,2,3-Trichloropropane	40.000	0.243	0.500	0.359	1.000	0.283	2.000	0.261	5.000	0.258	10.000	0.244	0.300		100.000	0.232	20.000	0.248
1,2,4-Trichlorobenzene	40.000	2.247	0.500	2.782	1.000	2.494	2.000	2.420	5.000	2.262	10.000	2.252	0.300		100.000	2.037	20.000	2.282
1,2,4-Trimethylbenzene	40.000	6.626	0.500	8.220	1.000	8.165	2.000	7.951	5.000	8.360	10.000	8.521	0.300		100.000	8.237	20.000	8.303
1,2-DCA	40.000	0.590	0.500	0.621	1.000	0.606	2.000	0.579	5.000	0.570	10.000	0.565	0.300		100.000	0.580	20.000	0.572
1,2-DCB	40.000	4.053	0.500	4.267	1.000	4.138	2.000	4.199	5.000	4.030	10.000	3.993	0.300	4.292	100.000	3.851	20.000	3.963
1,2-Dibromo-3-chloropropane	40.000	0.122	0.500		1.000	0.046	2.000	0.133	5.000	0.155	10.000	0.119	0.300		100.000	0.116	20.000	0.129
1,2-EDB	40.000	0.420	0.500	0.385	1.000	0.340	2.000	0.405	5.000	0.417	10.000	0.409	0.300		100.000	0.412	20.000	0.441
1,3,5-Trimethylbenzene	40.000	7.678	0.500	7.326	1.000	7.171	2.000	7.460	5.000	7.930	10.000	7.990	0.300		100.000	7.201	20.000	7.734
1,3-DCB	40.000	5.309	0.500	6.686	1.000	5.133	2.000	5.486	5.000	5.371	10.000	5.299	0.300		100.000	4.897	20.000	5.149
1,3-Dichloropropane	40.000	0.636	0.500	0.754	1.000	0.648	2.000	0.715	5.000	0.665	10.000	0.640	0.300	0.740	100.000	0.621	20.000	0.664
1,4-DCB	40.000	5.095	0.500	5.260	1.000	5.375	2.000	5.209	5.000	5.107	10.000	5.071	0.300	5.512	100.000	4.854	20.000	4.941
1-Chlorohexane	40.000	1.515	0.500	1.401	1.000	1.391	2.000	1.472	5.000	1.449	10.000	1.400	0.300		100.000	1.463	20.000	1.459
2,2-Dichloropropane	40.000		0.500	0.253	1.000	0.200	2.000	0.252	5.000	0.193	10.000	0.202	0.300		100.000		20.000	0.183
2-Chlorotoluene	40.000	7.939	0.500	5.946	1.000	7.606	2.000	8.070	5.000	7.782	10.000	8.135	0.300	7.992	100.000	7.339	20.000	7.490
4-Chlorotoluene	40.000	5.942	0.500	5.380	1.000	5.432	2.000	5.270	5.000	5.338	10.000	5.312	0.300		100.000	5.014	20.000	5.888
Benzene	40.000	3.264	0.500	3.794	1.000	3.421	2.000	3.325	5.000	3.252	10.000	3.225	0.300	4.103	100.000	2.966	20.000	3.126
Bromobenzene	40.000	2.268	0.500	2.209	1.000	2.300	2.000	2.247	5.000	2.267	10.000	2.263	0.300	2.362	100.000	2.090	20.000	2.226
Bromochloromethane	40.000	0.298	0.500	0.350	1.000	0.324	2.000	0.329	5.000	0.346	10.000	0.328	0.300	0.356	100.000	0.276	20.000	0.321
Bromodichloromethane	40.000	0.738	0.500	0.769	1.000	0.723	2.000	0.704	5.000	0.681	10.000	0.653	0.300		100.000	0.721	20.000	0.706
Bromomethane	40.000	0.524	0.500	0.177	1.000	0.188	2.000	0.207	5.000	0.313	10.000	0.346	0.300		100.000	0.576	20.000	0.417
Carbon Tetrachloride	40.000	1.267	0.500	1.160	1.000	1.118	2.000	1.091	5.000	1.076	10.000	1.097	0.300		100.000	1.267	20.000	1.139
Chloroethane	40.000	0.629	0.500	0.700	1.000	0.633	2.000	0.663	5.000	0.685	10.000	0.597	0.300		100.000	0.568	20.000	0.583
Cis-1,2-DCE	40.000	0.980	0.500	1.057	1.000	1.046	2.000	1.026	5.000	0.991	10.000	0.968	0.300		100.000	0.894	20.000	0.942
Cis-1,3-Dichloropropene	40.000	0.645	0.500	0.771	1.000	0.902	2.000	0.825	5.000	0.817	10.000	0.821	0.300		100.000	0.805	20.000	0.849
Dibromochloromethane	40.000	0.635	0.500	0.603	1.000	0.590	2.000	0.577	5.000	0.556	10.000	0.593	0.300		100.000	0.650	20.000	0.641
Dibromomethane	40.000	0.240	0.500	0.125	1.000	0.251	2.000	0.266	5.000	0.229	10.000	0.242	0.300		100.000	0.225	20.000	0.246
Dichlorodifluoromethane	40.000	0.599	0.500	0.968	1.000	0.853	2.000	0.870	5.000	0.825	10.000	0.769	0.300		100.000	0.866	20.000	0.785
Hexachlorobutadiene	40.000	1.924	0.500	1.379	1.000	1.262	2.000	1.276	5.000	1.213	10.000	1.229	0.300		100.000	1.261	20.000	1.206
Isopropylbenzene	40.000	10.242	0.500	9.383	1.000	9.218	2.000	9.220	5.000	9.463	10.000	9.552	0.300		100.000	9.644	20.000	9.394
m&p-Xylene	40.000	2.393	0.500	2.455	1.000	2.319	2.000	2.417	5.000	2.452	10.000	2.412	0.300		100.000	2.252	20.000	2.402
Methylene chloride	40.000	0.673	0.500	2.551	1.000	1.063	2.000	0.905	5.000	0.734	10.000	0.696	0.300		100.000	0.614	20.000	0.678
n-Butylbenzene	40.000	8.050	0.500	7.847	1.000	7.002	2.000	7.510	5.000	7.053	10.000	7.402	0.300		100.000	7.494	20.000	7.253
n-Propylbenzene	40.000	11.588	0.500	10.457	1.000	10.230	2.000	10.490	5.000	10.856	10.000	10.913	0.300	10.701	100.000	10.869	20.000	10.855
Naphthalene	40.000	2.718	0.500	3.226	1.000	2.957	2.000	2.806	5.000	2.723	10.000	2.626	0.300		100.000	2.549	20.000	2.642
o-Xylene	40.000	2.286	0.500	2.322	1.000	2.244	2.000	2.305	5.000	2.281	10.000	2.301	0.300		100.000	2.132	20.000	2.309
p-Isopropyltoluene	40.000	11.536	0.500	10.127	1.000	10.179	2.000	10.379	5.000	10.622	10.000	10.626	0.300		100.000	10.788	20.000	10.449
Sec-Butylbenzene	40.000	12.214	0.500	10.883	1.000	10.925	2.000	11.276	5.000	11.406	10.000	11.330	0.300		100.000	11.501	20.000	11.126
Styrene	40.000	0.334	0.500	0.152	1.000	0.316	2.000	0.319	5.000	0.326	10.000	0.306	0.300	0.354	100.000	0.336	20.000	0.331
TCE	40.000	0.946	0.500	0.971	1.000	0.909	2.000	0.959	5.000	0.937	10.000	0.886	0.300		100.000	0.892	20.000	0.876
Tert-Butylbenzene	40.000	10.620	0.500	9.856	1.000	9.496	2.000	9.552	5.000	9.796	10.000	9.939	0.300		100.000	9.931	20.000	9.706
Tetrachloroethene	40.000	1.145	0.500	1.354	1.000	1.160	2.000	1.216	5.000	1.147	10.000	1.113	0.300		100.000	1.128	20.000	1.103
Trans-1,2-DCE	40.000	0.991	0.500	1.055	1.000	1.066	2.000	1.017	5.000	0.966	10.000	0.949	0.300		100.000	0.932	20.000	0.936
Trans-1,3-Dichloropropene	40.000	0.582	0.500	0.670	1.000	0.579	2.000	0.596	5.000	0.590	10.000	0.585	0.300		100.000	0.568	20.000	0.591
Trichlorofluoromethane	40.000	1.298	0.500	1.274	1.000	1.207	2.000	1.269	5.000	1.014	10.000	1.148	0.300		100.000	1.323	20.000	1.139
1,2-DCA-D4(S)	40.000	0.428	0.500	0.486	1.000	0.465	2.000	0.447	5.000	0.413	10.000	0.415	0.300		100.000		20.000	0.422
4-Bromofluorobenzene(S)	40.000	1.134	0.500	1.145	1.000	1.242	2.000	1.193	5.000	1.186	10.000	1.450	0.300		100.000		20.000	1.187
Dibromofluoromethane(S)	40.000	0.731	0.500	0.769	1.000	0.728	2.000	0.735	5.000	0.704	10.000	0.721	0.300		100.000		20.000	0.718
Toluene-D8(S)	40.000	3.727	0.500	3.809	1.000	3.844	2.000	3.806	5.000	3.777	10.000	3.767	0.300		100.000		20.000	3.796

AFCEE
ORGANIC ANALYSES DATA SHEET 3
INITIAL MULTIPOINT CALIBRATION-GC/MS ANALYSIS

Analytical Method: EPA METHOD 8260B

AAB #: 040907AM-7 8969

Lab Name: APPL, Inc.

F4 rp 9-23-04
Contract #: F1624-01-D-8544, TO 00119
rp 9-3-04

Instrument ID: Max

Date of Initial Calibration: 7 Sep 04

Initial Calibration ID: M040907

Concentration Units (ug/L or mg/kg): ug/L

Analyte	% RSD	mean %RSD	r	COD	Q
1,1,1,2-Tetrachloroethane	4.0				
1,1,1-TCA	4.2				
1,1,2-TCA	10.7				
1,1-Dichloropropene	4.0				
1,2,3-Trichlorobenzene	15.0				
1,2,3-Trichloropropane	15.2		1.0000		
1,2,4-Trichlorobenzene	9.2				
1,2,4-Trimethylbenzene	3.1				
1,2-DCA	3.3				
1,2-DCB	4.7				
1,2-Dibromo-3-chloropropane	28.9		0.9990		
1,2-EDB	7.4				
1,3,5-Trimethylbenzene	3.6				
1,3-DCB	4.5				
1,3-Dichloropropane	7.1				
1,4-DCB	5.2				
1-Chlorohexane	3.1				
2,2-Dichloropropane	14.4				
2-Chlorotoluene	10.7				
4-Chlorotoluene	4.2				
Benzene	10.3				
Bromobenzene	3.4				
Bromochloromethane	7.9				
Bromodichloromethane	4.1				
Bromomethane	44.5		0.9970		
Carbon Tetrachloride	6.6				
Chloroethane	7.1				
Cis-1,2-DCE	5.6				
Cis-1,3-Dichloropropene	4.6				
Dibromochloromethane	5.4				
Dibromomethane	19.0		0.9990		
Dichlorodifluoromethane	12.6				
Hexachlorobutadiene	4.6				
Isopropylbenzene	3.5				
m&p-Xylene	2.9				
Methylene chloride	65.5		0.9990		
n-Butylbenzene	4.1				
n-Propylbenzene	3.6				
Naphthalene	7.5				
o-Xylene	2.7				
p-Isopropyltoluene	4.2				
Sec-Butylbenzene	3.6				
Styrene	19.5		1.0000		
TCE	3.6				
Tert-Butylbenzene	3.5				
Tetrachloroethene	7.0				
Trans-1,2-DCE	5.1				
Trans-1,3-Dichloropropene	5.3				
Trichlorofluoromethane	8.6				
1,2-DCA-D4(S)	6.2				
4-Bromofluorobenzene(S)	8.8				
Dibromofluoromethane(S)	2.7				
Toluene-D8(S)	2.0				

AFCEE
ORGANIC ANALYSES DATA SHEET 4
SECOND SOURCE CALIBRATION VERIFICATION

Analytical Method: EPA METHOD 8260B

AAB #: 040907AM-78969

Lab Name: APPL, Inc.

Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Max

Initial Calibration ID: M040907

2nd Source ID: 040907A LCS-1WM

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Expected	Found	%D	Q
1,1,1,2-Tetrachloroethane	10.00	11.05	10.5	
1,1,1-TCA	10.00	10.52	5.2	
1,1,2,2-Tetrachloroethane	10.00	10.01	0.1	
1,1,2-TCA	10.00	8.90	11.0	
1,1-DCA	10.00	10.25	2.5	
1,1-DCE	10.00	8.43	15.7	
1,1-Dichloropropene	10.00	10.28	2.8	
1,2,3-Trichlorobenzene	10.00	12.97	29.7	*
1,2,3-Trichloropropane	10.00	10.45	4.5	
1,2,4-Trichlorobenzene	10.00	12.03	20.3	
1,2,4-Trimethylbenzene	10.00	11.34	13.4	
1,2-DCA	10.00	10.21	2.1	
1,2-DCB	10.00	10.69	6.9	
1,2-Dibromo-3-chloroprops	10.00	12.19	21.9	
1,2-Dichloropropane	10.00	9.47	5.3	
1,2-EDB	10.00	10.79	7.9	
1,3,5-Trimethylbenzene	10.00	11.21	12.1	
1,3-DCB	10.00	11.07	10.7	
1,3-Dichloropropane	10.00	10.41	4.1	
1,4-DCB	10.00	10.71	7.1	
1-Chlorohexane	10.00	11.07	10.7	
2,2-Dichloropropane	10.00	9.15	8.5	
2-Chlorotoluene	10.00	11.74	17.4	
4-Chlorotoluene	10.00	11.90	19.0	
Benzene	10.00	9.04	9.6	
Bromobenzene	10.00	10.98	9.8	
Bromochloromethane	10.00	9.96	0.4	
Bromodichloromethane	10.00	9.60	4.0	
Bromoform	10.00	10.71	7.1	
Bromomethane	10.00	8.31	16.9	
Carbon Tetrachloride	10.00	10.84	8.4	
Chlorobenzene	10.00	10.21	2.1	
Chloroethane	10.00	8.80	12.0	
Chloroform	10.00	9.66	3.4	
Chloromethane	10.00	9.00	10.0	
Cis-1,2-DCE	10.00	9.11	8.9	
Cis-1,3-Dichloropropene	10.00	9.10	9.0	
Dibromochloromethane	10.00	10.39	3.9	
Dibromomethane	10.00	8.78	12.2	
Dichlorodifluoromethane	10.00	8.65	13.5	
Ethylbenzene	10.00	11.16	11.6	
Hexachlorobutadiene	10.00	13.89	38.9	*
Isopropylbenzene	10.00	12.10	21.0	

* Indicates the %D criteria was exceeded. TC 11/9/04

AFCEE
ORGANIC ANALYSES DATA SHEET 4
SECOND SOURCE CALIBRATION VERIFICATION

Analytical Method: EPA METHOD 8260B

AAB #: 040907AM-78969

Lab Name: APPL, Inc.

Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Max

Initial Calibration ID: M040907

2nd Source ID: 040907A LCS-1WM

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Expected	Found	%D	Q
m&p-Xylene	20.00	22.28	11.4	
Methylene chloride	10.00	9.21	7.9	
n-Butylbenzene	10.00	11.67	16.7	
n-Propylbenzene	10.00	12.16	21.6	
Naphthalene	10.00	11.61	16.1	
o-Xylene	10.00	10.62	6.2	
p-Isopropyltoluene	10.00	11.82	18.2	
Sec-Butylbenzene	10.00	11.72	17.2	
Styrene	10.00	11.14	11.3	
TCE	10.00	9.94	0.6	
Tert-Butylbenzene	10.00	11.76	17.6	
Tetrachloroethene	10.00	10.72	7.2	
Toluene	10.00	9.67	3.3	
Trans-1,2-DCE	10.00	9.30	7.0	
Trans-1,3-Dichloropropene	10.00	9.20	8.0	
Trichlorofluoromethane	10.00	10.15	1.5	
Vinyl chloride	10.00	8.72	12.8	

Comments:

AFCEE FORM O-4 Page ___ of _____

AFCEE
ORGANIC ANALYSES DATA SHEET 4
SECOND SOURCE CALIBRATION VERIFICATION

Analytical Method: EPA METHOD 8260B

AAB #: 040907AM-78969

Lab Name: APPL, Inc.

Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Max

Initial Calibration ID: M040907

2nd Source ID: 040907A LCSD-1WM

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Expected	Found	%D	Q
1,1,1,2-Tetrachloroethane	10.00	11.59	15.9	
1,1,1-TCA	10.00	10.72	7.2	
1,1,2,2-Tetrachloroethane	10.00	10.80	8.0	
1,1,2-TCA	10.00	8.65	13.5	
1,1-DCA	10.00	10.15	1.5	
1,1-DCE	10.00	8.41	15.9	
1,1-Dichloropropene	10.00	10.29	2.9	
1,2,3-Trichlorobenzene	10.00	10.72	7.2	
1,2,3-Trichloropropane	10.00	11.29	12.9	
1,2,4-Trichlorobenzene	10.00	10.82	8.2	
1,2,4-Trimethylbenzene	10.00	11.50	15.0	
1,2-DCA	10.00	10.57	5.7	
1,2-DCB	10.00	10.97	9.7	
1,2-Dibromo-3-chloroprop	10.00	10.44	4.4	
1,2-Dichloropropane	10.00	9.61	3.9	
1,2-EDB	10.00	11.06	10.6	
1,3,5-Trimethylbenzene	10.00	11.40	14.0	
1,3-DCB	10.00	11.20	12.0	
1,3-Dichloropropane	10.00	10.48	4.8	
1,4-DCB	10.00	11.13	11.3	
1-Chlorohexane	10.00	10.77	7.7	
2,2-Dichloropropane	10.00	7.61	23.9	
2-Chlorotoluene	10.00	11.96	19.6	
4-Chlorotoluene	10.00	12.39	23.9	
Benzene	10.00	9.00	10.0	
Bromobenzene	10.00	11.47	14.7	
Bromochloromethane	10.00	9.66	3.4	
Bromodichloromethane	10.00	9.74	2.6	
Bromoform	10.00	10.62	6.2	
Bromomethane	10.00	8.54	14.6	
Carbon Tetrachloride	10.00	10.52	5.2	
Chlorobenzene	10.00	10.34	3.4	
Chloroethane	10.00	8.91	10.9	
Chloroform	10.00	9.69	3.1	
Chloromethane	10.00	8.81	11.9	
Cis-1,2-DCE	10.00	9.09	9.1	
Cis-1,3-Dichloropropene	10.00	8.89	11.1	
Dibromochloromethane	10.00	10.98	9.8	
Dibromomethane	10.00	10.01	0.1	
Dichlorodifluoromethane	10.00	8.56	14.4	
Ethylbenzene	10.00	11.31	13.1	
Hexachlorobutadiene	10.00	12.11	21.1	
Isopropylbenzene	10.00	12.19	21.9	

AFCEE
ORGANIC ANALYSES DATA SHEET 4
SECOND SOURCE CALIBRATION VERIFICATION

Analytical Method: EPA METHOD 8260B

AAB #: 040907AM-78969

Lab Name: APPL, Inc.

Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Max

Initial Calibration ID: M040907

2nd Source ID: 040907A LCSD-1WM

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Expected	Found	%D	Q
m&p-Xylene	20.00	22.07	10.4	
Methylene chloride	10.00	9.84	1.6	
n-Butylbenzene	10.00	11.06	10.6	
n-Propylbenzene	10.00	12.09	20.9	
Naphthalene	10.00	9.88	1.2	
o-Xylene	10.00	10.70	7.0	
p-Isopropyltoluene	10.00	11.59	15.9	
Sec-Butylbenzene	10.00	11.71	17.1	
Styrene	10.00	10.98	9.8	
TCE	10.00	9.96	0.4	
Tert-Butylbenzene	10.00	11.83	18.3	
Tetrachloroethene	10.00	10.30	3.0	
Toluene	10.00	9.69	3.1	
Trans-1,2-DCE	10.00	9.33	6.7	
Trans-1,3-Dichloropropene	10.00	9.05	9.5	
Trichlorofluoromethane	10.00	9.94	0.6	
Vinyl chloride	10.00	9.17	8.3	

Comments:

AFCEE FORM O-4 Page ___ of ____

AFCEE
ORGANIC ANALYSES DATA SHEET 6
BLANK

Analytical Method: EPA 8260B
Lab Name: APPL, Inc
Concentration Units: ug/L
Initial Calibration ID: M040907

AAB #: 040907AM-78969
Contract #: F41624-01-D-8544, TO 0019
Method Blank ID: 040907AM-BLK1WM 10/23/04

Analyte	Method Blank	RL	Q
1,1,1,2-Tetrachloroethane	< RL	0.5	
1,1,1-TCA	< RL	0.8	
1,1,2,2-Tetrachloroethane	< RL	0.4	
1,1,2-TCA	< RL	1.0	
1,1-DCA	< RL	0.4	
1,1-DCE	< RL	1.2	
1,1-Dichloropropene	< RL	1.0	
1,2,3-Trichlorobenzene	< RL	0.3	
1,2,3-Trichloropropane	< RL	3.2	
1,2,4-Trichlorobenzene	< RL	0.4	
1,2,4-Trimethylbenzene	< RL	1.3	
1,2-DCA	< RL	0.6	
1,2-DCB	< RL	0.3	
1,2-Dibromo-3-chloropropane	< RL	2.6	
1,2-Dichloropropane	< RL	0.4	
1,2-EDB	< RL	0.6	
1,3,5-Trimethylbenzene	< RL	0.5	
1,3-DCB	< RL	1.2	
1,3-Dichloropropane	< RL	0.4	
1,4-DCB	< RL	0.3	
1-Chlorohexane	< RL	0.5	
2,2-Dichloropropane	< RL	3.5	
2-Chlorotoluene	< RL	0.4	
4-Chlorotoluene	< RL	0.6	
Benzene	< RL	0.4	
Bromobenzene	< RL	0.3	
Bromochloromethane	< RL	0.4	
Bromodichloromethane	< RL	0.8	
Bromoform	< RL	1.2	
Bromomethane	< RL	1.1	
Carbon tetrachloride	< RL	2.1	
Chlorobenzene	< RL	0.4	
Chloroethane	< RL	1.0	
Chloroform	< RL	0.3	
Chloromethane	< RL	1.3	
Cis-1,2-DCE	< RL	1.2	
Cis-1,3-Dichloropropene	< RL	1.0	
Dibromochloromethane	< RL	0.5	
Dibromomethane	< RL	2.4	
Dichlorodifluoromethane	< RL	1.0	
Ethylbenzene	< RL	0.6	

Comments: ARF: 45275, Sample: AP74821

AFCEE
ORGANIC ANALYSES DATA SHEET 6
BLANK

Analytical Method: EPA 8260B
Lab Name: APPL, Inc
Concentration Units: ug/L
Initial Calibration ID: M040907

