

DATE 4/13/82

MINERAL MANAGEMENT SERVICE  
FEDERAL BUREAU OF REVENUE

TO: OMS-2-2

FROM: JS-7-1

1982 APR 14 P 12:55

Supplemental Plan of Exploration

[REDACTED]

Lease OCS-044 and 046

Control No. S-0842.

EI 89+95

ODECO oil & Gas Co.

MINERAL MANAGEMENT SERVICE  
FEDERAL BUREAU OF REVENUE  
1982 APR 14 P 12:54

NOTED - WILLIAMSON

DEPARTMENT OF MINERAL RESOURCES

APR 13 1982

RECEIVED  
DEPARTMENT OF MINERAL RESOURCES  
PERMITTING DIVISION

**ODECO OIL & GAS COMPANY**

**Supplemental Plan of Exploration**

**OCS 044 Well #19 Eugene Island Block 89**

**OCS 046 Well #13 Eugene Island Block 95**

**Eugene Island Block 89 FVeld**

Submitted by: *E. S. Breda*

**E. S. Breda  
Oil & Gas Supervisor**

DATE: **APR 12 1982**

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ODECO OIL & GAS COMPANY  
Supplemental Plan of Exploration  
Eugene Island Blocks 89 and 95  
Eugene Island Block 89 Field

BEST AVAILABLE COPY

I. General

The OCS 044 lease in block 89 has three existing wells. We now propose to drill an additional well - namely OCS 044 #19..

The OCS 046 lease in block 95 has seven existing wells. We now propose to drill an additional well - namely OCS 046 #13.

In accordance with 30 CFR 250.34, revised December 13, 1979 this Supplemental Plan of Exploration is being submitted. Should the proposed wells have no commercial production they will be plugged and abandoned with casings removed 15' below mud line.

II. Tentative starting and completion dates, surface and bottom hole locations, total depth, and objective of proposed wells:

Well Number: OCS-044 #19, Eugene Island Block 89  
Estimated Commencement date: September 1, 1982  
Estimated Completion date: October 15, 1982  
Surface Location: 6150' FSL and 940' FWL of Eugene Island Block 89  
Bottom Hole Location: 5600' FSL and 50' FWL of Eugene Island Block 89  
Total Depth: 9,800' SS  
Objective: See Geological Program

Well Number: OCS-046 #13, Eugene Island Block 95  
Estimated Commencement date: October 15, 1982  
Estimated Completion date: November 30, 1982  
Surface Location: 6400' FSL and 4000' FWL of Eugene Island Block 95  
Bottom Hole Location: Straight hole  
Total Depth: 9,800' SS  
Objective: See Geological Program

III. Facility

- A. Drill Barge - ODECO's "Mr. Charlie"  
See attachment for rig specifications, pollution control and diverter system.
- B. No additional facilities will be added offshore or onshore as a result of these exploration activities.

IV. Oil Spill Contingency Plan

Odeco Oil and Gas Company fulfills its oil spill contingency plan by being a member of Clean Gulf Associates, P. O. Box 51239, New Orleans, Louisiana, 70151, an agency which handles clean up operations in the event of an oil spill. Fast Response Service can be obtained by calling Halliburton Services in Harvey, Louisiana (504) 366-1735.

- A. Estimated deployment time of the equipment to this area is 12 hours.
- B. Description of clean up equipment. See Supplemental Development dated

# V. Fuel Consumption - Drilling Operations

Drilling rig uses an average of 50 bbls. of diesel fuel per day during drilling operations. Each supply boat uses approximately 25 bbls. (42 gal/bbl.) of diesel per day. Two boats service drilling rig daily.

	<u>Boats</u>	<u>Rig</u>
Approx. Rig Days	90	90
	x50	x50
Total Fuel Consumption	4500 bbls.	4500 bbls.

VI. Safety Standards and Programs - Drilling Operations - See Supplemental Plan of Development dated October 14, 1981 for OCS 0228, Eugene Island Block 93.

# VII. Base of Operation

- A. Marine service to service drilling operations is provided from LAMCO Dock in Dulac, Louisiana.
- B. Air Service (helicopter) is provided from Houma, Louisiana.

# VIII. Type Drill Mud Used and Chemical Components

## A. Bariod

## B. Chemical Components

Aktaflo-s	Mixed oxyethylated phenols
Aluminum Stearate	$(CH_3(CH_2)_{16}COO)_3AL$
Aquagel	Sodium montmorillonite
Bariod	Barium Sulfate
Bicarbonate of Soda	$Na\ NCO_3$
Carbonox	Lignitic Humic Acid Powder
Caustic Soda	Sodium Hydroxide
CC-16	Caustized Carbonox
Cellex	Sodium Carbocymethylcellulose
Destrid	Dextrinized Polysaccharide Powder
HME	Selective, nonionic surfactant - Chemco product
Impermex	Starch
Lime	Calcium Hydroxide
Micatex	Mixa Flakes
Q-Broxin	Ferrochrome Lignosulfonate
Sapp	Sodium Acid Pyrophosphate
Soda Ash	Sodium Chromate
Soltex	Hydrocarbon Powder
Superdril	Gilsonte
Torq-Trim	Biodegradable, non toxic lubricant

## IX. Archeological & Shallow Hazards Survey

This lease being a mature producing area, Archeological and Shallow hazards surveys are not required. See Shallow Hazard letter.

## X. Gaseous Emission Data

Drill Barge "Mr. Charlie" be used. Estimated rig days for drilling these wells will be 90 days.

- A. Rig: Emission calculated for 90 days - stated in (lbs/day) Tons/90 days. See attachment for emission summary by rig and basis for calculation of Summary.

Drill Barge "Mr. Charlie"  
(1 lbs./day) Tons/90 days

1. CO (369.48) 16.63
2. Hydrocarbon (79.40) 3.57
3. NO<sub>x</sub> (2347.18) 105.62
4. SO<sub>2</sub> (190.90) 8.59
5. Particules (25.53) 1.15

- B. Helicopters: Estimate 14 Round Trips in 90 days, two and one half hours per Round Trip = 35 hours operating time. Stated in (lbs./day) Tons per 90 days, averaged to 90 days. See attached for emissions per hour of use.

1. CO (.19) .01
2. Hydrocarbon (.04) .00
3. NO<sub>x</sub> (.86) .04
4. SO<sub>2</sub> (5.52) .25
5. Particules (.07) .00

- C. Boats (crew): Sixty Four (64) trips in 90 days at 5 hours per round trip = 320 hours. (Supply) Forty (40) trips in 90 days at 11 hours round trip = 440 hours. 320 + 440 = 760 operating hours. Stated in (lbs/days) Tons per 90 days, averaged to 90 days. See attached for emission per hour of use.

1. CO (57.42) 2.58
2. Hydrocarbon (21.10) .95
3. NO<sub>x</sub> (265.16) 11.93
4. SO<sub>2</sub> (17.73) .80
5. Particules (19.42) .88

- D. Supply Base - 30 ton crane. Estimated use in 135 days - 310 hours. Stated in (lbs./day) Tons 90 days. Averaged for 90 days. See attached for emission per hour.

1. CO (12.98) .58
2. Hydrocarbon (1.21) .05
3. NO<sub>x</sub> (31.62) 1.42
4. SO<sub>2</sub> (1.62) .07
5. Particules (1.72) .08

XI. Attachments

- A. Vicinity Map
- B. Geological Program OCS 044 #9 with structure and salt maps
- C. Geological Program OCS 046 #13 with structure and salt maps
- D. Shallow Drilling Hazards statement with seismic map for wells 044 #19 and 046 #13.
- E. Drill Barge Data - "Mr. Charlie" including schematic of diverter and statement of pollution control.
- F. Emission Summary with basis of calculations for drill barge.
- G. Emission hourly rates for boats, helicopter, and crane.



EUGENE ISLAND AREA

89

OCS - 044

100 ft



GULF OF MEXICO

94

88

OCS - 043

5  
4  
3  
2  
1

100 ft

100 ft

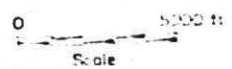
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95

OCS - 046

110

ODECO OIL & GAS CO.





ODECO OIL AND GAS COMPANY

JANUARY 15, 1982

GEOLOGICAL PROGRAM AND WELL RECOMMENDATION  
OCS-044 WELL NO. 19 - EUGENE ISLAND BLOCK 89

LOCATION:

Surface: 6150' FSL and 940' FWL of Block 89.

1st Target: ("S" Sand) 5975' FSL and 650' FWL of Block 89 at 8200'ss.

Tolerance: 100' radius circle centered on the above target.

2nd Target: ("U" Sand) 5700' FSL and 200' FWL of Block 89 at 9400'ss.

Tolerance: 100' radius circle centered on the above target.

PBHL: 5600' FSL and 50' FWL of Block 89.

TOTAL DEPTH:

9800'ss.

WELL CLASSIFICATION:

Exploratory

LOGGING SERVICES:

1.) ISF-Induction Spherically Focused

Run #1 - Base of conductor to TD of surface hole.

Run #2 - Base of surface casing to TD.

2.) FDC/CNL - Formation Density Compensated/Compensated Neutron Log

Over potential hydrocarbon bearing zones as indicated by the ISF.

3.) HRD-High Resolution Dipmeter

Run #1 - Base of surface casing to TD.

4.) SWC-Sidewall Cores

Over resistive and porous zones as indicated by other services.

Geological Program and Well Recommendation  
OCS-044 Well No. 19 - Eugene Island Block 89

Page 2

GEOLOGICAL PROGNOSIS:

0 - 3500	Pleistocene
3500 - 8700	Pliocene
8700 - TD	Miocene

WELL OBJECTIVES:

This well is designed to develop proven reserves in the "S" sand on the northwest flank of the dome. It will also evaluate the "T", "T<sub>2</sub>", "T<sub>4</sub>", and "U" sands which have not been previously tested in this fault block. These sands have been proven productive in nearby fault blocks. Neither salt nor abnormal pressure is expected at TD.

Submitted by: K. L. Treese  
K. L. Treese  
Development Geologist

Approved by: H. A. Vallas  
H. A. Vallas  
Vice President  
Development Geology

Approved by: L. B. Carpenter (by H. A. V)  
L. B. Carpenter  
Assistant to the  
Senior Vice President

APPROVALS:

CNG Producing Company

By: \_\_\_\_\_

Date: \_\_\_\_\_

ODECO OIL AND GAS COMPANY

MARCH 4, 1982

GEOLOGICAL PROGRAM AND WELL RECOMMENDATION  
OCS 016 WELL NO. 13 - EUGENE ISLAND BLOCK 95

LOCATION: Surface - 6500' FSL and 4000' FWL of Block 95.

PEHL: Same as surface.

TOTAL DEPTH: 9800' ss.

WELL CLASSIFICATION: Exploratory

LOGGING SERVICES:

1.) ISF-Induction Spherically Focused

Run #1 - Base of conductor to TD of surface cas.

Run #2 - Base of surface casing to TD.

2.) FDC/CNL - Formation Density Compensated/  
Compensated Neutron Log

Over potential hydrocarbon bearing zones as indicated by the ISF.

3.) HRD - High Resolution Dipmeter

Run #1 - Base of surface casing to TD.

4.) SWC - Sidewall Cores

Over resistive and porous zones as indicated by other services.

GEOLOGICAL PROGNOSIS:

0 - 3500	Pleistocene
3500 - 8600	Pliocene
8600 - TD	Miocene

Geological Program and Well Recommendations  
OCS-046 Well No. 13 - Eugene Island Block 95

Page 2

WELL OBJECTIVES:

This well is planned to test the Pliocene Q Sand in a separate fault block from the Mobil F wells. The well could prove reserves of up to 12 MCFG in the Q Sand and is expected to produce approximately 4 MCFG. The Upper Miocene sands which are missing in the OCS 685 #3 well are expected to be present in this well and will also be tested. Neither salt nor abnormal pressure is expected at TD, however, due to uncertainty in the amount of missing section, care should be taken in drilling below the Q Sand.

Submitted by: K. L. Treese  
K. L. Treese  
Development Geologist

Approved by: H. A. Vallas  
H. A. Vallas  
Vice President  
Development Geology

APPROVALS:

Petr. Eng.

By: \_\_\_\_\_ Date: \_\_\_\_\_

W. P. Properties

By: \_\_\_\_\_ Date: \_\_\_\_\_

## ATTACHMENT TO GEOLOGICAL PROGRAM & WELL RECOMMENDATION

### WELL SAMPLES:

Collect 2 sacks per joint from 7000' to total depth. The ODI-ECO Engineer or Toolpusher at the well site will arrange for the most expeditious transportation to the appropriate shore base, from thence by "Hot Shot" to New Orleans and addressed to the attention of Crosbie-Macomber, 2705 Division Street, Metairie, Louisiana 70002. All samples should be clearly marked with the lease, well number and depth taken.

### IMPORTANT NOTE:

If it should become necessary to by-pass the shale shaker, a bucket should be placed on the discharge line with a piece of junk, i. e., a broken shovel, steel plate or mesh standing erect to break the flow of mud. Even though this will contain lost circulation and other extraneous materials, sufficient sample can be caught to aid paleontological evaluation. Samples thus caught should be sacked in the usual manner and at the specified interval.

TELEX: 58-4124  
PHONE: 504-561-2811

**ODECO OIL & GAS COMPANY**

ODECO BUILDING • 1600 CANAL STREET  
MAIL TO: P.O. BOX 61780, NEW ORLEANS, LA. 70161

April 7, 1982

Mr. E. S. Hubble  
District Supervisor  
U.S. Department of Interior  
Geological Survey  
P. O. Box 52289  
Lafayette, Louisiana 70501

Dear Mr. Hubble:

Geophysical data in the vicinity of the proposed surface location of the Odeco Oil & Gas Company No. 19 OCS-644 well in Eugene Island Block 89 has been reviewed and there appears to be no evidence of shallow drilling hazards.

As indicated on the attached plat the seismic line reviewed was EI-78-21.

In addition to the seismic line, the log of the Odeco-Midwest Oil Company, No. 2 State Lease 681 was reviewed and no shallow hazard evidence was seen.

Respectfully submitted,



M. L. James  
Sr. Staff Geophysicist

MLJ/aah  
Enclosure

**ODECO OIL & GAS COMPANY**

ODECO BUILDING • 1600 CANAL STREET  
MAIL TO: P.O. BOX 61780, NEW ORLEANS, LA 70161

April 7, 1982

Mr. E. G. Hubble  
District Supervisor  
U.S. Department of Interior  
Geological Survey  
P. O. Box 52289  
Lafayette, Louisiana 70501

Dear Mr. Hubble:

Geophysical data in the vicinity of the proposed surface location of the Odeco Oil & Gas Company No. 13 OCS-046 well in Eugene Island Block 95 has been reviewed and there appears to be no evidence of shallow drilling hazards.

As indicated on the attached plat, the seismic line reviewed was LO-110A.

In addition to the seismic line the log of the Mobil Oil Corporation No. 3 State Lease 685 was reviewed and there appears to be no evidence of sands which would cause shallow drilling hazards.

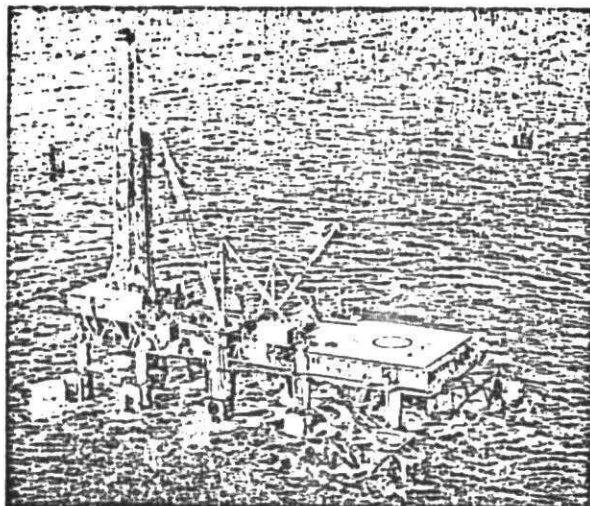
Respectfully submitted,

*M. L. James*

M. L. James  
Sr. Staff Geophysicist

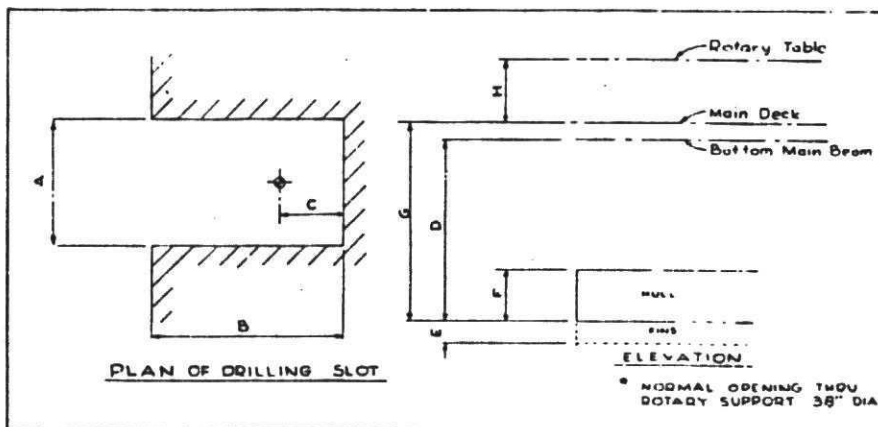
MLJ/aah  
Enclosure

# MR. CHARLIE



## BARGE DATA

<b>HULL</b>	Length 220'. Beam (with pontoons) 134'; Depth 14' with 5' fins
<b>SLOT</b>	Length 38'. Width 26'; Center of rotary 13' from back of slot
<b>WORKING DECK</b>	220' long by 60' Wide - Lowest platform structurals above bottom - 58' Platform deck above bottom 63'
<b>QUARTERS</b>	For 45 men
<b>HELIPORT</b>	Length 80', Width 60'



CLEARANCES & DIMENSIONS											
DIMENSIONS									Operating Depth		
	A	B	C	D	E	F	G	H	Maximum Normal	Hurricane Season	Minimum
Mr. Charlie	26'-0"	38'-0"	13'-0"	58'-0"	5'-0"	14'-0"	59'-2"	15'-4"	40'-0"	32'-0"	14'-0"



# ODECO

## INTER-OFFICE CORRESPONDENCE

TO: R. S. Gloger

LOC.: N. O.

DATE:

CARBONS TO:

FROM: W. J. Wilkinson

LOC.: N. O.

SUBJECT: Pollution and Waste Disposal from D/B Mr. Charlie

The D/B Mr. Charlie was constructed with certain features which were incorporated specifically to stop any pollutant likely to be found during normal drilling operations. It is equipped with drip pans and/or drains under floor and other machinery to retain all oil spills.

Provisions have been made for the collection, storage, and later transfer to shore base of all used oil from machinery on the drilling platform.

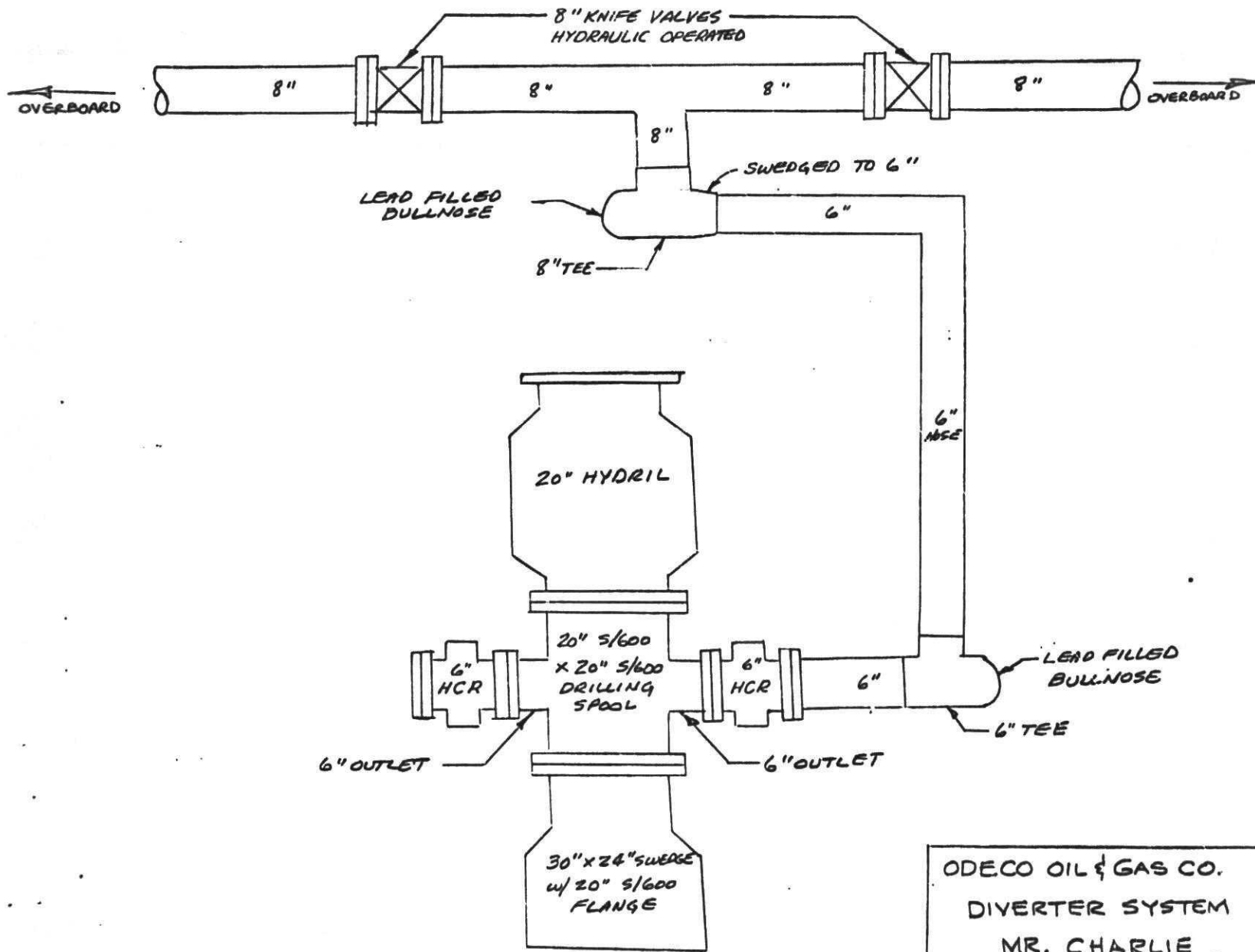
Containers have been provided to transfer solid waste, such as boxes, cartons, cans, etc., which cannot be incinerated to a shore base.

Copies of OCS Order Nos. 1 through 10 which are applicable to the contract drilling operations have been furnished the toolpushers. Rig supervisory personnel have been shown the seriousness of control of pollutants.

Should it come to your attention that any liquids or solids have escaped into the Gulf without our knowledge, I sincerely ask that you bring this to my attention.

*W. J. Wilkinson*  
W. J. Wilkinson

WJW/ggt



## BLOWOUT PREVENTER ACTIVATION

The Blowout Preventers on the drilling rig Mr. Charlie are HYDRAULICALLY activated from controls located on the rig floor, and the living quarters.

## DIVERTER SYSTEM OPERATIONAL PROCEDURE

The Diverter System as shown in Attachment I is installed so that the HCR valve (s) will open automatically when the hydril is closed. The diverting valves will remain open and be used to divert wellbore fluids downwind when necessary.

Prior to drilling the hydril shall be closed and seawater pumped through the system. The diverting valves shall be function tested at this time.

In the event it is necessary to use the diverter system for well control, the following sequence is recommended:

- A) Clear Kelly from hydril.
- B) Close hydril
- C) Use diverting valves to direct well fluids downwind
- D) Pump mud in hole as fast as possible. Pump seawater if mud is expended.

"MR. CHARLIE"

EMISSIONS SUMMARY

SOURCE NO.	SOURCE	STACK HT. (Ft.)	STACK DIA. (Ft.)	EMISSIONS (TONS/YEAR)				
				CO	HYDROCARBON	NO <sub>x</sub>	PARTICULATE	SO <sub>2</sub>
1	F.M. #380 8-1/8	40	1.33	32.9	7.08	209.0	2.28	17.0
2	F.M. #380 8-1/8	40	1.33	32.9	7.08	209.0	2.28	17.0
3	Murphy MP-20 (Aux)	40	.66	0.02	Neg	0.13	Neg	0.01
4	Murphy MP-21 (Aux)	40	.66	0.02	Neg	0.13	Neg	0.01
5	CAT D-353	40	.66	0.05	0.01	0.32	Neg	0.02
6	Air comp (GM 3-71)	40	.33	0.31	0.06	1.97	0.02	0.16
7	Mix Pump (GM 4-71)	40	.33	0.48	0.10	3.05	0.03	0.25
8	Hobart Welder (GM 2-71)	40	.25	0.04	0.01	0.25	Neg	0.02
9	Schlumberger (4-71)	40	.13	0.05	0.01	0.32	Neg	0.03
10	Halliburton (Det 353) HT-400	40	.25	0.08	0.02	1.51	0.01	0.04
11	Halliburton (Det 8V-71)	"	.25	0.29	0.06	1.84	0.02	0.15
12	Halliburton (Det 8V-71)	"	.125	0.29	0.06	1.84	0.02	0.15

Total 67.43 14.49 428.36 4.66 34.84

X 2000 = lbs./yr.  
÷ 365 = lbs./day

134,860 28,980 856,720 9320 69,680  
369.48 79.40 2347.18 25.53 190.90

Pollutant from diesel engines on drilling rigs were calculated using the following:

$$\frac{\text{TONS}}{\text{YR}} = .0096563 \times C \times P \times (\text{BHP})$$

where

- .0096563 = conversion from Grams/hr. to Tons/yr.
- C = Grams/BHP-Hr of pollutant - see (1)
- P = Average % usage in a yr. - see (2)
- BHP = Rated HP of engine

- (1) Available data from manufacturers of diesel engines and theoretical combustion data was surveyed, and the following values chosen:

<u>Pollutant</u>	<u>Grams/BHP-HR</u>
NO <sub>x</sub>	18.3
SO <sub>2</sub>	1.49
Hydrocarbon	0.62
CO	2.88
Particulate	0.20

- (2) Operation of equipment data from several rigs was reviewed to obtain % usage. Based on this review, the following data was utilized in preparing emissions estimates. This data is probably conservative, because it was assumed that engines were operating at all times at rated horsepower:

<u>Engine Application</u>	<u>Average Yearly % Use</u>
Main Engine	74
Emerg. Engine	0.5
Primary Crane	7
Back Up Crane	3
Fork Lift	3
Cement Unit	3
Logging Unit	1
Welding Unit	2
Desander/Desilter	10
Cold Start Air Comp.	2
Rig Air Comp.	10
Main Mud Pump	50
Mud Mix Unit	10
Draw works	60
Bulk Air Comp.	3

Basis For Calculations of Gaseous emissions of  
Boats - Helicopters and Crane at Supply Base  
for Rig Related Operations

- I. Boats: Equiped with two V 12 marine engines and two generators  
Lbs/Hour

CO	Hydrocarbon	No <sub>x</sub>	SO <sub>2</sub>	Particulates
6.8	2.5	31.4	2.1	.3

- II. Helicopter: For transportation of men. Size 206  
Lbs/Hour

CO	Hydrocarbon	No <sub>x</sub>	SO <sub>2</sub>	Particulates
.5	.1	2.2	14.2	.2

- III. Supply Base - Crane - with GM 6-71 diesel engine with 228 BHP  
driving a 30 ton crane  
Lbs/Hour

CO	Hydrocarbon	No <sub>x</sub>	SO <sub>2</sub>	Particulates
3.77	.35	9.18	.47	.5