In Reply Refer To: FC-2-1

October 17, 1989

Exxon Company, U.S.A.
Attention: Ms. Donna M. Hurley
Post Office Box 60626
New Orleans, Louisiana 70160-0626

Gentlemen:

Reference is made to your Supplemental Development Operations Coordination Document (DOCD) and accompanying information received October 3, 1989, for Lease OCS-G 3188, Block 160, West Delta Area. This DOCD includes the activities proposed for Well C-2.

In accordance with 30 CFR 250.34(f), this DOCD is hereby deemed submitted and is now being considered for approval.

Your control number is S-2346 and should be referenced in your communication and correspondence concerning this DOCD.

Sincerely,

(Orig. Sgd.) A. Donald Giroir

D. J. Bourgeois
Regional Supervisor
Field Operations

NOTED — KRAMER

bcc: Lease OCS-G 3188 (OPS-3-2) (FILE ROOM)
OPS-3-4 w/Public info. Copy of the DOCD and accomp. info. (PUBLIC RECORDS)

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Office of
Program Services

OCT 18 1989

Information Services
Section

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**EXXON** COMPANY, U.S.A.
POST OFFICE BOX 60626 • NEW ORLEANS, LOUISIANA 70160-0626

PRODUCTION DEPARTMENT
EASTERN DIVISION
OFFSHORE DIVISION

REGULATORY AFFAIRS

October 2, 1989

SUPPLEMENTAL DEVELOPMENT OPERATIONS
COORDINATION DOCUMENT
WEST DELTA BLOCK 117 FIELD
WEST DELTA BLOCK 100
LEASE OCS-G 3188, WELL NO. C-2
OFFSHORE, LOUISIANA

MINERALS MANAGEMENT SERVICE
RECEIVED
OCT 1989
FIELD OPERATIONS
Gulf of Mexico OCS Region, New Orleans

NON-CONFIDENTIAL

Mr. Daniel J. Bourgeois
Regional Supervisor
Office of Field Operations
Minerals Management Service
Gulf of Mexico, OCS Region
1201 Elmwood Park Blvd.
New Orleans, Louisiana 70123-2394

Dear Mr. Bourgeois:

In accordance with the provisions of Subpart B, 250. 34 (q)(2)(3) of the New Consolidated Orders, Exxon submits for your approval the enclosed Supplemental DOCD for the above captioned lease. The proposed well, OCS-G 3188, Well No. C-2 is schedule for drilling in November, 1989.

Certain parts of our enclosed plan contain proprietary information no subject to release under the Freedom of Act, or otherwise, without notice to and the express consent of Exxon. This submittal includes six copies labeled "Exxon Proprietary for MMS Use Only" and seven copies labeled "Non-Confidential".

If you need additional information, please contact Ron Castenell at (504) 561-4383.

Yours very truly,

EXXON CORPORATION

By Donna M. Hurley
D. M. Hurley, Supervisor
Regulatory Affairs -
Offshore Permits Group
Offshore Division
Exxon Company, U.S.A.
(a division of Exxon Corporation)

RAC/c13
Attachments

# DEVELOPMENT OPERATIONS COORDINATION DOCUMENT

## GULF OF MEXICO: OFFSHORE LOUISIANA

WEST DELTA 117 FIELD

OCS-G 3188 C-2

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EXXON CORPORATION

SEPTEMBER 29, 1989

SUPPLEMENTAL DEVELOPMENT OPERATIONS COORDINATION DOCUMENT
WEST DELTA 117 FIELD
WEST DELTA BLOCK 100
OCS-G 3188 #C-2

The following information detailing additional development and production activities at West Delta 117 Field Block 100 is submitted in compliance with notice to lessees 84-1. This information will supplement the current Plan of Development/Operations for the West Delta 117 Field.

## Proposed Operations

Development drilling is planned from the C platform on Block 100 in West Delta 117 Field. The well name, drilling status, and drill time are as follows:

| Well | Status |
|---|---|
| OCS-G 3188 #C-2 | Spud November 1989 |

## Expected Rates of Development and Production

Exxon considers this information proprietary.

## Safety Standards:

Safety features during drilling operations will include well control and blowout prevention equipment that meets or exceeds the requirements of OCS Subpart B. Platform production facilities will be designed, installed and maintained in accordance with OCS Subpart I and will contain all safety devices and systems as specified herein and in API RP 14C and OCS Subpart H. Appropriate life rafts, life jackets, ring buoys, fire extinguishers, and other personnel safety features will be provided as prescribed by the United States Coast Guard "Rules and Regulations for Artificial Island and Fixed Structures on the Outer Continental Shelf."

## Pollution Prevention:

Pollution prevention and cotrol features include all necessary curbing, gutters, drip pans, drains, and holding tanks to prevent contamination of the sea in accordance with Subpart C.

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## DRILLING RIG, PLATFORM AND FACILITIES

### (a) Drilling Vessel

The Penrod 82 or similar type jack-up rig will be used to drill this well. Rig safety features are as follows:

The rig has the following pollution prevention and control features:

1. Drip pans on the draw works, engines, motors, rotary table, hydraulic units and pumps which accumulate oil.
2. A high level alarm on fuel storage vessels subject to refilling during operations.
3. Down-comer on the jack-up rig extending 20' + below the water line. Oil-free drill cuttings are disposed of through the down-comer.
4. Sanitary waste shall be treated in an on-site sewage treatment unit prior to disposal into the water.
5. Any mud deposited into the water shall be oil-free in accordance with OCS Subpart C.
6. Edible garbage shall be disposed of into the water.
7. All burnable trash shall be burned on location or taken to shore for disposal.
8. Rig plat showing side profile and elevation of proposed drilling rig are shown on attachment A and B.

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## PLATFORM

The platform jacket and deck are totally of steel construction and will be designed, constructed, and installed in accordance with OCS orders 30 CFR § 250 Subpart I. The deck section has one level, and the jacket has three legs. Two wells in addition to the OCS-G 3188 #2 (C-1) well can be drilled from the platform which will be installed at the following location: 3289 feet west of the east line, and 12,282 feet north of the south line of Block 100, West Delta area.

Corrosion protection for the platform is provided by a sacrificial anode system below the water, special splash zone protection on structural members and conductors, and painted steel from the splash zone up.

The platform is designed for a 100-year storm. Design parameters include:

1. Wave Height: 66.0 feet Period: 12.0 Sec.

2. Current: Current is not specifically defined, but is accounted fc in the wave force criteria.

3. Wind Velocity: The 100-year wind one-minute me velocity is 98 MPH at reference eleva of 32.8 feet above MWL. Wind force culations are in accordance with API-RP2 Eighteenth Edition, Section 2.3.2.

4. Water Depth: 197 feet.

5. Storm and Astronomical Tide: 5.0 feet

The offshore structure will include the following items pertaining to safety of personnel and operations:

1. Boat landing.

2. Stairway to boat landing.

3. Life rafts, life jackets, and life rings to meet the requirements of the United States Coast Guard.

4. Swing ropes hung from platform deck to facilitate transfer to and from vessels and for backup emergency escape.

5. Telephone and/or radio communications.

6. Aids to navigation including lights and fog horn according to United States Coast Guard requirements.

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## FACILITIES

Exxon plans to flow all production full wellstream to the West Delta 117 Field 'B' Platform through a 6" line. The 6" line will be installed after the installation of the new platform. Production facilities for the new platform will include well control equipment, vent system, and a crane.

## Well Location and Geologic Data

Exxon considers this information proprietary.

## Shallow Hazards

Based on a recently completed shallow hazards study, soft sediment on the seafloor and shallow gas are recognized as potential hazards.

## $H_2S$ Contingency Plan

$H_2S$ is not expected within West Delta Block 100. Wells drilled and produced in West Delta Block 100 and adjacent Blocks 99 and 93 have not encountered $H_2S$. The OCS-3188 #C-2 well will be drilled to the same fault segment and stratigraphic interval as the OCS-G 3188 #1 well where no $H_2S$ was encountered.

## Operations Lease Stipulations

We have examined our lease files and find no operational lease stipulations.

## Support Facilities

Drilling operations will be supported by the existing Grand Isle base facilities. No facility expansion is planned for the Grand Isle base, the pipeline network leaving Grand Isle, or any refinery in the existing area.

The following list shows the acreage on Grand Isle utilized for existing facilities necessary to drill and produce the wells:

| | |
|---|---|
| Operation Office/Heliport | 19.0 Acres |
| Exxon Pipeline Co. Terminal | 22.9 Acres |
| Warehouse and Yard | 22.5 Acres |
| Gas Plant | 14.5 Acres |

See Attachment 1 for vicinity map and bathymetry map.

Personnel and/or support equipment and supplies will be ferried to and from the support base and drilling platform via boats and helicopters. Supply and/or crew boats will make an estimated seven trips per week, and helicopters will make an estimated fourteen (14) flights per week.

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**Mud Program:**

Standard additives planned to be used in the drilling fluid are: bentonite, barite, lignite, lignosulfonate and caustic soda. Additional additivies that may be used are: soda ash, sodium bicarbonate, driscose, lime, defoamer - aluminum stearate or equivalent, and bacteriacide - Corexit 7674 or equivalent. See Attachment VIII for a listing of typical additives.

**Discussion of New or Unusual Technology to be Employed:**

None proposed.

LTS/RAC/105.doc
09/29/89

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Oil Spill Contingency Plan

Exxon's Contingency Plan For Oil Spill Cleanup (CPOSC), aporoved by the MMS Regional Supervisor, designates an Oil Spill Response Team to be activated for containment and cleanup of oil spills that may occur at West Delta Block 100 C olatform. Exxon, as a member of Clean Gulf Associates (CGA), will utilize CGA equipment for spill containment and cleanup should the need arise. Additional equipment from outside sources will be utilized if needed. Resources for procuring this additional equipment are identified in Exxon's CPOSC. Any equipment utilized will be suitable for anticipated environmental conditions in the Gulf of Mexico.

Based on the oil spill trajectory simulation results listed in the Gulf of Mexico Sales 123 and 125: Environmental Impact Statement (EIS) Table IV-6, the probability that a spill from West Delta Block 100 will make landfall within 10 days is 1% for Terrebonne Parish, 10% for Lafourche Parish, 19% for Jefferson Parish, and 36% for Plaquemines Parish. Based on the projected landfalls, Clean Gulf Associates Operations Manual Volume II, Section V, Louisiana Maps #6 and #7 identify the environmentally sensitive areas which may be impacted, and outline the recommended responses to protect these areas.

Clean Gulf Associates maintains spill containment/cleanup equipment at Grand Isle, Houma, and Venice locations. For WD-100C the primary location for procurement is Grand Isle. Procurement response times are estimated as follows: equipment - 3 hours, vessel - 2 hours, and personnel - 4 hours. Each of these activities is independent and thus the total procurement time is 4 hours. Equipment load out time is estimated at 2 hours with a travel

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time to the deployment site of  hours. Final equipment deployment ending with the initiation of actual equipment operation is estimated at 0.5 hours. Total response time is estimated at 10.5 hours. Unforeseen variables at the time of the spill, such as weather, sea state, boat availability, and traffic conditions could result in a different response time.

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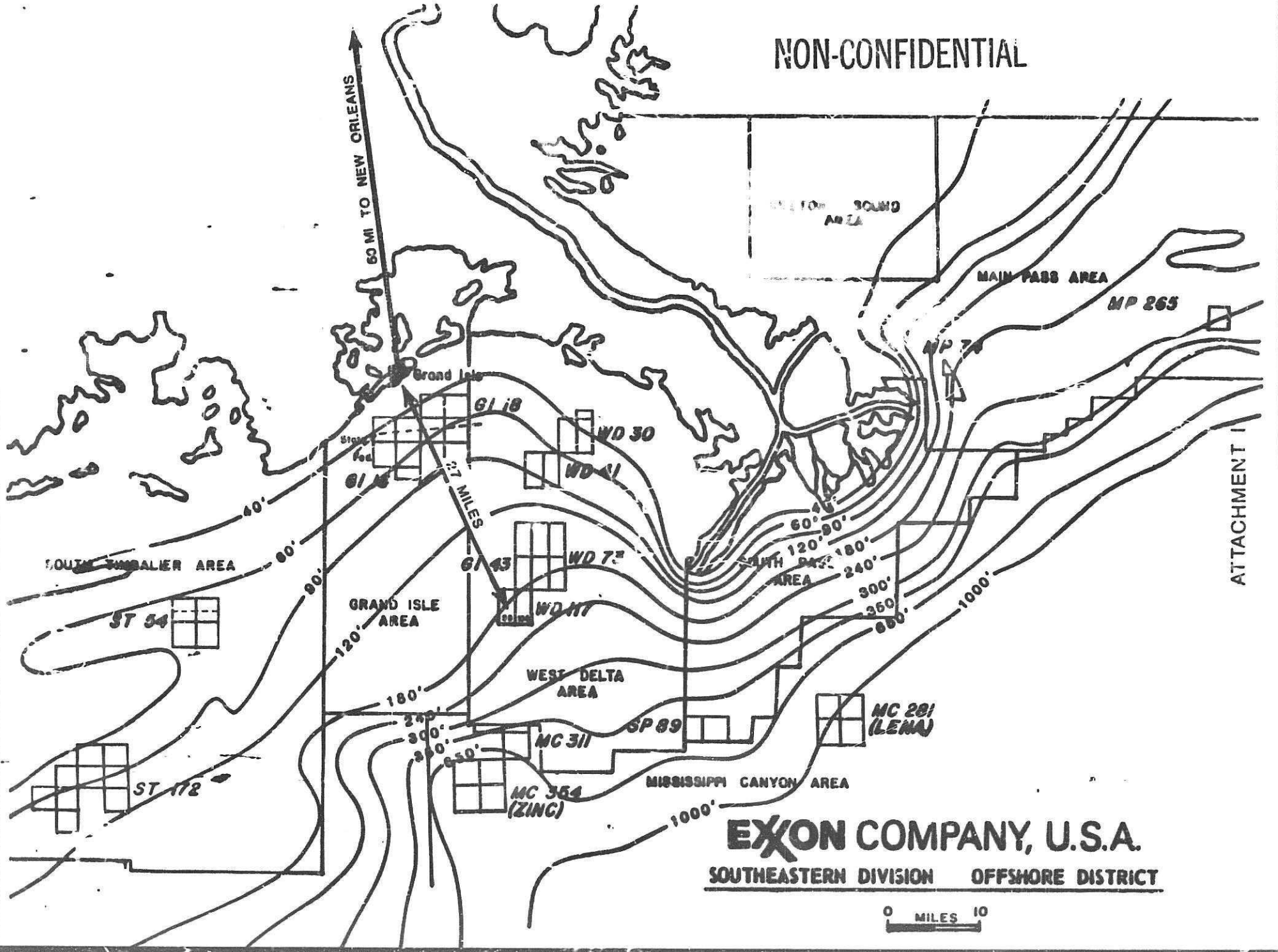
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60 MI TO NEW ORLEANS
27 MILES
Grand Isle
GI 18
WD 30
WD 41
GI 43
WD 77
WD 117
GRAND ISLE AREA
SOUTH TIMBALIER AREA
ST 54
ST 112
WEST DELTA AREA
SP 89
MC 311
MC 364 (ZINC)
MC 281 (LENA)
MISSISSIPPI CANYON AREA
MAIN PASS AREA
MP 265
40'
60'
90'
120'
180'
240'
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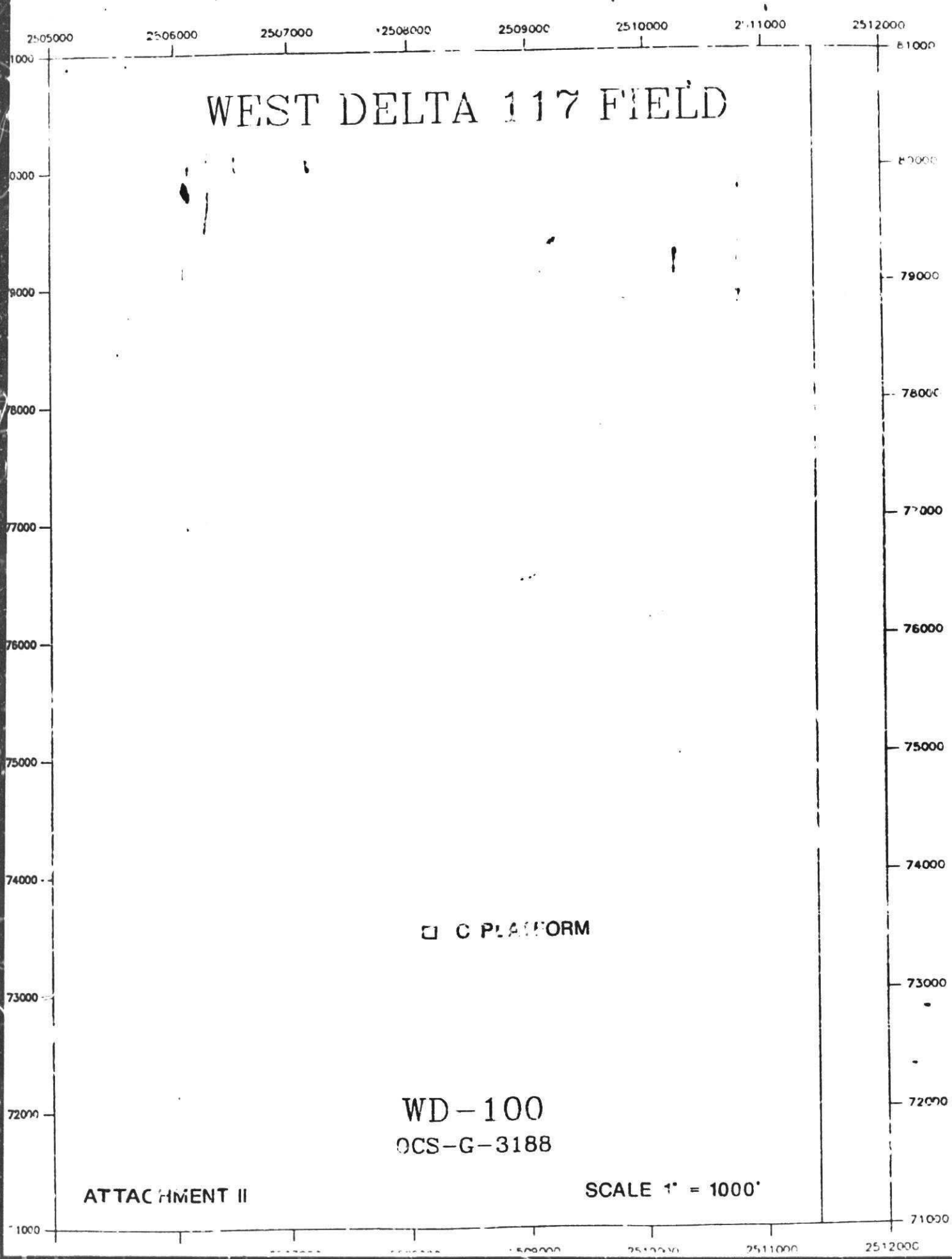
650'
1000'
EXXON COMPANY, U.S.A.
SOUTHEASTERN DIVISION OFFSHORE DISTRICT
0 MILES 10
ATTACHMENT I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WEST DELTA 117 FIELD
C PLATFORM
WD-100
OCS-G-3188
ATTACHMENT II
SCALE 1" = 1000'

## EMISSION INCREASES & EXEMPTION CALCULATIONS

WEST DELTA 10(

WELL NO. 3188 C2

OCS-G-31[illegible]

THE FOLLOWING ESTIMATE OF EMISSIONS IS BASED ON THE EPA-DERIVED FACTOR OF 60 HP-HOURS PER FOOT OF HOLE DRILLED AND EPA EMISSION FACTORS FOR INDUSTRIAL DIESEL ENGINES:

| POLLUTANT | EMISSION FACTOR (LB/HP-HR) |
|---|---|
| SO2 | 0.00205 |
| NOX | 0.03086 |
| VOC | 0.00247 |
| CO | 0.00668 |
| TSP | 0.007[illegible] |

**SAMPLE EMISSION CALCULATION (FOR NOX IN 1988):**

1989

FOOTAGE TO BE DRILLED =

60 HP-HRS/FT X FT/YR = HP-HRS/YR

HP-HRS/YR X .03086 LB/HP-HR X 1TON/2000 LBS = TONS/YR

**EXEMPTION CALCULATIONS:**

EXEMPTION FOR SO2, NOX, VOC AND TSP = 33.3 X 17.5 MILES FROM SHORE

EXEMPTION = 583 TONS/YR

EXEMPTION FOR CO = 3470 X ( 17.5 MI FROM SHORE) $^{2/3}$ = 22918 TONS /YR

**SUMMARY:**

| | | SO2 | NOX | VOC | CO | TSP |
|---|---|---|---|---|---|---|
| ESTIMATED EMISSIONS (T/YR) | 1989 | 0.31 | 1.72 | 0.38 | 1.02 | 0.34 |
| EXEMPTION LEVELS (T/YR) | | 583 | 583 | 583 | 22918 | 583 |

RTH 9/18/89

ATTACHMENT V

# TYPICAL WATER BASE DRILLING MUD ADDITIVES

- **PRIMARY ADDITIVES**

  Barite
  Bentonite
  Caustic Soda

- **DISPERSANTS AND FLUID LOSS CONTROL ADDITIVES**

  Iron or Chrome Lignosulfonate
  Lignite
  Drispac (Polymer)

- **LOST CIRCULATION MATERIAL**

  Mica
  Cotton Seed Hulls
  Walnut Hulls
  Thermoset Rubber

- **OTHER TYPICAL ADDITIVES**

  Lime
  Soda Ash
  Aluminum Stearate

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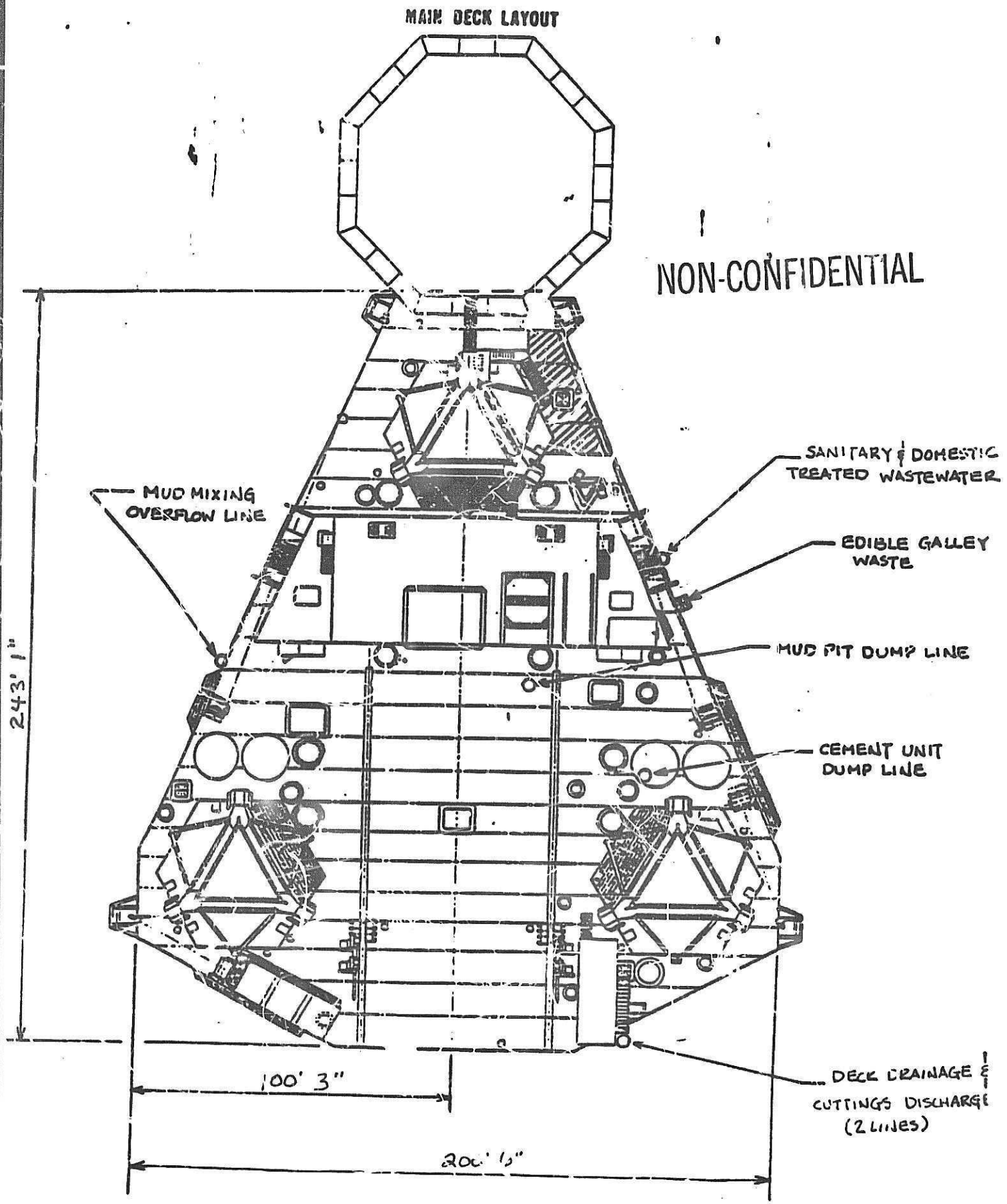
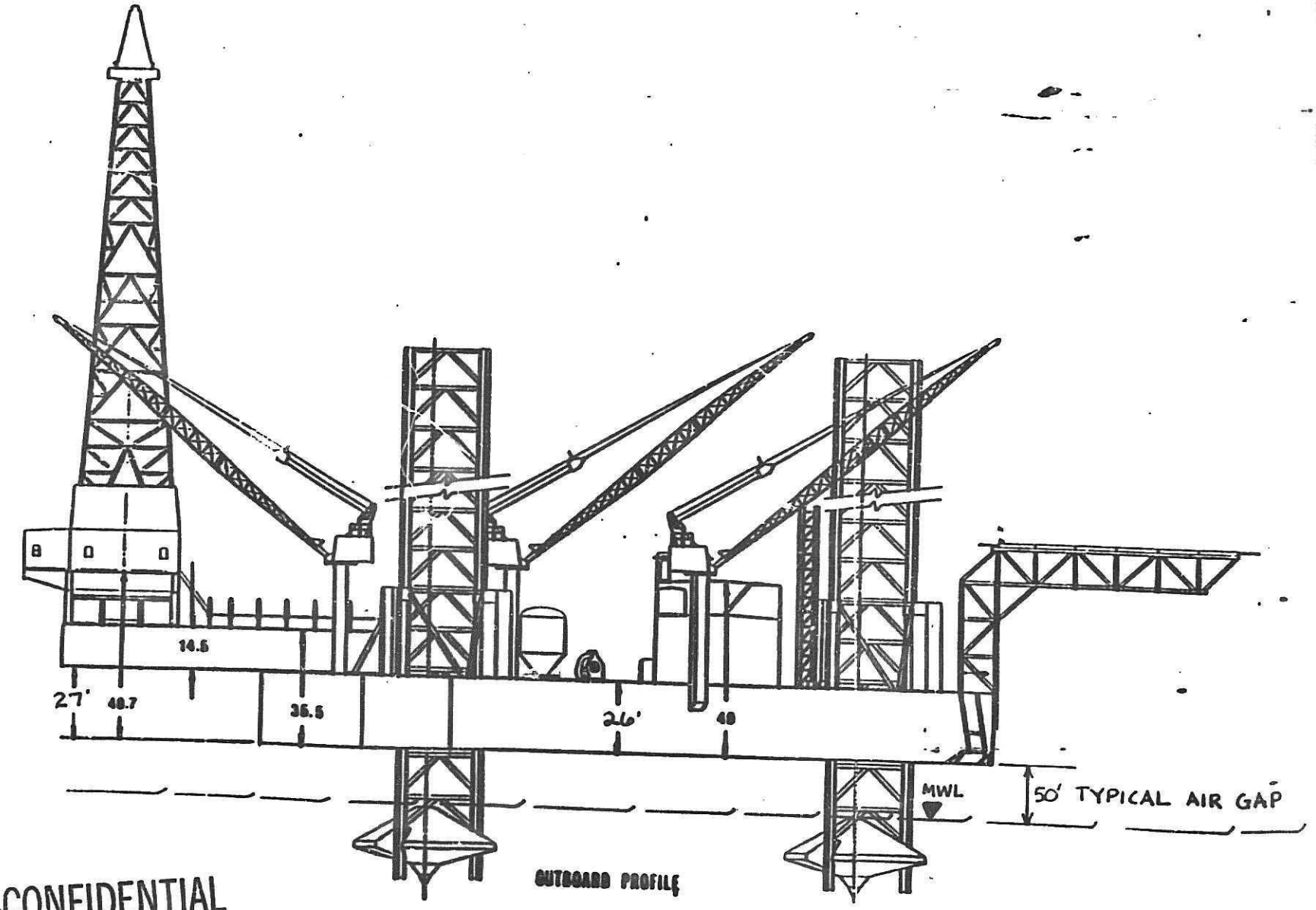
These are typical drilling mud additives. Not all the above additives will necessarily be used in every mud system, and likewise, there may be some special purpose additives used that are not on the above list.

ATTACHMENT VIII

LOCATION OF TYPICAL DISCHARGE POINTS ON A JACK-UP RIG



SIDE PROFILE OF A TYPICAL JACK-UP RIG




OUTBOARD PROFILE

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