JOB NO. 4324 BASF
BARGE: EIT-110 7/94

HER 03702

8000681

HERCULES
MARINE SERVICES CORPORATION
P.O. Drawer O • Freeport, Texas 77541

INVOICE NO. : 2582-94
DATE : July 31, 1994
Job No. : 4324-1
Location : Freeport Yard

TO: BASF
602 Copper Road
Freeport, Texas 77541

PLEASE REMIT PAYMENTS TO:
11011 RICHMOND
SUITE 500
HOUSTON, TX. 77042

Terms : Net 30

P. O. # F91392CB

FOR: Services to the barge ETT-110 as follows:

Set up equipment
Strip out all free product
Blow cargo pipeline
Vacuum and blow dry cargo tanks and gas free
Swept powder rust from cargo tank floors
Wash and strip deck around engine and header
Pressure test cargo pipeline to 40# psi
Deballast stern rake to repair fracture
Shift barge around to repair fracture
Fill up bow rake with fresh water to repair fracture
Repair fracture and test stern rake
Pump out bow rake to 5th run showing
Fill up stern rake with fresh water
Remove equipment
Close barge

LABOR:	Foreman 17 @ 36.00	$ 612.00
	Leadman 8 @ 33.50	268.00
	Journey 24 @ 31.00	744.00
Material:	305.50 + 61.10	366.60
Equip:		
	Compressor 8 @ 44.00	352.00
	Air Movers 24 @ 5.00	120.00
	Forklift 2 @ 20.00	40.00
	Tugboat 2 @ 80.00	160.00
	Vacuum 6 @ 18.00	108.00
	Hand Hose 2 @ 10.00	20.00
	Welding Machine 1½ @ 15.00	22.50
	3" Gas pump 8 @ 14.00	112.00
	2" Strip pump 2 @ 12.00	24.00
Fresh water		124.50
	TOTAL AMOUNT DUE:	$ 3,073.60

Arrived: 7/28
Completed: 7/29
Product: Cyclohexane

PHONE: (409) 233-6371

HER 03703

Strength through Experience, Equipment, Know-How

HERCULES
MARINE SERVICE CORP.
FREEPORT, TEXAS

FOREMAN'S DAILY TIME REPORT

JOB NO 4324

DATE 7-25-94

CLASS NO.

DESCRIPTION OF WORK PERFORMED BY FOREMAN

BADGE NO	NAME	Repair pumps, install new valves, install spacers, install the coated [illegible]	Pump water from [illegible]	TOTAL HOURS
[illegible]	[illegible]			
[illegible]	[illegible]	4		4
[illegible]	[illegible]			
[illegible]	SAM BETTIT [illegible]	1		1
[illegible]	[illegible]			
[illegible]	[illegible]			
[illegible]	[illegible]	4		4
[illegible]	[illegible] IGUET			
[illegible]	[illegible]			
[illegible]	[illegible]	2	3	5
[illegible]	[illegible]		4	4
[illegible]	[illegible]			
[illegible]	[illegible]			
[illegible]	[illegible] HOURS			18

HER 03704

SIGNED [illegible] FOREMAN

CODED AND EXTENDED BY

APPROVED BY

HERCULES
MARINE SERVICE CORP.
FREEPORT, TEXAS

FOREMAN'S DAILY TIME REPORT

JOB NO 4324

DATE 7-28-94

CLASS NO ETT-11D

DESCRIPTION OF WORK PERFORMED BY FOREMAN

BADGE NO.	NAME	Shop Work Pos Camp Lab, camp	Maintain CAT Equip Equipment	Move camp Lab, Office Cabins, Shop, etc	General maint. Lab Equipment, lab camp	Maintain Lab Equipment	Shop work camp Equipment Maintenance	Fill up Equipment and tank trucks					Phone & Chemical Fire extinguisher	TOTAL HOURS
[illegible]	[illegible]													
[illegible]	[illegible]	2½												2½
[illegible]	[illegible]													
41 [illegible]	SAM PETTIT	6¼												6
[illegible]														
[illegible]														
[illegible]	[illegible]	2												2
[illegible]	[illegible]													
[illegible]														
[illegible]	[illegible]	5										1		6
[illegible]	[illegible]	6												6
[illegible]	[illegible]	8												8
[illegible]														
[illegible]	JRS													[illegible]

HER 03705

SIGNED [illegible] FOREMAN

CODED AND EXTENDED BY

APPROVED BY

HERCULES
OFFSHORE CORPORATION
Strength through experience, equipment, know-how
11011 Richmond Ave., Suite 500
Houston, Texas 77042
Office (713) 789-7983
Fax (713) 789-4063

