WALK, HAYDEL & ASSOCIATES, INC.

ENGINEERS
600 CARONDELET STREET
NEW ORLEANS, LOUISIANA, U.S.A. 70130-3587
(504) 586-8111

LETTER OF TRANSMITTAL

WH-DOE-2353

U.S. Department of Energy
Strategic Petroleum Reserve
Project Management Office
900 Commerce Road East
New Orleans, LA 70123

Date: February 25, 1997

Job No.: DE-AC96-94PO19002
BC-LE-270
LE Consolidated Task No. 1
WH&A File No. 4100-28.3
-10.1

Attention: Mr. Warren H. Poarch, P.E.
Contracting Officer's Representative
Routing Symbol, FE-4432

GENTLEMEN:

WE FURNISH YOU HEREWITH THE FOLLOWING:

DESCRIPTION	COPIES	NUMBER	TITLE	REV. NO.	REV. DATE
Copy	1		Summary of Field Activities Associated with the Bayou Choctaw Geotechnical Efforts	0	
Copy	1		Analytical Results for Soil Samples by Inchcape Testing Services		
Set	1		Waste Determination Work Sheets (4)		

REMARKS: Based on our meeting of February 20, 1997, the above referenced documentation has been finalized and is being released for distribution.

WALK, HAYDEL & ASSOCIATES, INC.

BY: Donald B. Holland

Donald B. Holland
Site Support Engineer

DBH/LMH/map
4270T043.DOC

SUMMARY OF FIELD ACTIVITIES ASSOCIATED WITH BAYOU CHOCTAW GEOTECHNICAL EFFORTS

Prepared By: Adrian Chan

Adrian Chan, P.E.

Reviewed By: G D Hymel

Jerry Hymel, P.G.

Approved By: Ben J. Haney

Ben J. Haney, P.E., Eng. D.

WALK HAYDEL JOB NO. 4741.27
FEBRUARY 1997

INTRODUCTION

Walk Haydel provided field supervision during the drilling activities at the Department of Energy's (DOE) Bayou Choctaw site as part of the work scope performed under Task Number BC-LE-270. The drilling was performed by Eustis Engineering (Eustis) of Metairie, Louisiana to provide geotechnical engineering recommendations to Walk Haydel for detailed engineering design. Field activities commenced on January 9, 1997. Delays were encountered due to extreme weather conditions, however, all field investigation activities were completed by January 23, 1997. Field activities included shallow and deep soil borings at selected locations.

BORING LOCATIONS

Four shallow soil boring locations were performed at each corner of the high pressure pump pad area. Location A-1 was at the north west corner, Location A-2 was at the south east corner, Location A-3 was at the south west corner, and Location A-4 was at the north east corner of the high pressure pump pad area. Deep soil borings included Borings B-1, B-3, and B-9. Boring B-1 was located west of the heliport, Boring B-3 was located south of the 5 KV switchgear building, and Boring B-9 was located north of Well Pad 2.

directions are wrong

FIELD ACTIVITIES AND OBSERVATIONS

Field activities at the site included the installation of soil borings by hand augering and by hollow-stem augering and geotechnical sampling at all locations by Eustis. In addition, soil sample field screening and collection of soil and groundwater samples for laboratory analytical testing were also performed at the deep boring locations by Walk Haydel. During all field activities, the breathing zone air was monitored continuously to detect the presence of hydrogen sulfide gas and periodically to detect the presence of total organic vapors and benzene. No hydrogen sulfide, benzene, nor other volatile organic vapors were detected in the breathing zone.

At the shallow boring locations, a perched water table was present at approximately 3 feet below ground surface (bgs). None of the shallow borings were hand augered deeper than 4 feet bgs due to

underground obstructions, presumably due to the presence of a rip rap type of material beneath the limestone fill layer. At Locations A-1, an oil sheen was visible on top of the perched water table with detectable odors present. At Location A-2, several boring locations had been attempted with refusal occurring at approximately two feet below ground surface. At Location A-3, detectable odors were present. No unusual observations were made at Location A-4. Soil cuttings from Locations A-1 and A-3 and the personal protective equipment associated with the hand auger activities at the high pressure pump pad area were placed in drums (one drum is labeled as "Hand Auger at High Pressure Pump Pad (limestone)" and another drum is labeled as "PPE from hand auger location at HPP"). A composite sample (HPPAUGER) of the limestone from the first drum was collected and submitted for laboratory analysis for toxicity characteristic leaching procedure (TCLP) volatiles using SW-846 Method 8240, TCLP semi-volatiles using SW-846- Method 8270, and TCLP metals using SW-846 Methods 6010A, 7470A, and 7760A, TCLP pesticides and herbicides using SW-846 Methods 8080 and 8150 respectively, reactivity, corrosivity, and ignitability (RCI) using SW-846 Methods 7.3.3.2 and 7.3.4.2, Method 9045, and Method 1010M, respectively, and total petroleum hydrocarbon (TPH) using SW-846 Method 418.1.

At the deep boring locations, soil samples were obtained continuously at two-foot intervals from the ground surface to approximately 30 feet bgs, and then at three-foot intervals between 30 and 40 feet bgs, and at five-foot intervals from 40 feet bgs to the termination depth of 60 feet bgs. The sample from each depth interval was divided into two parts. One part was retained by Eustis for geotechnical testing. Another part was provided to Walk Haydel for field screening and potentially for laboratory analysis. A subsample from the Walk Haydel portion was placed in a zip-lock bag and placed in a warm place to generate organic vapors in the head space for field screening with a photoionization detector (PID). Since the PID readings from each of the samples were at background level, the soil sample from the soil/water interface from each boring was retained for laboratory analyses of TPH and benzene, toluene, ethylbenzene, and xylene (BTEX) using SW-846 Methods 418.1 and 8020, respectively. The soil cuttings from these boring locations were placed in labeled drums pending laboratory analysis.

Groundwater samples were also collected with disposable bailers from deep boring locations B-1, B-3, and B-9. The field parameters pH, specific conductance and temperature were measured from a

portion of each groundwater sample. A second portion of the groundwater sample was field screened for chlorides using a chloride field screening kit and a third portion was submitted for laboratory analysis for chlorides using SW-846 Methods 325.3. The field screening results indicated that the chloride contents in the groundwater at B-1, B-3, and B-9 are approximately 380 ppm, 13,500 ppm, and 320 ppm, respectively.

Based on the PID screening results, the soil cuttings from these boring locations were considered to be relatively free of volatile organic compounds; however, due to the high chloride content at Boring B-3 (as determined in the field), the soil cuttings from Boring B-3 were considered different from the soil cuttings from Borings B-1 and B-9. Composite samples B3COMP (B-3 soil cuttings) and B1B9SOIL (B-1 and B-9 soil cuttings) were collected and submitted for laboratory analysis for TCLP volatiles, semi-volatiles, metals, pesticides and herbicides, RCI, and TPH in order to determine the disposition of the soil cuttings drums.

FINDINGS

Table 1 presents the laboratory analytical results of the soil samples collected during the field investigation. Note that the laboratory chloride concentration in the groundwater is similar but slightly lower than the field screening values.

Based on these laboratory results, there is no indication of hydrocarbon impacts (i.e., absence of BTEX and TPH) in the subsurface of the deep boring locations. The presence of elevated chloride concentrations were found in the groundwater at Location B-3. The chloride concentrations in the groundwater at B-3 location might limit the use of certain types of foundations in this area.

Table 1

Summary of Soil and Groundwater Samples Results

Bayou Choctaw Geotechnical Investigation

Sample Name	Chloride (mg/L)[1]	Benzene (mg/Kg)[2]	Toluene (mg/Kg)[2]	Ethylbenzene (mg/Kg)[2]	Xylene (mg/Kg)[2]	TPH (mg/Kg)[3]
B1(8-10)	-	<DL	<DL	<DL	<DL	<DL
B1(8-10)DUP	-	<DL	<DL	<DL	<DL	-
B1-8	280	-	-	-	-	-
B3(20-22)	-	<DL	<DL	<DL	<DL	<DL
B3-20	9450	-	-	-	-	-
B3-20 DUP	9400	-	-	-	-	-
B9(10-12)	-	<DL	<DL	<DL	<DL	<DL
B9(10-12)DUP	-	-	-	-	-	<DL
B9(11)	225	-	-	-	-	-

Note: 1) Groundwater samples.
2) Detection Limits (DL) for Benzene, Toluene, Ethylbenzene, and Xylene are at 0.001 mg/Kg.
3) DL for TPH is 30 mg/Kg.

DISPOSITION OF SOIL CUTTINGS

TCLP volatiles, semi-volatiles, and metals, and RCI results of the soil cuttings samples indicated that the drums containing the soil cuttings are below the regulatory limits for hazardous wastes. The TPH concentration from the deep soil cuttings samples are below the detection limit of 30 mg/Kg; however, the TPH concentration on sample HPPAUGER (from high pressure pump pad) is 941 mg/Kg. Based on the laboratory analysis, most of the soil cuttings from the soil boring activities do not appear to be impacted by petroleum hydrocarbons and may not require disposal as a waste material. However, if off-site disposal is desired, the soil cuttings can be designated as a solid waste. Table 2 lists the recommended classification of the drums containing the soil cuttings.

Table 2

Soil Cuttings Classification

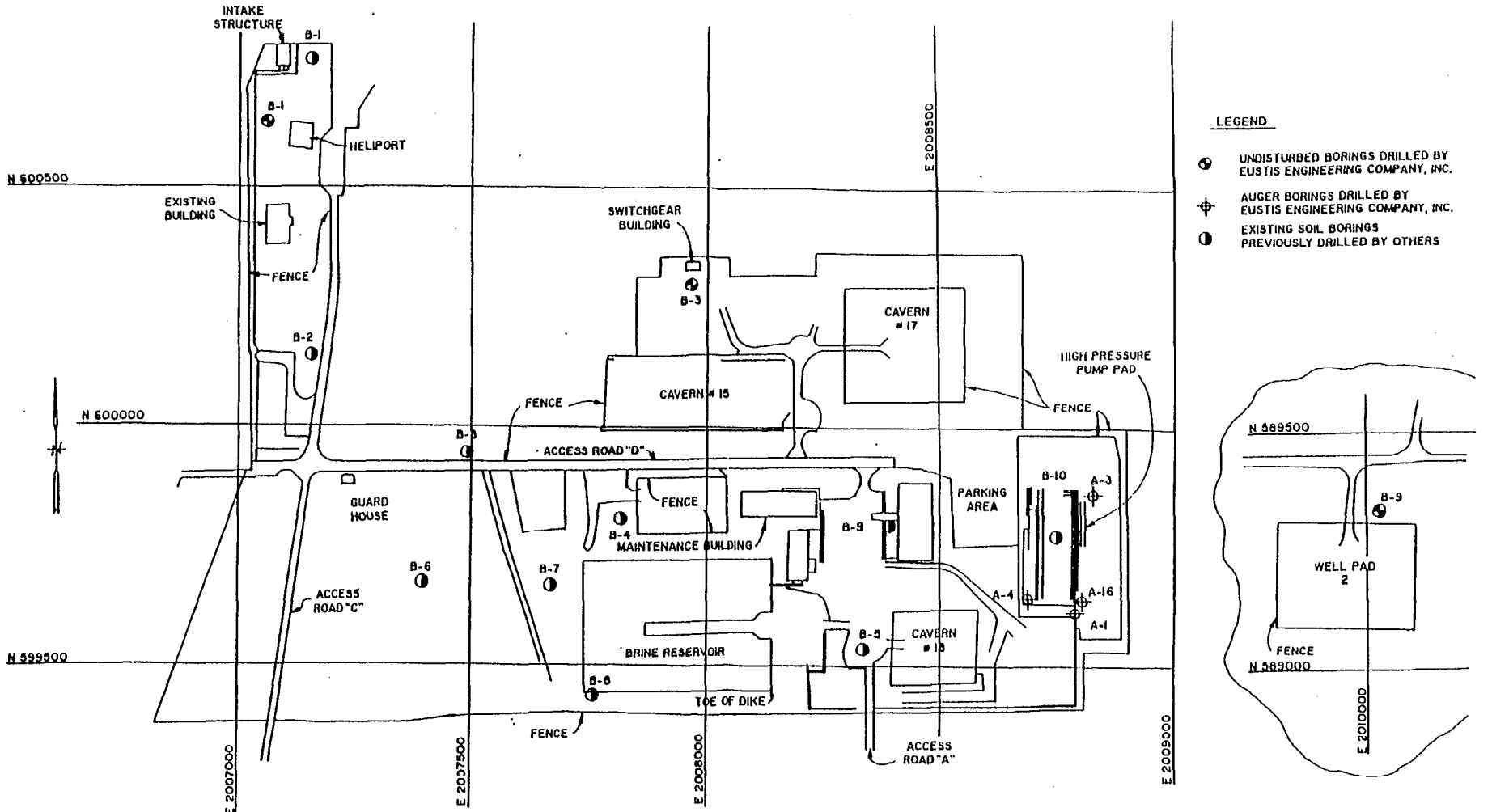
Bayou Choctaw Geotechnical Investigation

Drum Contents	Potential Disposition
Hand auger at High Pressure Pump Pad (limestone) (1 drum)	Non hazardous solid waste, hydrocarbon impacted soil, disposal at permitted facility required.
Soil Cuttings from Boring B3 (3 drums)	Non hazardous solid waste, non hydrocarbon impacted soil, with potential elevated chloride content, disposal at permitted facility required.
PPE from hand auger location at HPP (1 drum)	Non hazardous solid waste, hydrocarbon impacted PPE, disposal at permitted facility required.
PPE from Borings B1, B3, B9 (1 drum)	Non hazardous solid waste, non hydrocarbon impacted PPE, disposal at permitted facility required.
Soil Cuttings from Boring B1 (3 drums)	Non hazardous solid waste, non hydrocarbon impacted soil, not subject to disposal standards.
Soil Cuttings from Boring B9 (2 drums)	Non hazardous solid waste, non hydrocarbon impacted soil, not subject to disposal standards.

