Section A — IDENTIFICATION AND PRELIMINARY ASSESSMENT | IV | (Signed by HQ)

NOTE: This form is completed for each potential hazardous waste site to help set priorities for site inspection. The inform entered on this form is based on available records and may be updated on subsequent forms as a result of additional inquir and on-site inspections.

GENERAL INSTRUCTIONS: Complete Sections I and III through X as completely as possible before Section II (*Preliminary Assessment*). File this form in the Regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protectio Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (*EN-335*); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME: "Back 40" of Hercules Inc.

B. STREET (*for other identifier*): West 7th Street

C. CITY: Hattiesburg

D. STATE: MS

E. ZIP CODE: 39401

F. COUNTY NAME: Forrest

G. OWNER/OPERATOR (*If known*)

1. NAME: Hercules Incorporated

2. TELEPHONE NUMBER:

H. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4 MUNICIPAL ☒ 5. PRIVATE ☐ 6 UNKNOWN

I. SITE DESCRIPTION

J. HOW IDENTIFIED (*i.e., citizen's complaints, OSHA citations, etc.*): Congressman Eckhardt's Report to Congress

K. DATE IDENTIFI (*mo., day, & yr.*): 11-8-79

L. PRINCIPAL STATE CONTACT

1. NAME: Mississippi State Board of Health - Division of Solid Waste Management

2. TELEPHONE NUMBER: 601-982-6317

II. PRELIMINARY ASSESSMENT (*complete this section last*)

A. APPARENT SERIOUSNESS OF PROBLEM

☐ 1. HIGH ☐ 2. MEDIUM ☐ 3. LOW ☐ 4 NONE ☒ 5 UNKNOWN

B. RECOMMENDATION

☐ 1. NO ACTION NEEDED (*no hazard*)

☐ 2. IMMEDIATE SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR:
b. WILL BE PERFORMED BY:

☒ 3. SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR:
b. WILL BE PERFORMED BY: STATE

☐ 4. SITE INSPECTION NEEDED (*low priority*)

C. PREPARER INFORMATION

1. NAME: Jim Hardage / Sara Elizabeth Lowe

2. TELEPHONE NUMBER: 601-982-6317

3. DATE (*mo., day,*): 11-8-79

III. SITE INFORMATION

A. SITE STATUS

☒ 1. ACTIVE (*Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.*)

☐ 2. INACTIVE (*Those sites which no longer receive wastes.*)

☐ 3. OTHER (*specify*): (*Those sites that include such incidents like "midnight dumping" no regular or continuing use of the site for waste disposal has occ*

B. IS GENERATOR ON SITE?

☐ 1. NO ☒ 2. YES (*specify generator's four-digit SIC Code*):

C. AREA OF SITE (*in acres*): 40 acres

D. IF APPARENT SERIOUSNESS OF SITE IS HIGH, SPECIFY COORDINATES

1. LATITUDE (*deg.-min.-sec.*):

2. LONGITUDE (*deg.-min.-sec.*):

E. ARE THERE BUILDINGS ON THE SITE?

☒ 1. NO ☐ 2. YES (*specify*):

X	A. TRANSPORTER	X	B. STOPER	X	C. ATER	X	D. DISPOSER
	1. RAIL		1. PILE		1. FILTRATION	X	1. LANDFILL
	2. SHIP		2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
X	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY		4. SURFACE IMPOUNDME
	5. PIPELINE		5. TANK, BELOW GROUND		5. CHEM./PHYS. TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJEC
					8. SOLVENT RECOVERY		8. OTHER (specify):
					9. OTHER (specify):		

E. SPECIFY DETAILS OF SITE ACTIVITIES AS NEEDED

V. WASTE RELATED INFORMATION

A. WASTE TYPE

☐ 1 UNKNOWN ☐ 2. LIQUID ☒ 3. SOLID ☒ 4. SLUDGE ☐ 5. GAS

B. WASTE CHARACTERISTICS

☒ 1. UNKNOWN ☐ 2. CORROSIVE ☐ 3. IGNITABLE ☐ 4 RADIOACTIVE ☐ 5 HIGHLY VOLATILE
☒ 6. TOXIC * ☐ 7. REACTIVE ☒ 8. INERT ☐ 9 FLAMMABLE

☐ 10. OTHER (specify): _____

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

2. Estimate the amount (specify unit of measure) of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHI
AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEA
X (1) PAINT, PIGMENTS	X (1) OILY WASTES	X (1) HALOGENATED SOLVENTS	X (1) ACIDS	X (1) FLYASH	X (1) LABOR PHARM
(2) METALS SLUDGES	X (2) OTHER (specify):	(2) NON-HALOGNTD. SOLVENTS	(2) PICKLING LIQUORS	(2) ASBESTOS	(2) HOSPIT
(3) POTW		(3) OTHER (specify):	(3) CAUSTICS	(3) MILLING/ MINE TAILINGS	(3) RADIO
(4) ALUMINUM SLUDGE			(4) PESTICIDES	(4) FERROUS SMLTG. WASTES	(4) MUNICI
X (5) OTHER (specify):			(5) DYES/INKS	(5) NON-FERROUS SMLTG. WASTES	(5) OTHER
*Sludge contaminated with trace amount of Delnav and oils.			(6) CYANIDE	X (6) OTHER (specify):	
			(7) PHENOLS	Drums, boiler fly ash	
			(8) HALOGENS		
			(9) PCB		
			(10) METALS		
			(11) OTHER (specify)		

Continue On P

V. WASTE RELATED INFORMATION (continued)

3. LIST SUBSTANCES OF GREATEST CONCERN WHICH MAY BE ON THE SITE (place in descending order of hazard).

4. ADDITIONAL COMMENTS OR NARRATIVE DESCRIPTION OF SITUATION KNOWN OR REPORTED TO EXIST AT THE SITE.

VI. HAZARD DESCRIPTION

A. TYPE OF HAZARD	B. POTENTIAL HAZARD (mark 'X')	C. ALLEGED INCIDENT (mark 'X')	D. DATE OF INCIDENT (mo., day, yr.)	E. REMARKS
1. NO HAZARD				
2. HUMAN HEALTH				
3. NON-WORKER INJURY/EXPOSURE				
4. WORKER INJURY				
5. CONTAMINATION OF WATER SUPPLY				
6. CONTAMINATION OF FOOD CHAIN				
7. CONTAMINATION OF GROUND WATER				
8. CONTAMINATION OF SURFACE WATER				
9. DAMAGE TO FLORA/FAUNA				
10. FISH KILL				
11. CONTAMINATION OF AIR				
12. NOTICEABLE ODORS				
13. CONTAMINATION OF SOIL				
14. PROPERTY DAMAGE				
15. FIRE OR EXPLOSION				
16. SPILLS/LEAKING CONTAINERS/ RUNOFF/STANDING LIQUIDS				
17. SEWER, STORM DRAIN PROBLEMS				
18. EROSION PROBLEMS				
19. INADEQUATE SECURITY				
20. INCOMPATIBLE WASTES				
21. MIDNIGHT DUMPING				
22. OTHER (specify):				

Continue On Reverse

[X] 1. NPDES PERMIT [X] 2. SPCC PLAN [ ] 3. STATE PERMIT (specify):
[X] 4. AIR PERMITS [ ] 5. LOCAL PERMIT [ ] 6. RCRA TRANSPORTER
[ ] 7. RCRA STORER [ ] 8. RCRA TREATER [ ] 9 RCRA DISPOSER

[ ] 10. OTHER (specify):

B. IN COMPLIANCE?

[X] 1. YES [ ] 2. NO [ ] 3. UNKNOWN

4. WITH RESPECT TO (list regulation name & number): Bureau of Pollution Control Regulations

VIII. PAST REGULATORY ACTIONS

[ ] A. NONE [X] B. YES (summarize below)

Periodic violations of NPDES permits which have resulted in penalties.

IX: INSPECTION ACTIVITY (past or on-going)

[ ] A. NONE [X] B. YES (complete items 1,2,3, & 4 below)

1. TYPE OF ACTIVITY	2 DATE OF PAST ACTION (mo., day, & yr.)	3 PERFORMED BY: (EPA/State)	4. DESCRIPTION
Meeting with company officials	11-8-79	STATE	

X. REMEDIAL ACTIVITY (past or on-going)

[X] A. NONE [ ] B. YES (complete items 1, 2, 3, & 4 below)

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION

NOTE: Based on the information in Sections III through X, fill out the Preliminary Assessment (Section II) information on the first page of this form.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

REGION	SITE NUMBER (to be assigned by Hq)
IV	MS000000[illegible]

GENERAL INSTRUCTIONS: Complete Sections I and III through XV of this form as completely as possible. Then use the information on this form to develop a Tentative Disposition *(Section II)*. File this form in its entirety in the regional Hazardous Waste Log File. Be sure to include all appropriate Supplemental Reports in the file. Submit a copy of the forms to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force *(EN-335)*; 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME: Hercules "Back 40"

B. STREET *(or other identifier)*:

C. CITY: Hattiesburg

D. STATE: Miss

E. ZIP CODE:

F. COUNTY NAME: Forrest

G. SITE OPERATOR INFORMATION

1. NAME:

2. TELEPHONE NUMBER:

3. STREET:

4. CITY:

5. STATE:

6. ZIP CODE:

H. REALTY OWNER INFORMATION *(if different from operator of site)*

1. NAME:

2. TELEPHONE NUMBER:

3. CITY:

4. STATE:

5. ZIP CODE:

I. SITE DESCRIPTION: 4-5 acre site surrounded by forested area, adjacent to industrial complex.

J. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE

II. TENTATIVE DISPOSITION *(complete this section last)*

A. ESTIMATE DATE OF TENTATIVE DISPOSITION *(mo., day, & yr.)*:

B. APPARENT SERIOUSNESS OF PROBLEM

☐ 1. HIGH ☐ 2. MEDIUM ☐ 3. LOW ☐ 4. NONE

C. PREPARER INFORMATION

1. NAME: Ron W Joyner

2. TELEPHONE NUMBER: 257-2234

3. DATE *(mo., day, & yr.)*: 9/30/80

III. INSPECTION INFORMATION

A. PRINCIPAL INSPECTOR INFORMATION

1. NAME: Ron W. Joyner

2. TITLE: Hydrogeologist

3. ORGANIZATION: U.S. EPA U.S.S.

4. TELEPHONE NO. *(area code & no.)*: 257-2234

B. INSPECTION PARTICIPANTS

1. NAME	2. ORGANIZATION	3. TELEPHONE NO.
Lisa Lowe	Miss. Div. Solid Waste Man.	601/982-6317

C. SITE REPRESENTATIVES INTERVIEWED *(corporate officials, workers, residents)*

1. NAME	2. TITLE & TELEPHONE NO.	3. ADDRESS
Charles Jordan	Chem. Env.	
Dick Heller	Plant Man.	

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Continued From Page 2

IV. SAMPLING INFORMATION *(continued)*

C. PHOTOS

1. TYPE OF PHOTOS
   - [X] a. GROUND
   - [ ] b. AERIAL
2. PHOTOS IN CUSTODY OF: Ron W Joyner

D. SITE MAPPED?

- [X] YES. SPECIFY LOCATION OF MAPS:

E. COORDINATES

1. LATITUDE *(deg.-min.-sec.)*
2. LONGITUDE *(deg.-min.-sec.)*

V. SITE INFORMATION

A. SITE STATUS

- [X] 1. ACTIVE *(Those inductrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)*
- [ ] 2. INACTIVE *(Those sites which no longer receive wastes.)*
- [ ] 3. OTHER *(specify)*: _____ *(Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)*

B. IS GENERATOR ON SITE?

- [ ] 1. NO
- [X] 2. YES *(specify generator's four-digit SIC Code)*: _____

C. AREA OF SITE *(in acres)*: 4-5

D. ARE THERE BUILDINGS ON THE SITE?

- [X] 1. NO
- [ ] 2. YES *(specify)*:

VI. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity*(ies)* and details relating to each activity by marking 'X' in the appropriate boxes.

'X'	A. TRANSPORTER	'X'	B. STORER	'X'	C. TREATER	'X'	D. DISPOSER
	1. RAIL		1. PILE		1. FILTRATION	X	1. LANDFILL
	2. SHIP		2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY		4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND		5. CHEM./PHYS./TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER *(specify)*:		6. OTHER *(specify)*:		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY		8. OTHER *(specify)*:
					9. OTHER *(specify)*:		

E. SUPPLEMENTAL REPORTS: If the site falls within any of the categories listed below, Supplemental Reports must be completed. Indicate which Supplemental Reports you have filled out and attached to this for..

- [ ] 1. STC
- [ ] 2. INCINERATION
- [X] 3. LANDFILL
- [ ] 4. SURFACE IMPOUNDMENT
- [ ] 5. DEEP WELL
- [ ] 6. CHEM/BIO/PHYS TREATMENT
- [ ] 7. LANDFARM
- [ ] 8. OPEN DUMP
- [ ] 9. TRANSPORTER
- [ ] 10. RECYCLOR/RECLAIMER

VII. WASTE RELATED INFORMATION

A. WASTE TYPE

- [ ] 1. LIQUID
- [X] 2. SOLID
- [X] 3. SLUDGE
- [ ] 4. GAS

B. WASTE CHARACTERISTICS

- [ ] 1. CORROSIVE
- [ ] 2. IGNITABLE
- [ ] 3. RADIOACTIVE
- [ ] 4. HIGHLY VOLATILE
- [X] 5. TOXIC ?
- [ ] 6. REACTIVE
- [X] 7. INERT
- [ ] 8. FLAMMABLE
- [ ] 9. OTHER *(specify)*:

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

Continue On Reverse

Continued From Page 4

VIII. HAZARD DESCRIPTION *(continued)*

☐ B. NON-WORKER INJURY/EXPOSURE

☐ C. WORKER INJURY/EXPOSURE

☐ D. CONTAMINATION OF WATER SUPPLY

☐ E. CONTAMINATION OF FOOD CHAIN

☐ F. CONTAMINATION OF GROUND WATER

☐ G. CONTAMINATION OF SURFACE WATER

Continue On Reverse

Continued From Page 6

VIII. HAZARD DESCRIPTION *(continued)*

☐ N. FIRE OR EXPLOSION

☐ O. SPILLS/LEAKING CONTAINERS/RUNOFF/STANDING LIQUID

☐ P. SEWER, STORM DRAIN PROBLEMS

☐ Q. EROSION PROBLEMS

☐ R. INADEQUATE SECURITY

☐ S. INCOMPATIBLE WASTES

Continue On Reverse

Continued From Page 8

X. WATER AND HYDROLOGICAL DATA *(continued)*

H. LIST ALL DRINKING WATER WELLS WITHIN A 1/4 MILE RADIUS OF SITE

1. WELL	2. DEPTH *(specify unit)*	3. LOCATION *(proximity to population/buildings)*	4. NON-COMMUNITY *(mark 'X')*	5. COMMUNITY *(mark 'X')*

I. RECEIVING WATER

1. NAME

☐ 2. SEWERS ☐ 3. STREAMS/RIVERS

☐ 4. LAKES/RESERVOIRS ☐ 5. OTHER *(specify)*:

6. SPECIFY USE AND CLASSIFICATION OF RECEIVING WATERS

XI. SOIL AND VEGITATION DATA

LOCATION OF SITE IS IN:

☐ A. KNOWN FAULT ZONE ☐ B. KARST ZONE ☐ C. 100 YEAR FLOOD PLAIN ☐ D. WETLAND

☐ E. A REGULATED FLOODWAY ☐ F. CRITICAL HABITAT ☐ G. RECHARGE ZONE OR SOLE SOURCE AQUIFER

XII. TYPE OF GEOLOGICAL MATERIAL OBSERVED

Mark 'X' to indicate the type(s) of geological material observed and specify where necessary, the component parts.