EQUIPMENT	HOURS USED	HOURLY RATE	TOTAL PRICE
1 - COMPRESSOR	8 hr	44.00	
4 - AIR MOVERS 6 hr ea	24 hr	5.00	
FORKLIFT	2 hr	20.00	
TUG BOAT	2 hr	80.00	
STEAM RIG (BOILER)		80.00	
VACUUM	6 hr	18.00	
HAND HOSE	2 hr	10.00	
HAUL OUT		1100.00/DAY	
WELDING MACHINES	1 1/2 hr	15.00	
CHERRYPICKER		50.00	
CRANE		130.00	
FLATBED TRUCK		20.00	
2 - 3" GAS PUMP 4 hr ea	8 hr	14.00	
1 - 2" STRIP PUMP	2 hr	12.00	
BUTTERWORTH		10.00	
4" ELECTRIC PUMP		15.00	
WORK BARGE		35.00	
CUTTING RIGS		8.00	
			HER 03706

DATE: 7-29-94 JOB NO. 4324 BARGE NAME: CTT-110

FRESH WATER METER READING

START 03772900
STOP 03797800 = 24,900 ft

HERCULES OFFSHORE CO. PURCHASE ORDER

MARINE DIVISION

P.M. NO.	4324-89705
VENDOR	Dooley Tackaberry
TERMS	30
F.O.B.	Yard
VIA	Tackaberry
SHIP DATE	7/29/94

JOB	DATE 7/29/94	REQ NO.	
DATE MATERIAL REQ'D.		PREPARED BY: Sylvia	
NOTIFY: Juan		DELIVER TO: Marine	
REQUIRED FOR ETI-110 Barge			
DATE RECEIVED 1.	DATE RECEIVED 2.	DATE RECEIVED 3.	

ITEM	QUANTITY ORDERED	QUANTITY RECEIVED	SHIP. NO.	DESCRIPTION — FULL DETAIL REQUIRED	COST CODE		UNIT	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST
1	1			Box 12ct 6-Volt Lantern	85	10		2.25	27.00		
2	1			Box - 6ct 6-volt Lanterns	85	10		9.75	58.50		
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											

RECEIVED BY:	APPROVED BY J. M. Camacho	TOTALS			
DATE RECEIVED	APPROVED BY	BUYER / DATE	/	/	

HER 03707

HERCULES OFFSHORE CO. PURCHASE ORDER

MARINE DIVISION

P.M. NO.	4324-39709
VENDOR	Dooley Tackaberry
TERMS	
F.O.B.	
VIA	
SHIP DATE	

JOB 4324	DATE 7-29-94	REQ NO	
DATE MATERIAL REQ'D		PREPARED BY: Gonzalez	
NOTIFY: Gonzalez		DELIVER TO:	
REQUIRED FOR ETT-110 GAS FREE / MECH REPAIR			
DATE RECEIVED 1.	DATE RECEIVED 2	DATE RECEIVED 3	

ITEM	QUANTITY ORDERED	QUANTITY RECEIVED	SHIP NO.	DESCRIPTION — FULL DETAIL REQUIRED	COST CODE		UNIT	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST
1	1 bx	12 ct.		6 volt BATTERIES			ea	2.25	27.00		
2	1 bx.	6 ct		6 volt LANTERNS			ea	9.75	58.50		
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											

RECEIVED BY:	APPROVED BY	TOTALS			
DATE RECEIVED	APPROVED BY	BUYER / DATE	85.50		

HER 03708

DOOLEY TACKABERRY
Fire & Safety - Equipment/Services/Systems

1744 WEST 4TH ST., STE. 205
FREEPORT, TX 77541

INVOICE

Please Remit To:
DOOLEY TACKABERRY, INC.
P.O. BOX 299644
HOUSTON, TEXAS 77299-0644

INVOICE #: 254829
DATE: 08/03/94
PAGE: 1 OF 1

054928
HERCULES OFFSHORE
P.O. DRAWER 3
FREEPORT, TX 77541

Ship To:
HERCULES OFFSHORE
906 MARLIN
FREEPORT, TX 77541

ST.P/O#: 4324-69734
MENT TERMS: NET 30 DAYS
DER-DATE: 07/29/94 ORDER #: 254604

RELEASE #:
SHIP VIA: OUR TRUCK
W/B: WCH SLSM #: 102 F.O.B.