RECOMMENDATIONS

Due to the TPH concentration found in the soil cuttings from the high pressure pump pad and the visual observation from the borehole, Walk Haydel recommends the applicability of the notification

requirements for unauthorized discharges with groundwater impact as cited in Louisiana Administrative Code, Title 33, Part I, Subpart 2, Chapter 39, Section 3919 be assessed.



SCALE : 1" = 200'
BORINGS DRILLED 9 - 22 JANUARY 1997

SOURCE: Geotechnical Report, Eustis Engineering Company, Inc., February 1997

WALK HAYDEL
A DAMES & MOORE GROUP COMPANY

Strategic Petroleum Reserve, Bayou Choctaw

Boring Locations

JOB NO	DATE	PREPARED BY
4741.27	02/24/97	AC

Inchcape Testing Services
Environmental Laboratories

ANALYTICAL RESULTS FOR SAMPLES TESTED BY

INCHCAPE TESTING SERVICES

ENVIRONMENTAL LABORATORIES

7979 GSRI AVENUE

BATON ROUGE, LA 70820-7979

REPORT TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS
600 CARONDELET STREET

NEW ORLEANS , LA 70130

ATTENTION: ADRIAN CHAN
CLIENT ID: 0337
GROUP NO : 9700510
DATE : 01/31/97

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES,

GROUP NO. : 9700510
PROJECT NO.:
REPORT DATE: 01/31/97

SAMPLE SUMMARY INFORMATION

Sample Identification	Lab ID	Matrix	Sample Date	Sample Time
B1-RIN	9701230164	WATER	01/21/97	15:45
TRIP BLANK	9701230165	WATER	01/21/97	00:00
B9 (10-12)	9701230166	SOLID	01/22/97	08:28
B9 (10-12) DUP.	9701230167	SOLID	01/22/97	08:28
B9 (11')	9701230168	WATER	01/22/97	08:48
HPPAUGER	9701230169	SOLID	01/23/97	08:13
B1B9SOIL	9701230170	SOLID	01/23/97	09:02
B1B3B9COMP	9701230171	WATER	01/22/97	13:30
B3COMP	9701240019	SOLID	01/23/97	09:43

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES,

GROUP NO. : 9700510
PROJECT NO.:
REPORT DATE: 01/31/97

Sample receipt at Inchcape Testing Services is documented for your designated sample(s). Chain-of-custody documentation, if provided, is included in this report.

Sample analysis was performed in accordance with Environmental Protection Agency protocol or other approved methods. All Quality Control criteria was found to be within Method Control Limits unless otherwise noted.

This report may contain the following abbreviations:

< DL	= Result is less than the Detection Limit
DO	= Diluted Out
fld	= Desination for analysis performed in the field denoted in the analyst position on the report
MI	= Matrix Interference
NA	= Not Applicable
ND	= Not Detected
subc	= Designation for subcontracted data denoted in the analyst position of the report
TNTC	= Too Numerous to Count
00:00	= Denotes sample time was not provided on Chain of Custody or when sample time specified is midnight

In accordance with ISO Guide 25, this report shall not be reproduced except in full, without the written permission of Inchcape Testing Services. The results herein relate only to the sample(s) tested. Documented results are shown on the following page(s).

We appreciate this opportunity to provide you with this analytical service. If we can be of further assistance, please do not hesitate to contact us a (504) 769-4900.

Scott A. Bailey
Operations Manager

Inchcape Testing Services
Environmental Laboratories

CLIENT: WALK,HAYDEL & ASSOCIATES,
SAMPLE: B9 (10-12)
LAB ID: 9701230166
MATRIX: SOLID

GROUP NO. : 9700510
REPORT DATE: 01/31/97
PROJECT NO.: 4741.27

SAMPLE DATE: 01/22/97 **SAMPLE TIME:** 08:28

COMPOUND	RESULT	UNITS	DET LIM	PREP DATE/TIME	ANALYSIS DATE/TIME	METHOD ANALYST
Total Petroleum Hydrocarbon QC Batch 58395	<DL	(mg/kg)	30	01/24/97 13:00	01/28/97 13:58	418.1 slm

Inchcape Testing Services
Environmental Laboratories

CLIENT: WALK,HAYDEL & ASSOCIATES,
SAMPLE: B9 (10-12) DUP.
LAB ID: 9701230167
MATRIX: SOLID

GROUP NO. : 9700510
REPORT DATE: 01/31/97
PROJECT NO.: 4741.27

SAMPLE DATE: 01/22/97 SAMPLE TIME: 08:28

COMPOUND	RESULT	UNITS	DET LIM	PREP DATE/TIME	ANALYSIS DATE/TIME	METHOD ANALYST
Total Petroleum Hydrocarbon QC Batch 58395	<DL	(mg/kg)	30	01/24/97 13:00	01/28/97 13:59	418.1 slm

Inchcape Testing Services
Environmental Laboratories

CLIENT: WALK,HAYDEL & ASSOCIATES,
SAMPLE: B9 (11')
LAB ID: 9701230168
MATRIX: WATER

GROUP NO. : 9700510
REPORT DATE: 01/31/97
PROJECT NO.: 4741.27

SAMPLE DATE: 01/22/97 SAMPLE TIME: 08:48

COMPOUND	RESULT	UNITS	DET LIM	PREP DATE/TIME	ANALYSIS DATE/TIME	METHOD ANALYST
Chloride (Titrimetric) QC Batch 58197	225	(mg/L Cl)	10		01/27/97 09:20	325.3 jdt

Inchcape Testing Services
Environmental Laboratories

CLIENT: WALK,HAYDEL & ASSOCIATES,
SAMPLE: HPPAUGER
LAB ID: 9701230169
MATRIX: SOLID

GROUP NO. : 9700510
REPORT DATE: 01/31/97
PROJECT NO.: 4741.27

SAMPLE DATE: 01/23/97 SAMPLE TIME: 08:13

COMPOUND	RESULT	UNITS	DET LIM	PREP DATE/TIME	ANALYSIS DATE/TIME	METHOD ANALYST
Reactivity Cyanide	<DL	(mg/kg CN)	0.1	01/24/97 09:30	01/27/97 13:00	7.3.3.2 bje
QC Batch 58205						
Flashpoint	>212	(DEG F)	50		01/30/97 10:30	1010M crh
QC Batch 58409						
pH/Extract	9.1	(Units)	1		01/24/97 13:15	9045 olt
QC Batch 58180						
Reactivity Sulfide	<DL	(mg/kg S)	0.5	01/24/97 09:30	01/24/97 13:28	7.3.4.2 bje
QC Batch 58108						
Total Petroleum Hydrocarbon	941	(mg/kg)	150	01/24/97 13:00	01/28/97 14:04	418.1 slm
QC Batch 58395						

Inchcape Testing Services
Environmental Laboratories

CLIENT: WALK,HAYDEL & ASSOCIATES,
SAMPLE: B1B9SOIL
LAB ID: 9701230170
MATRIX: SOLID

GROUP NO. : 9700510
REPORT DATE: 01/31/97
PROJECT NO.: 4741.27

SAMPLE DATE: 01/23/97 SAMPLE TIME: 09:02

COMPOUND	RESULT	UNITS	DET LIM	PREP DATE/TIME	ANALYSIS DATE/TIME	METHOD ANALYST
Reactivity Cyanide	<DL	(mg/kg CN)	0.1	01/24/97 09:30	01/27/97 13:00	7.3.3.2 bje
QC Batch 58205						
Flashpoint	>212	(DEG F)	50		01/30/97 10:30	1010M crh
QC Batch 58409						
pH/Extract	8.4	(Units)	1		01/24/97 13:15	9045 olt
QC Batch 58180						
Reactivity Sulfide	0.8	(mg/kg S)	0.5	01/24/97 09:30	01/24/97 13:28	7.3.4.2 bje
QC Batch 58108						
Total Petroleum Hydrocarbon	<DL	(mg/kg)	30	01/24/97 13:00	01/28/97 14:05	418.1 slm
QC Batch 58395						

Inchcape Testing Services
Environmental Laboratories

CLIENT: WALK,HAYDEL & ASSOCIATES,
SAMPLE: B1B3B9COMP
LAB ID: 9701230171
MATRIX: WATER

GROUP NO. : 9700510
REPORT DATE: 01/31/97
PROJECT NO.: 4741.27

SAMPLE DATE: 01/22/97 **SAMPLE TIME:** 13:30

COMPOUND	RESULT	UNITS	DET LIM	PREP DATE/TIME	ANALYSIS DATE/TIME	METHOD ANALYST
Chloride (Titrimetric) QC Batch 58197	380	(mg/L Cl)	10		01/27/97 09:20	325.3 jdt

Inchcape Testing Services
Environmental Laboratories

CLIENT: WALK,HAYDEL & ASSOCIATES,
SAMPLE: B3COMP
LAB ID: 9701240019
MATRIX: SOLID

GROUP NO. : 9700510
REPORT DATE: 01/31/97
PROJECT NO.: 4741.27

SAMPLE DATE: 01/23/97 SAMPLE TIME: 09:43

COMPOUND	RESULT	UNITS	DET LIM	PREP DATE/TIME	ANALYSIS DATE/TIME	METHOD ANALYST
Reactivity Cyanide	<DL	(mg/kg CN)	0.1	01/24/97 09:30	01/30/97 13:30	7.3.3.2 jdt
QC Batch 58424						
Flashpoint	>212	(DEG F)	50		01/30/97 10:30	1010M crh
QC Batch 58409						
pH/Extract	7.0	(Units)	1		01/28/97 10:00	9045 olt
QC Batch 58277						
Reactivity Sulfide	<DL	(mg/kg S)	0.5	01/24/97 09:30	01/30/97 09:19	7.3.4.2 bje
QC Batch 58443						
Total Petroleum Hydrocarbon	<DL	(mg/kg)	30	01/27/97 09:00	01/28/97 13:49	418.1 slm
QC Batch 58394						

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO. : 9700510
PROJECT NO. : 4741.27
REPORT DATE : 01/31/97
MATRIX : SOLID
RECEIVE DATE: 01/23/97

SAMPLE NO. : 9701230166
CLIENT ID : B9 (10-12)
SAMPLE DATE: 01/22/97
SAMPLE TIME: 08:28

ANALYST: eeb ANALYSIS DATE: 01/24/97 METHOD: 8020
ANALYSIS TIME: 15:13 PREP REQ : N PREP DATE :

PARAMETER QC Batch:	RESULT (mg/kg)	DILUTION	DET LIM (mg/kg)
Benzene	< DL	1	0.001
Toluene	< DL	1	0.001
Ethylbenzene	< DL	1	0.001
Xylene	< DL	1	0.001

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO. : 9700510
PROJECT NO. : 4741.27
REPORT DATE : 01/31/97
MATRIX : WATER
RECEIVE DATE: 01/23/97

SAMPLE NO. : 9701230164
CLIENT ID : B1-RIN
SAMPLE DATE: 01/21/97
SAMPLE TIME: 15:45

ANALYST: eeb
ANALYSIS DATE: 01/24/97 METHOD: 8020
ANALYSIS TIME: 17:53 PREP REQ : N PREP DATE :

PARAMETER QC Batch:	RESULT (ug/L)	DILUTION	DET LIM (ug/L)
Benzene	< DL	1	1
Ethylbenzene	< DL	1	1
Toluene	< DL	1	1
Xylene	< DL	1	1

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO. : 9700510
PROJECT NO. : 4741.27
REPORT DATE : 01/31/97
MATRIX : WATER
RECEIVE DATE: 01/23/97

SAMPLE NO. : 9701230165
CLIENT ID : TRIP BLANK
SAMPLE DATE: 01/21/97
SAMPLE TIME: 00:00

ANALYST: eeb ANALYSIS DATE: 01/24/97 METHOD: 8020
ANALYSIS TIME: 17:28 PREP REQ : N PREP DATE :

PARAMETER QC Batch:	RESULT (ug/L)	DILUTION	DET LIM (ug/L)
Benzene	< DL	1	1
Ethylbenzene	< DL	1	1
Toluene	< DL	1	1
Xylene	< DL	1	1

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO : 9700510
PROJECT NO. : 4741.27
REPORT DATE : 01/31/97
MATRIX : SOLID
RECEIVE DATE: 01/23/97

SAMPLE NO : 9701230169
CLIENT ID : HPPAUGER
SAMPLE DATE: 01/23/97
SAMPLE TIME: 08:13

ANALYST: jmk
ANALYSIS DATE: 01/27/97
ANALYSIS TIME: 13:55
PREP DATE: 01/24/97

ALL UNITS ARE (mg/L)

TCLP CONTAMINANT	RESULT	REG LIM	DET LIM	DILUTION	METHOD
1,4-Dichlorobenzene	< DL	7.5	0.05	1	8270
2,4-Dinitrotoluene	< DL	0.13	0.05	1	8270
Hexachlorobenzene	< DL	0.13	0.05	1	8270
Hexachlorobutadiene	< DL	0.5	0.05	1	8270
Hexachloroethane	< DL	3.0	0.05	1	8270
Nitrobenzene	< DL	2.0	0.05	1	8270
Pyridine	< DL	5.0	0.05	1	8270
o-Cresol	< DL	200.0	0.05	1	8270
m & p-Cresol	< DL	200.0	0.05	1	8270
Cresols	< DL	200.0	0.05	1	8270
Pentachlorophenol	< DL	100.0	0.05	1	8270
2,4,5-Trichlorophenol	< DL	400.0	0.05	1	8270
2,4,6-Trichlorophenol	< DL	2.0	0.05	1	8270

"*" DENOTES TCLP REGULATORY LIMIT EXCEEDED

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO : 9700510
PROJECT NO. : 4741.27
REPORT DATE : 01/31/97
MATRIX : SOLID
RECEIVE DATE: 01/23/97

SAMPLE NO : 9701230170
CLIENT ID : B1B9SOIL
SAMPLE DATE: 01/23/97
SAMPLE TIME: 09:02

ANALYST: jmk
ANALYSIS DATE: 01/27/97
ANALYSIS TIME: 14:34
PREP DATE: 01/24/97

ALL UNITS ARE (mg/L)

TCLP CONTAMINANT	RESULT	REG LIM	DET LIM	DILUTION	METHOD
1,4-Dichlorobenzene	< DL	7.5	0.05	1	8270
2,4-Dinitrotoluene	< DL	0.13	0.05	1	8270
Hexachlorobenzene	< DL	0.13	0.05	1	8270
Hexachlorobutadiene	< DL	0.5	0.05	1	8270
Hexachloroethane	< DL	3.0	0.05	1	8270
Nitrobenzene	< DL	2.0	0.05	1	8270
Pyridine	< DL	5.0	0.05	1	8270
o-Cresol	< DL	200.0	0.05	1	8270
m & p-Cresol	< DL	200.0	0.05	1	8270
Cresols	< DL	200.0	0.05	1	8270
Pentachlorophenol	< DL	100.0	0.05	1	8270
2,4,5-Trichlorophenol	< DL	400.0	0.05	1	8270
2,4,6-Trichlorophenol	< DL	2.0	0.05	1	8270

"*" DENOTES TCLP REGULATORY LIMIT EXCEEDED

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO : 9700510
PROJECT NO. : 4741.27
REPORT DATE : 01/31/97
MATRIX : SOLID
RECEIVE DATE: 01/23/97

SAMPLE NO : 9701240019
CLIENT ID : B3COMP
SAMPLE DATE: 01/23/97
SAMPLE TIME: 09:43

ANALYST: jmk
ANALYSIS DATE: 01/28/97
ANALYSIS TIME: 14:28
PREP DATE: 01/27/97

ALL UNITS ARE (mg/L)

TCLP CONTAMINANT	RESULT	REG LIM	DET LIM	DILUTION	METHOD
1,4-Dichlorobenzene	< DL	7.5	0.05	1	8270
2,4-Dinitrotoluene	< DL	0.13	0.05	1	8270
Hexachlorobenzene	< DL	0.13	0.05	1	8270
Hexachlorobutadiene	< DL	0.5	0.05	1	8270
Hexachloroethane	< DL	3.0	0.05	1	8270
Nitrobenzene	< DL	2.0	0.05	1	8270
Pyridine	< DL	5.0	0.05	1	8270
o-Cresol	< DL	200.0	0.05	1	8270
m & p-Cresol	< DL	200.0	0.05	1	8270
Cresols	< DL	200.0	0.05	1	8270
Pentachlorophenol	< DL	100.0	0.05	1	8270
2,4,5-Trichlorophenol	< DL	400.0	0.05	1	8270
2,4,6-Trichlorophenol	< DL	2.0	0.05	1	8270

"*" DENOTES TCLP REGULATORY LIMIT EXCEEDED

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO : 9700510
PROJECT NO. : 4741.27
REPORT DATE : 01/31/97
MATRIX : SOLID
RECEIVE DATE: 01/23/97

SAMPLE NO : 9701230169
CLIENT ID : HPPAUGER
SAMPLE DATE: 01/23/97
SAMPLE TIME: 08:13

ANALYST: mgm
ANALYSIS DATE: 01/27/97
ANALYSIS TIME: 19:14
PREP DATE: 01/24/97

ALL UNITS ARE (mg/L)

TCLP CONTAMINANT	RESULT	REG LIM	DET LIM	DILUTION	METHOD
2,4-D	< DL	10.0	0.0025	1	8150
2,4,5-TP Silvex	< DL	1.0	0.0025	1	8150

"*" DENOTES TCLP REGULATORY LIMIT EXCEEDED

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO : 9700510
PROJECT NO. : 4741.27
REPORT DATE : 01/31/97
MATRIX : SOLID
RECEIVE DATE: 01/23/97

SAMPLE NO : 9701230170
CLIENT ID : B1B9SOIL
SAMPLE DATE: 01/23/97
SAMPLE TIME: 09:02

ANALYST: mgm
ANALYSIS DATE: 01/27/97
ANALYSIS TIME: 18:02
PREP DATE: 01/24/97

ALL UNITS ARE (mg/L)

TCLP CONTAMINANT	RESULT	REG LIM	DET LIM	DILUTION	METHOD
2,4-D	< DL	10.0	0.0025	1	8150
2,4,5-TP Silvex	< DL	1.0	0.0025	1	8150

"*" DENOTES TCLP REGULATORY LIMIT EXCEEDED

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO : 9700510
PROJECT NO. : 4741.27
REPORT DATE : 01/31/97
MATRIX : SOLID
RECEIVE DATE: 01/23/97

SAMPLE NO : 9701240019
CLIENT ID : B3COMP
SAMPLE DATE: 01/23/97
SAMPLE TIME: 09:43

ANALYST: mgm
ANALYSIS DATE: 01/29/97
ANALYSIS TIME: 14:59
PREP DATE: 01/27/97

ALL UNITS ARE (mg/L)

TCLP CONTAMINANT	RESULT	REG LIM	DET LIM	DILUTION	METHOD
2,4-D	< DL	10.0	0.0025	1	8150
2,4,5-TP Silvex	< DL	1.0	0.0025	1	8150

"*" DENOTES TCLP REGULATORY LIMIT EXCEEDED

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO : 9700510
PROJECT NO. : 4741.27
REPORT DATE : 01/31/97
MATRIX : SOLID
RECEIVE DATE: 01/23/97

SAMPLE NO : 9701230169
CLIENT ID : HPPAUGER
SAMPLE DATE: 01/23/97
SAMPLE TIME: 08:13

ANALYST: crv
ANALYSIS DATE: 01/30/97
ANALYSIS TIME: 10:00
PREP DATE: 01/27/97

ALL UNITS ARE (mg/L As)

TCLP CONTAMINANT	RESULT	REG LIM	DET LIM	DILUTION	METHOD
Arsenic	< DL	5.0	0.2	1	6010A
Barium	0.211	100.0	0.1	1	6010A
Cadmium	< DL	1.0	0.01	1	6010A
Chromium	< DL	5.0	0.05	1	6010A
Lead	< DL	5.0	0.1	1	6010A
Mercury	< DL	0.2	0.0002	1	7470A
Silver	< DL	5.0	0.01	1	7760A
Selenium	< DL	1.0	0.2	1	6010A

"*" DENOTES TCLP REGULATORY LIMIT EXCEEDED

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO : 9700510
PROJECT NO. : 4741.27
REPORT DATE : 01/31/97
MATRIX : SOLID
RECEIVE DATE: 01/23/97

SAMPLE NO : 9701230170
CLIENT ID : B1B9SOIL
SAMPLE DATE: 01/23/97
SAMPLE TIME: 09:02

ANALYST: crv
ANALYSIS DATE: 01/30/97
ANALYSIS TIME: 15:12
PREP DATE: 01/27/97

ALL UNITS ARE (mg/L As)

TCLP CONTAMINANT	RESULT	REG LIM	DET LIM	DILUTION	METHOD
Arsenic	< DL	5.0	0.2	1	6010A
Barium	0.279	100.0	0.1	1	6010A
Cadmium	< DL	1.0	0.01	1	6010A
Chromium	< DL	5.0	0.05	1	6010A
Lead	< DL	5.0	0.1	1	6010A
Mercury	0.0002	0.2	0.0002	1	7470A
Silver	< DL	5.0	0.01	1	7760A
Selenium	< DL	1.0	0.2	1	6010A

"*" DENOTES TCLP REGULATORY LIMIT EXCEEDED

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO : 9700510
PROJECT NO. : 4741.27
REPORT DATE : 01/31/97
MATRIX : SOLID
RECEIVE DATE: 01/23/97

SAMPLE NO : 9701240019
CLIENT ID : B3COMP
SAMPLE DATE: 01/23/97
SAMPLE TIME: 09:43

ANALYST: crv
ANALYSIS DATE: 01/30/97
ANALYSIS TIME: 10:00
PREP DATE: 01/27/97

ALL UNITS ARE (mg/L As)

TCLP CONTAMINANT	RESULT	REG LIM	DET LIM	DILUTION	METHOD
Arsenic	< DL	5.0	0.2	1	6010A
Barium	0.249	100.0	0.1	1	6010A
Cadmium	< DL	1.0	0.01	1	6010A
Chromium	< DL	5.0	0.05	1	6010A
Lead	< DL	5.0	0.1	1	6010A
Mercury	< DL	0.2	0.0002	1	7470A
Silver	< DL	5.0	0.01	1	7760A
Selenium	< DL	1.0	0.2	1	6010A

"*" DENOTES TCLP REGULATORY LIMIT EXCEEDED

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO : 9700510
PROJECT NO. : 4741.27
REPORT DATE : 01/31/97
MATRIX : SOLID
RECEIVE DATE: 01/23/97

SAMPLE NO : 9701230169
CLIENT ID : HPPAUGER
SAMPLE DATE: 01/23/97
SAMPLE TIME: 08:13

ANALYST: slm
ANALYSIS DATE: 01/28/97
ANALYSIS TIME: 10:43
PREP DATE: 01/24/97

ALL UNITS ARE (mg/L)

TCLP CONTAMINANT	RESULT	REG LIM	DET LIM	DILUTION	METHOD
Chlordane	< DL	0.03	0.0025	1	8080
Endrin	< DL	0.02	0.0005	1	8080
Heptachlor epoxide	< DL	0.008	0.0005	1	8080
Heptachlor	< DL	0.008	0.0005	1	8080
Lindane	< DL	0.4	0.0005	1	8080
Methoxychlor	< DL	10.0	0.0025	1	8080
Toxaphene	< DL	0.5	0.025	1	8080

"*" DENOTES TCLP REGULATORY LIMIT EXCEEDED

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO : 9700510
PROJECT NO. : 4741.27
REPORT DATE : 01/31/97
MATRIX : SOLID
RECEIVE DATE: 01/23/97

SAMPLE NO : 9701230170
CLIENT ID : B1B9SOIL
SAMPLE DATE: 01/23/97
SAMPLE TIME: 09:02

ANALYST: slm
ANALYSIS DATE: 01/28/97
ANALYSIS TIME: 11:13
PREP DATE: 01/24/97

ALL UNITS ARE (mg/L)

TCLP CONTAMINANT	RESULT	REG LIM	DET LIM	DILUTION	METHOD
Chlordane	< DL	0.03	0.0025	1	8080
Endrin	< DL	0.02	0.0005	1	8080
Heptachlor epoxide	< DL	0.008	0.0005	1	8080
Heptachlor	< DL	0.008	0.0005	1	8080
Lindane	< DL	0.4	0.0005	1	8080
Methoxychlor	< DL	10.0	0.0025	1	8080
Toxaphene	< DL	0.5	0.025	1	8080

"*" DENOTES TCLP REGULATORY LIMIT EXCEEDED

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO : 9700510
PROJECT NO. : 4741.27
REPORT DATE : 01/31/97
MATRIX : SOLID
RECEIVE DATE: 01/23/97

SAMPLE NO : 9701240019
CLIENT ID : B3COMP
SAMPLE DATE: 01/23/97
SAMPLE TIME: 09:43

ANALYST: slm
ANALYSIS DATE: 01/28/97
ANALYSIS TIME: 13:42
PREP DATE: 01/27/97

ALL UNITS ARE (mg/L)

TCLP CONTAMINANT	RESULT	REG LIM	DET LIM	DILUTION	METHOD
Chlordane	< DL	0.03	0.0025	1	8080
Endrin	< DL	0.02	0.0005	1	8080
Heptachlor epoxide	< DL	0.008	0.0005	1	8080
Heptachlor	< DL	0.008	0.0005	1	8080
Lindane	< DL	0.4	0.0005	1	8080
Methoxychlor	< DL	10.0	0.0025	1	8080
Toxaphene	< DL	0.5	0.025	1	8080

"*" DENOTES TCLP REGULATORY LIMIT EXCEEDED

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO : 9700510
PROJECT NO. : 4741.27
REPORT DATE : 01/31/97
MATRIX : SOLID
RECEIVE DATE: 01/23/97

SAMPLE NO : 9701230169
CLIENT ID : HPPAUGER
SAMPLE DATE: 01/23/97
SAMPLE TIME: 08:13

ANALYST: arr
ANALYSIS DATE: 01/29/97
ANALYSIS TIME: 19:28
PREP DATE: 01/23/97

ALL UNITS ARE (mg/L)

TCLP CONTAMINANT	RESULT	REG LIM	DET LIM	DILUTION	METHOD
Benzene	< DL	0.5	0.05	10	8240
Carbon tetrachloride	< DL	0.5	0.05	10	8240
Chlorobenzene	< DL	100.0	0.05	10	8240
Chloroform	< DL	6.0	0.05	10	8240
1,2-Dichloroethane	< DL	0.5	0.05	10	8240
1,1-Dichloroethylene	< DL	0.7	0.05	10	8240
Methyl ethyl ketone	< DL	200.0	0.25	10	8240
Tetrachloroethylene	< DL	0.7	0.05	10	8240
Trichloroethylene	< DL	0.5	0.05	10	8240
Vinyl chloride	< DL	0.2	0.05	10	8240

"*" DENOTES TCLP REGULATORY LIMIT EXCEEDED

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO : 9700510
PROJECT NO. : 4741.27
REPORT DATE : 01/31/97
MATRIX : SOLID
RECEIVE DATE: 01/23/97

SAMPLE NO : 9701230170
CLIENT ID : B1B9SOIL
SAMPLE DATE: 01/23/97
SAMPLE TIME: 09:02

ANALYST: arr
ANALYSIS DATE: 01/29/97
ANALYSIS TIME: 19:45
PREP DATE: 01/23/97

ALL UNITS ARE (mg/L)

TCLP CONTAMINANT	RESULT	REG LIM	DET LIM	DILUTION	METHOD
Benzene	< DL	0.5	0.05	10	8240
Carbon tetrachloride	< DL	0.5	0.05	10	8240
Chlorobenzene	< DL	100.0	0.05	10	8240
Chloroform	< DL	6.0	0.05	10	8240
1,2-Dichloroethane	< DL	0.5	0.05	10	8240
1,1-Dichloroethylene	< DL	0.7	0.05	10	8240
Methyl ethyl ketone	< DL	200.0	0.25	10	8240
Tetrachloroethylene	< DL	0.7	0.05	10	8240
Trichloroethylene	< DL	0.5	0.05	10	8240
Vinyl chloride	< DL	0.2	0.05	10	8240

"*" DENOTES TCLP REGULATORY LIMIT EXCEEDED

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO : 9700510
PROJECT NO. : 4741.27
REPORT DATE : 01/31/97
MATRIX : SOLID
RECEIVE DATE: 01/23/97

SAMPLE NO : 9701240019
CLIENT ID : B3COMP
SAMPLE DATE: 01/23/97
SAMPLE TIME: 09:43

ANALYST: arr
ANALYSIS DATE: 01/30/97
ANALYSIS TIME: 14:42
PREP DATE: 01/27/97

ALL UNITS ARE (mg/L)

TCLP CONTAMINANT	RESULT	REG LIM	DET LIM	DILUTION	METHOD
Benzene	< DL	0.5	0.05	10	8240
Carbon tetrachloride	< DL	0.5	0.05	10	8240
Chlorobenzene	< DL	100.0	0.05	10	8240
Chloroform	< DL	6.0	0.05	10	8240
1,2-Dichloroethane	< DL	0.5	0.05	10	8240
1,1-Dichloroethylene	< DL	0.7	0.05	10	8240
Methyl ethyl ketone	< DL	200.0	0.25	10	8240
Tetrachloroethylene	< DL	0.7	0.05	10	8240
Trichloroethylene	< DL	0.5	0.05	10	8240
Vinyl chloride	< DL	0.2	0.05	10	8240

"*" DENOTES TCLP REGULATORY LIMIT EXCEEDED

QUALITY CONTROL SUMMARY

Report#: 9700510

Parameter	Units	METHOD BLANK		LABORATORY CONTROL STANDARD			DUPLICATE			SPIKE		
		Detection Limit	Result	Spiked Amount	Recovered Amount	Percent Recovery	Result 1	Result 2	RPD	Spiked Amount	Recovered Amount	Percent Recovery
QC Batch 58108												
Reactivity Sulfide	(mg/kg S)			0.50	0.49	98	<DL	<DL				
QC Batch 58180												
pH/Extract	(Units)			5.00	5.02	100	7.8	7.8	0			
QC Batch 58197												
Chloride (Titrimetric)	(mg/L Cl)			50.0	49.0	98	380	375	1	500	490	98
QC Batch 58205												
Reactivity Cyanide	(mg/kg CN)			0.050	0.052	104	<DL	<DL				
QC Batch 58277												
pH/Extract	(Units)			5.00	5.03	101	7.0	7.0	0			
QC Batch 58394												
Total Petroleum Hydrocarbons	(mg/kg)			333	300	90				NA	NA	
QC Batch 58395												
Total Petroleum Hydrocarbons	(mg/kg)			333	293	88				333	231	69
QC Batch 58409												
Flashpoint	(DEG F)			81	81	100	>212	>212				
QC Batch 58424												
Reactivity Cyanide	(mg/kg CN)			0.050	0.053	106	0.1	0.1	0			
QC Batch 58426												
Silver	(mg/L Ag)			0.250	0.245	98				0.250	0.242	97
Arsenic	(mg/L As)			10.0	11.6	116				10.0	10.7	107
Barium	(mg/L Ba)			10.0	10.9	109				10.0	9.20	92
Cadmium	(mg/L Cd)			0.250	0.290	116				0.250	0.250	100
Chromium	(mg/L Cr)			1.00	1.09	109				1.00	0.97	97

QUALITY CONTROL SUMMARY

Report#: 9700510

Parameter	Units	METHOD BLANK Detection Limit	METHOD BLANK Result	LABORATORY CONTROL STANDARD Spiked Amount	LABORATORY CONTROL STANDARD Recovered Amount	LABORATORY CONTROL STANDARD Percent Recovery	DUPLICATE Result 1	DUPLICATE Result 2	DUPLICATE RPD	SPIKE Spiked Amount	SPIKE Recovered Amount	SPIKE Percent Recovery
Mercury	(mg/L Hg)			0.005	0.00495	99				0.005	0.00485	97
Lead	(mg/L Pb)			2.50	2.68	107				2.50	2.35	94
Selenium	(mg/L Se)			10.0	11.3	113				10.0	10.4	104
QC Batch 58429												
Silver	(mg/L Ag)			0.250	0.250	100				0.250	0.258	103
Arsenic	(mg/L As)			10.0	12.0	120				10.0	10.1	101
Barium	(mg/L Ba)			10.0	11.3	113				10.0	8.60	86
Cadmium	(mg/L Cd)			0.250	0.278	111				0.250	0.230	92
Chromium	(mg/L Cr)			1.00	1.17	117				1.00	0.91	91
Mercury	(mg/L Hg)			0.005	0.00485	97				0.005	0.00520	104
Lead	(mg/L Pb)			2.50	2.70	108				2.50	2.18	87
Selenium	(mg/L Se)			10.0	12.0	120				10.0	9.70	97
QC Batch 58443												
Reactivity Sulfide	(mg/kg S)			0.50	0.45	90	4.2	4.2	0			

SURROGATE DETAIL RESULTS

Sample#: 9701230164 Client ID: B1-RIN
Matrix : WATER

Surrogate Name	Percent Recovery	Acceptable Range	Method
BROMOFLUOROBENZENE	94	57 - 137	8020

Sample#: 9701230165 Client ID: TRIP BLANK
Matrix : WATER

Surrogate Name	Percent Recovery	Acceptable Range	Method
BROMOFLUOROBENZENE	108	57 - 137	8020

Sample#: 9701230166 Client ID: B9 (10-12)
Matrix : SOLID

Surrogate Name	Percent Recovery	Acceptable Range	Method
BROMOFLUOROBENZENE	99	57 - 157	8020

Sample#: 9701230169 Client ID: HPPAUGER
Matrix : SOLID

Surrogate Name	Percent Recovery	Acceptable Range	Method
Decachlorobiphenyl	109	60 - 150	1311/8080
Tetrachloro-m-xylene	95	60 - 150	1311/8080
Dicamba	61	30 - 132	TCLP 1311/8151
2,4-DB	88	25 - 138	TCLP 1311/8151
Phenol-d6	32	10 - 94	TCLP 1311/8270
2-Fluorophenol	50	21 - 100	TCLP 1311/8270
Nitrobenzene-d5	72	35 - 114	TCLP 1311/8270
2-Fluorobiphenyl	76	43 - 116	TCLP 1311/8270
2,4,6-Tribromophenol	80	10 - 123	TCLP 1311/8270
Terphenyl-d14	88	33 - 141	TCLP 1311/8270
Toluene-d8	98	81 - 117	ZHE 1311/8240
1,2-Dichloroethane-d4	107	70 - 121	ZHE 1311/8240
4-Bromofluorobenzene	99	74 - 121	ZHE 1311/8240

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: Case No.: 9611091 SAS No.: SDG No.: 012197.S

Matrix Spike - 8270/625C Sample No.: 970121SBLK01

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Phenol	100.000	0.298	36.609	36	5-112
2-Chlorophenol	100.000	0.000	73.171	73	23-134
1,4-Dichlorobenzene	100.000	0.000	73.391	73	20-124
N-Nitroso-di-n-prop.(1)	100.000	0.000	76.442	76	1-230
1,2,4-Trichlorobenzene	100.000	0.000	82.998	83	44-142
4-Chloro-3-Methylphenol	100.000	0.000	83.501	84	22-147
Acenaphthene	100.000	0.000	84.507	84	47-145
4-Nitrophenol	100.000	0.000	42.759	43	1-132
2,4-Dinitrotoluene	100.000	0.000	91.965	92	39-139
Pentachlorophenol	100.000	0.000	91.132	91	14-176
Pyrene	100.000	0.000	87.479	87	52-115

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	100.000	39.247	39	8	42	5-112
2-Chlorophenol	100.000	79.745	80	9	40	23-134
1,4-Dichlorobenzene	100.000	78.342	78	7	28	20-124
N-Nitroso-di-n-prop.(1)	100.000	82.931	83	9	38	1-230
1,2,4-Trichlorobenzene	100.000	88.043	88	6	28	44-142
4-Chloro-3-Methylphenol	100.000	87.048	87	4	42	22-147
Acenaphthene	100.000	90.988	91	8	31	47-145
4-Nitrophenol	100.000	47.691	48	11	50	1-132
2,4-Dinitrotoluene	100.000	97.810	98	6	38	39-139
Pentachlorophenol	100.000	95.923	96	5	50	14-176
Pyrene	100.000	89.557	90	3	31	52-115

(1) N-Nitroso-di-n-propylamine
Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits

COMMENTS: SVW-145

FORM 3
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: INCHCAPE TESTING SERVICES Contract:

Lab Code: Case No.: 9600286 SAS No.: SDG No.: 970123.S

Matrix Spike - CKA Sample No.: 9701140080

COMPOUND	SPIKE ADDED (ppb)	SAMPLE CONCENTRATION (ppb)	MS CONCENTRATION (ppb)	MS % REC #	QC. LIMITS REC.
1,1-DICHLORETHENE +	50.00	0.0000	58.50	117	61-145
Trichloroethene	50.00	0.0000	54.06	108	71-120
Benzene	50.00	0.0000	54.13	108	76-127
TOLUENE +	50.00	0.0000	58.15	116	76-125
CHLOROBENZENE ++	50.00	0.0000	56.22	112	75-130

COMPOUND	SPIKE ADDED (ppb)	MSD CONCENTRATION (ppb)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-DICHLORETHENE +	50.00	56.46	113	3	14	61-145
Trichloroethene	50.00	54.01	108	0	14	71-120
Benzene	50.00	54.64	109	1	11	76-127
TOLUENE +	50.00	56.63	113	3	13	76-125
CHLOROBENZENE ++	50.00	55.56	111	1	13	75-130

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: 4WL824-027

GAS CHROMATOGRAPHY

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Sample No: 9701230164 **Level (low/med). :** Low

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC (ug/L)	MS CONC ug/L)	MS % REC#	QC LIMITS REC.
Benzene	20.0	< 1.0	19.1	96	39-150
Toluene	20.0	< 1.0	18.9	95	46-148
Ethylbenzene	20.0	< 1.0	19.4	97	32-160
M,P-Xylene	40.0	< 1.0	41.0	103	35-150
O-Xylene/Styrene	40.0	< 1.0	42.3	106	35-150

COMPOUND	SPIKE ADDED (ug/L)	MSD CONC (ug/L)	MSD % REC#	% RPD#	RPD LIMIT	QC LIMITS REC.
Benzene	20.0	17.9	90	6.5	0-25	39-150
Toluene	20.0	17.8	89	6.0	0-26	46-148
Ethylbenzene	20.0	18.4	92	5.3	0-25	32-160
M,P-Xylene	40.0	39.2	98	4.5	0-25	35-150
O-Xylene/Styrene	40.0	41.0	103	3.1	0-25	35-150

Column to be used to flag recovery and RPD values with an asterick

* Values outside of QC limits

RPD: 0 out 5 outside limits

Spike Recovery 0 out 10 outside limits

Comments: LWBTEX-094

GAS CHROMATOGRAPHY

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Sample No: 9701170059 **Level (low/med) :** Low

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONC (ug/kg)	MS CONC (ug/kg)	MS % REC#	QC LIMITS REC.
Benzene	20.0	< 1.00	18.5	93	39-150
Toluene	20.0	< 1.00	19.1	96	46-148
Ethylbenzene	20.0	< 1.00	18.8	94	32-160
M,P-Xylene	40.0	< 1.00	38.6	97	35-150
Styrene	40.0	< 1.00	18.7	47	35-150
O-Xylene	40.0	< 1.00	19.8	50	35-150

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	MSD % REC#	% RPD#	RPD LIMIT	QC LIMITS REC.
Benzene	20.0	18.9	95	2.1	0-25	39-150
Toluene	20.0	18.9	95	1.1	0-26	46-148
Ethylbenzene	20.0	18.7	94	0.5	0-25	32-160
M,P-Xylene	40.0	38.4	96	0.5	0-25	35-150
Styrene	40.0	18.3	46	2.2	0-25	35-150
O-Xylene	40.0	19.9	50	0.5	0-25	35-150

Column to be used to flag recovery and RPD values with an asterick

* Values outside of QC limits

RPD: 0 out 5 outside limits

Spike Recovery 0 out 10 outside limits

Comments: BSBTEX-371

SURROGATE DETAIL RESULTS

Sample#: 9701230170 Client ID: B1B9SOIL
Matrix : SOLID

Surrogate Name	Percent Recovery	Acceptable Range	Method
Decachlorobiphenyl	101	60 - 150	1311/8080
Tetrachloro-m-xylene	88	60 - 150	1311/8080
Dicamba	MI	30 - 132	TCLP 1311/8151
2,4-DB	103	25 - 138	TCLP 1311/8151
Phenol-d6	34	10 - 94	TCLP 1311/8270
2-Fluorophenol	52	21 - 100	TCLP 1311/8270
Nitrobenzene-d5	71	35 - 114	TCLP 1311/8270
2-Fluorobiphenyl	74	43 - 116	TCLP 1311/8270
2,4,6-Tribromophenol	79	10 - 123	TCLP 1311/8270
Terphenyl-d14	88	33 - 141	TCLP 1311/8270
Toluene-d8	100	81 - 117	ZHE 1311/8240
1,2-Dichloroethane-d4	111	70 - 121	ZHE 1311/8240
4-Bromofluorobenzene	103	74 - 121	ZHE 1311/8240

Sample#: 9701240019 Client ID: B3COMP
Matrix : SOLID

Surrogate Name	Percent Recovery	Acceptable Range	Method
Decachlorobiphenyl	100	60 - 150	1311/8080
Tetrachloro-m-xylene	108	60 - 150	1311/8080
Dicamba	99	30 - 132	TCLP 1311/8151
2,4-DB	108	25 - 138	TCLP 1311/8151
Phenol-d6	25	10 - 94	TCLP 1311/8270
2-Fluorophenol	39	21 - 100	TCLP 1311/8270
Nitrobenzene-d5	62	35 - 114	TCLP 1311/8270
2-Fluorobiphenyl	58	43 - 116	TCLP 1311/8270
2,4,6-Tribromophenol	59	10 - 123	TCLP 1311/8270
Terphenyl-d14	81	33 - 141	TCLP 1311/8270
Toluene-d8	98	81 - 117	ZHE 1311/8240
1,2-Dichloroethane-d4	95	70 - 121	ZHE 1311/8240
4-Bromofluorobenzene	107	74 - 121	ZHE 1311/8240

CHAIN OF CUSTODY RECORD

Inchcape Testing Services
Environmental Laboratories
7979 GSRI Ave. • Baton Rouge, LA 70820
(504) 769-4900 • Fax (504) 767-5717

Lab use only	Client Name	Client #	Group #	Due Date
	Walk Haydel	337	9700510	1/30/97 dlr

Submitted by
Client: WALK HAYDEL
Address: 600 CARONDELET ST. N.O. LA 70130
Contact: ADRIAN CHAN
Phone: (504) 599-5069
Fax: (504) 599-5181

Bill to
Client: WALK HAYDEL
Address: 600 CARONDELET ST N.O. LA 70130
Contact: ADRIAN CHAN
Phone: (504) 599-5069

P.O. Number: 474197D107
Project Name/Number: BAYOU CHOCTOW / 474127
Sampled By: ADRIAN CHAN

Matrix*	Date	Time (2400)	Comp	Grab	Sample Description	Pre-servatives	No. Containers	Sw 846 Method 9020	Sw 846 Method 418.1	Sw 846 Method 325.3	Sw 846 TCLP/TPH IRCT	Sw 846 Method 325.3 (chlorides)	Remarks	Lab ID
W	1-21-97	1545		✓	B1-RIN	HCl	2	✓	✓	mm			Lowest detection for TPH-IR (418.1)	123
W	1-21-97	1550		✓	Trip Blank	HCl	2	✓						-164
S	1-22-97	8:28		✓	B9 (10-12)	NONE	2	✓	✓					-165
S	1-22-97	8:28		✓	B9 (10-12) DUP	NONE	1		✓					-166
W	1-22-97	8:48		✓	B9 (11')	NONE	1			✓				-167
SD	1-23-97	8:13	✓		HP AUGER	NONE	1				✓			-168
S	1-23-97	9:02	✓		B1B3SOIL	NONE	1				✓			-169
W	1-22-97	1330	✓		B1B3B9COMP	NONE	1					✓		-170
S	1-23-97	9:43	✓		B3COMP mm	NONE	1				✓			-171
													970124-19	

Lab use only:
LAB M ☐ ☐
Gen Chem ☐ ☐
Metals ☐ ☐
GC/MS VOA ☐ ☐
GC/MS Semi-V ☐ ☐
GC/Semi-V ☐ ☐
GC ☐ ☐
Extractions ☐ ☐
Client Services ☐ ☐
Ship ☐ ☐
Info Request ☐ ☐

Lab use only:
Custody Seal
used ☐ yes ☑ no
in tact ☐ yes ☐ no
Temperature °C 6

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☑ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Adrian Chan/Walk Haydel	Maria Haydel	1-23-97	1550
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Note:

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

✓ Water
✓ Solid
___ Oil
___ Sludge

Matrix*: W = water, S = soil, SD = solid, L = liquid, Sl = sludge, O = Oil, CT = charcoal tube, A = air bag

We cannot accept verbal changes. Please fax written changes to (504) 767-5717

WHITE: CLIENT FINAL REPORT — CANARY: LABORATORY — PINK: CLIENT

ITS-06

TERMS AND CONDITIONS OF SERVICES

All work or services performed by WEST-PAINE LABORATORIES, INC. (herein "W-P") for the person or entity ordering such work or services (herein "Customer") are undertaken and the rates and charges of W-P are based upon the following Terms and Conditions of Services (herein "Terms and Conditions of Service"):

1 CONTRACT DOCUMENTS. The contract (herein "Contract") between Customer and W-P shall consist exclusively of:

a.) These Terms and Conditions of Services;
b.) The Price Schedule published by W-P in effect at the time Customer places an order with W-P;
c.) Customer's Purchase Order, without reference to any Terms or Conditions contained therein;
d.) Customer's telephone instructions confirmed in writing by W-P;
e.) Customer's acceptance of any special quotation by W-P; and
f) Any revisions to the foregoing agreed to in writing between Customer and W-P.

No Terms or Conditions placed on Customer's Purchase Order or other documents shall be part of the Contract, unless accepted by W-P's authorized representative in writing. There are no other oral or written agreements between Customer and W-P other than those identified herein.

2. SEVERABILITY. The invalidity or unenforceability of any provision or term of this Contract shall not affect in any way the remainder of the provisions or terms of this Contract.

3 CONTRACT FORMATION. Customers may order analytical or related services from W-P by a Purchase Order, by Chain of Custody document, by telecopy or by telephone conversation confirmed in writing by W-P. Any such order by Customer is acceptance of W-P's offer to do business with Customer under these Terms and Conditions of Services. Additionally, Customer's delivery of samples to W-P is acceptance by Customer of these Terms and Conditions of Services.

4 JURISDICTION, VENUE AND CHOICE OF LAW.

4 1 Jurisdiction. Customer agrees that by placing an order with W-P it is doing business in the State of Louisiana where W-P has its principal place of business. All claims or causes of action which in any way arise out of or relate to the provision of work or services by W-P to Customer shall be brought exclusively in a court of competent jurisdiction in the Parish of East Baton Rouge, State of Louisiana.

4 2 Venue. Customer hereby specifically and voluntarily waives the right to seek to transfer venue from the court in which any action has been filed by W-P against Customer.

4.3 Choice of Law. The laws of the State of Louisiana, to the exclusion of any other procedural rules for choice of applicable law, shall apply to any dispute arising from or related to the provision of work or services by W-P to Customer.

5. TERM OF PAYMENT. Customer agrees to pay to W-P for an order those prices published by W-P in its Price Schedule in effect at the time of the placement of an order by Customer with W-P, together with all taxes and assessments prescribed by law. Customer agrees to make payment to W-P at its principal place of business unless otherwise designated by W-P on an invoice. Unless otherwise provided, customer's account with W-P becomes delinquent if payment is not received by W-P on or before thirty (30) days from the date of any invoice, or at such other time as specifically agreed to in writing by W-P (60-day accounts).

Customer agrees to a $15.00 handling fee for any of Customer's checks returned to W-P because of insufficient funds or for any other reason which prevents W-P from processing the check upon its receipt. This $15 00 handling fee is a minimum charge; if the check is dishonored upon resubmission, or if W-P incurs damage or additional costs due to the dishonoring of Customer's check, Customer shall be liable for all such additional costs and damages together with such other remedies as may be available under Louisiana law.

6 INTEREST CHARGE. Customer agrees to pay to W-P the lesser of an annual rate of interest of 18% (or a monthly rate of 1 5%) or the maximum rate allowed by law on all accounts which are delinquent. If the transactions contemplated by this provision should be determined to be usurious by a court of competent jurisdiction, W-P and Customer agree: (a) that the total amount contracted for, charged or received by W-P which constitutes interest shall not exceed the maximum amount of interest allowed by law; and (b) that any excess interest which is above that allowed by law previously received by W-P shall be credited or paid to Customer by W-P.

7. SAMPLES CONTAINING HAZARDOUS SUBSTANCE. Preceding the shipment of samples or accompanying the samples, Customer shall supply for each sample a complete written disclosure of the presence, known or suspected by Customer, of any hazardous substance, such as one defined by the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), or any hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA), and implementing regulations, or applicable State equivalents of either act, or any local or municipal ordinance. Each sample containing any hazardous substance or hazardous waste shall be packaged, labeled, transported,manifested (accompanied by all applicable Material Safety Data Sheets) and delivered in accordance with all applicable laws and regulations. Information shall be supplied as to the exact time and place where each sample was taken.

8. REFUSAL TO ACCEPT SAMPLE. W-P reserves the right to refuse to accept or to revoke acceptance of and return at Customer's sole expense any sample supplied by Customer which, in the sole opinion of W-P, is of insufficient volume; is not in conformity with the standards set forth in the Inchcape Environmental's Quality Assurance/Quality Control (hereinafter "QA/QC") Manual; is received in damaged, contaminated, or improperly preserved condition, or is likely to pose any unreasonable risk in handling or in analyzing, whether or not such risk has been disclosed by Customer. Customer shall bear the risk of loss, damage, liability or delay in transit.

9 SAMPLE RETENTION. Upon completion of analysis, all samples will be retained for thirty (30) days, except for potable water and perishables, which are discarded immediately after analysis and for which Customer agrees to pay a sample disposal fee.

10. SUBCONTRACTING. W-P reserves the right to subcontract with other laboratories in order to perform any portion of services ordered by Customer.

11. WARRANTY. W-P warrants only that its services shall be performed in a manner consistent with that level of care and skill ordinarily exercised by other professionals providing like services under similar circumstances. All services shall be performed in accordance with EPA and/or LDEQ protocols and/or specifications and QA/QC's Manual in effect at the time the services are performed, except that W-P reserves the right to deviate from standard methodologies where this, in W-P's sole discretion, is advisable and Customer is so notified. W-P makes no other warranties, expressed or implied.

12. CUSTOMER'S EXCLUSIVE REMEDY FOR W-P'S BREACH OF WARRANTY. Customer's exclusive remedy for W-P's breach of its express warranty shall be either (a) refund of the price paid for the specific defective test; or (b) retesting of the sample(s) without charges; however, should the retest confirm the results of the prior test, Customer agrees to pay for any retesting. Any customer seeking greater protection from loss or damage than is provided for herein should obtain appropriate insurance.

13. WAIVER OF CLAIMS, CAUSES OF ACTION AND DAMAGES. Customer waives any and all other claims or causes of action for incidental, consequential, special or any other damage or loss, including but not limited to lost profits, resulting from W-P work, services, or goods.

14. INDEMNITY AND HOLD HARMLESS AGREEMENT. If any suit, proceeding, claim or action arising from negligence or fault, including the sole negligence or fault of W-P or breach of contract by W-P, whether actual or alleged, whether civil, criminal, administrative, investigative or of any nature whatsoever, is threatened or brought against W-P, its parent, subsidiaries, or affiliated companies by any third party including, without limitation, any insurer asserting subrogation rights of Customer, any governmental or administrative body, or any private person or entity arising out of or relating to work or services provided by W-P, Customer shall defend, indemnity and hold harmless W-P, its parent, subsidiaries, or affiliated companies, and their officers, directors, agents, employees, and subcontractors from and against any expenses (including attorneys' fees for an attorney chosen by W-P), damages, judgments, fines or amounts paid in settlement.

Customer shall furnish to W-P evidence of an endorsement to Customer's liability policy for blanket contractual coverage for Customer's indemnity herein.

15. WAIVER. No waiver by W-P of any of these Terms and Conditions or of any obligation of the Customer hereunder shall constitute any future waiver of such provision or a waiver of any other obligation of Customer.

16. TERMINATION. Either party may terminate this Agreement at any time by sending or delivering to the other written Notice of Termination, which termination shall be effective 24 hours after receipt. Upon termination, W-P shall invoice Customer for services performed and charges incurred prior to termination, plus termination charges for bringing ongoing work to a reasonable stopping place and returning all samples.

17. FORCE MAJEURE. W-P shall not be responsible for damages or delays in performance caused by but not limited to, unusual weather conditions, fires, floods, epidemics, war, riots, strikes, lockouts, governmental action or failure to act, industrial disturbances, unanticipated site conditions, inability with reasonable diligence to supply personnel, equipment, or material to the project, delays or damage during shipment.

18. COMPLIANCE WITH LEGAL PROCESS. In the event any of W-P's personnel are required to testify in a court proceeding or arbitration regarding any services performed by W-P relating to an order placed by Customer, Customer agrees to pay to W-P an amount equal to the number of hours spent by W-P personnel complying with such legal process multiplied by the standard hourly rate of that person as established on the current Fee Schedule in effect for W-P, together with the cost of all materials and out of pocket expenses.

19. NO THIRD PARTY BENEFICIARIES. Customer and W-P agree that all test results are provided only for the benefit and use of Customer and not for any other party. Customer and W-P also agree that each intends no third parties to benefit from the test results.

Inchcape Testing Services
Environmental Laboratories

ANALYTICAL RESULTS FOR SAMPLES TESTED BY

INCHCAPE TESTING SERVICES

ENVIRONMENTAL LABORATORIES

7979 GSRI AVENUE

BATON ROUGE, LA 70820-7979

REPORT TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS
600 CARONDELET STREET

NEW ORLEANS , LA 70130

ATTENTION: ADRIAN CHAN
CLIENT ID: 0337
GROUP NO : 9700426
DATE : 01/27/97

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES,

GROUP NO. : 9700426
PROJECT NO.:
REPORT DATE: 01/27/97

SAMPLE SUMMARY INFORMATION

Sample Identification	Lab ID	Matrix	Sample Date	Sample Time
B3 (20-22)	9701210002	SOLID	01/14/97	12:16
B3-20	9701210003	WATER	01/14/97	14:30
B3-20 DUP	9701210004	WATER	01/14/97	14:30
B1 (8-10)	9701210005	SOLID	01/16/97	09:08
B1 (8-10) DUP	9701210006	SOLID	01/16/97	09:08
B1-8	9701210007	WATER	01/16/97	09:06
TRIP BLANK (1-16)	9701210008	WATER	01/16/97	00:00

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES,

GROUP NO. : 9700426
PROJECT NO.:
REPORT DATE: 01/27/97

Sample receipt at Inchcape Testing Services is documented for your designated sample(s). Chain-of-custody documentation, if provided, is included in this report.

Sample analysis was performed in accordance with Environmental Protection Agency protocol or other approved methods. All Quality Control criteria was found to be within Method Control Limits unless otherwise noted.

This report may contain the following abbreviations:

< DL	= Result is less than the Detection Limit
DO	= Diluted Out
fld	= Desination for analysis performed in the field denoted in the analyst position on the report
MI	= Matrix Interference
NA	= Not Applicable
ND	= Not Detected
subc	= Designation for subcontracted data denoted in the analyst position of the report
TNTC	= Too Numerous to Count
00:00	= Denotes sample time was not provided on Chain of Custody or when sample time specified is midnight

In accordance with ISO Guide 25, this report shall not be reproduced except in full, without the written permission of Inchcape Testing Services. The results herein relate only to the sample(s) tested. Documented results are shown on the following page(s).

We appreciate this opportunity to provide you with this analytical service. If we can be of further assistance, please do not hesitate to contact us a (504) 769-4900.

Scott A. Bailey
Operations Manager

Inchcape Testing Services
Environmental Laboratories

CLIENT: WALK,HAYDEL & ASSOCIATES,
SAMPLE: B3 (20-22)
LAB ID: 9701210002
MATRIX: SOLID

GROUP NO. : 9700426
REPORT DATE: 01/27/97
PROJECT NO.: 4741.27

SAMPLE DATE: 01/14/97 SAMPLE TIME: 12:16

COMPOUND	RESULT	UNITS	DET LIM	PREP DATE/TIME	ANALYSIS DATE/TIME	METHOD ANALYST
Total Petroleum Hydrocarbon	<DL	(mg/kg)	30	01/22/97 08:30	01/23/97 13:58	418.1 slm
QC Batch 58081						

Inchcape Testing Services
Environmental Laboratories

CLIENT: WALK,HAYDEL & ASSOCIATES,
SAMPLE: B3-20
LAB ID: 9701210003
MATRIX: WATER

GROUP NO. : 9700426
REPORT DATE: 01/27/97
PROJECT NO.: 4741.27

SAMPLE DATE: 01/14/97 SAMPLE TIME: 14:30

COMPOUND	RESULT	UNITS	DET LIM	PREP DATE/TIME	ANALYSIS DATE/TIME	METHOD ANALYST
Chloride (Titrimetric) QC Batch 57904	9450	(mg/L Cl)	100		01/22/97 08:30	325.3 jdt

Inchcape Testing Services
Environmental Laboratories

CLIENT: WALK,HAYDEL & ASSOCIATES,
SAMPLE: B3-20 DUP
LAB ID: 9701210004
MATRIX: WATER

GROUP NO. : 9700426
REPORT DATE: 01/27/97
PROJECT NO.: 4741.27

SAMPLE DATE: 01/14/97 SAMPLE TIME: 14:30

COMPOUND	RESULT	UNITS	DET LIM	PREP DATE/TIME	ANALYSIS DATE/TIME	METHOD ANALYST
Chloride (Titrimetric) QC Batch 57904	9400	(mg/L Cl)	100		01/22/97 08:30	325.3 jdt

Inchcape Testing Services
Environmental Laboratories

CLIENT: WALK,HAYDEL & ASSOCIATES,
SAMPLE: B1 (8-10)
LAB ID: 9701210005
MATRIX: SOLID

GROUP NO. : 9700426
REPORT DATE: 01/27/97
PROJECT NO.: 4741.27

SAMPLE DATE: 01/16/97 SAMPLE TIME: 09:08

COMPOUND	RESULT	UNITS	DET LIM	PREP DATE/TIME	ANALYSIS DATE/TIME	METHOD ANALYST
Total Petroleum Hydrocarbon QC Batch 58081	<DL	(mg/kg)	30	01/22/97 08:30	01/23/97 13:59	418.1 slm

Inchcape Testing Services
Environmental Laboratories

CLIENT: WALK,HAYDEL & ASSOCIATES,
SAMPLE: B1-8
LAB ID: 9701210007
MATRIX: WATER

GROUP NO. : 9700426
REPORT DATE: 01/27/97
PROJECT NO.: 4741.27

SAMPLE DATE: 01/16/97 SAMPLE TIME: 09:06

COMPOUND	RESULT	UNITS	DET LIM	PREP DATE/TIME	ANALYSIS DATE/TIME	METHOD ANALYST
Chloride (Titrimetric)	280	(mg/L Cl)	10		01/22/97	325.3
QC Batch 57904					08:30	jdt

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO. : 9700426
PROJECT NO. : 4741.27
REPORT DATE : 01/27/97
MATRIX : SOLID
RECEIVE DATE: 01/20/97

SAMPLE NO. : 9701210002
CLIENT ID : B3 (20-22)
SAMPLE DATE: 01/14/97
SAMPLE TIME: 12:16

ANALYST: eeb
ANALYSIS DATE: 01/22/97 METHOD: 8020
ANALYSIS TIME: 18:41 PREP REQ : N PREP DATE :

PARAMETER QC Batch:	RESULT (mg/kg)	DILUTION	DET LIM (mg/kg)
Benzene	< DL	1	0.001
Toluene	< DL	1	0.001
Ethylbenzene	< DL	1	0.001
Xylene	< DL	1	0.001

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO. : 9700426
PROJECT NO. : 4741.27
REPORT DATE : 01/27/97
MATRIX : SOLID
RECEIVE DATE: 01/20/97

SAMPLE NO. : 9701210005
CLIENT ID : B1 (8-10)
SAMPLE DATE: 01/16/97
SAMPLE TIME: 09:08

ANALYST: eeb ANALYSIS DATE: 01/22/97 METHOD: 8020
ANALYSIS TIME: 19:08 PREP REQ : N PREP DATE :

PARAMETER QC Batch:	RESULT (mg/kg)	DILUTION	DET LIM (mg/kg)
Benzene	< DL	1	0.001
Toluene	< DL	1	0.001
Ethylbenzene	< DL	1	0.001
Xylene	< DL	1	0.001

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO. : 9700426
PROJECT NO. : 4741.27
REPORT DATE : 01/27/97
MATRIX : SOLID
RECEIVE DATE: 01/20/97

SAMPLE NO. : 9701210006
CLIENT ID : B1 (8-10) DUP
SAMPLE DATE: 01/16/97
SAMPLE TIME: 09:08

ANALYST: eeb ANALYSIS DATE: 01/22/97 METHOD: 8020
ANALYSIS TIME: 19:35 PREP REQ : N PREP DATE :

PARAMETER QC Batch:	RESULT (mg/kg)	DILUTION	DET LIM (mg/kg)
Benzene	< DL	1	0.001
Toluene	< DL	1	0.001
Ethylbenzene	< DL	1	0.001
Xylene	< DL	1	0.001

Inchcape Testing Services
Environmental Laboratories

TO: WALK,HAYDEL & ASSOCIATES, INC./NEW ORLEANS

GROUP NO. : 9700426
PROJECT NO. : 4741.27
REPORT DATE : 01/27/97
MATRIX : WATER
RECEIVE DATE: 01/20/97

SAMPLE NO. : 9701210008
CLIENT ID : TRIP BLANK (1-16)
SAMPLE DATE: 01/16/97
SAMPLE TIME: 00:00

ANALYST: eeb ANALYSIS DATE: 01/23/97 METHOD: 8020
ANALYSIS TIME: 16:52 PREP REQ : N PREP DATE :

PARAMETER QC Batch:	RESULT (ug/L)	DILUTION	DET LIM (ug/L)
Benzene	< DL	1	1
Ethylbenzene	< DL	1	1
Toluene	< DL	1	1
Xylene	< DL	1	1

QUALITY CONTROL SUMMARY

Report#: 9700426

Parameter	Units	METHOD BLANK		LABORATORY CONTROL STANDARD			DUPLICATE			SPIKE		
		Detection Limit	Result	Spiked Amount	Recovered Amount	Percent Recovery	Result 1	Result 2	RPD	Spiked Amount	Recovered Amount	Percent Recovery
QC Batch 57904												
Chloride (Titrimetric)	(mg/L Cl)			50.0	49.5	99	9400	9350	1	5000	5050	101
QC Batch 58081												
Total Petroleum Hydrocarbons	(mg/kg)			333	298	89				NA	NA	

SURROGATE DETAIL RESULTS

Sample#: 9701210002 Client ID: B3 (20-22)
Matrix : SOLID

Surrogate Name	Percent Recovery	Acceptable Range	Method
BROMOFLUOROBENZENE	105	57 - 157	8020

Sample#: 9701210005 Client ID: B1 (8-10)
Matrix : SOLID

Surrogate Name	Percent Recovery	Acceptable Range	Method
BROMOFLUOROBENZENE	100	57 - 157	8020

Sample#: 9701210006 Client ID: B1 (8-10) DUP
Matrix : SOLID

Surrogate Name	Percent Recovery	Acceptable Range	Method
BROMOFLUOROBENZENE	97	57 - 157	8020

Sample#: 9701210008 Client ID: TRIP BLANK (1-16)
Matrix : WATER

Surrogate Name	Percent Recovery	Acceptable Range	Method
BROMOFLUOROBENZENE	96	57 - 137	8020

GAS CHROMATOGRAPHY

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Sample No: 9701170059 **Level (low/med) :** Low

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONC (ug/kg)	MS CONC (ug/kg)	MS % REC#	QC LIMITS REC.
Benzene	20.0	< 1.00	18.5	93	39-150
Toluene	20.0	< 1.00	19.1	96	46-148
Ethylbenzene	20.0	< 1.00	18.8	94	32-160
M,P-Xylene	40.0	< 1.00	38.6	97	35-150
Styrene	40.0	< 1.00	18.7	47	35-150
O-Xylene	40.0	< 1.00	19.8	50	35-150

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	MSD % REC#	% RPD#	RPD LIMIT	QC LIMITS REC.
Benzene	20.0	18.9	95	2.1	0-25	39-150
Toluene	20.0	18.9	95	1.1	0-26	46-148
Ethylbenzene	20.0	18.7	94	0.5	0-25	32-160
M,P-Xylene	40.0	38.4	96	0.5	0-25	35-150
Styrene	40.0	18.3	46	2.2	0-25	35-150
O-Xylene	40.0	19.9	50	0.5	0-25	35-150

