

008-0-3208
2-0388

(05-7-1)

MAR 24 1980

Federal Programs Office
Office of Coastal Zone Management
3000 White Haven Street
Washington, D.C. 20235

Gentlemen:

In accordance with 30 CFR 250.34, revised December 13, 1979, enclosed is a copy of a proposed Supplemental Exploration Plan submitted by Exxon Company, U.S.A. for lease OCS-G 3208, Block 862, Viosca Knoll Area, Control No. S-0388.

Sincerely yours,

(Orig. Sgd.) D. W. Solanas

D. W. Solanas
Oil and Gas Supervisor
Operations Support
Gulf of Mexico Area

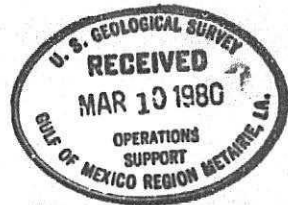
Enclosure

cc: OCS-G 3208
OCS-2-5 w/enclosure

DJPatz:lp:3/11/80

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EXXON CORPORATION
SUPPLEMENTAL PLAN OF EXPLORATION
GULF OF MEXICO
BLOCK 862, VIOSCA KNOLL AREA
OFFSHORE, LOUISIANA



- SECTION 1: PLAN DESCRIPTION
- SECTION 2: DRILLING EQUIPMENT
- SECTION 3: GEOLOGICAL AND GEOPHYSICAL SURVEY RESULTS, AND SHALLOW DRILLING HAZARDS REPORT
- SECTION 4: LOCATION
- SECTION 5: PROPRIETARY DATA
- SECTION 6: OIL SPILL CONTINGENCY
- SECTION 7: MUD ADDITIVES

"FOR PUBLIC INFORMATION"

BLOCK 862, VIOSCA KNOLL AREA
OFFSHORE, LOUISIANA

SECTION 2: DRILLING EQUIPMENT

A. DESCRIPTION

We intend to utilize the Zapata Yorktown, a 200' x 260' seimsubmersible drilling vessel, or similar drilling equipment. The Yorktown is moored on location with an 8-line spread with each line consisting of 2500' of 2-3/4" chain and 4500' of 2-3/4" wire rope. Each line is connected to a 40,000 pound Moorfast anchor. A descriptive rig brochure, a schematic of the diverter system, and a listing of blowout prevention equipment w'th a configuration schematic for OCS-G 3208 No. 4 are attached.

B. EMERGENCY PLAN

Our plan for abandoning the location, in case of an emergency such as a well kick, will vary in accordance with the severity of the occasion. If the well cannot be controlled by our usual normal methods, and a possible broaching is imminent, then anchor chains on the down wind side of the vessel will be slackened or dropped; and anchors on the up wind side of the vessel will be tightened and the rig moved off the location. Transportation will be available to evacuate personnel from the rig and area as need be. Appropriate U. S. Coast Guard prescribed life rafts, jackets, and ring buoys will be provided.

C. SAFETY FEATURES

Safety features will include well control and blowout prevention equipment to comply with OCS Order No. 2.

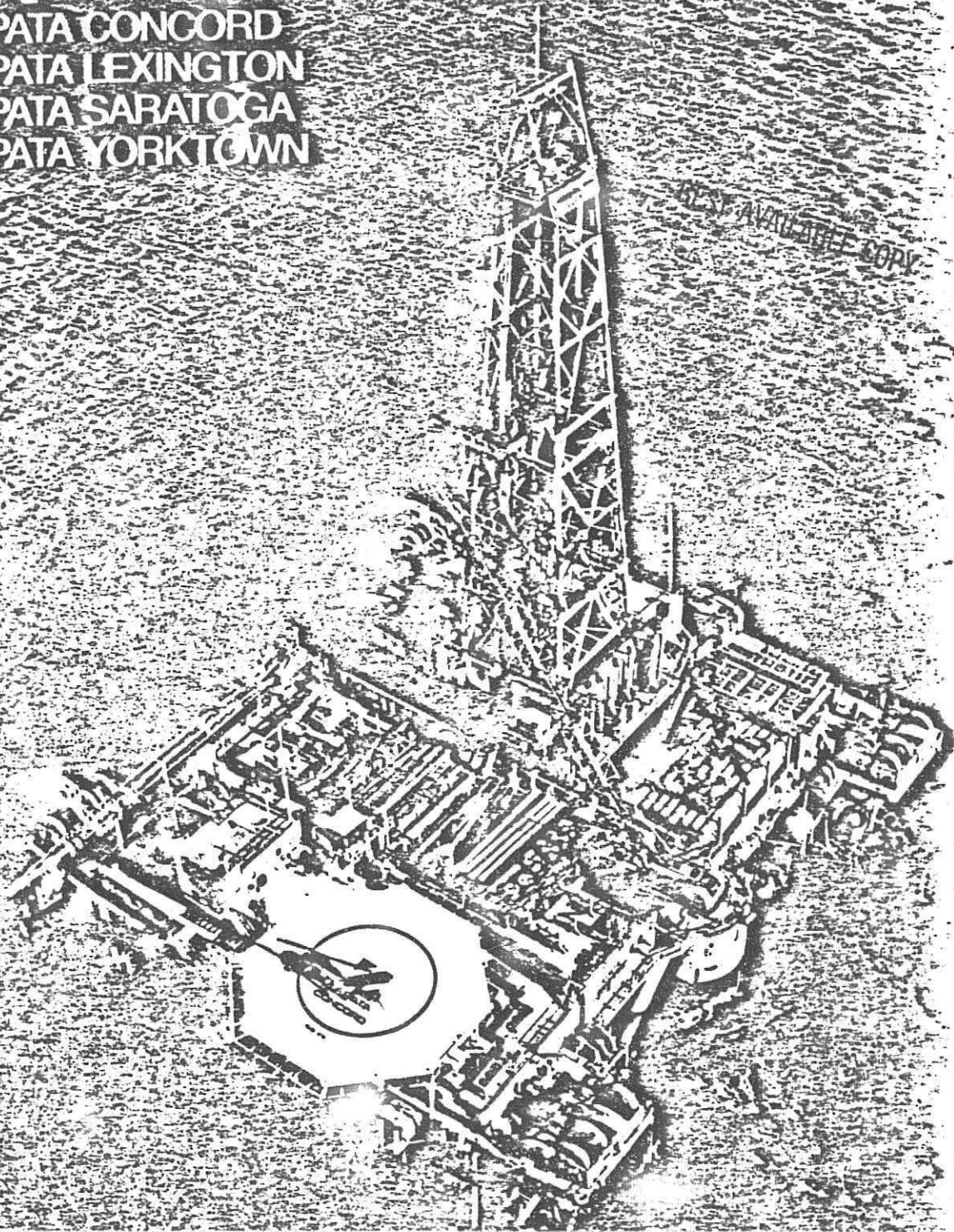
D. POLLUTION PREVENTION PLAN

Washed cuttings and table scraps will be disposed of into the Gulf. Pollution prevention and control features will prevent contamination, in accordance with OCS Orders No. 7 and 8. The vessel is equipped with drip pans, curbs, and gutters and such will be maintained. A USCG approved Type II sewage unit is installed.

Zapata SS-2000 Class

ZAPATA CONCORD
ZAPATA LEXINGTON
ZAPATA SARATOGA
ZAPATA YORKTOWN

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Zapata SS-2000 Semisubmersible

The contemporary offshore drilling industry needs rigs with a wide range of capabilities. Zapata's SS-2000 Class has been designed with the ability to operate efficiently year around at deep water, moderate environment locations. At the same time it has excellent mobility characteristics.

The increased emphasis on the ability to drill in deep water has led to the development of a floating unit to drill in depths of 150 feet to 2,000 feet or more.

After initial studies of existing designs were compared with the trend of industry requirements, Zapata developed design parameters for the new unit. These included the following key features:

- Ability to continue operations in seas up to 30 to 40 feet
- Ability to remain moored in seas of 75 feet
- Variable deckload capacity of 2,000 tons
- Load capacity enabling all movements to be made with anchors and anchor chains stowed aboard the vessel
- Target speed of 10 knots under tow
- Mooring system for at least 2,000 feet of water

These parameters served as a basis for the development of the SS-2000 design by the noted naval architectural consulting firm, Friede and Goldman, Inc., working in conjunction with Zapata's technical services division.

This development program included designing the structure, model tank tests of

the design, and performing strength analyses. These were done concurrently with a program for selection of the optimum drilling and auxiliary equipment.

The resulting design uses catamaran lower hulls with six stability columns. The lower hulls have a configuration with faired bows providing optimum heave dampening action and towing characteristics. The main deck is designed to accommodate the required machinery, storage and quarters spaces.

The Zapata SS-2000 is a drilling rig designed to meet the water depth requirements that will be required in the very near future, using equipment and techniques that have been proven by previous experience.

Key Features

Stability

Seakeeping capability in rough seas for:

• Drilling in waves up to 30 to 40 feet.

• Remaining moored in waves up to 75 feet.

Mobility

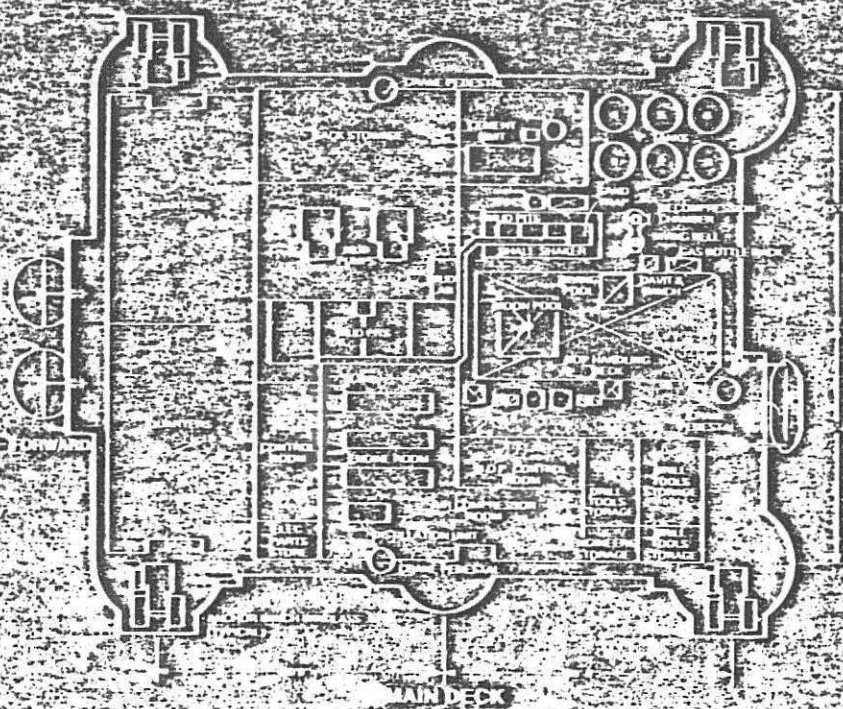
Excellent towing characteristics at speeds of up to 10 knots