'X'	A. OVERBURDEN	'X'	B. BEDROCK *(specify below)*	'X'	C. OTHER *(specify below)*
	1. SAND				
	2. CLAY				
	3. GRAVEL				

XIII. SOIL PERMEABILITY

☒ A. UNKNOWN ☐ B. VERY HIGH *(100,000 to 1000 cm/sec.)* ☐ C. HIGH *(1000 to 10 cm/sec.)*

☐ D. MODERATE *(10 to .1 cm/sec.)* ☐ E. LOW *(.1 to .001 cm/sec.)* ☐ F. VERY LOW *(.001 to .00001 cm/sec.)*

G. RECHARGE AREA

☐ 1. YES ☐ 2. NO 3. COMMENTS:

H. DISCHARGE AREA

☐ 1. YES ☐ 2. NO 3. COMMENTS:

I. SLOPE

1. ESTIMATE % OF SLOPE

2. SPECIFY DIRECTION OF SLOPE, CONDITION OF SLOPE, ETC.

J. OTHER GEOLOGICAL DATA

 Continue On Reverse

LANDFILLS SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. EVIDENCE OF SITE INSTABILITY *(Erosion, Settling, Sink Holes, etc)*
☒ YES ☐ NO

2. EVIDENCE OF IMPROPER DISPOSAL OF BULK LIQUIDS, SEMI-SOLIDS AND SLUDGES INTO THE LANDFILL
☐ YES ☒ NO

3. CHECK RECORDS OF CELL LOCATION AND CONTENTS AND BENCHMARK
☐ YES ☒ NO

4. WASTES SURROUNDED BY SORBENT MATERIAL
☒ YES ☐ NO

5. DIVERSION STRUCTURES ARE EFFECTIVELY CONSTRUCTED AND PROPERLY MAINTAINED
☐ YES ☐ NO

6. EVIDENCE OF PONDING OF WATER ON SITE
☐ YES ☒ NO

7. EVIDENCE OF IMPROPER/INADEQUATE DRAINING
☐ YES ☒ NO

8. ADEQUATE LEACHATE COLLECTION SYSTEM *(If "Yes", specify Type)*
☐ YES ☐ NO

8a. SURFACE LEACHATE SPRING
☐ YES ☒ NO

9. RECORDS OF LEACHATE ANALYSIS
☒ YES ☐ NO

10. GAS MONITORING
☐ YES ☒ NO

11. GROUNDWATER MONITORING WELLS
☒ YES ☐ NO

12. ARTIFICIAL MEMBRANE LINER INSTALLED
☐ YES ☒ NO

13. SPECIFIC CONTAINMENT MEASURES *(Clay Bottom, Sides, etc)*
☒ YES ☐ NO

14. FIXATION *(Stabilization)* OF WASTE
☐ YES ☐ NO

15. ADEQUATE CLOSURE OF INACTIVE PORTION OF FACILITY
☐ YES ☐ NO

16. COVER *(Type)*

16a. THICKNESS

16b. PERMEABILITY

16c. DAILY APPLICATION
☐ YES ☐ NO

EPA

POTENTIAL HAZARDOUS WASTE SITE
TENTATIVE DISPOSITION

REGION	SITE NUMBER
IV	MS000000250

File this form in the regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force *(EN-335)*; 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME	B. STREET	
Back 40 (Hercules)	West 7th St.	
C. CITY	**D. STATE**	**E. ZIP CODE**
Hattiesburg	Miss.	39401

II. TENTATIVE DISPOSITION

Indicate the recommended action*(s)* and agency*(ies)* that should be involved by marking 'X' in the appropriate boxes.

RECOMMENDATION	MARK 'X'	ACTION AGENCY: EPA	STATE	LOCAL	PRIVATE
A. NO ACTION NEEDED -- NO HAZARD					
B. INVESTIGATIVE ACTION(S) NEEDED *(If yes, complete Section III.)*	X		X		
C. REMEDIAL ACTION NEEDED *(If yes, complete Section IV.)*					
D. ENFORCEMENT ACTION NEEDED *(If yes, specify in Part E whether the case will be primarily managed by the EPA or the State and what type of enforcement action is anticipated.)*					

E. RATIONALE FOR DISPOSITION

Inspection 9/25/80.

F. INDICATE THE ESTIMATED DATE OF FINAL DISPOSITION *(mo., day, & yr.)*	G. IF A CASE DEVELOPMENT PLAN IS NECESSARY, INDICATE THE ESTIMATED DATE ON WHICH THE PLAN WILL BE DEVELOPED *(mo., day, & yr.)*

H. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE *(mo., day, & yr.)*
Ron W. Joyner	257-2234	10/16/80

III. INVESTIGATIVE ACTIVITY NEEDED

A. IDENTIFY ADDITIONAL INFORMATION NEEDED TO ACHIEVE A FINAL DISPOSITION.

additional sampling.

B. PROPOSED INVESTIGATIVE ACTIVITY *(Detailed Information)*

1. METHOD FOR OBTAINING NEEDED ADDITIONAL INFO.	2. SCHEDULED DATE OF ACTION *(mo,day, & yr)*	3. TO BE PERFORMED BY *(EPA, Contractor, State, etc.)*	4. ESTIMATED MANHOURS	5. REMARKS
a. TYPE OF SITE INSPECTION				
(1) follow-up		State		
(2)				
(3)				
b. TYPE OF MONITORING				
(1) groundwater				
(2)				
c. TYPE OF SAMPLING				
(1) Single phase aqueous				
(2)				

Forest. Co

FORM NO. MHW-101-A

HAZARDOUS WASTE INSPECTION FORM
(Complete Legibly)

INSPECTION BY D. Lee, L. Loup, B. Stewart, J. Hasty, P. White
DATE OF INSPECTION 12-2-80 19____ TIME 1:00 a.m. p.m.

PART I - INSTALLATION DATA

1-INSTALLATION E.P.A. I.D. NO. M/S/D/0/0/8/1/8/2/0/8/1/

2-NAME OF INSTALLATION Hercules Inc.

3-IF SUBSIDIARY, NAME OF PARENT CO. ____

4-INSTALLATION MAILING ADDRESS PO Box 1937

Hattiesburg (City), MS (State), 39401 (Zip Code), 545-3450 (Phone Number)

5-LOCATION OF INSTALLATION W. 7th St. (Street)

City State Zip Code Phone Number

6-INSTALLATION CONTACT PERSON T.E. Thoms

TITLE Development Supervisor Phone #/Extention

7-SIC CODE FOR PRINCIPLE PRODUCTS (4-DIGIT NO.)

a. 2861
b. 2822
c. 2821
d. 2879
e. ____
f. ____

8-IN-HOUSE WASTE TREATMENT CAPABILITIES

On-Site Waste Treatment ✓ Yes ____ No Neutralization of acid
POTW Discharge ____ Yes ✓ No
NPDES No. MS0001830 To Be Built By __/__/__

9-AIR POLLUTION CONTROL DEVICES ____ Yes ____ No

Permit No. 0800 - 00001 Type(s) Air - 32 points

To Be Built ____ Yes ____ No By __/__/__

10-HAZARDOUS WASTE PRODUCED OR EXPECTED TO BE PRODUCED (Include wastes reclaimed, recycled, treated, stored, or disposed of)

WASTE DESCRIPTION	EPA CODE NO.	AMOUNT OF WASTE GENERATED/MONTH
a. Sulfuric Acid	D002	3500 tons/yr.
b.		
c.		
d.		
e.		
f.		
g.		
h.		

11-IS ANY PORTION OF THE WASTE TREATED BEFORE DISPOSAL? ✓ Yes ____ No

12-IS ANY PORTION OF THE WASTE SALVAGED OR RECYCLED? ____ Yes ✓ No Waste % Recycled

13-IS ANY PORTION OF THE WASTE STORED? ✓ Yes ____ No for purpose of flow equalization

14-ATTACH FLOW DIAGRAMS OF CHEMICAL PROCESSES INCLUDING WASTE FLOW OUTPUTS (IF AVAILABLE). in file

15-IS THERE A CURRENTLY USED OR ABANDONED LANDFILL, DUMP, OR LAGOON ON THE PLANT PROPERTY? ✓ Yes ____ No lagoon - current - takes H_2SO_4 for pH raising of oil mixture + flow equalization

16-IF YES, WHERE IS IT LOCATED? plant property

17-INDUSTRIAL WASTES DISPOSED OF AT THE SITE:*

WASTE	VOLUME/MONTH	TYPE OF DISPOSAL
sludge - from lagoon	8 yd³/day · 30% solids	back 40 - land disposal
(Not listed as hazardous at present)		

*Attach additional sheet if necessary.

PART II - WASTE DATA

1-GENERATOR Hercules SPECIFIC WASTE H_2SO_4

2-DESCRIBE PROCESS PRODUCING WASTE Resin polymerization

3-MONTHLY WASTE PRODUCTION 3500 tons/yr; [redacted]

4-WASTE COMPOSITION:

SPECIFIC GRAVITY _____

Ph RANGE MAX <1.0 MIN. _____

COMPONENT	AVERAGE CONCENTRATION WT % or ppm
a. H_2SO_4	40
b. H_2O	
c. Resins	
d. Misc. solids	

ON-SITE WASTE: ✓ LAGOON ____ LANDFILL ____ STORAGE ____ TREATMENT ____ DISPOSAL ____ RECYCLING ____ INCINERATION ____ DEEP WELL INJECTION ____ SEWER ____ LAND SPREADING

WASTE IS: ✓ LIQUID ____ SOLID ____ SLUDGE
% LIQUID 100 % SOLID _____

5-ON-SITE STORAGE (CHECK ONE)

a. Method used: ____ Drums ✓ Tank ____ Lagoon ____ Other
b. Typical length of time waste stored: ____ day 1 week ____ month ____ year
c. Typical volume of waste stored: ____ monthly

6-ANALYSIS OF COMPOSITION IS: ____ theoretical ✓ laboratory ____ estimate (if available, attach copy of analysis)

7-HAZARDOUS PROPERTIES OF WASTE: ____ ignitable ✓ corrosive ____ toxic ____ reactive ____ other (explain)

8-PROJECTED ✓ INCREASE ____ DECREASE IN VOLUME, USING 1974 AS BASE.

9.WASTE IS SENT OFF-SITE TO BE:

____ Incinerated ____ Treated ____ Landspread/Filled ____ Stored ____ UIC

10-HAZARDOUS WASTE TRANSPORTER

NAME NA EPA I.D. NO. / / / / / / / / / / / /
ADDRESS _____
Street City State Zip Code

11-TYPE OF TRANSPORT VEHICLE(S) _____ PHONE NO. _____

12-WASTE WILL BE TRANSPORTED IN _____

13-HAZARDOUS WASTE WILL BE DELIVERED TO: NA
Address Phone No.

14-WASTE WILL BE: ____ STORED ____ TREATED ____ DISPOSED ____ INCINERATED ____ UIC

15-DISPOSER E.P.A. I.D. NO. / / / / / / / / / / / /

16-COMMENTS:

Back 40

impoundment with dredge material from NPDES treatment lagoon contaminated with trace pesticide.

landfill

boiler ash is used as cover material
empty drums that contained raw materials or products.

Scrap metal is stockpiled. Some is reclaimed.