AAB #: 040907AM-78969
Contract #: F41624-01-D-8544, TO 0019
Method Blank ID: 040907AM-BLK1WM 4F9/27/04

Analyte	Method Blank	RL	Q
Hexachlorobutadiene	< RL	1.1	
Isopropylbenzene	< RL	0.5	
m&p-Xylene	< RL	0.5	
Methylene chloride	< RL	1.0	
n-Butylbenzene	< RL	1.1	
n-Propylbenzene	< RL	0.4	
Naphthalene	< RL	0.4	
o-Xylene	< RL	1.1	
p-Isopropyltoluene	< RL	1.2	
Sec-Butylbenzene	< RL	1.3	
Styrene	< RL	0.4	
TCE	< RL	1.0	
Tert-Butylbenzene	< RL	1.4	
Tetrachloroethene	< RL	1.4	
Toluene	< RL	1.1	
Trans-1,2-DCE	< RL	0.6	
Trans-1,3-Dichloropropene	< RL	1.0	
Trichlorofluoromethane	< RL	0.8	
Vinyl chloride	< RL	1.1	

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	95.5	69-139	
4-Bromofluorobenzene(S)	100	75-125	
Dibromofluoromethane(S)	94.1	75-125	
Toluene-D8(S)	98.7	75-125	

Internal Std	Qualifier
1,4-Dichlorobenzene-D(IS)	
Chlorobenzene-D5(IS)	
Fluorobenzene(IS)	

Comments: ARF: 45275, Sample: AP74821

AFCEE
ORGANIC ANALYSES DATA SHEET 7
LABORATORY CONTROL SAMPLE

Analytical Method: EPA 8260B
Lab Name: APPL, Inc
LCS ID: 040907AM LCS-1WM LF a(23/0
Concentration Units: ug/L

AAB #: 040907AM-78969
Contract #: F41624-01-D-8544, TO 0019
Initial Calibration ID: M040907

Analyte	Expected	Found	% R	Control Limits	Q
1,1,1,2-Tetrachloroethane	10.00	11.05	111	72-125	
1,1,1-TCA	10.00	10.52	105	75-125	
1,1,2,2-Tetrachloroethane	10.00	10.01	100	74-125	
1,1,2-TCA	10.00	8.90	89.0	75-127	
1,1-DCA	10.00	10.25	103	72-125	
1,1-DCE	10.00	8.43	84.3	75-125	
1,1-Dichloropropene	10.00	10.28	103	75-125	
1,2,3-Trichlorobenzene	10.00	12.97	130	75-137	
1,2,3-Trichloropropane	10.00	10.45	105	75-125	
1,2,4-Trichlorobenzene	10.00	12.03	120	75-135	
1,2,4-Trimethylbenzene	10.00	11.34	113	75-125	
1,2-DCA	10.00	10.21	102	68-127	
1,2-DCB	10.00	10.69	107	75-125	
1,2-Dibromo-3-chloropropane	10.00	12.19	122	59-125	
1,2-Dichloropropane	10.00	9.47	94.7	70-125	
1,2-EDB	10.00	10.79	108	75-125	
1,3,5-Trimethylbenzene	10.00	11.21	112	72-112	
1,3-DCB	10.00	11.07	111	75-125	
1,3-Dichloropropane	10.00	10.41	104	75-125	
1,4-DCB	10.00	10.71	107	75-125	
1-Chlorohexane	10.00	11.07	111	75-125	
2,2-Dichloropropane	10.00	9.15	91.5	75-125	
2-Chlorotoluene	10.00	11.74	117	73-125	
4-Chlorotoluene	10.00	11.90	119	74-125	
Benzene	10.00	9.04	90.4	75-125	
Bromobenzene	10.00	10.98	110	75-125	
Bromochloromethane	10.00	9.96	99.6	73-125	
Bromodichloromethane	10.00	9.60	96.0	75-125	
Bromoform	10.00	10.71	107	75-125	
Bromomethane	10.00	8.31	83.1	72-125	
Carbon tetrachloride	10.00	10.84	108	62-125	
Chlorobenzene	10.00	10.21	102	75-125	
Chloroethane	10.00	8.80	88.0	65-125	
Chloroform	10.00	9.66	96.6	74-125	
Chloromethane	10.00	9.00	90.0	75-125	
Cis-1,2-DCE	10.00	9.11	91.1	75-125	
Cis-1,3-Dichloropropene	10.00	9.10	91.0	74-125	
Dibromochloromethane	10.00	10.39	104	73-125	
Dibromomethane	10.00	8.78	87.8	69-127	
Dichlorodifluoromethane	10.00	8.65	86.5	72-125	

Comments: ARF: 45275, Sample: AP74821

AFCEE
ORGANIC ANALYSES DATA SHEET 7
LABORATORY CONTROL SAMPLE

Analytical Method: EPA 8260B
Lab Name: APPL, Inc
LCS ID: 040907AM LCS-lwm 14 9/23/04
Concentration Units: ug/L

AAB #: 040907AM-78969
Contract #: F41624-01-D-8544, TO 0019
Initial Calibration ID: M040907

Analyte	Expected	Found	% R	Control Limits	Q
Ethylbenzene	10.00	11.16	112	75-125	
Hexachlorobutadiene	10.00	13.89	139	75-125	*
Isopropylbenzene	10.00	12.10	121	75-125	
m&p-Xylene	20.00	22.28	111	75-125	
Methylene chloride	10.00	9.21	92.1	75-125	
n-Butylbenzene	10.00	11.67	117	75-125	
n-Propylbenzene	10.00	12.16	122	75-125	
Naphthalene	10.00	11.61	116	75-125	
o-Xylene	10.00	10.62	106	75-125	
p-Isopropyltoluene	10.00	11.82	118	75-125	
Sec-Butylbenzene	10.00	11.72	117	75-125	
Styrene	10.00	11.13	111	75-125	
TCE	10.00	9.94	99.4	71-125	
Tert-Butylbenzene	10.00	11.76	118	75-125	
Tetrachloroethene	10.00	10.72	107	71-125	
Toluene	10.00	9.67	96.7	74-125	
Trans-1,2-DCE	10.00	9.30	93.0	75-125	
Trans-1,3-Dichloropropene	10.00	9.20	92.0	66-125	
Trichlorofluoromethane	10.00	10.15	102	67-125	
Vinyl chloride	10.00	8.72	87.2	46-134	

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	88.5	69-139	
4-Bromofluorobenzene(S)	100	75-125	
Dibromofluoromethane(S)	92.6	75-125	
Toluene-D8(S)	104	75-125	

Internal Std	Qualifier
1,4-Dichlorobenzene-D(IS)	
Chlorobenzene-D5(IS)	
Fluorobenzene(IS)	

Comments: ARF: 45275, Sample: AP74821

AFCEE
ORGANIC ANALYSES DATA SHEET 7
LABORATORY CONTROL SAMPLE DUPLICATE

Analytical Method: EPA 8260B
Lab Name: APPL, Inc
LCS ID: 040907AM LCSD - WM 4/23/07
Concentration Units: ug/L

AAB #: 040907AM-78969
Contract #: F41624-01-D-8544, TO 0019
Initial Calibration ID: M040907

Analyte	Expected	Found	% R	Control Limits	Q
1,1,1,2-Tetrachloroethane	10.00	11.59	116	72-125	
1,1,1-TCA	10.00	10.72	107	75-125	
1,1,2,2-Tetrachloroethane	10.00	10.80	108	74-125	
1,1,2-TCA	10.00	8.65	86.5	75-127	
1,1-DCA	10.00	10.15	102	72-125	
1,1-DCE	10.00	8.41	84.1	75-125	
1,1-Dichloropropene	10.00	10.29	103	75-125	
1,2,3-Trichlorobenzene	10.00	10.72	107	75-137	
1,2,3-Trichloropropane	10.00	11.29	113	75-125	
1,2,4-Trichlorobenzene	10.00	10.82	108	75-135	
1,2,4-Trimethylbenzene	10.00	11.50	115	75-125	
1,2-DCA	10.00	10.57	106	68-127	
1,2-DCB	10.00	10.97	110	75-125	
1,2-Dibromo-3-chloropropane	10.00	10.44	104	59-125	
1,2-Dichloropropane	10.00	9.61	96.1	70-125	
1,2-EDB	10.00	11.06	111	75-125	
1,3,5-Trimethylbenzene	10.00	11.40	114	72-112	*
1,3-DCB	10.00	11.20	112	75-125	
1,3-Dichloropropane	10.00	10.48	105	75-125	
1,4-DCB	10.00	11.13	111	75-125	
1-Chlorohexane	10.00	10.77	108	75-125	
2,2-Dichloropropane	10.00	7.61	76.1	75-125	
2-Chlorotoluene	10.00	11.96	120	73-125	
4-Chlorotoluene	10.00	12.39	124	74-125	
Benzene	10.00	9.00	90.0	75-125	
Bromobenzene	10.00	11.47	115	75-125	
Bromochloromethane	10.00	9.66	96.6	73-125	
Bromodichloromethane	10.00	9.74	97.4	75-125	
Bromoform	10.00	10.62	106	75-125	
Bromomethane	10.00	8.54	85.4	72-125	
Carbon tetrachloride	10.00	10.52	105	62-125	
Chlorobenzene	10.00	10.34	103	75-125	
Chloroethane	10.00	8.91	89.1	65-125	
Chloroform	10.00	9.69	96.9	74-125	
Chloromethane	10.00	8.81	88.1	75-125	
Cis-1,2-DCE	10.00	9.09	90.9	75-125	
Cis-1,3-Dichloropropene	10.00	8.89	88.9	74-125	
Dibromochloromethane	10.00	10.98	110	73-125	
Dibromomethane	10.00	10.01	100	69-127	
Dichlorodifluoromethane	10.00	8.56	85.6	72-125	

Comments: ARF: 45275, Sample: AP74821

AFCEE
ORGANIC ANALYSES DATA SHEET 7
LABORATORY CONTROL SAMPLE DUPLICATE

Analytical Method: EPA 8260B
Lab Name: APPL, Inc
LCS ID: 040907AM LCSD -1 wm LF 9/23/09
Concentration Units: ug/L

AAB #: 040907AM-78969
Contract #: F41624-01-D-8544, TO 0019
Initial Calibration ID: M040907

Analyte	Expected	Found	% R	Control Limits	Q
Ethylbenzene	10.00	11.31	113	75-125	
Hexachlorobutadiene	10.00	12.11	121	75-125	
Isopropylbenzene	10.00	12.19	122	75-125	
m&p-Xylene	20.00	22.07	110	75-125	
Methylene chloride	10.00	9.84	98.4	75-125	
n-Butylbenzene	10.00	11.06	111	75-125	
n-Propylbenzene	10.00	12.09	121	75-125	
Naphthalene	10.00	9.88	98.8	75-125	
o-Xylene	10.00	10.70	107	75-125	
p-Isopropyltoluene	10.00	11.59	116	75-125	
Sec-Butylbenzene	10.00	11.71	117	75-125	
Styrene	10.00	10.98	110	75-125	
TCE	10.00	9.96	99.6	71-125	
Tert-Butylbenzene	10.00	11.83	118	75-125	
Tetrachloroethene	10.00	10.30	103	71-125	
Toluene	10.00	9.69	96.9	74-125	
Trans-1,2-DCE	10.00	9.33	93.3	75-125	
Trans-1,3-Dichloropropene	10.00	9.05	90.5	66-125	
Trichlorofluoromethane	10.00	9.94	99.4	67-125	
Vinyl chloride	10.00	9.17	91.7	46-134	

Surrogate	Recovery	Control Limits	Qualifier
1,2-DCA-D4(S)	89.3	69-139	
4-Bromofluorobenzene(S)	101	75-125	
Dibromofluoromethane(S)	91.3	75-125	
Toluene-D8(S)	102	75-125	