Deepwater Capability

Mooring system designed for 2,000-foot water depths

Large Capacity for Consumables

Deckload capacity of 2,000 tons permits operation for long periods without resupply.



Design Considerations

Design wave: 75 ft. height with 15 second period.

Design wind: 125 knots sustained wind.

Design water depth: Range 150 ft. to 2,000 ft.

Design analyses: A computer stress program was used to evaluate wave loading from 75 ft. wave of 15-second period by passing wave through moored platform for approach angles of 0°, 22½°, 45°, 67½° and 90°. Results were input to a stress evaluation program to determine principal truss, beam, strut, diagonal and joint reactions and stresses.

Structural steel: Cold weather steel for 14°F.

Normalized ABS Grade EH-36 for highly stressed areas and principal members.

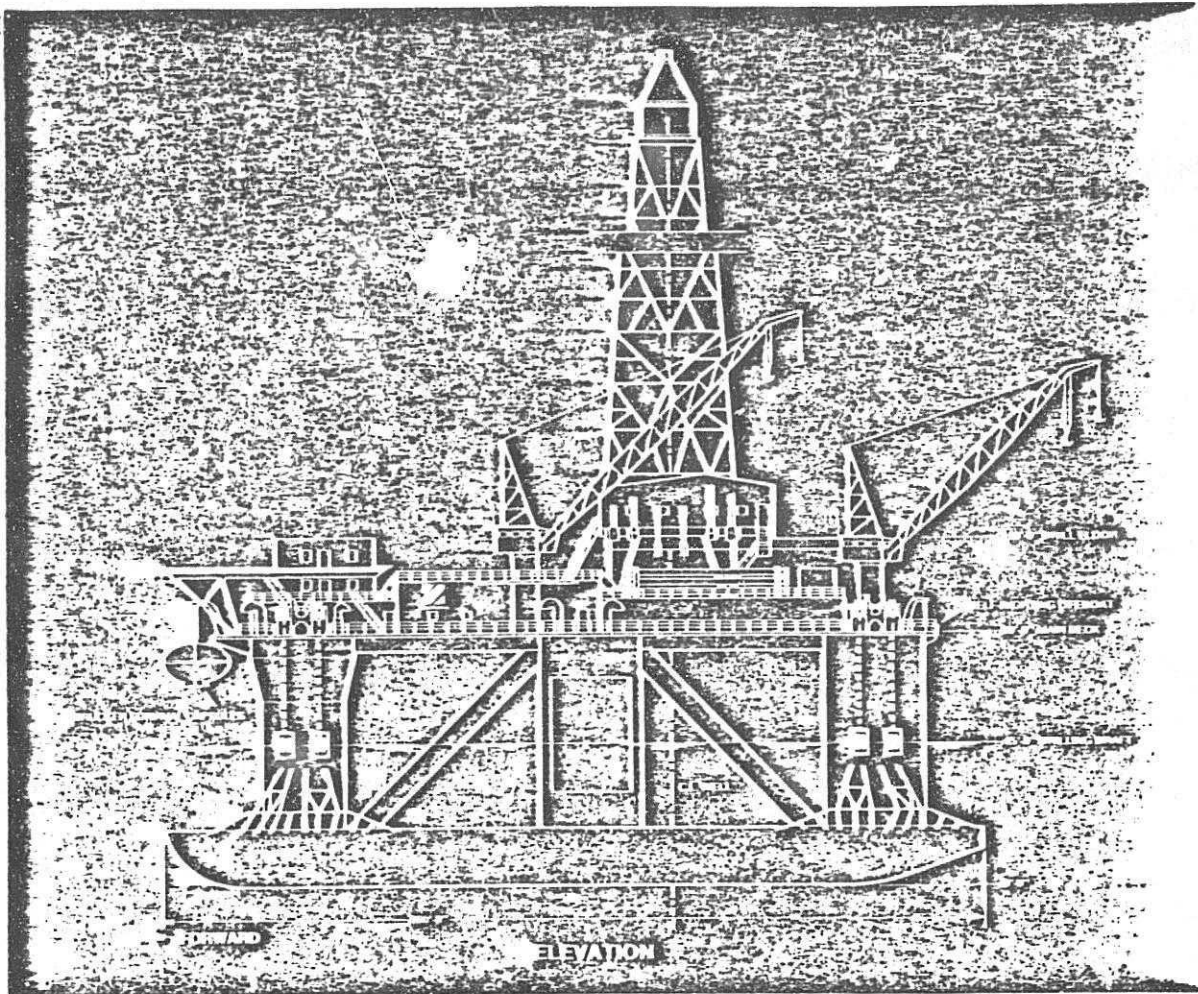
Design stresses: Calculated stresses in principal members in accordance with AISC Manual of Steel Construction, ABS Rules for Steel Vessels and ABS Rules for Offshore Mobile Drilling Units.

U. S. registration, ABS classification and USCG certification.

Zapata SS-2000 Natural Periods

Motion	Natural Period	Moored
Roll	34.1 seconds	27.0 seconds
Pitch	30.2 seconds	30.0 seconds
Heave	21.6 seconds	19.7 seconds

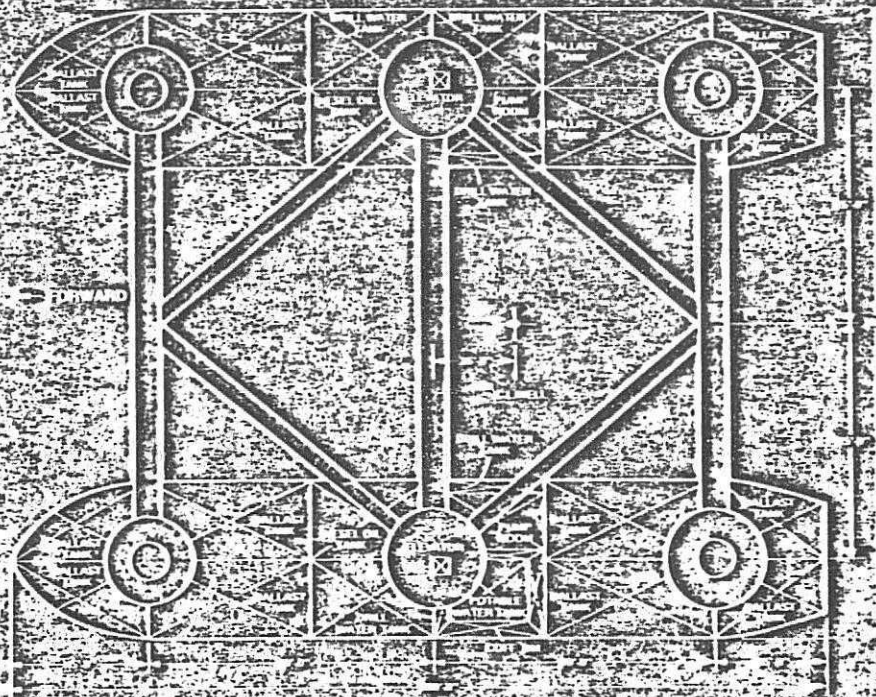
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Principal Dimensions

Length of lower hulls	260 ft.	Diameter of stabilizing columns forward	26 ft.
Overall width of lower hulls	200 ft.	Height to main deck	80 ft.
Width of each lower hull	50 ft.	Overall width of upper deck	214 ft.
Separation between lower hulls	100 ft.	Overall length of upper deck	228 ft.
Depth of lower hulls	20 ft.	Diameter of struts and braces	5 ft. to 9 ft.
Number of stabilizing columns	6	Drilling draft	45 ft.
Length of stabilizing columns	60 ft.	Drilling displacement (short tons)	18,760 s.t.
Diameter of stabilizing columns aft	32 ft.	Severe storm draft	35 ft.
Diameter of stabilizing columns amidships	32 ft.	Severe storm displacement (short tons)	17,300 s.t.

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LOWER HULL AND DECK

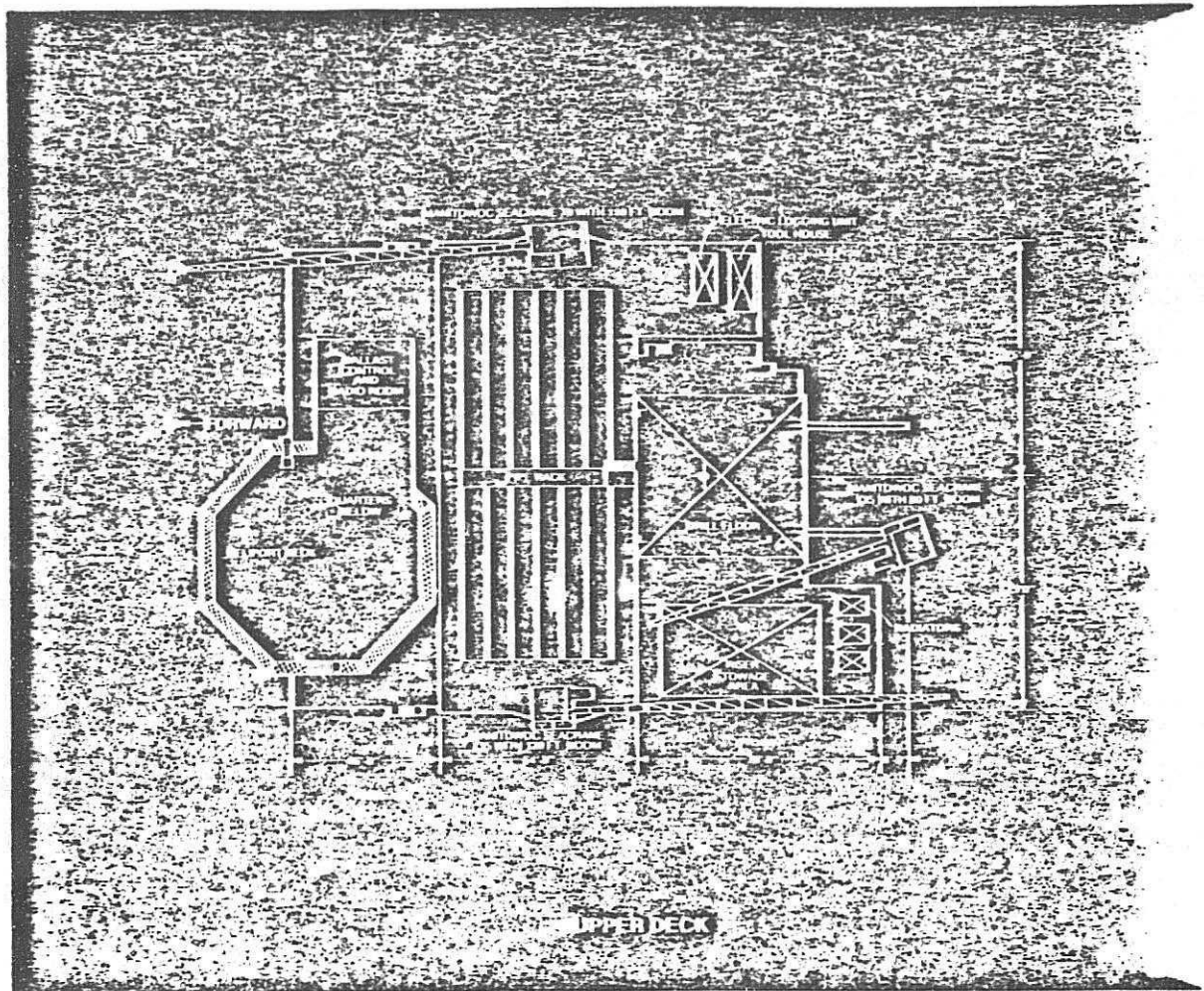
Variable Deckload Capacity

Bulk mud and cement	10,200 cu. ft.
Sack materials	6,000 sacks
Liquid mud	1,720 bbls.
Pipe rack	6,240 sq. ft.
Marine riser rack	3,120 sq. ft.
Potable water	100 bbls.

Variable Lower Hull Capacity

Fuel oil	6,900 bbls.
Drill water	8,800 bbls.
Ballast water	40,000 bbls.
Potable water	1,225 bbls.

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Major Drilling and Auxiliary Equipment

Derrick: Derricks, Inc.—40 ft. x 40 ft. base, 160 ft. clear height, 18 ft. x 18 ft. water table, designed to accommodate motion compensator and automated pipe racking. Rated at 1,000,000 lbs. static hook load capacity.

Power package: Three EMD Model 16E8 power units, each consisting of Model 645, 16 cylinder engine driving Model A20-6, 600 volt, 3 phase, 60 Hz alternator. Each

unit ABS rated at 1,400 KW. DC power provided through SCR rectifier system. Total engine power: 6,000 HP.

Drawworks: Oilwell E3000 double drum, with Elmagco 7838 auxiliary brake, with 1 1/2 inch drill line. Driven by two EMD 79MD DC electric motors, totaling 2,000 HP intermittent.

Mud pumps: Two Oilwell 1700 PT triplex single acting piston pumps, each with centrifugal charge pump and Hydril K20-5000

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Zapata "CS" Mooring System

The Zapata SS-2000 is equipped with the innovative Zapata "CS" mooring system, commensurate with its deep water design capabilities for operation on the Continental Slope offshore regions beyond the Continental Shelf limit of 600 ft. The Zapata "CS" system consists of a unique eight-line spread with each line consisting of 2,500 ft. of 2 3/4 in. chain and 4,500 ft. of 2 3/4 in. wire rope.

The Zapata "CS" system has evolved from extensive computer analyses by the Zapata technical services division based on the model test data, theoretical evaluations and mooring system operational data. The design objectives were:

- Ability to remain on location in water depth and sea conditions commensurate with both the platform's capability to conduct drilling operations and the maximum design wave conditions.
- Ability to be (1) run out and set and (2) tripped and retrieved in an expedient manner using existing anchor handling workboats, and mooring equipment installed entirely on the drilling platform.

Comparison of the maximum storm wave capabilities of the Zapata "CS" mooring system and conventional systems indicates the clear superiority of the unique combination chain-wire system for operations beyond the 600 ft. water depth. Another advantage of this system is that it can be handled by anchor handling workboats now in existence or under construction. The system consists of:

Anchors: Eight—40,000 lb. Vicinay Offdrill II anchors, ABS certified.

Chain: Eight—2,500 ft. of 2 3/4 in. high quality stud link, high strength, ABS certified, welded chain.

Mooring wire: Eight—4,500 ft. of 2 3/4 in. galvanized, 6 x 37 IWRC, ABS certified wire rope.

Winch-windlass: Four—Dual flight ETW 300/44 mooring units with winch capability for storing 6,000 ft. of 2 3/4 in. wire rope and a windlass wildcat for 2 3/4 in. chain. Nominal maximum rated tension capacity is 500,000 lbs. with brakes rated at 750,000 lbs. Stoppers are rated to breaking strength of mooring lines.

Controls: Control station at each corner of drilling unit. Tension indicators at each winch-windlass unit and barge control room.

Towing Characteristics

Characteristics

Draft	17 ft.
Lower hull depth	20 ft.
Lower hull freeboard	3 ft.

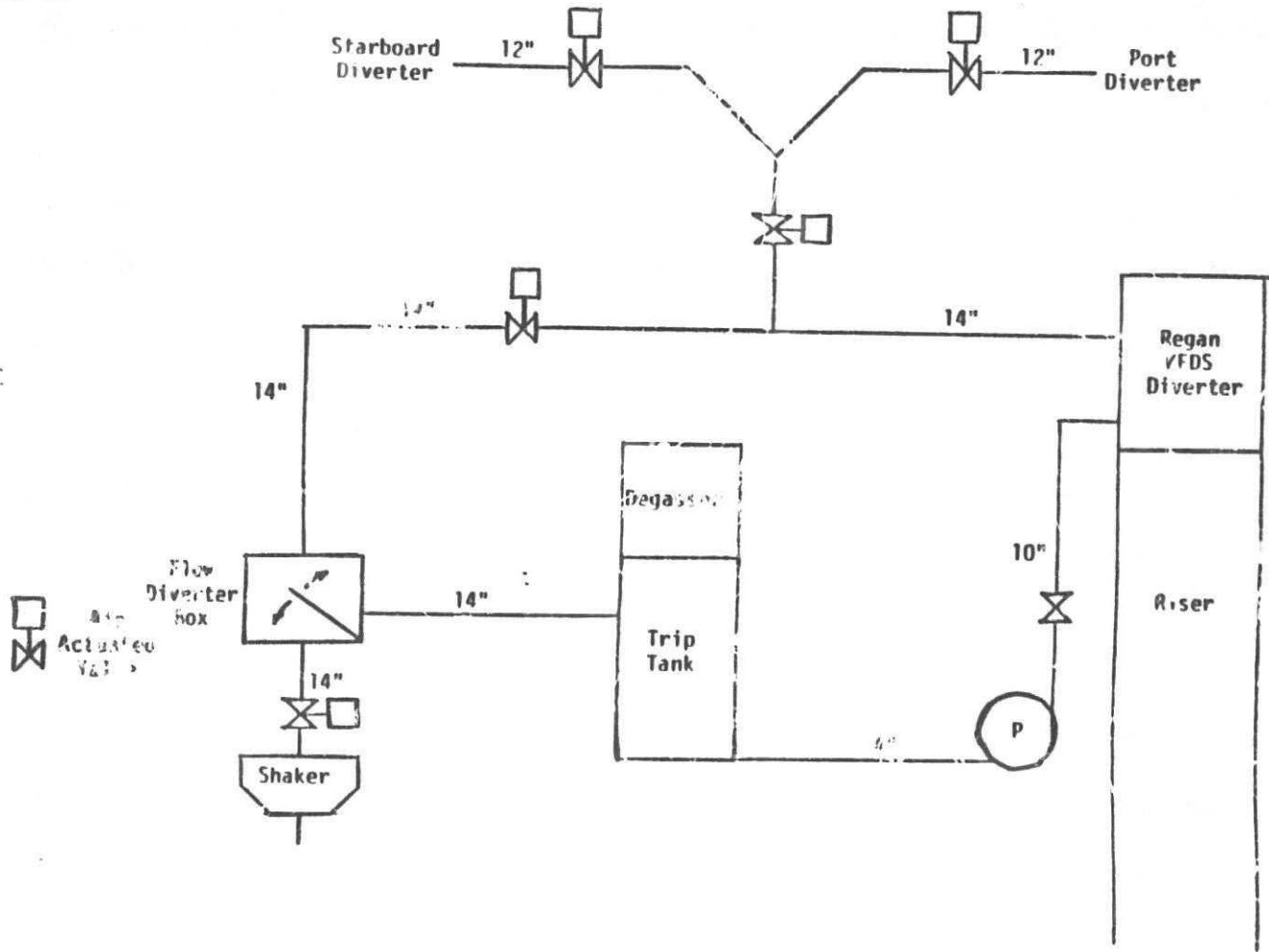
Predicated speed-power data

Required towing	
horsepower	8,000 HP
Calm sea with no wind	10 knots
Calm sea with 20-knot headwind	8.5 knots
15 ft. seas with 20-knot headwind	5.5 knots

Quarters

Ninety (90) person maximum capacity on two decks with dual galley-mess arrangement. Third deck control center including radio room and barge control room. Helicopter deck above quarters designed according to ABS rules for both Sikorsky S-61 and S-70 units.

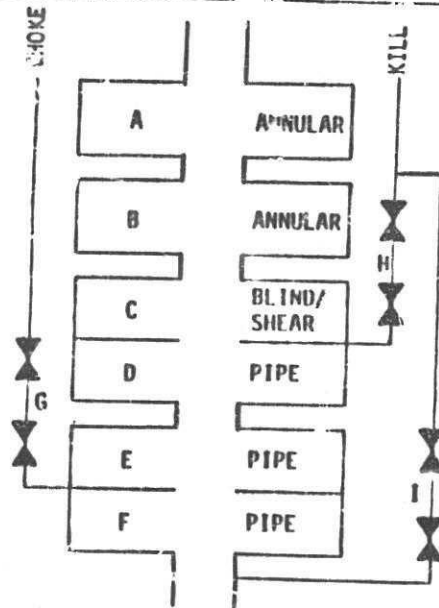
ZAPATA
YORKTOWN
DIVERTER
SYSTEM



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ZAPATA YORKTOWN
BLOWOUT PREVENTION EQUIPMENT

	EQUIPMENT DESCRIPTION
RISER AND DIVERTER	Regan Type KFDS Diverter. Cameron Riser system with two 12" diverter lines, one to starboard, one to port. Riser - A Cameron 21" OD, 1/2" wall with integral 3-1/2" choke and kill lines.
BLOWOUT PREVENTERS	Two - 18-3/4", 10,000 psi WP Cameron type double "U" BOP's with wedgelocks. (Four rams - bottom three are pipe rams and top ram is a blind/shear ram.) Two - 21-1/4", 5000 psi WP Shaffer Spherical BOP's.
BOP CONTROL SYSTEM	Cameron Payne 3000 psi hydraulic surface accumulator unit with air and electric pumps. Dual control pods are supplied by two (2) subsea hoses, and a 2-7/8" OD rigid power fluid conduit is attached to the riser.
SURFACE MANIFOLD	10,000 psi system with one (1) positive, two (2) manually adjustable and two (2) remote controlled hydraulically adjustable chokes.



BLOCK 862, VIOSCA KNOLL AREA
OFFSHORE, LOUISIANA

SECTION 3: GEOLOGICAL AND GEOPHYSICAL SURVEY RESULTS, AND SHALLOW
DRILLING HAZARDS REPORT

All anticipated geophysical work preparatory to initiation of exploratory drilling operations has been completed.

Water depths on Viosca Knoll, Block 862 at locations 4, 5, and 6 are approximately 1075, 1050, and 1060 feet respectively. The "cultural resource" requirement was not invoked for this lease.

Pursuant to Notice to Lessees and Operators No. 75-8, dated June 1, 1975, and to 30 CFR 250.34 (a), we have examined available high resolution geophysical data (sparker), seismic CDP and bright spot information, velocity data, and geologic data and find to the best of our knowledge that there are no significant shallow drilling hazards at the proposed drilling locations.

BLOCK 862, VIOSCA KNOLL AREA
OFFSHORE, LOUISIANA

SECTION 4: LOCATION

A. LOCATION MAP OF BLOCK AND SHORELINE.

See attached.

B. DESCRIPTION OF ONSHORE SUPPORT BASE FACILITIES

The following described commercial facilities for storage, staging, and supply are operated by A-Z Terminal, Inc. on Haliburton Road, Venice, Louisiana:

Approximately 1200 feet of dock front adjacent to 32 acres of land storage area.
Office spaces, covered storage, and warehouse facilities are available as needed.

Approximately 1345 square feet of office space.
30 parking spaces.

Diesel fuel, gasoline, and helicopter fuel are available from commercial facilities within one mile of the terminal; therefore, no fuel storage is required.

Potable water is available at dockside.

Exxon operates a surfaced heliport equipped with wind sock direction indicator located approximately 150 yards South of A-Z Terminal.

All facilities are considered adequate and no acquisitions for facility expansions are contemplated.

Other than an Exxon dispatcher, it is not anticipated that additional employees will be required to man this facility. No additional employments are forecast at this time, and impact on housing, services, and public facilities are expected to be minimal. The number of persons on the drilling vessel will generally be between 50 and 80.

At current exploration activity levels we expect 25 boat trips and 60 helicopter flights per month from these facilities. The docks are approximately two miles from West Bay via Tiger Pass and once boats reach open water, they will travel the most practical, direct route to the rig. All helicopter flights follow the most practical and direct route to the rig. The subject well is approximately 63 miles east-southeast of Venice, Louisiana.

C. LOCATION MAP OF BLOCK WITH WELL LOCATIONS.

See attached.

ST. BERNARD

PANISH

CHANDELEUR SOUND AREA

CHANDELEUR AREA

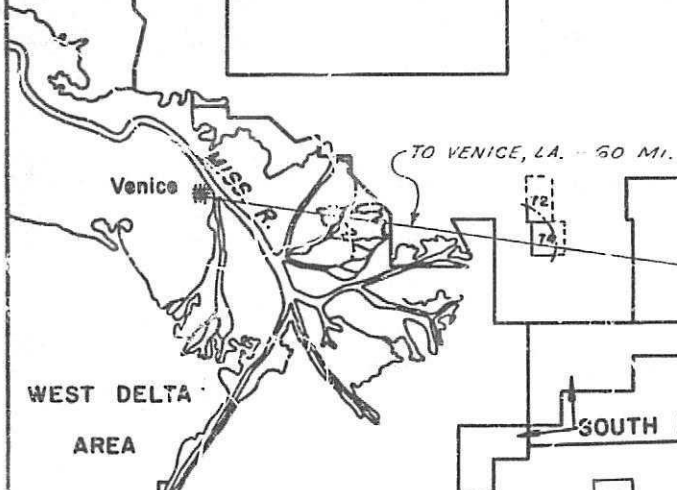
VIOSCA KNOLL AREA

CHANDELEUR AREA
(EAST ADDITION)

BRETON SOUND AREA

MAIN PASS AREA

MAIN PASS AREA
(SOUTH AND EAST ADDITIONS)



WEST DELTA
AREA

GULF

SOUTH PASS AREA

SOUTH PASS AREA (EAST ADDITION)

MISSISSIPPI CANYON AREA

VIOSCA KNOLL AREA

Permit Area

OF

MEXICO

12 0 12 24 MILES
SCALE: 1" = 12 MILES (APPROX)

APPLICATION BY
EXXON COMPANY, U.S.A.
(A DIVISION OF EXXON CORPORATION)

VICINITY MAP
VIOSCA KNOLL AREA BLOCK 907
GULF OF MEXICO

DRAWN BY: W.H.T.

CHECKED BY: *h*

DATE: 2-25-79

REVISED:

SHEET: 1 OF

FILE NO: EA-5025-1

BLOCK 862, VIOSCA KNOLL AREA
OFFSHORE, LOUISIANA

SECTION 6: OIL SPILL CONTINGENCY

Procedures for preventing, reporting, and cleaning up oil spills or waste materials are included in contingency manuals developed by Exxon's Southeastern Division office and revisions approved November 29, 1979, by the Oil and Gas Supervisor, Gulf of Mexico, U. S. Geological Survey. All procedures, personnel training and equipment are designed to be in compliance with OCS Order No. 7.

The possibility of a spill of any nature and magnitude has been contemplated by the Clean Gulf Associates (CGA). This organization has a membership of almost every operator in the Gulf of Mexico, including Exxon. CGA maintains spill and containment equipment at strategic locations along the coast, and as a member of the organization, this equipment is immediately available to Exxon. A list of the principal items of such equipment is included in Section III of the CGA "Oil Spill Contingency Manual."

Response time in the event of an emergency on this specific lease:

1. Approximately 60 minutes by helicopter.
2. Approximately 10 hours by CGA from its main base at Grand Isle, Louisiana, where fast response systems are located.

Additional equipment is available at Venice and Morgan City, Louisiana.

BLOCK 862, VIOSCA KNOLL AREA
OFFSHORE, LOUISIANA

SECTION 7: MUD ADDITIVES

A. Basic Mud Components:

Barite (Barium Sulfate)
Bentonite (Sodium Montmorillonite Clay)
Lignosulfonate (Chrome Lignosulfonate)
Lignite (Leonardite-Brown Coal)
Sodium Hydroxide (Caustic Soda)

B. Mud Additives:

Sodium Carbonate (Soda Ash)
Sodium Acid Pyrophosphate (Sapp)
Sodium Bicarbonate
Calcium Hydroxide (Lime)

C. Special Purpose Additives:

Surfactants:

Pipe Lax (Naphtha Base Surfactant)*
Lubra-Glide (Teflon Granules)
Torque-Trim (Vegetable Oil Base Surfactant)*
Black Magic (Oil Base Surfactant)*

Lost Circulation Material:

Mica
Nut Hulls

Special Fluid-Loss Control Agents:

Carboxymethyl Cellulose (CMC)

Defoaming Agents:

Aluminum Stearate
Octal Alcohol Defoamers

*Will not be discharged overboard.

February 29, 1980

SUPPLEMENTAL PLAN OF EXPLORATION
BLOCK 862, VIOSCA KNOLL AREA
OFFSHORE, LOUISIANA

SECTION 1: PLAN DESCRIPTION

This Supplemental Plan of Exploration for Viosca Knoll, Block 862, OCS-G 3208 consists of from one to three wells as shown below.

<u>Well</u>	<u>Approximate Location on Block</u>	<u>Approximate Depth</u>
No. 4	3250' FWL, 5350' FSL	9500'
No. 5	7250' FWL, 7750' FSL	9500'
No. 6	5800' FWL, 7200' FSL	9500'

In the event additional seismic surveys are conducted in the area, a conventional ocean-going seismic survey vessel equipped with an appropriate hydrophone cable and non-dynamite energy source (e.g., air gun) would be used.

Drilling on Well No. 4 is planned for about June 5, 1980, and will require about 34 days to complete. The drilling of Wells No. 5 and No. 6 will depend on the results of Well No. 4. The total time required to complete the drilling of three wells should be about 102 days.

Y = 10,581,120.00

Open

818

Exxon

ALL WELLS ARE STRAIGHT HOLES
TOTAL DEPTH = 9500'
WATER DEPTH RANGE = 1050' TO 1075'

Blk. 862

7250'

5800'

3250'

5350'

7200'

7750'

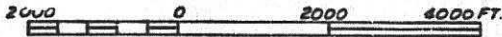
U.C.S.-G 3208

Y = 10,565,280.00

Exxon

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O.C.S.-G 3207



SCALE

O.C.S.-G 3208
VIOSCA KNOLL BLK. 862 AREA
GULF OF MEXICO

Exxon Company, U.S.A.
(DIVISION OF EXXON CORPORATION)
PRODUCTION DEPARTMENT
NEW ORLEANS

DRAWN RA Gutierrez
CHECKED S. L. J.

ENGR. SECTION
APPROVED

REVISION 2-26-80

SCALE 1" = 2000'
DATE 12/15/75

JOB NO.

FILE NO.

EA-4240

863

Open

Y = 1,203,840.00