In Reply Refer To: MS 5231

March 8, 1994

Santa Fe Minerals, Inc.
Attention: Ms. Suzy Younger
Two Lincoln Centre, Suite 1100
5420 LBJ Freeway
Dallas, Texas 75240-2648

Gentlemen:

Reference is made to the following plan received February 22, 1994:

Type Plan - Supplemental Development Operations Coordination Document
Leases - OCS-G 6042 and 7202
Blocks - 633 and 634
Area - Matagorda Island
Activities Proposed - Wells A4, A5, A6 and Caisson and Well No. 4

In accordance with 30 CFR 250.34, this plan is hereby deemed submitted and is now being considered for approval.

Your control number is S-3181 and should be referenced in your communication and correspondence concerning this plan.

Sincerely,

(Orig. Sgd.) Kent E. Stauffer

D. J. Bourgeois
Regional Supervisor
Field Operations

bcc: Lease OCS-G 6042 POD File (MS 5032)
Lease OCS-G 7202 POD File (MS 5032)
MS 5034 w/public info. copy of the plan
and accomp. info.

AGobert:cic:02/28/94:DOCDCOM

RECEIVED
MAR 11 8 30 AM '94

NOTED-SCHEXNAILDRE

February 18, 1994

JOINT DEVELOPMENT OPERATIONS COORDINATION DOCUMENT
SANTA FE MINERALS, INC.
MATAGORDA ISLAND BLOCKS 633 AND 634F
OCS-G 6042/7202
OFFSHORE, TEXAS

In compliance with Title 30 CFR 250.34 and the Regional Director's letter of October 12, 1988, September 5, 1989 and November 5, 1993 the following information is submitted for the Joint Development Operations Coordination Document (DOCD) for leases OCS-G 6042/7202 Matagorda Island Blocks 633 and 634F.

1. Description of Development Activities

Santa Fe Minerals, Inc. is operator of leases OCS-G 6042/7202, Matagorda Island Blocks 633/634.

Under the revised POE, Matagorda Island 633 No. 3 was drilled and temporarily abandoned in November, 1988. The well was re-entered and completed in June, 1990. The Matagorda Island 633 No. 3 satellite platform was installed in July, 1990. The well was placed on production in December, 1990.

Matagorda Island 633 jacket was installed in March, 1991. Under the DOCD approved by the MMS in April, 1991, the well protector for Matagorda Island 634 was installed in June, 1991. The Matagorda Island "A" deck and facilities and the Matagorda Island 634 deck were installed in February, 1992.

Under the revised Plan of Exploration for Matagorda Island 633. Well No. A-1 was drilled in July 1990 and encountered of net pay which tested from the bottom interval and temporarily abandoned. The well was placed on production in March, 1993.

Under the DOCD approved April 10, 1991 Matagorda Island 633, Well No. A-2 was drilled and completed in March, 1993 and encountered approximately of net pay which tested .

Matagorda Island Block 634F was acquired in the July 1984 Lease Sale. Well No. 1 was drilled in March, 1989 and encountered of net pay, which tested and The well was temporarily abandoned then re-entered, completed and placed on production February, 1993. Well No. 2 was drilled in September, 1989 and temporarily abandoned in November, 1989. Santa Fe re-entered and completed well No. 2 in June, 1991 and placed the well on production in March, 1992.

Santa Fe plans to drill Matagorda Island 634 A-3 in February, 1994. The drilling of this well is provided for in the DOCD approved by the MMS April 10, 1991.

Santa Fe proposes to do the following work under this revised DOCD:

Drill four additional wells; two from the Matagorda Island 633 "A" production platform which bottom holes in Matagorda Island 633, one from the Matagorda Island 633 "A" production platform which bottom holes in Matagorda Island 634, one well from

Matagorda Island 633 No. 3 surface location which bottom holes in Matagorda Island 634.

Production from Matagorda Island Blocks 633/634F is processed and commingled on the 633 "A" platform and transported via an 8" natural gas pipeline to a tie in with Seagull Pipeline in Matagorda Island Block 624 for sale in the spot market.