JOB #:
FREIGHT TERMS: PREPAY & ADD

PRODUCT / DESCRIPTION	QUANTITY OPEN	QUANTITY SHIPPED	QUANTITY B/O	UNIT PRICE	U/M	EXTENSION
P-6V AY-D-VAC 6 VOLT BATTERY	12	12	0	2.25	EA	27.00
59 VERBADY SAFETY LANTERN	6	6	0	9.75	EA	58.50

MERCHANDISE TOTAL	MISC CHGS	SALES TAX	FREIGHT		INVOICE TOTAL
85.50	0.00	0.00	0.00	PLEASE PAY THIS AMOUNT	85.5

credit will be allowed for material returned without our authorization. All claims for loss or damage should be made to the transportation company at once. Seller represents that the articles or services covered by this invoice were produced in compliance with the Fair Labor Standards Act of 1938, as amended.
INVOICES DUE AND PAYABLE IN HOUSTON, HARRIS COUNTY, TEXAS

HER 03709

ERIC L. MOORE MARINE CHEMIST
P.O. BOX V
FREEPORT TEXAS 77541

INVOICE HER3007A
DATE 7/30/94

HERCULES
P.O. DRAWER O
FREEPORT TEXAS 77541

4324-89701

Description	Amount
CHEMIST CERTIFICATE ON THE VESSEL ETT 110 AT HERCULES IN FREEPORT TEXAS ON 28 JUL 94 AT 14:45.	
4324-89701	220.00
Subtotal	220.00
Total	$220.00

Amount Paid $0
Amount Due $220.00

STATEMENT

0 - 30 days	31 - 60 days	61 - 90 days	over 90 days
$1,850.00	$0.00	$880.00	$0.00

HER 03710

HERCULES OFFSHORE CO.
MARINE DIVISION

PURCHASE ORDER

P.M. NO.	4324-89701
VENDOR	Eric Moore
TERMS	30
F.O.B.	Yard
VIA	Moore
SHIP DATE	7/28/94

JOB	DATE 7/28/4	REQ NO.	
DATE MATERIAL REQ'D		PREPARED BY: Sylvia	
NOTIFY: Juan		DELIVER TO: Marine	
REQUIRED FOR: Barge ETT-110			
DATE RECEIVED 1.	DATE RECEIVED 2.	DATE RECEIVED 3.	

ITEM	QUANTITY ORDERED	QUANTITY RECEIVED	SHIP. NO.	DESCRIPTION — FULL DETAIL REQUIRED	COST CODE		UNIT	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST
1	1			marine chemist	85	11			220.00		
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											

RECEIVED BY:	APPROVED BY J.M. Amaro	TOTALS			
DATE RECEIVED	APPROVED BY	BUYER / DATE	/	/	

HER 03711

JOB WORKSCOPE/BREAKDOWN

JOB NO: 4324 CUSTOMER: BASF BARGE: ETT 110

FOREMAN:	S/T 15/7	@ 36.00		$ 612.00
	O/T	@ 51.75		
LEADMAN:	S/T 8	@ 33.50		268.00
	O/T	@ 48.00		
JOURNEY:	S/T 24	@ 31.00		744.00
	O/T	@ 44.25		
DISPOSAL:		gal @ .35		
MATERIAL:	305.50	plus 15% 61.10		366.60
STOCK MATERIAL:		PLUS 15%		

4542-4

EQUIP:

COMPRESSOR	8	@ 44.00	352.00
AIR MOVERS	24	@ 5.00	120.00
FORKLIFT	2	@ 20.00	40.00
TUGBOAT	2	@ 80.00	160.00
STEAM RIG		@ 80.00	
VACUUM	6	@ 18.00	108.00
HAND HOSE	2	@ 10.00	20.00
WELDING MACHINE	1½	@ 15.00	22.50
CHERRYPICKER		@ 50.00	
CRANE		@ 130.00	
FLATBED TRUCK		@ 20.00	
3" GAS PUMP	8	@ 14.00	112.00
2" STRIPPING PUMP	2	@ 12.00	24.00
BUTTERWORTH		@ 10.00	
4" ELECT PUMP		@ 15.00	
WORK BARGE		@ 35.00	
CUTTING RIG		@ 8.00	
HAUL OUT		@1100.00	

Mech

ARRIVED: 7/28 COMPLETED: 7/29 DEPARTED:

PRODUCT: Cyclohexane LOAD:

Fresh Water 124.50

TOTAL INVOICE : 3073.60

HER 03712

HERCULES OFFSHORE CORPORATION
MARINE DIVISION
JOB COST WORKSHEET

Job #: 4324	Invoice #:
Date Started: July 28, 1994	Date Finished: July 28, 1994
Job Type: MECHANICAL	
Customer: BASF	Barge Name/#: ETT-110

Estimated Materials :		TOTAL Materials :	0.00
Estimated Labor :		TOTAL Labor :	885.46
Estimated Waste Water :		TOTAL Waste Water :	0.00
Total Estimated Cost	0.00	TOTAL JOB COST :	885.46
		AMOUNT BILLED :	3,073.60
		PROFIT/(LOSS) :	2,188.14