Are records available

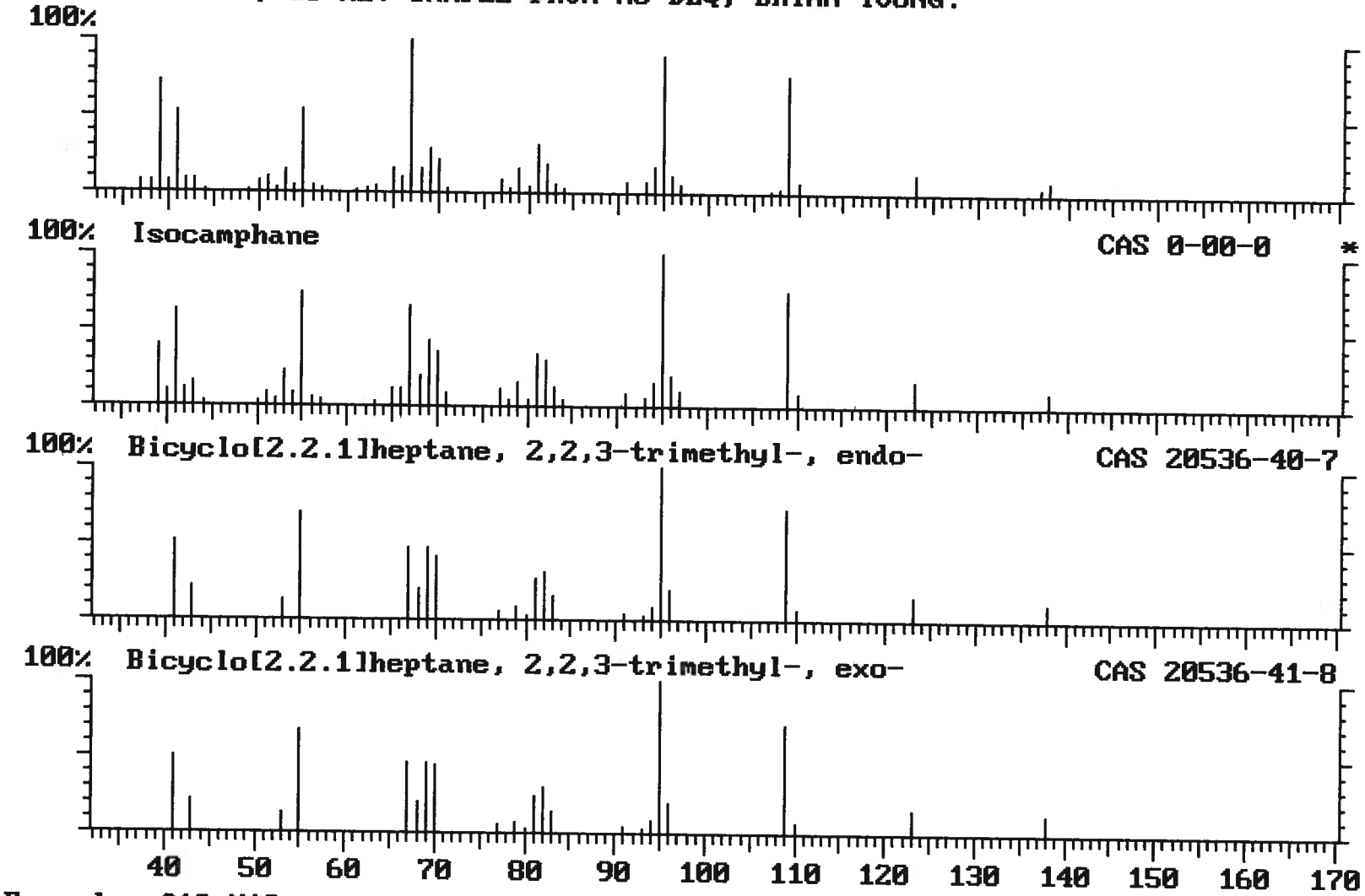
"Dr. Larry Lane" <larry@cyber1.mscl.msstate.edu> on 10/26/98 04:17:35 PM

To: Brian Young/HW/OPC/DEQ
cc:
Subject: Analytical Pesticide Standards

Hi Brian, I apologize for taking so long to reply to your question about the origin and age of the pesticide standards
used in the analysis of the two water samples. The chemist,
Rubel Cowart, ordered new standards from EPA at the Pesticide Repository at Research Triangle Park, NC. They sent Chlormephos but did not have Dioxathion, so Rubel prepared a new analytical standard from a Dioxathion standard material we obtained from Nor-Am in 1984. GC-Mass Spec analysis of the analytical standard and Sample No. 10,896 (MW-4) confirmed the authenticity of the Dioxathion standard and the presence of Dioxathion in the water sample.

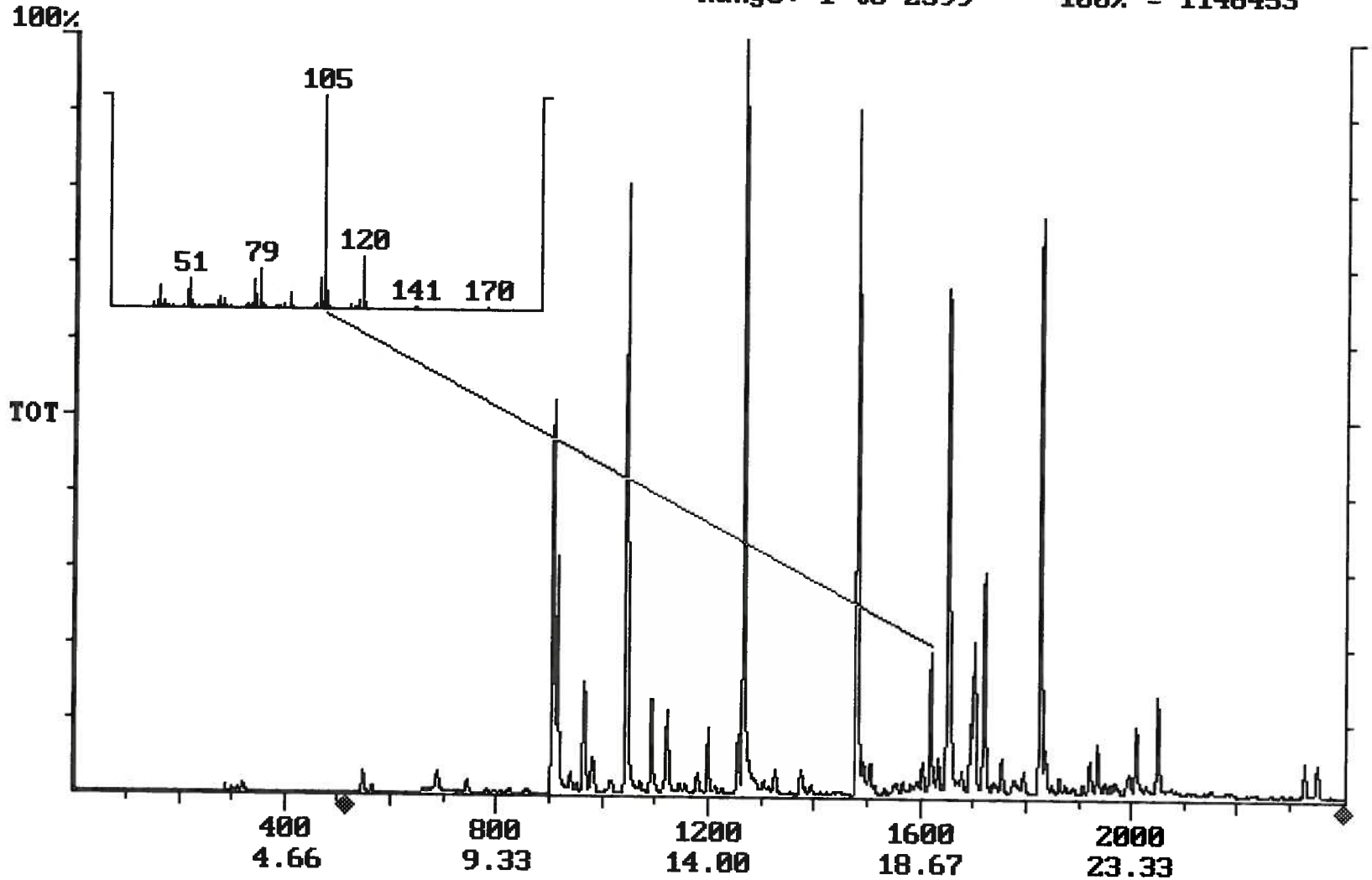
Thanks, Larry Lane

Library Search D:\DATA\V10896B Acquired: 15 Sep 1998 Scan number 1722
Comment: MW-4, 10 ML. SAMPLE FROM MS DEQ, BRIAN YOUNG.

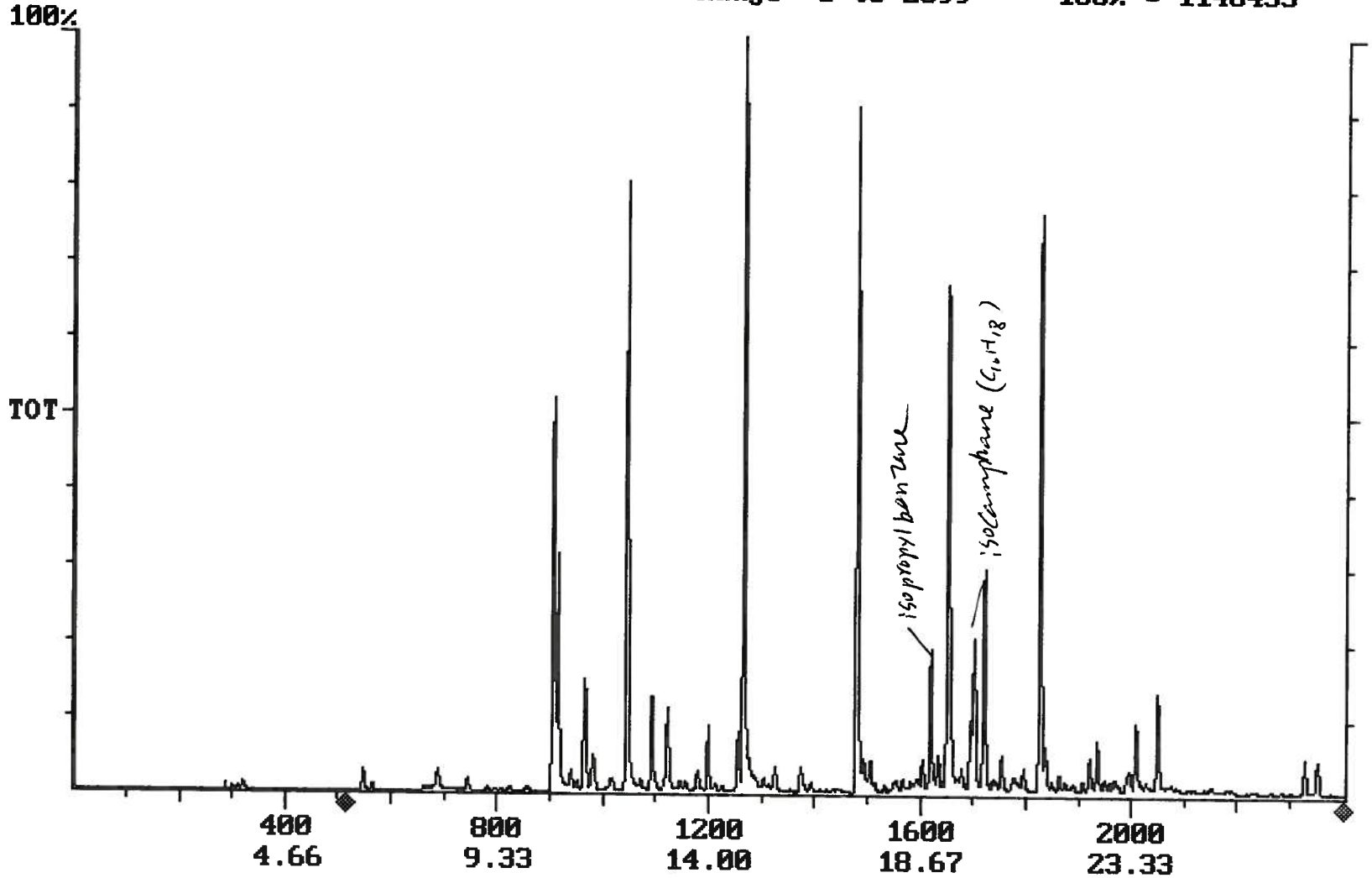


Formula C10.H18 Rank 1 Index 7020
MolWeight:138 Search:All LocalNorm:On P:907 F:919 R:963 CAS# 0-00-0

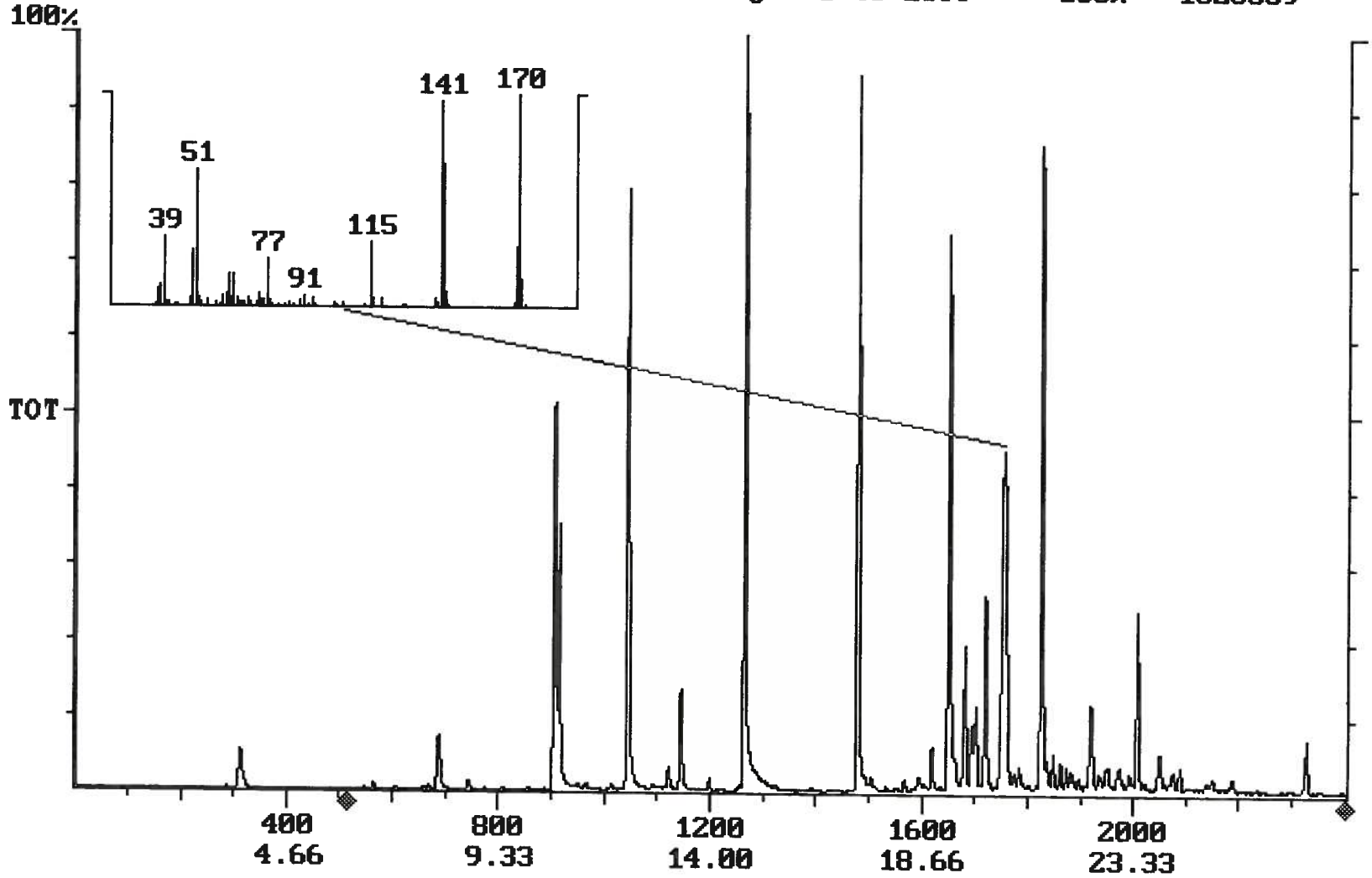
Chromatogram Plot File: D:\DATA\V10896B Date: 15 Sep 1998 09:30:03
Comment: MW-4, 10 ML. SAMPLE FROM MS DEQ, BRIAN YOUNG.
Scan: 1 Seg: 1 Group: 0 Retention: 0.00 RIC: 0 Masses: 0-0
Plotted: 1 to 2399 Range: 1 to 2399 100% = 1146453