The estimated life of reserves for Matagorda Island Blocks 633/634F is approximately 10 years. Daily production is currently approximately

Activities proposed under this Joint DOCD for Matagorda Island Blocks 633/634F commence in April, 1994.

Activity	Start-up-Date
Drill and complete 633 A-4	April 1994
Commence engineering design for "A" platform modifications	April 1994
Modify 633 "A" platform for increased capacity	August 1994
Drill and complete 634 A-5	January 1997
Drill and complete 633 A-6	March 1997
Drill and complete 633 No. 4	May 1997

2. Description of Drilling Unit and Proposed Facilities

Drilling Unit

The proposed wells will be drilled with a jack-up drilling rig. When a rig is selected, the rig specs will be made a part of the Application for Permit to Drill. Typical diverter and BOP schematics are enclosed herewith as Exhibit 1. Any rig utilized by Santa Fe will be designed, operated and maintained in accordance with 30 CFR 250.40 (b) (4).

Pollution prevention features will include a drill floor containment system with collection tank in hull.

Safety features will include well control and blowout prevention equipment as described in 30 CFR, Subpart D. Santa Fe will perform all operations in a safe and workmanlike manner and will maintain all equipment in a safe condition, thereby ensuring the protection of lease and associated facilities, the health and safety of all persons, and the preservation and conservation of property and the environment. Lifesaving appliances and fire fighting equipment on the rig will be in accordance with the U. S. Coast Guard regulations.

Description of Platforms

The Matagorda Island Block 633 "A" Platform is a 4-pile, 7-slot drilling/production platform. Attached as Exhibit 2 is a schematic of this platform.

The Matagorda Island Block 633 No. 3 and 634 No. 1 are satellite Moss II structures. (See Exhibit 3 for schematic of well structure and deck.)

All hydrocarbon handling equipment for testing and production such as separators, tanks and treaters have been designed, installed and operated to prevent pollution.

Maintenance or repairs which are necessary to prevent pollution of offshore shall be undertaken immediately.

Curbs, gutters, drip pans, and drains are installed in deck areas in a manner necessary to collect all contaminants not authorized for discharge. Oil drainage is piped to a properly designed, operated, and maintained sump system which will automatically maintain the oil at a level sufficient to prevent discharge of oil into offshore waters. All gravity drains are equipped with a water trap or other means to prevent gas in the sump system from escaping through the drains. Sump piles are not be used as processing devices to treat or skim liquids, but are used to collect treated-produced water, treated-produced sand, or liquids from drip pans and deck drains and as a final trap for hydrocarbon liquids in the event of equipment upsets. Improperly designed, operated or maintained sump piles which do not prevent the discharge of oil into offshore waters shall be replaced or repaired.

There shall be no disposal of equipment, cables, chains, containers or other materials into offshore waters.

3. Well Locations

A table indicating the surface locations, bottom hole locations, total vertical depths and measured depths for these wells covered by this Joint DOCD are enclosed as Exhibit 4.

Supporting Information

1. Structure Map

A Structure Map for Matagorda Island Blocks 633 and 634F is enclosed as Exhibit 5.

2. Bathymetry Map

A Bathymetry Map showing the location of existing well and proposed wells for Matagorda Island Blocks 633 and 634F is enclosed as Exhibit 6.

3. Shallow Hazards

Information on geological hazards and surface location for Matagorda Island Block 633 Well No. (4) A-1 was included in our Revised Exploration Plan that was submitted to the Minerals Management Service on March 6, 1990. The report indicated no magnetic anomalies, shallow gas, riser channels or other bottom conditions to hamper completion and production operations. A four pile jacket and production facility was installed over this well. One additional well was drilled from this location. See Exhibit 7 for copy of Shallow Hazard Report.

4. Oil Spill Contingency Plan

See Exhibit 8 for reference to our Oil Spill Contingency Plan.

5. No new techniques or unusual technology will be required for these operations.

6. Lease Stipulations

In accordance with Lease Stipulation No. 1 attached to lease for Matagorda Island Block 633, Amoco Production Company submitted to the Minerals Management Service with the Plan of Exploration dated October 5, 1983 a Cultural Resources Report which assessed the potential existence of any cultural resources and was reviewed by Minerals Management Service on December 5, 1983 and satisfied the requirements of Notices to Lessees and Operators No. 75-3 (Revision No. 1).