WASTE WATER DISPOSAL

# of Gallons:	x $ 0.35	per gallon =	$: 0.00

MATERIALS

Invoice #	Vendor	P.O. #	Amount

MATERIALS con't

Invoice #	Vendor	P.O. #	Amount

TOTAL MATERIALS : 0.00

LABOR HOURS

Emp#	Employee Name	Init	Pay1	Hours	Total	Pay2	Hours	Total
40	OLIVAREZ	J	[redacted]					
41	PETTIT	S	[redacted]					
73	DE LA ROSA	G	[redacted]					
31	GONZALEZ	J	[redacted]					
172	RIVERA	J	[redacted]					
[illegible]	DUARTE	[illegible]	[redacted]					
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00

LABOR HOURS con't

Emp#	Employee Name	Init	Pay1	Hours	Total	Pay2	Hours	Total
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00
					0.00			0.00
					[redacted]			0.00
		TOTAL			[redacted]		0	0.00

HER 03713

M. Hazard Classification

_X_ This product meets the following hazard definition(s) as defined by the Occupational Safety and Health Hazard Communication Standard (29 CFR Section 1910.1200):

___ Combustible Liquid	___ Flammable Aerosol	___ Oxidizer
___ Compressed Gas	___ Explosive	___ Pyrophoric
___ Flammable Gas	_X_ Health Hazard (Section F)	___ Unstable
_X_ Flammable Liquid	___ Organic Peroxide	___ Water Reactive
___ Flammable Solid		

___ Based on information presently available, this product does not meet any of the hazard definitions of 29 CFR Section 1910.1200.

N. Additional Comments

Additional Product Composition Information:

	Ingredient	% By Wt.
98.0%	Cyclohexane	98.7
	Methylcyclopentane	0.8
	Methylhexanes	0.3
	Diethylpentane	0.2
99.5%	Cyclohexane	99.8
	Related Hydrocarbons	0.2
99.8%	Cyclohexane	99.9
	Related Hydrocarbons	0.1
Research and Spectro Grades	Cyclohexane	99.98
	2,4-Diethylpentane	0.01
	3,3-Diethylpentane	0.01

This product contains the following chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. (See Section B):

Cyclohexane

Phillips believes that the information contained herein (including data and statements) is accurate as of the date hereof. NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE AS CONCERNS THE INFORMATION HEREIN PROVIDED. The information provided herein relates only to the specific product designated and may not be valid when such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use of the product and information referred to herein are beyond the control of Phillips (references to Phillips including its divisions, affiliates, and subsidiaries) Phillips expressly disclaims any and all liability as to any results obtained or arising from any use of the product or such information. No statement herein shall be construed as a permission or recommendation for the use of any product in a manner that might infringe existing patents.

HER 03714

HERCULES
OFFSHORE CORPORATION
Strength through experience, equipment, know-how
P.O. Drawer O
Freeport, Texas 77541
Office: (409) 233-6371
Fax: (409) 233-6375

Job 4324

FINAL CHECK LIST

DATE: 7-28-94

BARGE: ETT-110

BLND NUMBER CHECKED 2 REPLACED GASKET YES ___ NO ✓

GATE VALVE NUMBER CHECKED 5 REPLACED GASKET YES ___ NO ✓

DECK PUMP
PLUGS NUMBER CHECKED 2 REPLACED PLUG YES ___ NO ✓

CLOSED SYSTEM
* CHECK VALVE NUMBER CHECKED 1 REPLACED GASKET YES ___ NO ✓

DEEPWELL BLIND NUMBER CHECKED 0 REPLACED GASKET YES ___ NO ___

BELOW DECK CARGO PIPELINE BLIND NUMBER 2 REPLACED GASKET YES ___ NO ✓

BELOW DECK CARGO PIPELINE BLIND REMOVED YES ✓ NO ___

DRIP PANS VALVES: CLOSED BY DID NOT OPEN

DRIP PANS COVER: CLOSED BY 0

COMTAINMENT AREA PLUG OR VALVES: CLOSED BY 0

AIR TEST CARGO LINE - 40psi - USING SOAP

SIGNATURE OF TESTER: [signature]

WITNESS: [signature]

* CHECK VALVE GASKET WILL BE REPLACED
* AIR TEST IS LAST THING TO BE DONE BEFORE RELEASING BARGE.

