



TETRA TECH EM INC.

Karl Hans  
University of California  
Richmond Field Station  
1301 S. 46<sup>th</sup> Street  
Richmond, CA 94804

**Subject: July 25, 2006 Sampling Event Results for the PCB Area  
University of California – Richmond Field Station, Richmond, California**

Dear Mr. Hans:

Tetra Tech EM Inc. (Tetra Tech) was contracted by the University of California, Berkeley under Task Orders 2.0 and 3.0 under the statement of work for sampling and analysis as needed to perform due diligence polychlorinated biphenyl (PCB) sampling at the Richmond Field Station. On July 25, 2006, Tetra Tech collected twenty samples from the northern property boundary near the intersection of Meade Street and Regatta Boulevard. The samples were sent to Curtis and Tompkins, Ltd (C&T) laboratory for analysis.

**Sample Design:** The samples were collected according to a systematic triangular grid with a random starting position (Figure 1). There are several options for the approach, including statistical and spatially-defined, for determining the grid spacing and minimum number of samples. Tetra Tech used the spatially-defined approach, and a grid with dimensions of 50 X 50 feet was estimated. This resulted in sample sizes of 12. Additional judgmental samples were collected at specific points of interest.

**Sample Collection:** Surface soil samples were collected from 0 to 0.5 feet below ground surface at discrete locations using stainless-steel trowel or other digging tool, followed by final collection by sterile scoops. To avoid including aboveground plant material in analytical samples, vegetation was cleared from the surface before soil sampling begins. A pick axe was used to collect samples from under any paved areas, and a Bosch 11304 60 pound demolition hammer was used to collect soil samples from under the concrete pad, as well as the samples of the concrete itself.

The samples were transferred manually into a glass jar. The samples were labeled, sealed, and placed in a cooler pre-chilled with wet ice for storage and shipping. Tetra Tech delivered the samples to C&T to be analyzed for PCBs by SW-846 Method 8082.

Enclosed with this letter is a table presenting the sampling results for the PCB area and PDF copy of the laboratory results for the soil and concrete samples.

If you have any questions or need additional information, please call me at (415) 222-8205.