In accordance with Lease Stipulation No. 1 attached to lease for Matagorda Island Block 634F, Santa Fe International Corporation submitted a Cultural Resources Report to the Minerals Management Service on June 18, 1985 which was reviewed on August 6, 1985 and satisfied the requirements of Notice to Lessees and Operators No. 75-3 (Revision No. 1).

In accordance with Lease Stimulation No. 3 attached to leases for Matagorda Island 633/634F, Santa Fe will notify the Chief, Naval Air Training, Naval Air Station, Corpus Christi, Texas regarding air and boat operations affecting the Military Warning Area W-228.

Santa Fe Minerals, Inc. is environmentally sensitive to the wildlife in the Matagorda Island Area and agrees to abide by the two conditions covering endangered whooping cranes and the Brown Pelican mentioned in Minerals Management Service letter dated April 13, 1990 approving our Revision Plan of Exploration.

7. Discharges

Listed below are the discharges to be incurred during drilling and production operations. Any discharge will be done within the guidelines as set forth in the Final NPDES Permit dated December 3, 1993.

Drilling Operations

The anticipated discharge rates for Santa Fe's drilling operations for Matagorda Island Blocks 633/634F are listed below:

Drilling Fluids	3,000 bbls/month
Drill Cuttings	2,002 bbls/month
Deck Drainage	1,500 bbls/month
Sewage and Domestic Liquid Waste	2,000 gals/day*

* Based on 50 gals/person/day with average 40 persons on board.

The quantity of discharge of cuttings is based on the average hole size for each section of hole. Mud may be discharged for purposes of dilution or at the end of the well. Fifty percent (50%) for attached liquids to cuttings is added to give a total drilling fluids discharge. Sewage is treated on location. Solid domestic wastes are transported to shore for proper disposal at an authorized disposal site.

The fluid used for drilling will be a typical lignosulfonate mud, unless otherwise noted in the drilling prognosis. Concentrations of the chemicals in the mud can be estimated from the daily fluids chemical inventory. Other surveillance of the fluid is accomplished by

the monthly and end-of-well LC 50 toxicity tests required by the EPA. A list of mud additives that may be used while conducting development drilling operations is enclosed as Exhibit 9.

In no instance will the drilling fluid discharge rate exceed 1,000 bbls/hr.

Any drilling fluid contaminated with oil will be transported to shore for proper disposal at an authorized disposal site.

Production Operations

The volume of produced water discharge is presently unknown. However, all produced water discharges will be monitored in accordance with the EPA NPDES Permit.

The Matagorda Island 633 "A" Production Platform is manned.

Deck Drainage is estimated to be approximately 125 bbls/month from the Matagorda Island Block 633 "A" structure, 15 bbls/month from the Matagorda Island 633 No. 3 structure and approximately 5 bbls/month from the Matagorda Island 634 structure.

If any solid wastes are generated on the platform, these wastes will be transported to shore for proper disposal at an authorized disposal site.

8. Hydrogen Sulfide

Marathon, McMoran and Amoco has previously drilled wells in Matagorda Island Block 633 and no H_2S was encountered. Santa Fe drilled Well No. 3 to a depth of , Well No. A-1 to a depth of and Well No. A-2 to ' and encountered no H_2S in either well.

In Matagorda Island Block 634F, Santa Fe drilled Well No. 1 to a depth of and Well No. 2 to a depth of and encountered no H_2S gas.

The DOCD approved by the MMS dated April 10, 1994, determined the area in which drilling operations are to be conducted as a zone where the absence of H_2S has been confirmed.

9. Coastal Zone Consistency

Certificate of Coastal Zone Consistency is not applicable.

10. Projected Emissions

See Exhibit 10 for Air Quality Report

11. Environmental Report

Environmental Report is not applicable.

12. Onshore Base

Matagorda Island Blocks 633/634 are located approximately 10 miles from shore in water depths of approximately 80 feet. A map showing the location of Blocks 633/634 relative to the shoreline and onshore base is enclosed as Exhibit 11.