JOB NO. 4324 ETA

BARGE NO. PTT-110 DATE/TIME ARRIVAL 7-28-94 8:40A

CUSTOMER B.A.S.F. DATE/TIME STARTED 7-28-94 8:50A

PRODUCT CYCLOHEXANE DATE/TIME COMPLETED 7-29-94 1:00P

DISPOSAL AMOUNT _____ AMOUNT STRIPPED _____

CLEANING INSTRUCTION BY: GAS FREE / MECH. REPAIRS BY: V. PHIPPS

COMPLETION SCHEDULE BY: V. PHIPPS

OVERTIME AUTHORIZED BY: _____

BARGE INSPECTED BY: ERIC MOORE 7-28-94 DEWAYNE (DAMAGE INSP) DATE/TIME: 7-29-94 11:00A

BARGE RELEASED TO: CAPT. REDD m/v BROWN (CARGO) DATE/TIME: 7-29-94 1:00P

DEEPWELL OPENED: YES ____ NO ✓ CLOSED BY _____ NEW GASKET ____ YES ____ NO ____

BELOW DECK CARGO PIPELINE: BLIND OPEN YES ✓ NO ____ CLOSED BY ____ NEW GASKET ____ YES ____ NO ____

DECK CHECK VALVE OPENED: YES ____ NO ✓ CLOSED BY ____ NEW GASKET ____ YES ____ NO ____

DECK HEADER BLINDS OPEN: YES ✓ NO ____ CLOSED BY S. Quinn NEW GASKET ____ YES ____ NO ✓

DECK HEADER DRAIN PLUG OPEN: YES No NO ____ CLOSED BY ____

VAPOR RECOVERY HEADER OPENED: YES ✓ NO ____ CLOSED BY S. Quinn NEW GASKET ____ YES ____ NO ✓

RUST SCALE: YES ____ NO ✓ WASHED OUT ____ BUCKETED OUT ____

NUMBER OF CARGO TANKS 3

CONDITION OF CARGO VALVES Fair

SLOP TANK STRIPPED: YES n/a NO ____ PIPE PRESSURE TEST DATE: ____

DRIP PANS STRIPPED: YES ✓ NO ____

WEATHER: TEMP 80° RAIN ____ FOG ____ HUMIDITY ____ OVERCAST 1/2 CLOUDY ____ CLEAR ____

PIPELINE WASHED: no PIPELINE BLOWN ✓ PIPELINE SUMPS INSPECTED ✓

BOW RAKE CHECKED: YES ✓ (OK) NO ____ STERN RAKE: YES ✓ (OK) NO ____

VOIDS: YES ✓ (OK) NO ____ SAFETY EQUIPMENT USED: ____

****

WORK SCOPE

Set up equipment

Strip out all free product

Blow cargo pipeline

Vacuum · Blow Dry cargo tanks · GAS FREE

Swept powder rust from cargo tank floor

Wash · strip deck around engine · header

Pressure test cargo pipeline to 40 psi

Detected stern rake to repair fracture

Shift barge around to repair fracture

Fill up Bow rake with fresh water to repair fracture

Repair fracture · test stern rake

Pump out bow rake to 5 rings showing

HER 03716

HAZARDS COMMUNICATION STANDARD

OSHA 1910.1200

EMPLOYEE HAZARDOUS MATERIALS TRAINING PROGRAM

Date 7-28-94 Supervisor [illegible]

Plant HERCULES Client Safety _____

Area GAS FREE DOCK

ETT-110

The following listed materials are considered to be hazardous to the employees working in this area:

CYCLOHEXANE	1.05 gm. O.O. LEL 20 ppm
	Safe for confined entry
	w/ventilation & resp

The employees assigned to work in this area have been informed of the hazardous materials in this area, the hazards they present to the workers, the location of hazards listed, the protective equipment that has been provided and where it is located, and procedures to be followed in case of an accidental exposure. I have received the training listed above and will so designate by signing this form.

NAME	BADGE	NAME	BADGE
[illegible]	179		
[illegible]	60		
[illegible]	272		
[illegible]	41		

HER 03717

WORLDWIDE

USA and Canada Other Countries

Material Safety Da

CYCLOHEXANE (98%, 99.5%, 99.8%, Research Grade, Spectro Grade)

PHILLIPS 66 COMPANY
A Subsidiary of Phillips Petroleum Company
Bartlesville, Oklahoma 74004

PHONE NUMBERS
Emergency:
Business Hours (918) 661-3865
After Hours (918) 661-6118
General MSDS Information:
(918) 661-8327

A. Product Identification

Synonyms: Borger Refinery Stream No. 657; Sweeny Refinery Unit 19 Cyclohexane Product; Puerto Rico Core Stream No. 3216; Unit 3.2 Stabilizer Column Bottoms (Puerto Rico Core)
Chemical Name: Cyclohexane
Chemical Family: Cycloparaffinic Hydrocarbon
Chemical Formula: C_6H_{12}
CAS Reg. No.: 110-82-7
Product No.: H249,H24500,H24842

Product and/or Components Entered on EPA's TSCA Inventory: YES.