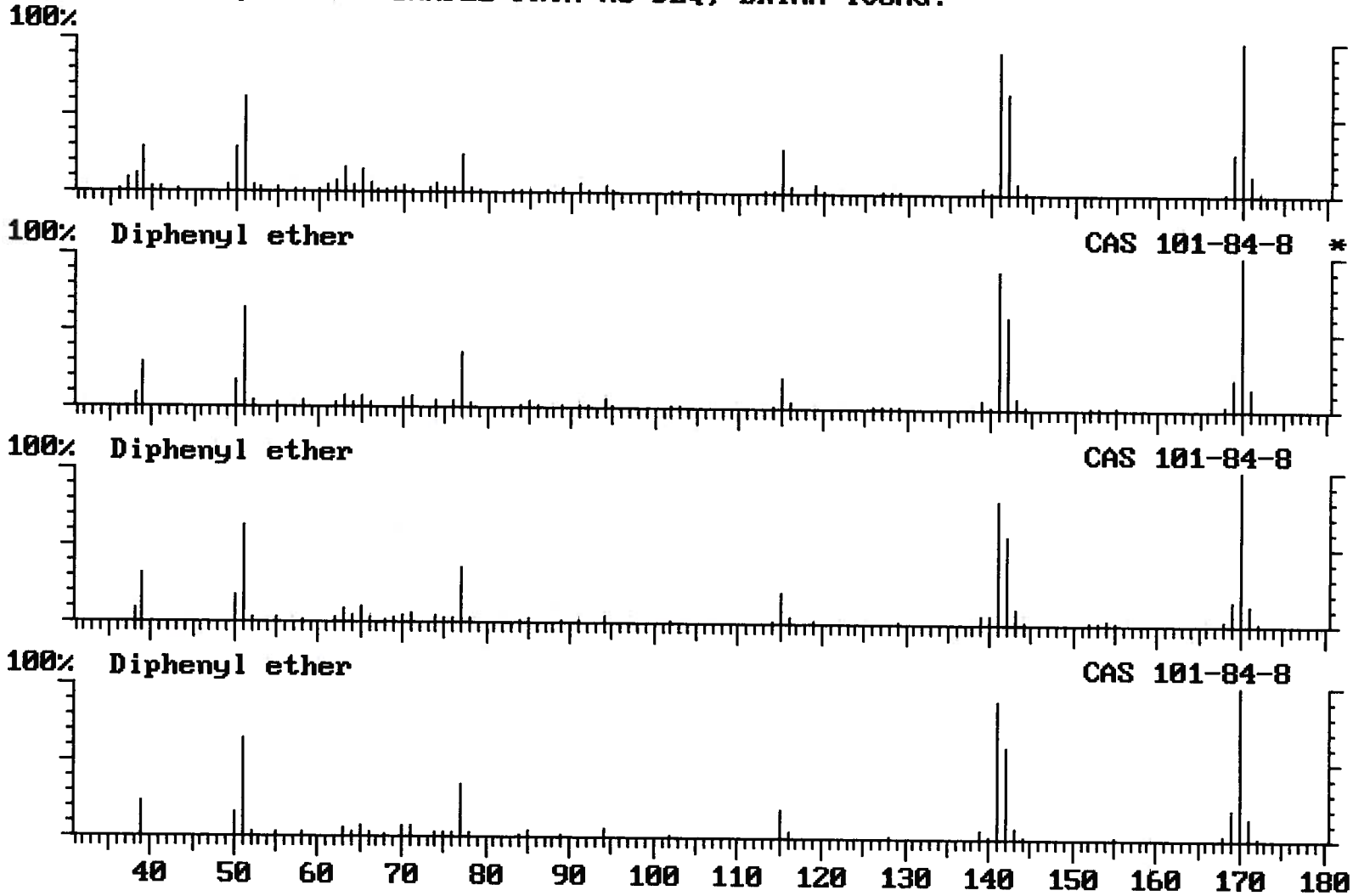
Chromatogram Plot File: D:\DATA\V10896B Date: 15 Sep 1998 09:30:03
Comment: MW-4, 10 ML. SAMPLE FROM MS DEQ, BRIAN YOUNG.
Scan: 1 Seg: 1 Group: 0 Retention: 0.00 RIC: 0 Masses: 0-0
Plotted: 1 to 2399 Range: 1 to 2399 100% = 1146453



Chromatogram Plot File: D:\DATA\V10897B Date: 15 Sep 1998 10:05:10
Comment: MW-5, 10 ML. SAMPLE FROM MS DEQ, BRIAN YOUNG.
Scan: 1 Seg: 1 Group: 0 Retention: 0.00 RIC: 0 Masses: 0-0
Plotted: 1 to 2399 Range: 1 to 2399 100% = 1026359



Library Search D:\DATA\V10897B Acquired: 15 Sep 1998 Scan number 1754
Comment: MW-5, 10 ML. SAMPLE FROM MS DEQ, BRIAN YOUNG.



Formula C12.H10.O Rank 1 Index 68247
MolWeight:170 Search:All LocalNorm:On P:941 F:964 R:958 CAS# 101-84-8

MISSISSIPPI
STATE CHEMICAL LABORATORY

BOX CR — MISSISSIPPI STATE, MISSISSIPPI 39762
TELEPHONE (601) 325-3324 FAX (601) 325-7807

DR. EARL G. ALLEY
State Chemist

DR. LARRY G. LANE
Director, IAS Division

October 9, 1998

Analysis No. 10,896-897

Analysis of Groundwater

Marked: Hercules, Inc., Hattiesburg, MS

Received on 9-11-98

from MS DEQ-Office of Poll. Control
ATTN: Brian Young

Address P.O. Box 10385 Jackson, MS 39289

RESULTS:

PESTICIDE RESIDUE REPORT

MSCL No.	10,896	10,897	----	----
Sample ID	MW-4	MW-5	Blank Water	Spiked Water
Sample Type	Groundwater	Groundwater		
ORGANOPHOSPHATE RESIDUES FOUND	PARTS PER BILLION			
Chlormephos	1.8	ND*		
Dioxathion	805	2.6		
Surrogate Recovery (%) (Chlorpyrifos)	105	95.8	92.6	100

QUALITY CONTROL:

Compound	Chlormephos	Dioxathion
Substrate Blank	ND*	ND*
Spiking Level, ppb	19.6	32.2
Level Found, ppb	19.0	28.9
Recovery, %	96.9	89.8

*ND = None Detected @ a Lower Level of Detection of 1 ppb.

Earl G. Alley
State Chemist

PLEASE GIVE NUMBER WHEN REFERRING TO THIS ANALYSIS

TARGET COMPOUND LIST OF VOLATILE ORGANIC COMPOUNDS

MSCL #: 10896

Analysis of Groundwater

Marked: MW-4

Hercules Inc.

MS DEQ-Office of Pollution Control

Compounds	Conc. ug/L	MQL ug/L	Compounds	Conc. ug/L	MQL ug/L
chloromethane	ND	1.0	cis-1,3-dichloropropene	ND	1.0
vinyl chloride	ND	1.0	1,1,2-trichloroethane	ND	1.0
bromomethane	ND	1.0	2-hexanone	ND	1.0
chloroethane	ND	1.0	tetrachloroethene	ND	1.0
acetone	ND	1.0	dibromochloromethane	ND	1.0
1,1-dichloroethene	ND	1.0	chlorobenzene	ND	1.0
dichloromethane	ND	1.0	ethyl benzene	ND	1.0
carbon disulfide	ND	1.0	m,p-xylenes	ND	1.0
vinyl acetate	ND	1.0	o-xylene	ND	1.0
trans-dichloroethene	ND	1.0	styrene	ND	1.0
1,1-dichloroethane	ND	1.0	bromoform	ND	1.0
methyl ethyl ketone (MEK)	ND	1.0	1,1,2,2-tetrachloroethane	ND	1.0
cis-1,2-dichloroethene	ND	1.0			
chloroform	ND	1.0			
1,1,1-trichloroethane	ND	1.0			
carbon tetrachloride	ND	1.0			
1,2-dichloroethane	ND	1.0			
benzene	ND	1.0			
trichloroethene	ND	1.0			
1,2-dichloropropane	ND	1.0			
bromodichloromethane	ND	1.0			
methyl isobutyl ketone	ND	1.0			
trans-1,3-dichloropropene	ND	1.0			
toluene	ND	1.0			

ND = None Detected

MQL = Minimum Quantifiable Level

Surrogates	Recovery, %
dibromofluoromethane	92
toluene-d8	97
bromofluorobenzene	115

Quantitation Report Quan File: V10896B Cali File: VOC8260 Entries: 32
Comment: MW-4, 10 ML. SAMPLE FROM MS DEQ, BRIAN YOUNG.
Sorted via: Entry Number ^ Mult: 1.000 Div: 1.000 IS Factor: 1.000

SURR. RE

Cal	Name of Compound	R Time	Peak Area	Calc Amt(A)	Units	
1	pentafluorobenzene (IS	10.57	1,024,277	200.000	ng	
2	difluorobenzene(IS)	12.19	1,911,730	200.000	ng	
3	chlorobenzene-d5(IS)	17.26	1,507,036	200.000	ng	
4	1,4-dichlorobenzene-d4	21.31	1,089,452	200.000	ng	
5	dibromofluoromethane(S	10.67	1,056,800	184.391	ng	92%
6	toluene-d8 (SUR)	14.77	2,238,987	194.446	ng	97%
7	bromofluorobenzene(SUR	19.27	1,539,824	230.055	ng	115%
8	dichlorodifluoromethan	3.74	47,267	7.025	ng	
13	Trichlorofluoromethane	5.87	2,360	0.460	ng	
14	Acrolein	6.25	537	7.585	ng	
15	acetone	6.58	32,961	0.170	ng	
16	1,1-dichloroethene	6.98	511	0.072	ng	
17	dichloromethane	7.73	13,960	2.960	ng	
18	carbon disulfide	7.83	19,132	3.484	ng	
23	methyl ethyl ketone	9.70	2,174	4.693	ng	
28	1,1,1-trichloroethane	11.09	12,741	2.170	ng	
30	Carbon tetrachloride	11.56	1,896	0.384	ng	
40	toluene	14.90	33,798	2.465	ng	
48	chlorobenzene	17.33	36,077	4.723	ng	
51	m,p xylenes	17.57	45,021	3.543	ng	
52	o-xylene	18.30	14,213	0.902	ng	
53	styrene	18.31	1,801	0.275	ng	
✓ 55	isopropylbenzene	18.90	390,039	33.427	ng	
60	1,3,5-trimethylbenzene	19.76	8,090	0.683	ng	
63	tert-butylbenzene	20.46	52,889	4.014	ng	
64	1,2,4-trimethylbenzene	20.27	28,992	2.614	ng	
65	sec-butylbenzene	20.83	22,547	1.563	ng	
66	p-isopropyltoluene	20.95	34,670	2.623	ng	
72	1,2,4-trichlorobenzene	25.02	1,731	0.793	ng	
73	hexachlorobutadiene	25.36	1,115	0.439	ng	
74	naphthalene	25.55	4,056	1.096	ng	
75	1,2,3-trichlorobenzene	26.08	1,736	0.978	ng	

isopropylbenzene = 33.4 ng/10ml = 3.3 ng/ml

other VOC = < 1.0 ng/ml

Quantitation Report Quan File: 0915VBK Cali File: VOC8260 Entries: 31
Comment: BLANK
Sorted via: Entry Number ^ Mult: 1.000 Div: 1.000 IS Factor: 1.000

Cal	Name of Compound	R Time	Peak Area	Calc Amt(A)	Units
1	pentafluorobenzene (IS	10.56	1,256,046	200.000	ng
2	difluorobenzene(IS)	12.18	2,338,072	200.000	ng
3	chlorobenzene-d5(IS)	17.25	1,843,619	200.000	ng
4	1,4-dichlorobenzene-d4	21.30	1,243,756	200.000	ng
5	dibromofluoromethane(S	10.66	1,211,637	173.252	ng
6	toluene-d8 (SUR)	14.76	2,624,689	186.220	ng
7	bromofluorobenzene(SUR	19.26	1,441,500	185.950	ng
8	dichlorodifluoromethan	3.78	62,954	7.633	ng
13	Trichlorofluoromethane	5.89	2,702	0.430	ng
14	Acrolein	6.50	344	3.989	ng
15	acetone	6.59	84,961	0.527	ng
17	dichloromethane	7.73	33,800	5.821	ng
18	carbon disulfide	7.81	12,266	1.823	ng
23	methyl ethyl ketone	9.68	6,409	11.527	ng
26	chloroform	10.33	21,891	3.047	ng
28	1,1,1-trichloroethane	11.08	16,254	2.263	ng
30	Carbon tetrachloride	11.55	2,150	0.356	ng
38	methyl isobutyl ketone	13.94	2,921	1.840	ng
40	toluene	14.89	42,104	2.510	ng
51	m,p xylenes	17.56	7,135	0.460	ng
52	o-xylene	18.28	3,807	0.198	ng
53	styrene	18.30	1,920	0.240	ng
59	bromobenzene	19.62	798	0.131	ng
60	1,3,5-trimethylbenzene	19.83	4,540	0.336	ng
61	2-chlorotoluene	19.88	2,604	0.156	ng
64	1,2,4-trimethylbenzene	20.48	8,525	0.673	ng
66	p-isopropyltoluene	21.03	6,113	0.405	ng
67	1,3-dichlorobenzene	21.20	2,548	0.381	ng
72	1,2,4-trichlorobenzene	25.01	2,256	0.905	ng
74	naphthalene	25.54	4,477	1.059	ng
75	1,2,3-trichlorobenzene	26.07	1,812	0.894	ng

TARGET COMPOUND LIST OF VOLATILE ORGANIC COMPOUNDS

MSCL #: 10897

Analysis of Groundwater

Marked: MW-5

Hercules Inc.