Santa Fe is utilizing the existing onshore facilities located at Baroid Dock in Port O'Connor, Texas. This serves as port of debarkation for supplies and crews. No onshore expansion or construction is anticipated with respect to this activity.

This base is capable of providing the services necessary for the proposed activities. It has 24 hour service, a radio tower with a phone patch, dock space, equipment and supply storage base, drink and drill water, etc. This serves as our base of operations for Matagorda Island Blocks 633/634. It is estimated that during drilling operations, a supply boat will make a round trip every three days, a crew boat will make a round trip each day and a helicopter will make two (2) round trips per week. During production activities, it is estimated that a supply boat will make one (1) round trip per week and a helicopter will make two (2) round trips per week.

The onshore activities associated with Matagorda Island Blocks 633/634 should not result in any increase in the size and number of onshore support and storage facilities or land and personnel requirements.

13. Surety Bond Requirements

In compliance with the Regional Director's letter dated November 5, 1993, Santa Fe Minerals, Inc. increased its $300,000 area wide bond to $3,000,000 area wide bond and furnished to the Gulf of Mexico OCS Regional Office of Leasing Environment February 3, 1994.

14. Authorized Representative

Inquiries concerning this plan may be made to the following authorized representative of Santa Fe Minerals, Inc.

Suzy Younger
Santa Fe Minerals, Inc.
Two Lincoln Centre, Suite 1100
5420 LBJ Freeway
Dallas, Texas 75240-2648
(214) 701-7599

February 18, 1994

LIST OF EXHIBITS

1. Typical Diverter and BOP Schematics
2. 4 Pile, 7 Slot Drilling/Production Platform
3. Schematic of Well Structure and Deck
4. Well Information Sheet
5. Structure Maps for Matagorda Island Blocks 633 and 634F
6. Bathymetry Maps for Matagorda Island Blocks 633 and 634F
7. Shallow Hazard Report
8. Oil Spill Plan, Deployment Time and Trajectory Analysis
9. Drilling Mud Components
10. Air Quality Review
11. Vicinity Plat

