

00397

MONTHLY PROGRESS REPORT
January 1993

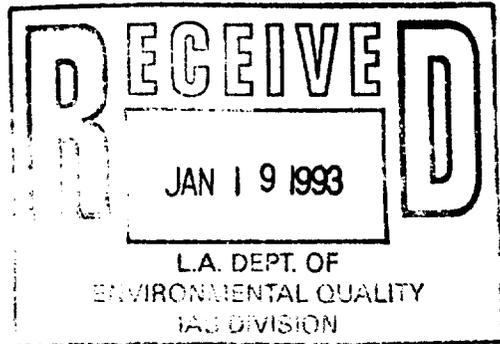
COMBUSTION, INC. EXPEDITED REMOVAL ACTION
LIVINGSTON PARISH, LOUISIANA

Prepared for
Combustion, Inc. Group
Participating Parties

WCC File 92B059C

Woodward-Clyde Consultants 

Consulting Engineers, Geologists, and Environmental Scientists



January 15, 1993

Mr. Harold Ethridge
Inactive and Abandoned Sites Division
Louisiana Department of Environmental Quality
Post Office Box 82282
Baton Rouge, Louisiana, 70884-2282

LOG # 1-19-93-120

Re: Combustion, Inc.
Expedited Removal Action (ERA) Agreement
Monthly Report
WCC File Number 92B059C

Dear Mr. Ethridge:

Consistent with Paragraph VI.E of the Expedited Removal Action Agreement for Combustion, Inc., Woodward-Clyde Consultants (WCC) provides this monthly progress report of:

- Actions which have been taken toward implementing the approved work plans
- Final results of sampling and testing and other data
- Plans and procedures completed subsequent to work plan approval
- Actions, data and plans scheduled for the next monthly period.

The information included in the report is as of January 10, 1993.

PREVIOUS MONTH'S ACTIVITY

The following actions have been taken toward implementing the approved work plans since the last monthly reporting period.

- GDC continued material handling operations in the Process Area. Tanks 2, 14, 15, 17, and 18 have been cleaned and wipe tested for PCBs. Tanks 3, 5, 13, and 16 have been cleaned and are awaiting wipe sampling.



Woodward-Clyde Consultants

Mr. Harold Ethridge

January 15, 1993

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- A total of 380 tons of debris from site clearing operations has been shipped to Waste Management at Woodside Landfill as non-hazardous waste.
- A total of 649 tons of debris from demolition activities and solidified sludge from the tanks has been shipped to Chemical Waste Management at Carlyss, LA as hazardous waste.
- A total of 82,000 pounds of waste oil has been shipped to Rhone-Poulenc.
- Six batches of water have been treated, tested, and discharged from Pond N to date (approximately 1,122,700 gallons); two batches during the reporting period.
- Eagle Environmental Health continued daily air monitoring.

FINAL RESULTS OF SAMPLING AND TESTING AND OTHER DATA

Air monitoring results through December 30, 1992 are found in Attachment 1. None of the results were at or above the established action levels.

Sampling results for each batch of treated water are found in Attachment 2. All of the results are within the established discharge limits.

PCB wipe test results for Tanks 2, 14, 15, 17, and 18 are found in Attachment 3. All results of all samples are below the limit set for PCBs in 40 CFR 761 of $10 \mu\text{g}/100 \text{ cm}^2$.

Results of the TCL/TAL analysis of the offsite backfill source are found in Attachment 4.

PLANS AND PROCEDURES COMPLETED

Approval of the Phase 2 Work Plan was received on January 5, 1993. No requirements for additional plans or procedures have been identified at this time.



**Woodward-Clyde
Consultants**

Mr. Harold Ethridge
January 15, 1993
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ACTIONS, DATA AND PLANS SCHEDULED FOR THE NEXT MONTH

With the approval of the Phase 2 Work Plan, the major focus of activities is currently shifting from the Process Area to the Pond Area. Activities will continue in the Process Area (cleaning, wipe testing, demolishing, and removing tanks and equipment) until complete, however the Critical Path activities now are in the Pond Area. The oil/water separator has been relocated from the Process Area to the Pond Area, and as activities in the Process Area are completed, other equipment will follow.

Because of almost daily rainfall, efforts to reduce the pond inventory have been significantly hampered. Therefore, water treatment continues to be a high priority.

Repairs to DuBose Road were scheduled for January 7, but were delayed by rain until January 11-12.

If you have any questions, please call.

Very truly yours,

William R. Hurdle

William R. Hurdle
Field Representative

S. Russell Killebrew

S. Russell Killebrew, P.E.
Project Coordinator

cc: James B. Thompson, III
Cathy Gilmore
David C. Bach
Elizabeth E. Westfall, P.E.



MONTHLY PROGRESS REPORT

January 1993

**COMBUSTION, INC. EXPEDITED REMOVAL ACTION
LIVINGSTON PARISH, LOUISIANA**

**Prepared for
Combustion, Inc. Group
Participating Parties**

WCC File 92B059C

Woodward-Clyde Consultants 

Consulting Engineers, Geologists, and Environmental Scientists
2822 O'Neal Lane, Baton Rouge, LA 70816

**Woodward-Clyde
Consultants**

ATTACHMENT 1

Air Monitoring Results

January 8, 1993



**EAGLE
ENVIRONMENTAL
HEALTH, INC.**

Mr. Russell Killebrew
Woodward Clyde Consultants
2822 O'Neal Lane
Baton Rouge, LA 70816

Project No. 999.0040
Combustion, Inc.

Dear Mr. Killebrew:

Attached please find the tables which summarize the downwind sample results and the running average of downwind samples collected and analyzed for volatile organic compounds in the process and pond areas of the Combustion Inc. Site. The tables include all samples collected through December 30, 1993. The running average for all compounds detected are below the action levels for the respective chemical compound.

The final laboratory results which I have received since November 30, 1992 are also attached. The lead in air results are in Attachment 1 and the volatile organics in are in Attachment 2.

If you have any questions or need additional detail, please do not hesitate to call on me.

Very truly yours,

EAGLE ENVIRONMENTAL HEALTH, INC.

A handwritten signature in cursive script that reads "Deanna M. Ennis".

Deanna M. Ennis, CIH
Project Manager/Senior Industrial Hygienist

Attachment 1: Lead Laboratory Results

Attachment 2: Volatile Organic Laboratory Results

0999.0040.008

COMBUSTION, INC., DENHAM SPRINGS, LA

Project # 999.0040

POND AREA DOWNWIND SAMPLE RESULTS AND RUNNING AVERAGE THROUGH DECEMBER 30, 1992

Note: all analytical results are in micrograms/cubic meter

Sample ID	Benzene	Chlorobenzene	Chloroethane	Chloroform	1,1 Dichloro-ethane	1,2 Dichloro-ethane	1,2 Dichloro-ethene	1,4 Dichloro-benzene	Benzene Styrene	Tetra-chloroethene	Toluene	Trichloro-ethene	Xylenes
11232033	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0
11232034	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0
120292D0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
120292E0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	5.0	< 4.0	< 4.0	22.0	< 4.0
120392B0	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
120392A0	< 3.2	< 3.2	< 3.2	< 3.2	< 3.2	< 3.2	< 3.2	< 3.2	3.2	< 3.2	< 3.2	3.3	< 3.2
120492B0	< 8.2	< 8.2	< 8.2	< 8.2	< 8.2	< 8.2	< 8.2	< 8.2	< 8.2	< 8.2	< 8.2	< 8.2	< 8.2
120492C0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0
122192D0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
122192A0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
122292D0	< 8.25	< 8.25	< 8.25	< 8.25	< 8.25	< 8.25	< 8.25	< 8.25	< 8.25	< 8.25	< 8.25	< 8.25	< 8.25
122292C0	< 8.33	< 8.33	< 8.33	< 8.33	< 8.33	< 8.33	< 8.33	< 8.33	< 8.33	< 8.33	< 8.33	< 8.33	< 8.33
122392C0	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40
122392D0	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40
122892B0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
122892A0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
122992B0	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20
122992C0	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20
123092B0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
123092C0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	4.2	< 4.0	< 4.0	< 4.0	< 4.0

Running Average (ug/m3)

0.53

12.7

Action Level

84

200

10,000

30

5,000

27

monitor only

700

1,000

1,220

1,340

2,000

420

300

Note: all analytical results are in micrograms/cubic meter

Sample ID	Benzene	Chlorobenzene	Chloroethane	Chloroform	1,1 Dichloroethane	1,2 Dichloroethane	1,2 Dichloroethane	1,4 Dichlorobenzene	Ethyl Benzene	Styrene	Tetra-chloroethane	Toluene	Trichloroethane	Xylenes
11232027	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0
11232028	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0
11252038	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
11252039	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
11302043	4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	5.0	< 4.0	< 4.0	7.0	< 4.0	< 4.0
11302044	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	9.0	< 4.0	< 4.0
12012048	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	12.0	< 4.0	< 4.0	4.0	< 4.0	< 4.0
12012048	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	222.0	< 4.0	< 4.0	5.0	< 4.0	< 4.0
120292HR	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
120292GR	Sample was lost due to power failure at the lab													
120392BR	3.7	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	12.6	< 3.0	< 3.0	14.0	< 3.0	< 3.0
120392AR	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	6.6	< 3.0	< 3.0	13.7	< 3.0	< 3.0
120492CR	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8
120492DR	< 5.2	< 5.2	< 5.2	< 5.2	< 5.2	< 5.2	< 5.2	< 5.2	< 5.2	< 5.2	< 5.2	< 5.2	< 5.2	< 5.2
120692AR	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3
1206921R	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3
120692BR	< 18.8	< 18.8	< 18.8	< 18.8	< 18.8	< 18.8	< 18.8	< 18.8	< 18.8	< 18.8	< 18.8	< 18.8	< 18.8	< 18.8
120692AR	< 17.1	< 17.1	< 17.1	< 17.1	< 17.1	< 17.1	< 17.1	< 17.1	< 17.1	< 17.1	< 17.1	< 17.1	< 17.1	< 17.1
121092GR	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	4.82	< 3.6	< 3.6	9.38	< 3.6	< 3.6
121092FR	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6	< 3.6
121192GR	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	5.47	< 4.3	< 4.3	6.43	< 4.3	< 4.3
121192FR	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3	< 4.3
121292BR	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	11	< 3.8	< 3.8	9.38	< 3.8	< 3.8
121292AR	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	9.09	< 3.8	< 3.8	3.97	< 3.8	< 3.8
121592BR	< 16.8	< 16.8	< 16.8	< 16.8	< 16.8	< 16.8	< 16.8	< 16.8	25.6	< 16.8	< 16.8	< 16.8	< 16.8	< 16.8
121592BR	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5
121692HR	< 26.6	< 26.6	< 26.6	< 26.6	< 26.6	< 26.6	< 26.6	< 26.6	< 26.6	< 26.6	< 26.6	< 26.6	< 26.6	< 26.6
121692GR	< 26.1	< 26.1	< 26.1	< 26.1	< 26.1	< 26.1	< 26.1	< 26.1	< 26.1	< 26.1	< 26.1	< 26.1	< 26.1	< 26.1
121792HR	< 4.27	< 4.27	< 4.27	< 4.27	< 4.27	< 4.27	< 4.27	< 4.27	6.54	< 4.27	< 4.27	9.27	< 4.27	< 4.27
121792GR	< 4.36	< 4.36	< 4.36	< 4.36	< 4.36	< 4.36	< 4.36	< 4.36	12.36	< 4.36	< 4.36	10.94	< 4.36	< 4.36
121892BR	8.08	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	24.9	< 4.0	< 4.0	22.7	< 4.0	4.34
121892AR	6.03	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	11.6	< 4.0	< 4.0	18.8	< 4.0	< 4.0
122192FR	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
122292DR	< 8.12	< 8.12	< 8.12	< 8.12	< 8.12	< 8.12	< 8.12	< 8.12	< 8.12	< 8.12	< 8.12	< 8.12	< 8.12	< 8.12
122292ER	< 8.33	< 8.33	< 8.33	< 8.33	< 8.33	< 8.33	< 8.33	< 8.33	< 8.33	< 8.33	< 8.33	10.25	< 8.33	< 8.33
122392ER	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	4.45	< 4.40	< 4.40	4.55	< 4.40	< 4.40
122392DR	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	< 4.40	4.4	< 4.40	< 4.40	4.59	< 4.40	< 4.40
1226921BR	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	25.1	< 4.0	< 4.0	16.7	< 4.0	< 4.0
122692AR	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	8.55	< 4.0	< 4.0	7.09	< 4.0	< 4.0
122692BR	10.6	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20	< 4.20	22.2	< 4.20	< 4.20	17.4	< 4.20	< 4.20
123092BR	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	22.78	< 4.0	< 4.0	12.87	< 4.0	< 4.0
123092AR	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	5.58	< 4.0	< 4.0	4.56	< 4.0	< 4.0

Running Average (ug/m3)	6.48								22.13			10.07		4.34
Action Level E	84	200	10,000	30	5,000	27	monitor only	700	1,000	1,220	1,340	2,000	420	300

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

December 8, 1992
Project No.: 92-3260

COMBUSTION, INC., DENHAM SPRINGS, LA
Project No.: 0999-0040
Sample Date: 12/01/92

LEAD

SAMPLE IDENTIFICATION	VOLUME (Cubic Feet)	UNCORRECTED (ug/filter)	CORRECTED (ug/filter)	LEAD (ug/m3)
BLANK FILTER	---	<93	---	---
CI-120192-AR	33,957.0	<93	<93	<0.10
CI-120192-BR	40,142.2	<93	<93	<0.08
CI-120192-BO	21,042.0	<93	<93	<0.16
CI-120192-AO	25,200.0	<93	<93	<0.13
CI-120192-O	28,800.0	<93	<93	<0.11

QA/QC (obs/act) 2.0/2.0

ANALYZED: 12/03/92

ANALYST: AE/NS

METHOD: 40 CFR, C1 (7-1-89 ED.) PRT 50, APP. G

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

92-3260

Eagle Environmental Health, Inc., Project No. 0999.0040				Date: 12/1/92			
Samplers: (Signatures)							
Sample No.	Po or Pr	Station I.D. No. or Letter	Up or Down	TIME	CUBIC Sample Vol.	Analyze or Hold	Number
120192-AR CI-#	PR	A	D	490	33957.0	A	1
CI-120192-3R	PR	L	D	567	42695.1	H	1
CI-120192-AR	PR	B	D	541	40142.2	A	1
CI-120192-FR	PR	F	U	537	35979.0	H	1
CI-120192-BO	PO	B	D	315	21042.0	A	1
CI-120192-BO	PO	D	U	382	24753.6	H	1
CI-120192-BO	PO	S	D	430	28767.0	H	1
CI-120192-BO	PO	A	D	450	25200.0	A	1
CI-120192-0	PO	O	D	480	28800.0	A	1

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
<i>[Signature]</i>	12/2/92	1500	<i>[Signature]</i>	2-2-92	4:00
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for:

24 Hour Turnaround: YES or NO

- ~~Benzene~~
- ~~Chlorobenzene~~
- ~~Chloroethane~~
- ~~Chloroform~~
- ~~1,1-Dichloroethane~~
- ~~1,2-Dichloroethane~~
- ~~1,2-Dichloroethane~~
- ~~1,4-Dichlorobenzene(f)~~
- ~~Ethylbenzene~~
- ~~Styrene~~
- ~~Tetrachloroethene~~
- ~~Toluene~~
- ~~Trichloroethene~~
- ~~Xylenes~~

LEAD

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998

SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410
 Houston, TX 77027

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

December 8, 1992
Project No.: 92-3274

COMBUSTION, INC., DENHAM SPRINGS, LA
Project No.: 0999-0040
Sample Date:

LEAD

SAMPLE IDENTIFICATION	VOLUME (Cubic Feet)	UNCORRECTED (ug/filter)	CORRECTED (ug/filter)	LEAD (ug/m3)
BLANK FILTER	---	<102	---	---
CI-120292-EO	20,552.0	<102	<102	<0.18
CI-120292-DO	23,220.0	<102	<102	<0.16
CI-120292-GR	23,268.0	<102	<102	<0.15
CI-120292-HR	29,628.8	<102	<102	<0.12
CI-120292-O	28765.9	<102	<102	<0.12

QA/QC (obs/act)

0.96/1.00

ANALYZED: 12/03/92

ANALYST: AE

METHOD: 40 CFR, C1 (7-1-89 ED.) PRT 50, APP. G

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

92-3274

Eagle Environmental Health, Inc. Project No. 0999.0040					Date: 12/2/92		
Samplers: (Signatures) <i>[Signature]</i>							
Sample No.	Po or Pr	Station I.D. No. or Letter	Up or Down	Total Sample No.	CUBIC Sample Vol.	Analyze or Hold	Number FILTERS
CI-120292-BO	PO	B	U	—	34371.0	H	1
CI-120292-EO	PO	E	D	—	20552.0	A	1
CI-120292-DO	PO	D	D	—	23220.0	A	1
CI-120292-CR	PR	C	U	—	28635.0	H	1
CI-120292-GR	PR	G	D	—	23268.0	A	1
CI-120292-HR	PR	H	D	—	29628.8	A	1
CI-120292-O	PR	O	D	—	28765.9	A	1

Relinquished by: (Signature) <i>[Signature]</i>	Date 12/3/92	Time 1200	Received by: (Signature) <i>[Signature]</i>	Date 12/17/92	Time 1345
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for:

24 Hour Turnaround: YES or NO

- ~~Benzene~~
- ~~Chlorobenzene~~
- ~~Chloroethane~~
- ~~Chloroform~~
- ~~1,1-Dichloroethane~~
- ~~1,2-Dichloroethane~~
- ~~1,2-Dichloroethane~~
- ~~1,4-Dichlorobenzene(f)~~
- ~~Ethylbenzene~~
- ~~Styrene~~
- ~~Tetrachloroethene~~
- ~~Toluene~~
- ~~Trichloroethene~~
- ~~Xylenes~~

LEAD

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998

SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410
 Houston, TX 77027

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

December 8, 1992
Project No.: 92-3274

COMBUSTION, INC., DENHAM SPRINGS, LA
Project No.: 0999-0040
Sample Date:

LEAD

SAMPLE IDENTIFICATION	VOLUME (Cubic Feet)	UNCORRECTED (ug/filter)	CORRECTED (ug/filter)	LEAD (ug/m3)
BLANK FILTER	---	<103	---	---
C120392-BR	20,552.0	117	117	0.12
C120392-AR	23,220.0	110	110	0.11
C120392-AR	23,268.0	<103	<103	<0.16
C120392-O	29,628.8	<103	<103	<0.10

QA/QC (obs/act)

0.96/1.00

ANALYZED: 12/07/92

ANALYST: AE

METHOD: 40 CFR, C1 (7-1-89 ED.) PRT 50, APP. G

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

92-3287

Eagle Environmental Health, Inc., Project No. 0999.0040				Date: 12/3/92			
Samplers: (Signatures) <i>Dany Pong</i>							
Sample No.	Po or Pr	Station I.D. No. or Letter	Up or Down	Tube Serial No.	Sample Vol.	Analyze or Hold	Number of Tubes <i>FILTERS</i>
C120392-FR	PR	F	U	---	45479.0	H	1
C120392-1R	PR	1	D	---	397822	H	1
C120392-RR	PR	B	D	---	33712.4	A	1
C120392-AR	PR	A	D	---	36429.8	A	1
C120392-00	PO	D	U	---	12779.2	H	1
C120392-80	PO	B	D	---	10540.8	H	1
C120392-AD	PO	A	D	---	22656.0	A	1
C120392-0	PO	O	D	---	39504	A	1

Reinquished by: (Signature) <i>Dany Pong</i>	Date 12/4/92	Time 1200	Received by: (Signature) <i>[Signature]</i>	Date 12/10/92	Time 1345
Reinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for:

24 Hour Turnaround: YES or NO

- ~~Benzene~~
- ~~Chlorobenzene~~
- ~~Chloroethane~~
- ~~Chloroform~~
- ~~1,1-Dichloroethane~~
- ~~1,2-Dichloroethane~~
- ~~1,2-Dichloroethane~~
- ~~1,4-Dichlorobenzene(f)~~
- ~~Ethylbenzene~~
- ~~Styrene~~
- ~~Tetrachloroethene~~
- ~~Toluene~~
- ~~Trichloroethene~~
- ~~Xylenes~~

LEAD

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998

SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410
 Houston, TX 77027

RUSH

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

December 10, 1992
Project No.: 92-3313

COMBUSTION, INC., DENHAM SPRINGS, LA
Project No.: 0999-0040
Sample Date: 12/04/92

LEAD

SAMPLE IDENTIFICATION	VOLUME (Cubic Feet)	UNCORRECTED (ug/filter)	CORRECTED (ug/filter)	LEAD (ug/m3)
BLANK FILTER	---	<98	---	---
C120492-CR	25,944.7	<98	<98	<0.13
C120492-DR	27,264.0	<98	<98	<0.13
C120492-BO	16,047.5	<98	<98	<0.22
C120492-CO	18,224.0	<98	<98	<0.19
C120492-O	26,705.3	<98	<98	<0.13

QA/QC (obs/act)

1.0/1.0

ANALYZED: 12/07/92

ANALYST: AE

METHOD: 40 CFR, C1 (7-1-89 ED.) PRT 50, APP. G

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

92-3319

Eagle Environmental Health, Inc., Project No. 0999.0040					Date: 12/4/92		
Samplers: (Signatures) <i>[Signature]</i>							
Sample No.	Po or Pr	Station ID. No. or Letter	Up or Down	Job Social No.	CUBIC FEET Sample Vol.	Analyze or Hold	Number of FILTERS
C120492-IR	PR	I	U	—	24888.0	H	1
C120492-CR	PR	C	D	—	25944.7	A	1
C120492-1R	PR	1	D	—	30040.0	H	1
C120492-OR	PR	D	D	—	27264.0	A	1
C120492-EQ	PO	E	U	—	22223.0	H	1
C120492-BO	PO	B	D	—	16047.5	A	1
C120492-CO	PO	C	D	—	18224.0	A	1
C120492-O	PO	O	D	—	26705.3	A	1

RUSH

Relinquished by: (Signature) <i>[Signature]</i>	Date 12/17/92	Time 12:00	Received by: (Signature) <i>[Signature]</i>	Date 12/17/92	Time 1345
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for:

24 Hour Turnaround: YES or NO

- ~~Benzene~~
- ~~Chlorobenzene~~
- ~~Chloroethane~~
- ~~Chloroform~~
- ~~1,1-Dichloroethane~~
- ~~1,2-Dichloroethane~~
- ~~1,2-Dichloroethane~~
- ~~1,4-Dichlorobenzene(f)~~
- ~~Ethylbenzene~~
- ~~Styrene~~
- ~~Tetrachloroethene~~
- ~~Toluene~~
- ~~Trichloroethene~~
- ~~Xylenes~~

LEAD

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998

SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410
 Houston, TX 77027

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

December 10, 1992
Project No.: 92-3321

COMBUSTION, INC., DENHAM SPRINGS, LA,
Project No.: 0999-0040
Sample Date: 12/07/92

LEAD

SAMPLE IDENTIFICATION	VOLUME (Cubic Feet)	UNCORRECTED (ug/filter)	CORRECTED (ug/filter)	LEAD (ug/m3)
BLANK FILTER	---	<99	---	---
C120792-HR	28,770.0	<99	<99	<0.12
C120792-GR	33,272.4	99	99	0.11
C120792-O	32,708.3	<99	<99	<0.11

QA/QC (obs/act)

1.0/1.0

ANALYZED: 12/08/92

ANALYST: AE

METHOD: 40 CFR, C1 (7-1-89 ED.) PRT 50, APP. G

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

92-332, 18/1

Eagle Environmental Health, Inc., Project No. 0999.0040					Date: 12/7/92		
Samplers: (Signatures) <i>[Signature]</i>							
Sample No.	Po or Pr	Station ID. No. or Letter	Up or Down	Tube Serial No.	CUBIC Feet Sample Vol.	Analyze or Hold	Number of Filters FILTERS
C120792-CR	PR	C	U	—	33505.6	H	1
C120792-HR	PR	H	D	—	28770.0	A	1
C120792-GR	PR	G	D	—	33272.4	A	1
C120792-O	PR	O	D	—	32708.3	A	1

Relinquished by: (Signature) <i>[Signature]</i>	Date 12/8/92	Time 1206	Received by: (Signature) <i>[Signature]</i>	Date 12/8/92	Time 1345
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for: 24 Hour Turnaround: YES or NO

- ~~Benzene~~
- ~~Chlorobenzene~~
- ~~Chloroethane~~
- ~~Chloroform~~
- ~~1,1-Dichloroethane~~
- ~~1,2-Dichloroethane~~
- ~~1,2-Dichloroethane~~
- ~~1,4-Dichlorobenzene(f)~~
- ~~Ethylbenzene~~
- ~~Styrene~~
- ~~Tetrachloroethene~~
- ~~Toluene~~
- ~~Trichloroethene~~
- ~~Xylenes~~

LEAD

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998

SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410
 Houston, TX 77027

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

December 15, 1992
Project No.: 92-3346

COMBUSTION, INC., DENHAM SPRINGS, LA
Project No.: 0999-0040
Sample Date: 12/08/92

LEAD

SAMPLE IDENTIFICATION	VOLUME (Cubic Feet)	UNCORRECTED (ug/filter)	CORRECTED (ug/filter)	LEAD (ug/m3)
BLANK FILTER	---	<91	---	---
C120892-AR	33,176.0	106	106	0.11
C120892-IR	31,694.0	<91	<91	<0.10
C120892-O	32,708.3	<91	<91	<0.10

QA/QC (obs/act)

0.9/1.0

ANALYZED: 12/10/92

ANALYST: AE

METHOD: 40 CFR, C1 (7-1-89 ED.) PRT 50, APP. G

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

Page 2 of 2
 92-3346

Eagle Environmental Health, Inc. Project No. 0999.0040					Date: 12/8/92		
Samplers: (Signatures) <i>[Signature]</i>							
Sample No.	Po or Pr	Station ID. No. or Letter	Up or Down	Tube-Serial-No.	CUBIC FT Sample Vol.	Analyze or Hold	Number of Tubes <i>Filters</i>
C120892-ER	PR	E	U	---	34184.4	H	1
C120892-GR	PR	G	D	---	34484.0	H	1
C120892-AR	PR	A	D	---	33176.0	A	1
C120892-TR	PR	I	D	---	31694.0	A	1
C120892-O	PR	O	D	---	32708.3	A	1
RUSH							

Relinquished by: (Signature) <i>[Signature]</i>	Date 12/9/92	Time 1200	Received by: (Signature) <i>[Signature]</i>	Date 12/9/92	Time 1425
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for: 24 Hour Turnaround: YES or NO

- ~~Benzene~~
- ~~Chlorobenzene~~
- ~~Chloroethane~~
- ~~Chloroform~~
- ~~1,1-Dichloroethane~~
- ~~1,2-Dichloroethane~~
- ~~1,2-Dichloroethane~~
- ~~1,4-Dichlorobenzene(f)~~
- ~~Ethylbenzene~~
- ~~Styrene~~
- ~~Tetrachloroethene~~
- ~~Toluene~~
- ~~Trichloroethene~~
- ~~Xylenes~~

LEAD

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998

SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410
 Houston, TX 77027

December 16, 1992
Project No.: 92-3404

COMBUSTION, INC., DENHAM SPRINGS, LA
Project No.: 0999-0040
Sample Date: 12/14/92

LEAD

SAMPLE IDENTIFICATION	VOLUME (Cubic Feet)	UNCORRECTED (ug/fitler)	CORRECTED (ug/fitler)	LEAD (ug/m3)
BLANK FILTER	---	<98	---	---
C121492-AO	25,141.3	<98	<98	<0.14
C121492-BO	12,660.0	<98	<98	<0.27
C121492-O	23,708.5	<98	<98	<0.15

QA/QC (obs/act) 1.0/1.0

ANALYZED: 12/16/92

ANALYST: AE

METHOD: 40 CFR, C1 (7-1-89 ED.) PRT 50, APP. G

Chain of Custody Form
 CCMBUSTION INC., DENHAM SPRINGS, LA

92-3404

Eagle Environmental Health, Inc., Project No. 0999.0040					Date: 12/14/92		
Samplers: (Signatures)							
Sample No.	Po or Pr	Station I.D. No. or Letter	Up or Down	Tube Serial No.	Sample Vol.	Analyze or Hold	Number of Filters ^{Filters}
C121492-00	PO	D	U	---	13358.4	H	1
C121492-80	PO	8	D	---	27470.7	H	1
C121492-A0	PO	A	D	---	25141.3	A	1
C121492-B0	PO	B	D	---	12660.0	A	1
C121492-0	PO	O	D	---	23708.5	A	1

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
<i>[Signature]</i>	12/15/92	1250	<i>[Signature]</i>	12/15/92	1530
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for: **RUSH** 24 Hour Turnaround: YES or NO

- ~~Benzene~~
- ~~Chlorobenzene~~
- ~~Chloroethane~~
- ~~Chloroform~~
- ~~1,1-Dichloroethane~~
- ~~1,2-Dichloroethane~~
- ~~1,2-Dichloroethane~~
- ~~1,4-Dichlorobenzene(f)~~
- ~~Ethylbenzene~~
- ~~Styrene~~
- ~~Tetrachloroethene~~
- ~~Toluene~~
- ~~Trichloroethene~~
- ~~Xylenes~~

LEAD

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998

SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410.
 Houston, TX 77027

Attachment 2

Volatile Organic Laboratory Results

December 1, 2, 3, 4, 8, 9, 10, 11, 12, 14, 15, 16, 17, and 18, 1992

COMBUSTION INC., DENHAM SPRINGS, LA
 Project No.: 0999-0040
 Sample Date: 12/01/92

December 8, 1992
 Project No.: 92-3260
 * Corrected 12/18/92

Sample Number	*12012046	12012048	*12012050							
PO or PR	PR	PR	PO							
Station (No. or Letter)	A	B	O							
Wind (up or down)	DOWN	DOWN	DOWN							
Volume (mls)	24,800.0	28,585.2	*24,000.0							
PARAMETER (concentrations mg/m3)										QA /QC (obs /act)
Benzene	<0.004	<0.004	<0.004							0.104 /0.100
Chlorobenzene	<0.004	<0.004	<0.004							0.103 /0.100
Chloroethane	<0.004	<0.004	<0.004							0.106 /0.100
Chloroform	<0.004	<0.004	<0.004							0.097 /0.100
1,1 Dichloroethane	<0.004	<0.004	<0.004							0.105 /0.100
1,2 Dichloroethane	<0.004	<0.004	<0.004							0.105 /0.100
1,2 Dichloroethene	<0.004	<0.004	<0.004							0.110 /0.100
1,4 Dichlorobenzene	<0.004	<0.004	<0.004							0.106 /0.100
Ethyl Benzene	0.012	0.012	<0.004							0.105 /0.100
Styrene	<0.004	<0.004	<0.004							0.106 /0.100
Tetrachloroethene	<0.004	<0.004	<0.004							0.103 /0.100
Toluene	0.004	0.005	<0.004							0.103 /0.100
Trichloroethene	<0.004	<0.004	<0.004							0.106 /0.100
Xylenes	<0.004	<0.004	<0.004							0.107 /0.100

Method: EPA-TO-1
 Analyzed: 12/02/92
 Analyst: ER

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

92-3268

Eagle Environmental Health, Inc., Project No. 0999.0040				Date: 12/1/92			
Samplers: (Signatures) <i>Danny Poy</i>							
Sample No.	Po or Pr	Station I.D. No. or Letter	Up or Down	Tube Serial No.	Sample Vol. ml	Analyze or Hold	Number of Tubes
12012046	PR	A	D	40	24800.0	A	1
12012047	PR	L	D	56	29893.5	H	1
12012048	PR	B	D	50	28585.2	A	1
12012049	PR	F	U	41	28207.2	H	1
12012050	PO	O	D	23	24000.0	A	1

Relinquished by: (Signature) <i>Danny Poy</i>	Date 12/2/92	Time 1500	Received by: (Signature) <i>Brett Anderson</i>	Date 12/2/92	Time 14:00
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for: 24 Hour Turnaround: YES or NO

- Benzene
- Chlorobenzene
- Chloroethane
- Chloroform
- 1,1-Dichloroethane
- 1,2-Dichloroethane
- 1,2-Dichloroethane
- 1,4-Dichlorobenzene(f)
- Ethylbenzene
- Styrene
- Tetrachloroethene
- Toluene
- Trichloroethene
- Xylenes

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998
 SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410
 Houston, TX 77027

COMBUSTION INC., DENHAM SPRINGS, LA
 Project No.: 0999-0040
 Sample Date: 12/02/92

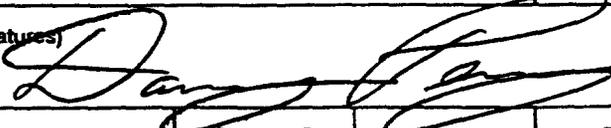
December 8, 1992
 Project No.: 92-3274

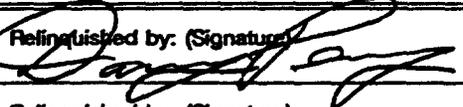
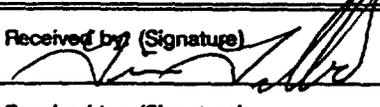
Sample Number	C120292DO	C120292O	C120292HR	C120292EO	C120292GR					
PO or PR	PO	PO	PR	PO	PR					
Station (No. or Letter)	D	O	H	E	G					
Wind (up or down)	DOWN	DOWN	DOWN	DOWN	DOWN					
Volume (mls)	26,950.0	31,091.6	30,129.7	27,960.4	29,951.0					
PARAMETER (concentrations mg/m3)										QA /QC (obs /act)
Benzene	<0.004	<0.003	<0.003	<0.004	SAMPLE					0.091 /0.100
Chlorobenzene	<0.004	<0.003	<0.003	<0.004	LOST					0.095 /0.100
Chloroethane	<0.004	<0.003	<0.003	<0.004	DUE TO					0.114 /0.100
Chloroform	<0.004	<0.003	<0.003	<0.004	POWER					0.092 /0.100
1,1 Dichloroethane	<0.004	<0.003	<0.003	<0.004	FAILURE					0.087 /0.100
1,2 Dichloroethane	<0.004	<0.003	<0.003	<0.004						0.089 /0.100
1,2 Dichloroethene	<0.004	<0.003	<0.003	<0.004						0.086 /0.100
1,4 Dichlorobenzene	<0.004	<0.003	<0.003	<0.004						0.091 /0.100
Ethyl Benzene	<0.004	0.003	<0.003	0.005						0.097 /0.100
Styrene	<0.004	<0.003	<0.003	<0.004						0.097 /0.100
Tetrachloroethene	<0.004	<0.003	<0.003	<0.004						0.096 /0.100
Toluene	<0.004	0.007	<0.003	0.022						0.099 /0.100
Trichloroethene	<0.004	<0.003	<0.003	<0.004						0.096 /0.100
Xylenes	<0.004	<0.003	<0.003	<0.004						0.095 /0.100

Method: EPA-TO-1
 Analyzed: 12/03,04/92
 Analyst: ER

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

92-3274

Eagle Environmental Health, Inc., Project No. 0999.0040					Date: 12/2/92		
Samplers: (Signatures) 							
Sample No.	Po or Pr	Station I.D. No. or Letter	Up or Down	Tube Serial No.	Sample Vol. ^{ml}	Analyze or Hold	Number of Tubes
C120292-FO	PO	E	D	29	27960.4	A	1
C120292-50	PO	5	D	32	29152.5	H	1
C120292-00	PO	D	D	26	26950.0	A	1
C120292-80	PO	B	U	13	29677.0	H	1
C120292-CR	PR	C	U	35	29880.0	H	1
C120292-6R	PR	6	D	8	30060.0	H	1
C120292-HR	PR	H	D	16	30129.7	A	1
C120292-GR	PR	G	D	37	29951.0	A	1
C120292-0	PO	O	D	14	31091.6	A	1

Relinquished by: (Signature) 	Date 12/3/92	Time 1200	Received by: (Signature) 	Date 12/3/92	Time 1245
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for:

24 Hour Turnaround: YES or NO

- | | |
|------------------------|-------------------|
| Benzene | Ethylbenzene |
| Chlorobenzene | Styrene |
| Chloroethane | Tetrachloroethene |
| Chloroform | Toluene |
| 1,1-Dichloroethane | Trichloroethene |
| 1,2-Dichloroethane | Xylenes |
| 1,2-Dichloroethane | |
| 1,4-Dichlorobenzene(f) | |

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998

SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410
 Houston, TX 77027

COMBUSTION INC., DENHAM SPRINGS, LA
 Project No.: 0999-0040
 Sample Date: 12/03/92

December 8, 1992
 Project No.: 92-3287

Sample Number	C120392BR	C120392AR	C120392BO	C120392AO	C120392O					
PO or PR	PR	PR	PO	PO	PO					
Station (No. or Letter)	B	A	B	A	O					
Wind (up or down)	DOWN	DOWN	DOWN	DOWN	DOWN					
Volume (mls)	34,914.0	33,525.6	30,754.5	31,261.3	32,757.1					
PARAMETER (concentrations ug/m3)										QA /QC (obs /act)
Benzene	3.7	<3.0	<3.3	<3.2	<3.1					0.086 /0.100
Chlorobenzene	<3.0	<3.0	<3.3	<3.2	<3.1					0.084 /0.100
Chloroethane	<3.0	<3.0	<3.3	<3.2	<3.1					-- /--
Chloroform	<3.0	<3.0	<3.3	<3.2	<3.1					0.077 /0.100
1,1 Dichloroethane	<3.0	<3.0	<3.3	<3.2	<3.1					0.084 /0.100
1,2 Dichloroethane	<3.0	<3.0	<3.3	<3.2	<3.1					0.100 /0.100
1,2 Dichloroethene	<3.0	<3.0	<3.3	<3.2	<3.1					0.083 /0.100
1,4 Dichlorobenzene	<3.0	<3.0	<3.3	<3.2	<3.1					0.112 /0.100
Ethyl Benzene	12.6	6.6	<3.3	3.2	<3.1					0.082 /0.100
Styrene	<3.0	<3.0	<3.3	<3.2	<3.1					0.066 /0.100
Tetrachloroethene	<3.0	<3.0	<3.3	<3.2	<3.1					0.080 /0.100
Toluene	14.0	13.7	<3.3	3.5	<3.1					0.095 /0.100
Trichloroethene	<3.0	<3.0	<3.3	<3.2	<3.1					0.088 /0.100
Xylenes	<3.0	<3.0	<3.3	<3.2	<3.1					0.067 /0.100