MS DEQ-Office of Pollution Control

Compounds	Conc. ug/L	MQL ug/L	Compounds	Conc. ug/L	MQL ug/L
chloromethane	ND	1.0	cis-1,3-dichloropropene	ND	1.0
vinyl chloride	ND	1.0	1,1,2-trichloroethane	ND	1.0
bromomethane	ND	1.0	2-hexanone	ND	1.0
chloroethane	ND	1.0	tetrachloroethene	ND	1.0
acetone	ND	1.0	dibromochloromethane	ND	1.0
1,1-dichloroethene	ND	1.0	chlorobenzene	ND	1.0
dichloromethane	ND	1.0	ethyl benzene	ND	1.0
carbon disulfide	ND	1.0	m,p-xylenes	ND	1.0
vinyl acetate	ND	1.0	o-xylene	ND	1.0
trans-dichloroethene	ND	1.0	styrene	ND	1.0
1,1-dichloroethane	ND	1.0	bromoform	ND	1.0
methyl ethyl ketone (MEK)	ND	1.0	1,1,2,2-tetrachloroethane	ND	1.0
cis-1,2-dichloroethene	ND	1.0			
chloroform	ND	1.0			
1,1,1-trichloroethane	ND	1.0			
carbon tetrachloride	ND	1.0			
1,2-dichloroethane	ND	1.0			
benzene	ND	1.0			
trichloroethene	ND	1.0			
1,2-dichloropropane	ND	1.0			
bromodichloromethane	ND	1.0			
methyl isobutyl ketone	ND	1.0			
trans-1,3-dichloropropene	ND	1.0			
toluene	ND	1.0			

ND = None Detected

MQL = Minimum Quantifiable Level

Surrogates	Recovery, %
dibromofluoromethane	98
toluene-d8	101
bromofluorobenzene	101

Quantitation Report Quan File: V10897B Cali File: VOC8260 Entries: 32
Comment: MW-5, 10 ML. SAMPLE FROM MS DEQ, BRIAN YOUNG.
Sorted via: Entry Number ^ Mult: 1.000 Div: 1.000 IS Factor: 1.000

Cal	Name of Compound	R Time	Peak Area	Calc Amt(A)	Units	Surr.Rec
1	pentafluorobenzene (IS	10.57	954,298	200.000	ng	
2	difluorobenzene(IS)	12.19	1,660,573	200.000	ng	
3	chlorobenzene-d5(IS)	17.27	1,414,999	200.000	ng	
4	1,4-dichlorobenzene-d4	21.30	1,072,370	200.000	ng	
5	dibromofluoromethane(S	10.67	975,157	195.436	ng	96%
6	toluene-d8 (SUR)	14.77	2,010,705	201.171	ng	101%
7	bromofluorobenzene(SUR	19.27	1,339,963	201.502	ng	101%
8	dichlorodifluoromethan	3.74	54,480	8.702	ng	
12	chloroethane	5.30	120	0.344	ng	
13	Trichlorofluoromethane	5.85	2,277	0.476	ng	
14	Acrolein	6.24	262	3.998	ng	
15	acetone	6.58	36,312	0.213	ng	
16	1,1-dichloroethene	6.95	775	0.117	ng	
18	carbon disulfide	7.81	15,838	3.096	ng	
20	vinyl acetate	9.02	1,111	3.267	ng	
23	methyl ethyl ketone	9.68	1,566	3.616	ng	
26	chloroform	10.33	3,393	0.622	ng	
28	1,1,1-trichloroethane	11.09	12,033	2.359	ng	
30	Carbon tetrachloride	11.56	1,269	0.296	ng	
35	bromodichloromethane	13.09	24,831	7.700	ng	
40	toluene	14.90	28,348	2.380	ng	
41	trans 1,3-dichloroprop	14.78	1,341	0.523	ng	
51	m,p xylenes	17.57	18,464	1.549	ng	
52	o-xylene	18.29	15,800	1.068	ng	
53	styrene	18.32	2,244	0.365	ng	
55	isopropylbenzene	18.90	110,243	9.607	ng	
64	1,2,4-trimethylbenzene	20.26	7,112	0.651	ng	
65	sec-butylbenzene	20.82	49,219	3.468	ng	
66	p-isopropyltoluene	21.04	13,074	1.004	ng	
67	1,3-dichlorobenzene	21.21	2,758	0.479	ng	
72	1,2,4-trichlorobenzene	25.01	5,055	2.356	ng	
74	naphthalene	25.54	26,826	7.435	ng	

VOC: <1.0 ng/ml (µg/kg)

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHAIN OF CUSTODY RECORD

OFFICE OF POLLUTION CONTROL
P. O. Box 10385
Jackson, Mississippi 39289-0385

MSD

PROJECT LEADER

REMARKS

PROJECT NAME/LOCATION: Hercules, Inc. Hattiesburg, MS

DATA TO: Brian Young MDEQ P.O. Box 10385 Jackson MS 39289

ESD SAMPLE TYPES
1. SURFACE WATER
2. GROUND WATER
3. POTABLE WATER
4. WASTEWATER
5. LEACHATE
6. SOIL/SEDIMENT
7. SLUDGE
8. WASTE
9. AIR
10. FISH
11. OTHER

SAMPLER: Brian Young

CIRCLE/ADD parameters desired. List no. of containers submitted.

ANALYSIS

	STATION NO.	SAMPLE TYPE	1998 DATE	TIME	COMP	GRAB	STATION LOCATION/DESCRIPTION	TOTAL CONTAINERS	VOA	Semi volatile org cpds	Pest/PCBs	METALS	CYANIDE					TAG NO./REMARKS	Custody Seals Intact at Lab	Seals Not Intact Upon Receipt by Lab	LAB USE ONLY
10896	MW-4	2	9 SOPT	11:20		X	MW-4	4	X		X							8260 / 8141 A			
10897	MW-5	2	9 SOPT	10:40		X	MW-5	4	X		X							8260 / 8141 A			

RELINQUISHED BY: (PRINT)	DATE/TIME	RECEIVED BY: (PRINT)	RELINQUISHED BY: (PRINT)	DATE/TIME	RECEIVED BY: (PRINT)
William Brian Young	10 SOPT 98	Ladd H. Reynolds	Ladd H. Reynolds	9/10/98	Bobby Davis
(SIGN)	8:20 A.M.	(SIGN) Ladd H. Reynolds	(SIGN) Ladd H. Reynolds	3:15 PM	(SIGN)
RELINQUISHED BY: (PRINT)	DATE/TIME	RECEIVED BY: (PRINT)	RELINQUISHED BY: (PRINT)	DATE/TIME	RECEIVED BY: (PRINT)
(SIGN)		(SIGN)	(SIGN)		(SIGN)

DISTRIBUTION: White and Yellow copies accompany sample shipment to laboratory; Yellow copy retained by laboratory. White copy is returned to samplers; Pink copy retained by samplers.

PAGE _____ OF _____

8/90

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHAIN OF CUSTODY RECORD

OFFICE OF POLLUTION CONTROL
P. O. Box 10385
Jackson, Mississippi 39289-0385

MSD

PROJECT LEADER

REMARKS

PROJECT NAME/LOCATION: Hercules, Inc. Hattiesburg, MS

DATA TO: Brian Young MDEQ P.O. Box 10385 Jackson, MS 39289

ESD SAMPLE TYPES
1. SURFACE WATER
2. GROUND WATER
3. POTABLE WATER
4. WASTEWATER
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6. SOIL/SEDIMENT
7. SLUDGE
8. WASTE
9. AIR
10. FISH
11. OTHER

SAMPLER: Brian Young

CIRCLE/ADD parameters desired. List no. of containers submitted.

ANALYSIS

STATION NO.	SAMPLE TYPE	DATE (19 98)	TIME	COMP	GRAB	STATION LOCATION/DESCRIPTION	TOTAL CONTAINERS	VOA	Semi volatile org cpds.	Pest/PCBs	METALS	CYANIDE						TAG NO./REMARKS	Custody Seals Intact at Lab	Seals Not Intact Upon Receipt by Lab	LAB USE ONLY
MW-4	2	9 SEPT	11:20		X	MW-4	4	X		X								8260 / 8141 A			
MW-5	2	9 SEPT	10:40		X	MW-5	4	X		X								8260 / 8141 A			

RELINQUISHED BY: (PRINT)	DATE/TIME	RECEIVED BY: (PRINT)	RELINQUISHED BY: (PRINT)	DATE/TIME	RECEIVED BY: (PRINT)
William Burnham	10 SEP 98 8:20 AM	[illegible]			
(SIGN) [illegible]		(SIGN) [illegible]	(SIGN)		(SIGN)
RELINQUISHED BY: (PRINT)	DATE/TIME	RECEIVED BY: (PRINT)	RELINQUISHED BY: (PRINT)	DATE/TIME	RECEIVED BY: (PRINT)
(SIGN)		(SIGN)	(SIGN)		(SIGN)

DISTRIBUTION: White and Yellow copies accompany sample shipment to laboratory; Yellow copy retained by laboratory. White copy is returned to samplers; Pink copy retained by samplers.

PAGE _____ OF _____

8/90

MISSISSIPPI
STATE CHEMICAL LABORATORY

BOX CR — MISSISSIPPI STATE, MISSISSIPPI 39762
TELEPHONE (601) 325-3324 FAX (601) 325-7807

DR. EARL G. ALLEY
State Chemist

DR. LARRY G. LANE
Director, IAS Division

October 9, 1998

Analysis No. 10,896-897

Analysis of Groundwater

Received on 9-11-98

Address P.O. Box 10385 Jackson, MS 39289

Marked: Hercules, Inc., Hattiesburg, MS

from MS DEQ-Office of Poll. Control
ATTN: Brian Young

RESULTS:

MSCL NO.	MS DEQ-OPC Identification
10,896	MW-4
10,897	MW-5

Results are presented in the attached reports from our analyses of the above groundwater samples for Volatile Organics (by gc/ms) and organophosphate pesticides.

Analytical Costs:

2 VOCs by GC/MS	@ $225 =	$450
2 OP Pesticides	@ $100 =	200
	Total	$650

Earl G. Alley
State Chemist

PLEASE GIVE NUMBER WHEN REFERRING TO THIS ANALYSIS

025065/6-93

BUREAU OF POLLUTION CONTROL
SAMPLE REQUEST FORM

Lab Bench No.: 1390
Cost Code:3858

I. GENERAL INFORMATION:

Facility Name: Hercules, Inc.
County Code:
NPDES Permit No.:
Discharge No:
Date Requested: 6/24/98
Sample Point Identification: MW-4 # 1&#2 (Duplicate)
Requested By: Bryan Young
Data To: Bryan Young
Type of Sample: Grab: X Composite: Flow: Time: Other:

II. SAMPLE IDENTIFICATION:

Environment Condition: Sunny 85°
Collected By: WBY
Where Taken:

	Type	Parameters	Preservative	Date	Time
1.	2 1 Liter Amber	Semi-Vol. 8270	None	6/24/98	1200
2.					
3.					
4.					
5.					
6.					

III. FIELD:

Analysis	Computer Code	Req	Results	Analyst	Date
pH	000400				
D.O.	000300				
Temperature	000010				
ResidualChlorine	050060				
Flow	074060				

IV. TRANSPORTATION OF SAMPLE:

Bus: RO Vehicle: Other:

V. LABORATORY:

Received by: Otis Clark
Date: 6/24/98
Time: 1430
Recorded by: Dot Lewis
Date Sent to State Office: 7-31-98

VI. Remarks:

TARGET COMPOUND LIST
SEMIVOLATILE ORGANIC COMPOUNDS
IN WATER

OPCL NO.: 1390 MARKED: Hercules MW-4
ANALYSIS OF: Water DATE RECEIVED: 6/24/98

COMPOUNDS	MQL	µg/L	COMPOUNDS	MQL	µg/L	COMPOUNDS	MQL	µg/L
Phenol	10	ND	4-Chloro-3-methylphenol	20	ND	Hexachlorobenzene	10	ND
bis(2-Chloroethyl)ether	10	ND	2-Methylnaphthalene	10	ND	Pentachloropohenol	50	ND
2-Chlorophenol	10	ND	Hexachlorocyclopentadiene	10	ND	Phenanthrene	10	ND
1,3-Dichlorobenzene	10	ND	2,4,6-Trichlorophenol	10	ND	Anthracene	10	ND
1,4-Dichlorobenzene	10	ND	2,4,5-Trichlorophenol	10	ND	Di-n-butylphthalate	10	ND
Benzyl alcohol	20	ND	2-Chloronaphthalene	10	ND	Fluoranthene	10	ND
1,2-Dichlorobenzene	10	ND	2-Nitroaniline	50	ND	Pyrene	10	ND
2-Methylphenol	10	ND	Dimethylphthalate	10	ND	Butylbenzylphthalate	10	ND
bis(2-Chloroisopropyl)ether	10	ND	Acenaphtylene	10	ND	3,3'Dichlorobenzidine	50	ND
4-Methylphenol	10	ND	2,6-Dinitrotoluene	10	ND	Benzo(a)anthracene	10	ND
N-Nitroso-di-n-propylamine	20	ND	3-Nitroaniline	50	ND	Chrysene	10	ND
Hexachloroethane	20	ND	Acenaphthene	10	ND	bis(2-Ethylhexyl)phthalate	10	ND
Nitrobenzene	10	ND	2,4-Dinitrophenol	50	ND	Di-n-octylphthalate	10	ND
Isophorone	10	ND	4-Nitrophenol	50	ND	Benzo(b)fluoranthene	10	ND
2-Nitrophenol	20	ND	Dibenzofuran	10	ND	Benzo(k)fluoranthene	10	ND
2,4-Dimethylphenol	10	ND	2,4-Dinitrotoluene	10	ND	Benzo(a)pyrene	10	ND
Benzoic acid	50	ND	Diethylphthalate	10	ND	Indeno(1,2,3-cd)pyrene	20	ND
bis(2-Chloroethoxy)methane	10	ND	4-Chlorophenyl-phenylether	10	ND	Dibenz(a,h)anthracene	20	ND
2,4-Dichlorophenol	10	ND	Fluorene	10	ND	Benzo(g,h,i)perylene	20	ND
1,2,4-Trichlorobenzene	10	ND	4-Nitroaniline	50	ND			
Naphthalene	10	ND	4,6-Dinitro-2-methylphenol	50	ND			
4-Chloroaniline	20	ND	N-nitrosodiphenylamine	20	ND			
Hexachlorobutadiene	10	ND	4-Bromophenyl-phenylether	10	ND			

SURROGATES	RECOVERY (%)	LIMITS
2-Fluorophenol	66	21-100
Phenol-d5	74	10-194
Nitrobenzene-d5	69	35-114
2-Fluorobiphenyl	62	43-116

Date Extracted: 7/1/1998
Date Injected: 7/8/1998
ND = None Detected
MQL = Minimum Quantifiable Level
Analyst: Jon Shell

Lower Detection Level = MQL X 1 = _____ µg/L

_____ No peaks above 40% of internal standard.
_____ Peaks above 40% of internal standard on EPA Appendx IX were identified.*
_____ Peaks above 40% of internal standard not on EPA Appendix IX.**
Many Peaks above 40% of internal standard not on EPA Appendix IX were not identified.
_____ Additional peaks were observed, but not examined.