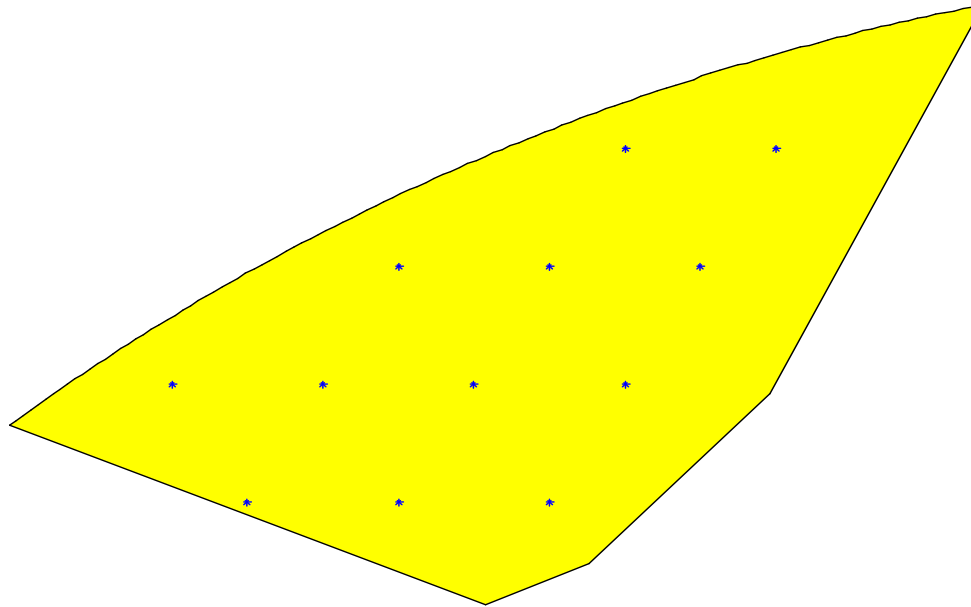
Sincerely,

Leslie Lundgren  
Project Manager

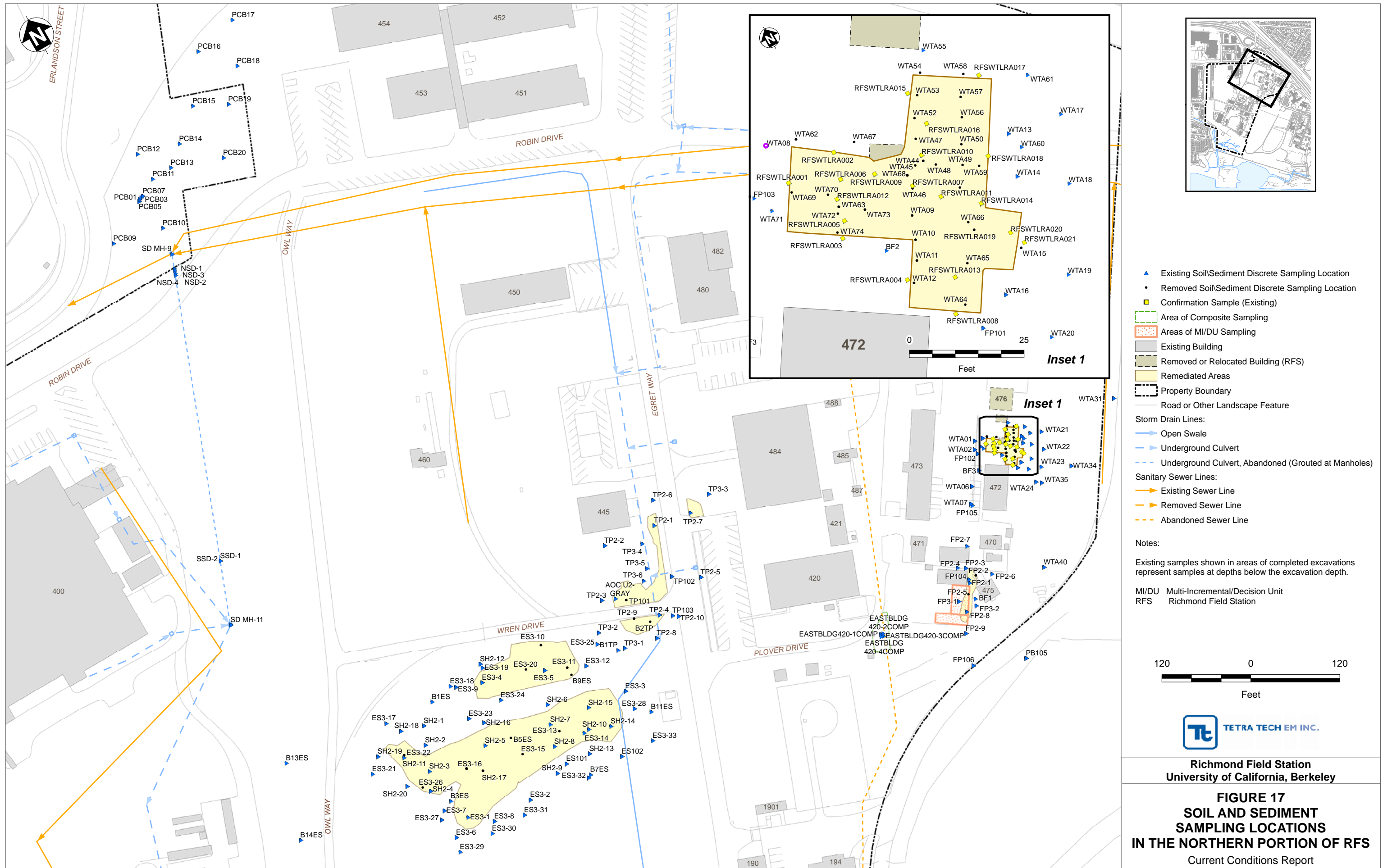
Figure 2 Draft Proposed Sampling Locations for 50 X 50 Foot Triangular Grid (n= 12 locations)

**Sampling Location Coordinates**

X	Y
6032751.253	2162087.013
6032801.664	2162087.013
6032852.076	2162087.013
6032726.048	2162130.67
6032776.459	2162130.67
6032826.87	2162130.67
6032877.281	2162130.67
6032801.664	2162174.328
6032852.076	2162174.328
6032902.487	2162174.328
6032877.281	2162217.985
6032927.692	2162217.985



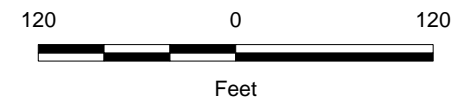




- ▲ Existing Soil/Sediment Discrete Sampling Location
  - Removed Soil/Sediment Discrete Sampling Location
  - Confirmation Sample (Existing)
  - Area of Composite Sampling
  - ▨ Areas of MI/DU Sampling
  - Existing Building
  - Removed or Relocated Building (RFS)
  - Remediated Areas
  - Property Boundary
  - Road or Other Landscape Feature
- Storm Drain Lines:
- Open Swale
  - Underground Culvert
  - Underground Culvert, Abandoned (Grouted at Manholes)
- Sanitary Sewer Lines:
- Existing Sewer Line
  - Removed Sewer Line
  - Abandoned Sewer Line

Notes:  
Existing samples shown in areas of completed excavations represent samples at depths below the excavation depth.

MI/DU Multi-Incremental/Decision Unit  
RFS Richmond Field Station



**Richmond Field Station**  
**University of California, Berkeley**  
  
**FIGURE 17**  
**SOIL AND SEDIMENT**  
**SAMPLING LOCATIONS**  
**IN THE NORTHERN PORTION OF RFS**  
 Current Conditions Report

Location ID	Depth (Feet)	Date Collected	Aroclor-1016 (mg/kg)	Aroclor-1221 (mg/kg)	Aroclor-1232 (mg/kg)	Aroclor-1242 (mg/kg)
<b>PCB Area</b>						
PCB01	0 - .5	7/25/2006	<.012	<.024	<.012	<.012
PCB03	0 - .5	7/25/2006	<.012	<.025	<.012	<.012
PCB05	0 - .5	7/25/2006	<.013	<.026	<.013	<.013
PCB07	0 - .5	7/25/2006	<.013	<.026	<.013	<.013
PCB09	0 - .5	7/25/2006	<.013	<.025	<.013	<.013
PCB10	0 - .5	7/25/2006	<.013	<.026	<.013	<.013
PCB11	0 - .5	7/25/2006	<.012	<.025	<.012	<.012
PCB12	0 - .5	7/25/2006	<.013	<.026	<.013	<.013
PCB13	0 - .5	7/25/2006	<.013	<.026	<.013	<.013
PCB14	0 - .5	7/25/2006	<.013	<.026	<.013	<.013
PCB15	0 - .5	7/25/2006	<.012	<.025	<.012	<.012
PCB16	0 - .5	7/25/2006	<.012	<.025	<.012	<.012
PCB17	0 - .5	7/25/2006	<.012	<.025	<.012	<.012
PCB18	0 - .5	7/25/2006	<.013	<.025	<.013	<.013
PCB19	0 - .5	7/25/2006	<.013	<.025	<.013	<.013
PCB20	0 - .5	7/25/2006	<.013	<.025	<.013	<.013

Aroclor-1248 (mg/kg)	Aroclor-1254 (mg/kg)	Aroclor-1260 (mg/kg)	
<.012	<.012	<.012	
<.012	<.012	<.012	
<.013	<.013	<.013	
<.013	<.013	<.013	
<.013	<.013	<.013	
<.013	<.013	<.013	
<.012	<.012		0.011
<.013	<.013	<.013	
<.013	<.013	<.013	
<.013	<.013		0.016
<.012	<.012	<.012	
<.012	0.034	<.012	
<.012	<.012	<.012	
<.013	<.013	<.013	
<.013	<.013		0.028
<.013	<.013	<.013	



**Tetra Tech EM Inc.**  
San Francisco Office

135 Main St. Suite 1800  
San Francisco, CA 94105  
415-543-4880  
Fax 415-543-5480

1883.21

# Chain of Custody Record No. 7948

Lab PO# PC #  
Lab to follow  
Lab # 281

Project name: ACB-RF's PCB

Project (CTO) number: S1578 (2381434)

Field samplers: DAVE MILLER / MARGE ALLEN

Field samplers' signatures: [Signature]