Internal Std	Qualifier
1,4-Dichlorobenzene-D(IS)	
Chlorobenzene-D5(IS)	
Fluorobenzene(IS)	

Comments: ARF: 45275, Sample: AP74821

AFCEE
ORGANIC ANALYSES DATA SHEET 9
HOLDING TIMES

Analytical Method: EPA 8260B

AAB#: 040907AM-78969

Lab Name: APPL, Inc

Contract #: F41624-01-D-8544, TO 0019

Field Sample ID	Date Collected	Date Received	Date Extracted	Max. Holding Time Ext	Time Held Ext	Date Analyzed	Max. Holding Time A	Time Held Anal.	Q
BLDG 40 WASH	01-Sep-04	03-Sep-04	08-Sep-04			08-Sep-04	14	7	
TB-1	01-Sep-04	03-Sep-04	08-Sep-04			08-Sep-04	14	7	

Comments: ARF: 45275

AFCEE
ORGANIC ANALYSES DATA SHEET 10
INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method: EPA METHOD 8260B

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID #: Max ICAL ID: M040907

Field Sample ID/Std ID/ Blank ID/QC Sample ID	Date Analysis Started	Time Analysis Started	Date Analysis Completed	Time Analysis Completed
20ug/ml BFB Std 08-30-04AO	7-Sep-04	16:52	7-Sep-04	17:04
Vol Std 09-07-04AG@0.3ug/L	7-Sep-04	17:46	7-Sep-04	18:14
Vol Std 09-07-04AH@0.5ug/L	7-Sep-04	18:22	7-Sep-04	18:49
Vol Std 09-07-04AI@1.0ug/L	7-Sep-04	18:57	7-Sep-04	19:24
Vol Std 09-07-04AJ@2.0ug/L	7-Sep-04	19:32	7-Sep-04	19:59
Vol Std 09-07-04AK@5.0ug/L	7-Sep-04	20:06	7-Sep-04	20:34
Vol Std 09-07-04AL@10.0ug/L	7-Sep-04	20:41	7-Sep-04	21:08
Vol Std 09-07-04AM@20.0ug/L	7-Sep-04	21:16	7-Sep-04	21:43
Vol Std 09-07-04AN@40.0ug/L	7-Sep-04	21:50	7-Sep-04	22:18
Vol Std 09-07-04AO@100.0ug/L	7-Sep-04	22:24	7-Sep-04	22:52
040907A LCS-1WM (2nd source)	7-Sep-04	22:59	7-Sep-04	23:26
040907A LCSD-1WM (2nd source)	7-Sep-04	23:33	8-Sep-04	0:00
040907A BLK-1WM	8-Sep-04	00:07	8-Sep-04	0:34
AP74822 W01 (STAP bubble)	8-Sep-04	1:50	8-Sep-04	2:18
AP74821 W01 (STAP bubble)	8-Sep-04	2:25	8-Sep-04	2:53

Comments:

AFCEE FORM O-10 Page ___ of _____

Injection Log

Directory: m:\max\data\m040907

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0907M00T.D	1.	20ug/ml BFB Std 08-30-04AO	2ul	07 Sep 2004 16:52
2	1	0907M01S.D	1.	Instrument blank	Water 10mL w/IS: 08-18-04U	07 Sep 2004 17:11
3	2	0907M02S.D	1.	Vol Std 09-07-04AG@0.3ug/L	Water 10mL w/IS: 08-18-04U	07 Sep 2004 17:46
4	3	0907M03S.D	1.	Vol Std 09-07-04AH@0.5ug/L	Water 10mL w/IS: 08-18-04U	07 Sep 2004 18:22
5	4	0907M04S.D	1.	Vol Std 09-07-04AI@1.0ug/L	Water 10mL w/IS: 08-18-04U	07 Sep 2004 18:57
6	5	0907M05S.D	1.	Vol Std 09-07-04AJ@2.0ug/L	Water 10mL w/IS: 08-18-04U	07 Sep 2004 19:32
7	6	0907M06S.D	1.	Vol Std 09-07-04AK@5.0ug/L	Water 10mL w/IS: 08-18-04U	07 Sep 2004 20:06
8	7	0907M07S.D	1.	Vol Std 09-07-04AL@10.0ug/L	Water 10mL w/IS: 08-18-04U	07 Sep 2004 20:41
9	8	0907M08S.D	1.	Vol Std 09-07-04AM@20.0ug/L	Water 10mL w/IS: 08-18-04U	07 Sep 2004 21:16
10	9	0907M09S.D	1.	Vol Std 09-07-04AN@40.0ug/L	Water 10mL w/IS: 08-18-04U	07 Sep 2004 21:50
11	10	0907M10S.D	1.	Vol Std 09-07-04AO@100.0ug/L	Water 10mL w/IS: 08-18-04U	07 Sep 2004 22:24
12	11	0907M11S.D	1.	040907A LCS-1WM (2nd source)	Water 10mL w/ISS: 08-18-04V	07 Sep 2004 22:59
13	12	0907M12S.D	1.	040907A LCSD-1WM (2nd source)	Water 10mL w/ISS: 08-18-04V	07 Sep 2004 23:33
14	13	0907M13S.D	1.	040907A BLK-1WM	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 00:07
15	14	0907M14S.D	1.	040907A BLK-1WM	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 00:41
16	15	0907M15S.D	1.	AP74659 W02 (LTAP bubble)	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 01:15
17	16	0907M16S.D	1.	AP74822 W01 (STAP bubble)	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 01:50
18	17	0907M17S.D	1.	AP74821 W01 (STAP bubble)	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 02:25
19	18	0907M18S.D	1.	AP74657 W02	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 03:00
20	19	0907M19S.D	1.	AP74658 W02	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 03:34
21	20	0907M20S.D	1.	AP74668 W01	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 04:09
22	21	0907M21S.D	1.	AP74670 W01	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 04:43
23	22	0907M22S.D	1.	040907A LCS-2WM	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 05:17
24	23	0907M23S.D	1.	BLANK	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 05:51
25	1	0908M00T.D	1.	20ug/ml BFB Std 08-30-04AO	2ul	08 Sep 2004 14:48
26	1	0908M01S.D	1.	Vol Std 09-08-04C@10ug/L	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 15:07
27	2	0908M02S.D	1.	040908A LCS-1WM	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 15:43
28	3	0908M03S.D	1.	040908A LCSD-1WM	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 16:18
29	4	0908M04S.D	1.	040908A BLK-1WM	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 16:54
30	5	0908M05S.D	1.	040908A BLK-1WM	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 17:30
31	6	0908M06S.D	10.	AP74431 W02 - DF10	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 18:05
32	7	0908M07S.D	10.	AP74432 W02 - DF10	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 18:41
33	8	0908M08S.D	5.	AP74434 W02 - DF5	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 19:16
34	9	0908M09S.D	10.	AP74435 W02 - DF10	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 19:52
35	10	0908M10S.D	10.	AP74436 W02 - DF10	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 20:27
36	11	0908M11S.D	10.	AP74437 W02 - DF10	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 21:02
37	12	0908M12S.D	10.	AP74496 W02 - DF10	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 21:37
38	13	0908M13S.D	10.	AP74497 W02 - DF10	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 22:12
39	14	0908M14S.D	5.	AP74657 W02 - DF5	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 22:47
40	15	0908M15S.D	50.	AP73954 W11 - DF50	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 23:21
41	16	0908M16S.D	50.	AP73955 W11 - DF50	Water 10mL w/ISS: 08-18-04V	08 Sep 2004 23:56
42	17	0908M17S.D	1.	AP74907 W01 (LTAP bubble)	Water 10mL w/ISS: 08-18-04V	09 Sep 2004 00:30
43	18	0908M18S.D	1.	AP74936 W01	Water 10mL w/ISS: 08-18-04V	09 Sep 2004 01:05
44	19	0908M19S.D	1.	AP74937 W01 (STAP bubble)	Water 10mL w/ISS: 08-18-04V	09 Sep 2004 01:39
45	20	0908M20S.D	1.	AP74938 W01 (STAP bubble)	Water 10mL w/ISS: 08-18-04V	09 Sep 2004 02:13
46	21	0908M21S.D	1.	AP74866 W01	Water 10mL w/ISS: 08-18-04V	09 Sep 2004 02:48
47	22	0908M22S.D	1.	BLANK	Water 10mL w/ISS: 08-18-04V	09 Sep 2004 03:22
48	23	0908M23W.D	1.	20ug/ml BFB Std 08-30-04AO	2ul	09 Sep 2004 03:55
49	24	0908M24W.D	1.	Instrument Blank	Soils 5g w/IS: 08-18-04U	09 Sep 2004 04:25
50	25	0908M25W.D	1.	Vol Std 09-08-04@2.0ug/kg	Soils 5g w/IS: 08-18-04U	09 Sep 2004 05:00
51	26	0908M26W.D	1.	Vol Std 09-08-04@4.0ug/kg	Soils 5g w/IS: 08-18-04U	09 Sep 2004 05:34
52	27	0908M27W.D	1.	Vol Std 09-08-04@10ug/kg	Soils 5g w/IS: 08-18-04U	09 Sep 2004 06:08
53	28	0908M28W.D	1.	Vol Std 09-08-04@20ug/kg	Soils 5g w/IS: 08-18-04U	09 Sep 2004 06:42
54	29	0908M29W.D	1.	Vol Std 09-08-04@50ug/kg	Soils 5g w/IS: 08-18-04U	09 Sep 2004 07:17
55	30	0908M30W.D	1.	Vol Std 09-08-04@100ug/kg	Soils 5g w/IS: 08-18-04U	09 Sep 2004 07:52

AFCEE
ORGANIC ANALYSES DATA SHEET 11
INSTRUMENT PERFORMANCE CHECK
(BFB or DFTPP)

Analytical Method: EPA METHOD 8260B

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID: Max Compound: BFB Injection Date/Time: 7 Sep 04 16:52

Initial Calibration ID: M040907

Mass	Ion Abundance Criteria	% Relative Abundance	Q
50	14.95 - 40% of mass 95	19.1	PASS
75	30 - 60% of mass 95	34.8	PASS
95	100 - 100% of mass 95	100.0	PASS
96	5 - 9% of mass 95	6.8	PASS
173	0 - 2% of mass 174	0.7	PASS
174	50 - 100% of mass 95	93.3	PASS
175	5 - 9% of mass 174	7.3	PASS
176	95 - 101% of mass 174	97.2	PASS
177	5 - 9% of mass 176	6.4	PASS

AFCEE FORM O-11 Page ___ of ___

8A

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: F41624-01-D-8544, TO 0019

Lab Code: _____ SDG No.: 45275

Lab File ID (Standard): 0907M07S.D Date Analyzed: 7 Sep 04 20:41

Instrument ID: Max Time Analyzed: 7 Sep 04 20:41

GC Column: _____ ID: Heated Purge: (Y/N) _____

		Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	240448	11.50	210816	16.02	109536	19.88
	UPPER LIMIT	480896	12.00	421632	16.52	219072	20.38
	LOWER LIMIT	120224	11.00	105408	15.52	54768	19.38
	SAMPLE NO.						
01	040907A LCS-1WM	252416	11.50	197120	16.01	99648	19.88
02	040907A LCSD-1WM	259072	11.50	200448	16.02	99816	19.88
03	040907A BLK-1WM	249344	11.50	204224	16.02	105488	19.88
04	AP74822 W01 (STAP b	230336	11.50	189248	16.02	91312	19.88
05	AP74821 W01 (STAP b	233984	11.50	184832	16.02	94072	19.88
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

METALS
EPA SW846 - 6010B

APPL, INC.

METALS
EPA SW846 - 6010B
Forms

APPL, INC.