Method: EPA-TO-1
 Analyzed: 12/07/92
 Analyst: SY

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

92-3287

Eagle Environmental Health, Inc., Project No. 0999.0040					Date: 12/3/92		
Samplers: (Signatures) <i>[Signature]</i>							
Sample No.	Po or Pr	Station I.D. No. or Letter	Up or Down	Tube Serial No.	Sample Vol.	Analyze or Hold	Number of Tubes
C120392-FR	PR	F	U	6	34303.5	H	1
C120392-1R	PR	1	D	34	33241.0	H	1
C120392-BR	PR	B	D	36	3494.0	A	1
C120392-AR	PR	A	D	25	33525.6	A	1
C120392-00	PO	D	U	44	30521.6	H	1
C120392-80	PO	8	D	49	29561.6	H	1
C120392-80	PO	B	D	24	30754.5	A	1
C120392-A0	PO	A	D	20	31264.3	A	1
C120392-0	PO	O	D	9	32252.1	A	1

Relinquished by: (Signature) <i>[Signature]</i>	Date 12/4/92	Time 1200	Received by: (Signature) <i>[Signature]</i>	Date 12/4/92	Time 1545
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for: 24 Hour Turnaround: YES or NO

- | | |
|------------------------|-------------------|
| Benzene | Ethylbenzene |
| Chlorobenzene | Styrene |
| Chloroethane | Tetrachloroethene |
| Chloroform | Toluene |
| 1,1-Dichloroethane | Trichloroethene |
| 1,2-Dichloroethane | Xylenes |
| 1,2-Dichloroethane | |
| 1,4-Dichlorobenzene(f) | |

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998

SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410
 Houston, TX 77027

RUSH

COMBUSTION INC., DENHAM SPRINGS, LA
 Project No.: 0999-0040
 Sample Date: 12/04/92

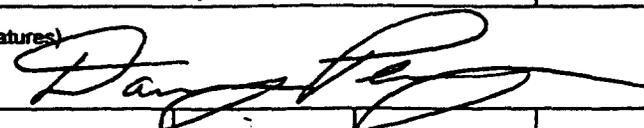
December 10, 1992
 Project No.: 92-3313

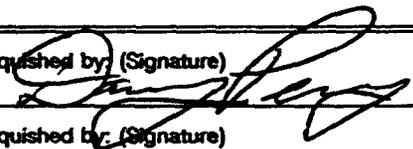
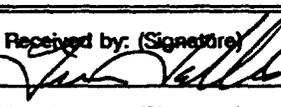
Sample Number	C120492CR	C120492DR	C120492BO	C120492CO	C120492O						
PO or PR	PR	PR	PO	PO	PO						
Station (No. or Letter)	C	D	B	C	O						
Wind (up or down)	DOWN	DOWN	DOWN	DOWN	DOWN						
Volume (mls)	20,568.6	19,217.7	12,127.7	16,596.8	20,765.3						
PARAMETER (concentrations ug/m3)											QA /QC (obs /act)
Benzene	<4.8	<5.2	<8.2	<6.0	<4.8						0.260 /0.250
Chlorobenzene	<4.8	<5.2	<8.2	<6.0	<4.8						0.300 /0.250
Chloroethane	<4.8	<5.2	<8.2	<6.0	<4.8						0.240 /0.250
Chloroform	<4.8	<5.2	<8.2	<6.0	<4.8						0.330 /0.250
1,1 Dichloroethane	<4.8	<5.2	<8.2	<6.0	<4.8						0.260 /0.250
1,2 Dichloroethane	<4.8	<5.2	<8.2	<6.0	<4.8						0.250 /0.250
1,2 Dichloroethene	<4.8	<5.2	<8.2	<6.0	<4.8						0.250 /0.250
1,4 Dichlorobenzene	<4.8	<5.2	<8.2	<6.0	<4.8						0.250 /0.250
Ethyl Benzene	<4.8	<5.2	<8.2	<6.0	<4.8						0.260 /0.250
Styrene	<4.8	<5.2	<8.2	<6.0	<4.8						0.240 /0.250
Tetrachloroethene	<4.8	<5.2	<8.2	<6.0	<4.8						0.260 /0.250
Toluene	<4.8	<5.2	<8.2	<6.0	<4.8						0.250 /0.250
Trichloroethene	<4.8	<5.2	<8.2	<6.0	<4.8						0.270 /0.250
Xylenes	<4.8	<5.2	<8.2	<6.0	<4.8						0.260 /0.250

Method: EPA-TO-1
 Analyzed: 12/08/92
 Analyst: SY

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

92-3313

Eagle Environmental Health, Inc., Project No. 0999.0040					Date: 12/4/92		
Samplers: (Signatures) 							
Sample No.	Po or Pr	Station I.D. No. or Letter	Up or Down	Tube Serial No.	ml Sample Vol.	Analyze or Hold	Number of Tubes
C120492-IR	PR	I	U	52	20980.4	H	1
C120492-CR	PR	C	D	50	20658.6	A	1
C120492-AR	PR	1	D	47	19960.0	H	1
C120492-DR	PR	D	D	48	19217.7	A	1
C120492-EO	PO	E	U	55	18432.5	H	1
C120492-LO	PO	1	D	54	16482.9	H	1
C120492-BO	PO	B	D	45	12127.7	A	1
C120492-CO	PO	C	D	51	16596.8	A	1
C120492-DO	PO	O	D	40	20765.3	A	1

Relinquished by: (Signature) 	Date: 12/7/92	Time: 1200	Received by: (Signature) 	Date: 12/7/92	Time: 1345
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

RUSH

INSTRUCTIONS: Analyze samples for: 24 Hour Turnaround: YES or NO

- Benzene
- Chlorobenzene
- Chloroethane
- Chloroform
- 1,1-Dichloroethane
- 1,2-Dichloroethane
- 1,2-Dichloroethane
- 1,4-Dichlorobenzene(f)
- Ethylbenzene
- Styrene
- Tetrachloroethene
- Toluene
- Trichloroethene
- Xylenes

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998
 SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410.
 Houston, TX 77027

COMBUSTION INC., DENHAM SPRINGS, LA
 Project No.: 0999-0040
 Sample Date: 12/08/92

December 15, 1992
 Project No.: 92-3346

Sample Number	C120892AR	C120892IR	C120892O							
PO or PR	PR	PR	PR							
Station (No. or Letter)	A	I	O							
Wind (up or down)	DOWN	DOWN	DOWN							
Volume (mls)	23,393.2	23,439.8	24,708.3							
PARAMETER (concentrations ug/m3)										QA /QC (obs /act)
Benzene	<4.3	<4.3	<4.3							0.021 /0.020
Chlorobenzene	<4.3	<4.3	<4.3							0.019 /0.020
Chloroethane	<4.3	<4.3	<4.3							-- /--
Chloroform	<4.3	<4.3	<4.3							0.016 /0.020
1,1 Dichloroethane	<4.3	<4.3	<4.3							0.019 /0.020
1,2 Dichloroethane	<4.3	<4.3	<4.3							0.019 /0.020
1,2 Dichloroethene	<4.3	<4.3	<4.3							0.019 /0.020
1,4 Dichlorobenzene	<4.3	<4.3	<4.3							0.020 /0.020
Ethyl Benzene	<4.3	<4.3	<4.3							0.022 /0.020
Styrene	<4.3	<4.3	<4.3							0.019 /0.020
Tetrachloroethene	<4.3	<4.3	<4.3							0.020 /0.020
Toluene	<4.3	<4.3	<4.3							0.022 /0.020
Trichloroethene	<4.3	<4.3	<4.3							0.021 /0.020
Xylenes	<4.3	<4.3	<4.3							0.021 /0.020

Method: EPA-TO-1
 Analyzed: 12/09,10/92
 Analyst: SY

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

92-3746 Page 1 of 2

Eagle Environmental Health, Inc., Project No. 0999.0040					Date: 12/8/92		
Samplers: (Signatures) <i>Dang Perry</i>							
Sample No.	Po or Pr	Station I.D. No. or Letter	Up or Down	Tube Serial No.	ml Sample Vol.	Analyze or Hold	Number of Tubes
C120892-ER	PR	E	U	30	23552.8	H	1
C120892-GR	PR	G	D	19	25396.7	H	1
C120892-AR	PR	A	P	11	23393.2	A	1
C120892-JR	PR	I	D	26	23439.8	A	1
C120892-O	PR	O	D	4	24708.3	A	1
RUSH							

Relinquished by: (Signature) <i>Dang Perry</i>	Date 12/9/92	Time 1200	Received by: (Signature) <i>Vin Talbot</i>	Date 12/9/92	Time 1425
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for:

24 Hour Turnaround: YES or NO

- | | |
|------------------------|-------------------|
| Benzene | Ethylbenzene |
| Chlorobenzene | Styrene |
| Chloroethane | Tetrachloroethene |
| Chloroform | Toluene |
| 1,1-Dichloroethane | Trichloroethene |
| 1,2-Dichloroethane | Xylenes |
| 1,2-Dichloroethane | |
| 1,4-Dichlorobenzene(f) | |

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998

SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410.
 Houston, TX 77027

COMBUSTION INC., DENHAM SPRINGS, LA

Project No.: 0999-0040

Sample Date: 12/09/92

December 14, 1992

Project No.: 92-3356

Sample Number	C120992BR	C120992AR	C120992O							
PO or PR	PR	PR	PR							
Station (No. or Letter)	B	A	O							
Wind (up or down)	DOWN	DOWN	DOWN							
Volume (mls)	5,324.4	5,842.9	5,597.6							
PARAMETER (concentrations ug/m3)										QA /QC (obs /act)
Benzene	<18.8	<17.1	<17.9							0.022 /0.020
Chlorobenzene	<18.8	<17.1	<17.9							0.020 /0.020
Chloroethane	<18.8	<17.1	<17.9							-- /--
Chloroform	<18.8	<17.1	<17.9							0.017 /0.020
1,1 Dichloroethane	<18.8	<17.1	<17.9							0.024 /0.020
1,2 Dichloroethane	<18.8	<17.1	<17.9							0.020 /0.020
1,2 Dichloroethene	<18.8	<17.1	<17.9							-- /--
1,4 Dichlorobenzene	<18.8	<17.1	<17.9							0.020 /0.020
Ethyl Benzene	<18.8	<17.1	<17.9							0.022 /0.020
Styrene	<18.8	<17.1	<17.9							0.018 /0.020
Tetrachloroethene	<18.8	<17.1	<17.9							0.020 /0.020
Toluene	<18.8	<17.1	<17.9							0.022 /0.020
Trichloroethene	<18.8	<17.1	<17.9							0.020 /0.020
Xylenes	<18.8	<17.1	<17.9							0.018 /0.020

Method: EPA-TO-1

Analyzed: 12/10/92

Analyst: SY

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

Eagle Environmental Health, Inc. Project No. 0999.0040				Date: 12/9/92			
Samplers: (Signatures) <i>[Signature]</i>							
Sample No.	Po or Pr	Station I.D. No. or Letter	Up or Down	Tube Serial No.	ml Sample Vol.	Analyze or Hold	Number of Tubes
C120992-ER	PR	E	U	16	5914.3	H	1
C120992-6R	PR	G	D	29	5846.4	H	1
C120992-8R	PR	B	D	37	5324.4	A	1
C120992-AR	PR	A	D	70	5842.9	A	1
C120992-O	PR	O	D	31	5597.6	A	1

Relinquished by: (Signature) <i>[Signature]</i>	Date 12/10/92	Time 1152	Received by: (Signature) <i>[Signature]</i>	Date 12/10	Time 1155
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for: 24 Hour Turnaround: YES or NO

- Benzene
- Chlorobenzene
- Chloroethane
- Chloroform
- 1,1-Dichloroethane
- 1,2-Dichloroethane
- 1,2-Dichloroethane
- 1,4-Dichlorobenzene(f)
- Ethylbenzene
- Styrene
- Tetrachloroethene
- Toluene
- Trichloroethene
- Xylenes

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998

SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410
 Houston, TX 77027

COMBUSTION INC., DENHAM SPRINGS, LA
 Project No.: 0999-0040
 Sample Date: 12/10/92

December 15, 1992
 Project No.: 92-3380

Sample Number	C121092GR	C121092FR	C121092O							
PO or PR	PR	PR	PR							
Station (No. or Letter)	G	F	O							
Wind (up or down)	DOWN	DOWN	DOWN							
Volume (mls)	25,387.2	24,949.4	27,984.3							
PARAMETER (concentrations ug/m3)										QA /QC (obs /act)
Benzene	<3.6	<3.6	<3.6							0.048 /0.050
Chlorobenzene	<3.6	<3.6	<3.6							0.048 /0.050
Chloroethane	<3.6	<3.6	<3.6							-- /--
Chloroform	<3.6	<3.6	<3.6							0.043 /0.050
1,1 Dichloroethane	<3.6	<3.6	<3.6							0.044 /0.050
1,2 Dichloroethane	<3.6	<3.6	<3.6							0.042 /0.050
1,2 Dichloroethene	<3.6	<3.6	<3.6							0.047 /0.050
1,4 Dichlorobenzene	<3.6	<3.6	<3.6							0.042 /0.050
Ethyl Benzene	4.92	<3.6	<3.6							0.051 /0.050
Styrene	<3.6	<3.6	<3.6							0.053 /0.050
Tetrachloroethene	<3.6	<3.6	<3.6							0.048 /0.050
Toluene	9.36	<3.6	<3.6							0.050 /0.050
Trichloroethene	<3.6	<3.6	<3.6							0.047 /0.050
Xylenes	<3.6	<3.6	<3.6							0.057 /0.050

Method: EPA-TO-1
 Analyzed: 12/09,10/92
 Analyst: SY

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

92-3380

Eagle Environmental Health, Inc., Project No. 0999.0040					Date: 12/10/92		
Samplers: (Signatures) <i>[Signature]</i>							
Sample No.	Po or Pr	Station I.D. No. or Letter	Up or Down	Tube Serial No.	ml Sample Vol.	Analyze or Hold	Number of Tubes
C121092-BR	PR	B	U	15	25395.5	H	1
C121092-4R	PR	4	D	23	25704.0	H	1
C121092-GR	PR	G	D	5	25387.2	A	1
C121092-FR	PR	F	D	27	24949.4	A	1
C121092-D	PR	D	D	36	27984.3	A	1
RUSH							

Relinquished by: (Signature) <i>[Signature]</i>	Date 12/11/92	Time 1200	Received by: (Signature) <i>[Signature]</i>	Date 12/11/92	Time 1340
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for:

24 Hour Turnaround: YES or NO

- | | |
|------------------------|-------------------|
| Benzene | Ethylbenzene |
| Chlorobenzene | Styrene |
| Chloroethane | Tetrachloroethene |
| Chloroform | Toluene |
| 1,1-Dichloroethane | Trichloroethene |
| 1,2-Dichloroethane | Xylenes |
| 1,2-Dichloroethane | |
| 1,4-Dichlorobenzene(f) | |

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998

SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410.
 Houston, TX 77027

COMBUSTION INC., DENHAM SPRINGS, LA
 Project No.: 0999-0040
 Sample Date: 12/11/92, 12/12/92

December 16, 1992
 Project No.: 92-3393

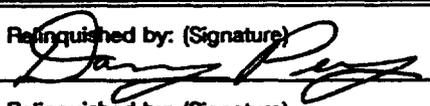
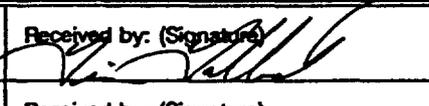
Sample Number	C121192GR	C121192FR	C121192O	C121292BR	C121292AR	C121292O				
PO or PR	PR	PR	PR	PR	PR	PO				
Station (No. or Letter)	G	F	O	B	A	O				
Wind (up or down)	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN				
Volume (mls)	23,215.5	23,259.6	23,596.7	26,619.2	25,893.7	27,943.6				
PARAMETER (concentrations ug/m3)										QA / QC (obs / act)
Benzene	<4.3	<4.3	<4.3	<3.8	<3.8	<3.8				0.105 / 0.100
Chlorobenzene	<4.3	<4.3	<4.3	<3.8	<3.8	<3.8				0.104 / 0.100
Chloroethane	<4.3	<4.3	<4.3	<3.8	<3.8	<3.8				-- / --
Chloroform	<4.3	<4.3	<4.3	<3.8	<3.8	<3.8				0.082 / 0.100
1,1 Dichloroethane	<4.3	<4.3	<4.3	<3.8	<3.8	<3.8				0.111 / 0.100
1,2 Dichloroethane	<4.3	<4.3	<4.3	<3.8	<3.8	<3.8				-- / --
1,2 Dichloroethene	<4.3	<4.3	<4.3	<3.8	<3.8	<3.8				0.113 / 0.100
1,4 Dichlorobenzene	<4.3	<4.3	<4.3	<3.8	<3.8	<3.8				0.095 / 0.100
Ethyl Benzene	5.47	<4.3	6.36	11.0	9.09	<3.8				0.106 / 0.100
Styrene	<4.3	<4.3	<4.3	<3.8	<3.8	<3.8				0.099 / 0.100
Tetrachloroethene	<4.3	<4.3	<4.3	<3.8	<3.8	<3.8				0.108 / 0.100
Toluene	6.43	<4.3	4.35	9.36	3.97	<3.8				0.104 / 0.100
Trichloroethene	<4.3	<4.3	<4.3	<3.8	<3.8	<3.8				0.117 / 0.100
Xylenes	<4.3	<4.3	<4.3	<3.8	<3.8	<3.8				0.097 / 0.100

Method: EPA-TO-1
 Analyzed: 12/14,15/92
 Analyst: ER

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

92-3393

Eagle Environmental Health, Inc., Project No. 0999.0040					Date: 12/11/92		
Samplers: (Signatures) 							
Sample No.	Po or Pr	Station I.D. No. or Letter	Up or Down	Tube Serial No.	Sample Vol. ^{ml}	Analyze or Hold	Number of Tubes
C121192-BR	PR	B	U	45	22844.8	H	1
C121192-4R	PR	4	D	40	23961.6	H	1
C121192-GR	PR	G	D	39	23215.5	A	1
C121192-FR	PR	F	D	48	23259.6	A	1
C121192-O	PO	O	D	46	23596.7	A	1
RUSH							

Relinquished by: (Signature) 	Date 12/14/92	Time 1200	Received by: (Signature) 	Date 12/14/92	Time 1430
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for:

24 Hour Turnaround. YES or NO

- Benzene
- Chlorobenzene
- Chloroethane
- Chloroform
- 1,1-Dichloroethane
- 1,2-Dichloroethane
- 1,2-Dichloroethane
- 1,4-Dichlorobenzene(f)
- Ethylbenzene
- Styrene
- Tetrachloroethene
- Toluene
- Trichloroethene
- Xylenes

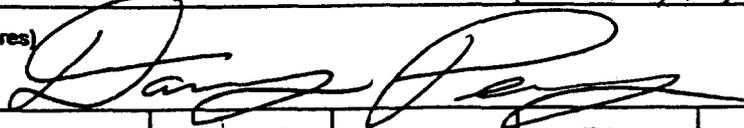
7 days minimum holding time for samples not analyzed immediately.

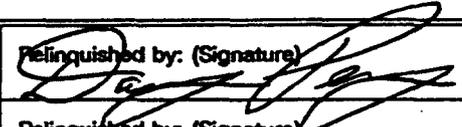
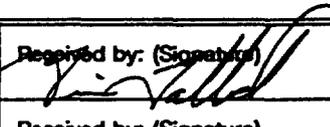
FAX RESULTS TO: (713) 850-9998

SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410.
 Houston, TX 77027

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

72-3393

Eagle Environmental Health, Inc. Project No. 0999.0040					Date: 12/12/92		
Samplers: (Signatures) 							
Sample No.	Po or Pr	Station I.D. No. or Letter	Up or Down	Tube Serial No.	Sample Vol. ^{ml}	Analyze or Hold	Number of Tubes
C121292-FR	PR	F	U	26	26440.4	H	1
C121292-7R	PR	7	D	11	26288.0	H	1
C121292-8R	PR	B	D	4	26619.2	A	1
C121292-AR	PR	A	D	7	25893.7	A	1
C121292-O	PR	O	D	28	27943.6	A	1
RUSH							

Relinquished by: (Signature) 	Date 12/14/92	Time 1200	Received by: (Signature) 	Date 12/14/92	Time 1430
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for:

24 Hour Turnaround YES or NO

- Benzene
- Chlorobenzene
- Chloroethane
- Chloroform
- 1,1-Dichloroethane
- 1,2-Dichloroethane
- 1,2-Dichloroethane
- 1,4-Dichlorobenzene(f)
- Ethylbenzene
- Styrene
- Tetrachloroethene
- Toluene
- Trichloroethene
- Xylenes

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998

SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410.
 Houston, TX 77027

COMBUSTION INC., DENHAM SPRINGS, LA

Project No.: 0999-0040

Sample Date: 12/14/92

December 18, 1992

Project No.: 92-3404

Sample Number	C121492CR	C121492AR	C121492O							
PO or PR	PR	PR	PR							
Station (No. or Letter)	C	A	O							
Wind (up or down)	DOWN	DOWN	DOWN							
Volume (mls)	26,555.8	24,750.4	25,963.5							
PARAMETER (concentrations ug/m3)										QA /QC (obs /act)
Benzene	<4.0	<4.0	<4.0							0.055 /0.050
Chlorobenzene	<4.0	<4.0	<4.0							-- /--
Chloroethane	<4.0	<4.0	<4.0							0.054 /0.050
Chloroform	<4.0	<4.0	<4.0							0.042 /0.050
1,1 Dichloroethane	<4.0	<4.0	<4.0							0.060 /0.050
1,2 Dichloroethane	<4.0	<4.0	<4.0							-- /--
1,2 Dichloroethene	<4.0	<4.0	<4.0							-- /--
1,4 Dichlorobenzene	<4.0	<4.0	<4.0							0.055 /0.050
Ethyl Benzene	<4.0	12.2	<4.0							0.058 /0.050
Styrene	<4.0	<4.0	<4.0							0.047 /0.050
Tetrachloroethene	<4.0	<4.0	<4.0							0.057 /0.050
Toluene	<4.0	17.7	<4.0							0.058 /0.050
Trichloroethene	<4.0	<4.0	<4.0							-- /--
Xylenes	<4.0	<4.0	<4.0							0.053 /0.050

Method: EPA-TO-1

Analyzed: 12/15,16/92

Analyst: ER

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

92-3404

Eagle Environmental Health, Inc., Project No. 0999.0040					Date: 12/14/92		
Samplers: (Signatures) <i>Dan Perry</i>							
Sample No.	Po or Pr	Station I.D. No. or Letter	Up or Down	Tube Serial No.	Sample Vol. ^{ml}	Analyze or Hold	Number of Tubes
C121492-ER	PR	F	U	14	23959.8	H	1
C121492-7R	PR	7	D	20	26560.8	H	1
C121492-CR	PR	C	D	24	26555.8	A	1
C121492-AR	PR	A	D	9	24750.4	A	1
C121492-O	PR	O	D	25	25963.5	A	1
RUSH							

Relinquished by: (Signature) <i>Dan Perry</i>	Date 12/15/92	Time 0730	Received by: (Signature) <i>Beth Anderson</i>	Date 12/15/92	Time 730
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for: 24 Hour Turnaround: YES or NO

- Benzene
- Chlorobenzene
- Chloroethane
- Chloroform
- 1,1-Dichloroethane
- 1,2-Dichloroethane
- 1,2-Dichloroethane
- 1,4-Dichlorobenzene(f)
- Ethylbenzene
- Styrene
- Tetrachloroethene
- Toluene
- Trichloroethene
- Xylenes

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998
 SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410.
 Houston, TX 77027

COMBUSTION INC., DENHAM SPRINGS, LA

Project No.: 0999-0040

Sample Date: 12/15/92

December 21, 1992

Project No.: 92-3426

Sample Number	C121592BR	C121592CR	C121592O							
PO or PR	PR	PR	PR							
Station (No. or Letter)	B	C	O							
Wind (up or down)	DOWN	DOWN	DOWN							
Volume (mls)	5,952.0	6,050.0	5,876.3							
PARAMETER (concentrations ug/m3)										QA /QC (obs /act)
Benzene	<16.8	<16.5	<17.0							0.540 /0.500
Chlorobenzene	<16.8	<16.5	<17.0							0.500 /0.500
Chloroethane	<16.8	<16.5	<17.0							0.530 /0.500
Chloroform	<16.8	<16.5	<17.0							0.420 /0.500
1,1 Dichloroethane	<16.8	<16.5	<17.0							0.570 /0.500
1,2 Dichloroethane	<16.8	<16.5	<17.0							0.570 /0.500
1,2 Dichloroethene	<16.8	<16.5	<17.0							0.600 /0.500
1,4 Dichlorobenzene	<16.8	<16.5	<17.0							0.470 /0.500
Ethyl Benzene	25.6	<16.5	<17.0							0.520 /0.500
Styrene	<16.8	<16.5	<17.0							0.480 /0.500
Tetrachloroethene	<16.8	<16.5	<17.0							0.550 /0.500
Toluene	<16.8	<16.5	<17.0							0.500 /0.500
Trichloroethene	<16.8	<16.5	<17.0							0.670 /0.500
Xylenes	<16.8	<16.5	<17.0							0.500 /0.500

Method: EPA-TO-1

Analyzed: 12/16,17/92

Analyst: SY

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

92-3426

Eagle Environmental Health, Inc., Project No. 0999.0040					Date: 12/15/92		
Samplers: (Signatures) <i>[Signature]</i>							
Sample No.	Po or Pr	Station ID. No. or Letter	Up or Down	Tube Serial No.	ml Sample Vol.	Analyze or Hold	Number of Tubes
C121592-GR	PR	G	U	13	5610.0	H	1
C121592-IR	PR	L	D	27	5750.0	H	1
C121592-BR	PR	B	D	70	5952.0	A	1
C121592-OR	PR	C	D	31	6050.0	A	1
C121592-O	PR	O	D	37	5876.3	A	1
RUSH							

Relinquished by: (Signature) <i>[Signature]</i>	Date 12/16/92	Time 1200	Received by: (Signature) <i>[Signature]</i>	Date 12/16/92	Time 1455
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for: 24 Hour Turnaround: YES or NO

- Benzene
- Chlorobenzene
- Chloroethane
- Chloroform
- 1,1-Dichloroethane
- 1,2-Dichloroethane
- 1,2-Dichloroethane
- 1,4-Dichlorobenzene(f)
- Ethylbenzene
- Styrene
- Tetrachloroethene
- Toluene
- Trichloroethene
- Xylenes

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998

SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410.
 Houston, TX 77027

COMBUSTION INC., DENHAM SPRINGS, LA
 Project No.: 0999-0040
 Sample Date: 12/16/92

December 21, 1992
 Project No.: 92-3432

Sample Number	C121692HR	C121692GR	C121692O							
PO or PR	PR	PR	PR							
Station (No. or Letter)	H	G	O							
Wind (up or down)	DOWN	DOWN	DOWN							
Volume (mls)	3,754.4	3,826.9	3,933.7							
PARAMETER (concentrations ug/m3)										QA /QC (obs /act)
Benzene	<26.6	<26.1	<25.5							0.540 /0.500
Chlorobenzene	<26.6	<26.1	<25.5							0.500 /0.500
Chloroethane	<26.6	<26.1	<25.5							0.530 /0.500
Chloroform	<26.6	<26.1	<25.5							0.420 /0.500
1,1 Dichloroethane	<26.6	<26.1	<25.5							0.570 /0.500
1,2 Dichloroethane	<26.6	<26.1	<25.5							0.570 /0.500
1,2 Dichloroethene	<26.6	<26.1	<25.5							0.600 /0.500
1,4 Dichlorobenzene	<26.6	<26.1	<25.5							0.470 /0.500
Ethyl Benzene	<26.6	<26.1	<25.5							0.520 /0.500
Styrene	<26.6	<26.1	<25.5							0.480 /0.500
Tetrachloroethene	<26.6	<26.1	<25.5							0.550 /0.500
Toluene	<26.6	<26.1	<25.5							0.500 /0.500
Trichloroethene	<26.6	<26.1	<25.5							0.670 /0.500
Xylenes	<26.6	<26.1	<25.5							0.500 /0.500

Method: EPA-TO-1
 Analyzed: 12/17,18/92
 Analyst: SY

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

92-3432

Eagle Environmental Health, Inc., Project No. 0999.0040					Date: 12/16/92		
Samplers: (Signatures) <i>[Signature]</i>							
Sample No.	Po or Pr	Station I.D. No. or Letter	Up or Down	Tube Serial No.	Sample Vol.	Analyze or Hold	Number of Tubes
C121692-CR	PR	C	U	5	4100.0	H	1
C121692-6R	PR	6	D	32	3954.6	H	1
C121692-4R	PR	H	D	36	3754.4	A	1
C121692-GR	PR	G	D	17	3826.9	A	1
C121692-O	PR	O	D	39	3933.7	A	1
RUSH							

Relinquished by: (Signature) <i>[Signature]</i>	Date: 12/17/92	Time: 0747	Received by: (Signature) <i>[Signature]</i>	Date: 12-17	Time: 7:51
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for: 24 Hour Turnaround: YES or NO

- | | |
|------------------------|-------------------|
| Benzene | Ethylbenzene |
| Chlorobenzene | Styrene |
| Chloroethane | Tetrachloroethene |
| Chloroform | Toluene |
| 1,1-Dichloroethane | Trichloroethene |
| 1,2-Dichloroethane | Xylenes |
| 1,2-Dichloroethane | |
| 1,4-Dichlorobenzene(f) | |

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998

SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410
 Houston, TX 77027

COMBUSTION INC., DENHAM SPRINGS, LA

Project No.: 0999-0040

Sample Date: 12/17/92

December 28, 1992

Project No.: 92-3461

Sample Number	C121792HR	C121792GR	C121792O							
PO or PR	PR	PR	PR							
Station (No. or Letter)	H	G	O							
Wind (up or down)	DOWN	DOWN	DOWN							
Volume (mls)	23,406.0	22,936.8	22,599.4							
PARAMETER (concentrations ug/m3)										QA /QC (obs /act)
Benzene	<4.27	<4.36	<4.24							0.112 /0.500
Chlorobenzene	<4.27	<4.36	<4.24							0.107 /0.500
Chloroethane	<4.27	<4.36	<4.24							-- /--
Chloroform	<4.27	<4.36	<4.24							0.097 /0.500
1,1 Dichloroethane	<4.27	<4.36	<4.24							0.112 /0.500
1,2 Dichloroethane	<4.27	<4.36	<4.24							0.099 /0.500
1,2 Dichloroethene	<4.27	<4.36	<4.24							0.108 /0.500
1,4 Dichlorobenzene	<4.27	<4.36	<4.24							0.097 /0.500
Ethyl Benzene	8.54	12.38	<4.24							0.096 /0.500
Styrene	<4.27	<4.36	<4.24							0.088 /0.500
Tetrachloroethene	<4.27	<4.36	<4.24							0.109 /0.500
Toluene	9.27	10.94	<4.24							0.100 /0.500
Trichloroethene	<4.27	<4.36	<4.24							0.115 /0.500
Xylenes	<4.27	<4.36	<4.24							0.095 /0.500

Method: EPA-TO-1

Analyzed: 12/21/92

Analyst: SY

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

92-3461

Eagle Environmental Health, Inc., Project No. 0999.0040					Date: 12/17/92		
Samplers: (Signatures) <i>[Signature]</i>							
Sample No.	Po or Pr	Station ID. No. or Letter	Up or Down	Tube Serial No.	ml Sample Vol.	Analyze or Hold	Number of Tubes
C121792-AR	PR	B	U	4	24253.6	H	1
C121792-GR	PR	G	D	24	23350.0	H	1
C121792-HR	PR	H	D	17	23406.0	A	1
C121792-OR	PR	O	D	8	22936.8	A	1
C121792-O	PR	O	D	46	22599.4	A	1
RUSH							

Relinquished by: (Signature) <i>[Signature]</i>	Date 12/18/92	Time 1200	Received by: (Signature) <i>[Signature]</i>	Date 12/18/92	Time 1540
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for: 24 Hour Turnaround: YES or NO

- Benzene
- Chlorobenzene
- Chloroethane
- Chloroform
- 1,1-Dichloroethane
- 1,2-Dichloroethane
- 1,2-Dichloroethane
- 1,4-Dichlorobenzene(f)
- Ethylbenzene
- Styrene
- Tetrachloroethene
- Toluene
- Trichloroethene
- Xylenes

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998

SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410.
 Houston, TX 77027

COMBUSTION INC., DENHAM SPRINGS, LA
 Project No.: 0999-0040
 Sample Date: 12/18/92

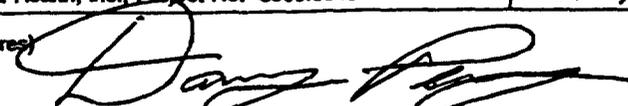
December 28, 1992
 Project No.: 92-3479

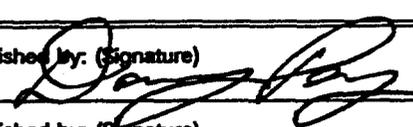
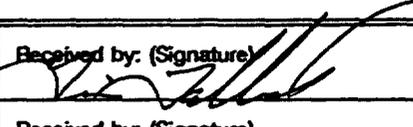
Sample Number	C121892BR	C121892AR	C121892O							
PO or PR	PR	PR	PR							
Station (No. or Letter)	B	A	O							
Wind (up or down)	DOWN	DOWN	DOWN							
Volume (mls)	24,651.0	25,400.0	24,708.6							
PARAMETER (concentrations ug/m3)										QA /QC (obs /act)
Benzene	8.08	6.03	<4.0							0.112 /0.500
Chlorobenzene	<4.0	<4.0	<4.0							0.107 /0.500
Chloroethane	<4.0	<4.0	<4.0							-- /--
Chloroform	<4.0	<4.0	<4.0							0.097 /0.500
1,1 Dichloroethane	<4.0	<4.0	<4.0							0.112 /0.500
1,2 Dichloroethane	<4.0	<4.0	<4.0							0.099 /0.500
1,2 Dichloroethene	<4.0	<4.0	<4.0							0.108 /0.500
1,4 Dichlorobenzene	<4.0	<4.0	<4.0							0.097 /0.500
Ethyl Benzene	24.9	11.6	<4.0							0.097 /0.500
Styrene	<4.0	<4.0	<4.0							0.088 /0.500
Tetrachloroethene	<4.0	<4.0	<4.0							0.109 /0.500
Toluene	22.7	13.8	<4.0							0.100 /0.500
Trichloroethene	<4.0	<4.0	<4.0							0.115 /0.500
Xylenes	4.34	<4.0	<4.0							0.095 /0.500

Method: EPA-TO-1
 Analyzed: 12/21,22/92
 Analyst: ER

Chain of Custody Form
 COMBUSTION INC., DENHAM SPRINGS, LA

92-3479

Eagle Environmental Health, Inc., Project No. 0999.0040					Date: 12/18/92		
Samplers: (Signatures) 							
Sample No.	Po or Pr	Station I.D. No. or Letter	Up or Down	Tube Serial No.	Sample Vol.	Analyze or Hold	Number of Tubes
C121892-FR	PR	F	U	70	24899.7	H	1
C121892-7R	PR	7	D	9	23959.8	H	1
C121892-BR	PR	B	D	37	24651.0	A	1
C121892-AR	PR	A	D	31	25400.0	A	1
C121892-O	PR	O	D	35	24708.6	A	1
RUSH							

Relinquished by: (Signature) 	Date: 12/21/92	Time: 1200	Received by: (Signature) 	Date: 12/21/92	Time: 1400
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Remarks:					

INSTRUCTIONS: Analyze samples for: 24 Hour Turnaround: YES or NO

- | | |
|------------------------|-------------------|
| Benzene | Ethylbenzene |
| Chlorobenzene | Styrene |
| Chloroethane | Tetrachloroethene |
| Chloroform | Toluene |
| 1,1-Dichloroethane | Trichloroethene |
| 1,2-Dichloroethane | Xylenes |
| 1,2-Dichloroethane | |
| 1,4-Dichlorobenzene(f) | |

7 days minimum holding time for samples not analyzed immediately.

FAX RESULTS TO: (713) 850-9998

SEND RESULTS TO:
 Eagle Environmental Health, Inc.
 4151 Southwest Freeway, Suite 410.
 Houston, TX 77027

ATTACHMENT 2

Water Sampling Results

January 14, 1993

ERM-Southwest, Inc.

3501 N. Causeway Blvd.
Suite 200
Metairie, Louisiana 70002
(504) 831-6700
(504) 831-6742 (Fax)

Mr. Russell Killebrew
Woodward-Clyde Consultants
2822 O'Neal Lane
Baton Rouge, LA 70816

W.O.#85-20

RE: December Monthly Report
Wastewater Analytical Results



Dear Mr. Killebrew:

This letter report presents a brief operational summary and the analytical data for the wastewater system at the Combustion, Inc. site for December of 1992 and through January 8, 1993.

Operations Summary

A chronological summary of wastewater treatment operations at the Combustion, Inc. site relative to the ongoing Removal Action is presented in Table 1.

The Pond N batch 4, 5, and 6 discharges had discharge volumes of 195,600 gallons, 195,400 gallons and 213,100 gallons respectively for a total of 604,100 gallons for this reporting period. A grand total of 1,122,700 gallons have been treated and discharged since initiation of site cleanup operations.

Effluent Sampling

The treated water contained in Pond N is discharged on a batch basis. After Pond N is filled to capacity, the package plant effluent is diverted/recycled to Pond M. Samples are then collected from Pond N for analysis in accordance with the wastewater analysis plan. After receipt of the specific pollutant and indicator analyses from the laboratory (with exception of the five day biological oxygen demand) and determination that the Pond N water meets the discharge standards, the Pond N discharge pump is activated. Flow measurements are either by gauging Pond N or by water flow meter. The operator is present throughout the discharge period.