B. Hazardous Components

Ingredients	CAS Number	% By Wt.	OSHA PEL	ACGIH TLV
Cyclohexane	110-82-7	*	300 ppm	300 ppm

* See Section N for additional product composition information.

NA - Not Applicable NE - Not Established

C. Personal Protection Information

Ventilation: Use adequate ventilation to control exposure below recommended levels.

Respiratory Protection: For concentrations exceeding the recommended exposure level, use NIOSH/MSHA approved air purifying respirator. In case of spill or leak resulting in unknown concentration, use NIOSH/MSHA approved supplied air respirator. If conditions immediately dangerous to life or health (IDLH) exist, use NIOSH/MSHA approved self-contained breathing apparatus (SCBA).

Eye Protection: Use safety glasses with side shields.

Skin Protection: Wear polyvinyl alcohol or Buna-N gloves. Use full-body, long sleeved garments to prevent excessive skin contact.

NOTE: Personal protection information shown in Section C is based upon general information as to normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.

D. Handling and Storage Precautions

Avoid inhalation and skin and eye contact. Wear protective equipment and/or garments described in Section C if exposure conditions warrant. Wash hands after handling. Provide means of controlling leaks and spills. Immediately remove and launder contaminated clothing before reuse.

Store in a cool, well-ventilated area away from ignition sources. Provide means of controlling leaks and spills. Bond and ground during liquid transfer. Keep containers closed.

E. Reactivity Data

Stability: Stable
Conditions to Avoid: Not Applicable
Incompatibility (Materials to Avoid): Oxygen and strong oxidizing materials.

Hazardous Polymerization: Will Not Occur
Hazardous Decomposition Products: Carbon oxides and various hydrocarbons formed when burned.

F. Health Hazard Data

Recommended Exposure Limits:

See Section B.

Acute Effects of Overexposure:

Eye: Contact with the liquid or high vapor concentrations may cause mild eye irritation including redness, swelling of mucous membranes and tearing.

Skin: Nominal skin absorption. May defat skin upon repeated or prolonged contact resulting in redness, swelling, pain or thickening. Prolonged exposure to high vapor concentrations may cause a mild mucous membrane irritation.

Inhalation: High vapor concentrations may cause dizziness, excitement, hyperactivity, rapid breathing, difficulty breathing, fatigue, headache, incoordination, tremors, nausea and respiratory irritation. Extreme exposures may cause anesthesia, unconsciousness and death.

Ingestion: May cause increased respiration rate, fatigue, diarrhea, nausea and central nervous system depression. Extreme exposure may cause circulatory collapse and death. May be aspirated into lungs if swallowed, resulting in pulmonary edema and chemical pneumonitis.

Subchronic and Chronic Effects of Overexposure:

No known applicable information.

Other Health Effects:

No known applicable information.

Health Hazard Categories:

	Animal	Human		Animal	Human
Known Carcinogen	___	___	Toxic	___	___
Suspect Carcinogen	___	___	Corrosive	___	___
Mutagen	___	___	Irritant	___	___
Teratogen	___	___	Target Organ Toxin	X	X
Allergic Sensitizer	___	___	-Specify - Lung - Aspiration Hazard		
Highly Toxic	___	___			

First Aid and Emergency Procedures:

Eye: Flush eyes with water.

Skin: Flush skin with water for 15 minutes.

Inhalation: Remove from exposure. If breathing is difficult, give oxygen and seek medical attention.

Ingestion: Do not induce vomiting. Seek immediate medical assistance.

Note to Physician: Gastric lavage using a cuffed endotracheal tube may be performed at your discretion.

HER 03720

G. Physical Data

Appearance:	Colorless Liquid
Odor:	Pungent
Boiling Point:	Approx. 177F (81C)
Vapor Pressure:	3.2 psia (165 mm Hg) at 100F
Vapor Density (Air = 1):	2.8
Solubility in Water:	Negligible
Specific Gravity (H20 = 1):	0.77 at 60/60F
Percent Volatile by Volume:	100
Evaporation Rate (Butyl Acetate = 1):	>1
Viscosity:	Not Established

H. Fire and Explosion Data

Flash Point (Method Used):	-4F (-20C) (TOC, ASTM D56)
Flammable Limits (% by Volume in Air):	LEL - 1.3 UEL - 8.0
Fire Extinguishing Media:	Dry chemical, foam or carbon dioxide (CO2)
Special Fire Fighting Procedures:	Evacuate area of all unnecessary personnel. Shut off source, if possible. Use NIOSH/MSHA approved self-contained breathing apparatus and other protective equipment and/or garments described in Section C if conditions warrant. Water fog or spray may be used to cool exposed containers and equipment. Do not spray water directly on fire - product will float and could be reignited on surface of water.
Fire and Explosion Hazards:	Carbon oxides and various hydrocarbons formed when burned. Highly flammable vapors which are heavier than air may accumulate in low areas and/or spread along ground away from handling site. Flash back along vapor trail is possible.