AFCEE
INORGANIC ANALYSES DATA PACKAGE

Analytical Method: EPA 6010B
Lab Name: APPL, Inc
Base/Command: CSSA

AAB #: 040909A-78981
Contract #: F41624-01-D-8544, TO 0019
Prime Contractor: Parsons Engineering Science, Inc.

Field Sample ID	Lab Sample ID
BLDG 40 WASH	AP74821

Comments: ARF: 45275

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Diane Anderson Name: DIANE ANDERSON

Date: 23 Sept 2004 Title: Project Manager

AFCEE
INORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: EPA 6010B Preparatory Method: 3010A AAB #: 040909A-78981
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: 040913
Date Received: 03-Sep-04 Date Prepared: 09-Sep-04 Date Analyzed: 13-Sep-04
Concentration Units: mg/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Barium (Ba)	0.0003	0.005	0.0431	1	
Chromium (Cr)	0.001	0.01	0.001	1	U
Copper (Cu)	0.003	0.01	0.155	1	
Nickel (Ni)	0.001	0.01	0.001	1	U
Zinc (Zn)	0.008	0.05	0.021	1	F

Comments: ARF: 45275

AFCEE
INORGANIC ANALYSES DATA SHEET 3
INITIAL MULTIPOINT CALIBRATION

Analytical Method: 6010B — AAB #: 040909A-78981

Lab Name: APPL, Inc. — Contract #: F41624-01-D-8544, TO 0019

Date of Initial Calibration: 13-Sep-04 — Initial Calibration ID: 040913

Instrument ID: PR ICAP — Concentration Units (mg/L or mg/kg) mg/L

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	r	Q
Ba	0.0050	847.0	1.0	154609.7	2.0	301676.6	1.0000	
Cr	0.0050	223.4	1.0	41764.7	2.0	81635.6	1.0000	
Cu	0.0050	1727.3	1.0	315720.7	2.0	626234.0	1.0000	
Ni	0.0050	144.4	1.0	24122.8	2.0	46264.9	0.9999	
Zn	0.0500	1955.8	1.0	34536.8	2.0	66204.5	0.9998	

r = correlation coefficient

Comments:

AFCEE FORM 1-3

~~857~~ 94
TC 10/28/04

AFCEE
INORGANIC ANALYSES DATA SHEET 4
CALIBRATION VERIFICATION

Analytical Method: 6010B

AAB #: 040909A-78981

Lab Name: APPL, Inc.

Contract #: F41624-01-D-8544, TO 0019

Instrument ID: PE ICAP

Initial Calibration ID: 040913

2nd Source ID: ICV 9/13/04 11:01

ICV ID: ICV 9/13/04 11:01

CCV #1 ID: CCV 9/13/04 11:~~26~~ 27
rp 9-22-04

CCV #2 ID: CCV 9/13/04 11:56

Concentration Units (mg/L or mg/kg): mg/L

Analyte	2nd Source Calibration Verification			Initial Calibration Verification			Continuing Calibration Verification					Q
	Expected	Found	%D	Expected	Found	%D	Expected	Found 1	%D	Found 2	%D	
Ba	1.0	1.005	0.5%	1.0	1.005	0.5%	1.0	1.032	3.2%	1.046	4.6%	
Cr	1.0	1.018	1.8%	1.0	1.018	1.8%	1.0	1.029	2.9%	1.041	4.1%	
Cu	1.0	1.018	1.8%	1.0	1.018	1.8%	1.0	1.021	2.1%	1.029	2.9%	
Ni	1.0	1.054	5.4%	1.0	1.054	5.4%	1.0	1.048	4.8%	1.065	6.5%	
Zn	1.0	1.050	5.0%	1.0	1.050	5.0%	1.0	1.054	5.4%	1.077	7.7%	

Comments:

AFCEE FORM I-4 Page ____ of ____

AFCEE
INORGANIC ANALYSES DATA SHEET 4
CALIBRATION VERIFICATION

Analytical Method: 6010B AAB #: 040909A-78981

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID: PE ICAP Initial Calibration ID: 040913

2nd Source ID: ICV 9/13/04 11:01 ICV ID: ICV 9/13/04 11:01

CCV #1 ID: CCV 9/13/04 12:32 CCV #2 ID:

Concentration Units (mg/L or mg/kg): mg/L

Analyte	2nd Source Calibration Verification			Initial Calibration Verification			Continuing Calibration Verification					Q
	Expected	Found	%D	Expected	Found	%D	Expected	Found 1	%D	Found 2	%D	
Ba	1.0	1.005	0.5%	1.0	1.005	0.5%	1.0	1.068	6.8%			
Cr	1.0	1.018	1.8%	1.0	1.018	1.8%	1.0	1.059	5.9%			
Cu	1.0	1.018	1.8%	1.0	1.018	1.8%	1.0	1.045	4.5%			
Ni	1.0	1.054	5.4%	1.0	1.054	5.4%	1.0	1.082	8.2%			
Zn	1.0	1.050	5.0%	1.0	1.050	5.0%	1.0	1.091	9.1%			

Comments:

AFCEE FORM I-4 Page ___ of ___

AFCEE
INORGANIC ANALYSES DATA SHEET 5
BLANKS

Analytical Method: 6010B AAB #: 040909A-78981

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Concentration Units (mg/L or mg/kg): mg/L

Initial Calibration Blank ID: ICB 9/13/04 11:23 Initial Calibration ID: 040913

CCB #1 ID: CCB 9/13/04 11:37 CCB #2 ID: CCB 9/13/04 12:02 CCB #3 ID: CCB 9/13/04 12:46

Method Blank ID: 040909A-BLK Initial Calibration ID: 040913

Analyte	Initial Calibration Blank	Continuing Calibration Blank			Method Blank	RL	Q
		1	2	3			
Ba	<RL	<RL	<RL	<RL	<RL	0.005	
Cr	<RL	<RL	<RL	<RL	<RL	0.01	
Cu	<RL	<RL	<RL	<RL	<RL	0.01	
Ni	<RL	<RL	<RL	<RL	<RL	0.01	
Zn	<RL	<RL	<RL	<RL	<RL	0.05	

Comments: _____

AFCEE FORM I-5 Page ___ of ___

AFCEE
INORGANIC ANALYSES DATA SHEET 6
LABORATORY CONTROL SAMPLE

Analytical Method: EPA 6010B
Lab Name: APPL, Inc
LCS ID: 040909A-LCS
Concentration Units: mg/L

AAB #: 040909A-78981
Contract #: F41624-01-D-8544, TO 0019
Initial Calibration ID: 040913

Analyte	Expected	Found	% R	Control Limits	Q
Barium (Ba)	0.2500	0.2700	108	75-125	
Chromium (Cr)	0.250	0.270	108	75-125	
Copper (Cu)	0.250	0.265	106	75-125	
Nickel (Ni)	0.250	0.273	109	75-125	
Zinc (Zn)	0.500	0.545	109	75-125	

Comments: ARF: 45275, Sample: AP74821

AFCEE
INORGANIC ANALYSES DATA SHEET 6
LABORATORY CONTROL SAMPLE DUPLICATE

Analytical Method: EPA 6010B
AAB #: 040909A-78981
Lab Name: APPL, Inc
Contract #: F41624-01-D-8544, TO 0019
LCS ID: 040909A-LCSD
Initial Calibration ID: 040913
Concentration Units: mg/L

Analyte	Expected	Found	% R	Control Limits	Q
Barium (Ba)	0.2500	0.2730	109	75-125	
Chromium (Cr)	0.250	0.273	109	75-125	
Copper (Cu)	0.250	0.269	108	75-125	
Nickel (Ni)	0.250	0.276	110	75-125	
Zinc (Zn)	0.500	0.551	110	75-125	

Comments: ARF: 45275, Sample: AP74821

AFCEE
INORGANIC ANALYSES DATA SHEET 8
HOLDING TIMES

Analytical Method: EPA 6010B AAB#: 040909A-78981

Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019

Field Sample ID	Date Collected	Date Received	Date Analyzed	Max. Holding Time (days)	Time Held (days)	Q
BLDG 40 WASH	01-Sep-04	03-Sep-04	13-Sep-04	180	12	

Comments: ARF: 45275

AFCEE
INORGANIC ANALYSES DATA SHEET 9
INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method: 6010B

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID #: PE ICAP ICAL ID: 040913

Field Sample ID/Std ID/ Blank ID/QC Sample ID	Date Analysis Started	Time Analysis Started	Date Analysis Completed	Time Analysis Completed
Calib Blank 1 040913 YV	13-Sep-04	10:40	13-Sep-04	10:40
STD 1 040913 YV	13-Sep-04	10:45	13-Sep-04	10:45
STD 2 040913 YV	13-Sep-04	10:50	13-Sep-04	10:50
STD 3 040913 YV	13-Sep-04	10:56	13-Sep-04	10:56
ICV 040913 YV (2nd Source)	13-Sep-04	11:01	13-Sep-04	11:01
ICB 040913 YV	13-Sep-04	11:23	13-Sep-04	11:23
CCV 040913 YV	13-Sep-04	11:27	13-Sep-04	11:27
CCB 040913 YV	13-Sep-04	11:37	13-Sep-04	11:37
ICSA 040913 YV	13-Sep-04	11:44	13-Sep-04	11:44
ICSAB 040913 YV	13-Sep-04	11:50	13-Sep-04	11:50
CCV 040913 YV	13-Sep-04	11:56	13-Sep-04	11:56
CCB 040913 YV	13-Sep-04	12:02	13-Sep-04	12:02
040909A-BLK	13-Sep-04	12:07	13-Sep-04	12:07
040909A-LCS	13-Sep-04	12:12	13-Sep-04	12:12
040909A-LCSD	13-Sep-04	12:19	13-Sep-04	12:19
AP74821W08	13-Sep-04	12:25	13-Sep-04	12:25
CCV 040913 YV	13-Sep-04	12:32	13-Sep-04	12:32
CCB 040913 YV	13-Sep-04	12:46	13-Sep-04	12:46

APPL, Inc.
Analysis listing PE ICAP
09/13/04

Sample ID	Date	Time	Batch ID	Diluted To Vol.
Calib Blank 1 040913 YV	9/13/04	10:40:18 AM		
STD 1 040913 YV	9/13/04	10:45:12 AM		
STD 2 040913 YV	9/13/04	10:50:01 AM		
STD 3 040913 YV	9/13/04	10:56:15 AM		
ICV 040913 YV (2nd source)	9/13/04	11:01:16 AM		
ICB 040913 YV	9/13/04	11:23:00 AM		
CCV 040913 YV	9/13/04	11:27:59 AM		
CCB 040913 YV	9/13/04	11:37:28 AM		
ICSA 040913 YV	9/13/04	11:44:54 AM		
ICSAB 040913 YV	9/13/04	11:50:44 AM		
CCV 040913 YV	9/13/04	11:56:44 AM		
CCB 040913 YV	9/13/04	12:02:37 PM		
040909A-BLK	9/13/04	12:07:22 PM	040909A-3010A	
040909A-LCS	9/13/04	12:12:30 PM	040909A-3010A	
040909A-LCSD	9/13/04	12:19:19 PM	040909A-3010A	
AP74821W08	9/13/04	12:25:50 PM	040909A-3010A	
CCV 040913 YV	9/13/04	12:32:38 PM		
CCB 040913 YV	9/13/04	12:46:27 PM		
~~AP73803S01-1/20~~	~~9/13/04~~	~~1:50:58 PM~~	~~040818A-3050B~~	~~20~~
~~AP73803S01-MS-1/20~~	~~9/13/04~~	~~1:54:53 PM~~	~~040818A-3050B~~	~~20~~
~~AP73803S01-MSD-1/20~~	~~9/13/04~~	~~1:59:22 PM~~	~~040818A-3050B~~	~~20~~
~~CCV 040907 YV~~	~~9/13/04~~	~~2:03:15 PM~~	-	-
~~CCB 040907 YV~~	~~9/13/04~~	~~2:11:53 PM~~	-	-

A.P.P.L. INC.
4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: A.P.P.L. INC. Contract: F41624-01-D-8544, TO 0019

ARF No.: 45275 SDG: 45275

ICP ID Number: PE ICAP ICS Source: Environmental Express

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A 11:44	Initial Found Sol. AB 11:50	%R
Aluminum	200000	200000	203200.0	205100.0	102.6
Barium		500	-0.4	504.1	100.8
Calcium	200000	200000	207200.0	209600.0	104.8
Chromium		500	0.4	495.2	99.0
Copper		500	4.7	523.3	104.7
Iron	200000	200000	189300.0	192800.0	96.4
Magnesium	200000	200000	206100.0	209400.0	104.7
Nickel		1000	-2.0	967.5	96.8
Zinc		1000	9.2	993.0	99.3

FORM IV - IN ILM02.0

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EPA SW846
7060A

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EPA SW846
7060A

AFCEE Forms

APPL, INC.