B.O.P. ARRANGEMENT

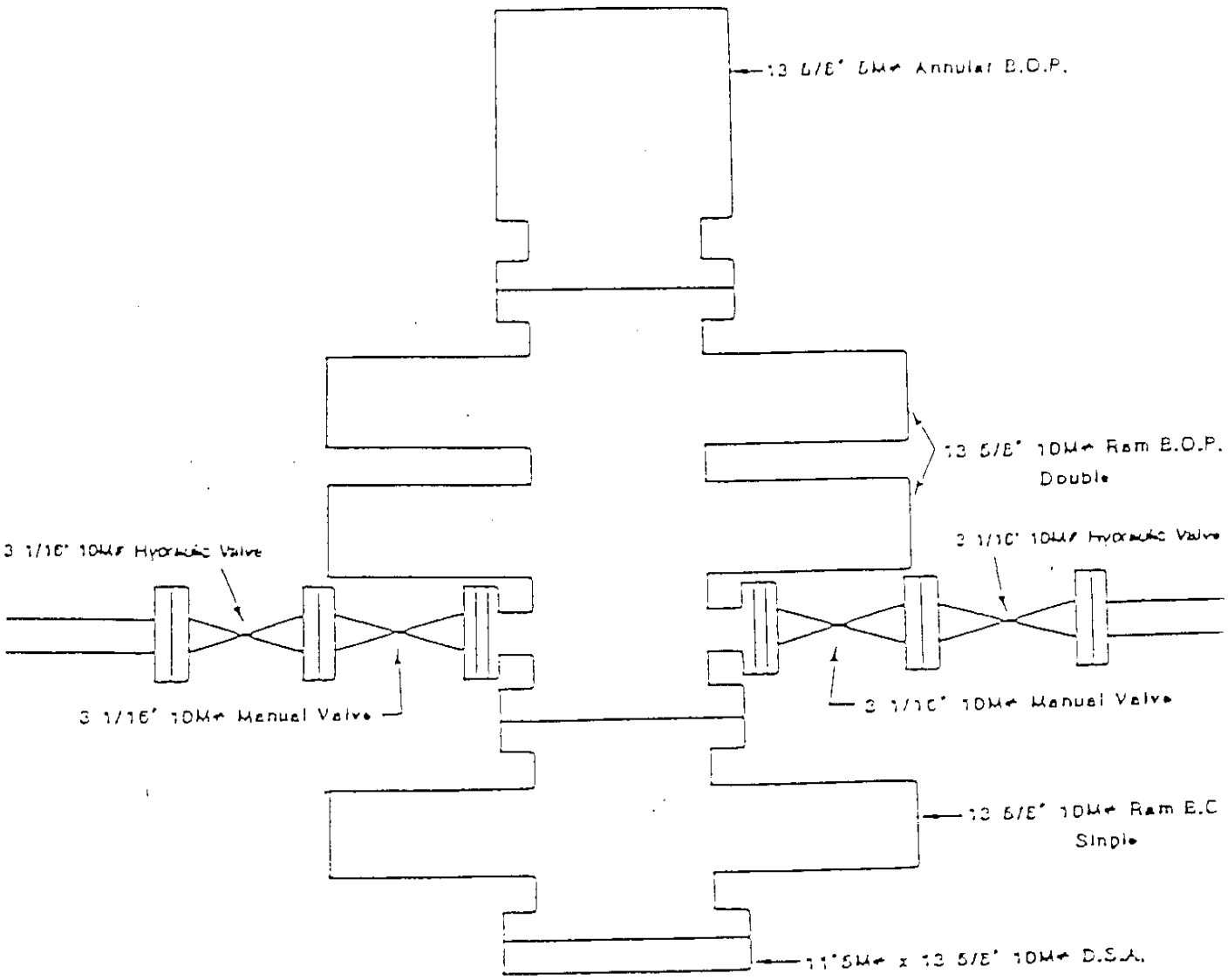