16300 Katy Freeway
Suite 300
Houston, Texas 77094-1609
(713) 579-8999
(713) 579-8988 (Fax)

1120 South
Capital of Texas Highway
Building II
Suite 205
Austin, Texas 78746
(512) 328-9200
(512) 328-9214 (Fax)

4100 Spring Valley Road
Suite 200
Dallas, Texas 75244
(214) 458-7272
(214) 458-7204 (Fax)

5959 Gateway West Blvd.
Suite 655
El Paso, Texas 79925
(915) 779-6666
(915) 779-6632 (Fax)

ERM-SW47

A member of the Environmental
Resources Management Group

TABLE 1

**CHRONOLOGICAL SUMMARY OF WASTEWATER TREATMENT OPERATIONS
THROUGH JANUARY 8, 1993**

**Combustion, Inc. Site
Livingston Parish, Louisiana**

Began site work for plant construction	10/01/92
Package plant delivered to site	10/07/92
Package plant hookup and shakedown	10/07-11/04/92
Received active biomass seed	11/05/92
Began filling Pond N	11/06/92
Batch 1 Pond N discharge	11/16/92
Batch 2 Pond N discharge	11/23/92
Batch 3 Pond N discharge	12/02/92
Batch 4 Pond N discharge	12/09/92
Batch 5 Pond N discharge with DEQ split sample	12/30/92
Batch 6 Pond N discharge	01/06/93

Mr. Russell Killebrew
Woodward-Clyde Consultants
January 14, 1993
Page 3

Effluent Quality

The effluent quality was within the effluent discharge standards for the Pond N batch discharges for this reporting period. A summary of Pond N discharge analyses is presented in Tables 2 and 3. Laboratory data sheets are presented in Attachment 1.

The Batch 5 initial analyses indicated an exceedance of total organic carbon (TOC) in the Pond N water. A carbon polishing system consisting of nine 55 gallon drums placed in series of three drums per treatment train was installed at the site to further treat (polish) the Pond N water. The total carbon capacity of this system was 1,440 pounds of Calgon carbon. Flow to the carbon system was provided by the existing submersible pump. The Pond N water was circulated through the carbon system and back to Pond N until the effluent TOC limit was achieved (approximately 4 days).

The Pond N zinc concentrations for Batch 5 were slightly above the zinc limits when first tested. The pH of Pond N was increased by addition of soda ash and allowed to settle to remove the zinc. This operation was successful in reducing the total zinc below the effluent limits. The final testing of Batch 5 indicated all parameters were in compliance at which time the pumps were activated and the batch discharged.

Other Analyses

Other testing data for the wastewater system are presented in Attachment 2. Other data includes the Pond M raw wastewater, other pond testing results and package treatment plant (SBR) effluent analyses.

System Enhancement

Heavy rains are increasing the backlog of water in the Pond system. The rainfall backlog is of very low organic strength (e.g. is less than effluent TOC, COD and BOD₅ limits). To address this backlog, a large (40,000 pound) carbon system is being leased for use at the site. Treated water will continue to be tested and discharged on a batch basis from Pond N in accordance with the Work Plan.



TABLE 2

FORM B
POND N TREATED BATCH
DISCHARGE AND MONITORING REPORT

COMBUSTION, INC. POND AREA DISCHARGE
Livingston Parish, Louisiana

Reporting Month: December 1992 through January 6, 1993

Reported by: ERM-Southwest, Inc.

Report Date: 01/14/93

COMPLETE THIS FORM FOR EACH BATCH OF WATER
DISCHARGED OFFSITE FROM FILLED POND N

	Units	Permissible Limits	Batch No.:	1	2	3	4	5
			Sample Date:	<u>11/13/92</u>	<u>11/20/92</u>	<u>11/29/92</u>	<u>12/07/92</u>	<u>12/28/92</u>
			Discharge Date:	<u>11/16/92</u>	<u>11/23/92</u>	<u>12/02/92</u>	<u>12/09/92</u>	<u>12/30/92</u>
Field Parameters^(a)								
pH	Std. Units	6.0 - 9.0		<u>6.5</u>	<u>6.6</u>	<u>7.08</u>	<u>6.5</u>	<u>7.18</u>
Temperature	°C	NA		<u>(c)</u>	<u>(c)</u>	<u>(c)</u>	<u>(c)</u>	<u>(c)</u>
Batch Size	Gallons	NA		<u>166,800</u>	<u>170,000</u>	<u>181,800</u>	<u>195,600</u>	<u>195,400</u>
Laboratory Parameters^(a)								
BOD ₅	mg/l	120		<u><5</u>	<u>52.5</u>	<u>6.0</u>	<u>15.5</u>	<u>48.4</u>
COD	mg/l	300 ^(b)		<u>142</u>	<u>176</u>	<u>112</u>	<u>137.5</u>	<u>194</u>
TOC	mg/l	50 ^(b)		<u>46</u>	<u>29</u>	<u>30</u>	<u>39.5</u>	<u>32.9</u>
TSS	mg/l	183		<u>18</u>	<u>50</u>	<u>28.6</u>	<u>33.3</u>	<u>26</u>
Oil & Grease	mg/l	15		<u>0.9</u>	<u>0.9</u>	<u>0.7</u>	<u>4.41</u>	<u>1.6</u>

NOTES:

- (a) All analyses to be performed in accordance with approved EPA methods for wastewater analysis.
 (b) If COD and TOC are greater than 50% over the average observed values, the batch will either be reanalyzed or treated again.
 (c) See field logs.

TABLE 2 (Continued)

FORM B
POND N TREATED BATCH
DISCHARGE AND MONITORING REPORT

COMBUSTION, INC. POND AREA DISCHARGE
Livingston Parish, Louisiana

Reporting Month: December 1992 through January 6, 1993

Reported by: ERM - Southwest, Inc.

Report Date: 01/14/93

COMPLETE THIS FORM FOR EACH BATCH OF WATER
DISCHARGED OFFSITE FROM FILLED POND N

			<u>Batch No.:</u>	<u>6</u>				
	<u>Units</u>	<u>Permissible Limits</u>	<u>Sample Date:</u>	<u>01/06/93</u>				
			<u>Discharge Date:</u>	<u>01/06/93</u>				
Field Parameters^(a)								
pH	Std. Units	6.0 - 9.0		<u>7.2</u>				
Temperature	°C	NA		<u>(c)</u>				
Batch Size	Gallons	NA		<u>213,100</u>				
Laboratory Parameters^(a)								
BOD ₅	mg/l	120		<u>20.0</u>				
COD	mg/l	300 ^(b)		<u>148</u>				
TOC	mg/l	50 ^(b)		<u>37.6</u>				
TSS	mg/l	183		<u>40.0</u>				
Oil & Grease	mg/l	15		<u><0.1</u>				

NOTES:

(a) All analyses to be performed in accordance with approved EPA methods for wastewater analysis.

(b) If COD and TOC are greater than 50% over the average observed values, the batch will either be reanalyzed or treated again.

(c) See field logs.

TABLE 3
FORM C
PERIODIC BATCH TESTING ^(a)
DISCHARGE MONITORING REPORT

COMBUSTION, INC. POND AREA DISCHARGE
Livingston Parish, Louisiana

Reporting Month: December 1992 through January 6, 1993

Reported by: ERM - Southwest, Inc.

Report Date: 01/14/93

COMPLETE THIS FORM FOR EACH OF THE FIRST FIVE BATCHES OF WATER DISCHARGED OFFSITE FROM FILLED POND N, THEN COMPLETE THIS FORM FOR EVERY FIFTH BATCH DISCHARGED OFFSITE THEREAFTER.

	Units	Permissible Limits	Batch No.:	1	2	3	4	5	6
			Sample Date:	11/13/92	11/20/92	11/29/92	12/07/92	12/28/92	01/06/93
			Discharge Date:	11/16/92	11/23/92	12/02/92	12/09/92	12/30/92	01/06/93
<u>Inorganics</u>									
Cyanide	mg/l	1.2		<0.02	<0.02	<0.02	<0.02	<0.02	(b)
Antimony	mg/l	0.549		<0.005	<0.005	<0.125	<0.005	0.053	(b)
Arsenic	mg/l	0.100		0.002	<0.0008	0.001	0.0008	0.0027	(b)
Barium	mg/l	1.000		0.049	0.049	0.044	0.035	0.058	(b)
Copper	mg/l	0.500		<0.007	<0.006	<0.006	0.008	<0.006	(b)
Chromium	mg/l	0.150		<0.008	<0.007	<0.007	<0.004	<0.007	(b)
Lead	mg/l	0.150		<0.045	<0.049	<0.048	<0.065	<0.044	(b)
Mercury	mg/l	0.005		<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	(b)
Zinc	mg/l	0.686		0.083	0.086	0.103	0.262	0.648	(b)
<u>Semivolatile Organics</u>									
Phenol	mg/l	0.026		<0.025	<0.025	<0.025	<0.025	<0.025	(b)
2-Methylphenol	mg/l	0.100		<0.025	<0.025	<0.030	<0.025	<0.025	(b)
4-Methylphenol	mg/l	0.100		<0.025	<0.025	<0.030	<0.025	<0.025	(b)
2,4-Dimethylphenol	mg/l	0.100		<0.025	<0.025	<0.030	<0.025	<0.025	(b)
Naphthalene	mg/l	0.059		<0.0125	<0.0125	<0.015	<0.0125	<0.0125	(b)
N-Nitrosodiphenylamine	mg/l	0.100		<0.0125	<0.0125	<0.015	<0.0125	<0.025	(b)
Anthracene	mg/l	0.059		<0.0125	<0.0125	<0.015	<0.0125	<0.0125	(b)

NOTE:

(a) All analyses to be performed in accordance with approved EPA methods for wastewater analysis.

(b) Not required for analyses.

TABLE 3 (Continued)
 FORM C
 PERIODIC BATCH TESTING (a)
 DISCHARGE MONITORING REPORT

COMBUSTION, INC. POND AREA DISCHARGE
 Livingston Parish, Louisiana

Reporting Month: December 1992 through January 6, 1993

Reported by: ERM - Southwest, Inc.

Report Date: 01/14/93

COMPLETE THIS FORM FOR EACH OF THE FIRST FIVE BATCHES OF WATER DISCHARGED OFFSITE FROM FILLED POND N, THEN COMPLETE THIS FORM FOR EVERY FIFTH BATCH DISCHARGED OFFSITE THEREAFTER.

	Units	Permissible Limits	Batch No.:	1	2	3	4	5	6
			Sample Date:	<u>11/13/92</u>	<u>11/20/92</u>	<u>11/29/92</u>	<u>12/07/92</u>	<u>12/28/92</u>	<u>01/06/93</u>
			Discharge Date:	<u>11/16/92</u>	<u>11/23/92</u>	<u>12/02/92</u>	<u>12/09/92</u>	<u>12/30/92</u>	<u>01/06/93</u>
Volatile Organics									
Methylene Chloride	mg/l	0.089		<0.010	<0.010	0.013	<0.010	<0.010	(b)
Acetone	mg/l	0.100		<0.050	<0.050	<0.050	<0.050	<0.050	(b)
Methyl Ethyl Ketone	mg/l	0.100		<0.050	<0.050	<0.050	<0.050	<0.050	(b)
Trichloroethene	mg/l	0.054		<0.010	<0.010	<0.010	<0.010	<0.010	(b)
Benzene	mg/l	0.100		<0.010	<0.010	0.013	<0.010	<0.010	(b)
4-Methyl-2-pentanone	mg/l	0.100		<0.010	<0.010	<0.010	<0.010	<0.010	(b)
1,1,2,2 - Tetrachloroethane	mg/l	0.100		<0.010	<0.010	<0.010	<0.010	<0.010	(b)
Toluene	mg/l	0.080		<0.010	<0.010	<0.010	<0.010	<0.010	(b)
Ethylbenzene	mg/l	0.100		<0.010	<0.010	<0.010	<0.010	<0.010	(b)
1,1 - Dichloroethane	mg/l	0.059		<0.010	<0.010	<0.010	<0.010	<0.010	(b)
1,2 - Dichloroethane	mg/l	0.211		<0.010	<0.010	<0.010	<0.010	<0.010	(b)
2 - Hexanone	mg/l	0.100		<0.010	<0.010	<0.010	<0.010	<0.010	(b)
Total Xylenes	mg/l	0.050		<0.010	<0.010	<0.010	<0.010	<0.010	(b)
Others^(a)									
Polychlorinated Biphenyls (PCBs)	mg/l	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

NOTE:

a) All analyses to be performed in accordance with approved EPA methods for wastewater analysis.

(b) Not required for analyses.

Mr. Russell Killebrew
Woodward-Clyde Consultants
January 14, 1993
Page 8

Conclusions

The effluent quality from the Combustion, Inc. site during cleanup operations has met or been better than all established standards for the effluent quality during the month of December and through January 8, 1993. There have been no mechanical problems with the treatment system to date. A small carbon polishing drum system was added to the system to be used on an as needed basis. A larger carbon treatment system is being pursued for installation at the site to address an increasing rainfall inventory.



Sincerely,

ERM-SOUTHWEST, INC.

A handwritten signature in black ink, appearing to read "Michael E. Pisani".

Michael E. Pisani, P.E.
Principal

MEP/dsd

cc: Ms. Beth Westfall
Combustion, Inc. c/o Amoco
Mr. David C. Bach
Combustion, Inc. c/o Ethyl

Wastewater Analytical Data
Pond N Effluent Data
Attachment 1

January 14, 1993
W.O. 85-14
Combustion, Inc.

ERM-SOUTHWEST, INC.
3501 N. Causeway Blvd., Suite 200
Metairie, Louisiana 70002
(504) 831-6700

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

**COMBUSTION INC.
DENHAM SPRINGS, LOUISIANA
POND N 12/07/92**

FOR

**ALLAN J. HARRIS COMPANY
POST OFFICE BOX 9024
METAIRIE, LOUISIANA 70055**

ATTENTION: DONALD CUNNINGHAM

**ERM SOUTHWEST, INC.
3501 N. CAUSEWAY BLVD., SUITE 200
METAIRIE, LOUISIANA, 70002
ATTENTION: MIKE E. PISANI**

**DECEMBER 9, 1992
PROJECT NO.: 92-3317**

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

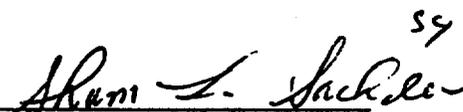
COMBUSTION, INC.
DENHAM SPRINGS, LA

December 9, 1992
Project No.: 92-3317

One set of samples from Pond N was received December 7, 1992. These samples were analyzed for parameters as specified. Analyses were performed in accordance with approved EPA Methods for waste water as indicated on the attached.

The results are listed on the attached pages. Results for the BOD5 testing will be provided under a separate report. Please do not hesitate to contact our office if you have any questions concerning these analyses.


Shoulan Yang
B.S. (Ch.E.), M.S. (Chemistry)


Sham L. Sachdev, Ph.D., CIH
President

ks

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

COMBUSTION, INC.
DENHAM SPRINGS, LA

December 14, 1992
Project No.: 92-3317

One sample from Pond N was received December 7, 1992. This report contains BOD5 results. Analysis was performed in accordance with approved EPA Method for waste water as indicated.

The result is listed on the attached. Please do not hesitate to contact our office if you have any questions concerning this result.


Sham L. Sachdev, Ph.D., CIH
President

ks

CHA OF CUSTODY RECORD

COMPANY:

ALLEN J. HARRIS

PROJECT NUMBER: _____

(circle one)

TURNAROUND TIME: Reg. / **(Rush)**

NEED BY WHAT DATE? ASAP

ATTN: _____

PHONE: _____

FAX: _____

P.O.# _____

SAMPLE LOCATION:

POND N
BATCH No. 4

SAMPLER'S INFORMATION:

Sampler's Name: <u>G. ANDERSON</u>
Number of Sample(s): _____
Date/Time Sampled: <u>12-7-92</u>
Number of Containers: _____
Type of Sample(s): <u>GRAB</u>

SAMPLE IDENTIFICATION	CONTAINER/PRES.	ANALYSES REQUESTED
SAMPLE BOTTLE I	1	CYANIDE POND N
" " J	1	PCB POND N
" " K	1	VOLATILE ORGANICS POND N
" " L	1	VOLATILE ORGANICS BACK-up only POND N

SPECIAL INSTRUCTIONS: _____

CHAIN OF POSSESSION:

RELINQUISHED BY:	RECEIVED BY:	DATE/TIME
<u>[Signature]</u>	<u>[Signature]</u>	<u>12-7-92 / 4:58</u>

ENTEK

14285 Airline Hwy.

Baton Rouge, LA 70817 • Off: (504) 752-2900

Fax: (504) 756-2706

**COMBUSTION INC.
DENHAM SPRINGS, LOUISIANA
POND N 12/28/92**

FOR

**ALLAN J. HARRIS COMPANY
POST OFFICE BOX 9024
METAIRIE, LOUISIANA 70055**

ATTENTION: DONALD CUNNINGHAM

**ERM SOUTHWEST, INC.
3501 N. CAUSEWAY BLVD., SUITE 200
METAIRIE, LOUISIANA, 70002
ATTENTION: MIKE E. PISANI**

**DECEMBER 30, 1992
PROJECT NO.: 92-3516**

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

COMBUSTION, INC.
DENHAM SPRINGS, LA

December 30 1992
Project No.: 92-3516

PARAMETER	ANALYZED/ANALYST	METHOD OF ANALYSES
COD	12/29/92/TW	EPA 410.4
TOC	12/28/92/SY	EPA 415.1
TSS	12/28/92/AF	EPA 160.1
pH	12/28/92/AHA	EPA 150.1
O&G	12/28/92/AS	EPA 413.1
Cyanide	12/29/92/AJ	EPA 335.3
Antimony	12/29/92/EH	EPA 204.2 (MSA)
Arsenic	12/29/92/EH	EPA 206.3
Barium	12/28/92/EH	EPA 200.7
Copper	12/28/92/EH	EPA 200.7 (MSA)
Chromium	12/28/92/EH	EPA 200.7
Lead	12/28/92/EH	EPA 200.7
Mercury	12/29/92/AE	EPA 245.1
Zinc	12/30/92/EH	EPA 200.7
Semivolatile Organics	12/29/92/JX	EPA 625, 1625
Volatile Organics	12/28/92/ER	EPA 624, 1624
Total PCB's	12/29/92/JX	EPA 608

(MSA) – Method of Standard Addition

CHAIN OF CUSTODY RECORD

ANALYST:

A. J. Harris

PROJECT NUMBER:

92-3508

(circle one)

TURNAROUND TIME: Reg. / Rush

NEED BY WHAT DATE? 12-28-92 AM

ATTN: DONALD Cunningham

PHONE:

FAX:

P.O.#

SAMPLER'S INFORMATION:

Sampler's Name:	<u>GREG ANDERSON</u>
Number of Sample(s):	<u>4</u>
Date/Time Sampled:	<u>12-24-92 / 12:30</u>
Number of Containers:	<u>4</u>
Type of Sample(s):	

SAMPLE LOCATION:

SBR EFF, POND N, A.C. Filter INFLUENT,
A.C. Filter EFFLUENT

SAMPLE IDENTIFICATION	CONTAINER/PRES.	ANALYSES REQUESTED:
<u>SAMPLE BOTTLE A</u>		<u>SBR EFFLUENT</u>
<u>" " B</u>		<u>A.C. Filter INFLUENT</u>
<u>" " C</u>		<u>A.C. Filter EFFLUENT</u>
<u>" " D</u>		<u>POND N</u>

SPECIAL INSTRUCTIONS:

CHAIN OF POSSESSION:

RELINQUISHED BY:	RECEIVED BY:	DATE/TIME
<u>[Signature]</u>	<u>[Signature]</u>	<u>12-24-92 / 12:45 PM</u>
<u>[Signature]</u>	<u>[Signature]</u>	<u>12/24/92 1323</u>

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

**COMBUSTION INC.
DENHAM SPRINGS, LOUISIANA
POND N 12/28/92
BOD**

FOR

**ALLAN J. HARRIS COMPANY
POST OFFICE BOX 9024
METAIRIE, LOUISIANA 70055**

ATTENTION: DONALD CUNNINGHAM

**ERM SOUTHWEST, INC.
3501 N. CAUSEWAY BLVD., SUITE 200
METAIRIE, LOUISIANA, 70002
ATTENTION: MIKE E. PISANI**

**JANUARY 6, 1993
PROJECT NO.: 92-3516**

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

COMBUSTION, INC.
DENHAM SPRINGS, LA

January 6, 1993
Project No.: 92-3516

One sample from Pond N was received December 28, 1992. This report contains BOD5 results. Analysis was performed in accordance with approved EPA Method for waste water as indicated.

The result is listed on the attached. Please do not hesitate to contact our office if you have any questions concerning this result.


Sham L. Sachdev, Ph.D., CIH
President

ks

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

COMBUSTION, INC.
DENHAM SPRINGS, LA

January 6, 1993
Project No.: 92-3516

PARAMETER	DAILY MAXIMUM	POND N 12/28/92	QA /QC (obs /act)
BOD5 (mg/L)	120	48.4 (50.0/46.9)	168 /200

Analyzed: 12/28/92,01/02/93
Analyst: AS
Method: EPA 405.1

CHAIN OF CUSTODY RECORD

COMPANY:

ALLEN J. HARRIS

PROJECT NUMBER: 92-3516

(circle one)

TURNAROUND TIME: Reg. / (Rush)

NEED BY WHAT DATE? ASAP 12/30

ATTN:

PHONE:

FAX:

P.O.#

SAMPLE LOCATION:

POND N

SAMPLER'S INFORMATION:

Sampler's Name: <u>G. ANDERSON</u>
Number of Sample(s):
Date/Time Sampled: <u>12-28-92 / 10:15</u>
Number of Containers: <u>8</u>
Type of Sample(s): <u>GRAB</u>

RUSH

SAMPLE IDENTIFICATION		CONTAINER/PRES	ANALYSES REQUESTED	
SAMPLE BOTTLE	A	1	BOD, TSS	POND N
"	B	1	BOD	POND N
"	C	1	COD, TOC	POND N
"	D	1	COD, TOC	POND N
"	E	1	OIL & GREASE	POND N
"	F	1	TOTAL METALS	POND N
"	G	1	SEMI VOLATILES	POND N
"	H	1	SEMI VOLATILES	POND N BACK up only

SPECIAL INSTRUCTIONS: RUN TOC SAMPLES BEFORE OTHER SAMPLES. CALL WARD CUNNINGHAM WITH TOC RESULTS ASAP

CHAIN OF POSSESSION:

RELINQUISHED BY:	RECEIVED BY:	DATE/TIME
<u>[Signature]</u>	<u>[Signature]</u>	<u>12-28-92 / 12:29</u>

CHAIN OF CUSTODY RECORD

COMPANY:

ALLEN J. HARRIS

PROJECT NUMBER:

92-3516

(circle one)

TURNAROUND TIME:

Reg. / **Rush**

NEED BY WHAT DATE?

ASAP

ATTN:

PHONE:

FAX:

P.O.#

SAMPLE LOCATION:

POND N

SAMPLER'S INFORMATION:

Sampler's Name: <u>G. ANDERSON</u>
Number of Sample(s):
Date/Time Sampled: <u>12-28-92 / 10:15</u>
Number of Containers: <u>4</u>
Type of Sample(s): <u>GRAB</u>

RUSH

SAMPLE IDENTIFICATION	CONTAINER/PRES.	ANALYSES REQUESTED
SAMPLE BOTTLE <u>I</u>	<u>1</u>	<u>CYANIDE</u> <u>POND N</u>
" " <u>J</u>	<u>1</u>	<u>PCB</u> <u>POND N</u>
" " <u>K</u>	<u>1</u>	<u>VOLATILE ORGANICS</u> <u>POND N</u>
" " <u>L</u>	<u>1</u>	<u>VOLATILE ORGANICS BACK-UP ONLY</u> <u>POND N</u>

SPECIAL INSTRUCTIONS:

CHAIN OF POSSESSION:

RELINQUISHED BY:	RECEIVED BY:	DATE/TIME
<u>G. Anderson</u>	<u>Jacitorz</u>	<u>12-28-92 / 12:29</u>

ALLAN J. HARRIS COMPANY, INC.

P.O. BOX 9024 - METAIRIE, LA 70055

PHONE: (504) 834-4994

FAX NO. (504) 834-5354

FACSIMILE TRANSMITTAL

NO. OF PAGES INCLUDING THIS PAGE: 2

TO: MIKE PISANI

DATE: 1/6/93

ERM SOUTHWEST

FROM: DONALD V. CUNNINGHAM

SUBJECT: COMBUSTION, INC.
BATCH #6, POND N
DISCHARGE ANALYSIS

MESSAGE: DEAR MIKE: PLEASE FIND ATTACHED DISCHARGE ANALYSIS FROM ENTEK ON POND N SAMPLED TODAY, JANUARY 6, 1993, AT 10AM. ALL ANALYTICAL RESULTS ARE WITHIN DISCHARGE PARAMETERS. B.O.D. AS YOU KNOW WILL BE FORTHCOMING BY TUESDAY OF NEXT WEEK. PLEASE NOTIFY PERMISSION TO DISCHARGE THIS BATCH.

**Wastewater Analytical Data
Miscellaneous Other Data
*Attachment 2***

***January 14, 1993
W.O. 85-14
Combustion, Inc.***

**ERM-SOUTHWEST, INC.
3501 N. Causeway Blvd., Suite 200
Metairie, Louisiana 70002
(504) 831-6700**

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

**COMBUSTION INC.
DENHAM SPRINGS, LOUISIANA
SAMPLES DATED 12/03/92**

FOR

**ALLAN J. HARRIS COMPANY
POST OFFICE BOX 9024
METAIRIE, LOUISIANA 70055**

ATTENTION: DONALD CUNNINGHAM

**ERM SOUTHWEST, INC.
3501 N. CAUSEWAY BLVD., SUITE 200
METAIRIE, LOUISIANA, 70002
ATTENTION: MIKE E. PISANI**

**DECEMBER 18, 1992
PROJECT NO.: 92-3270**

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

COMBUSTION, INC.
DENHAM SPRINGS, LA

December 18, 1992
Project No.: 92-3270

PARAMETER	POND M 12/03/92	ANALYZED/ ANALYST	QA /QC (obs /act)
pH (Std. Units)	6.3	12/04/92/AS	6.0 /6.0
BOD5 (mg/L) Sample A	<5	12/03-08/92/AS	181 /200
BOD5 (mg/L) Sample B	<5	12/03-08/92/AS	181 /200
TSS (mg/L)	9	12/04/92/AF	13.0 /12.0
COD (mg/L) Sample C	120	12/04/92/TW	108 /100
COD (mg/L) Sample D	106	12/04/92/TW	108 /500
TOC (mg/L) Sample C	30	12/05/92/NS	47 /50
TOC (mg/L) Sample D	28	12/05/92/NS	47 /50
Oil & Grease (mg/L)	1.4	12/04/92/AS	8.9 /9.5

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Fax: (504) 756-2706

COMBUSTION, INC.
DENHAM SPRINGS, LA

December 18, 1992
Project No.: 92-3270

PARAMETER	PLANT EFFL 12/03/92	ANALYZED/ ANALYST	QA /QC (obs /act)
TOC (mg/L) Sample F	19	12/05/92/NS	47 /50
TOC (mg/L) Sample G	26	12/05/92/NS	47 /50
TOC (mg/L) Sample H	28	12/05/92/NS	47 /50

PARAMETER	PROCESS AREA TANK TRUCK 12/01/92	ANALYZED/ ANALYST	QA /QC (obs /act)
COD (mg/L)	1,355	12/04/92/TW	259 /250
TOC (mg/L)	253	12/05/92/NS	47 /50

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COMBUSTION, INC.
DENHAM SPRINGS, LA

December 18, 1992
Project No.: 92-3270

PARAMETER

METHODS FOR ANALYSES

pH	EPA 150.1
BOD	EPA 405.1
COD	EPA 410.4
TOC	EPA 415.1
TSS	EPA 160.2
O&G	EPA 413.1

CHAIN OF CUSTODY RECORD

COMPANY:

ALLEN J. HARRIS

PROJECT NUMBER: 92-3270

(circle one)

TURNAROUND TIME: Reg. / (Rush)

NEED BY WHAT DATE? ASAP

ATTN:

PHONE:

FAX:

P.O.#

SAMPLER'S INFORMATION:

Sampler's Name: <u>G. ANDERSON</u>
Number of Sample(s):
Date/Time Sampled:
Number of Containers:
Type of Sample(s): <u>GRAB</u>

SAMPLE LOCATION:

POND M, TREATMENT PLANT, PROCESS AREA
TANK TRUCK

SAMPLE IDENTIFICATION		CONTAINER/PRES.	ANALYSES REQUESTED
SAMPLE BOTTLE	A	1	BOD, pH 12-3-92 POND M
"	B	1	BOD, TSS 12-3-92 POND M
"	C	1	COD, TOC 12-3-92 POND M
"	D	1	COD, TOC 12-3-92 POND M
"	E	1	OIL & GREASE 12-3-92 POND M
"	F	1	TOC 12-3-92 PLANT EFFLUENT
"	G	1	TOC 12-3-92 PLANT EFFLUENT
"	H	1	TOC 12-3-92 PLANT INFLUENT
"	I	1	COD, TOC 12-3-92 PROCESS AREA TANK TRUCK

SPECIAL INSTRUCTIONS:

CHAIN OF POSSESSION:

RELINQUISHED BY:	RECEIVED BY:	DATE/TIME
<i>G. Anderson</i>	<i>Carl Harris</i>	12-3-92/0820
<i>Carl Harris</i>	<i>Juan Lopez</i>	12/3/92/0948

ENTEK

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Fax: (504) 756-2706

**COMBUSTION INC.
DENHAM SPRINGS, LOUISIANA
SAMPLES DATED 12/07/92**

FOR

**ALLAN J. HARRIS COMPANY
POST OFFICE BOX 9024
METAIRIE, LOUISIANA 70055**

ATTENTION: DONALD CUNNINGHAM

**ERM SOUTHWEST, INC.
3501 N. CAUSEWAY BLVD., SUITE 200
METAIRIE, LOUISIANA, 70002
ATTENTION: MIKE E. PISANI**

**DECEMBER 14, 1992
PROJECT NO.: 92-3316**

ENTEK

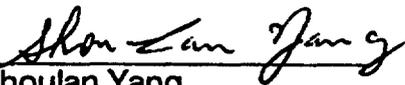
14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

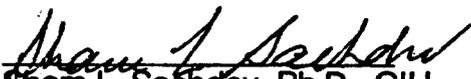
COMBUSTION, INC.
DENHAM SPRINGS, LA

December 14, 1992
Project No.: 92-3316

Three samples, Pond M, Plant Effluent and Plant Influent were received December 7, 1992. These samples were analyzed for specified parameters as requested. Analysis were performed in accordance with EPA methods for Waste Water as listed on the attached.

The results are listed on the attached. Please do not hesitate to contact our office if you have any questions concerning these results.


Shoulan Yang
B.S. (Ch.E.), M.S. (Chemistry)


Sham L. Sachdev, Ph.D., CIH
President

ks

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14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

COMBUSTION, INC.
DENHAM SPRINGS, LA

December 14, 1992
Project No.: 92-3316

PARAMETER	POND M 12/07/92	ANALYZED/ ANALYST	QA /QC (obs /act)
pH (Std. Units)	5.9	12/07/92/AS	6.0 /6.0
BOD5 (mg/L) Sample A	10.6	12/07-12/92/AS	168 /200
BOD5 (mg/L) Sample B	10.2	12/07-12/92/AS	168 /200
TSS (mg/L)	31	12/08/92/AF	32.0 /31.5
COD (mg/L) Sample C	414	12/08/92/TW	510 /500
COD (mg/L) Sample D	395	12/08/92/TW	510 /500
TOC (mg/L) Sample C	97	12/08/92/NS	100.8 /100.0
TOC (mg/L) Sample D	95	12/08/92/NS	100.8 /100.0
Oil & Grease (mg/L)	3.28	12/08/92/AF	8.9 /9.5
Benzene (mg/L)	0.032	12/08/92/SY	0.084 /0.088
Toluene (mg/L)	0.060	12/08/92/SY	0.090 /0.087
Ethyl Benzene (mg/L)	0.051	12/08/92/SY	0.080 /0.087
Xylene (mg/L)	0.017	12/08/92/SY	0.080 /0.087

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COMBUSTION, INC.
DENHAM SPRINGS, LA

December 14, 1992
Project No.: 92-3316

PARAMETER	PLANT EFFL 12/07/92	ANALYZED/ ANALYST	QA /QC (obs /act)
TOC (mg/L) Sample J	27	12/08/92/NS	100.8 /100.0
TOC (mg/L) Sample K	28	12/08/92/NS	100.8 /100.0
TOC (mg/L) Sample M	65	12/08/92/NS	100.8 /100.0
TOC (mg/L) Sample N	64.8	12/08/92/NS	100.8 /100.0

PARAMETER	PLANT INFL. 12/07/92	ANALYZED/ ANALYST	QA /QC (obs /act)
TOC (mg/L) Sample L	71.5	12/08/92/NS	100.8 /100.0
TOC (mg/L) Sample O	68.3	12/08/92/NS	100.8 /100.0

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Fax: (504) 756-2706

COMBUSTION, INC.
DENHAM SPRINGS, LA

December 14, 1992
Project No.: 92-3316

PARAMETER

METHODS FOR ANALYSES

pH	EPA 150.1
BOD	EPA 405.1
COD	EPA 410.4
TOC	EPA 415.1
TSS	EPA 160.2
O&G	EPA 413.1
BTEX	SW846, 8020

CHAIN OF CUSTODY RECORD

COMPANY:

ALLEN J. HARRIS

PROJECT NUMBER: 92-3316

(circle one)

TURNAROUND TIME: Reg. / Rush

NEED BY WHAT DATE? ASAP

ATTN:

PHONE:

FAX:

P.O.#

SAMPLER'S INFORMATION:

Sampler's Name: <u>G. ANDERSON</u>
Number of Sample(s):
Date/Time Sampled: <u>12-7-92</u>
Number of Containers:
Type of Sample(s): <u>GRAB</u>

SAMPLE LOCATION:

POND M AND TREATMENT PLANT

RUSH

SAMPLE IDENTIFICATION	CONTAINER/PRES.	ANALYSES REQUESTED:
SAMPLE BOTTLE A	1	BOD, pH POND M
" " B	1	BOD, TSS POND M
" " C	1	COD, BOD TOC POND M
" " D	1	COD, BOD TOC POND M
" " E	1	OIL & GREASE POND M
" " F	1	BTEX POND M
" " G	1	BTEX BACK-up only POND M
" " H	1	MLVSS TREATMENT PLANT
" " I	1	MLSS TREATMENT PLANT

SPECIAL INSTRUCTIONS:

CHAIN OF POSSESSION:

RELINQUISHED BY:	RECEIVED BY:	DATE/TIME
<u>G. Anderson</u>	<u>Maryann Stevens</u>	<u>12-7-92 / 4:58</u>

CHAIN OF CUSTODY RECORD

COMPANY:

ALLEN J. HARRIS

PROJECT NUMBER: _____

(circle one)

TURNAROUND TIME: Reg. / Rush

NEED BY WHAT DATE? ASAP

ATTN: _____

PHONE: _____

FAX: _____

P.O.# _____

SAMPLER'S INFORMATION:

Sampler's Name: G. ANDERSON

Number of Sample(s): _____

Date/Time Sampled: ~~12-5-92~~ / 12-5-92

Number of Containers: _____

Type of Sample(s): GRAB

SAMPLE LOCATION:

TREATMENT PLANT J-O

RUSH

SAMPLE IDENTIFICATION	CONTAINER/PRES.	ANALYSES REQUESTED
SAMPLE BOTTLE J	1	TOC 12-5-92 PLANT EFFLUENT
" " K	1	TOC 12-5-92 PLANT EFFLUENT
" " L	1	TOC 12-5-92 PLANT INFLUENT
" " M	1	TOC 12-6-92 PLANT EFFLUENT
" " N	1	TOC 12-6-92 PLANT EFFLUENT
" " O	1	TOC 12-6-92 PLANT INFLUENT

SPECIAL INSTRUCTIONS: _____

CHAIN OF POSSESSION:

RELINQUISHED BY:	RECEIVED BY:	DATE/TIME
<u>G. Anderson</u>	<u>Maryann Steven</u>	<u>12-7-92 / 4:58</u>

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Baton Rouge, LA 70817 • Of: (504) 752-2900

Fax: (504) 756-2706

**COMBUSTION INC.
DENHAM SPRINGS, LOUISIANA
SAMPLES DATED 12/07/92
(MLVSS, MLTSS)**

FOR

**ALLAN J. HARRIS COMPANY
POST OFFICE BOX 9024
METAIRIE, LOUISIANA 70055**

ATTENTION: DONALD CUNNINGHAM

**ERM SOUTHWEST, INC.
3501 N. CAUSEWAY BLVD., SUITE 200
METAIRIE, LOUISIANA, 70002
ATTENTION: MIKE E. PISANI**

**DECEMBER 14, 1992
PROJECT NO.: 92-3322**

CHAIN OF CUSTODY RECORD

COMPANY:

A. J. HARRIS

PROJECT NUMBER:

92-3322

(circle one)

TURNAROUND TIME:

Reg / Rush

NEED BY WHAT DATE?

ATTN:

PHONE:

FAX:

P.O.#

SAMPLE LOCATION:

TREATMENT PLANT

SAMPLER'S INFORMATION:

Sampler's Name: <u>G. ANDERSON</u>
Number of Sample(s): <u>2</u>
Date/Time Sampled: <u>12-7-92 / 11:30 PM</u>
Number of Containers: <u>2</u>
Type of Sample(s): <u>GRAB</u>

SAMPLE IDENTIFICATION	CONTAINER/PRES.	ANALYSES REQUESTED:
<u>SAMPLE BOTTLE A</u>	<u>1</u>	<u>MLVSS</u>
<u>" " B</u>	<u>1</u>	<u>MLSS</u>

SPECIAL INSTRUCTIONS:

CHAIN OF POSSESSION:

RELINQUISHED BY:	RECEIVED BY:	DATE/TIME
<u>G. Anderson</u>	<u>[Signature]</u>	<u>12-8-92 / 1245</u>

ENTEK

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Fax: (504) 756-2706

**COMBUSTION INC.
DENHAM SPRINGS, LOUISIANA
POND M 12/10/92**

FOR

**ALLAN J. HARRIS COMPANY
POST OFFICE BOX 9024
METAIRIE, LOUISIANA 70055**

ATTENTION: DONALD CUNNINGHAM

**ERM SOUTHWEST, INC.
3501 N. CAUSEWAY BLVD., SUITE 200
METAIRIE, LOUISIANA, 70002
ATTENTION: MIKE E. PISANI**

**DECEMBER 18, 1992
PROJECT NO.: 92-3358**

ENTEK

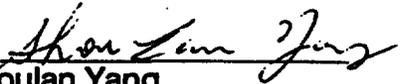
14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

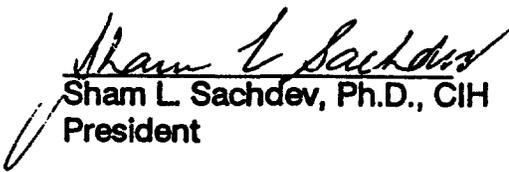
COMBUSTION, INC.
DENHAM SPRINGS, LA

December 18, 1992
Project No.: 92-3358

One set of samples from Pond M was received December 10, 1992. These samples were analyzed for specified parameters as requested. Analyses were performed in accordance with EPA methods for Waste Water as listed on the attached.

The results are listed on the attached. Please do not hesitate to contact our office if you have any questions concerning these results.


Shoulan Yang
B.S. (Ch.E.), M.S. (Chemistry)


Sham L. Sachdev, Ph.D., CIH
President

ks

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

COMBUSTION, INC.
DENHAM SPRINGS, LA

December 18, 1992
Project No.: 92-3358

PARAMETER	POND M 12/10/92	ANALYZED/ ANALYST	QA /QC (obs /act)
pH (Std. Units)	6.1	12/10/92/AS	6.0 /6.0
BOD5 (mg/L) Sample A	88	12/10-15/92/AS	174 /200
BOD5 (mg/L) Sample B	91	12/10-15/92/AS	174 /200
TSS (mg/L)	18.75	12/10/92/AS	32.0 /31.5
COD (mg/L) Sample C	398	12/14/92/TW	481 /500
COD (mg/L) Sample D	396	12/14/92/TW	481 /500
TOC (mg/L) Sample C	88.6	12/10/92/SY	90.3 /100.0
Oil & Grease (mg/L)	1.5	12/10/92/AS	2.4 /2.6

PARAMETER	METHODS FOR ANALYSES
pH	EPA 150.1
BOD	EPA 405.1
COD	EPA 410.4
TOC	EPA 415.1
TSS	EPA 160.2
O&G	EPA 413.1

CHAIN OF CUSTODY RECORD

COMPANY: ALLEN J. HARRIS

PROJECT NUMBER: 92-3358

(circle one)

TURNAROUND TIME: Reg. / **Rush**

NEED BY WHAT DATE? ASAP

ATTN: _____

PHONE: _____

FAX: _____

P.O.# _____

RUSH

SAMPLE LOCATION: _____

POND M

SAMPLER'S INFORMATION:

Sampler's Name: <u>G. ANDERSON</u>
Number of Sample(s): <u>10</u>
Date/Time Sampled: <u>12-10-92/10:00AM</u>
Number of Containers: <u>5</u>
Type of Sample(s): <u>GRAB</u>

SAMPLE IDENTIFICATION	CONTAINER/PRES.	ANALYSES REQUESTED	
SAMPLE BOTTLE	A	1	BOD, pH
" "	B	1	BOD, TSS
" "	C	1	COD, TOC
" "	D	1	COD, TOC
" "	E	1	OIL & GREASE

SPECIAL INSTRUCTIONS: _____

CHAIN OF POSSESSION:

RELINQUISHED BY:	RECEIVED BY:	DATE/TIME
<i>G. Anderson</i>	<i>[Signature]</i>	12-10-92/10:12
<i>[Signature]</i>	<i>Kathy Imaginary</i>	12/10/92 11:55

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Fax: (504) 756-2706

**COMBUSTION INC.
DENHAM SPRINGS, LOUISIANA
SAMPLES RECEIVED 12/14/92**

FOR

**ALLAN J. HARRIS COMPANY
POST OFFICE BOX 9024
METAIRIE, LOUISIANA 70055**

ATTENTION: DONALD CUNNINGHAM

**ERM SOUTHWEST, INC.
3501 N. CAUSEWAY BLVD., SUITE 200
METAIRIE, LOUISIANA, 70002
ATTENTION: MIKE E. PISANI**

**DECEMBER 21, 1992
PROJECT NO.: 92-3402**

ENTEK

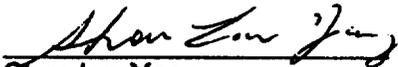
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Fax: (504) 756-2706

COMBUSTION, INC.
DENHAM SPRINGS, LA

December 21, 1992
Project No.: 92-3402

Four samples, Pond M, Treatment Plant, Plant Effluent and Plant Influent were received December 14, 1992. These samples were analyzed for specified parameters as requested. Analyses were performed in accordance with EPA methods for Waste Water as listed on the attached.

The results are listed on the attached. Please do not hesitate to contact our office if you have any questions concerning these results.


Shoulan Yang
B.S. (Ch.E.), M.S. (Chemistry)


Sham L. Sachdev, Ph.D., CIH
President

ks

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

COMBUSTION, INC.
DENHAM SPRINGS, LA

December 21, 1992
Project No.: 92-3402

PARAMETER	POND M 12/14/92	ANALYZED/ ANALYST	QA /QC (obs /act)
pH (Std. Units)	6.0	12/14/92/AS	6.0 /6.0
BOD5 (mg/L) Sample A	222	12/14-15/92/AS	168 /200
BOD5 (mg/L) Sample B	234	12/14-15/92/AS	168 /200
TSS (mg/L)	33.3	12/15/92/AF	9.0 /9.0
COD (mg/L) Sample C	517	12/15/92/TW	507 /500
COD (mg/L) Sample D	518	12/15/92/TW	507 /500
TOC (mg/L) Sample C	137	12/15/92/NS	109 /100
TOC (mg/L) Sample D	138	12/15/92/NS	109 /100
Oil & Grease (mg/L)	1.1	12/15/92/AS	2.4 /2.6
Benzene (mg/L)	<0.01	12/14/92/ER	0.047 /0.050
Toluene (mg/L)	0.01	12/14/92/ER	0.047 /0.050
Ethyl Benzene (mg/L)	<0.01	12/14/92/ER	0.048 /0.050
Xylene (mg/L)	<0.01	12/14/92/ER	0.044 /0.050

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Fax: (504) 756-2706

COMBUSTION, INC.
DENHAM SPRINGS, LA

December 21, 1992
Project No.: 92-3402

PARAMETER	METHODS FOR ANALYSES
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pH	EPA 150.1
BOD	EPA 405.1
COD	EPA 410.4
TOC	EPA 415.1
TSS	EPA 160.2
O&G	EPA 413.1
BTEX	SW846, 8020
VSS	EPA 160.4

CHAIN OF CUSTODY RECORD

COMPANY:

Ocean Harris Co.

PROJECT NUMBER: _____

(circle one)

TURNAROUND TIME: Reg. / Rush

NEED BY WHAT DATE? _____

ATTN: _____

FAX: _____

P.O.# _____

SAMPLE LOCATION: _____

SAMPLER'S INFORMATION:

Sampler's Name:
Number of Sample(s):
Date/Time Sampled:
Number of Containers:
Type of Sample(s):

SAMPLE IDENTIFICATION	CONTAINER/PRES.	ANALYSES REQUESTED:
<u>Treatment Plant I</u>		<u>MLSS</u>
<u>Effluent J</u>	<u>1st Batch of NEW seed</u>	<u>TOC - 12-10-92</u>
<u>Effluent K</u>		<u>TOC - 12-11-92</u>
<u>Effluent L</u>		<u>TOC - 12-13-92</u>
<u>Influent M</u>		<u>TOC - 12-13-92</u>
<u>Effluent N</u>		<u>TOC - 12-12-92</u>
<u>Effluent O</u>		<u>TOC - 12-14-92</u>

SPECIAL INSTRUCTIONS: _____

CHAIN OF POSSESSION:

RELINQUISHED BY:	RECEIVED BY:	DATE/TIME
	<u>Jaci Song</u>	<u>12-14-92 3:40</u>

ENTEK

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Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

December 18, 1992
Project No.: 92-3419

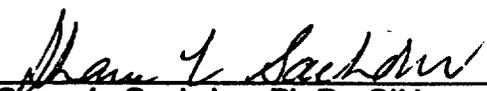
COMBUSTION, INC.
DENHAM SPRINGS, LOUISIANA

Two samples were received December 15, 1992. These samples were analyzed for Total Organic Carbon by EPA method 415.1.

The results are listed below. Please do not hesitate to contact our office if you have any questions concerning these analyses.

SAMPLE IDENTIFICATION	TOC (mg/L)
Samples Dated: 12/15/92	
Plant Effl.	142
Pond N	91
QA/QC (obs/act)	54.5/50.0
Analyzed: 12/15/92	
Analyst: NS/ER	


Shoulan Yang
B.S. (Ch.E.), M.S. (Chemistry)


Sham L. Sachdev, Ph.D., CIH
President

ks

CHAIN OF CUSTODY RECORD

COMPANY:

A. J. HARRIS^L

PROJECT NUMBER:

91-3419

(circle one)

TURNAROUND TIME:

Reg / Rush

NEED BY WHAT DATE?

12-15-92

ATTN:

PHONE:

FAX:

P.O.#

SAMPLE LOCATION:

SAMPLER'S INFORMATION:

Sampler's Name:	G. ANDERSON
Number of Sample(s):	2
Date/Time Sampled:	12-15-92
Number of Containers:	2
Type of Sample(s):	Water, GRAB T _{oc}

SAMPLE IDENTIFICATION	CONTAINER/PRES.	ANALYSES REQUESTED:
SAMPLE A		TOC PLANT EFFLUENT
" B		TOC POND N
RUSH		

SPECIAL INSTRUCTIONS: CALL DONALD CUNNINGHAM WITH RESULTS ASAP AT ~~504~~-885-5934

CHAIN OF POSSESSION:

RELINQUISHED BY:	RECEIVED BY:	DATE/TIME
<i>Ging Anderson</i>	<i>Erin Rouse</i>	12-15-92/1:45

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

**COMBUSTION INC.
DENHAM SPRINGS, LOUISIANA
TOC ANALYSES**

FOR

**ALLAN J. HARRIS COMPANY
POST OFFICE BOX 9024
METAIRIE, LOUISIANA 70055**

ATTENTION: DONALD CUNNINGHAM

**ERM SOUTHWEST, INC.
3501 N. CAUSEWAY BLVD., SUITE 200
METAIRIE, LOUISIANA, 70002
ATTENTION: MIKE E. PISANI**

**DECEMBER 18, 1992
PROJECT NO.: 92-3433**

CHAIN OF CUSTODY RECORD

COMPANY:

A.J. HARRIS

PROJECT NUMBER:

92-3438

(circle one)

TURNAROUND TIME:

Reg. **Rush**

NEED BY WHAT DATE?

ASAP

ATTN:

PHONE:

FAX:

P.O.#

SAMPLER'S INFORMATION:

Sampler's Name: G. ANDERSON

Number of Sample(s):

Date/Time Sampled: 12-16-92

Number of Containers:

Type of Sample(s): TOC WATER GRAB

SAMPLE LOCATION:

PONDS M, N & SBR PLANT

SAMPLE IDENTIFICATION	CONTAINER/PRES.	ANALYSES REQUESTED:
SAMPLE BOTTLE A		TOC SBR AM DISCHARGE
" " B		TOC POND N
" " C		TOC POND M
" " D		TOC TREATMENT PLANT EFFLUENT

SPECIAL INSTRUCTIONS:

CALL DONALD CUNNINGHAM SOON

AS YOU HAVE THE RESULTS 885-5934

CHAIN OF POSSESSION:

RELINQUISHED BY:	RECEIVED BY:	DATE/TIME
<u>G. Anderson</u>	<u>N. Selas</u>	<u>12-16-92 / 9:30</u>

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

**COMBUSTION INC.
DENHAM SPRINGS, LOUISIANA
TOC ANALYSES 12/17/92**

FOR

**ALLAN J. HARRIS COMPANY
POST OFFICE BOX 9024
METAIRIE, LOUISIANA 70055**

ATTENTION: DONALD CUNNINGHAM

**ERM SOUTHWEST, INC.
3501 N. CAUSEWAY BLVD., SUITE 200
METAIRIE, LOUISIANA, 70002
ATTENTION: MIKE E. PISANI**

**DECEMBER 21, 1992
PROJECT NO.: 92-3435**

ENTEK

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Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

December 21, 1992
Project No.: 92-3435

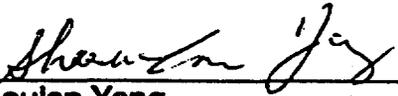
COMBUSTION, INC.
DENHAM SPRINGS, LOUISIANA

Five samples were received December 17, 1992. These samples were analyzed for Total Organic Carbon by EPA method 415.1.

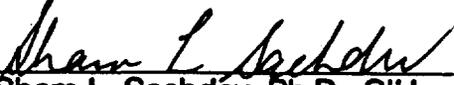
The results are listed below. Please do not hesitate to contact our office if you have any questions concerning these analyses.

<u>SAMPLE IDENTIFICATION</u>	<u>TOC (mg/L)</u>
Samples Dated: 12/17/92	
Pond M	144.0
Pond N	110.5
Pond A	232.0
Pond Ditch #1	250.5
Pond Ditch #2	255.0
QA/QC (obs/act)	106.9/100.0

Analyzed: 12/17/92
Analyst: SY



Shoulan Yang
B.S. (Ch.E.), M.S. (Chemistry)



Sham L. Sachdev, Ph.D., CIH
President

ks

CHAIN OF CUSTODY RECORD

COMPANY: ALLEN J. HARRIS CO.

PROJECT NUMBER: 92-3435

(circle one)

TURNAROUND TIME: Reg. **Rush** !!

NEED BY WHAT DATE? 12-17-92

ATTN: MIKE PISANI
 PHONE: (504) 831-6700
 FAX: (504) 831-6742
 P.O.# _____

SAMPLER'S INFORMATION:

Sampler's Name: <u>CARTER HARRIS</u>
Number of Sample(s): <u>5</u>
Date/Time Sampled: <u>12-17-92</u>
Number of Containers: <u>5</u>
Type of Sample(s): <u>GRAB</u>

SAMPLE LOCATION: COMBUSTION INC.

RUSH

SAMPLE IDENTIFICATION	CONTAINER/PRES.	ANALYSES REQUESTED
<u>POND - M</u>	<u>1</u>	<u>TOC</u>
<u>POND - N</u>	<u>1</u>	<u>TOC</u>
<u>POND - A</u>	<u>1</u>	<u>TOC</u>
<u>POND DITCH # 1</u>	<u>1</u>	<u>TOC</u>
<u>POND DITCH # 2</u>	<u>1</u>	<u>TOC</u>

SPECIAL INSTRUCTIONS: URGENT - RUSH

CHAIN OF POSSESSION:

RELINQUISHED BY:	RECEIVED BY:	DATE/TIME
<u>Carter Harris</u>	<u>Jain Yong</u>	<u>12/17/92 10:50</u>

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

**COMBUSTION INC.
DENHAM SPRINGS, LOUISIANA
SAMPLES DATED 12/17/92**

FOR

**ALLAN J. HARRIS COMPANY
POST OFFICE BOX 9024
METAIRIE, LOUISIANA 70055**

ATTENTION: DONALD CUNNINGHAM

**ERM SOUTHWEST, INC.
3501 N. CAUSEWAY BLVD., SUITE 200
METAIRIE, LOUISIANA, 70002
ATTENTION: MIKE E. PISANI**

**DECEMBER 28, 1992
PROJECT NO.: 92-3451**

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

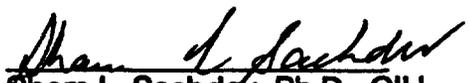
COMBUSTION, INC.
DENHAM SPRINGS, LA

December 28, 1992
Project No.: 92-3451

Three samples, Pond M, Plant Effluent and Pond N were received December 17, 1992. These samples were analyzed for specified parameters as requested. Analyses were performed in accordance with EPA methods for Waste Water as listed on the attached.

The results are listed on the attached. Please do not hesitate to contact our office if you have any questions concerning these results.


Ghoulan Yang
B.S. (Ch.E.), M.S. (Chemistry)


Sham L. Sachdev, Ph.D., CIH
President

ks

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

COMBUSTION, INC.
DENHAM SPRINGS, LA

December 28, 1992
Project No.: 92-3451

PARAMETER	POND M 12/17/92	ANALYZED/ ANALYST	QA /QC (obs /act)
pH (Std. Units)	6.5	12/17/92/AS	6.0 /6.0
BOD5 (mg/L) Sample A, B	309 (306,312)	12/17-22/92/AS	168 /200
TSS (mg/L)	72	12/17/92/AF	59.0 /58.5
COD (mg/L) Sample C	589	12/18/92/TW	258 /250
TOC (mg/L) Sample C	135.3	12/17/92/SY	97.2 /100
Oil & Grease (mg/L)	0.7	12/17/92/AS	5.0 /5.2

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COMBUSTION, INC.
DENHAM SPRINGS, LA

December 28, 1992
Project No.: 92-3451

PARAMETER	PLANT EFFL	ANALYZED/ ANALYST	QA /QC (obs /act)
TOC (mg/L) 12/17/92	106.0	12/17/92/SY	97.2 /100

PARAMETER	POND A 12/17/92	ANALYZED/ ANALYST	QA /QC (obs /act)
TOC (mg/L) with 1000 ppm PAC	200.0	12/17/92/SY	220 /200
TOC (mg/L) with 4000 ppm PAC	187.2	12/17/92/SY	220 /200
TOC (mg/L) DI Treated with Carbon	<2.0	12/17/92/SY	220 /200

PARAMETER	POND N 12/17/92	ANALYZED/ ANALYST	QA /QC (obs /act)
TOC (mg/L) with 500 ppm PAC	72.3	12/17/92/SY	97.2 /100
TOC (mg/L) with 1000 ppm PAC	55.4	12/17/92/SY	97.2 /100
TOC (mg/L) with 2000 ppm PAC	52.6	12/17/92/SY	97.2 /100
TOC (mg/L) with 4000 ppm PAC	44.2	12/17/92/SY	97.2 /100
TOC (mg/L) with 500 ppm GAC	90.2	12/17/92/SY	97.2 /100
TOC (mg/L) Filtered	98.2	12/17/92/SY	97.2 /100
TOC (mg/L) Unfiltered	94.5	12/17/92/SY	97.2 /100

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

COMBUSTION, INC.
DENHAM SPRINGS, LA

December 28, 1992
Project No.: 92-3451

PARAMETER

METHODS FOR ANALYSES

pH	EPA 150.1
BOD	EPA 405.1
COD	EPA 410.4
TOC	EPA 415.1
TSS	EPA 160.2
O&G	EPA 413.1

CHAIN OF CUSTODY RECORD

COMPANY:

ALLEN J. HARRIS

PROJECT NUMBER:

92-3451

(circle one)

TURNAROUND TIME:

Reg. / Rush

NEED BY WHAT DATE?

ASAP

ATTN:

PHONE:

FAX:

P.O.#

RUSH

SAMPLER'S INFORMATION:

Sampler's Name: G. ANDERSON

Number of Sample(s): 11

Date/Time Sampled: 12-17-92 / 12:35 pm

Number of Containers: 8

Type of Sample(s): GRAB

WATER

SAMPLE LOCATION:

POND M, plant EFFLUENT

SAMPLE IDENTIFICATION		CONTAINER/PRES.	ANALYSES REQUESTED:	
SAMPLE BOTTLE	A	1	BOD, pH	POND M
"	B	1	BOD, TSS	" "
"	C	1	COD, TOC	" "
"	D	1	COD, TOC	" "
"	E	1	OIL & GREASE	" "
"	F	1	TOC	PLANT EFFLUENT
1 GAL. POND	A	1	TOC	
5 GAL. POND	N	1	TOC	

SPECIAL INSTRUCTIONS:

CHAIN OF POSSESSION:

RELINQUISHED BY:	RECEIVED BY:	DATE/TIME
<i>Donald J. Anderson</i>	<i>Quaci Tony</i>	<u>12-17-92/</u>

ENTEK

• 14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

**COMBUSTION INC.
DENHAM SPRINGS, LOUISIANA
SAMPLES RECEIVED 12/22/92**

FOR

**ALLAN J. HARRIS COMPANY
POST OFFICE BOX 9024
METAIRIE, LOUISIANA 70055**

ATTENTION: DONALD CUNNINGHAM

**ERM SOUTHWEST, INC.
3501 N. CAUSEWAY BLVD., SUITE 200
METAIRIE, LOUISIANA, 70002
ATTENTION: MIKE E. PISANI**

**DECEMBER 30, 1992
PROJECT NO.: 92-3489**

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

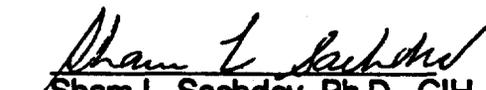
COMBUSTION, INC.
DENHAM SPRINGS, LA

December 30, 1992
Project No.: 92-3489

Five sets of samples, Pond M, Pond N, A.C. Filter, SBR Effluent and Treatment Plant were received December 22, 1992. These samples were analyzed for specified parameters as requested. Analyses were performed in accordance with EPA methods for Waste Water as requested.

The results are listed on the attached. Please do not hesitate to contact our office if you have any questions concerning these results.


Shoulan Yang
B.S. (Ch.E.), M.S. (Chemistry)


Sham L. Sachdev, Ph.D., CIH
President

ks

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

COMBUSTION, INC.
DENHAM SPRINGS, LA

December 30, 1992
Project No.: 92-3489

PARAMETER	POND M 12/22/92	ANALYZED/ ANALYST	QA /QC (obs /act)
pH (Std. Units)	6.4	12/22/92/AS	6.0 /6.0
BOD5 (mg/L) Sample A, B	288.5 (295,282)	12/22-27/92/AS	180 /200
TSS (mg/L)	72	12/22/92	74.0 /76.5
COD (mg/L) Sample C	574	12/23/92/TW	518 /500
TOC (mg/L) Sample C, D	112	12/22/92/LA	21.2 /20.0
Oil & Grease (mg/L)	1.7	12/23/92/AS	4.7 /4.9
Benzene (mg/L)	<0.01	12/23/92/ER	0.047 /0.050
Toluene (mg/L)	<0.01	12/23/92/ER	0.044 /0.050
Ethyl Benzene	<0.01	12/23/92/ER	0.041 /0.050
Xylene	<0.01	12/23/92/ER	0.044 /0.050

SAMPLE IDENTIFICATION	TOC (mg/L)
SBR Effluent 12/21/92	37
Pond N 12/21/92	47
Pond N 12/22/92	76
A.C. Filter 12/22/92	26
SBR Effluent 12/22/92	76
QA/QC (obs/act)	21.2/20.0

Analyzed: 12/22/92
Analyst: SY

PARAMETER	TREATMENT PLANT 12/22/92	ANALYZED/ ANALYST	QA /QC (obs /act)
MLVSS (mg/L)	875	12/22/92/AF	111.2 /110.1
MLSS (mg/L)	875	12/22/92/AF	-- /--

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

COMBUSTION, INC.
DENHAM SPRINGS, LA

December 30, 1992
Project No.: 92-3489

PARAMETER

METHODS FOR ANALYSES

pH	EPA 150.1
BOD	EPA 405.1
COD	EPA 410.4
TOC	EPA 415.1
TSS	EPA 160.2
O&G	EPA 413.1
VSS	EPA 160.4
BTEX	SW846, 8020

CHAIN OF CUSTODY RECORD

COMPANY:

ALLEN J. HARRIS

PROJECT NUMBER: 92-3489

(circle one)

TURNAROUND TIME: Reg. / **Rush**

NEED BY WHAT DATE? ASAP

ATTN:

PHONE:

FAX:

P.O.#

SAMPLER'S INFORMATION:

Sampler's Name: <u>G. ANDERSON</u>
Number of Sample(s):
Date/Time Sampled: <u>12-21-92 12-22-92</u>
Number of Containers:
Type of Sample(s): <u>GRAB</u>

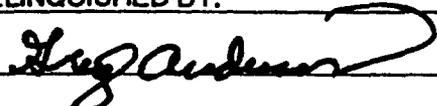
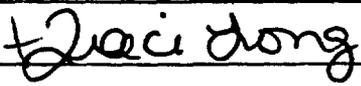
SAMPLE LOCATION:

POND M AND TREATMENT PLANT

SAMPLE IDENTIFICATION		CONTAINER/PRES.	ANALYSES REQUESTED:	
SAMPLE BOTTLE	A	1	BOD, pH	12-21-92 POND M
"	B	1	BOD, TSS	" POND M
"	C	1	COD, BOD TOC	" POND M
"	D	1	COD, BOD TOC	" POND M
"	E	1	OIL & GREASE	" POND M
"	F	1	BTEX	" POND M
"	G	1	BTEX BACK-UP ONLY	" POND M
"	H	1	MLVSS	" TREATMENT PLANT
"	I	1	MLSS	" TREATMENT PLANT

SPECIAL INSTRUCTIONS:

CHAIN OF POSSESSION:

RELINQUISHED BY:	RECEIVED BY:	DATE/TIME
		12-22-92 / 12-22-92 9:08

CHAIN OF CUSTODY RECORD

COMPANY:

ALLEN J. HARRIS

PROJECT NUMBER: _____

(circle one)

TURNAROUND TIME: Reg. / Rush

NEED BY WHAT DATE? ASAP

ATTN: _____

PHONE: _____

FAX: _____

P.O.# _____

SAMPLE LOCATION: _____

SAMPLER'S INFORMATION:

Sampler's Name:	G. ANDERSON
Number of Sample(s):	2
Date/Time Sampled:	12-21-92 ¹²⁻²²⁻⁹² / 12-21-92
Number of Containers:	2
Type of Sample(s):	GRAB

SAMPLE IDENTIFICATION	CONTAINER/PRES.	ANALYSES REQUESTED:
SAMPLE BOTTLE J		SBR EFFLUENT 12-21-92 TOC
" " K		POND N 12-21-92 TOC
" " L		POND N 12-22-92 TOC
" " M		A.C. FILTER 12-22-92 TOC
" " N		SBR 12-22-92 TOC

SPECIAL INSTRUCTIONS: _____

CHAIN OF POSSESSION:

RELINQUISHED BY:	RECEIVED BY:	DATE/TIME
<i>G. Anderson</i>	<i>Jaci Long</i>	12-22-92 9:08

ENTEK

14285 Airline Hwy.
Baton Rouge, LA 70817 • Off: (504) 752-2900
Fax: (504) 756-2706

January 6, 1993
Project No.: 92-3493

COMBUSTION, INC.
DENHAM SPRINGS, LOUISIANA

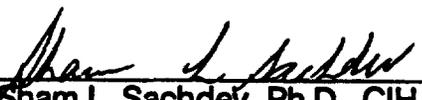
Two samples were received December 22, 1992. These samples were analyzed for Total Organic Carbon by EPA method 415.1.

The results are listed below. Please do not hesitate to contact our office if you have any questions concerning these analyses.

SAMPLE IDENTIFICATION	TOC (mg/L)
Samples Dated: 12/22/92	
A.C. Filter Influent - A	40
A.C. Filter Effluent - B	28
QA/QC (obs/act)	53/50

Analyzed: 12/22/92
Analyst: LA


Shoulan Yang
B.S. (Ch.E.), M.S. (Chemistry)


Sham L. Sachdev, Ph.D., CIH
President

ks

ENTEK

ENVIRONMENTAL LABORATORIES

14285 Airline Hwy.
Baton Rouge, LA 70817
Off: (504) 752-2900
Fax: (504) 756-2706

FACSIMILE TRANSMITTAL SHEET

DATE: January 4, 1993
 TO: Donald Cunningham / MIKE PISANI / ERM
 COMPANY: A.J. Harris
 FAX NUMBER: 1-831-6742
 FROM: Harry A. Alexander
 REFERENCE: _____

TOTAL NO. OF PAGES _____ (COVER SHEET NOT INCLUDED).

IF ANY PROBLEMS WITH THIS TRANSMITTAL, PLEASE CALL OPERATOR AT (504) 752-2900.

COMMENTS: _____

ATTACHMENT 3

**Tank 2
PCB Wipe Sample Results**



December 28, 1992

Mr. Russell Killebrew
Woodward-Clyde Consultants
2822 O'Neal Lane
Baton Rouge, LA 70816

Dear Mr. Killebrew:

Enclosed are the results for the samples received at Enseco-Rocky Mountain Analytical Laboratory on December 22, 1992, from the Denham Springs, Louisiana site.

Holding times for this matrix are not stated in SW-846.

Samples spiked with PCBs were not analyzed with this batch of samples.

All samples were analyzed at the dilutions stated in Enseco SOP #LM-RMA-4025 Section 7.6.1.

These results are reported on an "as received" basis.

The recovery of the blank spike is 81% which is inside the 70-130% control limits as stated in Enseco SOP #LM-RMA-4025 Section 8.7.2.

Analytes of interest were not detected above the reporting limits in the method blank associated with these samples.

Instrument calibration was within the 25% RSD limit established in Enseco SOP #LM-RMA-4025 Section 7.5.

All samples were received intact at 3.0°C.

Please call if you have any questions.

Sincerely,



Joe Aten
Pipeline Associate

JA/nep
Enclosures
RMAL #026886
Enseco Incorporated
4955 Yarrow Street
Arvada, Colorado 80002
303/421-6611 Fax: 303/431-7171

SAMPLE DESCRIPTION INFORMATION
for
Woodward Clyde Consultants

Lab ID	Client ID	Matrix	Sampled		Received	
			Date	Time	Date	Date
026886-0001-SA	W110-T02-EB	WIPE	21 DEC 92	14:15	22 DEC 92	92
026886-0002-SA	W111-T02-13	WIPE	21 DEC 92	14:42	22 DEC 92	92
026886-0003-SA	W112-T02-11	WIPE	21 DEC 92	14:44	22 DEC 92	92
026886-0004-SA	W113-T02-12	WIPE	21 DEC 92	14:45	22 DEC 92	92
026886-0005-SA	W114-T02-01	WIPE	21 DEC 92	14:47	22 DEC 92	92
026886-0006-SA	W115-T02-02	WIPE	21 DEC 92	14:50	22 DEC 92	92
026886-0007-SA	W116-T02-03	WIPE	21 DEC 92	14:53	22 DEC 92	92
026886-0008-SA	W117-T02-04	WIPE	21 DEC 92	14:58	22 DEC 92	92
026886-0009-SA	W118-T02-07	WIPE	21 DEC 92	15:01	22 DEC 92	92
026886-0010-SA	W119-T02-06	WIPE	21 DEC 92	15:03	22 DEC 92	92
026886-0011-SA	W120-T02-05	WIPE	21 DEC 92	15:05	22 DEC 92	92
026886-0012-SA	W121-T02-09	WIPE	21 DEC 92	15:07	22 DEC 92	92
026886-0013-SA	W122-T02-10	WIPE	21 DEC 92	15:13	22 DEC 92	92
026886-0014-SA	W123-T02-08	WIPE	21 DEC 92	15:20	22 DEC 92	92
026886-0015-SB		WIPE	22 DEC 92		22 DEC 92	92
026886-0016-MB		WIPE	22 DEC 92		22 DEC 92	92

Summary of Sample Chronology
for
Woodward Clyde Consultants

Sample Description	W110-T02-EB	W111-T02-13	W112-T02-11	W113-T02-12	W114-T02-01
Lab Id	026886-0001-SA	026886-0002-SA	026886-0003-SA	026886-0004-SA	026886-0005-SA
<u>Sample Chronology</u>					
Sample Date	21 DEC 92				
Received Date	22 DEC 92				
Login Date	22 DEC 92				
Extraction Date	22 DEC 92				
Analysis Date	22 DEC 92				
First Report Date	26 DEC 92				
Extracted By	MDRAVLAND	MDRAVLAND	MDRAVLAND	MDRAVLAND	MDRAVLAND
Analyzed By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Released By	JTOLLE	JTOLLE	JTOLLE	JTOLLE	JTOLLE
Dilution Factor	1.000000	1.000000	1.000000	1.000000	1.000000

Sample Description	W115-T02-02	W116-T02-03	W117-T02-04	W118-T02-07	W119-T02-06
Lab Id	026886-0006-SA	026886-0007-SA	026886-0008-SA	026886-0009-SA	026886-0010-SA
<u>Sample Chronology</u>					
Sample Date	21 DEC 92				
Received Date	22 DEC 92				
Login Date	22 DEC 92				
Extraction Date	22 DEC 92				
Analysis Date	22 DEC 92	22 DEC 92	23 DEC 92	23 DEC 92	23 DEC 92
First Report Date	26 DEC 92				
Extracted By	MDRAVLAND	MDRAVLAND	MDRAVLAND	MDRAVLAND	MDRAVLAND
Analyzed By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Released By	JTOLLE	JTOLLE	JTOLLE	JTOLLE	JTOLLE
Dilution Factor	1.000000	1.000000	1.000000	1.000000	1.000000

NA = Not Applicable

**ATTACHMENT 3
(Continued)**

**QC Samples
Tanks 14 and 15
PCB Wipe Sample Results**



December 16, 1992

Mr. Russell Killebrew
Woodward-Clyde Consultants
2822 O'Neal Lane
Baton Rouge, Louisiana 70816

Dear Mr. Killebrew:

Enclosed are the results for the samples received at Enseco-Rocky Mountain Analytical Laboratory on December 12, 1992, from the Denham Springs, Louisiana site.

Samples spiked with PCBs were not analyzed with this batch of samples.

All samples were analyzed at the dilutions stated in Enseco SOP #LM-RMA-4025 Section 7.6.1.

A field blank was not received with this batch of samples.

These results are reported on an "as received" basis.

The recovery of the blank spike is 92% which is inside the 70-130% control limits as stated in Enseco SOP #LM-RMA-4025 Section 8.7.2.

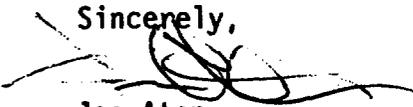
Analytes of interest were not detected above the reporting limits in the method blank associated with these samples.

Instrument calibration was within the 25% RSD limit established in Enseco SOP #LM-RMA-4025 Section 7.5.

All samples were received intact at 1.8°C.

Please call if you have any questions.

Sincerely,



Joe Aten
Pipeline Associate

JA/nep
Enclosures
RMAL #026733

Summary of Sample Chronology
for
Woodward Clyde Consultants

Sample Description	WQC-14-A	WQC-14-B	WQC-15-A	WQC-15-B
Lab Id	026733-0001-SA	026733-0002-SA	026733-0003-SA	026733-0004-SA

Sample Chronology

Sample Date	11 DEC 92	11 DEC 92	11 DEC 92	11 DEC 92
Received Date	12 DEC 92	12 DEC 92	12 DEC 92	12 DEC 92
Login Date	12 DEC 92	12 DEC 92	12 DEC 92	12 DEC 92
Extraction Date	13 DEC 92	13 DEC 92	13 DEC 92	13 DEC 92
Analysis Date	13 DEC 92	13 DEC 92	13 DEC 92	13 DEC 92
First Report Date	15 DEC 92	15 DEC 92	15 DEC 92	15 DEC 92
Extracted By	JBRADY	JBRADY	JBRADY	JBRADY
Analyzed By	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY
Released By	JATEN	JATEN	JATEN	JATEN
Dilution Factor	1.000000	1.000000	1.000000	1.000000

NA = Not Applicable

Summary of Sample Chronology
for
Woodward Clyde Consultants

Sample Description	Method Blank	Blank Spike
Lab Id	026733-0006-MB	026733-0005-SB

Sample Chronology

Sample Date	13 DEC 92	13 DEC 92
Received Date	13 DEC 92	13 DEC 92
Login Date	13 DEC 92	13 DEC 92
Extraction Date	13 DEC 92	13 DEC 92
Analysis Date	13 DEC 92	13 DEC 92
First Report Date	15 DEC 92	15 DEC 92
Extracted By	JBRADY	JBRADY
Analyzed By	MPIRKEY	MPIRKEY
Released By	JATEN	JATEN
Dilution Factor	1.000000	1.000000

NA = Not Applicable

Summary of Results for PCBs
for
Woodward Clyde Consultants

Sample Description	WQC-14-A	WQC-14-B	WQC-15-A	WQC-15-B
Lab Id	026733-0001-SA	026733-0002-SA	026733-0003-SA	026733-0004-SA
<u>Analyte</u>				
Aroclor 1016	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1221	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1232	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1242	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1248	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1254	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1260	1.0 U	1.0 U	1.0 U	1.0 U

U - Not Detected

NA - Not Applicable

Report Date 15 DEC 92 Reported by Michael Pirkey Reviewed by Joseph Aten

Aroclor results reported in concentration units of ug/wipe on an as received basis.

QUALITY CONTROL REPORT

Woodward Clyde Consultants No. 026733

Blank Spike Analysis - Samples: 0005SB

Analyte	Concentration ug/wipe		%Recovery
	Blank Spike	Spiked SB	SB
Aroclor 1254	18.3	20.0	92
Advisory QC Limits for % Recovery: 70-130			

- U = Not Detected.
- NC = Not Calculated; See Discussion.
- NA = Not Applicable.
- * = Value Outside Advisory QC Limits.

QUALITY CONTROL REPORT

Woodward Clyde Consultants No. 026733

Blank Analysis

Analyte	Concentration	
	Method	
	Blank	
	WQC	
		ug/wipe
Aroclor 1016		1.0 U
Aroclor 1221		1.0 U
Aroclor 1232		1.0 U
Aroclor 1242		1.0 U
Aroclor 1248		1.0 U
Aroclor 1254		1.0 U
Aroclor 1260		1.0 U

U = Not Detected.

NC = Not Calculated; See Discussion.

NA = Not Applicable.

* = Value Outside Advisory QC Limits.

QTPC8 SAMPLE RECEIPT CHECKLIST

PROJECT(s): 26733 CLIENT: COMBUSTION SITE: DELUHAM SPRINGS

NUMBER OF SAMPLES RECEIVED:

SOIL(s): _____ WIPE(s): 4 WATER(s): _____

OTHER(specify): _____

1. Custody Seal(s) present not present on outer package.

unbroken broken

2. Sample temperature ambient. chilled to 1.8 C

3. Samples were received intact.
 broken. leaking.

Samples affected: _____

4. Chain of Custody present. not present.
 matches sample labels. doesn't match labels.

Anomalies: _____

Was client contacted? yes no Date: _____ Init. _____

5. Custody Seals present not present on samples.
 unbroken broken

6. Radiation checked by Sample Control? yes

7. Comments: _____

Received by James Buttz Date 12/12/92

SAMPLE DESCRIPTION INFORMATION
for
Woodward Clyde Consultants

Lab ID	Client ID	Matrix	Sampled Date	Time	Received Date
026733-0001-SA	WQC-14-A	WIPE	11 DEC 92	14:55	12 DEC 92
026733-0002-SA	WQC-14-B	WIPE	11 DEC 92	15:00	12 DEC 92
026733-0003-SA	WQC-15-A	WIPE	11 DEC 92	15:04	12 DEC 92
026733-0004-SA	WQC-15-B	WIPE	11 DEC 92	15:08	12 DEC 92
026733-0005-SB	WQC	WIPE	13 DEC 92		13 DEC 92
026733-0006-MB	WQC	WIPE	13 DEC 92		13 DEC 92



CHAIN - OF - CUSTODY RECORD

SAMPLE NO.	MATRIX	YR: 92 DATE MM/DD	TIME	SAMPLE DEPTH		STATION LOCATION	TOTAL NO. CONTAINERS	PCB/72			
				FROM	TO						
WQC 14 A	WI	12/11	1455	-	-	Tank 14	1	✓			
WQC 14 B	WI	12/11	1500	-	-	Tank 14	1	✓			
WQC 15 A	WI	12/11	1504	-	-	Tank 15	1	✓			
WQC 15 B	WI	12/11	1508	-	-	Tank 15	1	✓			
/											

D1
D2
D3
D4

SAMPLE COLLECTION:

PROJECT NO. AND NAME 92B059C-D Combustion Inc.
 LOCATION OF SAMPLE: Combustion Inc. Denham Springs, Louisiana
 TEAM LEADER: Tom Warren TELEPHONE: (504) 751-1873
 COMPANY NAME: Woodward-Clyde Consultants
 ADDRESS: 2822 O'Neal Lane Baton Rouge, Louisiana
 WITNESS: Clive Blackburn COMPANY NAME: Rossel's Env. Ser.

FIELD INFORMATION:

TYPES OF SAMPLES: LIQUID (LJ) FISH (FI) SLUDGE (SL) SOIL (SO)
 (MATRIX) WIPE (WI) SEDIMENT (SE) OTHER (SPECIFY) _____
 FIELD NOTES: _____
 TRANSPORTER: Federal Express AIRBILL/INVOICE: 5747697097 DESTINATION: Enserco-RMAI
4955 Yarrow Street Arvada, CO 80002

SAMPLE TRANSFER (Original must be retained with sample at all times) 303-421-6611

	RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1	NAME: <u>Tom Warren</u> COMPANY: <u>Woodward-Clyde</u>	<u>12/11/92 1720</u>	<u>Clive Blackburn</u> <u>26733</u>	<u>12/12/92 0930</u>
2	NAME: COMPANY:			
3	NAME: COMPANY:			

TERMINATION OF CHAIN-OF-CUSTODY:

AUTHORIZED BY: _____ DATE: _____ TIME: _____
 COMPANY NAME: _____
 SAMPLE DISPOSITION: STORAGE _____ DISPOSAL _____ OTHER _____

**ATTACHMENT 3
(Continued)**

**Tank 17
PCB Wipe Sample Results**



December 22, 1992

Mr. Russell Killebrew
Woodward-Clyde Consultants
2822 O'Neal Lane
Baton Rouge, Louisiana 70816
Houston, TX 77056

Dear Mr. Killebrew:

Enclosed are the results for the samples received at Enseco-Rocky Mountain Analytical Laboratory on December 18, 1992, from the Denham Springs, Louisiana site.

Holding times for this matrix are not stated in SW-846.

Samples spiked with PCBs were not analyzed with this batch of samples.

All samples were analyzed at the dilutions stated in Enseco SOP #LM-RMA-4025 Section 7.6.1.

Analytes of interest were not detected above the reporting limits in field blank, sample 026833-0020.

These results are reported on an "as received" basis.

The recovery of the blank spike is 87% which is inside the 70-130% control limits as stated in Enseco SOP #LM-RMA-4025 Section 8.7.2.

Analytes of interest were not detected above the reporting limits in the method blank associated with these samples.

Instrument calibration was within the 25% RSD limit established in Enseco SOP #LM-RMA-4025 Section 7.5.

All samples were received intact at 2.4°C.

Mr. Russell Killebrew
December 22, 1992
Page Two

Upon examination of the samples at the laboratory the following discrepancies were noted: The sample ID for W039-T17-10 did not match the ID listed on the sample lable. The sample date and time matched and the ID from the chain of custody was used.

Please call if you have any questions.

Sincerely,



Joe Aten
Pipeline Associate

JA/nep
Enclosures

RMAL #026833

SAMPLE DESCRIPTION INFORMATION
for
Woodward Clyde Consultants

Lab ID	Client ID	Matrix	Sampled Date	Time	Received Date
026833-0001-SA	W030-T17-01	WIPE	12 DEC 92	12:10	18 DEC 92
026833-0002-SA	W031-T17-02	WIPE	12 DEC 92	12:12	18 DEC 92
026833-0003-SA	W032-T17-03	WIPE	12 DEC 92	12:15	18 DEC 92
026833-0004-SA	W033-T17-04	WIPE	12 DEC 92	12:19	18 DEC 92
026833-0005-SA	W034-T17-05	WIPE	12 DEC 92	12:21	18 DEC 92
026833-0006-SA	W035-T17-06	WIPE	12 DEC 92	12:23	18 DEC 92
026833-0007-SA	W036-T17-07	WIPE	12 DEC 92	12:25	18 DEC 92
026833-0008-SA	W037-T17-08	WIPE	12 DEC 92	12:26	18 DEC 92
026833-0009-SA	W038-T17-09	WIPE	12 DEC 92	12:28	18 DEC 92
026833-0010-SA	W039-T17-10	WIPE	12 DEC 92	12:30	18 DEC 92
026833-0011-SA	W040-T17-11	WIPE	12 DEC 92	12:32	18 DEC 92
026833-0012-SA	W041-T17-12	WIPE	12 DEC 92	12:34	18 DEC 92
026833-0013-SA	W042-T17-13	WIPE	12 DEC 92	12:38	18 DEC 92
026833-0014-SA	W043-T17-14	WIPE	12 DEC 92	12:40	18 DEC 92
026833-0015-SA	W044-T17-15	WIPE	12 DEC 92	12:45	18 DEC 92
026833-0016-SA	W045-T17-16	WIPE	12 DEC 92	12:47	18 DEC 92
026833-0017-SA	W046-T17-17	WIPE	12 DEC 92	12:48	18 DEC 92
026833-0018-SA	W047-T17-18	WIPE	12 DEC 92	12:50	18 DEC 92
026833-0019-SA	W048-T17-19	WIPE	12 DEC 92	12:52	18 DEC 92
026833-0020-SA	W029-T17-EB	WIPE	12 DEC 92	12:08	18 DEC 92
026833-0021-SB		WIPE	19 DEC 92		19 DEC 92
026833-0022-MB		WIPE	19 DEC 92		19 DEC 92

Summary of Sample Chronology
for
Woodward Clyde Consultants

Sample Description	W030-T17-01	W031-T17-02	W032-T17-03	W033-T17-04	W034-T17-05
Lab Id	026833-0001-SA	026833-0002-SA	026833-0003-SA	026833-0004-SA	026833-0005-SA
<u>Sample Chronology</u>					
Sample Date	12 DEC 92				
Received Date	18 DEC 92				
Login Date	18 DEC 92				
Extraction Date	19 DEC 92				
Analysis Date	19 DEC 92				
First Report Date	21 DEC 92				
Extracted By	JBRADY	JBRADY	JBRADY	JBRADY	JBRADY
Analyzed By	JATEN	JATEN	JATEN	JATEN	JATEN
Released By	HVUE	HVUE	HVUE	HVUE	HVUE
Dilution Factor	1.000000	1.000000	1.000000	1.000000	1.000000

Sample Description	W035-T17-06	W036-T17-07	W037-T17-08	W038-T17-09	W039-T17-10
Lab Id	026833-0006-SA	026833-0007-SA	026833-0008-SA	026833-0009-SA	026833-0010-SA
<u>Sample Chronology</u>					
Sample Date	12 DEC 92				
Received Date	18 DEC 92				
Login Date	18 DEC 92				
Extraction Date	19 DEC 92				
Analysis Date	19 DEC 92				
First Report Date	21 DEC 92				
Extracted By	JBRADY	JBRADY	JBRADY	JBRADY	JBRADY
Analyzed By	JATEN	JATEN	JATEN	JATEN	JATEN
Released By	HVUE	HVUE	HVUE	HVUE	HVUE
Dilution Factor	1.000000	1.000000	1.000000	1.000000	1.000000

NA = Not Applicable



CHAIN - OF - CUSTODY RECORD

SAMPLE NO.	MATRIX	YR: 92 DATE MM/DD	TIME	SAMPLE DEPTH		STATION LOCATION	TOTAL NO. CONTAINERS	REMARKS			
				FROM	TO						
W044-T12-15	15	12/12	1245	-	-	Trail 12	1	✓			
W045-T12-16	16		1247								
W046-T12-17	17		1248								
W047-T12-18	18		1250								
W048-T12-19	19		1252								
W049-T12-20			1254								
W050-T12-21			1254								
W051-T12-22			1303								
W052-T12-23			1303								
W053-T12-24			1306								
W054-T12-25			1308								
W055-T12-26			1309								
W056-T12-27			1310								
W057-T14-01			1432			Trail 14					
W058-T14-02			1440								

SAMPLE COLLECTION:

PROJECT NO. AND NAME 92B059C-D Combustion Inc.
 LOCATION OF SAMPLE: Combustion Inc. Denham Springs, Louisiana
 TEAM LEADER: William R. Hurd TELEPHONE: (504) 751-1873
 COMPANY NAME: Woodward-Clyde Consultants (WCC)
 ADDRESS: 2822 O'Neal Lane Baton Rouge, Louisiana
 WITNESS: _____ COMPANY NAME: _____

FIELD INFORMATION:

TYPES OF SAMPLES: LIQUID (L) FISH (FI) SLUDGE (SL) SOIL (SO)
 (MATRIX) WIPE (W) SEDIMENT (SE) OTHER (SPECIFY) _____
 FIELD NOTES: Please Note: Samples at a frequency of 20 sec to one hour
 TRANSPORTER: Federal Express AIRBILL/INVOICE: 2961324334 DESTINATION: Enseco, RMAI
4955 Yarrow Street Arvada, CO 80002

SAMPLE TRANSFER (Original must be retained with sample at all times) 303-421-6611

	RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1	NAME: <u>William R. Hurd</u> COMPANY: <u>WCC</u>	<u>17 DEC 92</u> <u>1600</u>	<u>John Burt</u> <u>26833</u>	<u>12/16/92/0830</u> <u>7400</u>
2	NAME: COMPANY:			
3	NAME: COMPANY:			

TERMINATION OF CHAIN-OF-CUSTODY:

AUTHORIZED BY: _____ DATE: _____ TIME: _____
 COMPANY NAME: _____
 SAMPLE DISPOSITION: STORAGE _____ DISPOSAL _____ OTHER _____

SAMPLE DESCRIPTION INFORMATION
for
Woodward Clyde Consultants

Lab ID	Client ID	Matrix	Sampled		Received
			Date	Time	Date
026834-0001-SA	W049-T17-20	WIPE	12 DEC 92	12:54	18 DEC 92
026834-0002-SA	W050-T17-21	WIPE	12 DEC 92	12:58	18 DEC 92
026834-0003-SA	W051-T17-22	WIPE	12 DEC 92	13:00	18 DEC 92
026834-0004-SA	W052-T17-23	WIPE	12 DEC 92	13:05	18 DEC 92
026834-0005-SA	W053-T17-24	WIPE	12 DEC 92	13:06	18 DEC 92
026834-0006-SA	W054-T17-25	WIPE	12 DEC 92	13:08	18 DEC 92
026834-0007-SA	W055-T17-26	WIPE	12 DEC 92	13:09	18 DEC 92
026834-0008-SA	W056-T17-27	WIPE	12 DEC 92	13:10	18 DEC 92
026834-0009-SA	W057-T14-01	WIPE	12 DEC 92	14:38	18 DEC 92
026834-0010-SA	W058-T14-02	WIPE	12 DEC 92	14:40	18 DEC 92
026834-0011-SA	W059-T14-03	WIPE	17 DEC 92	14:43	18 DEC 92
026834-0012-SA	W060-T14-04	WIPE	17 DEC 92	14:45	18 DEC 92
026834-0013-SA	W061-T14-05	WIPE	17 DEC 92	14:47	18 DEC 92
026834-0014-SA	W062-T14-06	WIPE	17 DEC 92	14:48	18 DEC 92
026834-0015-SA	W063-T14-07	WIPE	17 DEC 92	14:50	18 DEC 92
026834-0016-SA	W064-T14-08	WIPE	17 DEC 92	14:52	18 DEC 92
026834-0017-SA	W065-T14-09	WIPE	17 DEC 92	14:54	18 DEC 92
026834-0018-SA	W066-T14-10	WIPE	17 DEC 92	14:56	18 DEC 92
026834-0019-SA	W067-T14-11	WIPE	17 DEC 92	14:59	18 DEC 92
026834-0020-SA	W068-T14-12	WIPE	17 DEC 92	15:01	18 DEC 92
026834-0021-SB		WIPE	19 DEC 92		19 DEC 92
026834-0022-MB		WIPE	19 DEC 92		19 DEC 92

Summary of Sample Chronology
for
Woodward Clyde Consultants

Sample Description M049-T17-20 M050-T17-21 M051-T17-22 M052-T17-23 M053-T17-24

Lab Id 026834-0001-SA 026834-0002-SA 026834-0003-SA 026834-0004-SA 026834-0005-SA

Sample Chronology

Sample Date	12 DEC 92				
Received Date	18 DEC 92				
Login Date	18 DEC 92				
Extraction Date	19 DEC 92				
Analysis Date	19 DEC 92				
First Report Date	22 DEC 92				
Extracted By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Analyzed By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Released By	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY
Dilution Factor	1.000000	1.000000	1.000000	1.000000	1.000000

Sample Description M054-T17-25 M055-T17-26 M056-T17-27 M057-T14-01 M058-T14-02

Lab Id 026834-0006-SA 026834-0007-SA 026834-0008-SA 026834-0009-SA 026834-0010-SA

Sample Chronology

Sample Date	12 DEC 92				
Received Date	18 DEC 92				
Login Date	18 DEC 92				
Extraction Date	19 DEC 92				
Analysis Date	19 DEC 92				
First Report Date	22 DEC 92				
Extracted By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Analyzed By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Released By	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY
Dilution Factor	1.000000	1.000000	1.000000	1.000000	1.000000

NA = Not Applicable

Summary of Sample Chronology
for
Woodward Clyde Consultants

Sample Description W059-T14-03 W060-T14-04 W061-T14-05 W062-T14-06 W063-T14-07

Lab Id 026834-0011-SA 026834-0012-SA 026834-0013-SA 026834-0014-SA 026834-0015-SA

Sample Chronology

Sample Date	17 DEC 92				
Received Date	18 DEC 92				
Login Date	18 DEC 92				
Extraction Date	19 DEC 92				
Analysis Date	20 DEC 92				
First Report Date	22 DEC 92				
Extracted By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Analyzed By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Released By	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY
Dilution Factor	1.000000	1.000000	1.000000	1.000000	1.000000

Sample Description W064-T14-08 W065-T14-09 W066-T14-10 W067-T14-11 W068-T14-12

Lab Id 026834-0016-SA 026834-0017-SA 026834-0018-SA 026834-0019-SA 026834-0020-SA

Sample Chronology

Sample Date	17 DEC 92				
Received Date	18 DEC 92				
Login Date	18 DEC 92				
Extraction Date	19 DEC 92				
Analysis Date	20 DEC 92				
First Report Date	22 DEC 92				
Extracted By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Analyzed By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Released By	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY
Dilution Factor	1.000000	1.000000	1.000000	1.000000	1.000000

NA = Not Applicable

Summary of Sample Chronology
for
Woodward Clyde Consultants

Method Blank Blank Spike

Sample Description

Lab Id 026834-0022-MB 026834-0021-SB

Sample Chronology

Sample Date	19 DEC 92	19 DEC 92
Received Date	19 DEC 92	19 DEC 92
Login Date	19 DEC 92	19 DEC 92
Extraction Date	19 DEC 92	19 DEC 92
Analysis Date	20 DEC 92	20 DEC 92
First Report Date	22 DEC 92	22 DEC 92
Extracted By	DHARDING	DHARDING
Analyzed By	DHARDING	DHARDING
Released By	MPIRKEY	MPIRKEY
Dilution Factor	1.000000	1.000000

NA = Not Applicable

Summary of Results for PCBs
for
Woodward Clyde Consultants

Sample Description	W049-T17-20	W050-T17-21	W051-T17-22	W052-T17-23	W053-T17-24
Lab Id	026834-0001-SA	026834-0002-SA	026834-0003-SA	026834-0004-SA	026834-0005-SA
<u>Analyte</u>					
Aroclor 1016	1.0 U				
Aroclor 1221	1.0 U				
Aroclor 1232	1.0 U				
Aroclor 1242	1.0 U				
Aroclor 1248	1.0 U				
Aroclor 1254	1.0 U				
Aroclor 1260	1.0 U				

Sample Description	W054-T17-25	W055-T17-26	W056-T17-27	W057-T14-01	W058-T14-02
Lab Id	026834-0006-SA	026834-0007-SA	026834-0008-SA	026834-0009-SA	026834-0010-SA
<u>Analyte</u>					
Aroclor 1016	1.0 U				
Aroclor 1221	1.0 U				
Aroclor 1232	1.0 U				
Aroclor 1242	1.0 U				
Aroclor 1248	1.0 U				
Aroclor 1254	1.0 U				
Aroclor 1260	1.0 U				

U - Not Detected

NA - Not Applicable

Report Date 22 DEC 92 Reported by Dustin Harding Reviewed by Michael Pirkey

Aroclor results reported in concentration units of ug/wipe on an as received basis.

Summary of Results for PCBs
for
Woodward Clyde Consultants

Sample Description	W059-T14-03	W060-T14-04	W061-T14-05	W062-T14-06	W063-T14-07
Lab Id	026834-0011-SA	026834-0012-SA	026834-0013-SA	026834-0014-SA	026834-0015-SA
<u>Analyte</u>					
Aroclor 1016	1.0 U				
Aroclor 1221	1.0 U				
Aroclor 1232	1.0 U				
Aroclor 1242	1.0 U				
Aroclor 1248	1.0 U				
Aroclor 1254	1.0 U				
Aroclor 1260	1.0 U				

Sample Description	W064-T14-08	W065-T14-09	W066-T14-10	W067-T14-11	W068-T14-12
Lab Id	026834-0016-SA	026834-0017-SA	026834-0018-SA	026834-0019-SA	026834-0020-SA
<u>Analyte</u>					
Aroclor 1016	1.0 U				
Aroclor 1221	1.0 U				
Aroclor 1232	1.0 U				
Aroclor 1242	1.0 U				
Aroclor 1248	1.0 U				
Aroclor 1254	1.0 U				
Aroclor 1260	1.0 U				

U - Not Detected

NA - Not Applicable

Report Date 22 DEC 92 Reported by Dustin Harding Reviewed by Michael Pirkey

Aroclor results reported in concentration units of ug/wipe on an as received basis.

Summary of Sample Chronology
for
Woodward Clyde Consultants

Sample Description	W120-T02-05	W121-T02-09	W122-T02-10	W123-T02-08
Lab Id	026886-0011-SA	026886-0012-SA	026886-0013-SA	026886-0014-SA

Sample Chronology

	W120-T02-05	W121-T02-09	W122-T02-10	W123-T02-08
Sample Date	21 DEC 92	21 DEC 92	21 DEC 92	21 DEC 92
Received Date	22 DEC 92	22 DEC 92	22 DEC 92	22 DEC 92
Login Date	22 DEC 92	22 DEC 92	22 DEC 92	22 DEC 92
Extraction Date	22 DEC 92	22 DEC 92	22 DEC 92	22 DEC 92
Analysis Date	23 DEC 92	23 DEC 92	23 DEC 92	23 DEC 92
First Report Date	26 DEC 92	26 DEC 92	26 DEC 92	26 DEC 92
Extracted By	MDRAVLAND	MDRAVLAND	MDRAVLAND	MDRAVLAND
Analyzed By	DHARDING	DHARDING	DHARDING	DHARDING
Released By	JTOLLE	JTOLLE	JTOLLE	JTOLLE
Dilution Factor	1.000000	1.000000	1.000000	1.000000

NA = Not Applicable

Summary of Sample Chronology
for
Woodward Clyde Consultants

	Method	Blank
	Blank	Spkce

Sample Description

Lab Id	026886-0016-MB	026886-0015-SB
--------	----------------	----------------

Sample Chronology

Sample Date	22 DEC 92	22 DEC 92
Received Date	22 DEC 92	22 DEC 92
Login Date	22 DEC 92	22 DEC 92
Extraction Date	22 DEC 92	22 DEC 92
Analysis Date	23 DEC 92	23 DEC 92
First Report Date	26 DEC 92	26 DEC 92
Extracted By	MDRAVLAND	MDRAVLAND
Analyzed By	DHARDING	DHARDING
Released By	JTOLLE	JTOLLE
Dilution Factor	1.000000	1.000000

NA = Not Applicable

Summary of Results for PCBs
for
Woodward Clyde Consultants

Sample Description	W110-T02-EB	W111-T02-13	W112-T02-11	W113-T02-12	W114-T02-01
Lab Id	026886-0001-SA	026886-0002-SA	026886-0003-SA	026886-0004-SA	026886-0005-SA
<u>Analyte</u>					
Aroclor 1016	1.0 U				
Aroclor 1221	1.0 U				
Aroclor 1232	1.0 U				
Aroclor 1242	1.0 U				
Aroclor 1248	1.0 U				
Aroclor 1254	1.0 U				
Aroclor 1260	1.0 U				

Sample Description	W115-T02-02	W116-T02-03	W117-T02-04	W118-T02-07	W119-T02-06
Lab Id	026886-0006-SA	026886-0007-SA	026886-0008-SA	026886-0009-SA	026886-0010-SA
<u>Analyte</u>					
Aroclor 1016	1.0 U				
Aroclor 1221	1.0 U				
Aroclor 1232	1.0 U				
Aroclor 1242	1.0 U				
Aroclor 1248	1.0 U				
Aroclor 1254	1.0 U				
Aroclor 1260	1.0 U				

U - Not Detected

NA - Not Applicable

Report Date 26 DEC 92 Reported by Dustin Harding Reviewed by Jody Tolle

Aroclor results reported in concentration units of ug/wipe on an as received basis.

Summary of Results for PCBs
for
Woodward Clyde Consultants

Sample Description	W120-T02-05	W121-T02-09	W122-T02-10	W123-T02-08
Lab Id	026886-0011-SA	026886-0012-SA	026886-0013-SA	026886-0014-SA
<u>Analyte</u>				
Aroclor 1016	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1221	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1232	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1242	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1248	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1254	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1260	1.0 U	1.0 U	1.0 U	1.0 U

U - Not Detected

NA - Not Applicable

Report Date 26 DEC 92 Reported by Dustin Harding Reviewed by Jody Tolle

Aroclor results reported in concentration units of ug/wipe on an as received basis.

QUALITY CONTROL REPORT

Woodward Clyde Consultants No. 026886

Blank Analysis

Analyte	Concentration	
	Method	Blank
		ug/wipe
Aroclor 1016		1.0 U
Aroclor 1221		1.0 U
Aroclor 1232		1.0 U
Aroclor 1242		1.0 U
Aroclor 1248		1.0 U
Aroclor 1254		1.0 U
Aroclor 1260		1.0 U

- U = Not Detected.
- NC = Not Calculated; See Discussion.
- NA = Not Applicable.
- * = Value Outside Advisory QC Limits.

QTPC3 SAMPLE RECEIPT CHECKLIST

PROJECT(s): 26886 CLIENT: WCC. SITE: DENHAM SPRINGS

NUMBER OF SAMPLES RECEIVED:

SOIL(s): _____ WIPE(s): 14 ^{JA 10/28/92} WATER(s): _____

OTHER(specify): _____

1. Custody Seal(s) present not present on outer package.
 unbroken broken

2. Sample temperature ambient. chilled to 3.00

3. Samples were received intact.
 broken. leaking.

Samples affected: _____

4. Chain of Custody present. not present.
 matches sample labels. doesn't match labels.

Anomalies: _____

Was client contacted? yes no Date: _____ Init. _____

5. Custody Seals present not present on samples.
 unbroken broken

6. Radiation checked by Sample Control? yes

7. Comments: _____

Received by M Praxland Date 122292



CHAIN - OF - CUSTODY RECORD

SAMPLE NO.	MATRIX	YR: 92 DATE MM/DD	TIME	SAMPLE DEPTH		STATION LOCATION	TOTAL NO. CONTAINERS	PCO/72					
				FROM	TO								
W110-T02-EB	01	WI	12/21	1415	-	-	Tank 2	1	✓				
W111-T02-13	02			1442									
W112-T02-11	03			1444									
W113-T02-12	04			1445									
W114-T02-01	05			1447									
W115-T02-02	06			1450									
W116-T02-03	07			1453									
W117-T02-04	08			1458									
W118-T02-07	09			1501									
W119-T02-06	10			1503									
W120-T02-05	11			1505									
W121-T02-09	12			1507									
W122-T02-10	13			1513									
W123-T02-08	14	↓	↓	1520	↓	↓	↓	↓	↓				

SAMPLE COLLECTION:

PROJECT NO. AND NAME 92B059C-D Combustion Inc.
 LOCATION OF SAMPLE: Combustion Inc. Denham Springs, Louisiana
 TEAM LEADER: Bill H. Mc (WCC) TELEPHONE: (504) 751-1873
 COMPANY NAME: Woodward-Clyde Consultants (WCC)
 ADDRESS: 2822 O'Neal Lane Baton Rouge, Louisiana
 WITNESS: _____ COMPANY NAME: _____

FIELD INFORMATION:

TYPES OF SAMPLES: LIQUID (L) FISH (FI) SLUDGE (SL) SOIL (SO)
 (MATRIX) WIPE (W) SEDIMENT (SE) OTHER (SPECIFY) _____
 FIELD NOTES: _____
 TRANSPORTER: Fedex Express AIRBILL/INVOICE: 2961374356 DESTINATION: Enseco-RMAI
4955 Yarrow Street Arvada, CO 80002

SAMPLE TRANSFER (Original must be retained with sample at all times) 303-421-6611

	RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1	NAME: <u>William R. Schmidt</u> COMPANY: <u>WCC</u>	<u>21 DEC 92</u> <u>1545</u>	<u>M. D. W. I. A. N.</u> <u>20886 3.00</u>	<u>12-22-92</u>
2	NAME: _____ COMPANY: _____			
3	NAME: _____ COMPANY: _____			

TERMINATION OF CHAIN-OF-CUSTODY:

AUTHORIZED BY: _____ DATE: _____ TIME: _____
 COMPANY NAME: _____
 SAMPLE DISPOSITION: STORAGE _____ DISPOSAL _____ OTHER _____

ATTACHMENT 3

(Continued)

Tank 14

PCB Wipe Sample Results



December 29, 1992

Mr. Russell Killabrew
Woodward-Clyde Consultants
2822 O'Neal Lane
Baton Rouge, LA 70816

Dear Mr. Killabrew:

Enclosed are the results for the samples received at Enseco-Rocky Mountain Analytical Laboratory on December 18, 1992, from the Denham Springs, Louisiana site.

Holding times for this matrix are not stated in SW-846.

Samples spiked with PCBs were not analyzed with this batch of samples.

All samples were analyzed at the dilutions stated in Enseco SOP #LM-RMA-4025 Section 7.6.1.

These results are reported on an "as received" basis.

The recovery of the blank spike is 86% which is inside the 70-130% control limits as stated in Enseco SOP #LM-RMA-4025 Section 8.7.2.

Analytes of interest were not detected above the reporting limits in the method blank associated with these samples.

Instrument calibration was within the 25% RSD limit established in Enseco SOP #LM-RMA-4025 Section 7.5.

All samples were received intact at 2.4°C.

Please call if you have any questions.

Sincerely,



Joe Aten
Pipeline Associate

JA/nep
Enclosures
RMAL #026835

SAMPLE DESCRIPTION INFORMATION
for
Woodward Clyde Consultants

Lab ID	Client ID	Matrix	Sampled Date	Time	Received Date
026835-0001-SA	W069-T14-13	WIPE	17 DEC 92	15:02	18 DEC 92
026835-0002-SA	W070-T14-14	WIPE	17 DEC 92	15:04	18 DEC 92
026835-0003-SA	W071-T14-15	WIPE	17 DEC 92	15:05	18 DEC 92
026835-0004-SA	W072-T14-16	WIPE	17 DEC 92	15:07	18 DEC 92
026835-0005-SA	W073-T14-17	WIPE	17 DEC 92	15:08	18 DEC 92
026835-0006-SA	W074-T14-18	WIPE	17 DEC 92	15:10	18 DEC 92
026835-0007-SA	W075-T14-19	WIPE	17 DEC 92	15:12	18 DEC 92
026835-0008-SA	W076-T14-20	WIPE	17 DEC 92	15:13	18 DEC 92
026835-0009-SA	W077-T14-21	WIPE	17 DEC 92	15:14	18 DEC 92
026835-0010-SA	W078-T14-22	WIPE	17 DEC 92	15:15	18 DEC 92
026835-0011-SA	W079-T14-23	WIPE	17 DEC 92	15:17	18 DEC 92
026835-0012-SA	W080-T14-24	WIPE	17 DEC 92	15:18	18 DEC 92
026835-0013-SA	W081-T14-25	WIPE	17 DEC 92	15:21	18 DEC 92
026835-0014-SA	W082-T14-26	WIPE	17 DEC 92	15:23	18 DEC 92
026835-0015-SA	W083-T14-27	WIPE	17 DEC 92	15:24	18 DEC 92
026835-0016-SB		WIPE	21 DEC 92		21 DEC 92
026835-0017-MB		WIPE	21 DEC 92		21 DEC 92

Summary of Sample Chronology
for
Woodward Clyde Consultants

Sample Description W069-T14-13 W070-T14-14 W071-T14-15 W072-T14-16 W073-T14-17

Lab Id 026835-0001-SA 026835-0002-SA 026835-0003-SA 026835-0004-SA 026835-0005-SA

Sample Chronology

Sample Date	17 DEC 92				
Received Date	18 DEC 92				
Login Date	18 DEC 92				
Extraction Date	21 DEC 92				
Analysis Date	22 DEC 92				
First Report Date	28 DEC 92				
Extracted By	JBRADY	JBRADY	JBRADY	JBRADY	JBRADY
Analyzed By	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY
Released By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Dilution Factor	1.000000	1.000000	1.000000	1.000000	1.000000

Sample Description W074-T14-18 W075-T14-19 W076-T14-20 W077-T14-21 W078-T14-22

Lab Id 026835-0006-SA 026835-0007-SA 026835-0008-SA 026835-0009-SA 026835-0010-SA

Sample Chronology

Sample Date	17 DEC 92				
Received Date	18 DEC 92				
Login Date	18 DEC 92				
Extraction Date	21 DEC 92				
Analysis Date	22 DEC 92				
First Report Date	28 DEC 92				
Extracted By	JBRADY	JBRADY	JBRADY	JBRADY	JBRADY
Analyzed By	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY
Released By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Dilution Factor	1.000000	1.000000	1.000000	1.000000	1.000000

NA = Not Applicable

Summary of Sample Chronology
for
Woodward Clyde Consultants

Sample Description W079-T14-23 W080-T14-24 W081-T14-25 W082-T14-26 W083-T14-27

Lab ID 026835-0011-SA 026835-0012-SA 026835-0013-SA 026835-0014-SA 026835-0015-SA

Sample Chronology

Sample Date	17 DEC 92				
Received Date	18 DEC 92				
Login Date	18 DEC 92				
Extraction Date	21 DEC 92				
Analysis Date	21 DEC 92				
First Report Date	28 DEC 92				
Extracted By	JBRADY	JBRADY	JBRADY	JBRADY	JBRADY
Analyzed By	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY
Released By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Dilution Factor	1.000000	1.000000	1.000000	1.000000	1.000000

NA = Not Applicable

Summary of Sample Chronology
for
Woodward Clyde Consultants

Method	Blank
Blank	Spike

Sample Description

Lab Id	026835-0017-MB	026835-0016-SB
--------	----------------	----------------

Sample Chronology

Sample Date	21 DEC 92	21 DEC 92
Received Date	21 DEC 92	21 DEC 92
Login Date	21 DEC 92	21 DEC 92
Extraction Date	21 DEC 92	21 DEC 92
Analysis Date	21 DEC 92	21 DEC 92
First Report Date	28 DEC 92	28 DEC 92
Extracted By	JBRADY	JBRADY
Analyzed By	MPIRKEY	MPIRKEY
Released By	DHARDING	DHARDING
Dilution Factor	1.00000	1.00000

NA = Not Applicable

Summary of Results for PCBs
for
Woodward Clyde Consultants

Sample Description	W069-T14-13	W070-T14-14	W071-T14-15	W072-T14-16	W073-T14-17
Lab Id	026835-0001-SA	026835-0002-SA	026835-0003-SA	026835-0004-SA	026835-0005-SA
<u>Analyte</u>					
Aroclor 1016	1.0 U				
Aroclor 1221	1.0 U				
Aroclor 1232	1.0 U				
Aroclor 1242	1.0 U				
Aroclor 1248	1.0 U				
Aroclor 1254	1.0 U				
Aroclor 1260	1.0 U				

Sample Description	W074-T14-18	W075-T14-19	W076-T14-20	W077-T14-21	W078-T14-22
Lab Id	026835-0006-SA	026835-0007-SA	026835-0008-SA	026835-0009-SA	026835-0010-SA
<u>Analyte</u>					
Aroclor 1016	1.0 U				
Aroclor 1221	1.0 U				
Aroclor 1232	1.0 U				
Aroclor 1242	1.0 U				
Aroclor 1248	1.0 U				
Aroclor 1254	1.0 U				
Aroclor 1260	1.0 U				

U - Not Detected

NA - Not Applicable

Report Date 28 DEC 92 Reported by Michael Pirkey Reviewed by Dustin Harding

Aroclor results reported in concentration units of ug/wipe on an as received basis.

Summary of Results for PCBs
for
Woodward Clyde Consultants

Sample Description	W079-T14-23	W080-T14-24	W081-T14-25	W082-T14-26	W083-T14-27
Lab Id	026835-0011-SA	026835-0012-SA	026835-0013-SA	026835-0014-SA	026835-0015-SA
Analyte					
Aroclor 1016	1.0 U				
Aroclor 1221	1.0 U				
Aroclor 1232	1.0 U				
Aroclor 1242	1.0 U				
Aroclor 1248	1.0 U				
Aroclor 1254	1.0 U				
Aroclor 1260	1.0 U				

U - Not Detected

NA - Not Applicable

Report Date 28 DEC 92 Reported by Michael Pirkey Reviewed by Dustin Harding

Aroclor results reported in concentration units of ug/wipe on an as received basis.

QUALITY CONTROL REPORT

Woodward Clyde Consultants No. 026835

Blank Spike Analysis - Samples: 0016SB

Analyte	Concentration ug/wipe		%Recovery
	Blank Spike	Spiked SB	SB
Aroclor 1254	17.2	20.0	86

Advisory QC Limits for % Recovery: 70-130

U = Not Detected.
NC = Not Calculated; See Discussion.
NA = Not Applicable.
* = Value Outside Advisory QC Limits.

QUALITY CONTROL REPORT
Woodward Clyde Consultants No. 026835

Blank Analysis

Analyte	Concentration	
	Method	
	Blank	
		ug/wipe
Aroclor 1016		1.0 U
Aroclor 1221		1.0 U
Aroclor 1232		1.0 U
Aroclor 1242		1.0 U
Aroclor 1248		1.0 U
Aroclor 1254		1.0 U
Aroclor 1260		1.0 U

U = Not Detected.
NC = Not Calculated; See Discussion.
NA = Not Applicable.
* = Value Outside Advisory QC Limits.

QTPC3 SAMPLE RECEIPT CHECKLIST

PROJECT(s): 26833
26834
26835 CLIENT: COMBUSTION LAB SITE: DELWATA SPRINGS

NUMBER OF SAMPLES RECEIVED:

SOIL(s): _____ WIPE(s): 55 WATER(s): _____

OTHER(specify): _____

1. Custody Seal(s) present not present on outer package.
 unbroken broken

2. Sample temperature ambient. chilled to 2.4°C

3. Samples were received intact.
 broken. leaking.

Samples affected: _____

4. Chain of Custody present. not present.
 matches sample labels. doesn't match labels.

Anomalies: 26833 - SAMPLE W034* - T19 - 10 MARKED W040 - T17 - 10 ON CAN, TIME MARCHES.
26834 - SAMPLE W055* - T17 - 26 MARKED W056 - T17 - 26 ON CAN, TIME MARCHES
26835 - SAMPLE W070* - T14 - 14 MARKED W069 - T14 - 14 ON CAN, TIME MARCHES
26835 - SAMPLE W074* - T14 - 18 NOT LABELED ON CAN, TIME MARCHES 26835 - W079 - T14 - 23 HAS NO TIME MARKED ON CAN

Was client contacted? yes no Date: 12/21/02 Init. TV

* = correct label.