TRMI technical contact: SARA WOOLLEY

TRMI project manager: LESLIE WOODBURN

Sample ID	Sample Location (Pt. ID)	Date	Time	Matrix	MS / MSD												
					40 ml VOA	1 liter Amber	500 ml Poly	Sieve	Glass Jar	VOA	SVOA	PCBs	Metals	TPH Purgeables	TPH Extractables		
RFSP-001		7/25/06	1105	CONCRETE						X							
02			1120	SOIL						X							
03			1128	CONCRETE						X							
04			1132	SOIL						X							
05			1138	CONCRETE						X							
06			1145	SOIL						X							
07			1151	CONCRETE						X							
08			1155	SOIL						X							
09			1328	SOIL						X							
10			1333														
11			1338														
12			1340														

Relinquished by: [Signature] Name (print): SARA WOOLLEY Company Name: TRMI Date: 7/25/06 Time: 3:25

Received by: [Signature] Name (print): LAVANNE CURTIS Company Name: TRMI Date: 7/25/06 Time: 3:25

Relinquished by:

Received by:

Relinquished by:

Received by:

Turnaround time/remarks: \* THERE ARE TWO (2) BOTTLES PER SAMPLE ID - (1) FOR ANALYSIS (1) FOR ARCHIVE

Fed Ex #: 1883.21

Please crush cement before analyzing



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San Francisco Office

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San Francisco, CA 94105  
415-543-4880  
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188.3.21

# Chain of Custody Record No. 8217

Lab: C+T

Lab PO#: PO #  
to follow

Field samplers:  
DAVE MULLER / AMBER KIRBY  
A. MORALES

TIEMI technical contact:  
SARA WOOLLEY

Field samplers' signatures: *[Signature]*

TIEMI project manager:  
LESUE LUNDGREN

Project (CTO) number:  
S15 E. D3814341

Sample ID	Sample Location (Pt. ID)	Date	Time	Matrix	MS / MSD	
					40 ml VOA	500 ml Poly
RFSPCB13		4/25/06	1344	Soil	X	X
14			1348		X	X
15			1350		X	X
16			1352		X	X
17			1355		X	X
18			1357		X	X
19			1400		X	X
20			1402		X	X

No./Container Types

Analysis Required

VOA	
SVOA	
Metals	
TPH Purgeables	
TPH Extractables	

40 ml VOA	
1 liter Amber	
500 ml Poly	
Sleeve	
Glass Jar	

Name (print)

Company Name

Date

Time

SAARA WOOLLEY  
Levanni-Curtis / C+T

TIEMI

7/25/06 15:15  
7/25/06 3:25pm

Relinquished by:

Received by:

Relinquished by:

Received by:

Relinquished by:

Received by:

Turnaround time/remarks:

\* Two Jars/Sample - Analyze One  
Archive One

Fed Ex #:



## COOLER RECEIPT CHECKLIST

Login#: 188321 Date Received: 7/25/00 Number of Coolers: 3  
Client: TTEMT Project: UCB-RFS PCB

### A. Preliminary Examination Phase

Date Opened: 7/25/00 By (print): [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc.)?..... YES  NO

If YES, enter carrier name and airbill number: \_\_\_\_\_

2. Were custody seals on outside of cooler?..... YES  NO

How many and where? \_\_\_\_\_ Seal date: \_\_\_\_\_ Seal name: \_\_\_\_\_

3. Were custody seals unbroken and intact at the date and time of arrival?..... YES NO N/A

4. Were custody papers dry and intact when received?.....  YES NO

5. Were custody papers filled out properly (ink, signed, etc.)?.....  YES NO

6. Did you sign the custody papers in the appropriate place?.....  YES NO

7. Was project identifiable from custody papers?.....  YES NO

If YES, enter project name at the top of this form.

8. If required, was sufficient ice used? Samples should be 2-6 degrees C. .... YES  NO

Type of ice: wet Temperature: 21°, 17.4°, 24.9°

### B. Login Phase

Date Logged In: 7/25/00 By (print): [Signature] (sign) [Signature]

1. Describe type of packing in cooler: Bubblewrap

2. Did all bottles arrive unbroken?.....  YES NO

3. Were labels in good condition and complete (ID, date, time, signature, etc.)?.....  YES NO

4. Did bottle labels agree with custody papers?.....  YES NO

5. Were appropriate containers used for the tests indicated?.....  YES NO

6. Were correct preservatives added to samples?..... YES NO N/A

7. Was sufficient amount of sample sent for tests indicated?.....  YES NO

8. Were bubbles absent in VOA samples? If NO, list sample Ids below..... YES NO N/A

9. Was the client contacted concerning this sample delivery?..... YES NO

If YES, give details below.

Who was called? \_\_\_\_\_ By whom? \_\_\_\_\_ Date: \_\_\_\_\_

### Additional Comments:

IS - Samples delivered from field, cooling had bag on.

### Polychlorinated Biphenyls (PCBs)

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB02	Batch#:	115984
Lab ID:	188321-002	Sampled:	07/25/06
Matrix:	Soil	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/02/06
Basis:	dry	Analyzed:	08/03/06
Diln Fac:	1.000		

Moisture: 0%

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%REC	Limits
TCMX	121	61-140
Decachlorobiphenyl	102	50-155

ND= Not Detected

RL= Reporting Limit

**Polychlorinated Biphenyls (PCBs)**

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB04	Batch#:	115984
Lab ID:	188321-004	Sampled:	07/25/06
Matrix:	Soil	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/02/06
Basis:	dry	Analyzed:	08/03/06
Diln Fac:	1.000		

Moisture: 4%

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	12
Aroclor-1221	ND	25
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%REC	Limits
TCMX	126	61-140
Decachlorobiphenyl	118	50-155

ND= Not Detected

RL= Reporting Limit

### Polychlorinated Biphenyls (PCBs)

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB06	Batch#:	115984
Lab ID:	188321-006	Sampled:	07/25/06
Matrix:	Soil	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/02/06
Basis:	dry	Analyzed:	08/03/06
Diln Fac:	1.000		

Moisture: 6%

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	13
Aroclor-1221	ND	26
Aroclor-1232	ND	13
Aroclor-1242	ND	13
Aroclor-1248	ND	13
Aroclor-1254	ND	13
Aroclor-1260	ND	13

Surrogate	%REC	Limits
TCMX	126	61-140
Decachlorobiphenyl	108	50-155

ND= Not Detected

RL= Reporting Limit

### Polychlorinated Biphenyls (PCBs)

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB08	Batch#:	115984
Lab ID:	188321-008	Sampled:	07/25/06
Matrix:	Soil	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/02/06
Basis:	dry	Analyzed:	08/03/06
Diln Fac:	1.000		

Moisture: 8%

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	13
Aroclor-1221	ND	26
Aroclor-1232	ND	13
Aroclor-1242	ND	13
Aroclor-1248	ND	13
Aroclor-1254	ND	13
Aroclor-1260	ND	13

Surrogate	%REC	Limits
TCMX	130	61-140
Decachlorobiphenyl	128	50-155

ND= Not Detected

RL= Reporting Limit

### Polychlorinated Biphenyls (PCBs)

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB09	Batch#:	115984
Lab ID:	188321-009	Sampled:	07/25/06
Matrix:	Soil	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/02/06
Basis:	dry	Analyzed:	08/03/06
Diln Fac:	1.000		

Moisture: 4%

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	13
Aroclor-1221	ND	25
Aroclor-1232	ND	13
Aroclor-1242	ND	13
Aroclor-1248	ND	13
Aroclor-1254	ND	13
Aroclor-1260	ND	13

Surrogate	%REC	Limits
TCMX	139	61-140
Decachlorobiphenyl	132	50-155

ND= Not Detected

RL= Reporting Limit

### Polychlorinated Biphenyls (PCBs)

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB10	Batch#:	115984
Lab ID:	188321-010	Sampled:	07/25/06
Matrix:	Soil	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/02/06
Basis:	dry	Analyzed:	08/03/06
Diln Fac:	1.000		

Moisture: 10%

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	13
Aroclor-1221	ND	26
Aroclor-1232	ND	13
Aroclor-1242	ND	13
Aroclor-1248	ND	13
Aroclor-1254	ND	13
Aroclor-1260	ND	13

Surrogate	%REC	Limits
TCMX	97	61-140
Decachlorobiphenyl	94	50-155

 ND= Not Detected  
 RL= Reporting Limit

### Polychlorinated Biphenyls (PCBs)

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB11	Batch#:	115984
Lab ID:	188321-011	Sampled:	07/25/06
Matrix:	Soil	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/02/06
Basis:	dry	Analyzed:	08/03/06
Diln Fac:	1.000		

Moisture: 4%

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	12
Aroclor-1221	ND	25
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	11 J	12

Surrogate	%REC	Limits
TCMX	124	61-140
Decachlorobiphenyl	115	50-155

J= Estimated value

ND= Not Detected

RL= Reporting Limit



### Polychlorinated Biphenyls (PCBs)

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB12	Batch#:	115984
Lab ID:	188321-012	Sampled:	07/25/06
Matrix:	Soil	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/02/06
Basis:	dry	Analyzed:	08/03/06
Diln Fac:	1.000		

Moisture: 5%

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	13
Aroclor-1221	ND	26
Aroclor-1232	ND	13
Aroclor-1242	ND	13
Aroclor-1248	ND	13
Aroclor-1254	ND	13
Aroclor-1260	ND	13

Surrogate	%REC	Limits
TCMX	121	61-140
Decachlorobiphenyl	109	50-155

ND= Not Detected

RL= Reporting Limit

### Polychlorinated Biphenyls (PCBs)

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB13	Batch#:	115984
Lab ID:	188321-013	Sampled:	07/25/06
Matrix:	Soil	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/02/06
Basis:	dry	Analyzed:	08/03/06
Diln Fac:	1.000		

Moisture: 7%

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	13
Aroclor-1221	ND	26
Aroclor-1232	ND	13
Aroclor-1242	ND	13
Aroclor-1248	ND	13
Aroclor-1254	ND	13
Aroclor-1260	ND	13

Surrogate	%REC	Limits
TCMX	138	61-140
Decachlorobiphenyl	138	50-155

ND= Not Detected

RL= Reporting Limit

**Polychlorinated Biphenyls (PCBs)**

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB14	Batch#:	115984
Lab ID:	188321-014	Sampled:	07/25/06
Matrix:	Soil	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/02/06
Basis:	dry	Analyzed:	08/03/06
Diln Fac:	1.000		

Moisture: 6%

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	13
Aroclor-1221	ND	26
Aroclor-1232	ND	13
Aroclor-1242	ND	13
Aroclor-1248	ND	13
Aroclor-1254	ND	13
Aroclor-1260	16	13

Surrogate	%REC	Limits
TCMX	133	61-140
Decachlorobiphenyl	125	50-155

ND= Not Detected  
 RL= Reporting Limit

### Polychlorinated Biphenyls (PCBs)

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB15	Batch#:	115984
Lab ID:	188321-015	Sampled:	07/25/06
Matrix:	Soil	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/02/06
Basis:	dry	Analyzed:	08/04/06
Diln Fac:	1.000		

Moisture: 3%

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	12
Aroclor-1221	ND	25
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%REC	Limits
TCMX	122	61-140
Decachlorobiphenyl	109	50-155

ND= Not Detected

RL= Reporting Limit

### Polychlorinated Biphenyls (PCBs)

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB16	Batch#:	115984
Lab ID:	188321-016	Sampled:	07/25/06
Matrix:	Soil	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/02/06
Basis:	dry	Analyzed:	08/03/06
Diln Fac:	1.000		

Moisture: 4%

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	12
Aroclor-1221	ND	25
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	34	12
Aroclor-1260	ND	12

Surrogate	%REC	Limits
TCMX	127	61-140
Decachlorobiphenyl	129	50-155

ND= Not Detected

RL= Reporting Limit

### Polychlorinated Biphenyls (PCBs)

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB17	Batch#:	115984
Lab ID:	188321-017	Sampled:	07/25/06
Matrix:	Soil	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/02/06
Basis:	dry	Analyzed:	08/04/06
Diln Fac:	1.000		

Moisture: 3%

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	12
Aroclor-1221	ND	25
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%REC	Limits
TCMX	117	61-140
Decachlorobiphenyl	92	50-155

ND= Not Detected

RL= Reporting Limit

**Polychlorinated Biphenyls (PCBs)**

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB18	Batch#:	115984
Lab ID:	188321-018	Sampled:	07/25/06
Matrix:	Soil	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/02/06
Basis:	dry	Analyzed:	08/04/06
Diln Fac:	1.000		

Moisture: 3%

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	13
Aroclor-1221	ND	25
Aroclor-1232	ND	13
Aroclor-1242	ND	13
Aroclor-1248	ND	13
Aroclor-1254	ND	13
Aroclor-1260	ND	13

Surrogate	%REC	Limits
TCMX	121	61-140
Decachlorobiphenyl	114	50-155

ND= Not Detected

RL= Reporting Limit

### Polychlorinated Biphenyls (PCBs)

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB19	Batch#:	115984
Lab ID:	188321-019	Sampled:	07/25/06
Matrix:	Soil	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/02/06
Basis:	dry	Analyzed:	08/04/06
Diln Fac:	1.000		

Moisture: 3%

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	13
Aroclor-1221	ND	25
Aroclor-1232	ND	13
Aroclor-1242	ND	13
Aroclor-1248	ND	13
Aroclor-1254	ND	13
Aroclor-1260	28	13

Surrogate	%REC	Limits
TCMX	125	61-140
Decachlorobiphenyl	110	50-155

ND= Not Detected

RL= Reporting Limit



### Polychlorinated Biphenyls (PCBs)

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB20	Batch#:	115984
Lab ID:	188321-020	Sampled:	07/25/06
Matrix:	Soil	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/02/06
Basis:	dry	Analyzed:	08/04/06
Diln Fac:	1.000		

Moisture: 4%

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	13
Aroclor-1221	ND	25
Aroclor-1232	ND	13
Aroclor-1242	ND	13
Aroclor-1248	ND	13
Aroclor-1254	ND	13
Aroclor-1260	ND	13

Surrogate	%REC	Limits
TCMX	134	61-140
Decachlorobiphenyl	110	50-155

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC350156	Batch#:	115984
Matrix:	Soil	Prepared:	08/02/06
Units:	ug/Kg	Analyzed:	08/03/06
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%REC	Limits
TCMX	120	61-140
Decachlorobiphenyl	120	50-155

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC350157	Batch#:	115984
Matrix:	Soil	Prepared:	08/02/06
Units:	ug/Kg	Analyzed:	08/03/06
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.7	200.8	120	68-146
Aroclor-1260	166.7	210.6	126	70-152

Surrogate	%REC	Limits
TCMX	99	61-140
Decachlorobiphenyl	112	50-155

## Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB16	Batch#:	115984
MSS Lab ID:	188321-016	Sampled:	07/25/06
Matrix:	Soil	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/02/06
Basis:	dry	Analyzed:	08/03/06
Diln Fac:	1.000		

Type: MS  
 Lab ID: QC350158

Moisture: 4%  
 Cleanup Method: EPA 3665A

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<6.518	171.3	209.9	123	56-159
Aroclor-1260	<3.476	171.3	220.3	129	46-173

Surrogate	%REC	Limits
TCMX	124	61-140
Decachlorobiphenyl	105	50-155

Type: MSD  
 Lab ID: QC350159

Moisture: 4%  
 Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	174.3	251.3	144	56-159	16	31
Aroclor-1260	174.3	279.4	160	46-173	22	38

Surrogate	%REC	Limits
TCMX	140	61-140
Decachlorobiphenyl	125	50-155

RPD= Relative Percent Difference

### Polychlorinated Biphenyls (PCBs)

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB01	Batch#:	116084
Lab ID:	188321-001	Sampled:	07/25/06
Matrix:	Miscell.	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/04/06
Basis:	as received	Analyzed:	08/05/06
Diln Fac:	1.000		

Moisture:           \*\* MISSING MOISTURE DATA \*\*           Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%REC	Limits
TCMX	107	61-140
Decachlorobiphenyl	119	50-155

ND= Not Detected  
 RL= Reporting Limit

### Polychlorinated Biphenyls (PCBs)

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB03	Batch#:	116084
Lab ID:	188321-003	Sampled:	07/25/06
Matrix:	Miscell.	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/04/06
Basis:	as received	Analyzed:	08/05/06
Diln Fac:	1.000		

Moisture:           \*\* MISSING MOISTURE DATA \*\*           Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%REC	Limits
TCMX	133	61-140
Decachlorobiphenyl	139	50-155

ND= Not Detected  
 RL= Reporting Limit

### Polychlorinated Biphenyls (PCBs)

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB05	Batch#:	116084
Lab ID:	188321-005	Sampled:	07/25/06
Matrix:	Miscell.	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/04/06
Basis:	as received	Analyzed:	08/05/06
Diln Fac:	1.000		

Moisture:           \*\* MISSING MOISTURE DATA \*\*           Cleanup Method:   EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%REC	Limits
TCMX	117	61-140
Decachlorobiphenyl	134	50-155

ND= Not Detected  
 RL= Reporting Limit

### Polychlorinated Biphenyls (PCBs)

Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	RFSPCB07	Batch#:	116084
Lab ID:	188321-007	Sampled:	07/25/06
Matrix:	Miscell.	Received:	07/25/06
Units:	ug/Kg	Prepared:	08/04/06
Basis:	as received	Analyzed:	08/05/06
Diln Fac:	1.000		

Moisture:           \*\* MISSING MOISTURE DATA \*\*           Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%REC	Limits
TCMX	139	61-140
Decachlorobiphenyl	140	50-155

ND= Not Detected  
 RL= Reporting Limit



## Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC350562	Batch#:	116084
Matrix:	Soil	Prepared:	08/04/06
Units:	ug/Kg	Analyzed:	08/04/06
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%REC	Limits
TCMX	132	61-140
Decachlorobiphenyl	151	50-155

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC350563	Batch#:	116084
Matrix:	Soil	Prepared:	08/04/06
Units:	ug/Kg	Analyzed:	08/07/06
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	168.4	132.4	79	68-146
Aroclor-1260	168.4	154.7	92	70-152

Surrogate	%REC	Limits
TCMX	71	61-140
Decachlorobiphenyl	87	50-155

## Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	EPA 3550B
Project#:	S1518003810301	Analysis:	EPA 8082
Field ID:	ZZZZZZZZZZ	Batch#:	116084
MSS Lab ID:	188519-006	Sampled:	08/02/06
Matrix:	Soil	Received:	08/03/06
Units:	ug/Kg	Prepared:	08/04/06
Basis:	dry	Analyzed:	08/04/06
Diln Fac:	1.000		

 Type: MS  
 Lab ID: QC350564

 Moisture: 7%  
 Cleanup Method: EPA 3665A

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<4.271	181.0	201.4	111	56-159
Aroclor-1260	19.39	181.0	230.4	117	46-173

Surrogate	%REC	Limits
TCMX	123	61-140
Decachlorobiphenyl	116	50-155

 Type: MSD  
 Lab ID: QC350565

 Moisture: 7%  
 Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	181.2	208.7	115	56-159	3	31
Aroclor-1260	181.2	253.7	129	46-173	10	38

Surrogate	%REC	Limits
TCMX	134	61-140
Decachlorobiphenyl	127	50-155

RPD= Relative Percent Difference

Moisture			
Lab #:	188321	Location:	UCB-RFS PCB
Client:	Tetra Tech EMI	Prep:	METHOD
Project#:	S1518003810301	Analysis:	ASTM D2216/CLP
Analyte:	Moisture, Percent	Batch#:	115734
Matrix:	Soil	Sampled:	07/25/06
Units:	%	Received:	07/25/06
Diln Fac:	1.000	Analyzed:	07/26/06

Field ID	Lab ID	Result	RL
RFSPCB02	188321-002	ND	1
RFSPCB04	188321-004	4	1
RFSPCB06	188321-006	6	1
RFSPCB08	188321-008	8	1
RFSPCB09	188321-009	4	1
RFSPCB10	188321-010	10	1
RFSPCB11	188321-011	4	1
RFSPCB12	188321-012	5	1
RFSPCB13	188321-013	7	1
RFSPCB14	188321-014	6	1
RFSPCB15	188321-015	3	1
RFSPCB16	188321-016	4	1
RFSPCB17	188321-017	3	1
RFSPCB18	188321-018	3	1
RFSPCB19	188321-019	3	1
RFSPCB20	188321-020	4	1

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Moisture				
Lab #:	188321	Location:	UCB-RFS PCB	
Client:	Tetra Tech EMI	Prep:	METHOD	
Project#:	S1518003810301	Analysis:	ASTM D2216/CLP	
Analyte:	Moisture, Percent	Units:	%	
Field ID:	RFSPCB20	Diln Fac:	1.000	
Type:	SDUP	Batch#:	115734	
MSS Lab ID:	188321-020	Sampled:	07/25/06	
Lab ID:	QC349205	Received:	07/25/06	
Matrix:	Soil	Analyzed:	07/26/06	
MSS Result	Result	RL	RPD	Lim
3.674	3.383	1.000	8	15

RL= Reporting Limit

RPD= Relative Percent Difference