

TO: OMS-2-2

FROM: OS-7-1

MINERALS MANAGEMENT SERVICE

FEB 26 JUL 26 A 8:49

DATE 7-23-82

Supplemental Plan of Exploration,

Control No. S- 913 .

Lease OCS 043

EI BIR 88

ODECO Oil & Gas Co.

7-22-82

NOTED - WILLIAMSON

ODECO OIL & GAS COMPANY

Supplemental Plan of Exploration

OCS 043 Well #9 Eugene Island Block 88

Eugene Island Block 89 Field

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U. S. GEOLOGICAL SURVEY

JUL 22 1982

OPERATIONS
SUPPORT
DISTRICT OF MICHIGAN METALLOGICAL LAB.

Submitted by:

E. S. Breda
Oil & Gas Supervisor

Date:

JUL 22 1982

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ODECO OIL & GAS COMPANY
Supplemental Plan of Exploration
Eugene Island Block 88
Eugene Island Block 89 Field

I. General

The OCS 043 lease has three existing wells, each has its individual surface structure and two additional wells are "bottomed" on the lease with their surface structure being from the F platform in Block 95. Plans have also been submitted to drill OCS 043 #7 & #8. We are now submitting this plan to drill an additional well - namely OCS 043 #9.

In accordance with 30 CFR 250.34, revised December 13, 1979 this Supplemental Plan of Exploration is being submitted. Should the proposed well have no commercial production it 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 well:

Well Number: OCS-043 #9, Eugene Island Block 88
Estimated Commencement date: August 15, 1982
Estimated Completion date: September 15, 1982
Surface Location: 1050' FSL and 1525' FWL of Eugene Island Block 88
Total Depth: 9000' 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 & 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 Plan of Development dated October 14, 1981 for OCS-0228 Eugene Island Block 93.

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	30	30
	<u>x50</u>	<u>x50</u>
Total Fuel Consumption	1500 bbls.	1500 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	$NaHCO_3$
Carbonox	Lignitic Humic Acid Powder
Caustic Soda	Sodium Hydroxide
CC-16	Caustized Carbonox
Cellex	Sodium Carboxymethylcellulose
Destrid	Dextrinized Polysaccharide Powder
HME	Selective, nonionic surfactant - Chemco product
Imperex	Starch
Lime	Calcium Hydroxide
Micatex	Mica Flakes
Q-Broxin	Ferrochrome Lignosulfonate
Sapp	Sodium Acid Pyrophosphate
Soda Ash	Sodium Chromate
Soltex	Hydrocarbon Powder
Superdril	Gilsonite
Torq-Trim	Biodegradable non-toxic lubricant

IX. Archeological & Shallow Hazards Survey

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

X. Gaseous Emission Data

Drill Barge "Mr. Charlie" will be used. Estimated rig days for drilling these wells will be 30 days.

- A. Rig: Emission calculated for 30 days - stated in (lbs/day) Ton/30 days. See attachment for emission summary by rig and basis for calculations of Summary.

Drill Barge "Mr. Charlie"
(1 lbs./day) Tons/30 days

X. Gaseous Emission Data (Cont'd.)

A. Rig: (Cont'd.)

1. CO (369.48) 5.54
2. Hydrocarbon (79.40) 1.19
3. NO_x (2347.18) 35.20
4. SO₂^x (190.90) 2.86
5. Particles (25.53) .38

- B. Helicopters: Estimate 5 Round Trips in 30 days, two and one half hours per Round Trip = 12.5 hours operating time. Stated in (lbs./day) Tons per 30 days, averaged to 30 days. See attached for emissions per hour of use.

1. CO (.19) .00
2. Hydrocarbon (.04) .00
3. NO_x (.86) .01
4. SO₂^x (5.52) .08
5. Particles (.07) .00

- C. Boats (crew): Twenty One (21) trips in 30 days at 5 hours per round trip = 105 hours. (Supply) Thirteen (13) trips in 30 days at 11 hours round trip = 340 hours. 105 + 104 = 245 operating hours. Stated in (lbs/days) Tons per 30 days, averaged to 30 days. See attached for emission per hour of use.

1. CO (57.42) .86
2. Hydrocarbon (21.10) .32
3. NO_x (265.16) 3.98
4. SO₂^x (17.73) .27
5. Particles (19.42) .29

- D. Supply Base - 30 ton crane. Estimated use in 30 days = 103 hours. Stated in (lbs./day) Tons 30 days. Averaged 30 days. See attached for emission per hour.

1. CO (12.98) .19
2. Hydrocarbon (1.21) .02
3. NO_x (31.62) .47
4. SO₂^x (1.62) .02
5. Particles (1.72) .03

XI. Attachments

- A. Vicinity Map
- B. Geological Program OCS 043 #9 with structure and salt maps
- C. Shallow Drilling Hazards statement with seismic map
- D. Drill Barge Data - "Mr. Charlie" including schematic of diverter and statement of pollution control.
- E. Emission Summary with basis of calculations for drill barge.
- F. Emission hourly rates for boats, helicopter, and crane.
- G. Abnormal Pressure Map.



EUGENE ISLAND AREA

89

OCS - C44

7
88

OCS - 043

8
C

5
C
4
9
3
5
C

Junction Platform

F

GULF OF MEXICO

94

8
C
2

9
C

3
C

15
95

7
C
12

10
C

13
C

OCS - 046

110



ODECO OIL & GAS CO.

ODECO OIL AND GAS COMPANY

JULY 13, 1982

GEOLOGICAL PROGRAM AND WELL RECOMMENDATION
OCS-043 WELL NO. 9 - EUGENE ISLAND BLOCK 88

LOCATION: Surface: 1050' FSL and 1525' FWL of Block 88.
PBHL: Same as surface.

TOTAL DEPTH: 9,000' ss.

WELL CLASSIFICATION: Development.

LOGGING SERVICES:

- 1.) ISF-Induction Spherically Focused
Run #1-Base of conductor to TD of surface hole.
Run #2-Base of surface casing to 7,300'±.
Run #3-7,300'± 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 7,300'±.
Run #2-7,300'± to TD.
- 4.) SWC-Sidewall Cores
Over resistive and porous zones as indicated by other services.

GEOLOGICAL PROGNOSIS:

0 - 3500'	Pleistocene
3500 - 7300'	Pliocene
7300 - TD	Miocene

Geological Program and Well Recommendation
OCS-043 Well No. 9 - Eugene Island Block 88

Page 2

WELL OBJECTIVE:

This well will be drilled as a replacement for the OCS-043 No. F-4, S.T. 2 well which sanded up after producing 373 MBO, 586 MMCFG and OBW from the X-sand. Due to the structural condition of the F-platform the F-4 well cannot be reworked and the only way to recover the remaining oil is by drilling a replacement well. This well will also test the Y and Y₀ sands. Both of these sands were oil bearing in the OCS-043 No. 3 well, located approximately 500' updip, and were both wet in the OCS-043 No. 2 well located approximately 1000' down-dip of the proposed location. No salt is anticipated to TD.

Moderate pressures (approximately 14.5 ppg equivalent) are expected at approximately 7300'ss.

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

Approved by: C. Krauss
C. Krauss
Manager
Development Geology

Approved by: H. A. Vallas
H. A. Vallas
Senior Vice President
Exploration

APPROVALS:

CNG PRODUCING COMF

BY: _____ DATE: _____

ATTACHMENT TO GEOLOGICAL PROGRAM & WELL RECOMMENDATION

WELL SAMPLES:

Collect 2 sacks per joint from 6000' to total depth. The ODECO 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

July 19, 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 location of the Odeco Oil & Gas Company No. 9, OCS-043 well in Eugene Island Block 88 has been reviewed and there appears to be no evidence of shallow drilling hazards.

As indicated on the attached plat, seismic lines reviewed were: GS-374, LD-110A and LD-47A.

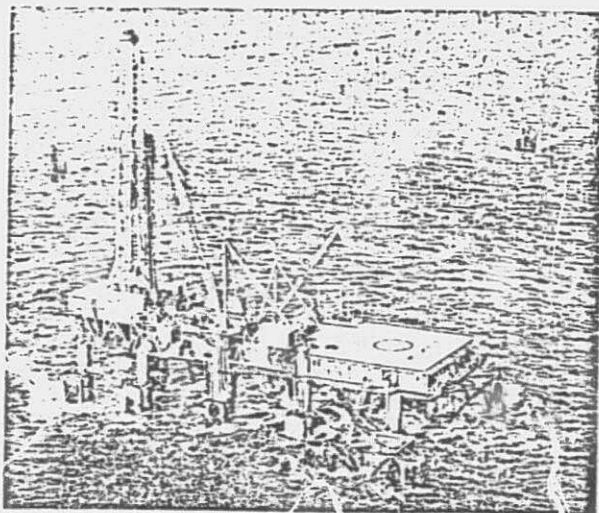
Respectfully submitted,

M. L. James
Sr. Staff Geophysicist

MLJ/aah

Enclosures

MR. CHARLIE



BARGE DATA

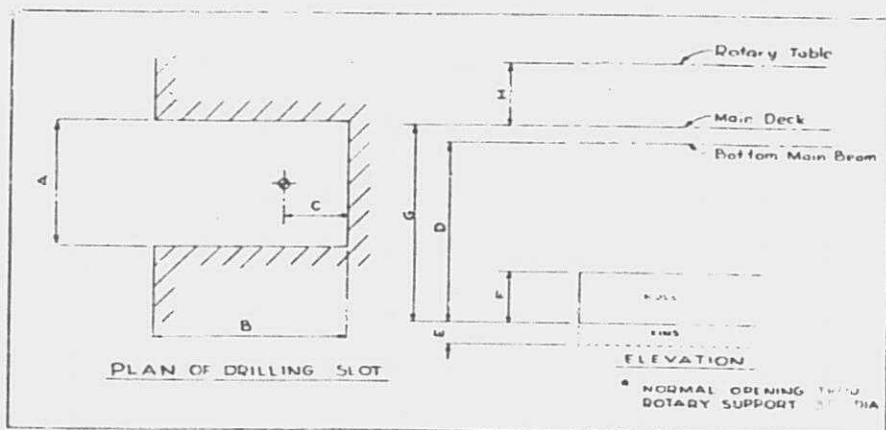
HULL Length 220'. Beam (with pontoons) 134'. Depth 14' with 5' fins

LOT Length 38'. Width 26'; Center of rotary 13' from back of slot

WORKING DECK 220' long by 60' wide. Platform structurals above bottom - 50'
Platform deck above bottom 67'

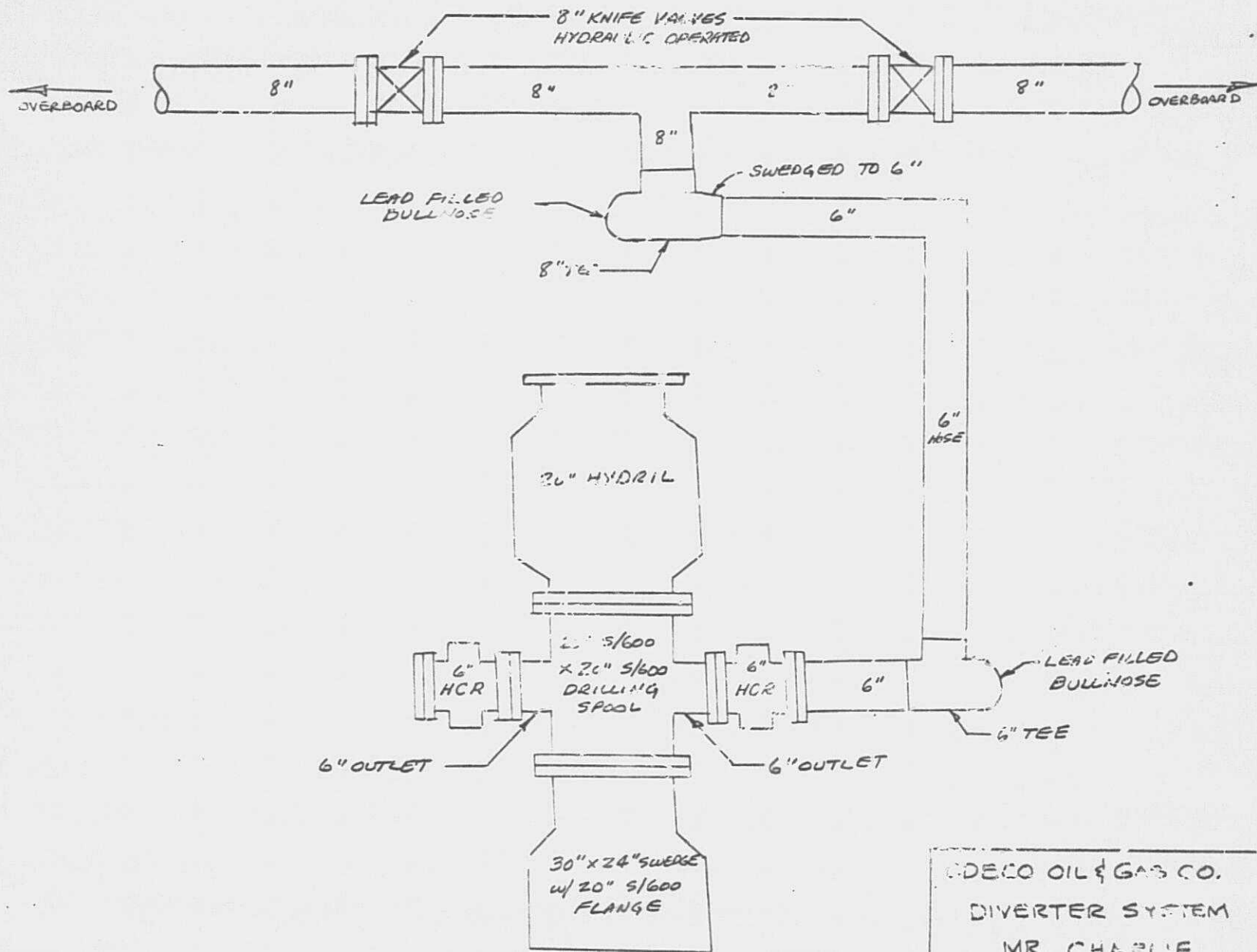
QUARTERS For 45 men

HELIPORT 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 OIL & GAS CO.
 DIVERTER SYSTEM
 MR. CHARLIE

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 down-
wind 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.

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

"MR. CHARLIE"

EMISSIONS SUMMARY

SOURCE NO.	SOURCE	STACK HT. (Ft.)	STACK DIA. (Ft.)	EMISSIONS (TONS/YEAR)				
				CO	HYDROCARBON	NO _x	PARTICULATE	SO ₂
1	F.M. #38D 8-1/8	40	1.33	32.9	7.08	209.0	2.28	17.0
2	F.M. #38D 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	0.51	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

$$\times 2000 = \text{lbs./yr.}$$

$$\div 365 = \text{lbs./day}$$

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 % useage 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>Pullutant</u>	<u>Grams/BHP-HR</u>
NO _x	18.3
SO ₂	1.49
Hydrocarbon	0.62
CO	2.88
Particulate	0.20

- (2) Operation of equipment data from several rigs was reviewed to obtain % useage. 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 _x	SO ₂	Particules
6.8	2.5	31.4	2.1	2.3

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

CO	Hydrocarbon	No _x	SO ₂	Particules
.5	.1	2.2	14.2	.2

- III. Supply Pase - Crane - with GM 6-71 diesel engine with 228 BHP
driving a 30 ton crane

CO	Hydrocarbon	No _x	SO ₂	Particules
3.77	.35	9.18	.47	.5