I. Spill, Leak and Disposal Procedures

Precautions Required if Material is Released or Spilled:
Evacuate area of all unnecessary personnel. In case of spill or leak resulting in unknown concentration, use NIOSH/MSHA approved supplied air respirator. In case of spill or leak which results in conditions immediately dangerous to life or health (IDLH) use NIOSH/MSHA approved self-contained breathing apparatus (SCBA) equipment. When entry into or exit from concentrations of unknown exposure, use NIOSH/MSHA approved self-contained breathing apparatus (SCBA). Shut off source, if possible and contain spill. Protect from ignition. Keep out of water sources and sewers. Absorb in dry, inert material. Transfer to disposal drums using non-sparking equipment.

Waste Disposal (Insure Conformity with all Applicable Disposal Regulations):
Incinerate or place in RCRA permitted waste management facility.

J. DOT Transportation

Shipping Name: Cyclohexane
Hazard Class: Flammable Liquid
ID Number: UN 1145
Marking: Cyclohexane/UN 1145
Label: Flammable Liquid
Placard: Flammable/1145
Hazardous Substance/RQ: Not Applicable
Shipping Description: Cyclohexane, Flammable Liquid, UN 1145
Packaging References: 49 CFR 173.118 and 173.119(a)

K. RCRA Classification – Unadulterated Product as a Waste

U056-Cyclohexane: Ignitable

L. Protection Required for Work on Contaminated Equipment

Wear protective equipment and/or garments described in Section C if exposure conditions warrant. Use NIOSH/MSHA approved respiratory protection, such as air-supplied mask, in confined spaces or other poorly ventilated areas. See Protective Clothing Requirements. Contact immediate supervisor for specific instructions before work is initiated.

ERIC MOORE
713-520-5479

MARINE CHEMIST CERTIFICATE

SERIAL NO. G 16043

JUAN Survey Requested by	HERCULES Vessel Owner or Agent	28 JUL 94 Date
ETT 110 Vessel	TANK BARGE Type of Vessel	HERCULES Specific Location of Vessel
CYCLOHEXANE Last Three (3) Cargoes	LEL-O_2-IT-VISUAL Tests Performed	1445 Time Survey Completed

CARGO TANKS No 1 2 & 3
WING TANKS No 1 2 3 4 & 5 - PORT
& STARBOARD
BOW RAKE
STERN BOX

SAFE FOR WORKERS
SAFE FOR HOT WORK

ATMOSPHERIC TEST 20.8% O_2
0 % LEL

PROVIDE VENTILATION DURING ALL ENTRY BY WORKERS

4324-89701

In the event of any physical or atmospheric changes adversely affecting the STANDARD SAFETY DESIGNATIONS assigned to any of the above spaces, or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist.

QUALIFICATIONS: Movement of vessels from original location, transfer of ballast, or manipulation of valves or closure equipment tending to alter conditions in pipe lines, tanks or compartments subject to gas accumulation, unless specifically approved in this Certificate, requires inspection and endorsement or reissue of Certificate for the spaces so affected. All lines, vents, heating coils, valves, and similarly enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated.

STANDARD SAFETY DESIGNATIONS (partial list, paraphrased from NFPA 306 Subsections 2-3.1 through 2-3.5, and Subsection 6-3.2)

SAFE FOR WORKERS: Means that in the compartment or space so designated: (a) the oxygen content of the atmosphere is at least 19.5 percent by volume; and that, (b) toxic materials in the atmosphere are within permissible concentrations; and that, (c) the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Marine Chemist's Certificate.

NOT SAFE FOR WORKERS: Means that in the compartment or space so designated, the requirements of Safe for Workers have not been met.

ENTER WITH RESTRICTIONS: Means that in any compartment or space so designated, entry for work may be made only if conditions of proper protective equipment, clothing, and time are as specified.

SAFE FOR HOT WORK: Means that in the compartment so designated: (a) oxygen content of the atmosphere is at least 19.5 percent by volume, with the exception of inerted spaces or where external hot work is to be performed; and that, (b) the concentration of flammable materials in the atmosphere is below 10 percent of the lower flammable limit; and that, (c) the residues are not capable of producing a higher concentration than permitted by (b) above under existing atmospheric conditions in the presence of fire, and while maintained as directed on the Marine Chemist's Certificate, and further, that, (d) all adjacent spaces containing or having contained flammable or combustible materials have been cleaned sufficiently to prevent the spread of fire, or are satisfactorily inerted, or, in the case of fuel tanks or lube oil tanks, or engine room or fire room bilges, have been treated in accordance with the Marine Chemist's requirements.

NOT SAFE FOR HOT WORK: Means that in the compartment so designated, the requirements of Safe for Hot Work have not been met.

SAFE FOR REPAIR YARD ENTRY: Means that the compartments and spaces of the flammable cryogenic liquid carrier so designated: (a) have been tested by sampling at remote sampling stations, and results indicate the atmosphere tested to be above 19.5 percent oxygen, and less than 10 percent of the lower flammable limit, or (b) are inerted.

CHEMIST'S ENDORSEMENT. This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 *Control of Gas Hazards on Vessels* and have found the condition of each to be in accordance with its assigned designation.

"The undersigned acknowledges receipt of this Certificate under Section 2-6 of NFPA 306 and understands conditions and limitations under which it was issued."

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Signed J. M. Camacho (Name) _____ (Company) 7-28-94 (Date) Signed [illegible] (Marine Chemist) [illegible] (Certificate No.)

NOTE. THIS CERTIFICATE IS VALID ONLY ON MARINE VESSELS

20M-2-88

Printed in U.S.A.

HER 03723

HERCULES OFFSHORE CO.

INVOICE NO. _____

MARINE REPAIR ORDER No. 4324

MARINE OPERATIONS FACILITY

CUSTOMER P.O. _____

DATE	
ORDER WRITTEN: 7-28-94	ETA: 7-28-94
ARRIVAL: 7-28-94	
COMPLETION DATE	
DEPARTURE DATE	

CUSTOMER	
NAME: E.A.S.F.	
BILLING ADDRESS	
CITY AND STATE	
PHONE NUMBER	
WORK AUTHORIZED BY: V. Phipps	C/T AUTHORIZED BY

M/V ☐ BARGE ☒

NAME: ETT-110

LOA: | WIDTH:

FOREMAN: Gonzalez / de la Rosa

LAST PRODUCT:

STOCK MATERIAL ☐ YES ☐ NO

IF YES, COMPLETE STOCK MATERIAL TRANSFER TICKET

OUTSIDE SERVICES IF YES, LIST ☐ YES ☐ NO

GAS FREEING YES ☑ NO ☐ CERTIFICATE REQUIRED YES ☑ NO ☐

HAUL OUT FOR INSPECTION AND REPAIR YES ☐ NO ☑

ON WAYS DATE: _____

ON WAYS DATE: _____

ITEM NUMBERS

1 Gas Free

2 Repair Fracture Stern Rake Stb side

3

4

5

6

7

8

9

10

Repair Crew
Nelson - Dooley

THIS SHALL SERVE AS YOUR AUTHORIZATION TO PROCEED WITH THE ABOVE.

Signed: _____ Date: _____

HER 03724

HERCULES OFFSHORE CO.

INVOICE NO. _____

MARINE REPAIR ORDER No. 4324

MARINE OPERATIONS FACILITY

CUSTOMER P.O. _____

DATE

ORDER WRITTEN: 7-28-94	ETA: 7-28-94
ARRIVAL: 7-28-94	
COMPLETION DATE:	
DEPARTURE DATE:	

M/V ☐ BARGE ☒

NAME: ETT-110

LOA: | WIDTH:

FOREMAN: Gonzalez / de la Rosa

LAST PRODUCT:

GAS FREEING YES ☑ NO ☐ CERTIFICATE REQUIRED YES ☑ NO ☐

HAUL OUT FOR INSPECTION AND REPAIR YES ☐ NO ☑

ON WAYS DATE: _____

ON WAYS DATE: _____

CUSTOMER

NAME: B.A.S.F.

BILLING ADDRESS:

CITY AND STATE:

PHONE NUMBER:

WORK AUTHORIZED BY: V. Phipps | O/T AUTHORIZED BY:

STOCK MATERIAL ☐ YES ☐ NO

IF YES, COMPLETE STOCK MATERIAL TRANSFER TICKET

OUTSIDE SERVICES IF YES, LIST ☐ YES ☐ NO

ITEM NUMBERS

1 Gas Free

2 Repair Fracture Stern Rake Stb side

3

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THIS SHALL SERVE AS YOUR AUTHORIZATION TO PROCEED WITH THE ABOVE.

Signed: _____ Date: _____

HER 03725