COMMENTS: Tentatively Identified Compounds: (1) o,o-diethylphosphorodithioic acid ester - est. conc. = 44.5 ug/l. (2) Diphenylether - estimated conc. = 82.4 ug/L. (3)Chloromephos - estimated conc. = 46.7 ug/L. (4) Dioxathion - estimated conc. = 3.76 ug/L

BUREAU OF POLLUTION CONTROL
SAMPLE REQUEST FORM

Lab Bench No. _____

I. GENERAL INFORMATION: Facility Name Hercules, Inc.
County Code _____ NPDES Permit No. _____
Discharge No. _____ Date Requested 24 June 98
Sample Point Identification MW-4 #1 & #2 (Duplicate)
Requested By Brian Young Data To SAms
Type of Sample: Grab (X) Composite (Flow) (Time) Other ( )

II. SAMPLE IDENTIFICATION:
Environment Condition Sunny 85°F Collected By WR
Where Taken _____

	Type	Parameters	Preservative	Date	Time
1.	2 liter Amber	Semi-Vol 8270	None	24 June 98	12:00
2.					
3.					
4.					
5.					

III. FIELD:

Analysis	Computer Code	Request	Results	Analyst	Date
pH	(000400)	( )			
D.O.	(000300)	( )			
Temperature	(000010)	( )			
Residual Chlorine	(050060)	( )			
Flow	(074060)	( )			

IV. TRANSPORTATION OF SAMPLE: Bus ( ) BO Vehicle ( ) Other ( ) 24 oc
V. LABORATORY: Received By [illegible] Date 6-24-98 Time 1143
Recorded By _____ Date Sent to State Office _____

Analysis	Computer Code	Request	Result	Analyst	Date Measured
BOD_5	(000310)	( )	mg/l		*
COD	(000340)	( )	mg/l		
TOC	(000680)	( )	mg/l		
Suspended Solids	(099000)	( )	mg/l		
TKN	(000625)	( )	mg/l		
Ammonia-N	(000610)	( )	mg/l		
Fecal Coliform(1)	(074055)	( )	colonies/100 ml		*
Fecal Coliform(2)	(074055)	( )	colonies/100 ml		*
Total Phosphorus	(000665)	( )	mg/l		
Oil and Grease(1)	(000550)	( )	mg/l		
Oil and Grease(2)	(000550)	( )	mg/l		
Chlorides	(099016)	( )	mg/l		
Phenol	(032730)	( )	mg/l		
Total Chromium	(001034)	( )	mg/l		
Hex. Chromium	(001032)	( )	mg/l		
Zinc	(001092)	( )	mg/l		
Copper	(001042)	( )	mg/l		
Lead	(017501)	( )	mg/l		
Cyanide	(000722)	( )	mg/l		
		( )			
		( )			
		( )			
		( )			
	4	( )			
		( )			
		( )			
		( )			
		( )			
		( )			

Remarks _____

*Date of Test Initiation

1290

P"REAU OF POLLUTION CONTRO"
SAMPLE REQUEST FORM

Lab Bench No.: 1391
Cost Code:3858

I. GENERAL INFORMATION:

Facility Name: Hercules, Inc.
County Code: NPDES Permit No.:
Discharge No: Date Requested: 6/24/98
Sample Point Identification: MW-54 # 1&#2 (Duplicate)
Requested By: Bryan Young Data To: Bryan Young
Type of Sample: Grab: X Composite: Flow: Time: Other:

II. SAMPLE IDENTIFICATION:

Environment Condition: Sunny 85° Collected By: WBY
Where Taken:

	Type	Parameters	Preservative	Date	Time
1.	2 1 Liter Amber	Semi-Vol. 8270	None	6/24/98	1030
2.					
3.					
4.					
5.					
6.					

III. FIELD:

Analysis	Computer Code	Req	Results	Analyst	Date
pH	000400				
D.O.	000300				
Temperature	000010				
ResidualChlorine	050060				
Flow	074060				

IV. TRANSPORTATION OF SAMPLE:

Bus: RO Vehicle: Other:

V. LABORATORY:

Received by: Otis Clark Date: 6/24/98 Time: 1430
Recorded by: Dot Lewis Date Sent to State Office: 7-31-98

VI. Remarks:

++

TARGET COMPOUND LIST
SEMIVOLATILE ORGANIC COMPOUNDS
IN WATER

OPCL NO.: 1391
ANALYSIS OF: Water

MARKED: Hercules MW-5
DATE RECEIVED: 6/24/98

COMPOUNDS	MQL	µg/L	COMPOUNDS	MQL	µg/L	COMPOUNDS	MQL	µg/L
Phenol	10	ND	4-Chloro-3-methylphenol	20	ND	Hexachlorobenzene	10	ND
bis(2-Chloroethyl)ether	10	ND	2-Methylnaphthalene	10	ND	Pentachloropohenol	50	ND
2-Chlorophenol	10	ND	Hexachlorocyclopentadiene	10	ND	Phenanthrene	10	ND
1,3-Dichlorobenzene	10	ND	2,4,6-Trichlorophenol	10	ND	Anthracene	10	ND
1,4-Dichlorobenzene	10	ND	2,4,5-Trichlorophenol	10	ND	Di-n-butylphthalate	10	ND
Benzyl alcohol	20	ND	2-Chloronaphthalene	10	ND	Fluoranthene	10	ND
1,2-Dichlorobenzene	10	ND	2-Nitroaniline	50	ND	Pyrene	10	ND
2-Methylphenol	10	ND	Dimethylphthalate	10	ND	Butylbenzylphthalate	10	ND
bis(2-Chloroisopropyl)ether	10	ND	Acenaphtylene	10	ND	3,3'Dichlorobenzidine	50	ND
4-Methylphenol	10	ND	2,6-Dinitrotoluene	10	ND	Benzo(a)anthracene	10	ND
N-Nitroso-di-n-propylamine	20	ND	3-Nitroaniline	50	ND	Chrysene	10	ND
Hexachloroethane	20	ND	Acenaphthene	10	ND	bis(2-Ethylhexyl)phthalate	10	ND
Nitrobenzene	10	ND	2,4-Dinitrophenol	50	ND	Di-n-octylphthalate	10	ND
Isophorone	10	ND	4-Nitrophenol	50	ND	Benzo(b)fluoranthene	10	ND
2-Nitrophenol	20	ND	Dibenzofuran	10	ND	Benzo(k)fluoranthene	10	ND
2,4-Dimethylphenol	10	ND	2,4-Dinitrotoluene	10	ND	Benzo(a)pyrene	10	ND
Benzoic acid	50	ND	Diethylphthalate	10	ND	Indeno(1,2,3-cd)pyrene	20	ND
bis(2-Chloroethoxy)methane	10	ND	4-Chlorophenyl-phenylether	10	ND	Dibenz(a,h)anthracene	20	ND
2,4-Dichlorophenol	10	ND	Fluorene	10	ND	Benzo(g,h,i)perylene	20	ND
1,2,4-Trichlorobenzene	10	ND	4-Nitroaniline	50	ND			
Naphthalene	10	ND	4,6-Dinitro-2-methylphenol	50	ND			
4-Chloroaniline	20	ND	N-nitrosodiphenylamine	20	ND			
Hexachlorobutadiene	10	ND	4-Bromophenyl-phenylether	10	ND			

SURROGATES	RECOVERY (%)	LIMITS
2-Fluorophenol	66	21-100
Phenol-d5	74	10-194
Nitrobenzene-d5	69	35-114
2-Fluorobiphenyl	62	43-116

Date Extracted: 7/1/1998
Date Injected: 7/8/1998
ND = None Detected
MQL = Minimum Quantifiable Level
Analyst: Jon Shell

Lower Detection Level = MQL X_____ = _____ µg/L

_____ No peaks above 40% of internal standard.
_____ Peaks above 40% of internal standard on EPA Appendx IX were identified.*
_____ Peaks above 40% of internal standard not on EPA Appendix IX.**
Many Peaks above 40% of internal standard not on EPA Appendix IX were not identified.
_____ Additional peaks were observed, but not examined.

COMMENTS: Tentatively Identified Compounds: (1) o,o-diethylphosphorodithioic acid ester - est. conc. = 42.3 ug/l. (2) Diphenylether - estimated conc. = 78.7 ug/L. (3)Chloromephos - estimated conc. = 125 ug/L. (4) Dioxathion - estimated conc. = 6.69 ug/L

BUREAU OF POLLUTION CONTROL
SAMPLE REQUEST FORM

Lab Bench No. _____

I. GENERAL INFORMATION: Facility Name Hercules Inc.
County Code _____ NPDES Permit No. _____
Discharge No. _____ Date Requested 24 June 98
Sample Point Identification MW-5 #14 #2 (Duplicate)
Requested By Brian Young Data To SAME
Type of Sample: Grab (X) Composite (Flow) (Time) Other ( )

II. SAMPLE IDENTIFICATION:
Environment Condition Sunny 85°F Collected By WBY
Where Taken _____

	Type	Parameters	Preservative	Date	Time
1.	2 1 Liter Amb.	Semi-Vol 8270	None	24 June 98	10:30
2.					
3.					
4.					
5.					

III. FIELD:

Analysis	Computer Code	Request	Results	Analyst	Date
pH	(000400)	( )			
D.O.	(000300)	( )			
Temperature	(000010)	( )			
Residual Chlorine	(050060)	( )			
Flow	(074060)	( )			

IV. TRANSPORTATION OF SAMPLE: Bus (X) RO Vehicle ( ) Other ( )
V. LABORATORY: Received By [signature] Date 6-24-98 Time 143
Recorded By _____ Date Sent to State Office _____

Analysis	Computer Code	Request	Result	Analyst	Date Measured
BOD_5	(000310)	( )	mg/1		*
COD	(000340)	( )	mg/1		
TOC	(000680)	( )	mg/1		
Suspended Solids	(099000)	( )	mg/1		
TKN	(000625)	( )	mg/1		
Ammonia-N	(000610)	( )	mg/1		
Fecal Coliform(1)	(074055)	( )	colonies/100 ml		*
Fecal Coliform(2)	(074055)	( )	colonies/100 ml		*
Total Phosphorus	(000665)	( )	mg/1		
Oil and Grease(1)	(000550)	( )	mg/1		
Oil and Grease(2)	(000550)	( )	mg/1		
Chlorides	(099016)	( )	mg/1		
Phenol	(032730)	( )	mg/1		
Total Chromium	(001034)	( )	mg/1		
Hex. Chromium	(001032)	( )	mg/1		
Zinc	(001092)	( )	mg/1		
Copper	(001042)	( )	mg/1		
Lead	(017501)	( )	mg/1		
Cyanide	(000722)	( )	mg/1		
		( )			
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		( )			
		( )			
		( )			

6-24-98

Remarks _____

*Date of Test Initiation

BUREAU OF POLLUTION CONTROL
SAMPLE REQUEST FORM

Lab Bench No. _____

I. GENERAL INFORMATION: Facility Name Hercules, Inc.
County Code _____ NPDES Permit No. _____
Discharge No. _____ Date Requested 24 June 98
Sample Point Identification MW-4 #1 & #2 (Duplicate)
Requested By Brian Young Data To Same
Type of Sample: Grab (X) Composite (Flow) (Time) Other ( ) _____

II. SAMPLE IDENTIFICATION:
Environment Condition Sunny 85°F Collected By WR
Where Taken _____

	Type	Parameters	Preservative	Date	Time
1.	2 Liter Amber	Semi-VOC 8270	None	24 June 98	12:00
2.					
3.					
4.					
5.					

III. FIELD:

Analysis	Computer Code	Request	Results	Analyst	Date
pH	(000400)	( )			
D.O.	(000300)	( )			
Temperature	(000010)	( )			
Residual Chlorine	(050060)	( )			
Flow	(074060)	( )			

IV. TRANSPORTATION OF SAMPLE: Bus ( ) RO Vehicle ( ) Other ( ) Fed Ex
V. LABORATORY: Received By [illegible] Date 6-25-98 Time 1430
Recorded By _____ Date Sent to State Office _____

Analysis	Computer Code	Request	Result	Analyst	Date Measured
BOD_5	(000310)	( )	mg/1		*
COD	(000340)	( )	mg/1		
TOC	(000680)	( )	mg/1		
Suspended Solids	(099000)	( )	mg/1		
TKN	(000625)	( )	mg/1		
Ammonia-N	(000610)	( )	mg/1		
Fecal Coliform(1)	(074055)	( )	colonies/100 ml		*
Fecal Coliform(2)	(074055)	( )	colonies/100 ml		*
Total Phosphorus	(000665)	( )	mg/1		
Oil and Grease(1)	(000550)	( )	mg/1		
Oil and Grease(2)	(000550)	( )	mg/1		
Chlorides	(099016)	( )	mg/1		
Phenol	(032730)	( )	mg/1		
Total Chromium	(001034)	( )	mg/1		
Hex. Chromium	(001032)	( )	mg/1		
Zinc	(001092)	( )	mg/1		
Copper	(001042)	( )	mg/1		
Lead	(017501)	( )	mg/1		
Cyanide	(000722)	( )	mg/1		
		( )			
		( )			
		( )			
		( )			
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		( )			
		( )			
		( )			

Remarks _____

*Date of Test Initiation

1858 1390

BUREAU OF POLLUTION CONTROL
SAMPLE REQUEST FORM

Lab Bench No. _____

I. GENERAL INFORMATION: Facility Name Hercules Inc.
County Code _____ NPDES Permit No. _____
Discharge No. _____ Date Requested 24 June 98
Sample Point Identification MW-5 #18 #2 (Duplicate)
Requested By Brian Young Data To Same
Type of Sample: Grab (X) Composite (Flow) (Time) Other ( ) _____

II. SAMPLE IDENTIFICATION:
Environment Condition Sunny 85°F Collected By WBY
Where Taken _____

	Type	Parameters	Preservative	Date	Time
1.	2 1 Liter Amb.	Semi-Voc 8270	None	24 Jun 98	10:30
2.					
3.					
4.					
5.					