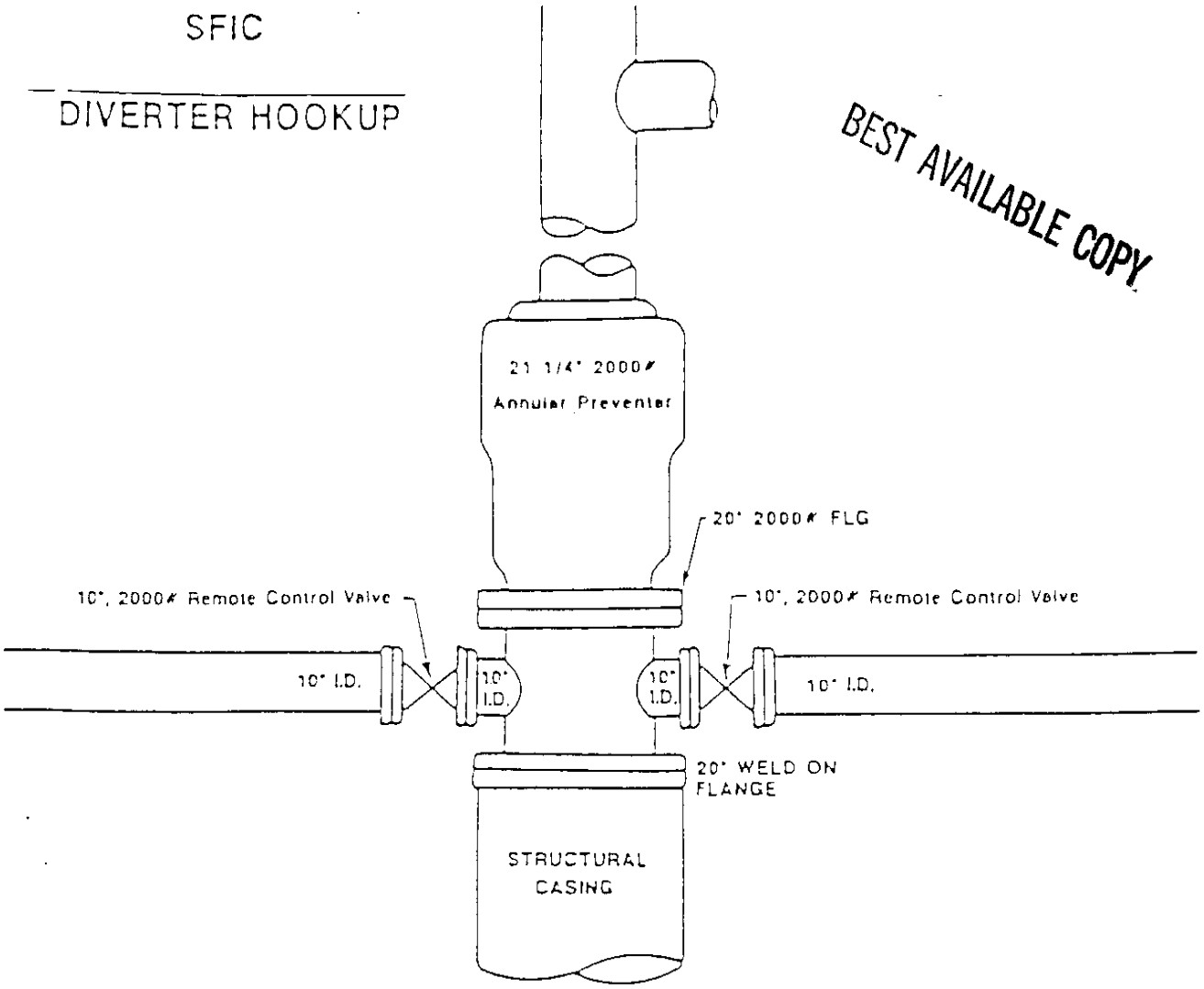