Column to be used to flag recovery and RPD values with an asterick

* Values outside of QC limits

RPD: 0 out 5 outside limits

Spike Recovery 0 out 10 outside limits

Comments: BSBTEX-371

CHAIN OF CUSTODY RECORD

Inchcape Testing Services
Environmental Laboratories
7979 GSRI Ave. • Baton Rouge, LA 70820
(504) 769-4900 • Fax (504) 767-5717

Lab use only	Client Name	Client #	Group #	Due Date
	WALK Haydel	337	9700426	1/27/97

Submitted by
Client: WALK HAYDEL
Address: 600 CARONDELOT ST NEW ORLEANS, LA 70130
Contact: ADRIAN CHAN
Phone: (504) 599-5069
Fax: (504) 599-5181

Bill to
Client: WALK HAYDEL
Address: 600 CARONDELOT ST N.O. LA 70130
Contact: ADRIAN CHAN
Phone: (504) 599-5069

P.O. Number: 4741-97-D107
Project Name/Number: BAYOU CHOCTOW / 4741.27
Sampled By:

Lab use only:
LAB M ☐ ☐
Gen Chem ☐ ☐
Metals ☐ ☐
GC/MS VOA ☐ ☐
GC/MS Semi-V ☐ ☐
GC/Semi-V ☐ ☐
GC ☐ ☐
Extractions ☐ ☐
Client Services ☐ ☐
Ship ☐ ☐
Info Request ☐ ☐

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No. Containers	Analytical Requests: Sulf 846 Method 9020	Sulf 846 Method 418.1	Sulfate 846 Method 325.3	Lab ID
SOIL	1-14-97	12:16		✓	B3 (20-22)	NONE	2	✓	✓		1121-2
GW	1-14-97	1430		✓	B3-20	NONE	1			✓	-3
GW	1-14-97	1430		✓	B3-20 DUP	NONE	1			✓	-4
SOIL	1-16-97	9:08		✓	B1 (8-10)	NONE	2	✓	✓		-5
SOIL	1-16-97	9:08		✓	B1 (8-10) DUP	NONE	1	✓			-6
GW	1-16-97	9.06		✓	B18'	NONE	1			✓	-7
WATER	1-16-97	10:05		✓	TRIP (1-16)	HCl	2	✓	☒		-8

Remarks: use lowest detection limit for 418.1

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☑ Standard ☐ Other_____

Lab use only:
Custody Seal
used ☐ yes ☐ no
in tact ☐ yes ☐ no
Temperature °C 6.0

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Adrian Chan/Walk Haydel	Chung Kim Ong	1-20-97	1855
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Note:
✓ Water
✓ Solid
___ Oil
___ Sludge

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

Matrix[1]: W = water, S = soil, SD = solid, L = liquid, Sl = sludge, O = Oil, CT = charcoal tube, A = air bag

We cannot accept verbal changes. Please fax written changes to (504) 767-5717

WHITE: CLIENT FINAL REPORT — CANARY: LABORATORY — PINK: CLIENT

ITS-96

TERMS AND CONDITIONS OF SERVICES

All work or services performed by WEST-PAINE LABORATORIES, INC. (herein "W-P") for the person or entity ordering such work or services (herein "Customer") are undertaken and the rates and charges of W-P are based upon the following Terms and Conditions of Services (herein "Terms and Conditions of Service"):

1 CONTRACT DOCUMENTS. The contract (herein "Contract") between Customer and W-P shall consist exclusively of:

a.) These Terms and Conditions of Services;
b.) The Price Schedule published by W-P in effect at the time Customer places an order with W-P;
c.) Customer's Purchase Order, without reference to any Terms or Conditions contained therein;
d.) Customer's telephone instructions confirmed in writing by W-P;
e.) Customer's acceptance of any special quotation by W-P; and
f.) Any revisions to the foregoing agreed to in writing between Customer and W-P.

No Terms or Conditions placed on Customer's Purchase Order or other documents shall be part of the Contract, unless accepted by W-P's authorized representative in writing. There are no other oral or written agreements between Customer and W-P other than those identified herein.

2 SEVERABILITY. The invalidity or unenforceability of any provision or term of this Contract shall not affect in any way the remainder of the provisions or terms of this Contract.

3. CONTRACT FORMATION. Customers may order analytical or related services from W-P by a Purchase Order, by Chain of Custody document, by telecopy or by telephone conversation confirmed in writing by W-P. Any such order by Customer is acceptance of W-P's offer to do business with Customer under these Terms and Conditions of Services. Additionally, Customer's delivery of samples to W-P is acceptance by Customer of these Terms and Conditions of Services.

4 JURISDICTION, VENUE AND CHOICE OF LAW.

4.1 Jurisdiction. Customer agrees that by placing an order with W-P it is doing business in the State of Louisiana where W-P has its principal place of business. All claims or causes of action which in any way arise out of or relate to the provision of work or services by W-P to Customer shall be brought exclusively in a court of competent jurisdiction in the Parish of East Baton Rouge, State of Louisiana.

4.2 Venue. Customer hereby specifically and voluntarily waives the right to seek to transfer venue from the court in which any action has been filed by W-P against Customer.

4.3 Choice of Law. The laws of the State of Louisiana, to the exclusion of any other procedural rules for choice of applicable law, shall apply to any dispute arising from or related to the provision of work or services by W-P to Customer.

5. TERM OF PAYMENT. Customer agrees to pay to W-P for an order those prices published by W-P in its Price Schedule in effect at the time of the placement of an order by Customer with W-P, together with all taxes and assessments prescribed by law. Customer agrees to make payment to W-P at its principal place of business unless otherwise designated by W-P on an invoice. Unless otherwise provided, customer's account with W-P becomes delinquent if payment is not received by W-P on or before thirty (30) days from the date of any invoice, or at such other time as specifically agreed to in writing by W-P (60-day accounts).

Customer agrees to a $15.00 handling fee for any of Customer's checks returned to W-P because of insufficient funds or for any other reason which prevents W-P from processing the check upon its receipt. This $15.00 handling fee is a minimum charge; if the check is dishonored upon resubmission, or if W-P incurs damage or additional costs due to the dishonoring of Customer's check, Customer shall be liable for all such additional costs and damages together with such other remedies as may be available under Louisiana law.

6. INTEREST CHARGE. Customer agrees to pay to W-P the lesser of an annual rate of interest of 18% (or a monthly rate of 1.5%) or the maximum rate allowed by law on all accounts which are delinquent. If the transactions contemplated by this provision should be determined to be usurious by a court of competent jurisdiction, W-P and Customer agree: (a) that the total amount contracted for, charged or received by W-P which constitutes interest shall not exceed the maximum amount of interest allowed by law; and (b) that any excess interest which is above that allowed by law previously received by W-P shall be credited or paid to Customer by W-P.

7. SAMPLES CONTAINING HAZARDOUS SUBSTANCE. Preceding the shipment of samples or accompanying the samples, Customer shall supply for each sample a complete written disclosure of the presence, known or suspected by Customer, of any hazardous substance, such as one defined by the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), or any hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA), and implementing regulations, or applicable State equivalents of either act, or any local or municipal ordinance. Each sample containing any hazardous substance or hazardous waste shall be packaged, labeled, transported,manifested (accompanied by all applicable Material Safety Data Sheets) and delivered in accordance with all applicable laws and regulations. Information shall be supplied as to the exact time and place where each sample was taken.

8. REFUSAL TO ACCEPT SAMPLE. W-P reserves the right to refuse to accept or to revoke acceptance of and return at Customer's sole expense any sample supplied by Customer which, in the sole opinion of W-P, is of insufficient volume; is not in conformity with the standards set forth in the Inchcape Environmental's Quality Assurance/Quality Control (hereinafter "QA/QC") Manual; is received in damaged, contaminated, or improperly preserved condition, or is likely to pose any unreasonable risk in handling or in analyzing, whether or not such risk has been disclosed by Customer. Customer shall bear the risk of loss, damage, liability or delay in transit.

9. SAMPLE RETENTION. Upon completion of analysis, all samples will be retained for thirty (30) days, except for potable water and perishables, which are discarded immediately after analysis and for which Customer agrees to pay a sample disposal fee.

10. SUBCONTRACTING. W-P reserves the right to subcontract with other laboratories in order to perform any portion of services ordered by Customer.

11. WARRANTY. W-P warrants only that its services shall be performed in a manner consistent with that level of care and skill ordinarily exercised by other professionals providing like services under similar circumstances. All services shall be performed in accordance with EPA and/or LDEQ protocols and/or specifications and QA/QC's Manual in effect at the time the services are performed, except that W-P reserves the right to deviate from standard methodologies where this, in W-P's sole discretion, is advisable and Customer is so notified. W-P makes no other warranties, expressed or implied.

12. CUSTOMER'S EXCLUSIVE REMEDY FOR W-P'S BREACH OF WARRANTY. Customer's exclusive remedy for W-P's breach of its express warranty shall be either (a) refund of the price paid for the specific defective test; or (b) retesting of the sample(s) without charges; however, should the retest confirm the results of the prior test, Customer agrees to pay for any retesting. Any customer seeking greater protection from loss or damage than is provided for herein should obtain appropriate insurance.

13. WAIVER OF CLAIMS, CAUSES OF ACTION AND DAMAGES. Customer waives any and all other claims or causes of action for incidental, consequential, special or any other damage or loss, including but not limited to lost profits, resulting from W-P work, services, or goods.

14. INDEMNITY AND HOLD HARMLESS AGREEMENT. If any suit, proceeding, claim or action arising from negligence or fault, including the sole negligence or fault of W-P or breach of contract by W-P, whether actual or alleged, whether civil, criminal, administrative, investigative or of any nature whatsoever, is threatened or brought against W-P, its parent, subsidiaries, or affiliated companies by any third party including, without limitation, any insurer asserting subrogation rights of Customer, any governmental or administrative body, or any private person or entity arising out of or relating to work or services provided by W-P, Customer shall defend, indemnity and hold harmless W-P, its parent, subsidiaries, or affiliated companies, and their officers, directors, agents, employees, and subcontractors from and against any expenses (including attorneys' fees for an attorney chosen by W-P), damages, judgments, fines or amounts paid in settlement.

Customer shall furnish to W-P evidence of an endorsement to Customer's liability policy for blanket contractual coverage for Customer's indemnity herein.

15. WAIVER. No waiver by W-P of any of these Terms and Conditions or of any obligation of the Customer hereunder shall constitute any future waiver of such provision or a waiver of any other obligation of Customer.

16. TERMINATION. Either party may terminate this Agreement at any time by sending or delivering to the other written Notice of Termination, which termination shall be effective 24 hours after receipt. Upon termination, W-P shall invoice Customer for services performed and charges incurred prior to termination, plus termination charges for bringing ongoing work to a reasonable stopping place and returning all samples.

17. FORCE MAJEURE. W-P shall not be responsible for damages or delays in performance caused by but not limited to, unusual weather conditions, fires, floods, epidemics, war, riots, strikes, lockouts, governmental action or failure to act, industrial disturbances, unanticipated site conditions, inability with reasonable diligence to supply personnel, equipment, or material to the project, delays or damage during shipment.

18. COMPLIANCE WITH LEGAL PROCESS. In the event any of W-P's personnel are required to testify in a court proceeding or arbitration regarding any services performed by W-P relating to an order placed by Customer, Customer agrees to pay to W-P an amount equal to the number of hours spent by W-P personnel complying with such legal process multiplied by the standard hourly rate of that person as established on the current Fee Schedule in effect for W-P, together with the cost of all materials and out of pocket expenses.

19. NO THIRD PARTY BENEFICIARIES. Customer and W-P agree that all test results are provided only for the benefit and use of Customer and not for any other party. Customer and W-P also agree that each intends no third parties to benefit from the test results.

WASTE DETERMINATION WORKSHEET

1.	DATE: 2-24-97		
2.	AUTHOR: Walk Haydel		
3.	SITE: Bayou Choctaw		
4.	GENERATOR ID: NA		
5.	LOCATION ON SITE: At boring locations B1 and B9		
6.	WASTE DESCRIPTION: Soil Cuttings from drilling of borings B1 and B9.		
7.	INITIAL WASTE GENERATION DATE: 1-16-97		
8.	QUANTITY: Five 55-gallon drums		
9.	DETERMINATION STATEMENT: Soil cuttings are non-hazardous. Lab results, field observations and monitoring indicate that the soil is not impacted by hydrocarbons. Uncontaminated earthen material is not subject to permitting requirements or processing or disposal standards of the solid waste regulations per Louisiana Administrative Codes Title 33, Part VII, Subpart 1, Chapter 3, Section 303.D.		
10.	PROPOSED DISPOSITION: Can be disposed as uncontaminated earthen material.		
11.	COST SAVINGS: Estimated $3,000 for transportation and disposal at a permitted landfill facility. Savings [redacted] due to what method of disposition?		
12.	One-Time Waste x	Initial Determination ____	Annual Up-Date ____
13.	PROCESS KNOWLEDGE INFORMATION: Generated from the drilling activities as part of the geotechnical investigation of the site using hollow-stem auger. No additives or water were used in the process.		
14.	Material Safety Data Sheet Attached? NA	Yes _	No x
	Product Name(s): NA		
15.	SPR QUALIFIED LAB: Inchcape Testing Services, Baton Rouge, Louisiana		
	Results Attached?	Yes x	No _
	EPA Approved Methods?	Yes x	No _
	Parameters Measured: TCLP volatiles, semi-volatiles, metals, pesticides and herbicides, and TPH.		
	Rationale for Parameters Measured: Landfill requirement for disposal if off-site disposal is required.		
	Are test results within detection limits?	Yes x	No _
	QA/QC performed for sampling and analyses?	Yes x	No _
16.	CHAIN OF CUSTODY RECORD ATTACHED?	Yes x	No _
17.	PHYSICAL LOCATION OF WASTE SAMPLE: At Borings B1 and B9.		
18.	IS SAMPLE REPRESENTATIVE OF WASTE STREAM?	Yes x	No _
19.	SAMPLE COLLECTION METHOD (random or grid, grab, composite, etc.): Composite.		
20.	CLASSIFICATION BY DISPOSER : NA		
21.	DISPOSER'S WASTE CODE: NA		

Be more specific. Where disposal?