III. FIELD:

Analysis	Computer Code	Request	Results	Analyst	Date
pH	(000400)	( )			
D.O.	(000300)	( )			
Temperature	(000010)	( )			
Residual Chlorine	(050060)	( )			
Flow	(074060)	( )			

IV. TRANSPORTATION OF SAMPLE: Bus ( ) RO Vehicle ( ) Other ( )
V. LABORATORY: Received By [illegible] Date 6-24-98 Time 1430
Recorded By _____ Date Sent to State Office _____

Analysis	Computer Code	Request	Result	Analyst	Date Measured
BOD_5	(000310)	( )	mg/1		*
COD	(000340)	( )	mg/1		
TOC	(000680)	( )	mg/1		
Suspended Solids	(099000)	( )	mg/1		
TKN	(000625)	( )	mg/1		
Ammonia-N	(000610)	( )	mg/1		
Fecal Coliform(1)	(074055)	( )	colonies/100 ml		*
Fecal Coliform(2)	(074055)	( )	colonies/100 ml		*
Total Phosphorus	(000665)	( )	mg/1		
Oil and Grease(1)	(000550)	( )	mg/1		
Oil and Grease(2)	(000550)	( )	mg/1		
Chlorides	(099016)	( )	mg/1		
Phenol	(032730)	( )	mg/1		
Total Chromium	(001034)	( )	mg/1		
Hex. Chromium	(001032)	( )	mg/1		
Zinc	(001092)	( )	mg/1		
Copper	(001042)	( )	mg/1		
Lead	(017501)	( )	mg/1		
Cyanide	(000722)	( )	mg/1		
		( )			
		( )			
		( )			
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Remarks _____

*Date of Test Initiation

1856

1391

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHAIN OF CUSTODY RECORD

OFFICE OF POLLUTION CONTROL
P. O. Box 10385
Jackson, Mississippi 39289-0385

MSD

PROJECT LEADER: Brian Young

PROJECT NAME/LOCATION: Hercules, Inc Hattiesburg, MS

REMARKS

DATA TO: Brian Young

ESD SAMPLE TYPES
1. SURFACE WATER
2. GROUND WATER
3. POTABLE WATER
4. WASTEWATER
5. LEACHATE
6. SOIL/SEDIMENT
7. SLUDGE
8. WASTE
9. AIR
10. FISH
11. OTHER

SAMPLER

CIRCLE/ADD parameters desired. List no. of containers submitted.

ANALYSIS

STATION NO.	SAMPLE TYPE	DATE (19 98)	TIME	COMP	GRAB	STATION LOCATION/DESCRIPTION	TOTAL CONTAINERS	VOA	Semi volatile org cpds	Pest/PCBs	METALS	CYANIDE					TAG NO./REMARKS	Custody Seals Intact at Lab	Seals Not Intact Upon Receipt by Lab	LAB USE ONLY
MW-4	2	24 June	12:00		X	MW-4 #1 & #2 (Duplicate)	2		X								8270			
MW-5	2	24 June	10:30		X	MW-5 #1 & #2 (Duplicate)	2		X								8270			

RELINQUISHED BY: (PRINT)	DATE/TIME	RECEIVED BY: (PRINT)	RELINQUISHED BY: (PRINT)	DATE/TIME	RECEIVED BY: (PRINT)
(SIGN)	24 June 98 14:30	(SIGN)	(SIGN)		(SIGN)
RELINQUISHED BY: (PRINT)	DATE/TIME	RECEIVED BY: (PRINT)	RELINQUISHED BY: (PRINT)	DATE/TIME	RECEIVED BY: (PRINT)
(SIGN)		(SIGN)	(SIGN)		(SIGN)

DISTRIBUTION: White and Yellow copies accompany sample shipment to laboratory; Yellow copy retained by laboratory. White copy is returned to samplers; Pink copy retained by samplers.

PAGE ____ OF ____

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16-0951 #1390

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHAIN OF CUSTODY RECORD

OFFICE OF POLLUTION CONTROL
P. O. Box 10385
Jackson, Mississippi 39289-0385

MSD

PROJECT LEADER: Brian Young

PROJECT NAME/LOCATION: Hercules, Inc Hattiesburg, MS

REMARKS

DATA TO: Brian Young

ESD SAMPLE TYPES
1. SURFACE WATER
2. GROUND WATER
3. POTABLE WATER
4. WASTEWATER
5. LEACHATE
6. SOIL/SEDIMENT
7. SLUDGE
8. WASTE
9. AIR
10. FISH
11. OTHER

SAMPLER

CIRCLE/ADD parameters desired. List no. of containers submitted.

ANALYSIS

STATION NO.	SAMPLE TYPE	DATE (19 98)	TIME	COMP	GRAB	STATION LOCATION/DESCRIPTION	TOTAL CONTAINERS	VOA	Semi volatile org cpds	Pest/PCBs	METALS	CYANIDE						TAG NO./REMARKS	Custody Seals Intact at Lab	Seals Not Intact Upon Receipt by Lab	LAB USE ONLY
MW-4	2	24 June	12:00		X	MW-4 #1 & #2 (Duplicate)	2		X									8270			
MW-5	2	24 June	10:30		X	MW-5 #1 & #2 (Duplicate)	2		X									8270			

RELINQUISHED BY: (PRINT) / (SIGN)	DATE/TIME	RECEIVED BY: (PRINT) / (SIGN)	RELINQUISHED BY: (PRINT) / (SIGN)	DATE/TIME	RECEIVED BY: (PRINT) / (SIGN)
Brian Young	24 June 98 14:30				

DISTRIBUTION: White and Yellow copies accompany sample shipment to laboratory; Yellow copy retained by laboratory. White copy is returned to samplers; Pink copy retained by samplers.

PAGE _____ OF _____

8/90

16-0651 #1390

BUREAU OF POLLUTION CONTROL
SAMPLE REQUEST FORM

Lab Bench No. _____

I. GENERAL INFORMATION: Facility Name Hercules HATTIESBURG, MS
County Code _____ NPDES Permit No. _____
Discharge No. _____ Date Requested 12-12-97
Sample Point Identification MW-4
Requested By BRIAN YOUNG (MAIN OFF.) Data To SAME
Type of Sample: Grab (X) Composite (Flow) (Time) Other ( ) _____

II. SAMPLE IDENTIFICATION:
Environment Condition SUNNY 40°F Collected By B. Y
Where Taken _____

	Type	Parameters	Preservative	Date	Time
1.	2/40ml	VOLATILES	ALL	12/12/97	13:10
2.		8260			
3.					
4.					
5.					

III. FIELD:

Analysis	Computer Code	Request	Results	Analyst	Date
pH	(000400)	( )			
D.O.	(000300)	( )			
Temperature	(000010)	( )			
Residual Chlorine	(050060)	( )			
Flow	(074060)	( )			

IV. TRANSPORTATION OF SAMPLE: Bus ( ) RO Vehicle ( ) Other ( )

V. LABORATORY: Received By [illegible] Date 12-12-97 Time 1510
Recorded By _____ Date Sent to State Office _____

Analysis	Computer Code	Request	Result	Analyst	Date Measured
BOD_5	(000310)	( )	mg/l		*
COD	(000340)	( )	mg/l		
TOC	(000680)	( )	mg/l		
Suspended Solids	(099000)	( )	mg/l		
TKN	(000625)	( )	mg/l		
Ammonia-N	(000610)	( )	mg/l		
Fecal Coliform(1)	(074055)	( )	colonies/100 ml		*
Fecal Coliform(2)	(074055)	( )	colonies/100 ml		*
Total Phosphorus	(000665)	( )	mg/l		
Oil and Grease(1)	(000550)	( )	mg/l		
Oil and Grease(2)	(000550)	( )	mg/l		
Chlorides	(099016)	( )	mg/l		
Phenol	(032730)	( )	mg/l		
Total Chromium	(001034)	( )	mg/l		
Hex. Chromium	(001032)	( )	mg/l		
Zinc	(001092)	( )	mg/l		
Copper	(001042)	( )	mg/l		
Lead	(017501)	( )	mg/l		
Cyanide	(000722)	( )	mg/l		
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		( )			
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		( )			
		( )			
		( )			
		( )			

Remarks _____

*Date of Test Initiation

1858

3/37

Mississippi Department of Environmental Quality
Office of Pollution Control Lab
121 Fairmont Plaza
Pearl, Mississippi 39208

Volatile Analysis of Water
By Method 8260

Sample Name	**3137**
Misc Info	**HERCULES MW4**
Date Acquired	**12/15/97 13:08**
Operator	**JACKIE KEY**

Name	Amount	Units	Quantitation Limit	Name	Amount	Units	Quantitation Limit
Dichlorodifluoromethane	NOT DETECTED		5 ppb	Chlorobenzene	NOT DETECTED		5 ppb
Chloromethane	NOT DETECTED		5 ppb	1,1,1,2-Tetrachloroethane	NOT DETECTED		5 ppb
Vinyl Chloride	NOT DETECTED		5 ppb	Ethylbenzene	NOT DETECTED		5 ppb
Bromomethane	NOT DETECTED		5 ppb	m & p -Xylene	NOT DETECTED		5 ppb
Chloroethane	NOT DETECTED		5 ppb	Styrene	NOT DETECTED		5 ppb
Trichlorofluoromethane	NOT DETECTED		5 ppb	o - Xylene	NOT DETECTED		5 ppb
Acetone	166	ppb	25 ppb	Bromoform	NOT DETECTED		5 ppb
1,1-Dichloroethene	NOT DETECTED		5 ppb	1,1,2,2-Tetrachloroethane	NOT DETECTED		5 ppb
Methylene Chloride	NOT DETECTED		5 ppb	Isopropylbenzene	NOT DETECTED		5 ppb
Carbon disulfide	NOT DETECTED		5 ppb	1,2,3-Trichloropropane	NOT DETECTED		5 ppb
trans-1,2-Dichloroethene	NOT DETECTED		5 ppb	Bromobenzene	NOT DETECTED		5 ppb
1,1-Dichloroethane	NOT DETECTED		5 ppb	n-Propylbenzene	NOT DETECTED		5 ppb
2-Butanone (MEK)	74	ppb	25 ppb	2-Chlorotoluene	NOT DETECTED		5 ppb
cis-1,2-Dichloroethene	NOT DETECTED		5 ppb	4-Chlorotoluene	NOT DETECTED		5 ppb
2,2-Dichloropropane	NOT DETECTED		5 ppb	1,3,5-Trimethylbenzene	NOT DETECTED		5 ppb
Chloroform	NOT DETECTED		5 ppb	tert-Butylbenzene	NOT DETECTED		5 ppb
Bromochloromethane	NOT DETECTED		5 ppb	1,2,4-Trimethylbenzene	NOT DETECTED		5 ppb
1,2-Dichloroethane	NOT DETECTED		5 ppb	sec-Butylbenzene	NOT DETECTED		5 ppb
1,1-Dichloropropene	NOT DETECTED		5 ppb	1,3-Dichlorobenzene	NOT DETECTED		5 ppb
Benzene	NOT DETECTED		5 ppb	4-Isopropyltoluene	NOT DETECTED		5 ppb
Trichloroethene	NOT DETECTED		5 ppb	1,4-Dichlorobenzene	NOT DETECTED		5 ppb
1,2-Dichloropropane	NOT DETECTED		5 ppb	1,2-Dichlorobenzene	NOT DETECTED		5 ppb
Dibromomethane	NOT DETECTED		5 ppb	n-Butylbenzene	NOT DETECTED		5 ppb
Bromodichloromethane	NOT DETECTED		5 ppb	1,2-Dibromo-3-chloropropane	NOT DETECTED		5 ppb
4-Methyl-2-pentanone (MIBK)	NOT DETECTED		5 ppb	1,2,4-Trichlorobenzene	NOT DETECTED		5 ppb
cis-1,3-Dichloropropene	NOT DETECTED		5 ppb	Naphthalene	NOT DETECTED		5 ppb
Toluene	NOT DETECTED		5 ppb	Hexachlorobutadiene	NOT DETECTED		5 ppb
trans-1,3-dichloropropene	NOT DETECTED		5 ppb				
1,1,2-Trichloroethane	NOT DETECTED		5 ppb				
2-Hexanone	NOT DETECTED		5 ppb	Tetrahydrofuran	52	ppb approximate	
1,3-Dichloropropane	NOT DETECTED		5 ppb	Isocamphene	25	ppb approximate	
Dibromochloromethane	NOT DETECTED		5 ppb				
Tetrachloroethene	NOT DETECTED		5 ppb				
1,2-Dibromoethane	NOT DETECTED		5 ppb				

Surrogates	% Recovery	Limits
Dibromofluoromethane	**104**	**(86-118)**
1,2-Dichloroethane-d4	**103**	**(80-120)**
Toluene-d8	**99**	**(80-110)**
p-Bromofluorobenzene	**99**	**(86-115)**

BUREAU OF POLLUTION CONTROL
SAMPLE REQUEST FORM

Lab Bench No.: 3137
Cost Code: 3858

I. GENERAL INFORMATION:

Facility Name: Hercules Hattiesburg, MS
County Code: NPDES Permit No.:
Discharge No: Date Requested: 12/12/97
Sample Point Identification: MW-4
Requested By: Brian Young Data To: Brian Young
Type of Sample: Grab: X Composite: Flow: Time: Other:

II. SAMPLE IDENTIFICATION:

Environment Condition: Sunny 40°F Collected By: B.Young
Where Taken:

	Type	Parameters	Preservative	Date	Time
1.	2/ 40 ml	Volatiles	None	12/12/97	1310
2.					
3.					
4.					
5.					
6.					