AFCEE
INORGANIC ANALYSES DATA PACKAGE

Analytical Method: SW 7060A
Lab Name: APPL, Inc
Base/Command: CSSA

AAB #: 040907A-78900
Contract #: F41624-01-D-8544, TO 0019
Prime Contractor: Parsons Engineering Science, Inc.

Field Sample ID	Lab Sample ID
BLDG 40 WASH	AP74821

Comments: ARF: 45275

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Diane Anderson Name: DIANE ANDERSON

Date: 23 Sept 2004 Title: Project Manager

AFCEE
INORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: SW 7060A Preparatory Method: 7060A AAB #: 040907A-78900
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 15 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: 040909
Date Received: 03-Sep-04 Date Prepared: 07-Sep-04 Date Analyzed: 09-Sep-04
Concentration Units: mg/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Arsenic (As)	0.0008	0.005	0.0008	1	U

Comments: ARF: 45275

AFCEE
INORGANIC ANALYSES DATA SHEET 3
INITIAL MULTIPOINT CALIBRATION

Analytical Method: 7060A

AAB #: 040907A-78900

Lab Name: APPL, Inc.

Contract #: F41624-01-D-8544, TO 0019

Date of Initial Calibration: 9-Sep-04

Initial Calibration ID: 040909

Instrument ID: PE SIMAA 6000 FURNACE

Concentration Units (mg/L or mg/kg): mg/L

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	r	Q
Arsenic(As)	0.0010	0.0029	0.0100	0.0327	0.0250	0.0792	0.9999	

r = correlation coefficient

Comments:

AFCEE FORM I-3

AFCEE
INORGANIC ANALYSES DATA SHEET 3
INITIAL MULTIPOINT CALIBRATION

Analytical Method: 7060A AAB #: 040907A-78900

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Date of Initial Calibration: 9-Sep-04 Initial Calibration ID: 040909

Instrument ID: PE SIMAA 6000 FURNACE Concentration Units (mg/L or mg/kg): mg/L

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	r	Q
Arsenic(As)	0.0500	0.1629					0.9999	

r = correlation coefficient

Comments:

AFCEE FORM I-3

AFCEE
INORGANIC ANALYSES DATA SHEET 4
CALIBRATION VERIFICATION

Analytical Method: 7060A AAB #: 040907A-78900

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID: PE SIMAA 6000 FURNACE Initial Calibration ID: 040909

2nd Source ID: ICV 9/9/04 10:15 ICV ID: ICV 9/9/04 10:15

CCV #1 ID: CCV 9/9/04 10:44 CCV #2 ID: CCV 11:37

Concentration Units (mg/L or mg/kg): mg/L

Analyte	2nd Source Calibration Verification			Initial Calibration Verification			Continuing Calibration Verification					Q
	Expected	Found	%D	Expected	Found	%D	Expected	Found 1	%D	Found 2	%D	
Arsenic(As)	0.025	0.0242	3.1%	0.025	0.0242	3.1%	0.025	0.0246	1.7%	0.0258	3.4%	

Comments:

AFCEE FORM I-4 Page ____ of ____

AFCEE
INORGANIC ANALYSES DATA SHEET 5
BLANKS

Analytical Method: 7060A AAB #: 040907A-78900

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Concentration Units (mg/L or mg/kg): mg/L

Initial Calibration Blank ID: ICB 9/9/04 10:20 Initial Calibration ID: 040909

CCB #1 ID: CCB 9/9/04 10:49 CCB #2 ID: CCB 9/09/04 11:42 CCB #3 ID:

Method Blank ID: 040907A-BLK Initial Calibration ID: 040909

Analyte	Initial Calibration Blank	Continuing Calibration Blank			Method Blank	RL	Q
		1	2	3			
Arsenic(As)	<RL	<RL	<RL		<RL	0.005	

Comments:

AFCEE FORM I-5 Page ___ of ___

AFCEE
INORGANIC ANALYSES DATA SHEET 6
LABORATORY CONTROL SAMPLE

Analytical Method: SW 7060A
Lab Name: APPL, Inc
LCS ID: 040907A LCS
Concentration Units: mg/L

AAB #: 040907A-78900
Contract #: F41624-01-D-8544, TO 0019
Initial Calibration ID: 040909

Analyte	Expected	Found	% R	Control Limits	Q
Arsenic (As)	0.0250	0.0258	103	74-120	

Comments: ARF: 45275, Sample: AP74821

AFCEE
INORGANIC ANALYSES DATA SHEET 6
LABORATORY CONTROL SAMPLE DUPLICATE

Analytical Method: SW 7060A
AAB #: 040907A-78900
Lab Name: APPL, Inc
Contract #: F41624-01-D-8544, TO 0019
LCS ID: 040907A LCS D
Initial Calibration ID: 040909
Concentration Units: mg/L rpg-22-04

Analyte	Expected	Found	% R	Control Limits	Q
Arsenic (As)	0.0250	0.0256	102	74-120	

Comments: ARF: 45275, Sample: AP74821

AFCEE
INORGANIC ANALYSES DATA SHEET 8
HOLDING TIMES

Analytical Method: SW 7060A AAB#: 040907A-78900

Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019

Field Sample ID	Date Collected	Date Received	Date Analyzed	Max. Holding Time (days)	Time Held (days)	Q
BLDG 40 WASH	01-Sep-04	03-Sep-04	09-Sep-04	180	8	

Comments: ARF: 45275

AFCEE
INORGANIC ANALYSES DATA SHEET 9
INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method: 7060A Initial Calibration ID: 040909

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID #: PE SIMAA 6000 FURNACE

Field Sample ID/Std ID/ Blank ID/QC Sample ID	Date Analysis Started	Time Analysis Started	Date Analysis Completed	Time Analysis Completed
Calib Blank	09-Sep-04	9:46	09-Sep-04	9:46
STD. 1	09-Sep-04	9:51	09-Sep-04	9:51
STD. 2	09-Sep-04	9:56	09-Sep-04	9:56
STD. 3	09-Sep-04	10:01	09-Sep-04	10:01
STD. 4	09-Sep-04	10:06	09-Sep-04	10:06
ICV (2nd Source)	09-Sep-04	10:15	09-Sep-04	10:15
ICB	09-Sep-04	10:20	09-Sep-04	10:20
CCV	09-Sep-04	10:44	09-Sep-04	10:44
CCB	09-Sep-04	10:49	09-Sep-04	10:49
040907A-BLK	09-Sep-04	10:58	09-Sep-04	10:58
040907A-LCS	09-Sep-04	11:03	09-Sep-04	11:03
040907A-LCSD	09-Sep-04	11:08	09-Sep-04	11:08
AP74821W08	09-Sep-04	11:13	09-Sep-04	11:13
CCV	09-Sep-04	11:37	09-Sep-04	11:37
CCB	09-Sep-04	11:42	09-Sep-04	11:42

Sample_ID	EL	Sam_Date	Sam_Time	Mean_SA	Batch_ID
Calib Blank	As	9/9/04	9:46:38		
STD. 1 9-9-04 SV	As	9/9/04	9:51:28		
STD. 2 Mod. Lot #320214	As	9/9/04	9:56:29		
STD. 3	As	9/9/04	10:01:34		
STD. 4	As	9/9/04	10:06:14		
ICV 9-9-04 SV (2nd Source)	As	9/9/04	10:15:51	24.2320601	
ICB 9-9-04 SV	As	9/9/04	10:20:33	-0.0613997	
CCV 9-9-04 SV	As	9/9/04	10:44:24	24.574024	
CCB 9-9-04 SV	As	9/9/04	10:49:08	-0.1973147	
~~AP74020W02~~	~~As~~	~~9/9/04~~	~~10:53:55~~	~~-0.5230157~~	~~040907A-7060A~~
040907A-BLK	As	9/9/04	10:58:41	-0.2351047	040907A-7060A
040907A-LCS	As	9/9/04	11:03:32	25.75911	040907A-7060A
040907A-LCSD	As	9/9/04	11:08:20	25.6548441	040907A-7060A
AP74821W08	As	9/9/04	11:13:10	0.44467731	040907A-7060A
~~AP74821W08-1/5~~	~~As~~	~~9/9/04~~	~~11:17:59~~	~~0.10478309~~	~~040907A-7060A~~
~~AP74821W08-A~~	~~As~~	~~9/9/04~~	~~11:22:54~~	~~28.1084763~~	~~040907A-7060A~~
~~MDL-1~~	~~As~~	~~9/9/04~~	~~11:27:48~~	~~1.02730665~~	~~040907A-7060A~~
~~MDL-2~~	~~As~~	~~9/9/04~~	~~11:32:42~~	~~0.85063709~~	~~040907A-7060A~~
CCV 9-9-04 SV	As	9/9/04	11:37:28	25.8418864	
CCB 9-9-04 SV	As	9/9/04	11:42:13	-0.1294647	

METALS
EPA SW846
7131

APPL, INC.

METALS
EPA SW846
7131
AFCEE Forms

APPL, INC.

AFCEE
INORGANIC ANALYSES DATA PACKAGE

Analytical Method: SW 7131A
Lab Name: APPL, Inc
Base/Command: CSSA

AAB #: 040908A-78954
Contract #: F41624-01-D-8544, TO 0019
Prime Contractor: Parsons Engineering Science, Inc.

Field Sample ID	Lab Sample ID
BLDG 40 WASH	AP74821

Comments: ARF: 45275

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Diane Anderson Name: DIANE ANDERSON

Date: 23 Sept 2004 Title: Project Manager

AFCEE
INORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: SW 7131A Preparatory Method: 3020A AAB #: 040908A-78954
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: 040911
Date Received: 03-Sep-04 Date Prepared: 08-Sep-04 Date Analyzed: 11-Sep-04
Concentration Units: mg/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Cadmium (Cd)	0.0001	0.001	0.0001	1	U

Comments: ARF: 45275

AFCEE
INORGANIC ANALYSES DATA SHEET 3
INITIAL MULTIPOINT CALIBRATION

Analytical Method: 7131 AAB #: 040908A-78954

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Date of Initial Calibration: 11-Sep-04 Initial Calibration ID: 040911

Instrument ID: PE SIMAA 6000 FURNACE Concentration Units (mg/L or mg/kg): mg/L

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	r	Q
Cadmium (Cd)	0.0001	0.0036	0.0006	0.0301	0.0015	0.0622	0.9985	

r = correlation coefficient

Comments:

AFCEE FORM I-3

AFCEE
INORGANIC ANALYSES DATA SHEET 3
INITIAL MULTIPOINT CALIBRATION

Analytical Method: 7131 AAB #: 040908A-78954

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Date of Initial Calibration: 11-Sep-04 Initial Calibration ID: 040911

Instrument ID: PE SIMAA 6000 FURNACE Concentration Units (mg/L or mg/kg): mg/L

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	r	Q
Cadmium (Cd)	0.0030	0.1315					0.9985	

r = correlation coefficient

Comments:

AFCEE FORM I-3

AFCEE
INORGANIC ANALYSES DATA SHEET 4
CALIBRATION VERIFICATION

Analytical Method: 7131 AAB #: 040908A-78954

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID: PE SIMAA 6000 FURNACE Initial Calibration ID: 040911

2nd Source ID: ICV 9/11/04 16:01 ICV ID: ICV 9/11/04 16:01

CCV #1 ID: CCV 9/11/04 16:11 CCV #2 ID: CCV 9/11/04 16:43

Concentration Units (mg/L or mg/kg): mg/L

Analyte	2nd Source Calibration Verification			Initial Calibration Verification			Continuing Calibration Verification					Q
	Expected	Found	%D	Expected	Found	%D	Expected	Found 1	%D	Found 2	%D	
Cadmium (Cd)	0.0015	0.00149	0.5%	0.0015	0.00149	0.5%	0.0015	0.00146	2.8%	0.00149	0.8%	

Comments:

AFCEE FORM I-4 Page ___ of ___

AFCEE
INORGANIC ANALYSES DATA SHEET 5
BLANKS

Analytical Method: 7131 AAB #: 040908A-78954

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Concentration Units (mg/L or mg/kg): mg/L

Initial Calibration Blank ID: ICB 9/11/04 16:06 Initial Calibration ID: 040911

CCB #1 ID: CCB 9/11/04 16:15 CCB #2 ID: CCB 9/11/04 16:47 CCB #3 ID:

Method Blank ID: 040908A-BLK Initial Calibration ID: 040911

Analyte	Initial Calibration Blank	Continuing Calibration Blank			Method Blank	RL	Q
		1	2	3			
Cadmium (Cd)	<RL	<RL	<RL		<RL	0.001	

Comments:

AFCEE FORM I-5 Page ___ of ___

AFCEE
INORGANIC ANALYSES DATA SHEET 6
LABORATORY CONTROL SAMPLE

Analytical Method: SW 7131A
Lab Name: APPL, Inc
LCS ID: 040908A LCS
Concentration Units: mg/L

AAB #: 040908A-78954
Contract #: F41624-01-D-8544, TO 0019
Initial Calibration ID: 040911

Analyte	Expected	Found	% R	Control Limits	Q
Cadmium (Cd)	0.0015	0.0016	107	80-122	

Comments: ARF: 45275, Sample: AP74821

AFCEE
INORGANIC ANALYSES DATA SHEET 6
LABORATORY CONTROL SAMPLE DUPLICATE

Analytical Method: SW 7131A
Lab Name: APPL, Inc
LCS ID: 040908A LCSD
Concentration Units: mg/L

AAB #: 040908A-78954
Contract #: F41624-01-D-8544, TO 0019
Initial Calibration ID: 040911

Analyte	Expected	Found	% R	Control Limits	Q
Cadmium (Cd)	0.0015	0.0015	100	80-122	

Comments: ARF: 45275, Sample: AP74821

AFCEE
INORGANIC ANALYSES DATA SHEET 8
HOLDING TIMES

Analytical Method: SW 7131A AAB#: 040908A-78954

Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019

Field Sample ID	Date Collected	Date Received	Date Analyzed	Max. Holding Time (days)	Time Held (days)	Q
BLDG 40 WASH	01-Sep-04	03-Sep-04	11-Sep-04	180	10	

Comments: ARF: 45275

AFCEE
INORGANIC ANALYSES DATA SHEET 9
INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method: 7131 Initial Calibration ID: 040911

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID #: PE SIMAA 6000 FURNACE

Field Sample ID/Std ID/ Blank ID/QC Sample ID	Date Analysis Started	Time Analysis Started	Date Analysis Completed	Time Analysis Completed
Calib Blank	11-Sep-04	15:36	11-Sep-04	15:36
STD. 1	11-Sep-04	15:41	11-Sep-04	15:41
STD. 2	11-Sep-04	15:46	11-Sep-04	15:46
STD. 3	11-Sep-04	15:50	11-Sep-04	15:50
STD. 4	11-Sep-04	15:55	11-Sep-04	15:55
ICV (2nd source)	11-Sep-04	16:01	11-Sep-04	16:01
ICB	11-Sep-04	16:06	11-Sep-04	16:06
CCV	11-Sep-04	16:11	11-Sep-04	16:11
CCB	11-Sep-04	16:15	11-Sep-04	16:15
040908A-BLK	11-Sep-04	16:20	11-Sep-04	16:20
040908A-LCS	11-Sep-04	16:24	11-Sep-04	16:24
040908A-LCSD	11-Sep-04	16:29	11-Sep-04	16:29
AP74821W08	11-Sep-04	16:34	11-Sep-04	16:34
CCV	11-Sep-04	16:43	11-Sep-04	16:43
CCB	11-Sep-04	16:47	11-Sep-04	16:47

Sample_ID	EL	Sam_Date	Sam_Time	Mean_SA	Batch_ID
Calib Blank	Cd	9/11/04	15:36:43		
STD. 1 9-11-04 SV	Cd	9/11/04	15:41:24		
STD. 2 MOD.LOT #320214	Cd	9/11/04	15:46:16		
STD. 3	Cd	9/11/04	15:50:52		
STD. 4	Cd	9/11/04	15:55:24		
ICV 9-11-04 SV (2nd source)	Cd	9/11/04	16:01:52	1.49277899	
ICB 9-11-04 SV	Cd	9/11/04	16:06:29	0.00666509	
CCV 9-11-04 SV	Cd	9/11/04	16:11:04	1.45789446	
CCB 9-11-04 SV	Cd	9/11/04	16:15:40	0.02343899	
040908A-BLK	Cd	9/11/04	16:20:15	-0.0114039	040908A-3020A
040908A-LCS	Cd	9/11/04	16:24:50	1.57366121	040908A-3020A
040908A-LCSD	Cd	9/11/04	16:29:27	1.4856075	040908A-3020A
AP74821W08	Cd	9/11/04	16:34:06	-0.002233	040908A-3020A
CCV 9-11-04 SV	Cd	9/11/04	16:43:21	1.48811232	
CCB 9-11-04 SV	Cd	9/11/04	16:47:55	-0.0140665	

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7421

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INORGANIC ANALYSES DATA PACKAGE

Analytical Method: SW 7421
Lab Name: APPL, Inc
Base/Command: CSSA

AAB #: 040908A-78955
Contract #: F41624-01-D-8544, TO 0019
Prime Contractor: Parsons Engineering Science, Inc.

Field Sample ID	Lab Sample ID
BLDG 40 WASH	AP74821

Comments: ARF: 45275

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Diane Anderson Name: DIANE ANDERSON

Date: 23 Sept 2004 Title: Project Manager

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INORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: SW 7421 Preparatory Method: 3020A AAB #: 040908A-78955
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: 040911
Date Received: 03-Sep-04 Date Prepared: 08-Sep-04 Date Analyzed: 11-Sep-04
Concentration Units: mg/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Lead (Pb)	0.0008	0.005	0.0065	1	

Comments: ARF: 45275

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INORGANIC ANALYSES DATA SHEET 3
INITIAL MULTIPOINT CALIBRATION

Analytical Method: 7421 AAB #: 040908A-78955

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Date of Initial Calibration: 11-Sep-04 Initial Calibration ID: 40911

Instrument ID: PE SIMAA 6000 FURNACE Concentration Units (mg/L or mg/kg): mg/L

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	r	Q
Lead(Pb)	0.0010	0.0036	0.0100	0.0283	0.0250	0.0674	0.9994	

r = correlation coefficient

Comments:

AFCEE FORM I-3

AFCEE
INORGANIC ANALYSES DATA SHEET 3
INITIAL MULTIPOINT CALIBRATION

Analytical Method: 7421 AAB #: 040908A-78955

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Date of Initial Calibration: 11-Sep-04 Initial Calibration ID: 40911

Instrument ID: PE SIMAA 6000 FURNACE Concentration Units (mg/L or mg/kg): mg/L

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	r	Q
Lead(Pb)	0.0500	0.1425					0.9994	

r = correlation coefficient

Comments:

AFCEE FORM I-3

AFCEE
INORGANIC ANALYSES DATA SHEET 4
CALIBRATION VERIFICATION

Analytical Method: 7421 AAB #: 040908A-78955

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID: PE SIMAA 6000 FURNACE Initial Calibration ID: 40911

2nd Source ID: ICV 9/11/04 11:02 ICV ID: ICV 9/11/04 11:02

CCV #1 ID: CCV 9/11/04 11:13 CCV #2 ID: CCV 9/11/04 12:15

Concentration Units (mg/L or mg/kg): mg/L

Analyte	2nd Source Calibration Verification			Initial Calibration Verification			Continuing Calibration Verification					Q
	Expected	Found	%D	Expected	Found	%D	Expected	Found 1	%D	Found 2	%D	
Lead(Pb)	0.025	0.025265	1.1%	0.025	0.025265	1.1%	0.025	0.024088	3.6%	0.025328	1.3%	

Comments:

AFCEE FORM I-4 Page ____ of ____

AFCEE
INORGANIC ANALYSES DATA SHEET 5
BLANKS

Analytical Method: 7421 AAB #: 040908A-78955

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Concentration Units (mg/L or mg/kg): mg/L

Initial Calibration Blank ID: ICB 9/11/04 11:07 Initial Calibration ID: 40911

CCB #1 ID: CCB 9/11/04 11:18 CCB #2 ID: CCB 9/11/04 12:25 CCB #3 ID:

Method Blank ID: 040908A-BLK Initial Calibration ID: 40911

Analyte	Initial Calibration Blank	Continuing Calibration Blank			Method Blank	RL	Q
		1	2	3			
Lead(Pb)	<RL	<RL	<RL		<RL	0.005	

Comments:

AFCEE FORM I-5 Page ___ of ___

AFCEE
INORGANIC ANALYSES DATA SHEET 6
LABORATORY CONTROL SAMPLE

Analytical Method: SW 7421
Lab Name: APPL, Inc
LCS ID: 040908A LCS
Concentration Units: mg/L

AAB #: 040908A-78955
Contract #: F41624-01-D-8544, TO 0019
Initial Calibration ID: 040911

Analyte	Expected	Found	% R	Control Limits	Q
Lead (Pb)	0.0250	0.0240	96.0	74-124	

Comments: ARF: 45275, Sample: AP74821

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INORGANIC ANALYSES DATA SHEET 6
LABORATORY CONTROL SAMPLE DUPLICATE

Analytical Method: SW 7421
Lab Name: APPL, Inc
LCS ID: 040908A LCSD
rp 9-22-04
Concentration Units: mg/L

AAB #: 040908A-78955
Contract #: F41624-01-D-8544, TO 0019
Initial Calibration ID: 040911

Analyte	Expected	Found	% R	Control Limits	Q
Lead (Pb)	0.0250	0.0248	99.2	74-124	

Comments: ARF: 45275, Sample: AP74821

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INORGANIC ANALYSES DATA SHEET 8
HOLDING TIMES

Analytical Method: SW 7421 AAB#: 040908A-78955

Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019

Field Sample ID	Date Collected	Date Received	Date Analyzed	Max. Holding Time (days)	Time Held (days)	Q
BLDG 40 WASH	01-Sep-04	03-Sep-04	11-Sep-04	180	10	

Comments: ARF: 45275

AFCEE
INORGANIC ANALYSES DATA SHEET 9
INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method: 7421 Initial Calibration ID: 40911

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID #: PE SIMAA 6000 FURNACE

Field Sample ID/Std ID/ Blank ID/QC Sample ID	Date Analysis Started	Time Analysis Started	Date Analysis Completed	Time Analysis Completed
Calib Blank	11-Sep-04	10:36	11-Sep-04	10:36
STD. 1	11-Sep-04	10:41	11-Sep-04	10:41
STD. 2	11-Sep-04	10:46	11-Sep-04	10:46
STD. 3	11-Sep-04	10:51	11-Sep-04	10:51
STD. 4	11-Sep-04	10:56	11-Sep-04	10:56
ICV (2nd source)	11-Sep-04	11:02	11-Sep-04	11:02
ICB	11-Sep-04	11:07	11-Sep-04	11:07
CCV	11-Sep-04	11:13	11-Sep-04	11:13
CCB	11-Sep-04	11:18	11-Sep-04	11:18
040908A-BLK	11-Sep-04	11:31	11-Sep-04	11:31
040908A-LCS	11-Sep-04	11:36	11-Sep-04	11:36
040908A-LCSD	11-Sep-04	11:41	11-Sep-04	11:41
AP74821W08	11-Sep-04	12:05	11-Sep-04	12:05
CCV	11-Sep-04	12:15	11-Sep-04	12:15
CCB	11-Sep-04	12:25	11-Sep-04	12:25

Sample_ID	EL	Sam_Date	Sam_Time	Mean_SA	Batch_ID
Calib Blank	Pb	9/11/04	10:36:36		
STD. 1 09-11-04 SV	Pb	9/11/04	10:41:33		
STD. 2 MOD#320214	Pb	9/11/04	10:46:40		
STD. 3	Pb	9/11/04	10:51:46		
STD. 4	Pb	9/11/04	10:56:33		
ICV 09-11-04 SV (2nd source)	Pb	9/11/04	11:02:30	25.2651943	
ICB 09-11-04 SV	Pb	9/11/04	11:07:52	0.04865586	
CCV 09-11-04 SV	Pb	9/11/04	11:13:15	24.0877207	
CCB 09-11-04 SV	Pb	9/11/04	11:18:39	0.07258358	
040908A-BLK	Pb	9/11/04	11:31:57	-0.0463768	040908A-3020A
040908A-LCS	Pb	9/11/04	11:36:47	24.0272752	040908A-3020A
040908A-LCSD	Pb	9/11/04	11:41:37	24.7997976	040908A-3020A
AP74821W08	Pb	9/11/04	12:05:10	6.53427462	040908A-3020A
CCV 09-11-04 SV	Pb	9/11/04	12:15:32	25.3279892	
CCB 09-11-04 SV	Pb	9/11/04	12:25:46	-0.0788938	

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INORGANIC ANALYSES DATA PACKAGE

Analytical Method: SW 7470A
Lab Name: APPL, Inc
Base/Command: CSSA

AAB #: 040908A-78892
Contract #: F41624-01-D-8544, TO 0019
Prime Contractor: Parsons Engineering Science, Inc.

Field Sample ID	Lab Sample ID
BLDG 40 WASH	AP74821

Comments: ARF: 45275

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Diane Anderson Name: DIANE ANDERSON

Date: 23 Sept 2004 Title: Project Manager

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INORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: SW 7470A Preparatory Method: 7470A AAB #: 040908A-78892
Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019
Field Sample ID: BLDG 40 WASH Lab Sample ID: AP74821 Matrix: Water
% Solids: NA Initial Calibration ID: 040909
Date Received: 03-Sep-04 Date Prepared: 08-Sep-04 Date Analyzed: 09-Sep-04
Concentration Units: mg/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Mercury (Hg)	0.0001	0.001	0.0001	1	U

Comments: ARF: 45275

AFCEE
INORGANIC ANALYSES DATA SHEET 3
MERCURY INITIAL MULTIPOINT CALIBRATION

Analytical Method: 7470A
AAB #: 040908A-78892
Lab Name: APPL, Inc
Contract #: F41624-01-D-8544, TO 0019
Instrument ID: PE300
Date of Initial Calibration: 9-Sep-04
Initial Calibration ID: 040909
Concentration Units (mg/L or mg/kg): mg/L

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	Std 4	RF 4	Std 5	RF 5	r	Q
Mercury	0.0002	0.002	0.0005	0.006	0.0010	0.011	0.0020	0.021	0.0050	0.049	0.99993	

r = correlation coefficient

Comments:

AFCEE FORM I-3A

AFCEE
INORGANIC ANALYSES DATA SHEET 3
MERCURY INITIAL MULTIPOINT CALIBRATION

Analytical Method: 7470A AAB #: 040908A-78892

Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019

Instrument ID: PE300 Date of Initial Calibration: 9-Sep-04

Initial Calibration ID: 040909 Concentration Units (mg/L or mg/kg): mg/L

Analyte	Std 6	RF 6									r	Q
Mercury	0.0100	0.098									0.99993	

r = correlation coefficient

Comments:

AFCEE FORM I-3A

AFCEE
INORGANIC ANALYSES DATA SHEET 4
CALIBRATION VERIFICATION

Analytical Method: 7470A
AAB #: 040908A-78892
Lab Name: APPL, Inc.
Contract #: F41624-01-D-8544, TO 0019
Instrument ID: PE300
Initial Calibration ID: 040909
2nd Source ID: ICV 9/9/04 9:45
ICV ID: ICV 9/9/04 9:45
CCV #1 ID: CCV 9/9/04 9:48
CCV #2 ID: CCV 9/9/04 9:57
Concentration Units (mg/L or mg/kg): mg/L

Analyte	2nd Source Calibration Verification			Initial Calibration Verification			Continuing Calibration Verification					Q
	Expected	Found	%D	Expected	Found	%D	Expected	Found 1	%D	Found 2	%D	
Mercury (Hg)	0.00400	0.00410	2.6%	0.00400	0.00410	2.6%	0.005000	0.00490	2.1%	0.00497	0.7%	

Comments:

AFCEE FORM I-4 Page ___ of ___

AFCEE
INORGANIC ANALYSES DATA SHEET 5
BLANKS

Analytical Method: 7470A AAB #: 040908A-78892

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Concentration Units (mg/L or mg/kg): mg/L

Initial Calibration Blank ID: ICB 9/9/04 9:46 Initial Calibration ID: 040909

CCB #1 ID: CCB 9/9/04 9:49 CCB #2 ID: CCB 9/9/04 9:59 CCB #3 ID:

Method Blank ID: 040908A-BLK Initial Calibration ID: 040909

Analyte	Initial Calibration Blank	Continuing Calibration Blank			Method Blank	RL	Q
		1	2	3			
Mercury (Hg)	<RL	<RL	<RL		<RL	0.001	

Comments:

AFCEE FORM 1-5 Page ___ of ___

AFCEE
INORGANIC ANALYSES DATA SHEET 6
LABORATORY CONTROL SAMPLE

Analytical Method: SW 7470A
Lab Name: APPL, Inc
LCS ID: 040908A LCS
Concentration Units: mg/L

AAB #: 040908A-78892
Contract #: F41624-01-D-8544, TO 0019
Initial Calibration ID: 040909

Analyte	Expected	Found	% R	Control Limits	Q
Mercury (Hg)	0.0040	0.0040	100	77-120	

Comments: ARF: 45275, Sample: AP74821

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INORGANIC ANALYSES DATA SHEET 6
LABORATORY CONTROL SAMPLE DUPLICATE

Analytical Method: SW 7470A
Lab Name: APPL, Inc
LCS ID: 040908A LCSD
Concentration Units: mg/L

AAB #: 040908A-78892
Contract #: F41624-01-D-8544, TO 0019
Initial Calibration ID: 040909

Analyte	Expected	Found	% R	Control Limits	Q
Mercury (Hg)	0.0040	0.0039	97.5	77-120	

Comments: ARF: 45275, Sample: AP74821

AFCEE
INORGANIC ANALYSES DATA SHEET 8
HOLDING TIMES

Analytical Method: SW 7470A AAB#: 040908A-78892

Lab Name: APPL, Inc Contract #: F41624-01-D-8544, TO 0019

Field Sample ID	Date Collected	Date Received	Date Analyzed	Max. Holding Time (days)	Time Held (days)	Q
BLDG 40 WASH	01-Sep-04	03-Sep-04	09-Sep-04	28	8	

Comments: ARF: 45275

AFCEE
INORGANIC ANALYSES DATA SHEET 9
INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method: 7470A ICAL ID: 040909

Lab Name: APPL, Inc. Contract #: F41624-01-D-8544, TO 0019

Instrument ID #: PE300

Field Sample ID/Std ID/ Blank ID/QC Sample ID	Date Analysis Started	Time Analysis Started	Date Analysis Completed	Time Analysis Completed
Calib Blank	9-Sep-04	9:34	9-Sep-04	9:34
0.2 µg/L	9-Sep-04	9:35	9-Sep-04	9:35
0.5	9-Sep-04	9:36	9-Sep-04	9:36
1	9-Sep-04	9:38	9-Sep-04	9:38
2	9-Sep-04	9:39	9-Sep-04	9:39
5	9-Sep-04	9:41	9-Sep-04	9:41
10 ↓	9-Sep-04	9:43	9-Sep-04	9:43
ICV (2nd source)	9-Sep-04	9:45	9-Sep-04	9:45
ICB	9-Sep-04	9:46	9-Sep-04	9:46
CCV	9-Sep-04	9:48	9-Sep-04	9:48
CCB	9-Sep-04	9:49	9-Sep-04	9:49
040908A-BLK	9-Sep-04	9:50	9-Sep-04	9:50
040908A-LCS	9-Sep-04	9:52	9-Sep-04	9:52
040908A-LCSD	9-Sep-04	9:53	9-Sep-04	9:53
AP74821W08	9-Sep-04	9:55	9-Sep-04	9:55
CCV	9-Sep-04	9:57	9-Sep-04	9:57
CCB	9-Sep-04	9:59	9-Sep-04	9:59

AFCEE FORM I-9 Page ___ of ____

Sample_ID	EL	Sam_Date	Sam_Time	Mean_SA	Batch_ID	Dilu
Calib Blank	Hg	9/9/04	9:34:38			
0.2 9-8-04 SV ug/L	Hg	9/9/04	9:35:48			
0.5	Hg	9/9/04	9:36:58			
1	Hg	9/9/04	9:38:28			
2	Hg	9/9/04	9:39:59			
5	Hg	9/9/04	9:41:30			
10	Hg	9/9/04	9:43:02			
ICV 9-8-04 SV (2nd Source)	Hg	9/9/04	9:45:11	4.10206		
ICB 9-8-04 SV	Hg	9/9/04	9:46:53	-0.005495		
CCV 9-8-04 SV	Hg	9/9/04	9:48:04	4.896526		
CCB 9-8-04 SV	Hg	9/9/04	9:49:48	0.025898		
040908A-BLK	Hg	9/9/04	9:50:59	-0.035607	040908A-7470A	
040908A-LCS	Hg	9/9/04	9:52:09	4.000011	040908A-7470A	
040908A-LCSD	Hg	9/9/04	9:53:50	3.895213	040908A-7470A	
AP74821W08	Hg	9/9/04	9:55:32	0.01281	040908A-7470A	
~~AP74821W08 1/5~~	~~Hg~~	~~9/9/04~~	~~9:58:42~~	~~0.18712~~	~~040908A-7470A~~	~~5~~
CCV 9-8-04 SV	Hg	9/9/04	9:57:52	4.965528		
CCB 9-8-04 SV	Hg	9/9/04	9:59:36	-0.027891		