5. Custody Seals present not present on samples.
 unbroken broken

6. Radiation checked by Sample Control? yes

7. Comments: _____

Received by Jay Beal Date 12/18/02



CHAIN - OF - CUSTODY RECORD

SAMPLE NO.	MATRIX	YR: 92 DATE MM/DD	TIME	SAMPLE DEPTH		STATION LOCATION	TOTAL NO. CONTAINERS	PCB/72				
				FROM	TO							
W059-T14-02	WI	12/12	1442	-	-	Tank 14	1	✓				
W060-T14-04			1445									
W061-T14-05			1442									
W062-T14-06			1442									
W063-T14-07			1450									
W064-T14-08			1452									
W065-T14-09			1454									
W066-T14-10			1456									
W067-T14-11			1459									
W068-T14-12			1501									
W069-T14-13	Ø1		1502									
W070-T14-14	Ø2		1504									
W071-T14-15	Ø3		1505									
W072-T14-16	Ø4		1502									
W073-T14-17	Ø5		1508									

SAMPLE COLLECTION:

PROJECT NO. AND NAME 92B059C-D Combustion Inc.
 LOCATION OF SAMPLE: Combustion Inc. Denham Springs, Louisiana
 TEAM LEADER: William R. Hurdle TELEPHONE: (504) 751-1873
 COMPANY NAME: Woodward-Clyde Consultants (WCC)
 ADDRESS: 2822 O'Neal Lane Baton Rouge, Louisiana
 WITNESS: _____ COMPANY NAME: _____

FIELD INFORMATION:

TYPES OF SAMPLES: LIQUID (L) FISH (FI) SLUDGE (SL) SOIL (SO)
 (MATRIX) WIPE (W) SEDIMENT (SE) OTHER (SPECIFY) _____
 FIELD NOTES: Please label sample at frequency of 20 sample per batch
 TRANSPORTER: Federal Express AIRBILL/INVOICE: 7911224334 DESTINATION: Enserco-RMAI
4955 Yarrow Street Arvada, CO 80002

SAMPLE TRANSFER (Original must be retained with sample at all times) 303-421-6611

	RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1	NAME: <u>William R. Hurdle</u> COMPANY: <u>WCC</u>	<u>17 DEC 92</u> <u>1600</u>	<u>[Signature]</u> <u>7:19:35</u>	<u>12/15/92 19830</u> <u>2:40</u>
2	NAME: COMPANY:			
3	NAME: COMPANY:			

TERMINATION OF CHAIN-OF-CUSTODY:

AUTHORIZED BY: _____ DATE: _____ TIME: _____
 COMPANY NAME: _____
 SAMPLE DISPOSITION: STORAGE _____ DISPOSAL _____ OTHER _____



CHAIN - OF - CUSTODY RECORD

SAMPLE NO.	MATRIX	YR: 92 DATE MM/DD	TIME	SAMPLE DEPTH		STATION LOCATION	TOTAL NO. CONTAINERS	PCR/??			
				FROM	TO						
W074-T14-18	DB	WI 12/12	1510	-	-	Tank 14	1	✓			
W075-T14-19	DB		1512								
W076-T14-20	DB		1513								
W077-T14-21	DB		1514								
W078-T14-22	DB		1515								
W079-T14-23	DB		1517								
W080-T14-24	DB		1518								
W081-T14-25	DB		1521								
W082-T14-26	DB		1523								
W083-T14-22	DB		1524								

SAMPLE COLLECTION:

PROJECT NO. AND NAME 92B059C-D Combustion Inc.
 LOCATION OF SAMPLE: Combustion Inc. Denham Springs, Louisiana
 TEAM LEADER: William R. Hurdle TELEPHONE: (504) 751-1873
 COMPANY NAME: Woodward-Clyde Consultants (WCC)
 ADDRESS: 2822 O'Neal Lane Baton Rouge, Louisiana
 WITNESS: _____ COMPANY NAME: _____

FIELD INFORMATION:

TYPES OF SAMPLES: LIQUID (L) FISH (FI) SLUDGE (SL) SOIL (SO)
 (MATRIX) WIPE (W) SEDIMENT (SE) OTHER (SPECIFY) _____
 FIELD NOTES: Please detach sample of fragment of 20 sample in label
 TRANSPORTER: Federal Express AIRBILL/INVOICE: 2961374334 DESTINATION: Enserco-2MAI
4955 Yarrow Street Arvada, CO 80002

SAMPLE TRANSFER (Original must be retained with sample at all times) 303-421-6611

	RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1	NAME: <u>William R. Hurdle</u> COMPANY: <u>WCC</u>	<u>17 DEC 92</u> <u>1600</u>	<u>[Signature]</u> <u>76835</u>	<u>12/18/92</u> <u>74:01</u>
2	NAME: _____ COMPANY: _____			
3	NAME: _____ COMPANY: _____			

TERMINATION OF CHAIN-OF-CUSTODY:

AUTHORIZED BY: _____ DATE: _____ TIME: _____
 COMPANY NAME: _____
 SAMPLE DISPOSITION: STORAGE _____ DISPOSAL _____ OTHER _____

ATTACHMENT 3

(Continued)

Tank 15

PCB Wipe Sample Results



December 28, 1992

Mr. Russell Killebrew
Woodward-Clyde Consultants
2822 O'Neal Lane
Baton Rouge, LA 70816

Dear Mr. Killebrew:

Enclosed are the results for the samples received at Enseco-Rocky Mountain Analytical Laboratory on December 19, 1992, from the Denham Springs, Louisiana site.

Holding times for this matrix are not stated in SW-846.

Samples spiked with PCBs were not analyzed with this batch of samples.

All samples were analyzed at the dilutions stated in Enseco SOP #LM-RMA-4025 Section 7.6.1.

These results are reported on an "as received" basis.

The recovery of the blank spike is 100% which is inside the 70-130% control limits as stated in Enseco SOP #LM-RMA-4025 Section 8.7.2.

Analytes of interest were not detected above the reporting limits in the method blank associated with these samples.

Instrument calibration was within the 25% RSD limit established in Enseco SOP #LM-RMA-4025 Section 7.5.

All samples were received intact at 1.6°C.

Please call if you have any questions.

Sincerely,



Joe Aten
Pipeline Associate

JA/nep
Enclosures
RMAL #026857
Enseco Incorporated
4955 Yarrow Street
Arvada, Colorado 80002
303/421-6611 Fax: 303/431-7171

SAMPLE DESCRIPTION INFORMATION
for
Woodward Clyde Consultants

Lab ID	Client ID	Matrix	Sampled Date	Time	Received Date
026857-0001-SA	W099-T15-24	WIPE	18 DEC 92	15:02	19 DEC 92
026857-0002-SA	W100-T15-25	WIPE	18 DEC 92	15:03	19 DEC 92
026857-0003-SA	W101-T15-08	WIPE	18 DEC 92	15:06	19 DEC 92
026857-0004-SA	W102-T15-15	WIPE	18 DEC 92	15:08	19 DEC 92
026857-0005-SA	W103-T15-09	WIPE	18 DEC 92	15:13	19 DEC 92
026857-0006-SA	W104-T15-10	WIPE	18 DEC 92	15:18	19 DEC 92
026857-0007-SA	W105-T15-14	WIPE	18 DEC 92	15:22	19 DEC 92
026857-0008-SA	W106-T15-11	WIPE	18 DEC 92	15:26	19 DEC 92
026857-0009-SA	W107-T15-12	WIPE	18 DEC 92	15:29	19 DEC 92
026857-0010-SA	W108-T15-13	WIPE	18 DEC 92	15:32	19 DEC 92
026857-0011-SA	W109-T15-16	WIPE	18 DEC 92	15:35	19 DEC 92
026857-0012-SB		WIPE	21 DEC 92		19 DEC 92
026857-0013-MB		WIPE	21 DEC 92		19 DEC 92

Summary of Sample Chronology
for
Woodward Clyde Consultants

Sample Description	W099-T15-24	W100-T15-25	W101-T15-08	W102-T15-15	W103-T15-09
Lab Id	026857-0001-SA	026857-0002-SA	026857-0003-SA	026857-0004-SA	026857-0005-SA

Sample Chronology

Sample Date	18 DEC 92				
Received Date	19 DEC 92				
Login Date	19 DEC 92				
Extraction Date	21 DEC 92				
Analysis Date	22 DEC 92				
First Report Date	26 DEC 92				
Extracted By	JBRADY	JBRADY	JBRADY	JBRADY	JBRADY
Analyzed By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Released By	JTOLLE	JTOLLE	JTOLLE	JTOLLE	JTOLLE
Dilution Factor	1.000000	1.000000	1.000000	1.000000	1.000000

Sample Description	W104-T15-10	W105-T15-14	W106-T15-11	W107-T15-12	W108-T15-13
Lab Id	026857-0006-SA	026857-0007-SA	026857-0008-SA	026857-0009-SA	026857-0010-SA

Sample Chronology

Sample Date	18 DEC 92				
Received Date	19 DEC 92				
Login Date	19 DEC 92				
Extraction Date	21 DEC 92				
Analysis Date	22 DEC 92				
First Report Date	26 DEC 92				
Extracted By	JBRADY	JBRADY	JBRADY	JBRADY	JBRADY
Analyzed By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Released By	JTOLLE	JTOLLE	JTOLLE	JTOLLE	JTOLLE
Dilution Factor	1.000000	1.000000	1.000000	1.000000	1.000000

NA = Not Applicable

Summary of Sample Chronology
for
Woodward Clyde Consultants

Sample Description W109-T15-16

Lab Id 026857-0011-SA

Sample Chronology

Sample Date	18 DEC 92
Received Date	19 DEC 92
Login Date	19 DEC 92
Extraction Date	21 DEC 92
Analysis Date	22 DEC 92
First Report Date	26 DEC 92
Extracted By	JBRADY
Analyzed By	DHARDING
Released By	JTOLLE
Dilution Factor	1.000000

NA = Not Applicable

Summary of Sample Chronology
for
Woodward Clyde Consultants

Method Blank Blank Spfke

Sample Description

Lab Id 026857-0013-MB 026857-0012-SB

Sample Chronology

Sample Date	21 DEC 92	21 DEC 92
Received Date	19 DEC 92	19 DEC 92
Login Date	19 DEC 92	19 DEC 92
Extraction Date	21 DEC 92	21 DEC 92
Analysis Date	22 DEC 92	22 DEC 92
First Report Date	26 DEC 92	26 DEC 92
Extracted By	JBRADY	JBRADY
Analyzed By	DHARDING	DHARDING
Released By	JTOLLE	JTOLLE
Dilution Factor	1.000000	1.000000

NA = Not Applicable

Summary of Results for PCBs
for
Woodward Clyde Consultants

Sample Description W099-T15-24 W100-T15-25 W101-T15-08 W102-T15-15 W103-T15-09

Lab Id 026857-0001-SA 026857-0002-SA 026857-0003-SA 026857-0004-SA 026857-0005-SA

Analyte

Aroclor 1016	1.0 U				
Aroclor 1221	1.0 U				
Aroclor 1232	1.0 U				
Aroclor 1242	1.0 U				
Aroclor 1248	1.0 U				
Aroclor 1254	1.0 U				
Aroclor 1260	1.0 U				

Sample Description W104-T15-10 W105-T15-14 W106-T15-11 W107-T15-12 W108-T15-13

Lab Id 026857-0006-SA 026857-0007-SA 026857-0008-SA 026857-0009-SA 026857-0010-SA

Analyte

Aroclor 1016	1.0 U				
Aroclor 1221	1.0 U				
Aroclor 1232	1.0 U				
Aroclor 1242	1.0 U				
Aroclor 1248	1.0 U				
Aroclor 1254	1.0 U				
Aroclor 1260	1.0 U				

U - Not Detected NA - Not Applicable

Report Date 26 DEC 92 Reported by Dustin Harding Reviewed by Jody Tolle

Aroclor results reported in concentration units of ug/wipe on an as received basis.

Summary of Results for PCBs
for
Woodward Clyde Consultants

Sample Description W109-T15-16

Lab Id 026857-0011-SA

Analyte

Aroclor 1016	1.0 U
Aroclor 1221	1.0 U
Aroclor 1232	1.0 U
Aroclor 1242	1.0 U
Aroclor 1248	1.0 U
Aroclor 1254	1.0 U
Aroclor 1260	1.0 U

U - Not Detected

NA - Not Applicable

Report Date 26 DEC 92 Reported by Dustin Harding Reviewed by Jody Tolle

Aroclor results reported in concentration units of ug/wipe on an as received basis.

QUALITY CONTROL REPORT

Woodward Clyde Consultants No. 026857

Blank Spike Analysis - Samples: 0012SB

Analyte	Concentration ug/wipe		%Recovery
	Blank Spike	Spiked SB	SB
Aroclor 1254	20.0	20.0	100
Advisory QC Limits for % Recovery: 70-130			

- U = Not Detected.
- NC = Not Calculated; See Discussion.
- NA = Not Applicable.
- * = Value Outside Advisory QC Limits.

QUALITY CONTROL REPORT

Woodward Clyde Consultants No. 026857

Blank Analysis

Analyte	Concentration	
	Method	
	Blank	
		ug/wipe
Aroclor 1016		1.0 U
Aroclor 1221		1.0 U
Aroclor 1232		1.0 U
Aroclor 1242		1.0 U
Aroclor 1248		1.0 U
Aroclor 1254		1.0 U
Aroclor 1260		1.0 U

U = Not Detected.
NC = Not Calculated; See Discussion.
NA = Not Applicable.
* = Value Outside Advisory QC Limits.

QTPC3 SAMPLE RECEIPT CHECKLIST

PROJECT(s): 26856, 26857 CLIENT: UC SITE: DENHAM SPRG

NUMBER OF SAMPLES RECEIVED:

SOIL(s): _____ WIPE(s): 26 WATER(s): _____
OTHER(specify): _____

1. Custody Seal(s) present not present on outer package.
 unbroken broken

2. Sample temperature ambient. chilled to 1.6 C

3. Samples were received intact.
 broken. leaking.

Samples affected: _____

4. Chain of Custody present. not present.
 matches sample labels. doesn't match labels.

Anomalies: _____

Was client contacted? yes no Date: _____ Init. _____

5. Custody Seals present not present on samples.
 unbroken broken

6. Radiation checked by Sample Control? yes

7. Comments: _____

Received by *[Signature]* Date 12-19-92

CHAIN - OF - CUSTODY RECORD

SAMPLE NO.	MATRIX	YR: 92 DATE MM/DD	TIME	SAMPLE DEPTH		STATION LOCATION	TOTAL NO. CONTAINERS	PCB/72					
				FROM	TO								
W1099-T15-24	Q1SA	WI	12/18	1502	-	-	Tank 15	1	✓				
W100-T15-25	Q2SA			1503									
W101-T15-08	Q3SA			1506									
W102-T15-15	Q4SA			1508									
W103-T15-09	Q5SA			1513									
W104-T15-10	Q6SA			1518									
W105-T15-14	Q7SA			1522									
W106-T15-11	Q8SA			1526									
W107-T15-12	Q9SA			1529									
W108-T15-13	Q10SA			1532									
W109-T15-16	Q11SA			1535									

SAMPLE COLLECTION:

PROJECT NO. AND NAME 92B059C-D Combustion Inc.
 LOCATION OF SAMPLE: Combustion Inc. Denham Springs, Louisiana
 TEAM LEADER: William R. Hundt TELEPHONE: (504) 751-1873
 COMPANY NAME: Woodward-Clyde Consultants (WCC)
 ADDRESS: 2822 O'Neal Lane Baton Rouge, Louisiana
 WITNESS: _____ COMPANY NAME: _____

FIELD INFORMATION:

TYPES OF SAMPLES: LIQUID (L) FISH (FI) SLUDGE (SL) SOIL (SO)
 (MATRIX) WIPE (W) SEDIMENT (SE) OTHER (SPECIFY) _____

FIELD NOTES: _____
 TRANSPORTER: Federal Express AIRBILL/INVOICE: 2961374345 DESTINATION: Enseco, RMAI
4955 Yarrow Street Arvada, CO 80002

SAMPLE TRANSFER (Original must be retained with sample at all times) 303-421-6611

	RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1	NAME: <u>William R. Hundt</u> COMPANY: <u>WCC</u>	<u>18 DEC 92</u> <u>1600</u>	<u>William R. Hundt</u> <u>TEMP 1.6°C</u>	<u>12-19-92 0900</u>
2	NAME: COMPANY:			
3	NAME: COMPANY:			

TERMINATION OF CHAIN-OF-CUSTODY:

AUTHORIZED BY: _____ DATE: _____ TIME: _____
 COMPANY NAME: _____
 SAMPLE DISPOSITION: STORAGE _____ DISPOSAL _____ OTHER _____

QUALITY CONTROL REPORT

Woodward Clyde Consultants No. 026834

Blank Spike Analysis - Samples: 0021SB

Analyte	<u>Concentration ug/wipe</u>		<u>%Recovery</u>
	Blank Spike	Spiked SB	SB
Aroclor 1254	16.4	20.0	82
Advisory QC Limits for % Recovery: 70-130			

- U = Not Detected.
- NC = Not Calculated; See Discussion.
- NA = Not Applicable.
- * = Value Outside Advisory QC Limits.

QUALITY CONTROL REPORT

Woodward Clyde Consultants No. 026834

Blank Analysis

Analyte	Method	Concentration
	Blank	
		ug/wipe
Aroclor 1016		1.0 U
Aroclor 1221		1.0 U
Aroclor 1232		1.0 U
Aroclor 1242		1.0 U
Aroclor 1248		1.0 U
Aroclor 1254		1.0 U
Aroclor 1260		1.0 U

U = Not Detected.
NC = Not Calculated; See Discussion.
NA = Not Applicable.
* = Value Outside Advisory QC Limits.

QTPC3 SAMPLE RECEIPT CHECKLIST

PROJECT(s): 26833
26834
26835 CLIENT: COMBUSTION LAB SITE: DENHAM SPRINGS

NUMBER OF SAMPLES RECEIVED:

SOIL(s): _____ WIPE(s): 55 WATER(s): _____

OTHER(specify): _____

1. Custody Seal(s) present not present on outer package.
 unbroken broken

2. Sample temperature ambient. chilled to 2.4°C

3. Samples were received intact.
 broken. leaking.

Samples affected: _____

4. Chain of Custody present. not present.
 matches sample labels. doesn't match labels.

Anomalies: 26833 - SAMPLE W039* - T19 - 10 MARKED W040 - T17 - 10 ON CAN, TIME MATCHES.
26834 - SAMPLE W055* - T17 - 26 MARKED W056 - T17 - 26 ON CAN, TIME MATCHES.

26835 - SAMPLE W070* - T14 - 14 MARKED W069 - T14 - 14 ON CAN, TIME MATCHES
26835 - SAMPLE W074* - T14 - 18 NOT LABELED OLD CAN, TIME MATCHES 26835 - W079 - T14 - 23 HAS NO TIME MARKED ON CAN

Was client contacted? yes no Date: 12/21/02 Init. TV

* = correct label.

5. Custody Seals present not present on samples.
 unbroken broken

6. Radiation checked by Sample Control? yes

7. Comments: _____

Received by Jerry Bealy Date 12/18/02



CHAIN - OF - CUSTODY RECORD

SAMPLE NO.	MATRIX	YR: 02 DATE MM/DD	TIME	SAMPLE DEPTH		STATION LOCATION	TOTAL NO. CONTAINERS	RCR#			
				FROM	TO						
W044-T12-15	01	12/12	1245	-	-	Tank 12	1	✓			
W045-T12-16			1247								
W046-T12-17			1248								
W047-T12-18			1250								
W048-T12-19			1252								
W049-T12-20	01		1254								
W050-T12-21	02		1254								
W051-T12-22	03		1300								
W052-T12-23	04		1305								
W053-T12-24	05		1306								
W054-T12-25	06		1308								
W055-T12-26	07		1309								
W056-T12-27	08		1310								
W057-T14-01	09		1432			Tank 14					
W058-T14-02	10		1440								

SAMPLE COLLECTION:

PROJECT NO. AND NAME 92B059C-D Combustion Inc.
 LOCATION OF SAMPLE: Combustion Inc. Denham Springs, Louisiana
 TEAM LEADER: William R Hurd TELEPHONE: (504) 751-1873
 COMPANY NAME: Woodward-Clyde Consultants (WCC)
 ADDRESS: 2822 O'Neal Lane Baton Rouge, Louisiana
 WITNESS: _____ COMPANY NAME: _____

FIELD INFORMATION:

TYPES OF SAMPLES: LIQUID (L) FISH (FI) SLUDGE (SL) SOIL (SO)
 (MATRIX) WIPE (WI) SEDIMENT (SE) OTHER (SPECIFY) _____
 FIELD NOTES: Please Water Sample at a frequency of 20 samples per hour
 TRANSPORTER: Federal Express AIRBILL/INVOICE: 2961374334 DESTINATION: Ensero-RMAL
4955 Yarrow Street Arvada, CO 80002

SAMPLE TRANSFER (Original must be retained with sample at all times) 303-421-6611

	RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1	NAME: <u>William R Hurd</u> COMPANY: <u>WCC</u>	<u>17 DEC 91</u> <u>1600</u>	<u>John Brady</u> <u>26834</u>	<u>12/14/91/0330</u> <u>7400</u>
2	NAME: _____ COMPANY: _____			
3	NAME: _____ COMPANY: _____			

TERMINATION OF CHAIN-OF-CUSTODY:

AUTHORIZED BY: _____ DATE: _____ TIME: _____
 COMPANY NAME: _____
 SAMPLE DISPOSITION: STORAGE _____ DISPOSAL _____ OTHER _____



CHAIN - OF - CUSTODY RECORD

SAMPLE NO.	MATRIX	YR:92 DATE MM/DD	TIME	SAMPLE DEPTH		STATION LOCATION	TOTAL NO. CONTAINERS	PCP/72		
				FROM	TO					
W059-T14-03	11	WI	12/12	1443	-	-	Trawl 14	1	✓	
W060-T14-04	12			1445						
W061-T14-05	13			1443						
W062-T14-06	14			1442						
W063-T14-07	15			1450						
W064-T14-08	16			1452						
W065-T14-09	17			1454						
W066-T14-10	18			1456						
W067-T14-11	19			1459						
W068-T14-12	20			1501						
W069-T14-13				1502						
W070-T14-14				1504						
W071-T14-15				1505						
W072-T14-16				1507						
W073-T14-17				1508						

SAMPLE COLLECTION:

PROJECT NO. AND NAME 92B059C-D Combustion Inc.
 LOCATION OF SAMPLE: Combustion Inc. Denham Springs, Louisiana
 TEAM LEADER: William R. Hurdle TELEPHONE: (504) 751-1873
 COMPANY NAME: Woodward-Clyde Consultants (WCC)
 ADDRESS: 2822 O'Neal Lane Baton Rouge, Louisiana
 WITNESS: _____ COMPANY NAME: _____

FIELD INFORMATION:

TYPES OF SAMPLES: LIQUID (LJ) FISH (FI) SLUDGE (SL) SOIL (SO)
 (MATRIX) WIPE (WI) SEDIMENT (SE) OTHER (SPECIFY) _____
 FIELD NOTES: Please label sample at frequency of 20 sample in batch
 TRANSPORTER: Federal Express AIRBILL/INVOICE: 1911224334 DESTINATION: Enseco, RMAL
4955 Yarrow Street Arvada, CO 80002

SAMPLE TRANSFER (Original must be retained with sample at all times) 303-421-6611

	RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1	NAME: <u>William R. Hurdle</u> COMPANY: <u>WCC</u>	<u>17 DEC 92</u> <u>1600</u>	<u>John Hill</u> <u>RMAL</u> <u>26834</u>	<u>12/18/92</u> <u>1930</u> <u>2:42</u>
2	NAME: _____ COMPANY: _____			
3	NAME: _____ COMPANY: _____			

TERMINATION OF CHAIN-OF-CUSTODY:

AUTHORIZED BY: _____ DATE: _____ TIME: _____
 COMPANY NAME: _____
 SAMPLE DISPOSITION: STORAGE _____ DISPOSAL _____ OTHER _____



December 23, 1992

Mr. Russell Killebrew
Woodward-Clyde Consultants
2822 O'Neal Lane
Baton Rouge, Louisiana 70816

Dear Mr. Killebrew:

Enclosed are the results for the samples received at Enseco-Rocky Mountain Analytical Laboratory on December 19, 1992, from the Denham Springs, Louisiana site.

Holding times for this matrix are not stated in SW-846.

Samples spiked with PCBs were not analyzed with this batch of samples.

All samples were analyzed at the dilutions stated in Enseco SOP #LM-RMA-4025 Section 7.6.1.

These results are reported on an "as received" basis.

The recovery of the blank spike is 93% which is inside the 70-130% control limits as stated in Enseco SOP #LM-RMA-4025 Section 8.7.2.

Analytes of interest were not detected above the reporting limits in the method blank associated with these samples.

Instrument calibration was within the 25% RSD limit established in Enseco SOP #LM-RMA-4025 Section 7.5.

All samples were received intact at 1.6°C.

Please call if you have any questions.

Sincerely,



Joe Ater
Pipeline Associate

JA/nep
Enclosures
RMAL #026856

Enseco Incorporated
4955 Yarrow Street
Arvada, Colorado 80002
303/421-6611 Fax: 303/431-7171

SAMPLE DESCRIPTION INFORMATION
for
Woodward Clyde Consultants

Lab ID	Client ID	Matrix	Sampled		Received Date
			Date	Time	
026856-0001-SA	W084-T15-EB	WIPE	18 DEC 92	14:36	19 DEC 92
026856-0002-SA	W085-T15-01	WIPE	18 DEC 92	14:39	19 DEC 92
026856-0003-SA	W086-T15-02	WIPE	18 DEC 92	14:41	19 DEC 92
026856-0004-SA	W087-T15-03	WIPE	18 DEC 92	14:43	19 DEC 92
026856-0005-SA	W088-T15-04	WIPE	18 DEC 92	14:45	19 DEC 92
026856-0006-SA	W089-T15-05	WIPE	18 DEC 92	14:46	19 DEC 92
026856-0007-SA	W090-T15-06	WIPE	18 DEC 92	14:47	19 DEC 92
026856-0008-SA	W091-T15-07	WIPE	18 DEC 92	14:49	19 DEC 92
026856-0009-SA	W092-T15-17	WIPE	18 DEC 92	14:50	19 DEC 92
026856-0010-SA	W093-T15-18	WIPE	18 DEC 92	14:52	19 DEC 92
026856-0011-SA	W094-T15-19	WIPE	18 DEC 92	14:53	19 DEC 92
026856-0012-SA	W095-T15-20	WIPE	18 DEC 92	14:55	19 DEC 92
026856-0013-SA	W096-T15-21	WIPE	18 DEC 92	14:57	19 DEC 92
026856-0014-SA	W097-T15-22	WIPE	18 DEC 92	14:58	19 DEC 92
026856-0015-SA	W098-T15-23	WIPE	18 DEC 92	15:00	19 DEC 92
026856-0016-SB	T15	WIPE	21 DEC 92		21 DEC 92
026856-0017-MB	T15	WIPE	21 DEC 92		21 DEC 92

Summary of Sample Chronology
for
Woodward Clyde Consultants

Sample Description	W084-T15-EB	W085-T15-01	W086-T15-02	W087-T15-03	W088-T15-04
Lab Id	026856-0001-SA	026856-0002-SA	026856-0003-SA	026856-0004-SA	026856-0005-SA
<u>Sample Chronology</u>					
Sample Date	18 DEC 92				
Received Date	19 DEC 92				
Login Date	19 DEC 92				
Extraction Date	21 DEC 92				
Analysis Date	21 DEC 92				
First Report Date	22 DEC 92				
Extracted By	JBRADY	JBRADY	JBRADY	JBRADY	JBRADY
Analyzed By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Released By	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY
Dilution Factor	1.000000	1.000000	1.000000	1.000000	1.000000

Sample Description	W089-T15-05	W090-T15-06	W091-T15-07	W092-T15-17	W093-T15-18
Lab Id	026856-0006-SA	026856-0007-SA	026856-0008-SA	026856-0009-SA	026856-0010-SA
<u>Sample Chronology</u>					
Sample Date	18 DEC 92				
Received Date	19 DEC 92				
Login Date	19 DEC 92				
Extraction Date	21 DEC 92				
Analysis Date	21 DEC 92				
First Report Date	22 DEC 92				
Extracted By	JBRADY	JBRADY	JBRADY	JBRADY	JBRADY
Analyzed By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Released By	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY
Dilution Factor	1.000000	1.000000	1.000000	1.000000	1.000000

NA = Not Applicable

Summary of Sample Chronology
for
Woodward Clyde Consultants

Sample Description	W094-T15-19	W095-T15-20	W096-T15-21	W097-T15-22	W098-T15-23
Lab Id	026856-0011-SA	026856-0012-SA	026856-0013-SA	026856-0014-SA	026856-0015-SA

Sample Chronology

Sample Date	18 DEC 92				
Received Date	19 DEC 92				
Login Date	19 DEC 92				
Extraction Date	21 DEC 92				
Analysis Date	22 DEC 92				
First Report Date	22 DEC 92				
Extracted By	JBRADY	JBRADY	JBRADY	JBRADY	JBRADY
Analyzed By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Released By	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY
Dilution Factor	1.000000	1.000000	1.000000	1.000000	1.000000

NA = Not Applicable

Summary of Sample Chronology
for
Woodward Clyde Consultants

	Method Blank	Blank Spike
Sample Description	T15	T15
Lab Id	026856-0017-MB	026856-0016-SB

Sample Chronology

Sample Date	21 DEC 92	21 DEC 92
Received Date	21 DEC 92	21 DEC 92
Login Date	21 DEC 92	21 DEC 92
Extraction Date	21 DEC 92	21 DEC 92
Analysis Date	22 DEC 92	22 DEC 92
First Report Date	22 DEC 92	22 DEC 92
Extracted By	JBRADY	JBRADY
Analyzed By	DHARDING	DHARDING
Released By	MPIRKEY	MPIRKEY
Dilution Factor	1.000000	1.000000

NA = Not Applicable

Summary of Results for PCBs
for
Woodward Clyde Consultants

Sample Description	W084-T15-EB	W085-T15-01	W086-T15-02	W087-T15-03	W088-T15-04
Lab Id	026856-0001-SA	026856-0002-SA	026856-0003-SA	026856-0004-SA	026856-0005-SA
<u>Analyte</u>					
Aroclor 1016	1.0 U				
Aroclor 1221	1.0 U				
Aroclor 1232	1.0 U				
Aroclor 1242	1.0 U				
Aroclor 1248	1.0 U				
Aroclor 1254	1.0 U				
Aroclor 1260	1.0 U				

Sample Description	W089-T15-05	W090-T15-06	W091-T15-07	W092-T15-17	W093-T15-18
Lab Id	026856-0006-SA	026856-0007-SA	026856-0008-SA	026856-0009-SA	026856-0010-SA
<u>Analyte</u>					
Aroclor 1016	1.0 U				
Aroclor 1221	1.0 U				
Aroclor 1232	1.0 U				
Aroclor 1242	1.0 U				
Aroclor 1248	1.0 U				
Aroclor 1254	1.0 U				
Aroclor 1260	1.0 U				

U - Not Detected NA - Not Applicable

Report Date 22 DEC 92 Reported by Dustin Harding Reviewed by Michael Pirkey

Aroclor results reported in concentration units of ug/wipe on an as received basis.

Summary of Results for PCBs
for
Woodward Clyde Consultants

Sample Description	W094-T15-19	W095-T15-20	W096-T15-21	W097-T15-22	W098-T16-23
Lab Id	026856-0011-SA	026856-0012-SA	026856-0013-SA	026856-0014-SA	026856-0015-SA
<u>Analyte</u>					
Aroclor 1016	1.0 U				
Aroclor 1221	1.0 U				
Aroclor 1232	1.0 U				
Aroclor 1242	1.0 U				
Aroclor 1248	1.0 U				
Aroclor 1254	1.0 U				
Aroclor 1260	1.0 U				

U - Not Detected

NA - Not Applicable

Report Date 22 DEC 92 Reported by Dustin Harding Reviewed by Michael Pirkey

Aroclor results reported in concentration units of ug/wipe on an as received basis.

QUALITY CONTROL REPORT

Woodward Clyde Consultants No. 026856

Blank Spike Analysis - Samples: 0016SB

Analyte	Concentration ug/wipe		%Recovery
	Blank Spike	Spiked SB	SB
Aroclor 1254	18.6	20.0	93
Advisory QC Limits for % Recovery: 70-130			

U = Not Detected.
NC = Not Calculated; See Discussion.
NA = Not Applicable.
* = Value Outside Advisory QC Limits.

QUALITY CONTROL REPORT

Woodward Clyde Consultants No. 026856

Blank Analysis

Analyte	Concentration	
	Method	Blank
	T15	
	ug/wipe	
Aroclor 1016	1.0	U
Aroclor 1221	1.0	U
Aroclor 1232	1.0	U
Aroclor 1242	1.0	U
Aroclor 1248	1.0	U
Aroclor 1254	1.0	U
Aroclor 1260	1.0	U

U = Not Detected.
NC = Not Calculated; See Discussion.
NA = Not Applicable.
* = Value Outside Advisory QC Limits.

QTPCB SAMPLE RECEIPT CHECKLIST

PROJECT(s): 26856, 26857 CLIENT: UIC SITE: DENHAM SPRG

NUMBER OF SAMPLES RECEIVED:

SOIL(s): _____ WIPE(s): 26 WATER(s): _____

OTHER(specify): _____

1. Custody Seal(s) present not present on outer package.
 unbroken broken

2. Sample temperature ambient. chilled to 1.6 C

3. Samples were received intact.
 broken. leaking.

Samples affected: _____

4. Chain of Custody present. not present.
 matches sample labels. doesn't match labels.

Anomalies: _____

Was client contacted? yes no Date: _____ Init. _____

5. Custody Seals present not present on samples.
 unbroken broken

6. Radiation checked by Sample Control? yes

7. Comments: _____

Received by *[Signature]* Date 12-19-92



CHAIN - OF - CUSTODY RECORD

SAMPLE NO.	MATRIX	YR: 92 DATE MM/DD	TIME	SAMPLE DEPTH		STATION LOCATION	TOTAL NO. CONTAINERS	PCD/72			
				FROM	TO						
W084-T15-E1	Q1SA	WI 12/18	1436	-	-	Tank 15	1	✓			
W085-T15-01	Q2SA		1439								
W086-T15-02	Q3SA		1441								
W087-T15-03	Q4SA		1443								
W088-T15-04	Q5SA		1445								
W089-T15-05	Q6SA		1446								
W090-T15-06	Q7SA		1447								
W091-T15-07	Q8SA		1449								
W092-T15-17	Q9SA		1450								
W093-T15-18	10SA		1452								
W094-T15-19	11SA		1453								
W095-T15-20	12SA		1455								
W096-T15-21	13SA		1457								
W097-T15-22	14SA		1458								
W098-T15-23	15SA		1500								

SAMPLE COLLECTION:

PROJECT NO. AND NAME 92B059C-D Combustion Inc.
 LOCATION OF SAMPLE: Combustion Inc. Denham Springs, Louisiana
 TEAM LEADER: William Hurdle TELEPHONE: (504) 751-1873
 COMPANY NAME: Woodward-Clyde Consultants (WCC)
 ADDRESS: 2822 O'Neal Lane Baton Rouge, Louisiana
 WITNESS: _____ COMPANY NAME: _____

FIELD INFORMATION:

TYPES OF SAMPLES: LIQUID (L) FISH (FI) SLUDGE (SL) SOIL (SO)
 (MATRIX) WIPE (W) SEDIMENT (SE) OTHER (SPECIFY) _____
 FIELD NOTES: _____
 TRANSPORTER: FedEx Express AIRBILL/INVOICE: 2961324345 DESTINATION: Enseco-RMAI
4955 Yarrow Street Arvada, CO 80002

SAMPLE TRANSFER (Original must be retained with sample at all times) 303-421-6611

	RELINQUISHED BY	DATE/TIME	() RECEIVED BY	DATE/TIME
1	NAME: <u>William R. Hurdle</u> COMPANY: <u>WCC</u>	<u>18 DEC 92</u> <u>1600</u>	<u>William Hurdle</u> <u>TEMP 1.6C</u>	<u>12/19/92 0940</u>
2	NAME: COMPANY:			
3	NAME: COMPANY:			

TERMINATION OF CHAIN-OF-CUSTODY:

AUTHORIZED BY: _____ DATE: _____ TIME: _____
 COMPANY NAME: _____
 SAMPLE DISPOSITION: STORAGE _____ DISPOSAL _____ OTHER _____

1451

**ATTACHMENT 3
(Continued)**

**Tank 18
PCB Wipe Sample Results**



December 15, 1992

Mr. Russell Killebrew
Woodward-Clyde Consultants
2822 O'Neal Lane
Baton Rouge, LA 70816

Dear Mr. Killebrew:

Enclosed are the results for the 15 samples received at Enseco-Rocky Mountain Analytical Laboratory on December 10, 1992, from the Denham Springs, Louisiana site.

Holding times for this matrix are not stated in SW-846.

Samples spiked with PCBs were not analyzed with this batch of samples.

All samples were analyzed at the dilutions stated in Enseco SOP #LM-RMA-4025 Section 7.6.1.

Analytes of interest were not detected above the reporting limits in the field blank, sample 026681-0001-~~3~~AFB

These results are reported on an "as received" basis.

The recovery of the blank spike is 84% which is inside the 70-130% control limits as stated in Enseco SOP #LM-RMA-4025 Section 8.7.2.

Analytes of interest were not detected above the reporting limits in the method blank associated with these samples.

Instrument calibration was within the 25% RSD limit established in Enseco SOP #LM-RMA-4025 Section 7.5.

All samples were received intact at 2.4°C.

Please call if you have any questions.

Sincerely,
Don Vieaux
Don Vieaux
Pipeline Associate

DV/heg
Enclosures

RMAL #026681
Enseco Incorporated
4955 Yarrow Street
Arvada, Colorado 80002
303/421-6611 Fax: 303/431-7171

Summary of Sample Chronology
for
Woodward Clyde Consultants

Sample Description W002-T18-01 W003-T18-02 W004-T18-03 W005-T18-04 W006-T18-05

Lab Id 026681-0002-SA 026681-0003-SA 026681-0004-SA 026681-0005-SA 026681-0006-SA

Sample Chronology

Sample Date	09 DEC 92				
Received Date	10 DEC 92				
Login Date	10 DEC 92				
Extraction Date	10 DEC 92				
Analysis Date	10 DEC 92				
First Report Date	11 DEC 92				
Extracted By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Analyzed By	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY
Released By	DVIEAUX	DVIEAUX	DVIEAUX	DVIEAUX	DVIEAUX
Dilution Factor	1.000000	1.000000	1.000000	1.000000	1.000000

Sample Description W007-T18-06 W008-T18-07 W009-T18-08 W010-T18-09 W011-T18-10

Lab Id 026681-0007-SA 026681-0008-SA 026681-0009-SA 026681-0010-SA 026681-0011-SA

Sample Chronology

Sample Date	09 DEC 92				
Received Date	10 DEC 92				
Login Date	10 DEC 92				
Extraction Date	10 DEC 92				
Analysis Date	10 DEC 92				
First Report Date	11 DEC 92				
Extracted By	DHARDING	DHARDING	DHARDING	DHARDING	DHARDING
Analyzed By	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY
Released By	DVIEAUX	DVIEAUX	DVIEAUX	DVIEAUX	DVIEAUX
Dilution Factor	1.000000	1.000000	1.000000	1.000000	1.000000

NA = Not Applicable

Summary of Results for PCBs
for
Woodward Clyde Consultants

Sample Description	W002-T18-01	W003-T18-02	W004-T18-03	W005-T18-04	W006-T18-05
Lab Id	026681-0002-SA	026681-0003-SA	026681-0004-SA	026681-0005-SA	026681-0006-SA
<u>Analyte</u>					
Aroclor 1016	1.0 U				
Aroclor 1221	1.0 U				
Aroclor 1232	1.0 U				
Aroclor 1242	1.0 U				
Aroclor 1248	1.0 U				
Aroclor 1254	1.0 U				
Aroclor 1260	1.0 U				

Sample Description	W007-T18-06	W008-T18-07	W009-T18-08	W010-T18-09	W011-T18-10
Lab Id	026681-0007-SA	026681-0008-SA	026681-0009-SA	026681-0010-SA	026681-0011-SA
<u>Analyte</u>					
Aroclor 1016	1.0 U				
Aroclor 1221	1.0 U				
Aroclor 1232	1.0 U				
Aroclor 1242	1.0 U				
Aroclor 1248	1.0 U				
Aroclor 1254	1.0 U				
Aroclor 1260	1.0 U				

U - Not Detected

NA - Not Applicable

Report Date 11 DEC 92 Reported by Michael Pirkey Reviewed by Don Vieaux

Aroclor results reported in concentration units of ug/wipe on an as received basis.

QUALITY CONTROL REPORT

Woodward Clyde Consultants No. 026681

Blank Spike Analysis - Samples: 0016SB

Analyte	Concentration ug/wipe		%Recovery
	Blank Spike	Spiked SB	SB
Aroclor 1254	16.7	20.0	84

Advisory QC Limits for % Recovery: 70-130

- U = Not Detected.
- NC = Not Calculated; See Discussion.
- NA = Not Applicable.
- * = Value Outside Advisory QC Limits.

SAMPLE DESCRIPTION INFORMATION
for
Woodward Clyde Consultants

Lab ID	Client ID	Matrix	Sampled		Received Date
			Date	Time	
026681-0001-FB	W001-T18-EB	WIPE	09 DEC 92	11:40	10 DEC 92
026681-0002-SA	W002-T18-01	WIPE	09 DEC 92	11:47	10 DEC 92
026681-0003-SA	W003-T18-02	WIPE	09 DEC 92	11:50	10 DEC 92
026681-0004-SA	W004-T18-03	WIPE	09 DEC 92	11:53	10 DEC 92
026681-0005-SA	W005-T18-04	WIPE	09 DEC 92	11:54	10 DEC 92
026681-0006-SA	W006-T18-05	WIPE	09 DEC 92	11:56	10 DEC 92
026681-0007-SA	W007-T18-06	WIPE	09 DEC 92	11:59	10 DEC 92
026681-0008-SA	W008-T18-07	WIPE	09 DEC 92	12:02	10 DEC 92
026681-0009-SA	W009-T18-08	WIPE	09 DEC 92	12:03	10 DEC 92
026681-0010-SA	W010-T18-09	WIPE	09 DEC 92	12:07	10 DEC 92
026681-0011-SA	W011-T18-10	WIPE	09 DEC 92	12:08	10 DEC 92
026681-0012-SA	W012-T18-11	WIPE	09 DEC 92	12:10	10 DEC 92
026681-0013-SA	W013-T18-12	WIPE	09 DEC 92	12:12	10 DEC 92
026681-0014-SA	W014-T18-13	WIPE	09 DEC 92	12:14	10 DEC 92
026681-0015-SA	W015-T18-14	WIPE	09 DEC 92	12:16	10 DEC 92
026681-0016-SB		WIPE	10 DEC 92		10 DEC 92
026681-0017-MB		WIPE	10 DEC 92		10 DEC 92



CHAIN - OF - CUSTODY RECORD

SAMPLE NO.	MATRIX	YR:92 DATE MM/DD	TIME	SAMPLE DEPTH		STATION LOCATION	TOTAL NO. CONTAINERS	PCB/72			
				FROM	TO						
W001-T18-EB 01	WI	12/09	1140	-	-	Tank 18	1	✓			
W002-T18-01 02	WI	12/09	1147								
W003-T18-02 02	WI		1150								
W004-T18-03 04			1153								
W005-T18-04 05			1154								
W006-T18-05 06			1156								
W007-T18-06 07			1159								
W008-T18-07 08			1202								
W009-T18-08 09			1203								
W010-T18-09 10			1207								
W011-T18-10 11			1208								
W012-T18-11 12			1210								
W013-T18-12 13			1212								
W014-T18-13 14	↓	↓	1214	↓	↓	↓	↓	↓			
W015-T18-14 15	WI	12/09	1216	-	-	Tank 18	1	✓			

SAMPLE COLLECTION:

PROJECT NO. AND NAME 92B059C-D Combustion Inc.
 LOCATION OF SAMPLE: Combustion Inc. Denham Springs, Louisiana
 TEAM LEADER: Tom Warren TELEPHONE: (504) 751-1873
 COMPANY NAME: Woodward-Clyde Consultants
 ADDRESS: 2822 O'Neal Lane Baton Rouge, Louisiana
 WITNESS: Bill Hurdle COMPANY NAME: WCC

FIELD INFORMATION:

TYPES OF SAMPLES: LIQUID (LI) FISH (FI) SLUDGE (SL) SOIL (SO)
 (MATRIX) WIPE (WI) SEDIMENT (SE) OTHER (SPECIFY) _____
 FIELD NOTES: _____
 TRANSPORTER: Fedex Express AIRBILL/INVOICE: 2961324474 DESTINATION: Enseco-EMAI
4955 Yarrow Street Arvada, CO 80002

SAMPLE TRANSFER (Original must be retained with sample at all times) 303-421-6611

	RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1	NAME: <u>Tom E. Warren</u> COMPANY: <u>WCC</u>	<u>12/9/92 1630</u>	<u>William R. Hurdle</u> <u>WCC</u>	<u>12/9/92 1630</u>
2	NAME: <u>William R. Hurdle</u> COMPANY: <u>WCC</u>	<u>12/9/92 1705</u>	<u>Michael J. ...</u> <u>WCC</u>	<u>12-10-92 08:00</u>
3	NAME: _____ COMPANY: _____			

TERMINATION OF CHAIN-OF-CUSTODY:

AUTHORIZED BY: _____ DATE: _____ TIME: _____



December 17, 1992

Ms. Amanda Sullivan
Woodward-Clyde Consultants
2822 O'Neal Lane
Baton Rouge, Louisiana 70816

Dear Ms. Sullivan:

Enclosed are the results for the nine samples received at Enseco-Rocky Mountain Analytical Laboratory on December 10, 1992, from the Denham Springs, Louisiana site.

Holding times for this matrix are not stated in SW-846.

Samples spiked with PCBs were not analyzed with this batch of samples.

All samples were analyzed at the dilutions stated in Enseco SOP #LM-RMA-4025 Section 7.6.1.

A field blank was not received with this batch of samples.

These results are reported on an "as received" basis.

The recovery of the blank spike is 90% which is inside the 70-130% control limits as stated in Enseco SOP #LM-RMA-4025 Section 8.7.2.

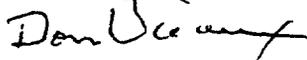
Analytes of interest were not detected above the reporting limits in the method blank associated with these samples.

Instrument calibration was within the 25% RSD limit established in Enseco SOP #LM-RMA-4025 Section 7.5.

All samples were received intact at 2.4°C.

Please call if you have any questions.

Sincerely,



Don Vieaux
Pipeline Associate

DV/nep

Enclosures
RMAL #026684

Summary of Sample Chronology
for
Woodward Clyde Consultants

Sample Description	W016-T18-15	W017-T18-16	W018-T18-17	W019-T18-18	W020-T18-19
Lab Id	026684-0001-SA	026684-0002-SA	026684-0003-SA	026684-0004-SA	026684-0005-SA
<u>Sample Chronology</u>					
Sample Date	09 DEC 92	09 DEC 92	09 DEC 92	10 DEC 92	09 DEC 92
Received Date	10 DEC 92	10 DEC 92	10 DEC 92	11 DEC 92	10 DEC 92
Login Date	10 DEC 92	10 DEC 92	10 DEC 92	11 DEC 92	10 DEC 92
Extraction Date	11 DEC 92				
Analysis Date	16 DEC 92				
First Report Date	16 DEC 92				
Extracted By	MDRAVLAND	MDRAVLAND	MDRAVLAND	MDRAVLAND	MDRAVLAND
Analyzed By	JATEN	JATEN	JATEN	JATEN	JATEN
Released By	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY
Dilution Factor	1.000000	1.000000	1.000000	1.000000	1.000000

Sample Description	W021-T18-20	W022-T18-21	W023-T18-22	W024-T18-23
Lab Id	026684-0006-SA	026684-0007-SA	026684-0008-SA	026684-0009-SA

Sample Chronology

Sample Date	09 DEC 92	09 DEC 92	09 DEC 92	09 DEC 92
Received Date	10 DEC 92	10 DEC 92	10 DEC 92	10 DEC 92
Login Date	10 DEC 92	10 DEC 92	10 DEC 92	10 DEC 92
Extraction Date	11 DEC 92	11 DEC 92	11 DEC 92	11 DEC 92
Analysis Date	16 DEC 92	16 DEC 92	16 DEC 92	16 DEC 92
First Report Date	16 DEC 92	16 DEC 92	16 DEC 92	16 DEC 92
Extracted By	MDRAVLAND	MDRAVLAND	MDRAVLAND	MDRAVLAND
Analyzed By	JATEN	JATEN	JATEN	JATEN
Released By	MPIRKEY	MPIRKEY	MPIRKEY	MPIRKEY
Dilution Factor	1.000000	1.000000	1.000000	1.000000

NA = Not Applicable

Summary of Sample Chronology
for
Woodward Clyde Consultants

	Method Blank	Blank Spike
Sample Description	W024	W024
Lab Id	026684-0011-MB	026684-0010-SB
<u>Sample Chronology</u>		
Sample Date	11 DEC 92	11 DEC 92
Received Date	11 DEC 92	11 DEC 92
Login Date	11 DEC 92	11 DEC 92
Extraction Date	11 DEC 92	11 DEC 92
Analysis Date	13 DEC 92	12 DEC 92
First Report Date	15 DEC 92	15 DEC 92
Extracted By	MDRAVLAND	MDRAVLAND
Analyzed By	MPIRKEY	MPIRKEY
Released By	DVIEAUX	DVIEAUX
Dilution Factor	1.000000	1.000000

NA = Not Applicable

QUALITY CONTROL REPORT

Woodward Clyde Consultants No. 026684

Blank Spike Analysis - Samples: 0010SB

Analyte	Concentration ug/wipe		%Recovery
	Blank Spike	Spiked SB	SB
Aroclor 1254	18.0	20.0	90
Advisory QC Limits for % Recovery: 70-130			

U = Not Detected.
NC = Not Calculated; See Discussion.
NA = Not Applicable.
* = Value Outside Advisory QC Limits.

QUALITY CONTROL REPORT

Woodward Clyde Consultants No. 026684

Blank Analysis

Analyte	Concentration	
	Method	
	Blank	
	W024	
		ug/wipe
Aroclor 1016	1.0	U
Aroclor 1221	1.0	U
Aroclor 1232	1.0	U
Aroclor 1242	1.0	U
Aroclor 1248	1.0	U
Aroclor 1254	1.0	U
Aroclor 1260	1.0	U

U = Not Detected.
NC = Not Calculated; See Discussion.
NA = Not Applicable.
* = Value Outside Advisory QC Limits.

QTPCB SAMPLE RECEIPT CHECKLIST

PROJECT(s): 26681, 26684, 26686 CLIENT: WNC SITE: Denham Springs

NUMBER OF SAMPLES RECEIVED:

SOIL(s): _____ WIPE(s): 24 WATER(s): _____
OTHER(specify): OIL 1

1. Custody Seal(s) present not present on outer package.
 unbroken broken

2. Sample temperature ambient. chilled to 24 C

3. Samples were received intact.
 broken. leaking.

Samples affected: _____

4. Chain of Custody present. not present.
 matches sample labels. doesn't match labels.

Anomalies: _____

Was client contacted? yes no Date: _____ Init. _____

5. Custody Seals present not present on samples.
 unbroken broken

6. Radiation checked by Sample Control? yes

7. Comments: _____

Received by MDRorland Date 12-10-92

ATTACHMENT 4

**TCL/TAL Results
Offsite Backfill Source**

NATX/ETC

Gulf South Environmental Laboratory, Inc.
6801 Press Drive — East Building
New Orleans, LA 70126
(504) 283-4223
FAX (504) 288-3625

**Sample Data
Summary Package**

Episode(s): LFD

SDG# 92183

Presented to:

**Woodward Clyde Consultants
2822 O'Neal Lane
Baton Rouge, LA 70816**

Presented by:

**Gulf South Environmental Laboratory
P.O. Box 26518
New Orleans, LA 70186**

December 21, 1992

Narrative

The Woodward Clyde Consultants project consisted of one (1) soil and one (1) water sample which were received by Gulf South Environmental Laboratory on November 25, 1992. These samples were logged in as Episode LFD. The samples were identified as BK1125 and TB1125.

The samples were analyzed for volatiles, semivolatiles, pesticides/PCBs, metals, and cyanide.

Manual integrations for volatile and semivolatile organics are occasionally necessary due to co-elution, interferences and/or inadequacies of the software; such integrations are indicated by the initials of the analyst and the date on the quantitation report.

Volatiles:

Sample BK1125 was analyzed according to the low level procedure. The pH of sample TB1125 was 3. No problems were encountered with these analysis.

Semivolatiles:

Sample BK1125 was analyzed according to the low level procedure; no problems were encountered with these analysis.

Pesticides/PCBs

No problems were encountered with the analyses.

Metals:

For the GFAA Z3030, the cyanide, and the mercury runs, the times reported are a representation of the average analytical process time.

Cyanide:

No problems were encountered with the analyses.

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

Shelley R. Antoine
Shelley Antoine
GC/MS Manager

12/29/1992
Date

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BK1125

Lab Name: G S E L I Contract: 92B059C-D

Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183

Matrix: (soil/water) SOIL Lab Sample ID: LFD001

Sample wt/vol: 5.00 (g/mL) G Lab File ID: VOLF001

Level: (low/med) LOW Date Received: 11/25/92

% Moisture: not dec. 16 Date Analyzed: 12/03/92

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	13	B
67-64-1	Acetone	18	B
75-15-0	Carbon Disulfide	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
540-59-0	1,2-Dichloroethene (total)	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon Tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	12	U
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U
1330-20-7	Xylene (total)	12	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BK1125

Lab Name: G S E L I Contract: 92B059C-D
Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183
Matrix: (soil/water) SOIL Lab Sample ID: LFD001
Sample wt/vol: 5.00 (g/mL) G Lab File ID: VOLFD01
Level: (low/med) LOW Date Received: 11/25/92
% Moisture: not dec. 16 Date Analyzed: 12/03/92
GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BK1125

Lab Name: G S E L I Contract: 92B059C-D

Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183

Matrix: (soil/water) SOIL Lab Sample ID: LFD001

Sample wt/vol: 30.00 (g/mL) G Lab File ID: SVLFD01

Level: (low/med) LOW Date Received: 11/25/92

% Moisture: 16 decanted: (Y/N) N Date Extracted: 12/04/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 12/07/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
108-95-2	Phenol	390	U
111-44-4	bis(2-Chloroethyl)Ether	390	U
95-57-8	2-Chlorophenol	390	U
541-73-1	1,3-Dichlorobenzene	390	U
106-46-7	1,4-Dichlorobenzene	390	U
95-50-1	1,2-Dichlorobenzene	390	U
95-48-7	2-Methylphenol	390	U
108-60-1	2,2'-oxybis(1-Chloropropane	390	U
106-44-5	4-Methylphenol	390	U
621-64-7	N-Nitroso-Di-n-Propylamine	390	U
67-72-1	Hexachloroethane	390	U
98-95-3	Nitrobenzene	390	U
78-59-1	Isophorone	390	U
88-75-5	2-Nitrophenol	390	U
105-67-9	2,4-Dimethylphenol	390	U
111-91-1	bis(2-Chloroethoxy)Methane	390	U
120-83-2	2,4-Dichlorophenol	390	U
120-82-1	1,2,4-Trichlorobenzene	390	U
91-20-3	Naphthalene	390	U
106-47-8	4-Chloroaniline	390	U
87-68-3	Hexachlorobutadiene	390	U
59-50-7	4-Chloro-3-Methylphenol	390	U
91-57-6	2-Methylnaphthalene	390	U
77-47-4	Hexachlorocyclopentadiene	390	U
88-06-2	2,4,6-Trichlorophenol	390	U
95-95-4	2,4,5-Trichlorophenol	950	U
91-58-7	2-Chloronaphthalene	390	U
88-74-4	2-Nitroaniline	950	U
131-11-3	Dimethyl Phthalate	390	U
208-96-8	Acenaphthylene	390	U
606-20-2	2,6-Dinitrotoluene	390	U
99-09-2	3-Nitroaniline	950	U
83-32-9	Acenaphthene	390	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BK1125

Lab Name: G S E L I Contract: 92B059C-D

Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183

Matrix: (soil/water) SOIL Lab Sample ID: LFD001

Sample wt/vol: 30.00 (g/mL) G Lab File ID: SVLFD01

Level: (low/med) LOW Date Received: 11/25/92

% Moisture: 16 decanted: (Y/N) N Date Extracted: 12/04/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 12/07/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	UG/KG	Q
51-28-5	2,4-Dinitrophenol	950	U
100-02-7	4-Nitrophenol	950	U
132-64-9	Dibenzofuran	390	U
121-14-2	2,4-Dinitrotoluene	390	U
84-66-2	Diethylphthalate	390	U
7005-72-3	4-Chlorophenyl-phenylether	390	U
86-73-7	Fluorene	390	U
100-01-6	4-Nitroaniline	950	U
534-52-1	4,6-Dinitro-2-Methylphenol	950	U
86-30-6	N-Nitrosodiphenylamine (1)	390	U
101-55-3	4-Bromophenyl-phenylether	390	U
118-74-1	Hexachlorobenzene	390	U
87-86-5	Pentachlorophenol	950	U
85-01-8	Phenanthrene	390	U
120-12-7	Anthracene	390	U
86-74-8	Carbazole	390	U
84-74-2	Di-n-Butylphthalate	390	U
206-44-0	Fluoranthene	390	U
129-00-0	Pyrene	390	U
85-68-7	Butylbenzylphthalate	390	U
91-94-1	3,3'-Dichlorobenzidine	390	U
56-55-3	Benzo(a)Anthracene	390	U
218-01-9	Chrysene	390	U
117-81-7	bis(2-Ethylhexyl)Phthalate	52	J
117-84-0	Di-n-Octyl Phthalate	390	U
205-99-2	Benzo(b)Fluoranthene	390	U
207-08-9	Benzo(k)Fluoranthene	390	U
50-32-8	Benzo(a)Pyrene	390	U
193-39-5	Indeno(1,2,3-cd)Pyrene	390	U
53-70-3	Dibenz(a,h)Anthracene	390	U
191-24-2	Benzo(g,h,i)Perylene	390	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BK1125

Lab Name: G S E L I Contract: 92B059C-D

Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183

Matrix: (soil/water) SOIL Lab Sample ID: LFD001

Sample wt/vol: 30.00 (g/mL) G Lab File ID: SVLFD01

Level: (low/med) LOW Date Received: 11/25/92

% Moisture: 16 decanted: (Y/N) N Date Extracted: 12/04/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 12/07/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.2

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	KETONE	6.47	520	JNAB
2.	KETONE	7.13	650	JNAB
3.	UNKNOWN HYDROCARBON	15.88	150	JN
4.	UNKNOWN HYDROCARBON	25.23	76	JN

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BK1125

Lab Name: G S E L I Contract: 92B059C-D

Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183

Matrix: (soil/water) SOIL Lab Sample ID: LFD001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Moisture: 16 decanted: (Y/N) N Date Received: 11/25/92

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/03/92

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/17/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 5.2 Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	Q
319-84-6	alpha-BHC	2.0IU
319-85-7	beta-BHC	2.0IU
319-86-8	delta-BHC	2.0IU
58-89-9	gamma-BHC (Lindane)	2.0IU
76-44-8	Heptachlor	2.0IU
309-00-2	Aldrin	2.0IU
1024-57-3	Heptachlor epoxide	2.0IU
959-98-8	Endosulfan I	2.0IU
60-57-1	Dieldrin	3.9IU
72-55-9	4,4'-DDE	3.9IU
72-20-8	Endrin	3.9IU
33213-65-9	Endosulfan II	3.9IU
72-54-8	4,4'-DDD	3.9IU
1031-07-8	Endosulfan sulfate	3.9IU
50-29-3	4,4'-DDT	3.9IU
72-43-5	Methoxychlor	20 IU
53494-70-5	Endrin ketone	3.9IU
7421-36-3	Endrin aldehyde	3.9IU
5103-71-9	alpha-Chlordane	2.0IU
5103-74-2	gamma-Chlordane	2.0IU
8001-35-2	Toxaphene	200 IU
12674-11-2	Aroclor-1016	39 IU
11104-28-2	Aroclor-1221	80 IU
11141-16-5	Aroclor-1232	39 IU
53469-21-9	Aroclor-1242	39 IU
12672-29-6	Aroclor-1248	39 IU
11097-69-1	Aroclor-1254	39 IU
11096-82-5	Aroclor-1260	39 IU

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB112S

Lab Name: G S E L I Contract: 92B059C-D

Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183

Matrix: (soil/water) WATER Lab Sample ID: LFD002

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: VOLFD02

Level: (low/med) LOW Date Received: 11/25/92

% Moisture: not dec. _____ Date Analyzed: 12/03/92

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB112S

Lab Name: G S E L I Contract: 92B059C-D
Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183
Matrix: (soil/water) WATER Lab Sample ID: LFD002
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: VOLFD02
Level: (low/med) LOW Date Received: 11/25/92
% Moisture: not dec. _____ Date Analyzed: 12/03/92
GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: _____ 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
-----	-----	-----	-----	-----

2A
 WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: G S E L I

Contract: 92B059C-D

Lab Code: GULF

Case No.: WCC

SAS No.: _____

SDG No.: 92183

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01	TB112S	102	105	94	0	0
02	VBLKW1	108	104	93	0	0

QC LIMITS

SMC1 (TOL) = Toluene-d8 (88-110)

SMC2 (BFB) = Bromofluorobenzene (86-115)

SMC3 (DCE) = 1,2-Dichloroethane-d4(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: G S E L I Contract: 92B059C-D

Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183

Level: (low/med) LOW

EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01 BK1125	105	99	100	0	0
02 BK1125MS	99	97	99	0	0
03 BK1125MSD	100	98	83	0	0
04 VBLKL1	101	99	81	0	0

QC LIMITS

SMC1 (TOL) = Toluene-d8 (84-138)
 SMC2 (BFB) = Bromofluorobenzene (59-113)
 SMC3 (DCE) = 1,2-Dichloroethane-d4(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

ab Name: G S E L I

Contract: 92B059C-D

Lab Code: GULF

Case No.: WCC

SAS No.: _____

SDG No.: 92183

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 (2CP)#	S8 (DCB)#	TOT OUT
01	BK1125	88	89	114	91	85	83	90	84	0
02	BK1125MS	86	84	102	90	84	87	89	80	0
03	BK1125MSD	89	85	117	94	86	88	91	81	0
04	SBLKL1	81	84	100	85	81	81	86	79	0

QC LIMITS

- S1 (NBZ) = Nitrobenzene-d5 (23-120)
- S2 (FBP) = 2-Fluorobiphenyl (30-115)
- S3 (TPH) = Terphenyl-d14 (18-137)
- S4 (PHL) = Phenol-d5 (24-113)
- S5 (2FP) = 2-Fluorophenol (25-121)
- S6 (TBP) = 2,4,6-Tribromophenol (19-122)
- S7 (2CP) = 2-Chlorophenol-d4 (20-130) (advisory)
- S8 (DCB) = 1,2-Dichlorobenzene-d4 (20-130) (advisory)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogate diluted out

2F
SOIL PESTICIDE SURROGATE RECOVERY

o Name: G S E L I Contract: 92B059C-D

Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183

GC Column(1): DB-608 ID: 0.53(mm) GC Column(2): DB-1701 ID: 0.53(mm)

EPA	TCX	1TCX	2DCB	1DCB	2OTHER	OTHER	TOT	
SAMPLE NO.	%REC	#%REC	%REC	#%REC	%REC	(1)	(2)	OUT
01 PBLKL1	75	69	77	72			0	
02 BK1125	106	97	108	102			0	

ADVISORY
QC LIMITS
(60-150)
(60-150)

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: G S E L I Contract: 92B059C-D
 Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183
 Matrix Spike - EPA Sample No.: BK1125 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	59.50	0	60.81	102	59-172
Trichloroethene	59.50	0	60.48	102	62-137
Benzene	59.50	0	61.66	104	66-142
Toluene	59.50	0	58.73	99	59-139
Chlorobenzene	59.50	0	73.69	124	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
1,1-Dichloroethene	59.50	50.48	85	18	22 59-172
Trichloroethene	59.50	60.30	101	1	24 62-137
Benzene	59.50	61.83	104	0	21 66-142
Toluene	59.50	58.45	98	1	21 59-139
Chlorobenzene	59.50	74.03	124	0	21 60-133

* Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
 Spike Recovery: 0 out of 10 outside limits

COMMENTS: BK1125 LOW SOIL 5G CLIENT: WCC
 RTX-502.2 60M X 0.53MM 40/3-220e8 INST: F

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: G S E L IContract: 92B059C-DLab Code: GULFCase No.: WCC

SAS No.: _____

SDG No.: 92183Matrix Spike - EPA Sample No.: BK1125Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	2980	0	2304	77	26-90
2-Chlorophenol	2980	0	2247	75	25-102
1,4-Dichlorobenzene	1980	0	1509	76	28-104
N-Nitroso-di-n-prop.(1)	1980	0	1536	78	41-126
1,2,4-Trichlorobenzene	1980	0	1656	84	38-107
4-Chloro-3-methylphenol	2980	0	2529	85	26-103
Acenaphthene	1980	0	1647	83	31-137
4-Nitrophenol	2980	0	2972	100	11-114
2,4-Dinitrotoluene	1980	0	1734	88	28-89
Pentachlorophenol	2980	0	2944	99	17-109
Pyrene	1980	0	1666	84	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
Phenol	2980	2397	80	4	35	26-90
2-Chlorophenol	2980	2331	78	4	50	25-102
1,4-Dichlorobenzene	1980	1530	77	1	27	28-104
N-Nitroso-di-n-prop.(1)	1980	1580	80	3	38	41-126
1,2,4-Trichlorobenzene	1980	1699	86	2	23	38-107
4-Chloro-3-methylphenol	2980	2662	89	5	33	26-103
Acenaphthene	1980	1695	86	4	19	31-137
4-Nitrophenol	2980	3095	104	4	50	11-114
2,4-Dinitrotoluene	1980	1790	90 *	2	47	28-89
Pentachlorophenol	2980	3122	105	6	47	17-109
Pyrene	1980	1913	97	14	36	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
k Values outside of QC limitsRPD: 0 out of 11 outside limitsSpike Recovery: 1 out of 22 outside limits

COMMENTS: BK1125 LOW SOIL WCC

0.32MM X 30M RTX-5 1.0UM 45/4-310@15 INST B

3F
LOW_SOIL ECD SPIKE RECOVERY SUMMARY

Lab Name: GULF SOUTH ENVIRONMENTAL LABORATORY Client: _____

Lab Code: GULF Project: _____ SDG: _____

Instrument: GC-F Column: DB-608/WIDE

	File	Identification	Date	Time	NF	Batch	INF
Blank spike	Fr145532	1719S1/NPPSD48S1	12-17-92	04:20	0.333	1719	0.333
Sample							MSID
Matrix spike							
Spike duplicate							17566NPPMS

COMPOUND	BS	BS	BS	REC	QC	MS/MSD	SAMPLE	MS	MSD	MS	MSD	MS/MSD	REC	QC	MS/MSD
	ADDED	FOUND	REC	LIMITS	ADDED	FOUND	FOUND	FOUND	REC	REC	RPD	LIMITS	RPD		
	(UG/KG)	(UG/KG)	%	LOW HIGH	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	%	%	%	LOW HIGH MAX			
gamma-BHC	16.7	8.8	53	46 127											
Heptachlor	16.7	8.7	52	35 130											
Aldrin	16.7	8.5	51	34 132											
Dieldrin	33.3	17.0	51	31 134											
drin	33.3	20.7	62	42 139											
,4'-DDT	33.3	19.8	59	23 134											
Number excursions			0												
TCX	13.3		55	60 150											
DCB	13.3		56	60 150											

REVIEWED

DEC 18 1992

GSELI

COMMENTS: _____

3F
LOW_SOIL ECD SPIKE RECOVERY SUMMARY

Lab Name: GULF SOUTH ENVIRONMENTAL LABORATORY Client: _____

Lab Code: GULF Project: _____ SDG: _____

Instrument: GC-F Column: DB-1701/WIDE

	File	Identification	Date	Time	NF	Batch	DNF
Blank spike	F:B145532	1719S1/NPPS048S1	12-17-92	04:20	0.333	1719	0.333
Sample							MSID
Matrix spike							
Spike duplicate							17566NPPS

COMPOUND	BS	BS	BS	REC	QC	MS/MSD	SAMPLE	MS	BSD	MS	BSD	MSMSD	REC	QC		
	ADDED	FOUND	REC	LIMITS	ADDED	FOUND	FOUND	FOUND	REC	REC	RPD	LIMITS	RPD			
	(UG/KG)	(UG/KG)	%	LOW	HIGH	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	%	%	%	LOW	HIGH	MAX	
gamma-BHC	16.7	8.3	50	46	127											
Heptachlor	16.7	8.4	50	35	130											
Aldrin	16.7	8.5	51	34	132											
Dieldrin	33.3	17.1	51	31	134											
ndrin	33.3	20.9	63	42	139											
4,4'-DDT	33.3	17.8	54	23	134											
Number excursions			0													
TCX	13.3		50	60	150											
DCB	13.3		53	60	150											

REVIEWED

DEC 18 1992

GSELI

COMMENTS: _____

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKL1

Lab Name: G S E L I

Contract: 92B059C-D

Lab Code: GULF

Case No.: WCC

SAS No.: _____

SDG No.: 92183

Lab File ID: FNB120392A

Lab Sample ID: VBLKL1

Date Analyzed: 12/03/92

Time Analyzed: 1053

GC Column: RTX-502.2 ID: 0.530(mm)

Heated Purge: (Y/N) Y

Instrument ID: F

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	BK1125	LFD001	VOLFD01	1210
02	BK1125MS	LFD001MS	VOLFD01MS	1333
03	BK1125MSD	LFD001MSD	VOLFD01MSD	1410

COMMENTS: VBLKL LOW SOIL 10ML CASE/SAS/CLIENT:
RTX-502.2 60M X 0.53MM 40/3-220@B INST: F

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLKL1

Lab Name: G S E L I Contract: 92B059C-D
Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183
Lab File ID: SVNSLO43B1 Lab Sample ID: SBLKL1
Instrument ID: B Date Extracted: 12/04/92
Matrix: (soil/water) SOIL Date Analyzed: 12/07/92
Level: (low/med) LOW Time Analyzed: 1307

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01 BK1125	LFD001	SVLFD01	12/07/92
02 BK1125MS	LFD001MS	SVLFD01MS	12/07/92
03 BK1125MSD	LFD001MSD	SVLFD01MSD	12/07/92

COMMENTS: SBLKL1 LOW SOIL-NBSLO43B1 WCC
0.32MM X 30M RTX-5 1.0UM 45/4-310@15 INST B

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKL1

Lab Name: G S E L I Contract: 92B059C-D

Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183

Matrix: (soil/water) SOIL Lab Sample ID: VBLKL1

Sample wt/vol: 5.00 (g/mL) G Lab File ID: FNB120392A

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/03/92

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: _____ 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	<u>Q</u>
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	7	J
67-64-1	Acetone	9	J
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	3	J
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKW1

Lab Name: G S E L I Contract: 92B059C-D

Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183

Matrix: (soil/water) WATER Lab Sample ID: VBLKW1

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: ENB120392A

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/03/92

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKW1

Lab Name: G S E L I Contract: 92B059C-D
Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183
Matrix: (soil/water) WATER Lab Sample ID: VBLKW1
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: ENB120392A
Level: (low/med) LOW Date Received: _____
% Moisture: not dec. _____ Date Analyzed: 12/03/92
GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
-----	-----	-----	-----	-----

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKL1

Lab Name: G S E L I Contract: 92B059C-D

Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183

Matrix: (soil/water) SOIL Lab Sample ID: SBLKL1

Sample wt/vol: 30.00 (g/mL) G Lab File ID: SVNSL043B1

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) N Date Extracted: 12/04/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 12/07/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	<u>Q</u>
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-Di-n-Propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)Methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	800	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	800	U
131-11-3	Dimethyl Phthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	800	U
83-32-9	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKL1

Lab Name: G S E L I Contract: 92B059C-D

Lab Codes: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183

Matrix: (soil/water) SOIL Lab Sample ID: SBLKL1

Sample wt/vol: 30.00 (g/mL) G Lab File ID: SVNSL043B1

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) N Date Extracted: 12/04/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 12/07/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG g

CAS NO.	COMPOUND	UG/KG	g
51-28-5	2,4-Dinitrophenol	800	U
100-02-7	4-Nitrophenol	800	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	800	U
534-52-1	4,6-Dinitro-2-Methylphenol	800	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	800	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-Butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)Anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)Phthalate	330	U
117-84-0	Di-n-Octyl Phthalate	330	U
205-99-2	Benzo(b)Fluoranthene	330	U
207-08-9	Benzo(k)Fluoranthene	330	U
50-32-8	Benzo(a)Pyrene	330	U
193-39-5	Indeno(1,2,3-cd)Pyrene	330	U
53-70-3	Dibenz(a,h)Anthracene	330	U
191-24-2	Benzo(g,h,i)Perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKL1

Lab Name: G S E L I Contract: 92B059C-D
 Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183
 Matrix: (soil/water) SOIL Lab Sample ID: SBLKL1
 Sample wt/vol: 30.00 (g/mL) G Lab File ID: SVNSLO43R1
 Level: (low/med) LOW Date Received: _____
 % Moisture: _____ decanted: (Y/N) N Date Extracted: 12/04/92
 Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 12/07/92
 Injection Volume: 2.0(uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) Y pH: 8.3

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	KETONE	6.52	460	JNA
2.	KETONE	7.17	250	JNA

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLKL1

Lab Name: G S E L I

Contract: 92B059C-D

Lab Code: GULF

Case No.: WCC

SAS No.: _____

SDG No.: 92183

Matrix: (soil/water) SOIL

Lab Sample ID: NPPS040B1

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: _____

Moisture: _____ decanted: (Y/N) _____

Date Received: _____

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 12/03/92

Concentrated Extract Volume: 5000 (uL)

Date Analyzed: 12/17/92

Injection Volume: 1.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y

pH: 7.8

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/KG

Q

319-84-6	alpha-BHC	1.7IU	
319-85-7	beta-BHC	1.7IU	
319-86-8	delta-BHC	1.7IU	
58-89-9	gamma-BHC (Lindane)	1.7IU	
76-44-8	Heptachlor	1.7IU	
309-00-2	Aldrin	1.7IU	
1024-57-3	Heptachlor epoxide	1.7IU	
959-98-8	Endosulfan I	1.7IU	
60-57-1	Dieldrin	3.3IU	
72-55-9	4,4'-DDE	3.3IU	
72-20-8	Endrin	3.3IU	
33213-65-9	Endosulfan II	3.3IU	
72-54-8	4,4'-DDD	3.3IU	
1031-07-8	Endosulfan sulfate	3.3IU	
50-29-3	4,4'-DDT	3.3IU	
72-43-5	Methoxychlor	17 IU	
53494-70-5	Endrin ketone	3.3IU	
7421-36-3	Endrin aldehyde	3.3IU	
5103-71-9	alpha-Chlordane	1.7IU	
5103-74-2	gamma-Chlordane	1.7IU	
8001-35-2	Toxaphene	170 IU	
12674-11-2	Aroclor-1016	33 IU	
11104-28-2	Aroclor-1221	67 IU	
11141-16-5	Aroclor-1232	33 IU	
53469-21-9	Aroclor-1242	33 IU	
12672-29-6	Aroclor-1248	33 IU	
11097-69-1	Aroclor-1254	33 IU	
11096-82-5	Aroclor-1260	33 IU	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PIBLK01

Lab Name: G S E L I

Contract: 92B059C-D

Lab Code: GULF

Case No.: WCC

SAS No.: _____

SDG No.: 92183

Matrix: (soil/water) WATER

Lab Sample ID: PIBLK01

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: _____

% Moisture: _____ decanted: (Y/N) _____

Date Received: _____

Extraction: (SepF/Cont/Sonc) _____

Date Extracted: _____

Concentrated Extract Volume: _____ (uL)

Date Analyzed: 12/16/92

Injection Volume: 1.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: _____

Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
319-84-6	alpha-BHC	0.050IU	
319-85-7	beta-BHC	0.050IU	
319-86-8	delta-BHC	0.050IU	
58-89-9	gamma-BHC (Lindane)	0.050IU	
76-44-8	Heptachlor	0.050IU	
309-00-2	Aldrin	0.050IU	
1024-57-3	Heptachlor epoxide	0.050IU	
959-98-8	Endosulfan I	0.050IU	
60-57-1	Dieldrin	0.10IU	
72-55-9	4,4'-DDE	0.10IU	
72-20-8	Endrin	0.10IU	
33213-65-9	Endosulfan II	0.10IU	
72-54-8	4,4'-DDD	0.10IU	
1031-07-8	Endosulfan sulfate	0.10IU	
50-29-3	4,4'-DDT	0.10IU	
72-43-5	Methoxychlor	0.50IU	
53494-70-5	Endrin ketone	0.10IU	
7421-36-3	Endrin aldehyde	0.10IU	
5103-71-9	alpha-Chlordane	0.050IU	
5103-74-2	gamma-Chlordane	0.050IU	
8001-35-2	Toxaphene	5.0IU	
12674-11-2	Aroclor-1016	1.0IU	
11104-28-2	Aroclor-1221	2.0IU	
11141-16-5	Aroclor-1232	1.0IU	
53469-21-9	Aroclor-1242	1.0IU	
12672-29-6	Aroclor-1248	1.0IU	
11097-69-1	Aroclor-1254	1.0IU	
11096-82-5	Aroclor-1260	1.0IU	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PIBLK02