III. FIELD:

Analysis	Computer Req Code		Results	Analyst	Date
pH	000400				
D.O.	000300				
Temperature	000010				
ResidualChlorine	050060				
Flow	074060				

IV. TRANSPORTATION OF SAMPLE:

Bus: RO Vehicle: Other:

V. LABORATORY:

Received by: Otis Clark Date: 12/12/95 Time: 1510
Recorded by: Dot Lewis Date Sent to State Office: 1/12/98

VI. Remarks:

BUREAU OF POLLUTION CONTROL
SAMPLE REQUEST FORM

Lab Bench No.: 3138
Cost Code: 3858

I. GENERAL INFORMATION:

Facility Name: Hercules Hattiesburg, MS
County Code: NPDES Permit No.:
Discharge No: Date Requested: 12/12/97
Sample Point Identification: MW-4
Requested By: Brian Young Data To: Brian Young
Type of Sample: Grab: X Composite: Flow: Time: Other:

II. SAMPLE IDENTIFICATION:

Environment Condition: Sunny 40°F Collected By: B.Young
Where Taken:

	Type	Parameters	Preservative	Date	Time
1.	2 /1 Liters	Semi-VOA 8270	None	12/12/97	1310
2.					
3.					
4.					
5.					
6.					

III. FIELD:

Analysis	Computer Code	Req	Results	Analyst	Date
pH	000400				
D.O.	000300				
Temperature	000010				
ResidualChlorine	050060				
Flow	074060				

IV. TRANSPORTATION OF SAMPLE:

Bus: RO Vehicle: Other:

V. LABORATORY:

Received by: Otis Clark Date: 12/12/95 Time: 1510
Recorded by: Dot Lewis Date Sent to State Office: 1/12/98

VI. Remarks:

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TARGET COMPOUND LIST
SEMIVOLATILE ORGANIC COMPOUNDS
IN WATER

OPCL NO.: 3138 MARKED: Hercules MW-4
ANALYSIS OF: Water DATE RECEIVED: 12/12/97

COMPOUNDS	MQL	µg/L	COMPOUNDS	MQL	µg/L	COMPOUNDS	MQL	µg/L
Phenol	10	ND	4-Chloro-3-methylphenol	20	ND	Hexachlorobenzene	10	ND
bis(2-Chloroethyl)ether	10	ND	2-Methylnaphthalene	10	ND	Pentachloropohenol	50	ND
2-Chlorophenol	10	ND	Hexachlorocyclopentadiene	10	ND	Phenanthrene	10	ND
1,3-Dichlorobenzene	10	ND	2,4,6-Trichlorophenol	10	ND	Anthracene	10	ND
1,4-Dichlorobenzene	10	ND	2,4,5-Trichlorophenol	10	ND	Di-n-butylphthalate	10	ND
Benzyl alcohol	20	ND	2-Chloronaphthalene	10	ND	Fluoranthene	10	ND
1,2-Dichlorobenzene	10	ND	2-Nitroaniline	50	ND	Pyrene	10	ND
2-Methylphenol	10	ND	Dimethylphthalate	10	ND	Butylbenzylphthalate	10	ND
bis(2-Chloroisopropyl)ether	10	ND	Acenaphtylene	10	ND	3,3'Dichlorobenzidine	50	ND
4-Methylphenol	10	ND	2,6-Dinitrotoluene	10	ND	Benzo(a)anthracene	10	ND
N-Nitroso-di-n-propylamine	20	ND	3-Nitroaniline	50	ND	Chrysene	10	ND
Hexachloroethane	20	ND	Acenaphthene	10	ND	bis(2-Ethylhexyl)phthalate	10	ND
Nitrobenzene	10	ND	2,4-Dinitrophenol	50	ND	Di-n-octylphthalate	10	ND
Isophorone	10	ND	4-Nitrophenol	50	ND	Benzo(b)fluoranthene	10	ND
2-Nitrophenol	20	ND	Dibenzofuran	10	ND	Benzo(k)fluoranthene	10	ND
2,4-Dimethylphenol	10	ND	2,4-Dinitrotoluene	10	ND	Benzo(a)pyrene	10	ND
Benzoic acid	50	ND	Diethylphthalate	10	ND	Indeno(1,2,3-cd)pyrene	20	ND
bis(2-Chloroethoxy)methane	10	ND	4-Chlorophenyl-phenylether	10	ND	Dibenz(a,h)anthracene	20	ND
2,4-Dichlorophenol	10	ND	Fluorene	10	ND	Benzo(g,h,l)perylene	20	ND
1,2,4-Trichlorobenzene	10	ND	4-Nitroaniline	50	ND			
Naphthalene	10	ND	4,6-Dinitro-2-methylphenol	50	ND			
4-Chloroaniline	20	ND	N-nitrosodiphenylamine	20	ND			
Hexachlorobutadiene	10	ND	4-Bromophenyl-phenylether	10	ND			

SURROGATES	RECOVERY (%)	LIMITS
2-Fluorophenol	69	21 - 100
Phenol-d5	84	10 -194
Nitrobenzene-d5	77	35 - 114
2-Fluorobiphenyl	50	43 - 116
2,4,6-Tribromophenol	65	10 - 123
p-Terphenyl-d14	45	33 - 141

Date Extracted: 12 /16 / 1997
Date Injected: 12 /23 / 1997
ND = None Detected
MQL = Minimum Quantifiable Level
Analyst: Jon Shell

Lower Detection Level = MQL X 1 = _____ µg/L

___ No peaks above 40% of internal standard.
___ Peaks above 40% of internal standard on EPA Appendx IX were identified.*
___ Peaks above 40% of internal standard not on EPA Appendix IX.**
6 Peaks above 40% of internal standard not on EPA Appendix IX were not identified.
___ Additional peaks were observed, but not examined.

COMMENTS: No target semi-volatile compounds were identified in this sample, however, the following compounds were tentatively identified at the listed estimated concentrations: (1) Diphenyl Ether - 66.4 ug/L (2) Chlomephos - 55.2 ug/L (3) Dioxathion - 40.0 ug/L (4) Phosphorodithioic acid esters - 113 ug/l

BUREAU OF POLLUTION CONTROL
SAMPLE REQUEST FORM

Lab Bench No. _____

I. GENERAL INFORMATION: Facility Name Hercules / Hattiesburg, MS
County Code _____ NPDES Permit No. _____
Discharge No. _____ Date Requested _____
Sample Point Identification MW-4
Requested By Brian Young - Main Office Data To Same
Type of Sample: Grab (X) Composite (Flow) (Time) Other ( ) _____

II. SAMPLE IDENTIFICATION:
Environment Condition Sunny 40°F Collected By B.Y
Where Taken _____

	Type	Parameters	Preservative	Date	Time
1.	2 liter	Semi-VOA's	None	12/12/97	13:10
2.		8270			
3.					
4.					
5.					

III. FIELD:

Analysis	Computer Code	Request	Results	Analyst	Date
pH	(000400)	( )			
D.O.	(000300)	( )			
Temperature	(000010)	( )			
Residual Chlorine	(050060)	( )			
Flow	(074060)	( )			

IV. TRANSPORTATION OF SAMPLE: Bus ( ) RO Vehicle ( ) Other ( ) _____
V. LABORATORY: Received By Ola Clark Date 12-12-97 Time 1510
Recorded By _____ Date Sent to State Office _____

Analysis	Computer Code	Request	Result	Analyst	Date Measured
BOD_5	(000310)	( )	mg/l		*
COD	(000340)	( )	mg/l		
TOC	(000680)	( )	mg/l		
Suspended Solids	(099000)	( )	mg/l		
TKN	(000625)	( )	mg/l		
Ammonia-N	(000610)	( )	mg/l		
Fecal Coliform(1)	(074055)	( )	colonies/100 ml		*
Fecal Coliform(2)	(074055)	( )	colonies/100 ml		*
Total Phosphorus	(000665)	( )	mg/l		
Oil and Grease(1)	(000550)	( )	mg/l		
Oil and Grease(2)	(000550)	( )	mg/l		
Chlorides	(099016)	( )	mg/l		
Phenol	(032730)	( )	mg/l		
Total Chromium	(001034)	( )	mg/l		
Hex. Chromium	(001032)	( )	mg/l		
Zinc	(001092)	( )	mg/l		
Copper	(001042)	( )	mg/l		
Lead	(017501)	( )	mg/l		
Cyanide	(000722)	( )	mg/l		
		( )			
		( )			
		( )			
		( )			
		( )			
		( )			
		( )			
		( )			
		( )			
		( )			

Remarks _____

*Date of Test Initiation

1858

3138

Mississippi Department of Environmental Quality
Office of Pollution Control Lab
121 Fairmont Plaza
Pearl, Mississippi 39208

Volatile Analysis of Water
By Method 8260

Sample Name	**3139**
Misc Info	**HERCULES MW5**
Date Acquired	**12/15/97 13:52**
Operator	**JACKIE KEY**

Name	Amount	Units	Quantitation Limit	Name	Amount	Units	Quantitation Limit
Dichlorodifluoromethane	NOT DETECTED		5 ppb	Chlorobenzene	NOT DETECTED		5 ppb
Chloromethane	NOT DETECTED		5 ppb	1,1,1,2-Tetrachloroethane	NOT DETECTED		5 ppb
Vinyl Chloride	NOT DETECTED		5 ppb	Ethylbenzene	NOT DETECTED		5 ppb
Bromomethane	NOT DETECTED		5 ppb	m & p -Xylene	NOT DETECTED		5 ppb
Chloroethane	NOT DETECTED		5 ppb	Styrene	NOT DETECTED		5 ppb
Trichlorofluoromethane	NOT DETECTED		5 ppb	o - Xylene	NOT DETECTED		5 ppb
Acetone	NOT DETECTED		25 ppb	Bromoform	NOT DETECTED		5 ppb
1,1-Dichloroethene	NOT DETECTED		5 ppb	1,1,2,2-Tetrachloroethane	NOT DETECTED		5 ppb
Methylene Chloride	NOT DETECTED		5 ppb	Isopropylbenzene	NOT DETECTED		5 ppb
Carbon disulfide	NOT DETECTED		5 ppb	1,2,3-Trichloropropane	NOT DETECTED		5 ppb
trans-1,2-Dichloroethene	NOT DETECTED		5 ppb	Bromobenzene	NOT DETECTED		5 ppb
1,1-Dichloroethane	NOT DETECTED		5 ppb	n-Propylbenzene	NOT DETECTED		5 ppb
2-Butanone (MEK)	NOT DETECTED		25 ppb	2-Chlorotoluene	NOT DETECTED		5 ppb
cis-1,2-Dichloroethene	NOT DETECTED		5 ppb	4-Chlorotoluene	NOT DETECTED		5 ppb
2,2-Dichloropropane	NOT DETECTED		5 ppb	1,3,5-Trimethylbenzene	NOT DETECTED		5 ppb
Chloroform	NOT DETECTED		5 ppb	tert-Butylbenzene	NOT DETECTED		5 ppb
Bromochloromethane	NOT DETECTED		5 ppb	1,2,4-Trimethylbenzene	NOT DETECTED		5 ppb
1,2-Dichloroethane	NOT DETECTED		5 ppb	sec-Butylbenzene	NOT DETECTED		5 ppb
1,1-Dichloropropene	NOT DETECTED		5 ppb	1,3-Dichlorobenzene	NOT DETECTED		5 ppb
Benzene	NOT DETECTED		5 ppb	4-Isopropyltoluene	20	ppb	5 ppb
Trichloroethene	NOT DETECTED		5 ppb	1,4-Dichlorobenzene	NOT DETECTED		5 ppb
1,2-Dichloropropane	NOT DETECTED		5 ppb	1,2-Dichlorobenzene	NOT DETECTED		5 ppb
Dibromomethane	NOT DETECTED		5 ppb	n-Butylbenzene	NOT DETECTED		5 ppb
Bromodichloromethane	NOT DETECTED		5 ppb	1,2-Dibromo-3-chloropropane	NOT DETECTED		5 ppb
4-Methyl-2-pentanone (MIBK)	NOT DETECTED		5 ppb	1,2,4-Trichlorobenzene	NOT DETECTED		5 ppb
cis-1,3-Dichloropropene	NOT DETECTED		5 ppb	Naphthalene	NOT DETECTED		5 ppb
Toluene	NOT DETECTED		5 ppb	Hexachlorobutadiene	NOT DETECTED		5 ppb
trans-1,3-dichloropropene	NOT DETECTED		5 ppb				
1,1,2-Trichloroethane	NOT DETECTED		5 ppb				
2-Hexanone	NOT DETECTED		5 ppb				
1,3-Dichloropropane	NOT DETECTED		5 ppb				
Dibromochloromethane	NOT DETECTED		5 ppb				
Tetrachloroethene	NOT DETECTED		5 ppb				
1,2-Dibromoethane	NOT DETECTED		5 ppb				

Surrogates	% Recovery	Limits
Dibromofluoromethane	**103**	**(86-118)**
1,2-Dichloroethane-d4	**105**	**(80-120)**
Toluene-d8	**99**	**(80-110)**
p-Bromofluorobenzene	**100**	**(86-115)**

BUREAU OF POLLUTION CONTROL
SAMPLE REQUEST FORM

Lab Bench No.: 3139
Cost Code: 3858

I. GENERAL INFORMATION:

Facility Name: Hercules Hattiesburg, MS
County Code: NPDES Permit No.:
Discharge No: Date Requested: 12/12/97
Sample Point Identification: MW-5
Requested By: Brian Young Data To: Brian Young
Type of Sample: Grab: X Composite: Flow: Time: Other:

II. SAMPLE IDENTIFICATION:

Environment Condition: Sunny 40°F Collected By: B.Young
Where Taken:

	Type	Parameters	Preservative	Date	Time
1.	2/ 40 ml	Volatiles	None	12/12/97	1200
2.					
3.					
4.					
5.					
6.					

III. FIELD:

Analysis	Computer Code	Req	Results	Analyst	Date
pH	000400				
D.O.	000300				
Temperature	000010				
ResidualChlorine	050060				
Flow	074060				

IV. TRANSPORTATION OF SAMPLE:

Bus: RO Vehicle: Other:

V. LABORATORY:

Received by: Otis Clark Date: 12/12/95 Time: 1510
Recorded by: Dot Lewis Date Sent to State Office: 1/12/98

VI. Remarks: