

Environmental Conservation Laboratories, Inc.

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www.encolabs.com

Thursday, December 7, 2006

US Fish and Wildlife (US014)

Attn: Tom Augspurger

PO Box 33726

Raleigh, NC 27636-3726

**RE: Project Number: [none], Project Name/Desc: Cape Fear Sediments
ENCO Workorder: B609856**

Dear Tom Augspurger,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Friday, November 10, 2006.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

This data has been produced in accordance with NELAC standards (June, 2003). This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads 'Christina M. Tompkins'. The signature is written in a cursive style with a large initial 'C'.

Chris Tompkins

Project Manager

Enclosure(s)



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CASE NARRATIVE

Date: November 20, 2006
Client: US Fish and Wildlife
Project: Cape Fear Sediments
Lab ID: B609856

Overview

All samples submitted were analyzed by Environmental Conservation Laboratories, Inc. in accordance with the methods referenced in the laboratory report. Any particular difficulties encountered during sample handling by Environmental Conservation Laboratories, Inc. will be discussed in the QC Remarks section below.

Quality Control Remarks

Total Organic Carbon analysis was sent to an outside laboratory and reported under a separate header.

Other Comments

The analytical data presented in this report are consistent with the methods as referenced in the analytical report. Any exceptions or deviations are noted in the QC remarks section of this narrative.

Released By:
Environmental Conservation Laboratories, Inc.



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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: CF-1

Lab ID: B609856-01

Sampled: 11/01/06 10:15

Received: 11/10/06 00:00

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:02
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:04
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:04
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:05
EPA 6010B	04/30/07	11/14/06 07:13	11/28/2006 22:26
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:04
EPA 7471A	11/29/06	11/14/06 15:11	11/17/2006 08:33
EPA 8270C	11/15/06 12/24/06	11/14/06 10:38	11/16/2006 19:09

Client ID: CF-2

Lab ID: B609856-02

Sampled: 11/01/06 11:25

Received: 11/10/06 00:00

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:09
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:11
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:11
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:11
EPA 6010B	04/30/07	11/14/06 07:13	11/28/2006 22:33
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:11
EPA 7471A	11/29/06	11/14/06 15:11	11/17/2006 08:36
EPA 8270C	11/15/06 12/24/06	11/14/06 10:38	11/16/2006 19:27



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Client ID: CF-3

Lab ID: B609856-03

Sampled: 11/01/06 11:54

Received: 11/10/06 00:00

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:16
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:17
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:18
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:18
EPA 6010B	04/30/07	11/14/06 07:13	11/28/2006 22:39
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:18
EPA 7471A	11/29/06	11/14/06 15:11	11/17/2006 08:40
EPA 8270C	11/15/06 12/24/06	11/14/06 10:38	11/16/2006 19:44

Client ID: CF-4

Lab ID: B609856-04

Sampled: 11/01/06 15:47

Received: 11/10/06 00:00

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:24
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:24
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:24
EPA 6010B	04/30/07	11/14/06 07:13	11/16/2006 11:18
EPA 6010B	04/30/07	11/14/06 07:13	11/28/2006 22:44
EPA 6010B	04/30/07	11/14/06 07:13	11/28/2006 22:46
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:24
EPA 7471A	11/29/06	11/14/06 15:11	11/17/2006 08:43
EPA 8270C	11/15/06 12/24/06	11/14/06 10:38	11/16/2006 20:02



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Client ID: CF-5

Lab ID: B609856-05

Sampled: 11/01/06 16:39

Received: 11/10/06 00:00

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:29
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:31
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:31
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:31
EPA 6010B	04/30/07	11/14/06 07:13	11/28/2006 23:14
EPA 6010B	04/30/07	11/14/06 07:13	11/15/2006 13:31
EPA 7471A	11/29/06	11/14/06 15:11	11/17/2006 08:46
EPA 8270C	11/15/06 12/24/06	11/14/06 10:38	11/16/2006 20:52

Client ID: CF-6

Lab ID: B609856-06

Sampled: 11/02/06 11:09

Received: 11/10/06 00:00

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010B	05/01/07	11/14/06 07:13	11/15/2006 13:38
EPA 6010B	05/01/07	11/14/06 07:13	11/15/2006 13:38
EPA 6010B	05/01/07	11/14/06 07:13	11/15/2006 13:38
EPA 6010B	05/01/07	11/14/06 07:13	11/28/2006 23:19
EPA 6010B	05/01/07	11/14/06 07:13	11/28/2006 23:21
EPA 6010B	05/01/07	11/14/06 07:13	11/15/2006 13:38
EPA 7471A	11/30/06	11/15/06 13:32	11/17/2006 08:50
EPA 8270C	11/16/06 12/24/06	11/14/06 10:38	11/16/2006 21:09

Client ID: CF-7

Lab ID: B609856-07

Sampled: 11/02/06 11:48

Received: 11/10/06 00:00

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010B	05/01/07	11/14/06 07:13	11/15/2006 13:42
EPA 6010B	05/01/07	11/14/06 07:13	11/15/2006 13:44
EPA 6010B	05/01/07	11/14/06 07:13	11/15/2006 13:44
EPA 6010B	05/01/07	11/14/06 07:13	11/15/2006 13:44
EPA 6010B	05/01/07	11/14/06 07:13	11/28/2006 23:27
EPA 6010B	05/01/07	11/14/06 07:13	11/15/2006 13:44
EPA 7471A	11/30/06	11/14/06 15:11	11/17/2006 08:53
EPA 8270C	11/16/06 12/24/06	11/14/06 10:38	11/16/2006 21:27



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Client ID: CF-8

Lab ID: B609856-08

Sampled: 11/02/06 14:00

Received: 11/10/06 00:00

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010B	05/01/07	11/14/06 07:13	11/15/2006 13:49
EPA 6010B	05/01/07	11/14/06 07:13	11/15/2006 13:50
EPA 6010B	05/01/07	11/14/06 07:13	11/15/2006 13:51
EPA 6010B	05/01/07	11/14/06 07:13	11/15/2006 13:51
EPA 6010B	05/01/07	11/14/06 07:13	11/28/2006 23:34
EPA 6010B	05/01/07	11/14/06 07:13	11/15/2006 13:51
EPA 7471A	11/30/06	11/14/06 15:11	11/17/2006 09:07
EPA 8270C	11/16/06 12/24/06	11/14/06 10:38	11/16/2006 21:44

Client ID: CF-9

Lab ID: B609856-09

Sampled: 11/03/06 09:47

Received: 11/10/06 00:00

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:16
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:18
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:18
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:18
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:18
EPA 7471A	12/01/06	11/14/06 15:11	11/17/2006 09:10
EPA 8270C	11/17/06 12/24/06	11/14/06 10:38	11/16/2006 22:02

Client ID: CF-10

Lab ID: B609856-10

Sampled: 11/03/06 10:24

Received: 11/10/06 00:00

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:23
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:25
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:25
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:25
EPA 6010B	05/02/07	11/14/06 07:13	12/5/2006 11:01
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:25
EPA 7471A	12/01/06	11/14/06 15:11	11/17/2006 09:13
EPA 8270C	11/17/06 12/24/06	11/14/06 10:38	11/16/2006 22:20



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Client ID: CF-11

Lab ID: B609856-11

Sampled: 11/03/06 13:50

Received: 11/10/06 00:00

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:30
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:32
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:32
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:32
EPA 6010B	05/02/07	11/14/06 07:13	12/5/2006 11:07
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:32
EPA 7471A	12/01/06	11/14/06 15:11	11/17/2006 09:17
EPA 8270C	11/17/06 12/24/06	11/14/06 10:38	11/16/2006 22:37

Client ID: CF-12

Lab ID: B609856-12

Sampled: 11/03/06 14:47

Received: 11/10/06 00:00

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:37
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:38
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:38
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:39
EPA 6010B	05/02/07	11/14/06 07:13	12/5/2006 11:14
EPA 6010B	05/02/07	11/14/06 07:13	11/15/2006 14:38
EPA 7471A	12/01/06	11/14/06 15:11	11/17/2006 09:20
EPA 8270C	11/17/06 12/24/06	11/14/06 10:38	11/16/2006 22:55

SAMPLE DETECTION SUMMARY

Client ID: CF-1

Lab ID: B609856-01

Analyte	Results/Qual	MRL	Units	Method
2-Methylnaphthalene	0.0571 J	0.0707	mg/kg dry	EPA 8270C
Aluminum	9470	21	mg/kg dry	EPA 6010B
Arsenic	3.6	1.1	mg/kg dry	EPA 6010B
Barium	116	1.1	mg/kg dry	EPA 6010B
Cadmium	0.22	0.11	mg/kg dry	EPA 6010B
Chromium	19.6	1.1	mg/kg dry	EPA 6010B
Copper	17.3	1.07	mg/kg dry	EPA 6010B
Fluoranthene	0.0428 J	0.0707	mg/kg dry	EPA 8270C
Iron	19600 D	27	mg/kg dry	EPA 6010B
Lead	18.7	1.1	mg/kg dry	EPA 6010B
Manganese	1040	1.07	mg/kg dry	EPA 6010B
Mercury	0.087	0.021	mg/kg dry	EPA 7471A
Naphthalene	0.0428 J	0.0707	mg/kg dry	EPA 8270C
Nickel	7.1	5.4	mg/kg dry	EPA 6010B
Pyrene	0.0357 J	0.0707	mg/kg dry	EPA 8270C
Selenium	2.7	1.1	mg/kg dry	EPA 6010B
Zinc	93.8	2.1	mg/kg dry	EPA 6010B

Client ID: CF-2

Lab ID: B609856-02

Analyte	Results/Qual	MRL	Units	Method
Aluminum	10100	25	mg/kg dry	EPA 6010B
Arsenic	3.5	1.2	mg/kg dry	EPA 6010B
Barium	125	1.2	mg/kg dry	EPA 6010B
Benzo(a)anthracene	0.0657 J	0.0813	mg/kg dry	EPA 8270C
Benzo(a)pyrene	0.0493 J	0.0813	mg/kg dry	EPA 8270C
Benzo(b)fluoranthene	0.0739 J	0.0813	mg/kg dry	EPA 8270C
Benzo(g,h,i)perylene	0.123	0.0813	mg/kg dry	EPA 8270C
Benzo(k)fluoranthene	0.0410 J	0.0813	mg/kg dry	EPA 8270C
Cadmium	0.25	0.12	mg/kg dry	EPA 6010B
Chromium	20.2	1.2	mg/kg dry	EPA 6010B
Chrysene	0.0493 J	0.0813	mg/kg dry	EPA 8270C
Copper	17.4	1.23	mg/kg dry	EPA 6010B
Fluoranthene	0.0739 J	0.0813	mg/kg dry	EPA 8270C
Indeno(1,2,3-cd)pyrene	0.164	0.0813	mg/kg dry	EPA 8270C
Iron	19800 D	31	mg/kg dry	EPA 6010B
Lead	19.0	1.2	mg/kg dry	EPA 6010B
Manganese	1050	1.23	mg/kg dry	EPA 6010B
Mercury	0.097	0.020	mg/kg dry	EPA 7471A
Nickel	7.7	6.2	mg/kg dry	EPA 6010B
Pyrene	0.0657 J	0.0813	mg/kg dry	EPA 8270C
Selenium	2.5	1.2	mg/kg dry	EPA 6010B
Zinc	101	2.5	mg/kg dry	EPA 6010B



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Client ID: CF-3

Lab ID: B609856-03

Analyte	Results/Qual	MRL	Units	Method
Aluminum	9320	20	mg/kg dry	EPA 6010B
Arsenic	3.2	1.0	mg/kg dry	EPA 6010B
Barium	113	1.0	mg/kg dry	EPA 6010B
Benzo(a)anthracene	0.0464 J	0.0656	mg/kg dry	EPA 8270C
Benzo(a)pyrene	0.0398 J	0.0656	mg/kg dry	EPA 8270C
Benzo(b)fluoranthene	0.0596 J	0.0656	mg/kg dry	EPA 8270C
Benzo(g,h,i)perylene	0.0994	0.0656	mg/kg dry	EPA 8270C
Cadmium	0.24	0.10	mg/kg dry	EPA 6010B
Chromium	18.8	1.0	mg/kg dry	EPA 6010B
Chrysene	0.0398 J	0.0656	mg/kg dry	EPA 8270C
Copper	18.0	0.99	mg/kg dry	EPA 6010B
Fluoranthene	0.0663	0.0656	mg/kg dry	EPA 8270C
Indeno(1,2,3-cd)pyrene	0.133	0.0656	mg/kg dry	EPA 8270C
Iron	18700 D	25	mg/kg dry	EPA 6010B
Lead	17.4	1.0	mg/kg dry	EPA 6010B
Manganese	815	0.99	mg/kg dry	EPA 6010B
Mercury	0.097	0.022	mg/kg dry	EPA 7471A
Nickel	6.8	5.0	mg/kg dry	EPA 6010B
Pyrene	0.0596 J	0.0656	mg/kg dry	EPA 8270C
Selenium	2.4	1.0	mg/kg dry	EPA 6010B
Zinc	93.2	2.0	mg/kg dry	EPA 6010B

Client ID: CF-4

Lab ID: B609856-04

Analyte	Results/Qual	MRL	Units	Method
Aluminum	9790 D	92	mg/kg dry	EPA 6010B
Arsenic	3.6	0.9	mg/kg dry	EPA 6010B
Barium	97.5	0.9	mg/kg dry	EPA 6010B
Benzo(a)anthracene	0.0427 J	0.0604	mg/kg dry	EPA 8270C
Benzo(a)pyrene	0.0427 J	0.0604	mg/kg dry	EPA 8270C
Benzo(b)fluoranthene	0.0672	0.0604	mg/kg dry	EPA 8270C
Benzo(g,h,i)perylene	0.0916	0.0604	mg/kg dry	EPA 8270C
Benzo(k)fluoranthene	0.0305 J	0.0604	mg/kg dry	EPA 8270C
Cadmium	0.15	0.09	mg/kg dry	EPA 6010B
Chromium	18.7	0.9	mg/kg dry	EPA 6010B
Chrysene	0.0549 J	0.0604	mg/kg dry	EPA 8270C
Copper	15.9	0.92	mg/kg dry	EPA 6010B
Fluoranthene	0.0794	0.0604	mg/kg dry	EPA 8270C
Indeno(1,2,3-cd)pyrene	0.128	0.0604	mg/kg dry	EPA 8270C
Iron	20100 D	23	mg/kg dry	EPA 6010B
Lead	16.1	0.9	mg/kg dry	EPA 6010B
Manganese	777	0.92	mg/kg dry	EPA 6010B
Mercury	0.064	0.017	mg/kg dry	EPA 7471A
Nickel	6.2	4.6	mg/kg dry	EPA 6010B
Phenanthrene	0.0305 J	0.0604	mg/kg dry	EPA 8270C



Pyrene	0.0672	0.0604	mg/kg dry	EPA 8270C
Selenium	2.5	0.9	mg/kg dry	EPA 6010B
Zinc	70.7	1.8	mg/kg dry	EPA 6010B

Client ID: CF-5

Lab ID: B609856-05

Analyte	Results/Qual	MRL	Units	Method
Aluminum	5600	17	mg/kg dry	EPA 6010B
Arsenic	2.3	0.8	mg/kg dry	EPA 6010B
Barium	74.4	0.8	mg/kg dry	EPA 6010B
Benzo(a)anthracene	0.0893	0.0553	mg/kg dry	EPA 8270C
Benzo(a)pyrene	0.100	0.0553	mg/kg dry	EPA 8270C
Benzo(b)fluoranthene	0.162	0.0553	mg/kg dry	EPA 8270C
Benzo(g,h,i)perylene	0.123	0.0553	mg/kg dry	EPA 8270C
Benzo(k)fluoranthene	0.0558	0.0553	mg/kg dry	EPA 8270C
Cadmium	0.22	0.08	mg/kg dry	EPA 6010B
Chromium	13.3	0.8	mg/kg dry	EPA 6010B
Chrysene	0.134	0.0553	mg/kg dry	EPA 8270C
Copper	11.7	0.84	mg/kg dry	EPA 6010B
Dibenzo(a,h)anthracene	0.134	0.0553	mg/kg dry	EPA 8270C
Fluoranthene	0.346	0.0553	mg/kg dry	EPA 8270C
Indeno(1,2,3-cd)pyrene	0.156	0.0553	mg/kg dry	EPA 8270C
Iron	12400 D	21	mg/kg dry	EPA 6010B
Lead	13.7	0.8	mg/kg dry	EPA 6010B
Manganese	544	0.84	mg/kg dry	EPA 6010B
Mercury	0.040	0.017	mg/kg dry	EPA 7471A
Nickel	4.4	4.2	mg/kg dry	EPA 6010B
Phenanthrene	0.0781	0.0553	mg/kg dry	EPA 8270C
Pyrene	0.262	0.0553	mg/kg dry	EPA 8270C
Selenium	1.8	0.8	mg/kg dry	EPA 6010B
Zinc	62.9	1.7	mg/kg dry	EPA 6010B

Client ID: CF-6

Lab ID: B609856-06

Analyte	Results/Qual	MRL	Units	Method
Aluminum	13500 D	123	mg/kg dry	EPA 6010B
Arsenic	4.3	1.2	mg/kg dry	EPA 6010B
Barium	148	1.2	mg/kg dry	EPA 6010B
Cadmium	0.27	0.12	mg/kg dry	EPA 6010B
Chromium	24.2	1.2	mg/kg dry	EPA 6010B
Copper	19.8	1.23	mg/kg dry	EPA 6010B
Iron	24700 D	31	mg/kg dry	EPA 6010B
Lead	21.8	1.2	mg/kg dry	EPA 6010B
Manganese	1160	1.23	mg/kg dry	EPA 6010B
Mercury	0.092	0.025	mg/kg dry	EPA 7471A
Nickel	9.0	6.2	mg/kg dry	EPA 6010B
Selenium	3.1	1.2	mg/kg dry	EPA 6010B
Zinc	109	2.5	mg/kg dry	EPA 6010B



Client ID: CF-7

Lab ID: B609856-07

Analyte	Results/Qual	MRL	Units	Method
Aluminum	13000	29	mg/kg dry	EPA 6010B
Arsenic	4.3	1.4	mg/kg dry	EPA 6010B
Barium	148	1.4	mg/kg dry	EPA 6010B
Cadmium	0.22	0.14	mg/kg dry	EPA 6010B
Chromium	24.1	1.4	mg/kg dry	EPA 6010B
Copper	19.2	1.43	mg/kg dry	EPA 6010B
Fluoranthene	0.0477 J	0.0944	mg/kg dry	EPA 8270C
Iron	24400 D	36	mg/kg dry	EPA 6010B
Lead	21.9	1.4	mg/kg dry	EPA 6010B
Manganese	1260	1.43	mg/kg dry	EPA 6010B
Mercury	0.084	0.020	mg/kg dry	EPA 7471A
Nickel	9.1	7.1	mg/kg dry	EPA 6010B
Selenium	3.0	1.4	mg/kg dry	EPA 6010B
Zinc	105	2.9	mg/kg dry	EPA 6010B

Client ID: CF-8

Lab ID: B609856-08

Analyte	Results/Qual	MRL	Units	Method
Aluminum	8730	22	mg/kg dry	EPA 6010B
Arsenic	2.7	1.1	mg/kg dry	EPA 6010B
Barium	100	1.1	mg/kg dry	EPA 6010B
Cadmium	0.24	0.11	mg/kg dry	EPA 6010B
Chromium	16.7	1.1	mg/kg dry	EPA 6010B
Copper	13.6	1.11	mg/kg dry	EPA 6010B
Iron	16600 D	28	mg/kg dry	EPA 6010B
Lead	15.2	1.1	mg/kg dry	EPA 6010B
Manganese	595	1.11	mg/kg dry	EPA 6010B
Mercury	0.072	0.018	mg/kg dry	EPA 7471A
Nickel	6.4	5.6	mg/kg dry	EPA 6010B
Selenium	1.9	1.1	mg/kg dry	EPA 6010B
Zinc	78.7	2.2	mg/kg dry	EPA 6010B

Client ID: CF-9

Lab ID: B609856-09

Analyte	Results/Qual	MRL	Units	Method
Aluminum	4940	19	mg/kg dry	EPA 6010B
Arsenic	1.8	0.9	mg/kg dry	EPA 6010B
Barium	64.8	0.9	mg/kg dry	EPA 6010B
Benzo(a)anthracene	0.0558 J	0.0614	mg/kg dry	EPA 8270C
Benzo(a)pyrene	0.0558 J	0.0614	mg/kg dry	EPA 8270C
Benzo(b)fluoranthene	0.0868	0.0614	mg/kg dry	EPA 8270C
Benzo(g,h,i)perylene	0.0992	0.0614	mg/kg dry	EPA 8270C
Benzo(k)fluoranthene	0.0372 J	0.0614	mg/kg dry	EPA 8270C
Cadmium	0.15	0.09	mg/kg dry	EPA 6010B
Chromium	11.9	0.9	mg/kg dry	EPA 6010B
Chrysene	0.0558 J	0.0614	mg/kg dry	EPA 8270C
Copper	9.81	0.93	mg/kg dry	EPA 6010B

Fluoranthene	0.0992	0.0614	mg/kg dry	EPA 8270C
Indeno(1,2,3-cd)pyrene	0.136	0.0614	mg/kg dry	EPA 8270C
Iron	10300	5	mg/kg dry	EPA 6010B
Lead	13.6	0.9	mg/kg dry	EPA 6010B
Manganese	506	0.93	mg/kg dry	EPA 6010B
Mercury	0.057	0.016	mg/kg dry	EPA 7471A
Nickel	3.8 J	4.7	mg/kg dry	EPA 6010B
Pyrene	0.0806	0.0614	mg/kg dry	EPA 8270C
Selenium	1.3	0.9	mg/kg dry	EPA 6010B
Zinc	57.5	1.9	mg/kg dry	EPA 6010B

Client ID: CF-10

Lab ID: B609856-10

Analyte	Results/Qual	MRL	Units	Method
Aluminum	10500	25	mg/kg dry	EPA 6010B
Arsenic	4.3	1.2	mg/kg dry	EPA 6010B
Barium	139	1.2	mg/kg dry	EPA 6010B
Benzo(a)anthracene	0.0578 J	0.0817	mg/kg dry	EPA 8270C
Benzo(a)pyrene	0.0578 J	0.0817	mg/kg dry	EPA 8270C
Benzo(b)fluoranthene	0.0908	0.0817	mg/kg dry	EPA 8270C
Benzo(g,h,i)perylene	0.124	0.0817	mg/kg dry	EPA 8270C
Cadmium	0.28	0.12	mg/kg dry	EPA 6010B
Chromium	22.4	1.2	mg/kg dry	EPA 6010B
Chrysene	0.0660 J	0.0817	mg/kg dry	EPA 8270C
Copper	21.5	1.24	mg/kg dry	EPA 6010B
Fluoranthene	0.140	0.0817	mg/kg dry	EPA 8270C
Indeno(1,2,3-cd)pyrene	0.165	0.0817	mg/kg dry	EPA 8270C
Iron	20600 D	12	mg/kg dry	EPA 6010B
Lead	22.9	1.2	mg/kg dry	EPA 6010B
Manganese	1610	1.24	mg/kg dry	EPA 6010B
Mercury	0.101	0.023	mg/kg dry	EPA 7471A
Nickel	8.2	6.2	mg/kg dry	EPA 6010B
Phenanthrene	0.0743 J	0.0817	mg/kg dry	EPA 8270C
Pyrene	0.107	0.0817	mg/kg dry	EPA 8270C
Selenium	2.5	1.2	mg/kg dry	EPA 6010B
Zinc	101	2.5	mg/kg dry	EPA 6010B

Client ID: CF-11

Lab ID: B609856-11

Analyte	Results/Qual	MRL	Units	Method
Acenaphthylene	0.0452 J	0.0639	mg/kg dry	EPA 8270C
Aluminum	6750	19	mg/kg dry	EPA 6010B
Arsenic	3.0	1.0	mg/kg dry	EPA 6010B
Barium	95.7	1.0	mg/kg dry	EPA 6010B
Benzo(a)anthracene	0.194	0.0639	mg/kg dry	EPA 8270C
Benzo(a)pyrene	0.232	0.0639	mg/kg dry	EPA 8270C
Benzo(b)fluoranthene	0.316	0.0639	mg/kg dry	EPA 8270C
Benzo(g,h,i)perylene	0.200	0.0639	mg/kg dry	EPA 8270C
Benzo(k)fluoranthene	0.110	0.0639	mg/kg dry	EPA 8270C



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Cadmium	0.22	0.10	mg/kg dry	EPA 6010B
Chromium	15.6	1.0	mg/kg dry	EPA 6010B
Chrysene	0.226	0.0639	mg/kg dry	EPA 8270C
Copper	15.1	0.97	mg/kg dry	EPA 6010B
Dibenzo(a,h)anthracene	0.168	0.0639	mg/kg dry	EPA 8270C
Fluoranthene	0.355	0.0639	mg/kg dry	EPA 8270C
Indeno(1,2,3-cd)pyrene	0.232	0.0639	mg/kg dry	EPA 8270C
Iron	14800 D	10	mg/kg dry	EPA 6010B
Lead	17.8	1.0	mg/kg dry	EPA 6010B
Manganese	930	0.97	mg/kg dry	EPA 6010B
Mercury	0.051	0.018	mg/kg dry	EPA 7471A
Nickel	5.6	4.8	mg/kg dry	EPA 6010B
Phenanthrene	0.136	0.0639	mg/kg dry	EPA 8270C
Pyrene	0.336	0.0639	mg/kg dry	EPA 8270C
Selenium	1.8	1.0	mg/kg dry	EPA 6010B
Zinc	76.1	1.9	mg/kg dry	EPA 6010B

Client ID: CF-12

Lab ID: B609856-12

Analyte	Results/Qual	MRL	Units	Method
Aluminum	8310	21	mg/kg dry	EPA 6010B
Arsenic	2.9	1.0	mg/kg dry	EPA 6010B
Barium	108	1.0	mg/kg dry	EPA 6010B
Benzo(a)anthracene	0.0554 J	0.0686	mg/kg dry	EPA 8270C
Benzo(a)pyrene	0.0554 J	0.0686	mg/kg dry	EPA 8270C
Benzo(b)fluoranthene	0.0900	0.0686	mg/kg dry	EPA 8270C
Benzo(g,h,i)perylene	0.111	0.0686	mg/kg dry	EPA 8270C
Cadmium	0.30	0.10	mg/kg dry	EPA 6010B
Chromium	19.0	1.0	mg/kg dry	EPA 6010B
Chrysene	0.0623 J	0.0686	mg/kg dry	EPA 8270C
Copper	17.7	1.04	mg/kg dry	EPA 6010B
Fluoranthene	0.118	0.0686	mg/kg dry	EPA 8270C
Indeno(1,2,3-cd)pyrene	0.152	0.0686	mg/kg dry	EPA 8270C
Iron	16800 D	10	mg/kg dry	EPA 6010B
Lead	19.4	1.0	mg/kg dry	EPA 6010B
Manganese	693	1.04	mg/kg dry	EPA 6010B
Mercury	0.073	0.018	mg/kg dry	EPA 7471A
Nickel	6.4	5.2	mg/kg dry	EPA 6010B
Phenanthrene	0.0416 J	0.0686	mg/kg dry	EPA 8270C
Pyrene	0.0900	0.0686	mg/kg dry	EPA 8270C
Selenium	2.1	1.0	mg/kg dry	EPA 6010B
Zinc	96.6	2.1	mg/kg dry	EPA 6010B



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ANALYTICAL REPORT

Sample ID: CF-1
 Lab #: B609856-01
 Prep. Method: EPA 3545_MS
 Analyzed: 11/16/06 By: jj
 Anal. Method: EPA 8270C
 Anal. Batch:
 QC Batch: 6K14012

Project: Cape Fear Sediments
 Work Order #: B609856
 Matrix: Soil
 Unit: mg/kg dry
 Dilution Factor: 1
 Percent Solids: 46.69

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0227 U	0.0227	0.0707	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0571 J	0.0212	0.0707	mg/kg dry
Acenaphthene	83-32-9	0.0156 U	0.0156	0.0707	mg/kg dry
Acenaphthylene	208-96-8	0.0227 U	0.0227	0.0707	mg/kg dry
Anthracene	120-12-7	0.0148 U	0.0148	0.0707	mg/kg dry
Benzo(a)anthracene	56-55-3	0.0148 U	0.0148	0.0707	mg/kg dry
Benzo(a)pyrene	50-32-8	0.0148 U	0.0148	0.0707	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.0114 U	0.0114	0.0707	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.0218 U	0.0218	0.0707	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.0148 U	0.0148	0.0707	mg/kg dry
Chrysene	218-01-9	0.0156 U	0.0156	0.0707	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0240 U	0.0240	0.0707	mg/kg dry
Fluoranthene	206-44-0	0.0428 J	0.0191	0.0707	mg/kg dry
Fluorene	86-73-7	0.0135 U	0.0135	0.0707	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.0248 U	0.0248	0.0707	mg/kg dry
Naphthalene	91-20-3	0.0428 J	0.0261	0.0707	mg/kg dry
Phenanthrene	85-01-8	0.0148 U	0.0148	0.0707	mg/kg dry
Pyrene	129-00-0	0.0357 J	0.0191	0.0707	mg/kg dry
Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	3.54	3.57	99 %	34-180



ANALYTICAL REPORT

Sample ID: CF-1
Lab #: B609856-01

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 46.69

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Aluminum	7429-90-5	9470	5	21	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Arsenic	7440-38-2	3.6	0.4	1.1	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Barium	7440-39-3	116	0.1	1.1	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Cadmium	7440-43-9	0.22	0.05	0.11	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Chromium	7440-47-3	19.6	0.3	1.1	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Copper	7440-50-8	17.3	0.30	1.07	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Iron	7439-89-6	19600 D	19	27	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Lead	7439-92-1	18.7	0.2	1.1	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Manganese	7439-96-5	1040	0.15	1.07	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Nickel	7440-02-0	7.1	0.2	5.4	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Selenium	7782-49-2	2.7	0.3	1.1	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Silver	7440-22-4	0.21 U	0.21	1.07	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Zinc	7440-66-6	93.8	0.3	2.1	mg/kg dry	EPA 6010B	EPA 3050B	6K14001



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ANALYTICAL REPORT

Sample ID: CF-1
Lab #: B609856-01

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 47.53

Metals by EPA 6000/7000 Series Methods

<u>Parameter</u>	<u>CAS Number</u>	<u>Analytical Results</u>	<u>MDL</u>	<u>MRL</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Prep Method</u>	<u>Analytical Batch</u>
Mercury	7439-97-6	0.087	0.0007	0.021	mg/kg dry	EPA 7471A	EPA 7471A	6K14013

**ANALYTICAL REPORT**

Sample ID: CF-2
 Lab #: B609856-02
 Prep. Method: EPA 3545_MS
 Analyzed: 11/16/06 By: jj
 Anal. Method: EPA 8270C
 Anal. Batch:
 QC Batch: 6K14012

Project: Cape Fear Sediments
 Work Order #: B609856
 Matrix: Soil
 Unit: mg/kg dry
 Dilution Factor: 1
 Percent Solids: 40.60

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0261 U	0.0261	0.0813	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0244 U	0.0244	0.0813	mg/kg dry
Acenaphthene	83-32-9	0.0179 U	0.0179	0.0813	mg/kg dry
Acenaphthylene	208-96-8	0.0261 U	0.0261	0.0813	mg/kg dry
Anthracene	120-12-7	0.0170 U	0.0170	0.0813	mg/kg dry
Benzo(a)anthracene	56-55-3	0.0657 J	0.0170	0.0813	mg/kg dry
Benzo(a)pyrene	50-32-8	0.0493 J	0.0170	0.0813	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.0739 J	0.0131	0.0813	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.123	0.0251	0.0813	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.0410 J	0.0170	0.0813	mg/kg dry
Chrysene	218-01-9	0.0493 J	0.0180	0.0813	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0276 U	0.0276	0.0813	mg/kg dry
Fluoranthene	206-44-0	0.0739 J	0.0219	0.0813	mg/kg dry
Fluorene	86-73-7	0.0155 U	0.0155	0.0813	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.164	0.0286	0.0813	mg/kg dry
Naphthalene	91-20-3	0.0300 U	0.0300	0.0813	mg/kg dry
Phenanthrene	85-01-8	0.0170 U	0.0170	0.0813	mg/kg dry
Pyrene	129-00-0	0.0657 J	0.0219	0.0813	mg/kg dry
Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	5.93	4.10	144 %	34-180



ANALYTICAL REPORT

Sample ID: CF-2
Lab #: B609856-02

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 40.60

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Aluminum	7429-90-5	10100	6	25	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Arsenic	7440-38-2	3.5	0.5	1.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Barium	7440-39-3	125	0.1	1.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Cadmium	7440-43-9	0.25	0.06	0.12	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Chromium	7440-47-3	20.2	0.4	1.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Copper	7440-50-8	17.4	0.34	1.23	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Iron	7439-89-6	19800 D	22	31	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Lead	7439-92-1	19.0	0.2	1.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Manganese	7439-96-5	1050	0.17	1.23	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Nickel	7440-02-0	7.7	0.2	6.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Selenium	7782-49-2	2.5	0.3	1.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Silver	7440-22-4	0.25 U	0.25	1.23	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Zinc	7440-66-6	101	0.3	2.5	mg/kg dry	EPA 6010B	EPA 3050B	6K14001



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ANALYTICAL REPORT

Sample ID: CF-2
Lab #: B609856-02

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 50.76

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Mercury	7439-97-6	0.097	0.0006	0.020	mg/kg dry	EPA 7471A	EPA 7471A	6K14013

**ANALYTICAL REPORT**

Sample ID: CF-3
 Lab #: B609856-03
 Prep. Method: EPA 3545_MS
 Analyzed: 11/16/06 By: jj
 Anal. Method: EPA 8270C
 Anal. Batch:
 QC Batch: 6K14012

Project: Cape Fear Sediments
 Work Order #: B609856
 Matrix: Soil
 Unit: mg/kg dry
 Dilution Factor: 1
 Percent Solids: 50.30

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0211 U	0.0211	0.0656	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0197 U	0.0197	0.0656	mg/kg dry
Acenaphthene	83-32-9	0.0144 U	0.0144	0.0656	mg/kg dry
Acenaphthylene	208-96-8	0.0211 U	0.0211	0.0656	mg/kg dry
Anthracene	120-12-7	0.0137 U	0.0137	0.0656	mg/kg dry
Benzo(a)anthracene	56-55-3	0.0464 J	0.0137	0.0656	mg/kg dry
Benzo(a)pyrene	50-32-8	0.0398 J	0.0137	0.0656	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.0596 J	0.0106	0.0656	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.0994	0.0203	0.0656	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.0137 U	0.0137	0.0656	mg/kg dry
Chrysene	218-01-9	0.0398 J	0.0145	0.0656	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0223 U	0.0223	0.0656	mg/kg dry
Fluoranthene	206-44-0	0.0663	0.0177	0.0656	mg/kg dry
Fluorene	86-73-7	0.0125 U	0.0125	0.0656	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.133	0.0231	0.0656	mg/kg dry
Naphthalene	91-20-3	0.0243 U	0.0243	0.0656	mg/kg dry
Phenanthrene	85-01-8	0.0137 U	0.0137	0.0656	mg/kg dry
Pyrene	129-00-0	0.0596 J	0.0177	0.0656	mg/kg dry
Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	4.62	3.31	139 %	34-180



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ANALYTICAL REPORT

Sample ID: CF-3
Lab #: B609856-03

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 50.30

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Aluminum	7429-90-5	9320	5	20	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Arsenic	7440-38-2	3.2	0.4	1.0	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Barium	7440-39-3	113	0.1	1.0	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Cadmium	7440-43-9	0.24	0.05	0.10	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Chromium	7440-47-3	18.8	0.3	1.0	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Copper	7440-50-8	18.0	0.28	0.99	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Iron	7439-89-6	18700 D	18	25	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Lead	7439-92-1	17.4	0.2	1.0	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Manganese	7439-96-5	815	0.14	0.99	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Nickel	7440-02-0	6.8	0.2	5.0	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Selenium	7782-49-2	2.4	0.2	1.0	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Silver	7440-22-4	0.20 U	0.20	0.99	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Zinc	7440-66-6	93.2	0.3	2.0	mg/kg dry	EPA 6010B	EPA 3050B	6K14001



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ANALYTICAL REPORT

Sample ID: CF-3
Lab #: B609856-03

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 45.81

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Mercury	7439-97-6	0.097	0.0007	0.022	mg/kg dry	EPA 7471A	EPA 7471A	6K14013

**ANALYTICAL REPORT**

Sample ID: CF-4
 Lab #: B609856-04
 Prep. Method: EPA 3545_MS
 Analyzed: 11/16/06 By: jj
 Anal. Method: EPA 8270C
 Anal. Batch:
 QC Batch: 6K14012

Project: Cape Fear Sediments
 Work Order #: B609856
 Matrix: Soil
 Unit: mg/kg dry
 Dilution Factor: 1
 Percent Solids: 54.60

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0194 U	0.0194	0.0604	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0181 U	0.0181	0.0604	mg/kg dry
Acenaphthene	83-32-9	0.0133 U	0.0133	0.0604	mg/kg dry
Acenaphthylene	208-96-8	0.0194 U	0.0194	0.0604	mg/kg dry
Anthracene	120-12-7	0.0126 U	0.0126	0.0604	mg/kg dry
Benzo(a)anthracene	56-55-3	0.0427 J	0.0126	0.0604	mg/kg dry
Benzo(a)pyrene	50-32-8	0.0427 J	0.0126	0.0604	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.0672	0.00976	0.0604	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.0916	0.0187	0.0604	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.0305 J	0.0126	0.0604	mg/kg dry
Chrysene	218-01-9	0.0549 J	0.0134	0.0604	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0205 U	0.0205	0.0604	mg/kg dry
Fluoranthene	206-44-0	0.0794	0.0163	0.0604	mg/kg dry
Fluorene	86-73-7	0.0115 U	0.0115	0.0604	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.128	0.0212	0.0604	mg/kg dry
Naphthalene	91-20-3	0.0223 U	0.0223	0.0604	mg/kg dry
Phenanthrene	85-01-8	0.0305 J	0.0126	0.0604	mg/kg dry
Pyrene	129-00-0	0.0672	0.0163	0.0604	mg/kg dry
Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	4.45	3.05	146 %	34-180