Lab Name: G S E L I Contract: 92B059C-D

Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183

Matrix: (soil/water) WATER Lab Sample ID: PIBLK02

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) _____ Date Received: _____

Extraction: (SepF/Cont/Sonc) _____ Date Extracted: _____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 12/16/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	Q
319-84-6	alpha-BHC	0.050IU
319-85-7	beta-BHC	0.050IU
319-86-8	delta-BHC	0.050IU
58-89-9	gamma-BHC (Lindane)	0.050IU
76-44-8	Heptachlor	0.050IU
309-00-2	Aldrin	0.050IU
1024-57-3	Heptachlor epoxide	0.050IU
959-98-8	Endosulfan I	0.050IU
60-57-1	Dieldrin	0.10IU
72-55-9	4,4'-DDE	0.10IU
72-20-8	Endrin	0.10IU
33213-65-9	Endosulfan II	0.10IU
72-54-8	4,4'-DDD	0.10IU
1031-07-8	Endosulfan sulfate	0.10IU
50-29-3	4,4'-DDT	0.10IU
72-43-5	Methoxychlor	0.50IU
53494-70-5	Endrin ketone	0.10IU
7421-36-3	Endrin aldehyde	0.10IU
5103-71-9	alpha-Chlordane	0.050IU
5103-74-2	gamma-Chlordane	0.050IU
8001-35-2	Toxaphene	5.0IU
12674-11-2	Aroclor-1016	1.0IU
11104-28-2	Aroclor-1221	2.0IU
11141-16-5	Aroclor-1232	1.0IU
53469-21-9	Aroclor-1242	1.0IU
12672-29-6	Aroclor-1248	1.0IU
11097-69-1	Aroclor-1254	1.0IU
11096-82-5	Aroclor-1260	1.0IU

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PIBLK03

Lab Name: G S E L I Contract: 92B059C-D

Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183

Matrix: (soil/water) WATER Lab Sample ID: PIBLK03

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) _____ Date Received: _____

Extraction: (SepF/Cont/Sonc) _____ Date Extracted: _____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 12/17/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
319-84-6	-----alpha-BHC		0.050IU
319-85-7	-----beta-BHC		0.050IU
319-86-8	-----delta-BHC		0.050IU
58-89-9	-----gamma-BHC (Lindane)		0.050IU
76-44-8	-----Heptachlor		0.050IU
309-00-2	-----Aldrin		0.050IU
1024-57-3	-----Heptachlor epoxide		0.050IU
959-98-8	-----Endosulfan I		0.050IU
60-57-1	-----Dieldrin		0.10IU
72-55-9	-----4,4'-DDE		0.10IU
72-20-8	-----Endrin		0.10IU
33213-65-9	-----Endosulfan II		0.10IU
72-54-8	-----4,4'-DDD		0.10IU
1031-07-8	-----Endosulfan sulfate		0.10IU
50-29-3	-----4,4'-DDT		0.10IU
72-43-5	-----Methoxychlor		0.50IU
53494-70-5	-----Endrin ketone		0.10IU
7421-36-3	-----Endrin aldehyde		0.10IU
5103-71-9	-----alpha-Chlordane		0.050IU
5103-74-2	-----gamma-Chlordane		0.050IU
8001-35-2	-----Toxaphene		5.0IU
12674-11-2	-----Aroclor-1016		1.0IU
11104-28-2	-----Aroclor-1221		2.0IU
11141-16-5	-----Aroclor-1232		1.0IU
53469-21-9	-----Aroclor-1242		1.0IU
12672-29-6	-----Aroclor-1248		1.0IU
11097-69-1	-----Aroclor-1254		1.0IU
11096-82-5	-----Aroclor-1260		1.0IU

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PIBLK04

Lab Name: G S E L I

Contract: 92B059C-D

Lab Code: GULF

Case No.: WCC

SAS No.: _____

BDG No.: 92183

Matrix: (soil/water) WATER

Lab Sample ID: PIBLK04

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: _____

Moisture: _____ decanted: (Y/N) _____

Date Received: _____

Extraction: (SepF/Cont/Sonc) _____

Date Extracted: _____

Concentrated Extract Volume: _____ (uL)

Date Analyzed: 12/17/92

Injection Volume: 1.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: _____

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/L

Q

319-84-6	alpha-BHC	0.050IU
319-85-7	beta-BHC	0.050IU
319-86-8	delta-BHC	0.050IU
58-89-9	gamma-BHC (Lindane)	0.050IU
76-44-8	Heptachlor	0.050IU
309-00-2	Aldrin	0.050IU
1024-57-3	Heptachlor epoxide	0.050IU
959-98-8	Endosulfan I	0.050IU
60-57-1	Dieldrin	0.10IU
72-55-9	4,4'-DDE	0.10IU
72-20-8	Endrin	0.10IU
33213-65-9	Endosulfan II	0.10IU
72-54-8	4,4'-DDD	0.10IU
1031-07-8	Endosulfan sulfate	0.10IU
50-29-3	4,4'-DDT	0.10IU
72-43-5	Methoxychlor	0.50IU
53494-70-5	Endrin ketone	0.10IU
7421-36-3	Endrin aldehyde	0.10IU
5103-71-9	alpha-Chlordane	0.050IU
5103-74-2	gamma-Chlordane	0.050IU
8001-35-2	Toxaphene	5.0IU
12674-11-2	Aroclor-1016	1.0IU
11104-28-2	Aroclor-1221	2.0IU
11141-16-5	Aroclor-1232	1.0IU
53469-21-9	Aroclor-1242	1.0IU
12672-29-6	Aroclor-1248	1.0IU
11097-69-1	Aroclor-1254	1.0IU
11096-82-5	Aroclor-1260	1.0IU

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PIBLK05

Lab Name: G S E L I Contract: 92B059C-D

Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183

Matrix: (soil/water) WATER Lab Sample ID: PIBLK05

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Moisture: _____ decanted: (Y/N) _____ Date Received: _____

Extraction: (SepF/Cont/Sonc) _____ Date Extracted: _____

Concentrated Extract Volume: _____ (uL) Date Analyzed: 12/17/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
319-84-6	alpha-BHC	0.050IU	
319-85-7	beta-BHC	0.050IU	
319-86-8	delta-BHC	0.050IU	
58-89-9	gamma-BHC (Lindane)	0.050IU	
76-44-8	Heptachlor	0.050IU	
309-00-2	Aldrin	0.050IU	
1024-57-3	Heptachlor epoxide	0.050IU	
959-98-8	Endosulfan I	0.050IU	
60-57-1	Dieldrin	0.10IU	
72-55-9	4,4'-DDE	0.10IU	
72-20-8	Endrin	0.10IU	
33213-65-9	Endosulfan II	0.10IU	
72-54-8	4,4'-DDD	0.10IU	
1031-07-8	Endosulfan sulfate	0.10IU	
50-29-3	4,4'-DDT	0.10IU	
72-43-5	Methoxychlor	0.50IU	
53494-70-5	Endrin ketone	0.10IU	
7421-36-3	Endrin aldehyde	0.10IU	
5103-71-9	alpha-Chlordane	0.050IU	
5103-74-2	gamma-Chlordane	0.050IU	
8001-35-2	Toxaphene	5.0IU	
12674-11-2	Aroclor-1016	1.0IU	
11104-28-2	Aroclor-1221	2.0IU	
11141-16-5	Aroclor-1232	1.0IU	
53469-21-9	Aroclor-1242	1.0IU	
12672-29-6	Aroclor-1248	1.0IU	
11097-69-1	Aroclor-1254	1.0IU	
11096-82-5	Aroclor-1260	1.0IU	

BA
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: G S E L I

Contract: 92B059C-D

Lab Code: GULF Case No.: WCC

SAS No.: _____ SDG No.: 92183

Lab File ID (Standard): FNS120392B

Date Analyzed: 12/03/92

Instrument ID: F

Time Analyzed: 1008

GC Column: RTX-502.2 ID: 0.530(mm)

Heated Purge: (Y/N) Y

	IS1(BCM)		IS2(DFB)		IS3(CBZ)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	42861	6.70	185427	8.28	158780	13.37
UPPER LIMIT	85722	7.20	370854	8.79	317560	13.87
LOWER LIMIT	21430	6.20	92714	7.78	79390	12.87
EPA SAMPLE NO.						
01 BK1125	31862	6.63	140633	8.25	115344	13.32
02 BK1125MS	33028	6.72	140689	8.30	121412	13.37
03 BK1125MSD	37016	6.68	128931	8.28	114792	13.39
04 VBLKL1	45541	6.72	168316	8.32	140528	13.39

IS1 (BCM) = Bromochloromethane
 IS2 (DFB) = 1,4-Difluorobenzene
 IS3 (CBZ) = Chlorobenzene-d5

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

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

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: G S E L I Contract: 92B059C-D
 Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183
 Lab File ID (Standard): BS120792A Date Analyzed: 12/07/92
 Instrument ID: B Time Analyzed: 1042

	IS1(DCB)		IS2(NFT)		IS3(ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	8607	8.23	35307	10.75	20907	14.14
UPPER LIMIT	17214	8.74	70614	11.25	41814	14.64
LOWER LIMIT	4304	7.73	17654	10.25	10454	13.64
EPA SAMPLE NO.						
01 BK1125	11475	8.23	46898	10.75	26641	14.14
02 BK1125MS	12404	8.34	50782	10.79	30760	14.15
03 BK1125MSD	12291	8.25	50398	10.75	30525	14.14
04 SBLKL1	10899	8.27	44942	10.77	25502	14.15

IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NFT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

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

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

8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: G S E L I Contract: 92B059C-D
 Lab Code: GULF Case No.: WCC SAS No.: _____ SDG No.: 92183
 Lab File ID (Standard): BS120792A Date Analyzed: 12/07/92
 Instrument ID: B Time Analyzed: 1042

	IS4(PHN)		IS5(CRY)		IS6(PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	34874	16.95	29779	22.15	31585	26.86
UPPER LIMIT	69748	17.45	59558	22.65	63170	27.36
LOWER LIMIT	17437	16.45	14890	21.65	15792	26.36
EPA SAMPLE NO.						
01 BK1125	43249	16.94	34503	22.14	32957	26.86
02 BK1125MS	52050	16.97	42808	22.17	39565	26.89
03 BK1125MSD	50111	16.95	37146	22.14	32197	26.86
04 SBLKL1	42015	16.97	34552	22.15	34819	26.87

IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

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

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



CHAIN - OF - CUSTODY RECORD

SAMPLE NO.	MATRIX	YR: 92 DATE MM/DD	TIME	SAMPLE DEPTH		STATION LOCATION	TOTAL NO. CONTAINERS	TCL VOA	TCL SVOA	TCL	PEST/PCB TAL	METALS, CN
				FROM	TO							
BK 1125	SO	11/25	1530	-	-	Backfill Pit	6	2	2			2
TB 1125	LI	11/25	-	-	-		2	2				

SAMPLE COLLECTION:

PROJECT NO. AND NAME 92B059C-D Combustion Inc.
 LOCATION OF SAMPLE: Combustion Inc. Denham Springs, Louisiana
 TEAM LEADER: T. Warren TELEPHONE: (504) 751-1873
 COMPANY NAME: Woodward-Clyde Consultants
 ADDRESS: 2822 O'Neal Lane Baton Rouge, Louisiana
 WITNESS: [Signature] COMPANY NAME: GDC Engineering

FIELD INFORMATION:

TYPES OF SAMPLES: LIQUID (LI) FISH (FI) SLUDGE (SL) SOIL (SO)
 (MATRIX) WIPE (W) SEDIMENT (SE) OTHER (SPECIFY) _____
 FIELD NOTES: _____
 TRANSPORTER: _____ AIRBILL/INVOICE: _____ DESTINATION: GSELI
6801 Press Drive East Building New Orleans LA 70126

SAMPLE TRANSFER (Original must be retained with sample at all times) 504-283-4223

	RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1	NAME: <u>T. E. Warren</u> COMPANY: <u>Woodward-Clyde Cons.</u>	<u>11/25/92</u>	<u>Anna K. Saucier</u> <u>WCC</u>	<u>11/25/92</u>
2	NAME: <u>Anna K. Saucier</u> COMPANY: <u>WCC</u>	<u>11/25/92</u>	<u>Tiffany LaFleur</u> <u>GSELI</u>	<u>11/25/92</u>
3	NAME: _____ COMPANY: _____	_____	_____	_____

TERMINATION OF CHAIN-OF-CUSTODY:

AUTHORIZED BY: _____ DATE: _____ TIME: _____
 COMPANY NAME: _____
 SAMPLE DISPOSITION: STORAGE _____ DISPOSAL _____ OTHER _____

000006

NATIX/ETC

Metals

Sample Data

FORM I-IN includes fields for three types of result qualifiers. These qualifiers must be completed as follows:

- o C (Concentration) qualifier -- Enter "B" if the reported value was obtained from a reading that was less than the Contract Required Detection limit (CRDL) but greater than or equal to the Instrument Detection limit (IDL). If the analyte was analyzed for but not detected, a "U" must be entered.
- o Q qualifier -- Specified entries and their meanings are as follows:
 - E - The reported value is estimated because of the presence of interference. An explanatory note must be included under Comments on the Cover Page (if the problem applies to all samples) or on the specific FORM I-IN (if it is an isolated problem).
 - M - Duplicate injection precision not met.
 - N - Spiked sample recovery not within control limits.
 - S - The reported value was determined by the Method of Standard Additions (MSA).
 - W - Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance. (See Exhibit E.)
 - * - Duplicate analysis not within control limits.
 - + - Correlation coefficient for the MSA is less than 0.995.

Entering "S", "W", or "+" is mutually exclusive. No combination of these qualifiers can appear in the same field for an analyte.

- o M (Method) qualifier -- Enter:
 - "P" for ICP
 - "A" for Flame AA
 - "F" for Furnace AA
 - "PM" for ICP when Microwave Digestion is used
 - "AM" for Flame AA when Microwave Digestion is used
 - "FM" for Furnace AA when Microwave Digestion is used
 - "CV" for Manual Cold Vapor AA
 - "AV" for Automated Cold Vapor AA
 - "CA" for Midi-Distillation spectrophotometric.
 - "AS" for Semi-Automated Spectrophotometric
 - "C" for Manual Spectrophotometric
 - "T" for Titrimetric
 - " " where no data has been entered.
 - "NR" if the analyte is not required to be analyzed.

A brief physical description of the sample, both before and after digestion, must be reported in the fields for color (before and after), clarity (before and after), texture and artifacts. For water samples, report color and clarity. For soil samples, report color, texture and artifacts.

INORGANIC ANALYSIS DATA SHEET

BK1125

Lab Name: GULF SOUTH ENVIRONMENTAL

Contract: 92B059C-D

Lab Code: GSELI

Case No.: WCC

SAS No.:

SDG No.: 092183

Matrix (soil/water): SOIL

Lab Sample ID: LFD001

Level (low/med): LOW

Date Received: 11/25/92

% Solids: 84.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4170		E*	P
7440-36-0	Antimony	5.7	U	N	P
7440-38-2	Arsenic	2.0	B	N	F
7440-39-3	Barium	23.9	B		P
7440-41-7	Beryllium	0.26	B		P
7440-43-9	Cadmium	0.69	U		P
7440-70-2	Calcium	296	B	E	P
7440-47	Chromium	5.1			P
7440-48-4	Cobalt	2.7	B		P
7440-50-8	Copper	3.3	B		P
7439-89-6	Iron	4930		E*	P
7439-92-1	Lead	5.2		S	F
7439-95-4	Magnesium	433	B	E	P
7439-96-5	Manganese	14.2			P
7439-97-6	Mercury	0.12	U		CV
7440-02-0	Nickel	3.2	B		P
7440-09-7	Potassium	122	B		P
7782-49-2	Selenium	2.1	B		F
7440-22-4	Silver	0.71	U		P
7440-23-5	Sodium	605	B		P
7440-28-0	Thallium	0.36	U		F
7440-62-2	Vanadium	12.1			P
7440-66-6	Zinc	7.9			P
57-12-5	Cyanide	1.2	U		C

Color Before: GREY

Clarity Before:

Texture: MEDIUM

Color After: COLORLESS

Clarity After: CLOUDY

Artifacts: NO

Comments:

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GULF SOUTH ENVIRONMENTAL

Contract: 92B059C-D

Lab Code: GSELI

Case No.: WCC

SAS No.:

SDG No.: 092183

Initial Calibration Source: 82-85-ICVA

Continuing Calibration Source: 82-84-CCVA

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	1000.0	970.59	97.1	2000.0	2039.74	102.0	1979.58	99.0	P
Antimony	1000.0	1031.18	103.1	2000.0	2089.10	104.5	2091.56	104.6	P
Arsenic	60.0	65.56	109.3	50.0	52.05	104.1	53.50	107.0	F
Barium	1000.0	992.40	99.2	2000.0	2029.26	101.5	2042.28	102.1	P
Beryllium	1000.0	945.59	94.6	2000.0	1940.74	97.0	1963.60	98.2	P
Cadmium	1000.0	987.49	98.7	2000.0	2029.92	101.5	2042.85	102.1	P
Calcium	1000.0	1014.58	101.5	2000.0	2127.10	106.4	2113.69	105.7	P
Chromium	1000.0	994.80	99.5	2000.0	2041.01	102.1	2057.17	102.9	P
Cobalt	1000.0	991.75	99.2	2000.0	2049.75	102.5	2053.04	102.7	P
Copper	1000.0	1000.49	100.0	2000.0	2043.50	102.2	2042.73	102.1	P
Iron	1000.0	1010.72	101.1	2000.0	2072.75	103.6	2083.59	104.2	P
Lead	60.0	57.62	96.0	50.0	48.26	96.5	49.30	98.6	F
Magnesium	1000.0	983.60	98.4	2000.0	2131.14	106.6	2119.43	106.0	P
Manganese	1000.0	999.83	100.0	2000.0	2053.19	102.7	2068.80	103.4	P
Mercury	4.0	3.78	94.5	5.0	5.13	102.6	4.74	94.8	CV
Nickel	1000.0	991.49	99.1	2000.0	2042.80	102.1	2017.55	100.9	P
Potassium	1000.0	1038.59	103.9	2000.0	2085.69	104.3	2085.69	104.3	P
Selenium	60.0	58.70	97.8	50.0	47.50	95.0	46.30	92.6	F
Silver	1000.0	949.59	95.0	2000.0	1847.34	92.4	1849.54	92.5	P
Sodium	1000.0	983.12	98.3	2000.0	2015.38	100.8	2019.11	101.0	P
Thallium	60.0	55.60	92.7	50.0	52.20	104.4	48.20	96.4	F
Vanadium	1000.0	1012.28	101.2	2000.0	2081.84	104.1	2097.37	104.9	P
Zinc	1000.0	1003.39	100.3	2000.0	2015.25	100.8	2081.76	104.1	P
Cyanide	40.0	38.17	95.4	100.0	104.31	104.3	104.42	104.4	C

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GULF SOUTH ENVIRONMENTAL

Contract: 92B059C-D

Lab Code: GSELI

Case No.: WCC

SAS No.:

SDG No.: 092183

Initial Calibration Source: 82-85-ICVA

Continuing Calibration Source: 82-84-CCVA

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum									
Antimony									
Arsenic	60.0	61.78	103.0	50.0	51.84	103.7	51.18	102.4	F
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	60.0	59.64	99.4	50.0	49.10	98.2	48.38	96.8	F
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide				100.0	104.17	104.2			C

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

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2B

CRDL STANDARD FOR AA AND ICP

Lab Name: GULF SOUTH ENVIRONMENTAL

Contract: 92B059C-D

Lab Code: GSELI

Case No.: WCC

SAS No.:

SDG No.: 092183

AA CRDL Standard Source: 82-66-STDF

ICP CRDL Standard Source: 82-88-STD

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	True	Initial Found	%R	Final Found	%R
Aluminum								
Antimony				120.0	53.56	44.6	55.99	46.7
Arsenic	10.0	12.22	122.2					
Barium								
Beryllium				10.0	9.84	98.4	10.10	101.0
Cadmium				10.0	8.24	82.4	6.00	60.0
Calcium								
Chromium				20.0	24.40	122.0	23.89	119.4
Cobalt				100.0	108.11	108.1	106.34	106.3
Copper				50.0	46.70	93.4	46.87	93.7
Iron								
Lead	3.0	3.14	104.7					
Magnesium								
Manganese				30.0	31.32	104.4	31.44	104.8
Mercury								
Nickel				80.0	90.36	113.0	89.04	111.3
Potassium								
Selenium	5.0	4.30	86.0					
Silver				20.0	22.89	114.4	21.68	108.4
Sodium								
Thallium	10.0	9.60	96.0					
Vanadium				100.0	106.94	106.9	106.40	106.4
Zinc				40.0	45.53	113.8	44.63	111.6

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: GULF SOUTH ENVIRONMENTAL

Contract: 92B059C-D

Lab Code: GSELI

Case No.: WCC

SAS No.:

SDG No.: 092183

AA CRDL Standard Source: 82-66-STDF

ICP CRDL Standard Source: 82-88-STD

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	True	Initial Found	%R	Final Found	%R
Aluminum								
Antimony								
Arsenic	10.0	10.66	106.6					
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	3.0	2.48	82.7					
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								

U.S. EPA - CLP

3
BLANKS

Lab Name: GULF SOUTH ENVIRONMENTAL

Contract: 92B059C-D

Lab Code: GSELI

Case No.: WCC

SAS No.:

SDG No.: 092183

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum	-9.2	B	7.7	U	15.0	B			1.540	U	P
Antimony	24.2	U	24.2	U	24.2	U			4.840	U	P
Arsenic	1.9	B	1.7	U	1.7	U	1.7	U	0.340	U	F
Barium	4.3	U	4.3	U	4.3	U			0.860	U	P
Beryllium	-0.3	B	-0.3	B	0.7	B			-0.052	B	P
Cadmium	2.9	U	2.9	U	2.9	B			0.580	U	P
Calcium	22.1	U	22.1	U	22.1	U			4.420	U	P
Chromium	2.1	U	2.1	U	2.1	U			0.420	U	P
Cobalt	2.8	U	2.8	U	2.8	U			0.560	U	P
Copper	2.1	U	2.1	U	2.1	U			0.420	U	P
Iron	8.2	U	8.2	U	8.2	U			1.640	U	P
Lead	1.0	U	1.0	U	1.0	B	1.0	U	0.200	U	F
Magnesium	-23.4	B	21.7	U	-46.8	B			4.340	U	P
Manganese	1.4	U	-1.4	B	1.4	U			0.280	U	P
Mercury	0.2	U	0.2	U	0.2	U			0.100	U	CV
Nickel	13.3	U	13.3	U	13.3	U			2.660	U	P
Potassium	59.4	U	59.4	U	59.4	U			11.880	U	P
Selenium	3.5	U	3.5	U	3.5	U			0.700	U	F
Silver	5.8	B	3.0	U	3.0	U			0.600	U	P
Sodium	65.0	U	65.0	U	65.0	U			13.000	U	P
Thallium	1.5	U	1.5	U	1.5	U			0.300	U	F
Vanadium	7.2	U	7.2	U	7.2	U			1.440	U	P
Zinc	3.5	U	3.5	U	3.5	U			0.700	U	P
Cyanide	20.0	U	20.0	U	20.0	U	20.0	U	1.000	U	C

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3
BLANKS

Lab Name: GULF SOUTH ENVIRONMENTAL

Contract: 92B059C-D

Lab Code: GSELI

Case No.: WCC

SAS No.:

SDG No.: 092183

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
	1	C	1	C	2	C	3	C	C		
Aluminum											
Antimony											
Arsenic	1.7	U	1.7	U							F
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead	1.0	U	1.0	U							F
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium											
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

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4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: GULF SOUTH ENVIRONMENTAL

Contract: 92B059C-D

Lab Code: GSELI

Case No.: WCC

SAS No.:

SDG No.: 092183

ICP ID Number: ICAP61

ICS Source: PE PURE

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum	500000	500000	504106	516697.7	103.3	456220	494801.6	99.0
Antimony			-103			-90		
Arsenic								
Barium		500	0	494.4	98.9	0	485.8	97.2
Beryllium		500	-1	478.6	95.7	-1	472.0	94.4
Cadmium		1000	-11	918.8	91.9	-9	905.9	90.6
Calcium	500000	500000	481854	492109.1	98.4	443899	480963.6	96.2
Chromium		500	7	468.6	93.7	7	455.4	91.1
Cobalt		500	1	467.6	93.5	0	455.8	91.2
Copper		500	-16	482.1	96.4	-11	471.9	94.4
Iron	200000	200000	183686	187742.0	93.9	170399	184257.1	92.1
Lead								
Magnesium	500000	500000	519110	532880.6	106.6	478888	521791.6	104.4
Manganese		500	3	473.4	94.7	4	466.0	93.2
Mercury								
Nickel		1000	-16	889.1	88.9	-12	863.4	86.3
Potassium			3			31		
Selenium								
Silver		1000	12	902.0	90.2	7	878.1	87.8
Sodium			27			8		
Thallium								
Vanadium		500	25	503.6	100.7	22	495.2	99.0
Zinc		1000	-9	933.1	93.3	7	942.0	94.2

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

BK1125S

Lab Name: GULF SOUTH ENVIRONMENTAL

Contract: 92B059C-D

Lab Code: GSELI

Case No.: WCC

SAS No.:

SDG No.: 092183

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 84.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum							NR
Antimony	75-125	22.0893	5.7414	118.62	18.6	N	P
Arsenic	75-125	8.9929	2.0214	9.49	73.5	N	F
Barium	75-125	496.5158	23.8881	474.50	99.6		P
Beryllium	75-125	10.6912	0.2578	11.86	88.0		P
Cadmium	75-125	11.8009	0.6880	11.86	99.5		P
Calcium							NR
Chromium	75-125	49.9173	5.0731	47.45	94.5		P
Cobalt	75-125	116.0325	2.7219	118.62	95.5		P
Copper	75-125	59.8825	3.3227	59.31	95.4		P
Iron							NR
Lead	75-125	9.4460	5.1985	4.74	89.6		F
Magnesium							NR
Manganese	75-125	126.7043	14.1861	118.62	94.9		P
Mercury	75-125	1.3224	0.1186	1.19	111.1		CV
Nickel	75-125	116.5478	3.2217	118.62	95.5		P
Potassium							NR
Selenium	75-125	2.5148	2.1000	2.37	17.5	N	F
Silver	75-125	9.9426	0.7117	11.86	83.8		P
Sodium							NR
Thallium	75-125	9.6797	0.3559	11.86	81.6		F
Vanadium	75-125	121.1320	12.1276	118.62	91.9		P
Zinc	75-125	126.5748	7.8652	118.62	100.1		P
Cyanide	75-125	4.2203	1.1862	4.74	89.0		C

Comments:

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5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

BK1125A

Lab Name: GULF SOUTH ENVIRONMENTAL

Contract: 92B059C-D

Lab Code: GSELI

Case No.: WCC

SAS No.:

SDG No.: 092183

Matrix (soil/water): SOIL

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum							NR
Antimony		113.18	24.20	120.0	94.3		P
Arsenic							NR
Barium							NR
Beryllium							NR
Cadmium							NR
Calcium							NR
Chromium							NR
Cobalt							NR
Copper							NR
Iron							NR
Lead							NR
Magnesium							NR
Manganese							NR
Mercury							NR
Nickel							NR
Potassium							NR
Selenium							NR
Silver							NR
Sodium							NR
Thallium							NR
Vanadium							NR
Zinc							NR
Cyanide							NR

omments:

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

BK1125D

Lab Name: GULF SOUTH ENVIRONMENTAL

Contract: 92B059C-D

Lab Code: GSELI

Case No.: WCC

SAS No.:

SDG No.: 092183

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 84.3

% Solids for Duplicate: 84.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		4168.7663		5840.8304		33.4	*	P
Antimony		5.7414	U	5.7414	U			P
Arsenic		2.0214	B	1.5018	B	29.5		F
Barium		23.8881	B	34.0004	B	34.9		P
Beryllium		0.2578	B	0.2267	B	12.8		P
Cadmium		0.6880	U	0.6880	U			P
Calcium		296.2043	B	349.9647	B	16.6		P
Chromium	2.4	5.0731		6.8536		29.9		P
Cobalt		2.7219	B	2.6458	B	2.8		P
Copper		3.3227	B	3.8945	B	15.8		P
Iron		4926.2467		6102.8209		21.3	*	P
Lead		5.1985		4.3843		17.0		F
Magnesium		433.3803	B	552.8377	B	24.2		P
Manganese	3.6	14.1861		11.2255		23.3		P
Mercury		0.1186	U	0.1186	U			CV
Nickel		3.2217	B	4.3346	B	29.5		P
Potassium		121.8555	B	179.0804	B	38.0		P
Selenium	1.2	2.1000		0.8304	U	200.0	*	F
Silver		0.7117	U	0.7117	U			P
Sodium		604.7469	B	715.7397	B	16.8		P
Thallium		0.3559	U	0.3559	U			F
Vanadium	11.9	12.1276		11.0450	B	9.3		P
Zinc	4.7	7.8652		12.3797		44.6		P
Cyanide		1.1862	U	1.1862	U			C

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7

LABORATORY CONTROL SAMPLE

Lab Name: GULF SOUTH ENVIRONMENTAL

Contract: 92B059C-D

Lab Code: GSELI

Case No.: WCC

SAS No.:

SDG No.: 092183

Solid LCS Source: ERA-CERT.

Aqueous LCS Source: PLASMACHEM

Analyte	Aqueous (ug/L)			Solid (mg/kg)				%R
	True	Found	%R	True	Found	C	Limits	
Aluminum				10700.0	9296.6		5000.0 16400.0	86.9
Antimony				55.2	40.4		10.0 200.0	73.2
Arsenic				145.0	144.2		86.0 204.0	99.4
Barium				503.0	477.2		383.0 623.0	94.9
Beryllium				129.0	122.1		89.0 169.0	94.7
Cadmium				154.0	159.2		105.0 203.0	103.4
Calcium				7390.0	6981.0		5850.0 8930.0	94.5
Chromium				151.0	137.7		100.0 201.0	91.2
Cobalt				122.0	122.7		86.0 158.0	100.6
Copper				162.0	158.7		110.0 214.0	98.0
Iron				15400.0	14243.3		10100.0 20700.0	92.5
Lead				148.0	126.2		97.0 200.0	85.3
Magnesium				3740.0	3538.6		2780.0 4700.0	94.6
Manganese				423.0	411.9		315.0 530.0	97.4
Mercury				29.0	26.0		15.0 43.0	89.7
Nickel				166.0	164.1		112.0 220.0	98.9
Potassium				4050.0	3632.2		2760.0 5340.0	89.7
Selenium				143.0	121.0		97.0 189.0	84.6
Silver				104.0	97.5		79.0 129.0	93.8
Sodium				747.0	711.3	B	425.0 968.0	95.2
Thallium				99.0	50.0		48.0 150.0	50.5
Vanadium				154.0	142.8		113.0 196.0	92.7
Zinc				530.0	541.9		347.0 713.0	102.2
Cyanide				40.0	52.4		10.0 76.0	131.0

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9
ICP SERIAL DILUTIONS

EPA SAMPLE NO.

BK1125L

Lab Name: GULF SOUTH ENVIRONMENTAL

Contract: 92B059C-D

Lab Code: GSELI

Case No.: WCC

SAS No.:

SDG No.: 092183

Matrix (soil/water): SOIL

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	17571.35		14017.64		20.2	E	P
Antimony	24.20	U	121.00	U			P
Arsenic							F
Barium	100.69	B	82.62	B	17.9		P
Beryllium	1.09	B	1.00	U	100.0		P
Cadmium	2.90	U	14.50	U			P
Calcium	1248.50	B	1564.36	B	25.3	E	P
Chromium	21.38		21.82	B	2.1		P
Cobalt	11.47	B	14.00	U	100.0		P
Copper	14.01	B	10.50	U	100.0		P
Iron	20764.13		16667.90		19.7	E	P
Lead							F
Magnesium	1826.70	B	1405.15	B	23.1	E	P
Manganese	59.79		43.06	B	28.0		P
Mercury							CV
Nickel	13.58	B	66.50	U	100.0		P
Potassium	513.62	B	439.84	B	14.4		P
Selenium							F
Silver	3.00	U	15.00	U			P
Sodium	2549.01	B	2048.07	B	19.7		P
Thallium							F
Vanadium	51.12		41.34	B	19.1		P
Zinc	33.15		98.39	B	196.8		P

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10
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: GULF SOUTH ENVIRONMENTAL

Contract: 92B059C-D

Lab Code: GSELI

Case No.: WCC

SAS No.:

SDG No.: 092183

ICP ID Number:

Date: 10/05/92

Flame AA ID Number:

Furnace AA ID Number: 5100PC

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum					
Antimony					
Arsenic	193.70	BZ	10.0	1.7	F
Barium					
Beryllium					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron					
Lead	283.30	BZ	3.0	1.0	F
Magnesium					
Manganese					
Mercury					
Nickel					
Potassium					
Selenium	196.00	BZ	5.0	3.5	
Silver					
Sodium					
Thallium	276.80	BZ	10.0	1.5	
Vanadium					
Zinc					

Comments:

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10
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: GULF SOUTH ENVIRONMENTAL

Contract: 92B059C-D

Lab Code: GSELI

Case No.: WCC

SAS No.:

SDG No.: 092183

ICP ID Number:

Date: 10/05/92

Flame AA ID Number:

Furnace AA ID Number: Z3030

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum					
Antimony					
Arsenic	193.70	BZ	10.0	1.7	
Barium					
Beryllium					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron					
Lead	283.30	BZ	3.0	1.0	
Magnesium					
Manganese					
Mercury					
Nickel					
Potassium					
Selenium	196.00	BZ	5.0	3.5	F
Silver					
Sodium					
Thallium	276.80	BZ	10.0	1.5	F
Vanadium					
Zinc					

Comments:

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10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: GULF SOUTH ENVIRONMENTAL

Contract: 92B059C-D

Lab Code: GSELI

Case No.: WCC

SAS No.:

SDG No.: 092183

ICP ID Number:

Date: 01/22/92

Flame AA ID Number:

Furnace AA ID Number: BUCK400

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron					
Lead					
Magnesium					
Manganese					
Mercury	253.30		0.2	0.2	CV
Nickel					
Potassium					
Selenium					
Silver					
Sodium					
Thallium					
Vanadium					
Zinc					

Comments:

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10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: GULF SOUTH ENVIRONMENTAL

Contract: 92B059C-D

Lab Code: GSELI

Case No.: WCC

SAS No.:

SDG No.: 092183

ICP ID Number:

ICAP61

Date:

09/08/92

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200.0	7.7	P
Antimony	217.58		60.0	24.2	P
Arsenic			10.0		
Barium	493.40		200.0	4.3	P
Beryllium	313.04		5.0	0.2	P
Cadmium	226.50		5.0	2.9	P
Calcium	317.93		5000.0	22.1	P
Chromium	267.72		10.0	2.1	P
Cobalt	228.62		50.0	2.8	P
Copper	324.75		25.0	2.1	P
Iron	259.94		100.0	8.2	P
Lead			3.0		
Magnesium	279.08		5000.0	21.7	P
Manganese	257.61		15.0	1.4	P
Mercury			0.2		
Nickel	231.60		40.0	13.3	P
Potassium	766.49		5000.0	59.4	P
Selenium			5.0		
Silver	328.07		10.0	3.0	P
Sodium	589.00		5000.0	65.0	P
Thallium			10.0		
Vanadium	292.40		50.0	7.2	P
Zinc	213.86		20.0	3.5	P

Comments:

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11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: GULF SOUTH ENVIRONMENTAL

Contract: 92B059C-D

Lab Code: GSELI

Case No.: WCC

SAS No.:

SDG No.: 092183

ICP ID Number: ICAP61

Date: 09/08/92

Analyte	Wave-length (nm)	Interelement Correction Factors for:			
		Al	Ca	Fe	Mg
Aluminum	308.22	0.0000000	0.0000000	0.0001360	0.0001560
Antimony	217.58	0.0004400	0.0000000	0.0000000	0.0000000
Arsenic	193.70	0.0003800	0.0000000	-0.0043380	-0.0002070
Barium	493.40	0.0000000	0.0000000	0.0000060	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000010
Cadmium	226.50	0.0000660	0.0000000	0.0002150	0.0000030
Calcium	317.93	0.0000690	0.0000000	0.0000000	0.0000170
Chromium	267.72	-0.0000050	-0.0000010	-0.0000150	-0.0000060
Cobalt	228.62	-0.0000060	0.0000000	0.0000000	-0.0000070
Copper	324.75	0.0000000	0.0000000	0.0000820	0.0000020
Iron	259.94	-0.0000130	-0.0000210	0.0000000	0.0000000
Lead	220.35	0.0017390	-0.0001670	0.0001280	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000060	0.0000000	-0.0000590	0.0000270
Mercury					
Nickel	231.60	0.0000000	0.0000000	-0.0001420	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0002060	0.0000000	-0.0010260	0.0000000
Silver	328.07	0.0000000	-0.0000250	-0.0003500	-0.0000050
Sodium	589.00	0.0000000	0.0000000	0.0000080	0.0000000
Thallium					
Vanadium	292.40	-0.0000080	-0.0000190	-0.0000870	-0.0000060
Zinc	213.86	0.0000000	0.0000050	0.0000120	0.0000350

Comments:

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12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: GULF SOUTH ENVIRONMENTAL

Contract: 92B059C-D

Lab Code: GSELI

Case No.: WCC

SAS No.:

SDG No.: 092183

ICP ID Number: ICAP61

Date: 09/08/92

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	10.00	500000.0	P
Antimony	10.00	50000.0	P
Arsenic		50000.0	
Barium	10.00	100000.0	P
Beryllium	10.00	50000.0	P
Cadmium	10.00	50000.0	P
Calcium	10.00	50000.0	P
Chromium	10.00	50000.0	P
Cobalt	10.00	50000.0	P
Copper	10.00	50000.0	P
Iron	10.00	50000.0	P
Lead		50000.0	
Magnesium	10.00	500000.0	P
Manganese	10.00	100000.0	P
Mercury			
Nickel	10.00	50000.0	P
Potassium	10.00	100000.0	P
Selenium			
Silver	10.00	5000.0	P
Sodium	10.00	100000.0	P
Thallium			
Vanadium	10.00	50000.0	P
Zinc	10.00	50000.0	P

Comments:

