OCS-G 6845 & 6851

N-3036

In Reply Refer To: FO-2-1 June 2, 1988

Tenneco USA
Attention: Mr. J. A. Houston
Post Office Box 60252
New Orleans, Louisiana 70160

Gentlemen:

Reference is made to your Initial Plan of Exploration and Environmental Report received May 27, 1988, for Leases OCS-G 6845 and 6851, Blocks 830 and 873, Mobile Area. This plan includes the activities proposed for Wells A and B in Block 830 and Wells A, B, and C in Block 873.

In accordance with 30 CFR 250.34, revised December 13, 1979, and our letter dated January 29, 1979, this plan is hereby determined to be complete and is now being considered for approval.

Your plan control number is N-3036 and should be referenced in your communication and correspondence concerning this plan.

Sincerely yours,

(Orig. Sgd.) A. Donald Giroir

For D. J. Bourgeois
Regional Supervisor
Field Operations

bcc: Lease OCS-G 6845 (OPS-3-2) (FILE ROOM)
Lease OCS-G 6851 (OPS-3-2) (FILE ROOM)
OPS-3-4 w/Public Info. Copy of the plan and ER (PUBLIC RECORDS)

LTHerbst:cok:05/31/88:poecom

PUBLIC INFORMATION

Texaco USA
PO Box 60252
New Orleans LA 701 [illegible]

May 26, 1988

Regional Supervisor
Field Operations
Minerals Management Service
1201 Elmwood Park Blvd.
New Orleans, LA 70123

Re: FEDERAL LEASE OCS-G 6845
MOBILE BLOCK 830
FEDERAL LEASE OCS-G 6851
MOBILE BLOCK 873
EXPLORATION PLAN

Dear Sir:

In accordance with the provisions of Title 30 CFR 250, Texaco Producing Inc. submits for your approval twelve copies of an Exploration Plan for Federal Leases OCS-G 6845 and OCS-G 6851 at Mobile Blocks 830 and 873. Should any additional information be required, please contact David M. Groce by telephone at (504) 595-1475.

Yours very truly,

TEXACO PRODUCING INC.

By: J. A. Newton
J. A. NEWTON

DMG:pal
5/26/1

Attachment

EXPLORATION PLAN
TEXACO PRODUCING INC.
FEDERAL LEASES OCS-G 6845 and OCS-G 6851
MOBILE BLOCKS 830 AND 873

Description of and Schedule for Exploration Activities

Texaco Producing Inc.'s (Texaco) exploration plan for Mobile Blocks 830 and 873 includes the drilling of five (5) exploratory wells to evaluate Federal Leases OCS-G 6845 and OCS-G 6851. The first well is scheduled to commence on or about July 1, 1988. A total of 100 days of operations are planned.

Description of Rig and Safety Equipment

Depending on the availability of rigs, the proposed wells will be drilled with a jackup rig similar to the Chiles-Alexander "Horizon". Attached are the rig specifications for the Chiles-Alexander "Horizon". The specifications for the actual drilling vessel and safety equipment to be used will be submitted along with the application for permit to drill. The rig used to drill the exploratory wells under this plan will contain and maintain a diverter system, blowout-preventers, auxiliary equipment, and mud testing and monitoring equipment. Drilling operations will be conducted in a manner so as to maximize pollution prevention in accordance with OCS Order No. 7. All other safety and control equipment will be used in accordance with other applicable OCS Orders. Well abandoned procedures will be in accordance with OCS Order No. 3.

Geophysical Equipment

All geophysical work prior to the commencement of exploratory drilling operations has been completed. No other geophysical work is presently planned for these leases. If it is subsequently determined that additional work is required, conventional CDP reflection methods will be used.

Location of Proposed Wells

Attached is the vicinity map which shows the location of Mobile Blocks 830 and 873 relative to the Alabama shoreline, and the location plat, which provides the surface and bottom hole locations, proposed total depth of each well, and the water depth at the surface locations.

Subsurface Geologic and Geophysical Interpretation

Attached are the subsurface structure maps and the geologic cross sections which reflect the current subsurface interpretation of the geologic and geophysical data in the area. These data are considered confidential by Texaco and should be exempt from disclosure under the Freedom of Information Act 5 U.S.C. 552.

Oil Spill Contingency Plan

In accordance with OCS Order No. 7, Texaco has on file with the Minerals Management Service an Oil Spill Contingency Plan which has been approved by the Minerals Management Service.

Texaco is a member of Clean Gulf Associates (CGA) and, as such, has access to a stock-pile of oil spill containment and cleanup materials for use in the offshore and estuarine areas. There are several CGA bases which are strategically located along the coastline of the Gulf of Mexico that have the materials and equipment necessary to control and clean up oil spills. The closest CGA base at Theodore, Alabama is located within 40 miles of the proposed drill sites. Based on the distance from this CGA installation to the proposed drill sites, we estimate a travel and deployment time of approximately 6 hours.

Onshore Support Bases

Onshore bases located at Amelia and Morgan City, Louisiana, and Theodore, Alabama will be used to support the exploration activity proposed. From these bases personnel, materials and supplies will be transported by boat and helicopter to the proposed drill sites.

Drilling Mud Components and Mud Additives

Attached are listings of the drilling mud components and mud additives which are normally used during drilling operations.

Projected Air Emissions Report

The attached projected air emissions report reflects the highest estimated emissions of total suspended particles (TSP), sulfur dioxide (SO_2), nitrogen oxide (NO_x), carbon monoxide (CO) and volatile organic compounds (VOC) for a 100 day period of continuous lease operations. Upon comparison of the estimated emissions to the emissions calculated using the exemption formulas, it was determined that the proposed exploration activities were exempt from further air quality review. Based on these data, emissions from the proposed exploration activities will not cause any significant effect on the air quality of the onshore areas.

Drilling Hazards and Archeological Assessment

An archeological and hazard survey was conducted by John E. Chance and Associates, Inc. over Mobile Blocks 830 and 873 which included the following drill sites:

BLOCK 830

Location A @ 3560' FSL & 520' FWL of Mobile 830
Location B @ 2850' FSL & 1170' FWL of Mobile 830

BLOCK 873

Location A @ 100' FNL & 2250' FWL of Mobile 873
Location B @ 5250' FSL & 100' FEL of Mobile 873
Location C @ 750' FSL & 1000' FWL of Mobile 873

The data collected from this survey included dual display 12-fold stacked profiles, water gun profiles DFS V, magnetometer, side scan sonar, and O.R.E. pinger profiles. These survey data along with available CDP seismic and velocity data were reviewed by Texaco to evaluate the proposed drill sites for potential drilling hazards. Attached are the evaluations of each drill site.

An archeological survey was conducted on Mobile Blocks 830 and 873. The survey identified a number of magnetic anomalies and presence of early Holocene fluvial channels. Texaco Producing Inc.'s operations avoid these areas. There are no known archeological or cultural resources located on Mobile Blocks 830 and 873.

Shallow Hazards Evaluation
Location A: 3560' FSL and 520' FWL
of Mobile Block 830

The seismic data which traverse the well site consist of CDP profiles and high resolution profiles which include dual display 12-fold stacked profiles, DFS V water gun profiler, magnetometer, side scan sonar and O.R.E. pinger profiles.

The water depth at the proposed drill site is 36 feet. The seafloor is fairly smooth with low ridges and broad troughs, and slopes to the southeast at an approximate rate of 10 feet per mile. The near-surface strata are composed of sand, which is predominantly quartz, intermixed with fine-grain muds and silts. A Holocene-Pleistocene unconformity is located approximately 30 feet below the seafloor and may form a stiff sedimentary stratum. There is no evidence of surface or near-surface faulting near the drill site. The well bore is not expected to penetrate any shallow fault zones.

Much of the survey area contains near-surface accumulations of sedimentary gas and organics which are not significant enough to interfere with drilling operations. CDP velocity data indicate no anomalous velocities in the vicinity of the drill site and normally pressured strata are expected to total depth of the well, with possible exceptions of the objective sand at approximately -1500 feet subsea. Care will be exercised when drilling this part of the well. The survey data indicate minor amplitude increases at -500 to -600 feet in an area located 1000 feet southwest of the drill site. Care will be exercised while penetrating this interval.

Magnetic anomalies are identified 1500 feet east of the drill site.

The drill site is 1000 feet south and 1500 feet west of the Holocene channel.

Shallow Hazards Evaluation
Location B: 2850' FSL and 1170' FWL
of Mobile Block 830

The seismic data which traverse the well site consist of CDP profiles and high resolution profiles which include dual display 12-fold stacked profiles, DFS V water gun profiler, magnetometer, side scan sonar and O.R.E. pinger profiles.

The water depth at the proposed drill site is 37 feet. The seafloor is fairly smooth with low ridges and broad troughs, and slopes to the southeast at an approximate rate of 10 feet per mile. the near-surface strata are composed of sand, which is predominantly quartz, intermixed with fine-grain muds and silts. A Holocene-Pleistocene unconformity is located approximately 30 feet below the seafloor and may form a stiff sedimentary stratum. There is no evidence of surface or near-surface faulting near the drill site. The well bore is not expected to penetrate any shallow fault zones.

Much of the survey area contains near-surface accumulations of sedimentary gas and organics which are not significant enough to interfere with drilling operations. CDP velocity data indicate no anomalous velocities in the vicinity of the drill site and normally pressured strata are expected to total depth of the well, with possible exceptions of the objective sand at approximately -1500 feet subsea. Care will be exercised when drilling this part of the well. The survey data indicate minor amplitude increases at -500 to -600 feet in an area located 1200 feet west of the drill site. Care will be exercised while penetrating this interval.

Magnetic anomalies are identified 1100 feet northeast of the drill site.

The drill site is 1200 feet southwest and 1700 feet south of the Holocene channel.

Shallow Hazards Evaluation
Location A: 100' FNL and 2250' FWL
of Mobile Block 873

The seismic data which traverse the well site consist of CDP profiles and high resolution profiles which include dual display 12-fold stacked profiles, DFS V water gun profiler, magnetometer, side scan sonar and O.R.E. pinger profiles.

The water depth at the proposed drill site is 40 feet. The seafloor is fairly smooth with low ridges and broad troughs, and slopes to the southeast at an approximate rate of 10 feet per mile. The drill site is located within a broad trough of one of the sand-wave, topographic features located within the hazard survey study area. The near-surface strata are composed of sand, which is predominantly quartz, intermixed with fine-grain muds and silts. A Holocene-Pleistocene unconformity is located approximately 30 feet below the seafloor and may form a stiff sedimentary stratum. There is no evidence of surface or near-surface faulting near the drill site. The well bore is not expected to penetrate any shallow fault zones.

CDP velocity data indicate no anomalous velocities in the vicinity of the drill site and normally pressured strata are expected to total depth of the well, with possible exception of the objective sand at approximately -1800 feet subsea. Care will be exercised when drilling this part of the well. The survey data indicate "bright spots" at -400 to -450 feet, -900 to -1000 feet and, -1450 feet at the drill site. Care will be exercised while penetrating these intervals.

Shallow Hazards Evaluation
Location B: 5250' FSL and 100' FEL
of Mobile Block 873

The seismic data which traverse the well site consist of CDP profiles and high resolution profiles which include dual display 12-fold stacked profiles, DFS V water gun profiler, magnetometer, side scan sonar and O.R.E. pinger profiles.

The water depth at the proposed drill site is 52 feet. The seafloor is fairly smooth with low ridges and broad troughs, and slopes to the southeast at an approximate rate of 10 feet per mile. The drill site is located on the crest of one of the sand-wave, topographic features located within the hazard survey study area. The near-surface strata are composed of sand, which is predominantly quartz, intermixed with fine-grain muds and silts. Three hundred feet west of the drill site, a Holocene-Pleistocene unconformity is located approximately 30 feet below the seafloor. This formation may form a stiff sedimentary stratum. There is no evidence of surface or near-surface faulting near the drill site. The well bore is not expected to penetrate any shallow fault zones.

CDP velocity data indicate no anomalous velocities in the vicinity of the drill site and normally pressured strata are expected to total depth of the well, with possible exception of the objective sand at approximately -1800 feet subsea. Care will be exercised when drilling this part of the well. The survey data indicate an amplitude anomaly at -900 to -1000 feet in an area located 1000 feet southeast of the drill site. Care will be exercised while penetrating this interval.

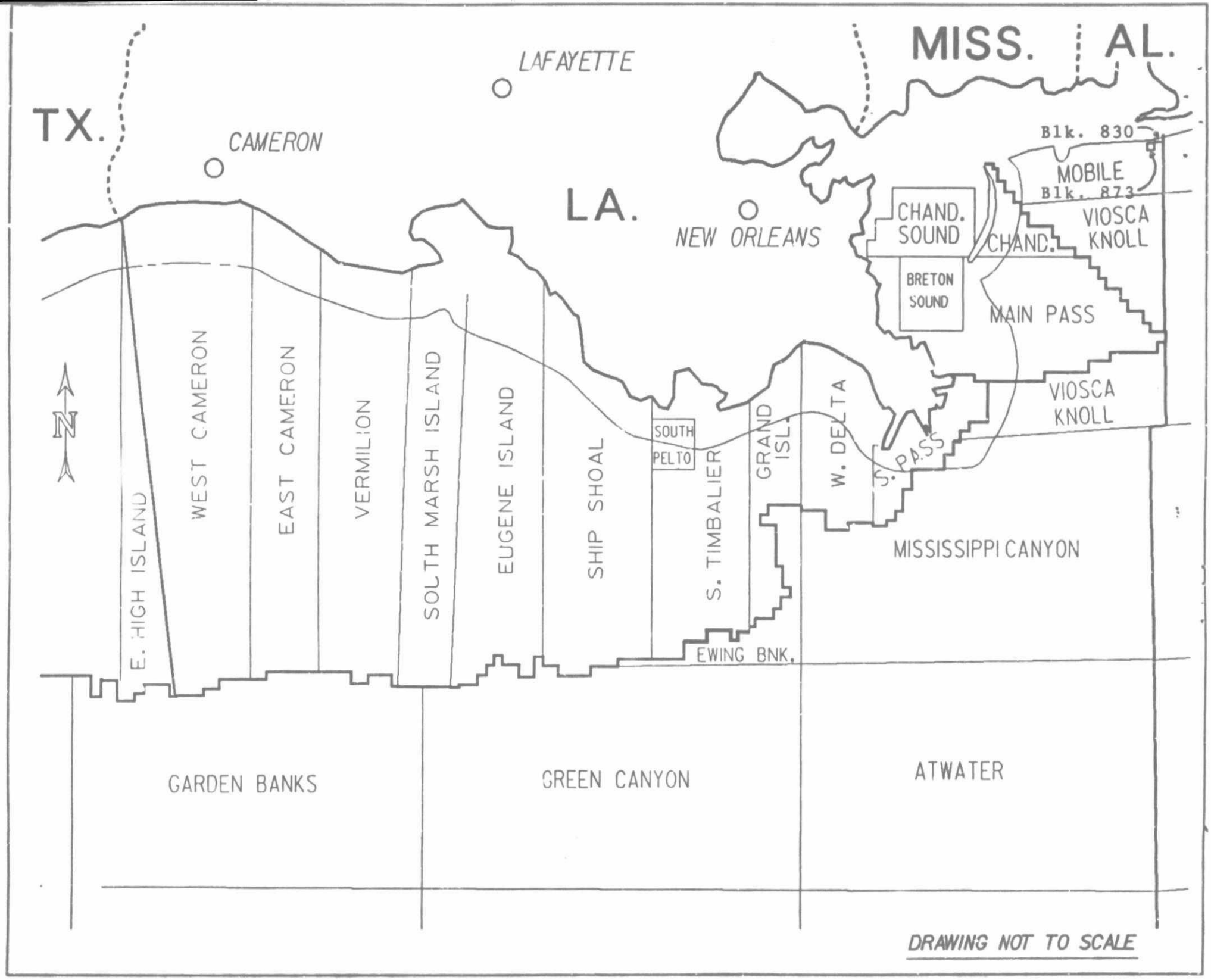
A magnetic anomaly is identified 1400 feet west of the drill site.

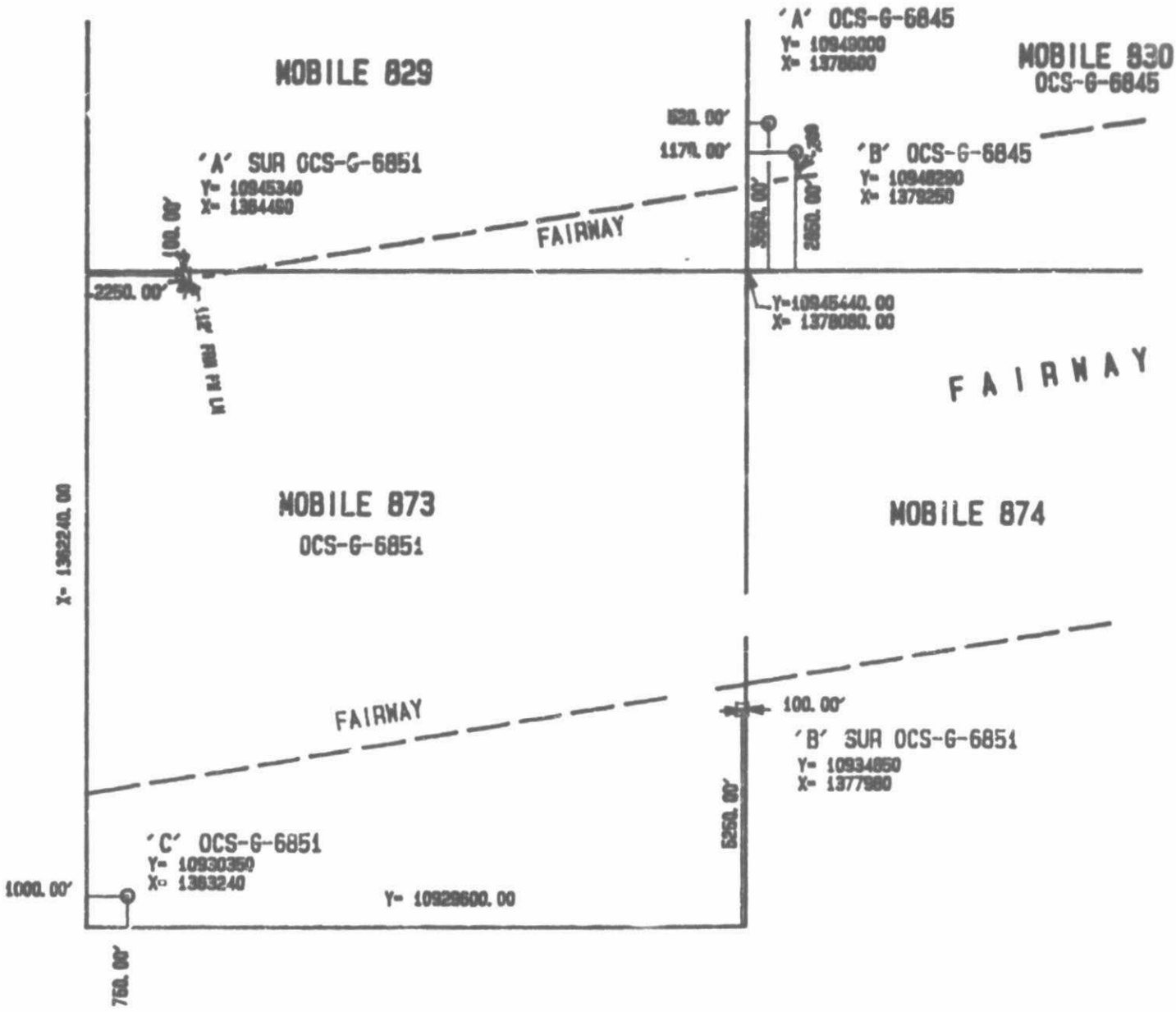
Shallow Hazards Evaluation
Location C: 750' FSL and 1000' FWL
of Mobile Block 873

The seismic data which traverse the well site consist of CDP profiles and high resolution profiles which include dual display 12-fold stacked profiles, DFS V water gun profiler, magnetometer, side scan sonar and O.R.E. pinger profiles.

The water depth at the proposed drill site is 58 feet. The seafloor is fairly smooth with low ridges and broad troughs, and slopes to the southeast at an approximate rate of 6 feet per mile. The near-surface strata are composed of sand, which is predominantly quartz, intermixed with fine-grain muds and silts. A Holocene-Pleistocene unconformity is located approximately 30 feet below the seafloor and may form a stiff sedimentary stratum. There is no evidence of surface or near-surface faulting near the drill site. The well bore is not expected to penetrate any shallow fault zones.

CDP velocity data indicate no anomalous velocities in the vicinity of the drill site and normally pressured strata are expected to total depth of the well, with possible exception of the objective sand at approximately -1900 feet subsea. Care will be exercised when drilling this part of the well. The survey data indicate minor amplitude increases at -500 to -700 feet. Care will be exercised while penetrating this interval.


TX.
LAFAYETTE
MISS.
AL.
CAMERON
LA.
NEW ORLEANS
Blk. 830
MOBILE
Blk. 873
CHAND. SOUND
CHAND.
VIOSCA KNOLL
BRETON SOUND
MAIN PASS
VIOSCA KNOLL
N
E. HIGH ISLAND
WEST CAMERON
EAST CAMERON
VERMILION
SOLTH MARSH ISLAND
EUGENE ISLAND
SHIP SHOAL
SOUTH PELTO
S. TIMBALIER
GRAND ISL.
W. DELTA
S. PASS
MISSISSIPPI CANYON
EWING BNK.
GARDEN BANKS
GREEN CANYON
ATWATER
DRAWING NOT TO SCALE



NOTE:
ALL COORDINATES ARE BASED ON UNIVERSAL TRANSVERSE MERCATOR GRID COORDINATE SYSTEM ZONE 16 (NAD27)

TEXACO PRODUCING INC.

NEW ORLEANS, LA.

MOBILE BLOCK 830 OCS-G-6845
MOBILE BLOCK 873 OCS-G-6851

APPROX 20 MILES SOUTHEAST OF
DAUPHINE ISLAND, ALABAMA

SCALE

PLAN OF EXPLORATION
PUBLIC INFORMATION PLAT

CHILES-ALEXANDER OFFSHORE, INC.

"HORIZON"

General Specifications

Hull:

a. **Type:** Bethlehem Steel Corporation, Mat Supported Jackup Design Mobile Offshore Drilling Unit with three (3) 12 feet diameter legs outfitted for 20,000 feet drilling in a maximum of 250 feet of water. Approved by the American Bureau of Shipping as an A-1 Self-Elevating Drilling Unit and registered under Panamanian Flag.

b. **Builder:** Bethlehem Steel Corporation, Beaumont, Texas Delivery - 1976 and Purchased by Chiles Offshore, Inc. in October, 1985.

c. Elevating System: Bethlehem Design Hydraulic Elevating System

d. Principal Characteristics:

Length Overall	166'-0"
Breadth Overall	132'-0"
Depth of Hull	16'-0"
Length of Legs (Measured to top of Mud Skirt)	312'-0"
Mud Skirt	2'-0"
Depth of Mat (Excluding Mud Skirt)	10'-0"
Length of Mat	210'-0"
Breadth of Mat	170'-0"
Projection of Mat Below Hull	2'-0"
Centerline of Fwd Leg to Centerline of Aft Legs	104'-0"
Center to Center of Aft Legs	109'-0"
Drilling Slot (Width x Length)	50'x48'
Drilling Area (Width x Length)	15'x21.5'

e. Design Operating Conditions:

	Non-Hurricane	Hurricane
Water Depth	250 Ft.	205 Ft.
Maximum Wave Height	33 Ft.	60 Ft.
Corresponding Wave Period	10 Sec.	16 Sec.
Maximum Wind Velocity (One Minute Average)	70 Kn.	100 Kn.
Air Gap	25 Ft.	25 Ft.

Minimum Operating Water Depth: 22 Ft.

Variable Loads:

*Normal Drilling:	4,500 kips
Floating:	2,980 kips
Elevated Storm:	3,300 kips

* Calm Weather, Exclusive of Hook, Rotary and Setback Loads

f. Maximum Allowable Drill Floor Loading: 1,000 kips

Distance Aft of Slot at Well C.L. & 7'-6" Off C.L. Port & Stb'd:	8'-0" - 25'-6"	27'-6"	29'-6"
Allowable Loading (kips):	1,000	850	750

g. Quarters:

Accommodations	56 persons
Treatment Room	2 persons
Galley and Mess Rooms	
One Recreation Room	
Two Offices	
One Radio Room	
One Control Room	

h. Heliport:

60 Ft. x 70 Ft. Rectangular Shaped Heliport Designed For a Sikorsky S-61 Wheeled Helicopter

i. Expandable Capacities:

Diesel Fuel	1,796 bbls.
Drill Water	4,702 bbls.
Potable Water	472 bbls.
Lube Oil	90 bbls.
Bulk Mud and Cement (7 - tanks)	6,030 cu. ft.
Sack Stores	3,000 sacks
Active and Reserve Mud Pits (3 - tanks)	1,510 bbls.
Slugging Pit and Chemical Mixing Tank	30 bbls.
Sand Trap and Solids Control Pits (4 - tanks)	200 bbls.

CHILES ALEXANDER OFFSHORE, INC.

"HORIZON"

CONTRACTOR FURNISHED STANDARD EQUIPMENT

I. DRILLING EQUIPMENT:

a. Derrick:	Pyramid, 30' x 30' x 147' with 8' x 8' top, 1,392,000 lbs. gross nominal capacity, racking for 15,500' of 4-1/2" drill pipe and 10 stands of 8" drill collars. IDECO, 585 Ton seven (7) 60" diameter sheave crown block, adjustable stabbing board and a two-rail traveling block guide system.
b. Drawworks:	Mid-Continent, U-1220-B double drum with Elmagco 6032 auxiliary brake, Lebus 1-3/8" drum grooving, driven by two (2) EMD D79MB electric motors, each rated at 800 HP continuous, 1000 HP intermittent.
c. Rotary:	Continental Emsco, T-3750 - 53-1/4" rotary table driven by an EMD D79MB DC Electric motor rated at 800 HP continuous, driving through a National 2-speed transmission, with Varco HCDE 37-1/2" hinged master bushing and pin drive insert bowl with extended API taper.
d. Swivel:	Continental Emsco, LB500 ton, #6508-200F.
e. Hook:	Joy, Web Wilson, 500 ton hydra hook with Return-A-Matic.
f. Block:	McKissick, 84 x 60, 525 ton with six (6) - 60" diameter sheaves.
g. Elevators:	Two (2) 4-1/2" O.D. drill pipe rated at 350 tons. One (1) 2-3/4" x 132" 350 ton elevator links. Seven (7) drill collar lift subs for 8" drill collars.

	Seven (7) drill collar lift subs for 6-1/2" drill collars.
h. Slips:	Two (2) for 4-1/2" drill pipe.
	One (1) for 6-3/4" - 9-1/4" drill collars.
	One (1) for 5-1/2" - 7" drill collars.
i. Tongs:	Three (3) Foley Type "DB" with 3-1/2" to 14-3/8" jaws.
j. Wireline Unit:	One (1) Mathey Surveyors, wireline measuring unit with 25,000 ft. of 0.092" line.
k. Drift Recorders:	One (1) TOTCO, 8° Instrument drift indicator.
l. Driller's Console:	One (1) Geolograph, Driller's console to contain the following: Two (2) pump pressure gauges Weight Indicator Rotary torque gauge Two (2) pump SPM gauges Pit volume gauge Trip tank volume loss gauge
m. Automatic Driller:	One (1) Geolograph Bit Sentry.
n. Spinning Wrench:	Weatherford "Spinner Hawk" for 4-1/2" drill pipe.
o. Kelly:	Two (2) 5-1/4" Hexagon, 43' long 40' working space, 3" I.D.
p. Kelly Spinner:	One (1) International, Model A6B complete with all controls for left and right hand rotation, with 6-5/8" API regular left box up and pin down.
q. Safety Valves:	Two (2) 6-3/8" O.D. Hydril 10,000 psi lower safety valves, with 4-1/2" X-Hole connections.
	One (1) OMSCO, 10,000 psi upper "kelly cock", 6-5/8" API Regular box and pin.
	One (1) Gray, Inside B.O.P., with release tool.

r. Mud Check Valves: One (1) Drilco "Mud Check" valve.

s. Brake Cooling System: Brake cooling system consists of two (2) M-G-M, machine works, 2 x 3 x 11" centrifuges with two (2) Toshiba 15 HP motors.

t. Fishing Tools: Necessary overshots for Contractor's tubulars.

u. Logging Unit: Operator's Preference.

II. WELL CONTROL EQUIPMENT:

a. Ram Preventers: One (1) Cameron "U" single 13-5/8" 10,000 psi W.P. with CIW clamp hubs top and bottom connections and with two (2) 3-1/8" 10,000 psi W.P. CIW clamp hub outlets, trimmed for hydrogen sulfide service, standard bonnet bolts, stainless steel lined ring grooves and 4-1/2" pipe rams.

One (1) Cameron "U" double 13-5/8" 10,000 psi W.P. with CIW clamp hubs top and bottom connections and with four (4) 3-1/8" 10,000 psi W.P. CIW clamp hub outlets, trimmed for hydrogen sulfide services, standard bonnet bolts, stainless steel lined ring grooves, 4-1/2" pipe rams and blind rams.

b. Annular Preventers: One (1) Hydril, GL 13-5/8" 5,000 psi W.P. with 13-5/8" 10,000 psi W.P. CIW clamp hub bottom connection, stainelss steel lined ring grooved top and bottom.

One (1) 29-1/2" Hydril, Model MSP, 500 psi W.P. with 30" 300 psi ring joint connection.

c. Drilling Spool: One (1) Drilling Spool, 13-5/8", 10,000 psi W.P., 24" high. 13-5/8" BX-159 flanged top and bottom with one (1) 3-1/16" I.D. and one (1) 2-1/16" I.D. side outlets (10,000 psi W.P.).

One (1) diverter spool, 30" ANSI 300 psi with RX-95 flange top and bottom complete with two 6" ANSI 150 psi flanged outlets and two hydraulically operated WECO sliding gate valves and jumper hoses.

One (1) double studded adaptor 30" ANSI 300 psi RX-95 studded top and 20" 2,000 psi RX-73 studded bottom.

d. Valves:

Three (3) Cameron 3-1/16" Type "F" gate valves, 10,000 psi W.P. with CIW clamp hub ends. H_2S Trim. Hydraulic operated valves.

Three (3) Cameron 3-1/16" Type "F" gate valves, 10,000 psi W.P. with CIW clamp hub ends. H_2S Trim. Manual operated valves.

Four (4) Cameron 2-1/16" Type "F" gate valves, 10,000 psi W.P. with CIW clamp hub ends. H_2S Trim.

Two (2) Cameron 2-1/16" Type "R" check valves, 10,000 psi W.P. with CIW clamp hub ends. H_2S Trim.

Seven (7) sets of Cameron clamp assemblies and ring gaskets to assemble stack.

e. Choke Manifold:

One (1) Cameron 3-1/16" 10,000 psi W.P. choke manifold with two (2) Cameron hydraulic activated adjustable chokes (remote controls), one (1) Cameron adjustable choke and one (1) 4" straight through line into buffer tank.

f. Standpipe Manifold:

One (1), 5" - 5,000 psi dual standpipe manifold.

g. B.O.P. Control Unit:

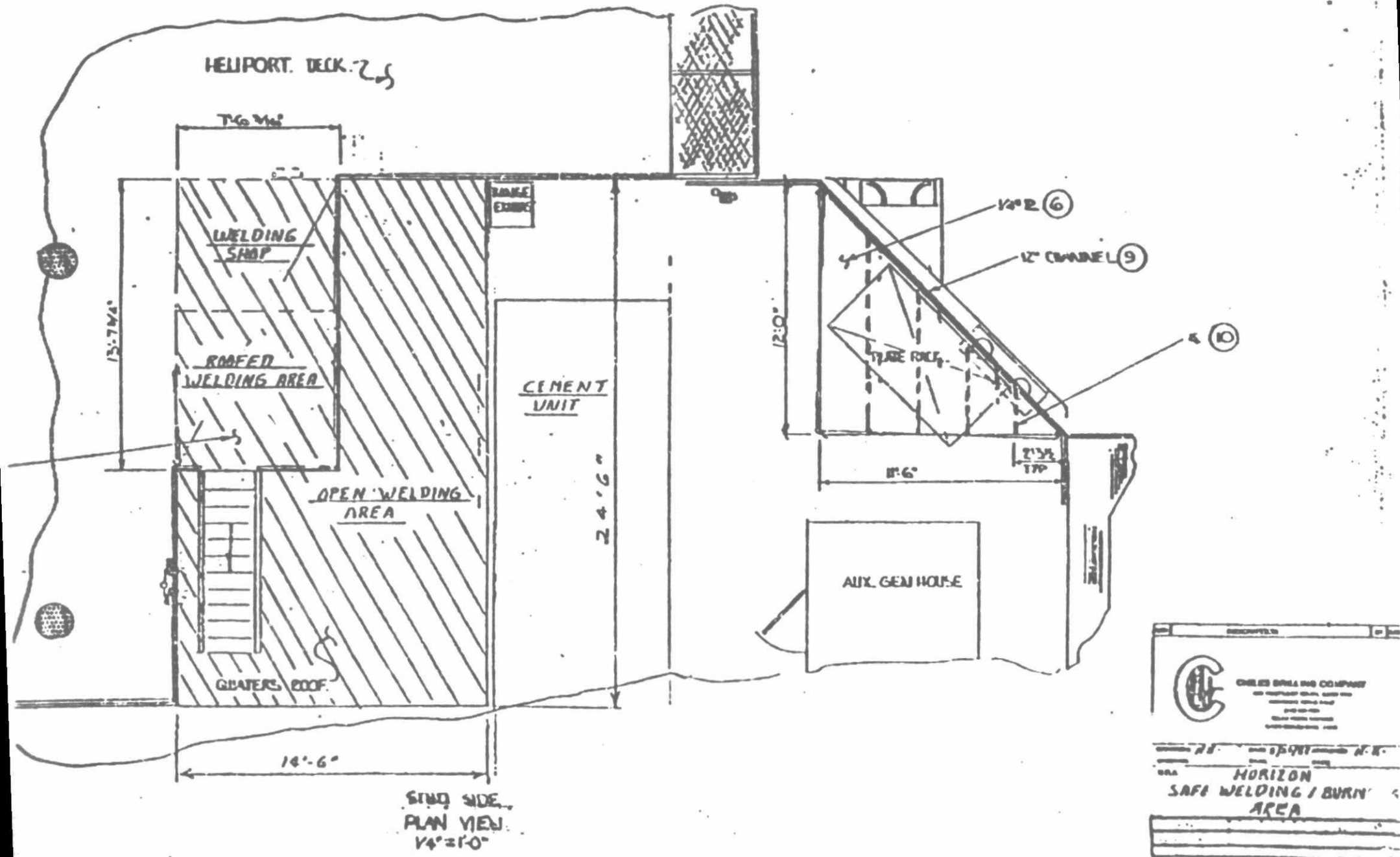
One (1) Koomey, Model T20260-3S B.O.P. control unit.

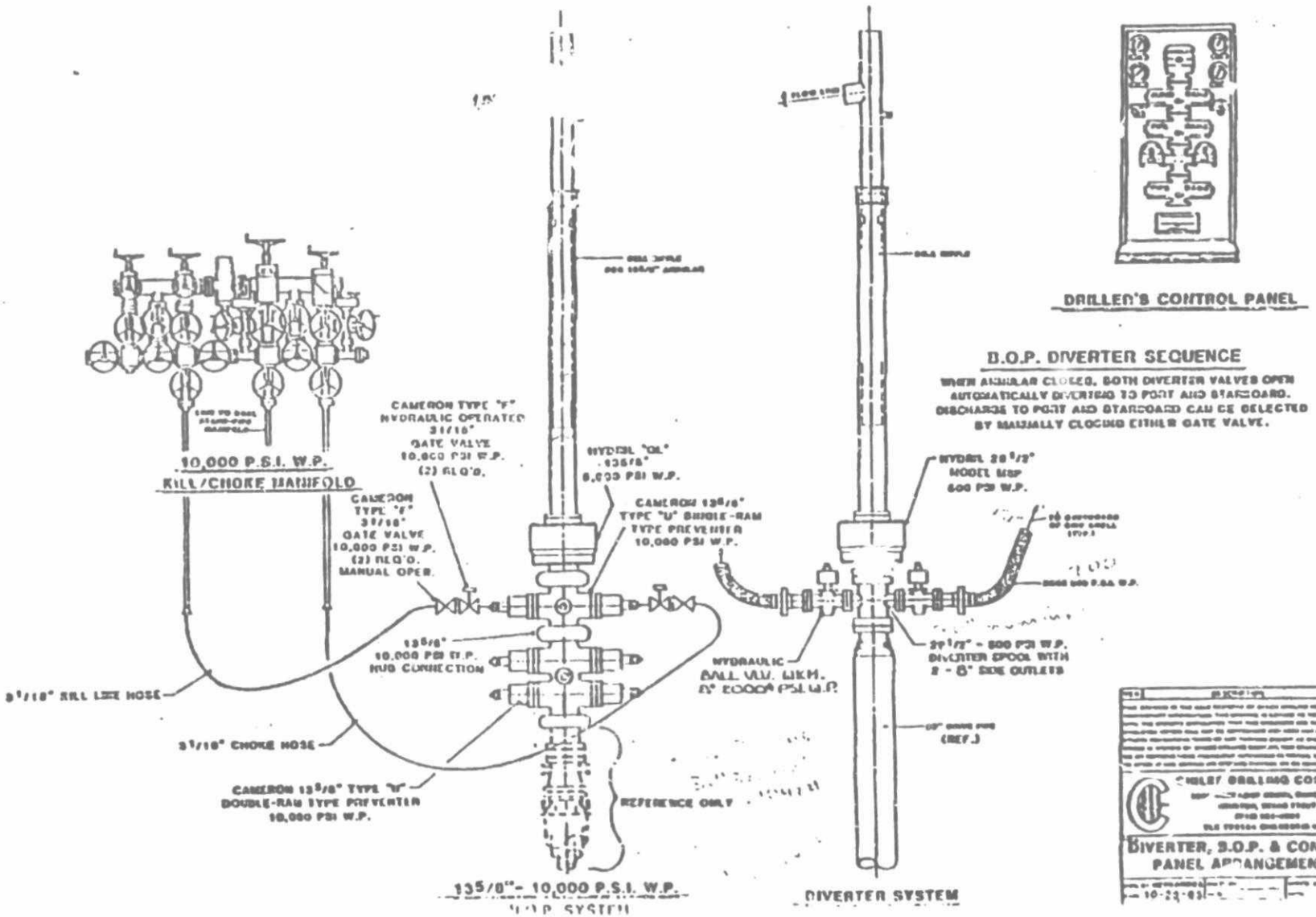
h.	B.O.P. Master Control Panel:	One (1) Koomey, Model CB116A B.O.P. master control panel.
i.	B.O.P. Remote Control Panel:	One (1) Koomey, Model ARC-6 remote control panel.
j.	B.O.P. Handling System:	Two (2) 25 ton air operated J.D. Neuhaus B.O.P. handling hoists. Hoists move along a wide flange beam (S24" x 106#) and lift up or down using pendant control.
k.	Mud/Gas Separator:	One (1) Houston Systems, 30" diameter x 8' high.

III. TUBULARS: (See Note Below)

a.	4-1/2" Grade X-95 Drill Pipe:	10,800 ft. (349 joints) 4-1/2" O.D. 16.60 lbs./ft., Grade "X-95", Range II with 6-1/4" O.D. x 3" I.D., 4-1/2" X-Hole tool joints with 18 degree taper, fine particle hardband and internal plastic coat.
b.	4-1/2" Grade X-95 Drill Pipe:	7,500 ft. (243 joints) 4-1/2" O.D., 20.00 lbs./ft., Grade "X-95", Range II with 6-1/4" O.D. x 2-3/4" I.D., 4-1/2" X-Hole tool joints with 18 degree taper and internal plastic coat.
c.	8" Drill Collars:	Twenty-one (21) - 8" O.D. x 2-13/16" I.D. with 6-5/8" API regular box and pin connections.
d.	6-1/2" Drill Collars:	Twenty-one (21) 6-1/2" O.D. x 2-13/16" I.D. with 4-1/2" X-Hole connections.
e.	5" Hevi-wate:	Fifteen (15) joints, 4-1/2" O.D. DRILCO "Hevi-Wate" DP, with 3" I.D., with 4-1/2" X-Hole connect ons, hardbanded.
f.	Subs and Bit Subs:	Necessary subs for Contractor's drill pipe, kelly and drill collars.

NOTE: Rig can be furnished with 5" drill pipe if required by Operator.


HELIPORT. DECK. 25
WELDING SHOP
ROOFED WELDING AREA
OPEN WELDING AREA
CEMENT UNIT
AUX. GEN HOUSE
QUARTERS ROOF
13'-7½"
24'-6"
12'-0"
11'-6"
14'-6"
STBD SIDE
PLAN VIEW
¼"=1'-0"
HORIZON
SAFE WELDING / BURN AREA



DRILLER'S CONTROL PANEL

B.O.P. DIVERTER SEQUENCE

WHEN ANNULAR CLOSED, BOTH DIVERTER VALVES OPEN AUTOMATICALLY DIVERTING TO PORT AND STARBOARD. DISCHARGE TO PORT AND STARBOARD CAN BE SELECTED BY MANUALLY CLOSING EITHER GATE VALVE.

SHELF DRILLING COMPANY

DIVERTER, B.O.P. & CONTROL PANEL ARRANGEMENT

DRILLING COMPONENTS

Common Chemical or Chemical Trade Name	Description of Material
Aluminum Stearate	Aluminum Stearate
"AKTAFLO-S"	Nonionic Surfactant
Barite	Barite Sulfate ($BaSP_4$)
Calcium Carbonate	Aragonite ($CaCO_3$)
Calcium Chloride	Hydrophilite ($CaCO^2$)
Calcium Oxide	Lime (Quick)
Calcium Sulfate	Anhydrite ($CaSO^4$)
Carboxymethyl Cellulose	Carboxymethyl Cellulose
Caustic Potash	Potassium Hydrate
Caustic Soda	Sodium Hydroxide (NaOH)
Chrome Lignite	Chrome Lignite
Chrome Lignosulfonate	Chrome Lignosulfonate
Drilling Detergent	Soap
"E-Pal"	Non-toxic, biodegradable defoamer
Ferrochrome Lignosulfonate	Derived from wood pulp
Gel	Sodium montmorillonite, bentonite, attapulgite
Gypsum	$CaSO^4.2H^2O$
Lignite	Lignite
Lignosulfonate	Lignosulfonate
"Mud Sweep"	Cement Pre-flush
"MOR-REX"	Hydrolyzed Cereal Solid
"Shale-Trol"	Organo-aluminum complex
Sapp	Sodium Acid Pyrophosphate
Soda Ash	Sodium Carbonate
Sodium Bicarbonate	$NaHCO^3$
Sodium Carboxymethyl Cellulose	Sodium Carboxymethyl Cellulose
Sodium Chloride	NaCl
Sodium Chromate	$NaCr04.10H^2O$
Starch	Corn Starch
"TX-9010"	Biodegradable drilling lubricant
"TORQ-Trim"	Biodegradable drilling lubricant

MUD ADDITIVES

Common Chemical or Chemical Trade Name	Description of Material
"Black Magic"	(base mud concentrate
"Black Magic Supermix"	Sacked concentrated oil base mud
Diesel	Used to mix certain loss-circulation pills
"Jelflake"	Plastic foil, shredded cellophane
MICA	Loss-circulation material
"Pipe-Lax"	Surfactant mixed with diesel
"Wall-Nut"	Ground walnut shells
Wood Fibers	Loss-circulation material

G:poe/4dfc

PROJECTED AIR EMISSIONS REPORT
FEDERAL LEASE OCS-G 6845 AND OCS-G 6851
BLOCKS 830 AND 873 MOBILE

EMISSIONS IN POUNDS PER DAY

Temporary Sources[1]	NO_x	CO	VOC	TSP	SO_2
Drilling Equipment[2]	206.4	44.7	16.5	14.7	13.7
Construction Equipment[3]	-	-	-	-	-
Other Sources[4]	19	15	11	2	2
MAXIMUM EMISSIONS	225.4	59.7	27.5	16.7	15.7

EMISSIONS IN TONS PER YEAR

Temporary Sources[1]	NO_x	CO	VO	TSP	SO_2
Drilling Equipment[2]	10.3	2.2	0.8	0.7	0.7
Construction Equipment[3]	-	-	-	-	-
Other Sources[4]	0.95	0.75	0.55	0.1	0.1
MAXIMUM EMISSIONS	11.25	2.95	1.35	0.8	0.8

CO Exemption (E) in Tons Per Year.

$$E = 3400 \times (\text{distance from shore})^{2/3} = 3400\ (4)^{2/3} = 8{,}568$$

NOx, VOC, TSP, SO_2 Exemption (E) in Tons Per Year.

$$E = 33.3 \times \text{distance from shore} = 33.3\ (4) = 133.2$$

(1) Air emissions from temporary activities that occur in one location for less than three years are exempt from further air quality review. Temporary activities for this proposal will last approximately 100 days, therefore, being within the limits of the definition of temporary activities.

(2) Based on 60 hphr/ft. from study, "Atmospheric Emissions From Offshore Oil and Gas Development and Production," EPA 450/3-77-026, June, 1977.

(3) Based on emission factors from "Compilation of Air Pollutant Emission Factors", Fourth Edition EPA Report AP-42, September, 1985 (Tables 3.2.-1, 3.3-1, and 3.4-1).

(4) Based on emission factors from "Compilation of Air Pollutant Emission Factors," Fourth Edition EPA Report AP-42, September, 1985 (Tables 3.2-1, 3.3-1, and 9.1-2). Included are helicopter landing and take off (avg. of two trips/week); supply and/or crew boats, at dockside (avg. of 12 hrs./day, two days/week); fuel storage and transfer; loading and unloading operations; and incineration of waste paper (average of 800 lb/mo) for duration of project.

ENVIRONMENTAL REPORT
AND
AIR QUALITY REVIEW
FOR COASTAL MANAGEMENT CONSISTENCY DETERMINATION
BY THE STATES OF LOUISIANA AND ALABAMA ON OPERATIONS
PROPOSED IN THE PLAN OF EXPLORATION FOR
GULF OF MEXICO LEASES OCS-G 6845 AND 6851
MOBILE BLOCKS 830 AND 873
MAY 1988

Prepared by:

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DESCRIPTION OF PROPOSED ACTION

This report addresses the activities proposed by Texaco Producing Inc. (TPI) for Mobile Blocks 830 and 873 (OCS-G 6845 and OCS-G 6851). The approximate location of the proposed activities are presented in Figure 1, a general vicinity map of the Gulf of Mexico Outer Continental Shelf (OCS) lease areas.

It is anticipated that a jack-up rig will be moved on the leases and five (5) exploratory wells will be drilled. The surface locations of the wells and additional information regarding specific activities proposed by TPI for these blocks are included in the Plan of Exploration (POE) to which this report is attached.

The proposed activities will be carried out by TPI with a guarantee of the following:

1. The best available and safest technologies will be utilized throughout the project. This includes meeting all applicable requirements for equipment types, general project layout, safety systems, equipment and monitoring systems.

2. All operations will be covered by a Minerals Management Service (MMS) approved Oil Spill Contingency Plan.

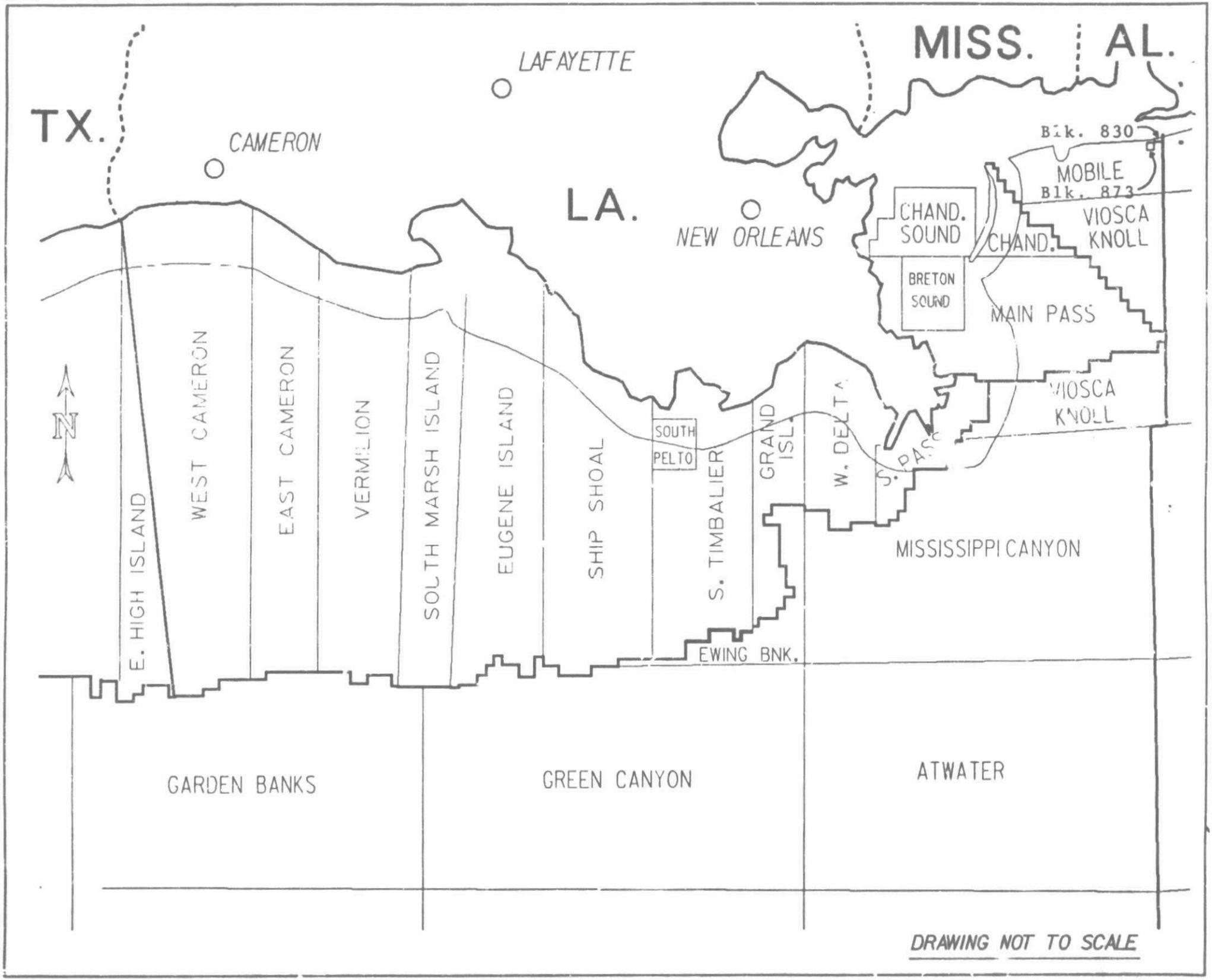
TX.
LAFAYETTE
CAMERON
LA.
NEW ORLEANS
MISS.
AL.
Blk. 830
MOBILE
Blk. 873
CHAND. SOUND
CHAND.
VIOSCA KNOLL
BRETON SOUND
MAIN PASS
VIOSCA KNOLL
N
E. HIGH ISLAND
WEST CAMERON
EAST CAMERON
VERMILION
SOUTH MARSH ISLAND
EUGENE ISLAND
SHIP SHOAL
SOUTH PELTO
S. TIMBALIER
GRAND ISL.
W. DELTA
J. PASS
MISSISSIPPI CANYON
EWING BNK.
GARDEN BANKS
GREEN CANYON
ATWATER
DRAWING NOT TO SCALE

FIGURE 1

3. All applicable Federal, State, and local requirements regarding air emissions, water quality, and discharge for the proposed activities, as well as any other permit conditions, will be complied with.

A. Travel Modes, Routes, and Frequencies

In addition to the drilling rig, service boats and helicopters will be used to transport equipment, material, personnel, and supplies to the drill site. TPI expects to operate the service boats out of support base facilities in Morgan City, Louisiana and Theodore, Alabama. It is estimated that the service boats will make three (3) to four (4) trips each week. Helicopters flights to the area will average two (2) trips per week and will originate from and return to Petroleum Helicopters, Inc.'s facilities at Amelia, Louisiana.

It is anticipated that the transportation vessels will utilize the most direct routes from their points of origin. However, because a vessel supporting the proposed exploration activities may be scheduled for other stops in the area, the exact route for each vessel on each particular trip cannot be predetermined.

B. Support Facilities and New Personnel

The proposed activities are expected to use two (2) existing support bases in Morgan City, Louisiana and Theodore, Alabama. The proposed activities will not require any expansion to these facilities. The proposed activities will be accomplished using existing employees and contract personnel. No new employment is expected to be generated as a result of these activities.

C. New Support Facilities

No new support facilities will be required.

D. New or Unusual Technology

No new techniques or unusual technology will be used.

E. Location of the Proposed Activities

The Mobile area exploration activity is located approximately three to five (3-5) miles south of the Alabama coast off Fort Morgan Peninsula. Figure 1 shows the location of Blocks 830 and 873 in relation to the Gulf Coast, as well as the geographic relationship between Mobile Blocks 830 and 873 and the other OCS lease areas.

DESCRIPTION OF THE AFFECTED ENVIRONMENT AND IMPACTS

A. Physical and Environmental

1. Commercial Fishing

Mobile Blocks 830 and 873 fall within the brown and white shrimp harvest area, (U.S.D.I., FEIS, Gulf of Mexico, 1987, Visual No. 2) wherein the possibility of shrimping activities exists. The placement of a drilling rig on Blocks 830 and 873 will remove a portion of the trawling space available for use by commercial fisheries and provide the possibility of fishing gear conflicts. Additionally, the waters adjacent to the drill site may become temporarily turbid due to drilling operations.

Mobile Block 873 also falls within the "principal industrial bottomfish harvest area" (Visual No. 2). Fishes within this group are taken on or near the bottom by trawlers. Many of the species taken in this category spawn in offshore waters and it is possible that the eggs might be affected by contact with drill cuttings and/or drilling mud if they were present near the rig during such discharges. These discharges may also cause temporary relocation of adults due to inundation of feeding grounds at the drill sites.

Both commercial shrimp and fish trawling activities may be temporarily interrupted by the placement of the drilling rig, but no long term effects are anticipated as a result of the proposed activities.

2. Shipping

Mobile Blocks 830 and 873 are almost completely covered by a designated shipping fairway. The northern 50% of the Block 830 and the southern 25% of Block 873 are clear (U.S.D.I., FEIS, Gulf of Mexico, 1987, Visual No. 3). It is likely that marine vessels supporting the proposed activities will utilize this shipping fairway to gain access to the support bases. However, it is unlikely that the marine vessels will have a significant effect on fairway traffic. All marine vessel operations will be in accordance with the U.S. Coast Guard's regulations regarding navigation standards and the drilling rig and each marine vessel will be equipped with all U.S. Coast Guard required navigational safety aids.

3. **Small Craft Pleasure Boating, Sport Fishing and Recreation**

The activities proposed in the accompanying POE are primarily confined to Mobile Blocks 830 and 873, which are located approximately three to five miles from the Alabama coast and have a water depth of approximately 50 feet. Many fishermen charter boats to deep-sea fish and sport dive in the northern Gulf. Petroleum platforms in the northern Gulf provide recreation for fishermen and scuba divers because they act as artificial reefs attracting and establishing aquatic communities including highly sought after food and sport fishes. The reef effect created by petroleum platforms is well known and is evidenced by numerous private boat owners who regularly visit offshore facilities to harvest food and sport fishes.

Frequently, offshore rigs and platforms serve as navigation points for small commercial and recreational marine craft. Manned drilling rigs and platforms can also provide a haven for small craft operators forced to abandon their vessels during storms or following boat accidents. The installation and use of navigational aids, lifesaving equipment, and other safety requirements pursuant to Coast Guard regulations are standard procedure for drilling rigs and marine vessels utilized by TPI.

4. **Cultural Resources**

There are no known cultural resources located in Mobile Blocks 830 and 873. Visual No. 4 from the Final Environmental Import Statement (FEIS) (U.S.D.I., 1987) indicates that Mobile Blocks 830 and 873 are located within the U.S.D.I. designated historic and prehistoric cultural resources high probability lines. The geohazard survey and archaeological assessment

conducted on Blocks 830 and 873 provides the following for prehistoric times.

"The deeper channel margins which are 30 feet below the seafloor may have been inhabited by Paleo-Indians during the subaerial exposure of the area associated with the Late Wisconsin low sea level cycle. Alluvial deposits could have covered possible site remains and protected cultural materials from destruction by marine surf action. Following a period of marine conversion during which the area could not have been inhabited by humans, the sea level oscillation provided another period of potential human occupation from 8,000 to 6,400 years B.P. when the upper channel margins directly beneath the mudline noted throughout Block 830, 873 and 918 were subaerially exposed. Transitional Paleo-Indian and early Archaic cultural groups may have moved into this study area during this later lowered sea level cycle.

With the final transgression of sea level across the region soon after 6,400 years B.P., the area could not have been inhabited by prehistoric hunter and foragers. The upper 30 feet of sand across the western portions probably could not contain any in situ human camp sites, although durable artifacts of stone, bone, or baked clay could be scattered within the surficial sands. The zone within a few hundred feet of the plotted channel margins exhibit the highest potential for prehistoric site occurrence and possible preservation of cultural material."

For historic times, the report indicates:

"In terms of potential historic shipwreck sites, the local water depths preclude the possibility of any historic vessel having run aground, and the ferrous debris may have been discarded by passing boats. This region, however, has seen rather extensive historic shipping activity, and the anomalies should be avoided as possible cultural resources."

The report further state that six (6) magnetic anomalies were detected in Block 830 and one (1) in Block 873. Attempts to verify the point sources for these anomalies with sonar proved inconclusive. These contacts are presumed to be articles of ferrous debris which are either buried below the seafloor or are too small to be acoustically detected. TPI will take proper precautions when operating near any of these anomalies. Therefore, based on the above, no impact on cultural resources is expected.

5. Ecologically Sensitive Features

There are no known ecologically sensitive features located on Mobile Blocks 830 and 873 (U.S.D.I., FEIS, Gulf of Mexico, 1987, Visual No. 3). The nearest sensitive feature are the fish havens located approximately two (2) miles to the south of Block 873. The proposed operations should have no impact on this feature.

There is no indication of "hard" or live bottoms within the surveyed areas of Blocks 830 and 873. The local bottom topography is characterized by low-relief sand ridges and wide troughs that are resultant of ancient sand

bars and spits reworked by littoral currents and tidal scour. Side scan sonar records highlighted the low relief sand undulations or broad sand waves.

The onshore support bases will necessitate the passage of marine vessels and helicopter traffic. These operations will have only minimal impact on the Louisiana and Alabama shorelines.

6. **Existing Pipelines and Cables**

There is no evidence of any cables or pipelines being located in Mobile Blocks 830 and 873.

7. **Other Mineral Uses**

The activities proposed for Mobile Blocks 830 and 873 will have no impact on other mineral uses.

8. **Ocean Dumping**

The major sources of ocean dumping related to OCS hydrocarbon exploration activities are drilling muds and drill cuttings. Drill cuttings are brought to the surface by the drilling mud. These cuttings are separated and disposed of overboard. After the exploratory drilling in Mobile Blocks 830 and 873 is completed, TPI anticipates dumping its excess water-based drilling fluid (estimate 1000 bbls.). If any oil-based mud is used, it will be transported to shore for proper disposal. Treated domestic waste, drill water, and kitchen and other wastes will also be disposed of at the proposed drill site. There will be no intentional discharge of any oily or hazardous materials in violation of MMS or EPA regulations.

9. **Endangered or Threatened Species**

Federally listed endangered or threatened species which might occur in the Mobile Area are th fin whale, humpback whale, right whale, sei whale, sperm whale, Kemp's ridley turtle, green turtle, hawksbill turtle, leatherback turtle, and loggerhead turtle (U.S.D.I., FEIS, Gulf of Mexico, 1987, p III-44). Of the whale species, the sperm whale is perhaps the most common in the Gulf of Mexico. Generally, these whales inhabit the waters of the continental slope and the deep oceanic waters. The other species of whales may be considered uncommon in the Gulf. The leatherback turtle is believed to prefer the deeper oceanic waters while the other species may be considered more coastal in nature. However, it is possible that any of these turtle species may occur in the project area at one time or another. Little or no impact is expected to any of these threatened or endangered species by the proposed activities.

Federally listed endangered or threatened species which may occur in the vicinity of the onshore bases are the bald eagle and American alligator (U.S.D.I., FEIS, Gulf of Mexico, 1987, Visual No. 2). The American alligator, which inhabits the Gulf Coast, is listed in Louisiana as "threatened by similarity of appearance and is listed in Alabama as endangered." The bald eagle inhabits the area from Morgan City, Louisiana east and north to the Mississippi River. The Alabama, Chotawatchee and Perdido Key beach mice, which occur along the eastern Alabama and northwestern Florida Gulf beaches were listed as endangered species on June 6, 1985. The beach mice are restricted to sand dune habitat on coastal areas along the eastern Alabama and northwestern Florida coasts. No federally listed endangered plant species are known to occur in the Louisiana or Alabama coastal area.

The FEIS for lease sales 113, 115 and 116 (U.S.D.I., 1987) discusses the occurrence and impact on endangered or threatened species. The impacts discussed are primarily based on the occurrence of oil spills. The impacts on various endangered and threatened species will depend on the nature of the spill, weather conditions, proximity of the spill to the species, tolerance of the species for oil, and the response time and effectiveness of the spill cleanup and containment services. Given these variables, the impact on the various endangered or threatened species will vary from no effect to serious.

The experience of oil and gas exploration in the Gulf of Mexico indicates that there is a small probability of occurrence of an oil spill. The probability remains low because of the level of technology used by the industry to insure safe and responsible operations. TPI, as a prudent operator, will take the necessary measures to reduce the probability of oil spills. Towards this, TPI will comply with OCS Order No. 7 on pollution prevention and control, and has an approved Oil Spill Contingency Plan on file with the MMS. It is unlikely that the offshore or onshore activities related to the Mobile area exploratory drilling activities will have any effect on the federally listed endangered or threatened species.

B. Socio-Economic Data

In accordance with MMS guidelines, the initial OCS Socio-Economic Data Base Report for the support base facilities utilized by TPI will be prepared for submission pursuant to the specific parameters to be established by the MMS at a later date.

UNAVOIDABLE ADVERSE IMPACTS

The greatest threat to the environment would be caused by an oil spill or well blowout. These occurrences can be reduced in number by utilizing trained personnel, adequate operational safeguards, and employing available safety and pollution control systems. These measures are standard operating procedure for TPI.

The unavoidable adverse impacts that will occur as a result of the proposed exploratory drilling will be few in number and temporary in nature. The primary adverse impacts are a localized degradation of water and air quality in the vicinity of the drilling site, the potential obstruction to commercial and recreational fishing vessels, and the disruption and/or killing of benthic and/or pelagic organisms during the location of the drilling rig and during the disposal of muds, cuttings, domestic wastes, and treated sewage.

The discharge of drill cuttings and water-based muds will result in an increase in water turbidity, burial of benthic organisms, and possible toxic effect on marine organisms in the immediate vicinity of the drilling rig. A reduction in photosynthetic activity and plankton population can also be expected as a result

of discharging. However, it is expected that the pelagic and benthic organisms will repopulate the area rapidly after discharges end.

The proposed activities will generate a small amount of air pollutants due to the emissions from the diesel engines; therefore, some deterioration in air quality of the OCS operation area is expected. These emissions affect only the immediate exploration activity site and are rapidly dissipated by the atmosphere. A Projected Air Emissions Report has been prepared for the proposed activities and is included in the appendix to the POE to which this Environmental Report is a part.

Commercial and recreational fishing could be affected by the proposed activities, mainly in terms of interference. Although the unavoidable adverse impacts could include some smothering of shellfish, reduction of the area presently available for unrestricted fishing, and minimal finfish killing, fishing activities would not be significantly affected.

VFC:pdm

VFC/16

REFERENCES

1. United States Department of the Interior, Minerals Management Service, Final Environmental Impact Statement, Gulf of Mexico, December 1983.

2. United States Department of the Interior, Minerals Management Service, Final Environmental Impact Statement, Gulf of Mexico, December 1984.

3. United States Department of the Interior, Minerals Management Service, Final Environmental Impact Statement, Gulf of Mexico, November 1985.

4. United States Department of the Interior, Minerals Management Service, Final Environmental Impact Statement, Gulf of Mexico, November 1986.

5. United States Department of the Interior, Minerals Management Service, Final Environmental Impact Statement, Gulf of Mexico, October 1987.

COASTAL ZONE MANAGEMENT
CONSISTENCY CERTIFICATION

Exploration
Type of Plan

Mobile Blocks 830 and 873
Area and Block

OCS-G 6845 and 6851
Lease Number

The proposed activities described in detail in this Plan comply with Alabama's approved Coastal Zone Management Program and will be conducted in a manner consistent with such Program.

Texaco Producing Inc.
Lessee or Operator

J. A. Newton Jr.
Certifying Official

May 27, 1988
Date

COASTAL ZONE MANAGEMENT
CONSISTENCY CERTIFICATION

Exploration
Type of Plan

Mobile Blocks 830 and 873
Area and Block

OCS-G 6845 and 6851
Lease Number

The proposed activities described in detail in this Plan comply with Louisiana's approved Coastal Zone Management Program and will be conducted in a manner consistent with such Program.

Arrangements have been made with the State-Times in Baton Rouge, Louisiana to publish a public notice of the proposed activities no later than June 6, 1988.

Texaco Producing Inc.
Lessee or Operator

J. A. Newton
Certifying Official

May 27, 1988
Date