This waste determination must be readily accessible on site for a minimum of three (3) years from the date the waste was sent to a DM authorized disposal facility

WASTE DETERMINATION WORKSHEET

1.	**DATE:** 2-24-97		
2.	**AUTHOR:** Walk Haydel		
3.	**SITE:** Bayou Choctaw		
4.	**GENERATOR ID:** NA		
5.	**LOCATION ON SITE:** At Well Pad 15.		
6.	**WASTE DESCRIPTION:** Soil Cuttings from hand auger boring locations at high pressure pump pad. At boring locations A-1 and A-3? Say this if applicable.		
7.	**INITIAL WASTE GENERATION DATE:** 1-9-97		
8.	**QUANTITY:** One 55-gallon drum (30% full)		
9.	**DETERMINATION STATEMENT:** Soil cuttings are non-hazardous. Lab results, field observations and monitoring indicate that the soil may be impacted by petroleum hydrocarbons.		
10.	**PROPOSED DISPOSITION:** Disposal at a permitted solid waste facility. ~~which one~~ Consider now facility		
11.	**COST SAVINGS:** NA		
12.	**One-Time Waste** x	**Initial Determination** _____	**Annual Up-Date** _____
13.	**PROCESS KNOWLEDGE INFORMATION:** Generated from the hand auger boring activities as part of the geotechnical investigation.		
14.	**Material Safety Data Sheet Attached?** NA	**Yes** _	**No** x
	Product Name(s): NA		
15.	**SPR QUALIFIED LAB:** Inchcape Testing Services, Baton Rouge, Louisiana		
	Results Attached?	**Yes** x	**No** _
	EPA Approved Methods?	**Yes** x	**No** _
	Parameters Measured: TCLP volatiles, semi-volatiles, metals, pesticides and herbicides, and TPH.		
	Rationale for Parameters Measured: Landfill requirement for disposal.		
	Are test results within detection limits?	**Yes** x	**No** _
	QA/QC performed for sampling and analyses?	**Yes** x	**No** _
16.	**CHAIN OF CUSTODY RECORD ATTACHED?**	**Yes** x	**No** _
17.	**PHYSICAL LOCATION OF WASTE SAMPLE:** At high pressure pump pad area.		
18.	**IS SAMPLE REPRESENTATIVE OF WASTE STREAM?**	**Yes** x	**No** _
19.	**SAMPLE COLLECTION METHOD (random or grid, grab, composite, etc.):** Composite.		
20.	**CLASSIFICATION BY DISPOSER :** Pending classification from disposer.		
21.	**DISPOSER'S WASTE CODE:** Information pending.		

This waste determination must be readily accessible on site for a minimum of three (3) years from the date the waste was sent to a DM authorized disposal facility.

WASTE DETERMINATION WORKSHEET

1.	DATE: 2-24-97			
2.	AUTHOR: Walk Haydel			
3.	SITE: Bayou Choctaw			
4.	GENERATOR ID: NA			
5.	LOCATION ON SITE: At Well Pad 15.			
6.	WASTE DESCRIPTION: Personal protective equipment and sampling equipment.			
7.	INITIAL WASTE GENERATION DATE: 1-9-97.			
8.	QUANTITY: Two 55-gallon drums.			
9.	DETERMINATION STATEMENT: The wastes are generated as the result of the drilling operation. Based on laboratory data, the soils encountered during drilling are determined non-hazardous; therefore, the PPE associated with the drilling is determined as non-hazardous. However, lab results and field observations indicated that the soil from the high pressure pump pad may be impacted by petroleum hydrocarbons.			
10.	PROPOSED DISPOSITION: Disposal at a permitted solid waste facility. – Specify			
11.	COST SAVINGS: NA			
12.	One-Time Waste x	Initial Determination _____	Annual Up-Date _____	
13.	PROCESS KNOWLEDGE INFORMATION: Generated from the geotechnical investigation activities.			
14.	Material Safety Data Sheet Attached? NA		Yes _	No _
	Product Name(s): NA			
15.	SPR QUALIFIED LAB: NA			
	Results Attached? NA		Yes _	No _
	EPA Approved Methods? NA		Yes _	No _
	Parameters Measured: NA			
	Rationale for Parameters Measured: NA			
	Are test results within detection limits? NA		Yes _	No _
	QA/QC performed for sampling and analyses? NA		Yes _	No _
16.	CHAIN OF CUSTODY RECORD ATTACHED? NA		Yes _	No _
17.	PHYSICAL LOCATION OF WASTE SAMPLE: At Well Pad 15.			
18.	IS SAMPLE REPRESENTATIVE OF WASTE STREAM? NA		Yes _	No _
19.	SAMPLE COLLECTION METHOD (random or grid, grab, composite, etc.): NA			
20.	CLASSIFICATION BY DISPOSER : Pending classification from disposer.			
21.	DISPOSER'S WASTE CODE: Information pending.			

This waste determination must be readily accessible on site for a minimum of three (3) years from the date the waste was sent to a DM authorized disposal facility.

WASTE DETERMINATION WORKSHEET

1.	DATE: 2-24-97		
2.	AUTHOR: Walk Haydel		
3.	SITE: Bayou Choctaw		
4.	GENERATOR ID: NA		
5.	LOCATION ON SITE: At boring location B3.		
6.	WASTE DESCRIPTION: Soil Cuttings from drilling of boring B3.		
7.	INITIAL WASTE GENERATION DATE: 1-14-97		
8.	QUANTITY: Three 55-gallon drums		
9.	DETERMINATION STATEMENT: Soil cuttings are non-hazardous. Lab results, field observations and monitoring indicate that the soils are not impacted by hydrocarbon. Groundwater collected from this boring indicated that the chloride content is elevated. Soils may be impacted with chloride.		
10.	PROPOSED DISPOSITION: Disposal at a permitted solid waste facility. – specify which one		
11.	COST SAVINGS: NA		
12.	One-Time Waste x	Initial Determination _____	Annual Up-Date _____
13.	PROCESS KNOWLEDGE INFORMATION: Generated from the drilling activities as part of the geotechnical investigation of the site using hollow-stem auger. No additives or water were used in the process.		
14.	Material Safety Data Sheet Attached? NA	Yes _	No _
	Product Name(s): NA		
15.	SPR QUALIFIED LAB: Inchcape Testing Services, Baton Rouge, Louisiana		
	Results Attached?	Yes x	No _
	EPA Approved Methods?	Yes x	No _
	Parameters Measured: TCLP volatiles, semi-volatiles, metals, pesticides and herbicides, and TPH. In addition, groundwater sample from B3 was tested for chloride.		
	Rationale for Parameters Measured: Landfill requirement for disposal.		
	Are test results within detection limits?	Yes x	No _
	QA/QC performed for sampling and analyses?	Yes x	No _
16.	CHAIN OF CUSTODY RECORD ATTACHED?	Yes x	No _
17.	PHYSICAL LOCATION OF WASTE SAMPLE: At Boring B3.		
18.	IS SAMPLE REPRESENTATIVE OF WASTE STREAM?	Yes x	No _
19.	SAMPLE COLLECTION METHOD (random or grid, grab, composite, etc.): Composite.		
20.	CLASSIFICATION BY DISPOSER : Pending classification from disposer.		
21.	DISPOSER'S WASTE CODE: Information pending.		

This waste determination must be readily accessible on site for a minimum of three (3) years from the date the waste was sent to a DM authorized disposal facility.

– where is the determination on ground water from B3

– Where is the determination on wastes generated from field testing chlorides? Was it all considered "sample" for lab testing?

DOE/SPR PROJECTS

WH&A JOB NO.: 4100.00
DATE: 2/26/97

LOG NO.: WH-DOE-2353
FILE NO.: 4100- 28.3
4100- 10.1

BC-LE-270

	Tran	Attach	Dwg.
DOE/NEW ORLEANS			
Boston, Larry.....(FE-4422)	( )	( )	( )
Brock, Jim.....(FE-4432)	( )	( )	( )
Champagne, G.....(FE-4451.1)	(X)	( )	( )
Culbert, Jon.....(FE-443)	( )	( )	( )
Elias, Wayne.....(FE-4431)	( )	( )	( )
Ferrara, Debbie.....(FE-4432)	( )	( )	( )
Gastrock, George.....(FE-4431)	( )	( )	( )
Gele, Lionel.....(FE-4432)	( )	( )	( )
Gibson, W.C. (Hoot)...(FE-44)	( )	( )	( )
Judice, Todd.....(FE-4432)	( )	( )	( )
Kilroy, John.....(FE-442).	( )	( )	( )
Landry, Gary.....(FE-4453	( )	( )	( )
Maldonado, Julio.....(FE-4431)	( )	( )	( )
Malphurs, Paul.....(FE-4432	( )	( )	( )
Nicholson, Lisa.....(FE-4431)	( )	( )	( )
O'Brien, John.....(FE-4431)	( )	( )	( )
Palestina, Nick.....(FE-4432)	( )	( )	( )
Poarch, Warren.....(FE-4432)	(X)	(X)	( )
Rochon, Jo Ann.....(FE-4451.1)	( )	( )	( )
Tilly, Paul.....(FE-4432)	(X) o	(X)	( )
Willard, Diane.....(FE-4432)	( )	( )	( )
Weber, Eric.....(FE-4421)	( )	( )	( )
Curole, Mike.....(FE-4441)	( )	( )	( )
Bouquet, Judy.....(FE-445)	( )	( )	( )
Smith, Brent	(X)	(X)	( )
	( )	( )	( )
	( )	( )	( )
	( )	( )	( )

	Tran	Attach	Dwg.
DYN-MCDERMOTT - NEW ORLEANS			
Bonito, Jose.....(EF-20)	( )	( )	( )
Dandridge, Yvonne.....(EF-22	( )	( )	( )
Daws, Brenda.....(EF-22)	( )	( )	( )
Gallavan, Charles.....(EF-22)	( )	( )	( )
Garcia, Al.....(EF-20)	(X)	(X)	( )
Gross, Greg.....(EF-20)	( )	( )	( )
Gump, Bob.....(EF-20)	( )	( )	( )
Hughes, Greg.....(EF-25)	( )	( )	( )
Harmeyer, Linda.....(EF-16)	( )	( )	( )
Harvey, James.....(EF-23)	( )	( )	( )
Hojem, Deborah.....(EF-44)	( )	( )	( )
Jacobs, Jo Ann.....(EF-34)	( )	( )	( )
Johnson, Curt.....(EF-30)	( )	( )	( )
Kapinus, Ed.....(EF-27)	( )	( )	( )
Kubicek, Harold.....(EF-28)	( )	( )	( )
Largey, Michael.....(EF-27)	( )	( )	( )
Lawrence, Jim.....(EF-22)	( )	( )	( )
Lombard, Harry.....(EF-32)	( )	( )	( )
Lukinovich, Drew .....(EF-27)	( )	( )	( )
Moore, Darryl.....(EF-25)	( )	( )	( )
Poche, Bill.....(EF-27)	(X)	( )	( )
Robert, Janet.....(EF-22)	( )	( )	( )

	Tran	Attach	Dwg.	
DYN-MCDERMOTT - NEW ORLEANS (Cont'd)				
Sanchez, Alex.....(EF-22)	( )	( )	( )	
Watson, Nelson .....(EF-27)	( )	( )	( )	
Roussel, Chip.....(EF-27)	( )	( )	( )	
Ripoll, Jim.....(EF-23)	(X)	(X)	( )	
Robichaux, Bill.....(EF-22)	( )	( )	( )	
Normand, Bill.....(EF-27)	( )	( )	( )	
Monister, J.....(EF-23)	( )	( )	( )	
Huff, Mike	(X)	(X)	( )	
Schaltenhauer, David	(X)	(X)	( )	BC

	Tran	Attach	Dwg.
TUCKER AND ASSOCIATES - NEW ORLEANS			
Downer, Kip.....	( )	( )	( )
McNeel, Ted.....	( )	( )	( )
	( )	( )	( )
	( )	( )	( )
	( )	( )	( )

	Tran	Attach	Dwg.
MITRETEK CORPORATION - NEW ORLEANS			
Begault, Rudy.....	( )	( )	( )
Peters, Randy.....	( )	( )	( )
	( )	( )	( )
	( )	( )	( )
	( )	( )	( )

O - Original(s)
A - Accopress copy
B - Bound copy
U - Unbound copy
F - Full drawings
R - Reduced drawings