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ANALYTICAL REPORT

Sample ID: CF-4
Lab #: B609856-04

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 54.60

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Aluminum	7429-90-5	9790 D	23	92	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Arsenic	7440-38-2	3.6	0.4	0.9	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Barium	7440-39-3	97.5	0.1	0.9	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Cadmium	7440-43-9	0.15	0.05	0.09	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Chromium	7440-47-3	18.7	0.3	0.9	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Copper	7440-50-8	15.9	0.26	0.92	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Iron	7439-89-6	20100 D	16	23	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Lead	7439-92-1	16.1	0.2	0.9	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Manganese	7439-96-5	777	0.13	0.92	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Nickel	7440-02-0	6.2	0.2	4.6	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Selenium	7782-49-2	2.5	0.2	0.9	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Silver	7440-22-4	0.37 U, D	0.37	1.83	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Zinc	7440-66-6	70.7	0.2	1.8	mg/kg dry	EPA 6010B	EPA 3050B	6K14001



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ANALYTICAL REPORT

Sample ID: CF-4
Lab #: B609856-04

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 59.72

Metals by EPA 6000/7000 Series Methods

<u>Parameter</u>	<u>CAS Number</u>	<u>Analytical Results</u>	<u>MDL</u>	<u>MRL</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Prep Method</u>	<u>Analytical Batch</u>
Mercury	7439-97-6	0.064	0.0005	0.017	mg/kg dry	EPA 7471A	EPA 7471A	6K14013

**ANALYTICAL REPORT**

Sample ID: CF-5
 Lab #: B609856-05
 Prep. Method: EPA 3545_MS
 Analyzed: 11/16/06 By: jj
 Anal. Method: EPA 8270C
 Anal. Batch:
 QC Batch: 6K14012

Project: Cape Fear Sediments
 Work Order #: B609856
 Matrix: Soil
 Unit: mg/kg dry
 Dilution Factor: 1
 Percent Solids: 59.71

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0178 U	0.0178	0.0553	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0166 U	0.0166	0.0553	mg/kg dry
Acenaphthene	83-32-9	0.0122 U	0.0122	0.0553	mg/kg dry
Acenaphthylene	208-96-8	0.0178 U	0.0178	0.0553	mg/kg dry
Anthracene	120-12-7	0.0116 U	0.0116	0.0553	mg/kg dry
Benzo(a)anthracene	56-55-3	0.0893	0.0116	0.0553	mg/kg dry
Benzo(a)pyrene	50-32-8	0.100	0.0116	0.0553	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.162	0.00892	0.0553	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.123	0.0171	0.0553	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.0558	0.0116	0.0553	mg/kg dry
Chrysene	218-01-9	0.134	0.0122	0.0553	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.134	0.0188	0.0553	mg/kg dry
Fluoranthene	206-44-0	0.346	0.0149	0.0553	mg/kg dry
Fluorene	86-73-7	0.0106 U	0.0106	0.0553	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.156	0.0194	0.0553	mg/kg dry
Naphthalene	91-20-3	0.0204 U	0.0204	0.0553	mg/kg dry
Phenanthrene	85-01-8	0.0781	0.0116	0.0553	mg/kg dry
Pyrene	129-00-0	0.262	0.0149	0.0553	mg/kg dry
Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	3.84	2.79	138 %	34-180



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ANALYTICAL REPORT

Sample ID: CF-5
Lab #: B609856-05

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 59.71

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Aluminum	7429-90-5	5600	4	17	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Arsenic	7440-38-2	2.3	0.3	0.8	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Barium	7440-39-3	74.4	0.09	0.8	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Cadmium	7440-43-9	0.22	0.04	0.08	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Chromium	7440-47-3	13.3	0.3	0.8	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Copper	7440-50-8	11.7	0.23	0.84	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Iron	7439-89-6	12400 D	15	21	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Lead	7439-92-1	13.7	0.2	0.8	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Manganese	7439-96-5	544	0.12	0.84	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Nickel	7440-02-0	4.4	0.2	4.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Selenium	7782-49-2	1.8	0.2	0.8	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Silver	7440-22-4	0.17 U	0.17	0.84	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Zinc	7440-66-6	62.9	0.2	1.7	mg/kg dry	EPA 6010B	EPA 3050B	6K14001



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ANALYTICAL REPORT

Sample ID: CF-5
Lab #: B609856-05

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 59.01

Metals by EPA 6000/7000 Series Methods

<u>Parameter</u>	<u>CAS Number</u>	<u>Analytical Results</u>	<u>MDL</u>	<u>MRL</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Prep Method</u>	<u>Analytical Batch</u>
Mercury	7439-97-6	0.040	0.0005	0.017	mg/kg dry	EPA 7471A	EPA 7471A	6K14013

**ANALYTICAL REPORT**

Sample ID: CF-6
 Lab #: B609856-06
 Prep. Method: EPA 3545_MS
 Analyzed: 11/16/06 By: jj
 Anal. Method: EPA 8270C
 Anal. Batch:
 QC Batch: 6K14012

Project: Cape Fear Sediments
 Work Order #: B609856
 Matrix: Soil
 Unit: mg/kg dry
 Dilution Factor: 1
 Percent Solids: 40.63

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0261 U	0.0261	0.0812	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0244 U	0.0244	0.0812	mg/kg dry
Acenaphthene	83-32-9	0.0179 U	0.0179	0.0812	mg/kg dry
Acenaphthylene	208-96-8	0.0261 U	0.0261	0.0812	mg/kg dry
Anthracene	120-12-7	0.0170 U	0.0170	0.0812	mg/kg dry
Benzo(a)anthracene	56-55-3	0.0170 U	0.0170	0.0812	mg/kg dry
Benzo(a)pyrene	50-32-8	0.0170 U	0.0170	0.0812	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.0131 U	0.0131	0.0812	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.0251 U	0.0251	0.0812	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.0170 U	0.0170	0.0812	mg/kg dry
Chrysene	218-01-9	0.0180 U	0.0180	0.0812	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0276 U	0.0276	0.0812	mg/kg dry
Fluoranthene	206-44-0	0.0219 U	0.0219	0.0812	mg/kg dry
Fluorene	86-73-7	0.0155 U	0.0155	0.0812	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.0286 U	0.0286	0.0812	mg/kg dry
Naphthalene	91-20-3	0.0300 U	0.0300	0.0812	mg/kg dry
Phenanthrene	85-01-8	0.0170 U	0.0170	0.0812	mg/kg dry
Pyrene	129-00-0	0.0219 U	0.0219	0.0812	mg/kg dry
Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	5.42	4.10	132 %	34-180



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ANALYTICAL REPORT

Sample ID: CF-6
Lab #: B609856-06

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 40.63

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Aluminum	7429-90-5	13500 D	31	123	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Arsenic	7440-38-2	4.3	0.5	1.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Barium	7440-39-3	148	0.1	1.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Cadmium	7440-43-9	0.27	0.06	0.12	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Chromium	7440-47-3	24.2	0.4	1.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Copper	7440-50-8	19.8	0.34	1.23	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Iron	7439-89-6	24700 D	22	31	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Lead	7439-92-1	21.8	0.2	1.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Manganese	7439-96-5	1160	0.17	1.23	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Nickel	7440-02-0	9.0	0.2	6.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Selenium	7782-49-2	3.1	0.3	1.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Silver	7440-22-4	0.25 U	0.25	1.23	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Zinc	7440-66-6	109	0.3	2.5	mg/kg dry	EPA 6010B	EPA 3050B	6K14001



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ANALYTICAL REPORT

Sample ID: CF-6
Lab #: B609856-06

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 39.78

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Mercury	7439-97-6	0.092	0.0008	0.025	mg/kg dry	EPA 7471A	EPA 7471A	6K14013



ANALYTICAL REPORT

Sample ID: CF-7
 Lab #: B609856-07
 Prep. Method: EPA 3545_MS
 Analyzed: 11/16/06 By: jj
 Anal. Method: EPA 8270C
 Anal. Batch:
 QC Batch: 6K14012

Project: Cape Fear Sediments
 Work Order #: B609856
 Matrix: Soil
 Unit: mg/kg dry
 Dilution Factor: 1
 Percent Solids: 34.97

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0303 U	0.0303	0.0944	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0283 U	0.0283	0.0944	mg/kg dry
Acenaphthene	83-32-9	0.0208 U	0.0208	0.0944	mg/kg dry
Acenaphthylene	208-96-8	0.0303 U	0.0303	0.0944	mg/kg dry
Anthracene	120-12-7	0.0197 U	0.0197	0.0944	mg/kg dry
Benzo(a)anthracene	56-55-3	0.0197 U	0.0197	0.0944	mg/kg dry
Benzo(a)pyrene	50-32-8	0.0197 U	0.0197	0.0944	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.0152 U	0.0152	0.0944	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.0292 U	0.0292	0.0944	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.0197 U	0.0197	0.0944	mg/kg dry
Chrysene	218-01-9	0.0209 U	0.0209	0.0944	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0320 U	0.0320	0.0944	mg/kg dry
Fluoranthene	206-44-0	0.0477 J	0.0255	0.0944	mg/kg dry
Fluorene	86-73-7	0.0180 U	0.0180	0.0944	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.0332 U	0.0332	0.0944	mg/kg dry
Naphthalene	91-20-3	0.0349 U	0.0349	0.0944	mg/kg dry
Phenanthrene	85-01-8	0.0197 U	0.0197	0.0944	mg/kg dry
Pyrene	129-00-0	0.0255 U	0.0255	0.0944	mg/kg dry

Surrogate Recovery	Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	5.10	4.77	107 %	34-180



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ANALYTICAL REPORT

Sample ID: CF-7
Lab #: B609856-07

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 34.97

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Aluminum	7429-90-5	13000	7	29	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Arsenic	7440-38-2	4.3	0.6	1.4	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Barium	7440-39-3	148	0.2	1.4	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Cadmium	7440-43-9	0.22	0.07	0.14	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Chromium	7440-47-3	24.1	0.5	1.4	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Copper	7440-50-8	19.2	0.40	1.43	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Iron	7439-89-6	24400 D	26	36	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Lead	7439-92-1	21.9	0.3	1.4	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Manganese	7439-96-5	1260	0.20	1.43	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Nickel	7440-02-0	9.1	0.3	7.1	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Selenium	7782-49-2	3.0	0.3	1.4	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Silver	7440-22-4	0.29 U	0.29	1.43	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Zinc	7440-66-6	105	0.4	2.9	mg/kg dry	EPA 6010B	EPA 3050B	6K14001



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ANALYTICAL REPORT

Sample ID: CF-7
Lab #: B609856-07

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 49.60

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Mercury	7439-97-6	0.084	0.0006	0.020	mg/kg dry	EPA 7471A	EPA 7471A	6K14013

**ANALYTICAL REPORT**

Sample ID: CF-8
Lab #: B609856-08
Prep. Method: EPA 3545_MS
Analyzed: 11/16/06 By: jj
Anal. Method: EPA 8270C
Anal. Batch:
QC Batch: 6K14012

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Unit: mg/kg dry
Dilution Factor: 1
Percent Solids: 44.98

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0236 U	0.0236	0.0734	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0220 U	0.0220	0.0734	mg/kg dry
Acenaphthene	83-32-9	0.0161 U	0.0161	0.0734	mg/kg dry
Acenaphthylene	208-96-8	0.0236 U	0.0236	0.0734	mg/kg dry
Anthracene	120-12-7	0.0153 U	0.0153	0.0734	mg/kg dry
Benzo(a)anthracene	56-55-3	0.0153 U	0.0153	0.0734	mg/kg dry
Benzo(a)pyrene	50-32-8	0.0153 U	0.0153	0.0734	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.0118 U	0.0118	0.0734	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.0227 U	0.0227	0.0734	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.0153 U	0.0153	0.0734	mg/kg dry
Chrysene	218-01-9	0.0162 U	0.0162	0.0734	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0249 U	0.0249	0.0734	mg/kg dry
Fluoranthene	206-44-0	0.0198 U	0.0198	0.0734	mg/kg dry
Fluorene	86-73-7	0.0140 U	0.0140	0.0734	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.0258 U	0.0258	0.0734	mg/kg dry
Naphthalene	91-20-3	0.0271 U	0.0271	0.0734	mg/kg dry
Phenanthrene	85-01-8	0.0153 U	0.0153	0.0734	mg/kg dry
Pyrene	129-00-0	0.0198 U	0.0198	0.0734	mg/kg dry
Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	4.79	3.71	129 %	34-180



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ANALYTICAL REPORT

Sample ID: CF-8
Lab #: B609856-08

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 44.98

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Aluminum	7429-90-5	8730	6	22	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Arsenic	7440-38-2	2.7	0.4	1.1	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Barium	7440-39-3	100	0.1	1.1	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Cadmium	7440-43-9	0.24	0.06	0.11	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Chromium	7440-47-3	16.7	0.4	1.1	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Copper	7440-50-8	13.6	0.31	1.11	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Iron	7439-89-6	16600 D	20	28	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Lead	7439-92-1	15.2	0.2	1.1	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Manganese	7439-96-5	595	0.16	1.11	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Nickel	7440-02-0	6.4	0.2	5.6	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Selenium	7782-49-2	1.9	0.3	1.1	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Silver	7440-22-4	0.22 U	0.22	1.11	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Zinc	7440-66-6	78.7	0.3	2.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001



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ANALYTICAL REPORT

Sample ID: CF-8
Lab #: B609856-08

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 55.96

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Mercury	7439-97-6	0.072	0.0006	0.018	mg/kg dry	EPA 7471A	EPA 7471A	6K14013

**ANALYTICAL REPORT**

Sample ID: CF-9
 Lab #: B609856-09
 Prep. Method: EPA 3545_MS
 Analyzed: 11/16/06 By: jj
 Anal. Method: EPA 8270C
 Anal. Batch:
 QC Batch: 6K14012

Project: Cape Fear Sediments
 Work Order #: B609856
 Matrix: Soil
 Unit: mg/kg dry
 Dilution Factor: 1
 Percent Solids: 53.74

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0197 U	0.0197	0.0614	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0184 U	0.0184	0.0614	mg/kg dry
Acenaphthene	83-32-9	0.0135 U	0.0135	0.0614	mg/kg dry
Acenaphthylene	208-96-8	0.0197 U	0.0197	0.0614	mg/kg dry
Anthracene	120-12-7	0.0128 U	0.0128	0.0614	mg/kg dry
Benzo(a)anthracene	56-55-3	0.0558 J	0.0128	0.0614	mg/kg dry
Benzo(a)pyrene	50-32-8	0.0558 J	0.0128	0.0614	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.0868	0.00991	0.0614	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.0992	0.0190	0.0614	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.0372 J	0.0128	0.0614	mg/kg dry
Chrysene	218-01-9	0.0558 J	0.0136	0.0614	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0208 U	0.0208	0.0614	mg/kg dry
Fluoranthene	206-44-0	0.0992	0.0166	0.0614	mg/kg dry
Fluorene	86-73-7	0.0117 U	0.0117	0.0614	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.136	0.0216	0.0614	mg/kg dry
Naphthalene	91-20-3	0.0227 U	0.0227	0.0614	mg/kg dry
Phenanthrene	85-01-8	0.0128 U	0.0128	0.0614	mg/kg dry
Pyrene	129-00-0	0.0806	0.0166	0.0614	mg/kg dry
Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	4.45	3.10	143 %	34-180



ANALYTICAL REPORT

Sample ID: CF-9
Lab #: B609856-09

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 53.74

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Aluminum	7429-90-5	4940	5	19	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Arsenic	7440-38-2	1.8	0.4	0.9	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Barium	7440-39-3	64.8	0.1	0.9	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Cadmium	7440-43-9	0.15	0.05	0.09	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Chromium	7440-47-3	11.9	0.3	0.9	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Copper	7440-50-8	9.81	0.26	0.93	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Iron	7439-89-6	10300	3	5	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Lead	7439-92-1	13.6	0.2	0.9	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Manganese	7439-96-5	506	0.13	0.93	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Nickel	7440-02-0	3.8 J	0.2	4.7	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Selenium	7782-49-2	1.3	0.2	0.9	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Silver	7440-22-4	0.19 U	0.19	0.93	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Zinc	7440-66-6	57.5	0.2	1.9	mg/kg dry	EPA 6010B	EPA 3050B	6K14001



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ANALYTICAL REPORT

Sample ID: CF-9
Lab #: B609856-09

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 61.68

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Mercury	7439-97-6	0.057	0.0005	0.016	mg/kg dry	EPA 7471A	EPA 7471A	6K14013

**ANALYTICAL REPORT**

Sample ID: CF-10
 Lab #: B609856-10
 Prep. Method: EPA 3545_MS
 Analyzed: 11/16/06 By: jj
 Anal. Method: EPA 8270C
 Anal. Batch:
 QC Batch: 6K14012

Project: Cape Fear Sediments
 Work Order #: B609856
 Matrix: Soil
 Unit: mg/kg dry
 Dilution Factor: 1
 Percent Solids: 40.40

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0262 U	0.0262	0.0817	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0245 U	0.0245	0.0817	mg/kg dry
Acenaphthene	83-32-9	0.0180 U	0.0180	0.0817	mg/kg dry
Acenaphthylene	208-96-8	0.0262 U	0.0262	0.0817	mg/kg dry
Anthracene	120-12-7	0.0171 U	0.0171	0.0817	mg/kg dry
Benzo(a)anthracene	56-55-3	0.0578 J	0.0171	0.0817	mg/kg dry
Benzo(a)pyrene	50-32-8	0.0578 J	0.0171	0.0817	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.0908	0.0132	0.0817	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.124	0.0252	0.0817	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.0171 U	0.0171	0.0817	mg/kg dry
Chrysene	218-01-9	0.0660 J	0.0181	0.0817	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0277 U	0.0277	0.0817	mg/kg dry
Fluoranthene	206-44-0	0.140	0.0220	0.0817	mg/kg dry
Fluorene	86-73-7	0.0156 U	0.0156	0.0817	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.165	0.0287	0.0817	mg/kg dry
Naphthalene	91-20-3	0.0302 U	0.0302	0.0817	mg/kg dry
Phenanthrene	85-01-8	0.0743 J	0.0171	0.0817	mg/kg dry
Pyrene	129-00-0	0.107	0.0220	0.0817	mg/kg dry
Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	4.93	4.13	119 %	34-180



ANALYTICAL REPORT

Sample ID: CF-10
Lab #: B609856-10

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 40.40

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Aluminum	7429-90-5	10500	6	25	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Arsenic	7440-38-2	4.3	0.5	1.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Barium	7440-39-3	139	0.1	1.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Cadmium	7440-43-9	0.28	0.06	0.12	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Chromium	7440-47-3	22.4	0.4	1.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Copper	7440-50-8	21.5	0.35	1.24	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Iron	7439-89-6	20600 D	9	12	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Lead	7439-92-1	22.9	0.2	1.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Manganese	7439-96-5	1610	0.17	1.24	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Nickel	7440-02-0	8.2	0.2	6.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Selenium	7782-49-2	2.5	0.3	1.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Silver	7440-22-4	0.25 U	0.25	1.24	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Zinc	7440-66-6	101	0.3	2.5	mg/kg dry	EPA 6010B	EPA 3050B	6K14001



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ANALYTICAL REPORT

Sample ID: CF-10
Lab #: B609856-10

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 42.86

Metals by EPA 6000/7000 Series Methods

<u>Parameter</u>	<u>CAS Number</u>	<u>Analytical Results</u>	<u>MDL</u>	<u>MRL</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Prep Method</u>	<u>Analytical Batch</u>
Mercury	7439-97-6	0.101	0.0007	0.023	mg/kg dry	EPA 7471A	EPA 7471A	6K14013

**ANALYTICAL REPORT**

Sample ID: CF-11
 Lab #: B609856-11
 Prep. Method: EPA 3545_MS
 Analyzed: 11/16/06 By: jj
 Anal. Method: EPA 8270C
 Anal. Batch:
 QC Batch: 6K14012

Project: Cape Fear Sediments
 Work Order #: B609856
 Matrix: Soil
 Unit: mg/kg dry
 Dilution Factor: 1
 Percent Solids: 51.65

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0205 U	0.0205	0.0639	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0192 U	0.0192	0.0639	mg/kg dry
Acenaphthene	83-32-9	0.0141 U	0.0141	0.0639	mg/kg dry
Acenaphthylene	208-96-8	0.0452 J	0.0205	0.0639	mg/kg dry
Anthracene	120-12-7	0.0134 U	0.0134	0.0639	mg/kg dry
Benzo(a)anthracene	56-55-3	0.194	0.0134	0.0639	mg/kg dry
Benzo(a)pyrene	50-32-8	0.232	0.0134	0.0639	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.316	0.0103	0.0639	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.200	0.0197	0.0639	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.110	0.0134	0.0639	mg/kg dry
Chrysene	218-01-9	0.226	0.0141	0.0639	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.168	0.0217	0.0639	mg/kg dry
Fluoranthene	206-44-0	0.355	0.0172	0.0639	mg/kg dry
Fluorene	86-73-7	0.0122 U	0.0122	0.0639	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.232	0.0225	0.0639	mg/kg dry
Naphthalene	91-20-3	0.0236 U	0.0236	0.0639	mg/kg dry
Phenanthrene	85-01-8	0.136	0.0134	0.0639	mg/kg dry
Pyrene	129-00-0	0.336	0.0172	0.0639	mg/kg dry
Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	4.41	3.23	137 %	34-180



ANALYTICAL REPORT

Sample ID: CF-11
Lab #: B609856-11

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 51.65

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Aluminum	7429-90-5	6750	5	19	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Arsenic	7440-38-2	3.0	0.4	1.0	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Barium	7440-39-3	95.7	0.1	1.0	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Cadmium	7440-43-9	0.22	0.05	0.10	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Chromium	7440-47-3	15.6	0.3	1.0	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Copper	7440-50-8	15.1	0.27	0.97	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Iron	7439-89-6	14800 D	7	10	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Lead	7439-92-1	17.8	0.2	1.0	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Manganese	7439-96-5	930	0.14	0.97	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Nickel	7440-02-0	5.6	0.2	4.8	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Selenium	7782-49-2	1.8	0.2	1.0	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Silver	7440-22-4	0.19 U	0.19	0.97	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Zinc	7440-66-6	76.1	0.3	1.9	mg/kg dry	EPA 6010B	EPA 3050B	6K14001



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ANALYTICAL REPORT

Sample ID: CF-11
Lab #: B609856-11

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 56.45

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Mercury	7439-97-6	0.051	0.0005	0.018	mg/kg dry	EPA 7471A	EPA 7471A	6K14013

**ANALYTICAL REPORT**

Sample ID: CF-12
 Lab #: B609856-12
 Prep. Method: EPA 3545_MS
 Analyzed: 11/16/06 By: jj
 Anal. Method: EPA 8270C
 Anal. Batch:
 QC Batch: 6K14012

Project: Cape Fear Sediments
 Work Order #: B609856
 Matrix: Soil
 Unit: mg/kg dry
 Dilution Factor: 1
 Percent Solids: 48.13

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0220 U	0.0220	0.0686	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0206 U	0.0206	0.0686	mg/kg dry
Acenaphthene	83-32-9	0.0151 U	0.0151	0.0686	mg/kg dry
Acenaphthylene	208-96-8	0.0220 U	0.0220	0.0686	mg/kg dry
Anthracene	120-12-7	0.0143 U	0.0143	0.0686	mg/kg dry
Benzo(a)anthracene	56-55-3	0.0554 J	0.0143	0.0686	mg/kg dry
Benzo(a)pyrene	50-32-8	0.0554 J	0.0143	0.0686	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.0900	0.0111	0.0686	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.111	0.0212	0.0686	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.0143 U	0.0143	0.0686	mg/kg dry
Chrysene	218-01-9	0.0623 J	0.0152	0.0686	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0233 U	0.0233	0.0686	mg/kg dry
Fluoranthene	206-44-0	0.118	0.0185	0.0686	mg/kg dry
Fluorene	86-73-7	0.0131 U	0.0131	0.0686	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.152	0.0241	0.0686	mg/kg dry
Naphthalene	91-20-3	0.0253 U	0.0253	0.0686	mg/kg dry
Phenanthrene	85-01-8	0.0416 J	0.0143	0.0686	mg/kg dry
Pyrene	129-00-0	0.0900	0.0185	0.0686	mg/kg dry
Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	4.20	3.46	121 %	34-180



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ANALYTICAL REPORT

Sample ID: CF-12
Lab #: B609856-12

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 48.13

Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Aluminum	7429-90-5	8310	5	21	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Arsenic	7440-38-2	2.9	0.4	1.0	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Barium	7440-39-3	108	0.1	1.0	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Cadmium	7440-43-9	0.30	0.05	0.10	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Chromium	7440-47-3	19.0	0.3	1.0	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Copper	7440-50-8	17.7	0.29	1.04	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Iron	7439-89-6	16800 D	7	10	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Lead	7439-92-1	19.4	0.2	1.0	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Manganese	7439-96-5	693	0.15	1.04	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Nickel	7440-02-0	6.4	0.2	5.2	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Selenium	7782-49-2	2.1	0.2	1.0	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Silver	7440-22-4	0.21 U	0.21	1.04	mg/kg dry	EPA 6010B	EPA 3050B	6K14001
Zinc	7440-66-6	96.6	0.3	2.1	mg/kg dry	EPA 6010B	EPA 3050B	6K14001



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ANALYTICAL REPORT

Sample ID: CF-12
Lab #: B609856-12

Project: Cape Fear Sediments
Work Order #: B609856
Matrix: Soil
Percent Solids: 54.68

Metals by EPA 6000/7000 Series Methods

<u>Parameter</u>	<u>CAS Number</u>	<u>Analytical Results</u>	<u>MDL</u>	<u>MRL</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Prep Method</u>	<u>Analytical Batch</u>
Mercury	7439-97-6	0.073	0.0006	0.018	mg/kg dry	EPA 7471A	EPA 7471A	6K14013

**QUALITY CONTROL**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sample Notes
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Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 6K14012 - EPA 3545_MS

Blank (6K14012-BLK1)

Prepared: 11/14/2006 10:38 Analyzed: 11/16/2006 11:29

Benzo(a)anthracene	0.00690 U	0.0330	mg/kg wet							
Benzo(b)fluoranthene	0.00533 U	0.0330	mg/kg wet							
Benzo(k)fluoranthene	0.00690 U	0.0330	mg/kg wet							
Benzo(g,h,i)perylene	0.0102 U	0.0330	mg/kg wet							
Benzo(a)pyrene	0.00690 U	0.0330	mg/kg wet							
Dibenzo(a,h)anthracene	0.0112 U	0.0330	mg/kg wet							
Indeno(1,2,3-cd)pyrene	0.0116 U	0.0330	mg/kg wet							
Naphthalene	0.0122 U	0.0330	mg/kg wet							
2-Methylnaphthalene	0.00990 U	0.0330	mg/kg wet							
1-Methylnaphthalene	0.0106 U	0.0330	mg/kg wet							
Acenaphthylene	0.0106 U	0.0330	mg/kg wet							
Acenaphthene	0.00726 U	0.0330	mg/kg wet							
Fluorene	0.00630 U	0.0330	mg/kg wet							
Phenanthrene	0.00690 U	0.0330	mg/kg wet							
Anthracene	0.00690 U	0.0330	mg/kg wet							
Fluoranthene	0.00890 U	0.0330	mg/kg wet							
Pyrene	0.00890 U	0.0330	mg/kg wet							
Chrysene	0.00730 U	0.0330	mg/kg wet							

Surrogate: p-Terphenyl 3.14 mg/kg wet 3.33 94 34-180

LCS (6K14012-BS1)

Prepared: 11/14/2006 10:38 Analyzed: 11/16/2006 11:46

Benzo(g,h,i)perylene	0.877	0.0330	mg/kg wet	1.33		66	10-168			
Benzo(a)pyrene	0.980	0.0330	mg/kg wet	1.33		74	41-125			
Naphthalene	0.937	0.0330	mg/kg wet	1.33		70	40.4-121			
Acenaphthene	0.963	0.0330	mg/kg wet	1.33		72	41-123			

Surrogate: p-Terphenyl 2.72 mg/kg wet 3.33 82 34-180

Matrix Spike (6K14012-MS1)

Source: B609856-01

Prepared: 11/14/2006 10:38 Analyzed: 11/16/2006 18:17

Benzo(g,h,i)perylene	1.14	0.0707	mg/kg dry	1.43	0.0218 U	80	10-168			
Benzo(a)pyrene	1.24	0.0707	mg/kg dry	1.43	0.0148 U	87	43-136			
Naphthalene	1.54	0.0707	mg/kg dry	1.43	0.0428	105	48-112			
Acenaphthene	1.39	0.0707	mg/kg dry	1.43	0.0156 U	97	48-119			

Surrogate: p-Terphenyl 3.72 mg/kg dry 3.57 104 34-180

Matrix Spike Dup (6K14012-MSD1)

Source: B609856-01

Prepared: 11/14/2006 10:38 Analyzed: 11/16/2006 18:34

Benzo(g,h,i)perylene	0.857	0.0707	mg/kg dry	1.43	0.0218 U	60	10-168	29	48	
Benzo(a)pyrene	0.935	0.0707	mg/kg dry	1.43	0.0148 U	66	43-136	28	34	
Naphthalene	1.34	0.0707	mg/kg dry	1.43	0.0428	91	48-112	14	22	
Acenaphthene	1.14	0.0707	mg/kg dry	1.43	0.0156 U	80	48-119	20	31	

Surrogate: p-Terphenyl 3.01 mg/kg dry 3.57 84 34-180

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 6K14001 - EPA 3050B

Blank (6K14001-BLK1)

Prepared: 11/14/2006 07:13 Analyzed: 11/15/2006 11:18

Aluminum	2 U	10	mg/kg wet							
Arsenic	0.2 U	0.5	mg/kg wet							

**QUALITY CONTROL**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sample Notes
Metals by EPA 6000/7000 Series Methods - Quality Control										
<i>Batch 6K14001 - EPA 3050B</i>										
Blank (6K14001-BLK1) Continued				Prepared: 11/14/2006 07:13 Analyzed: 11/15/2006 11:20						
Barium	0.06 U	0.5	mg/kg wet							
Cadmium	0.02 U	0.05	mg/kg wet							
Chromium	0.2 U	0.5	mg/kg wet							
Copper	0.14 U	0.50	mg/kg wet							
Iron	2 U	2	mg/kg wet							
Lead	0.1 U	0.5	mg/kg wet							
Manganese	0.07 U	0.50	mg/kg wet							
Nickel	0.1 U	2.5	mg/kg wet							
Selenium	0.1 U	0.5	mg/kg wet							
Silver	0.10 U	0.50	mg/kg wet							
Zinc	0.1 U	1.0	mg/kg wet							
LCS (6K14001-BS1)				Prepared: 11/14/2006 07:13 Analyzed: 11/15/2006 11:25						
Aluminum	489	10	mg/kg wet	500		98	78-115			
Arsenic	50.8	0.5	mg/kg wet	50.0		102	84-113			
Barium	50.5	0.5	mg/kg wet	50.0		101	87-110			
Cadmium	24.9	0.05	mg/kg wet	25.0		100	85-110			
Chromium	50.9	0.5	mg/kg wet	50.0		102	86-111			
Copper	25.6	0.50	mg/kg wet	25.0		102	86-115			
Iron	499	2	mg/kg wet	500		100	81-109			
Lead	51.4	0.5	mg/kg wet	50.0		103	84-112			
Manganese	25.0	0.50	mg/kg wet	25.0		100	85-111			
Nickel	51.6	2.5	mg/kg wet	50.0		103	86-111			
Selenium	50.0	0.5	mg/kg wet	50.0		100	85-109			
Silver	5.09	0.50	mg/kg wet	5.00		102	86-109			
Zinc	51.6	1.0	mg/kg wet	50.0		103	84-121			
Matrix Spike (6K14001-MS1)		Source: B609764-AR			Prepared: 11/14/2006 07:13 Analyzed: 11/15/2006 11:32					
Aluminum	1960	10	mg/kg dry	507	1110	166	35-172			
Arsenic	46.8	0.5	mg/kg dry	50.7	0.476	91	63-122			
Barium	54.2	0.5	mg/kg dry	50.7	7.95	91	34-147			
Cadmium	22.2	0.05	mg/kg dry	25.3	0.100	87	64-119			
Chromium	49.0	0.5	mg/kg dry	50.7	2.42	92	44-144			
Copper	29.4	0.51	mg/kg dry	25.3	5.52	94	32-163			
Iron	1480	3	mg/kg dry	507	1000	93	48-139			
Lead	71.5	0.5	mg/kg dry	50.7	25.7	90	41-144			
Manganese	50.5	0.51	mg/kg dry	25.3	31.5	75	30-164			
Nickel	47.5	2.5	mg/kg dry	50.7	1.07	92	60-123			
Selenium	46.1	0.5	mg/kg dry	50.7	0.170	91	64-117			
Silver	4.73	0.51	mg/kg dry	5.07	0.10 U	93	69-118			
Zinc	68.5	1.0	mg/kg dry	50.7	22.1	92	39-143			
Matrix Spike Dup (6K14001-MSD1)		Source: B609764-AR			Prepared: 11/14/2006 07:13 Analyzed: 11/15/2006 11:37					
Aluminum	2000 QM-05	10	mg/kg dry	507	1110	174	35-172	2	32	QM-05
Arsenic	49.7	0.5	mg/kg dry	50.7	0.476	97	63-122	6	16	
Barium	60.9	0.5	mg/kg dry	50.7	7.95	104	34-147	12	22	
Cadmium	23.6	0.05	mg/kg dry	25.3	0.100	93	64-119	6	17	

**QUALITY CONTROL**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sample Notes
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Metals by EPA 6000/7000 Series Methods - Quality Control*Batch 6K14001 - EPA 3050B***Matrix Spike Dup (6K14001-MSD1) Continued** **Source: B609764-AR** Prepared: 11/14/2006 07:13 Analyzed: 11/15/2006 11:40

Chromium	52.0	0.5	mg/kg dry	50.7	2.42	98	44-144	6	21	
Copper	32.9	0.51	mg/kg dry	25.3	5.52	108	32-163	11	24	
Iron	1540	3	mg/kg dry	507	1000	105	48-139	4	38	
Lead	72.2	0.5	mg/kg dry	50.7	25.7	92	41-144	0.9	32	
Manganese	51.5	0.51	mg/kg dry	25.3	31.5	79	30-164	2	21	
Nickel	50.5	2.5	mg/kg dry	50.7	1.07	98	60-123	6	23	
Selenium	48.8	0.5	mg/kg dry	50.7	0.170	96	64-117	6	18	
Silver	4.96	0.51	mg/kg dry	5.07	0.10 U	98	69-118	5	10	
Zinc	74.0	1.0	mg/kg dry	50.7	22.1	103	39-143	8	31	

QUALITY CONTROL

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sample Notes
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Metals by EPA 6000/7000 Series Methods - Quality Control*Batch 6K14013 - EPA 7471A***Blank (6K14013-BLK1)** Prepared: 11/14/2006 15:11 Analyzed: 11/17/2006 07:41

Mercury	0.0003 U	0.010	mg/kg wet							
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Blank (6K14013-BLK2) Prepared: 11/15/2006 13:32 Analyzed: 11/17/2006 07:44

Mercury	0.0003 U	0.010	mg/kg wet							
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LCS (6K14013-BS1) Prepared: 11/14/2006 15:11 Analyzed: 11/17/2006 07:47

Mercury	0.261	0.010	mg/kg wet	0.250		105	90-112			
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LCS (6K14013-BS2) Prepared: 11/15/2006 13:32 Analyzed: 11/17/2006 07:50

Mercury	0.255	0.010	mg/kg wet	0.250		102	90-112			
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Matrix Spike (6K14013-MS1) **Source: A605654-05** Prepared: 11/14/2006 15:11 Analyzed: 11/17/2006 07:56

Mercury	0.284	0.011	mg/kg dry	0.266	0.0003 U	107	69-121			
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Matrix Spike Dup (6K14013-MSD1) **Source: A605654-05** Prepared: 11/14/2006 15:11 Analyzed: 11/17/2006 08:00

Mercury	0.276	0.011	mg/kg dry	0.266	0.0003 U	104	69-121	3	18	
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NOTES AND DEFINITIONS

- D Data reported from a dilution
- J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
- U Analyte included in the analysis, but not detected

LABORATORY CERTIFICATION SUMMARY

Analysis	Matrix	Cert ID	Cert Number
8270C PAH SIM	Soil	NC	442
Aluminum Total EPA 6010B	Soil	NC	442
Arsenic Total EPA 6010B	Soil	NC	442
Barium Total EPA 6010B	Soil	NC	442
Cadmium Total EPA 6010B	Soil	NC	442
Chromium Total EPA 6010B	Soil	NC	442
Copper Total EPA 6010B	Soil	NC	442
Iron Total EPA 6010B	Soil	NC	442
Lead Total EPA 6010B	Soil	NC	442
Manganese Total EPA 6010B	Soil	NC	442
Nickel Total EPA 6010B	Soil	NC	442
Selenium Total EPA 6010B	Soil	NC	442
Silver Total EPA 6010B	Soil	NC	442
Zinc Total EPA 6010B	Soil	NC	442
Mercury Total EPA 7471A	Soil	NC	424