Exhibit 1

SFIC

DIVERTER HOOKUP



SECTION "A-A"

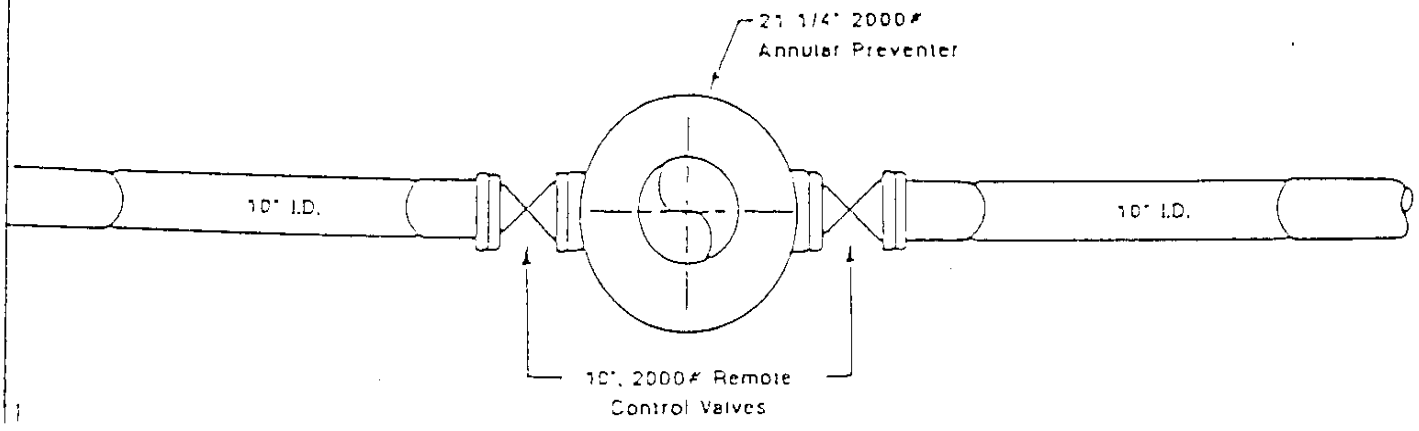
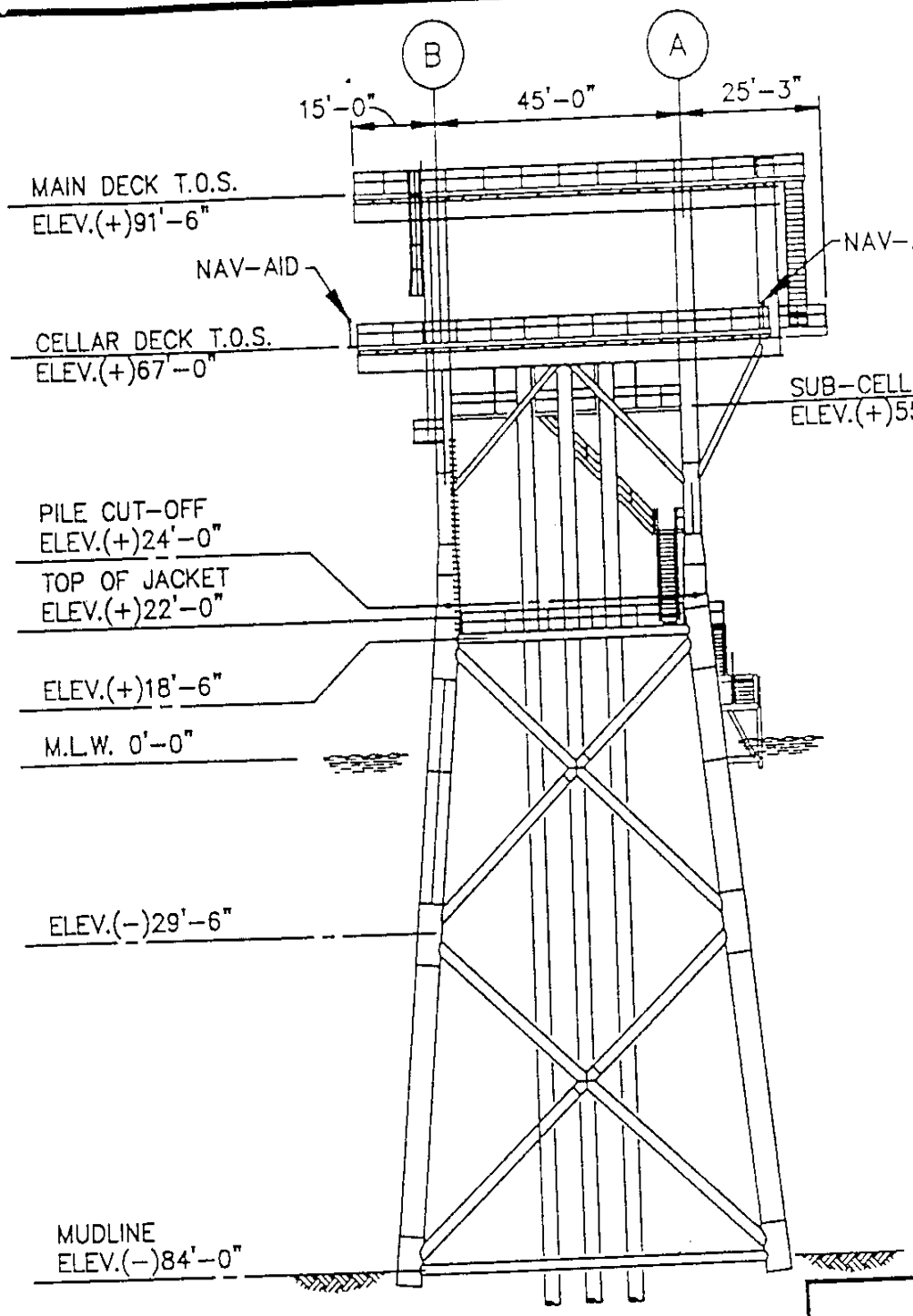
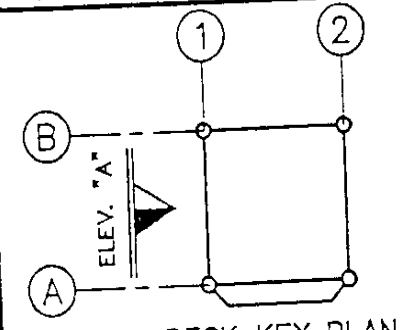


Exhibit 1



ELEVATION "A"



DECK KEY PLAN
SCALE: — 1"=60'-0"

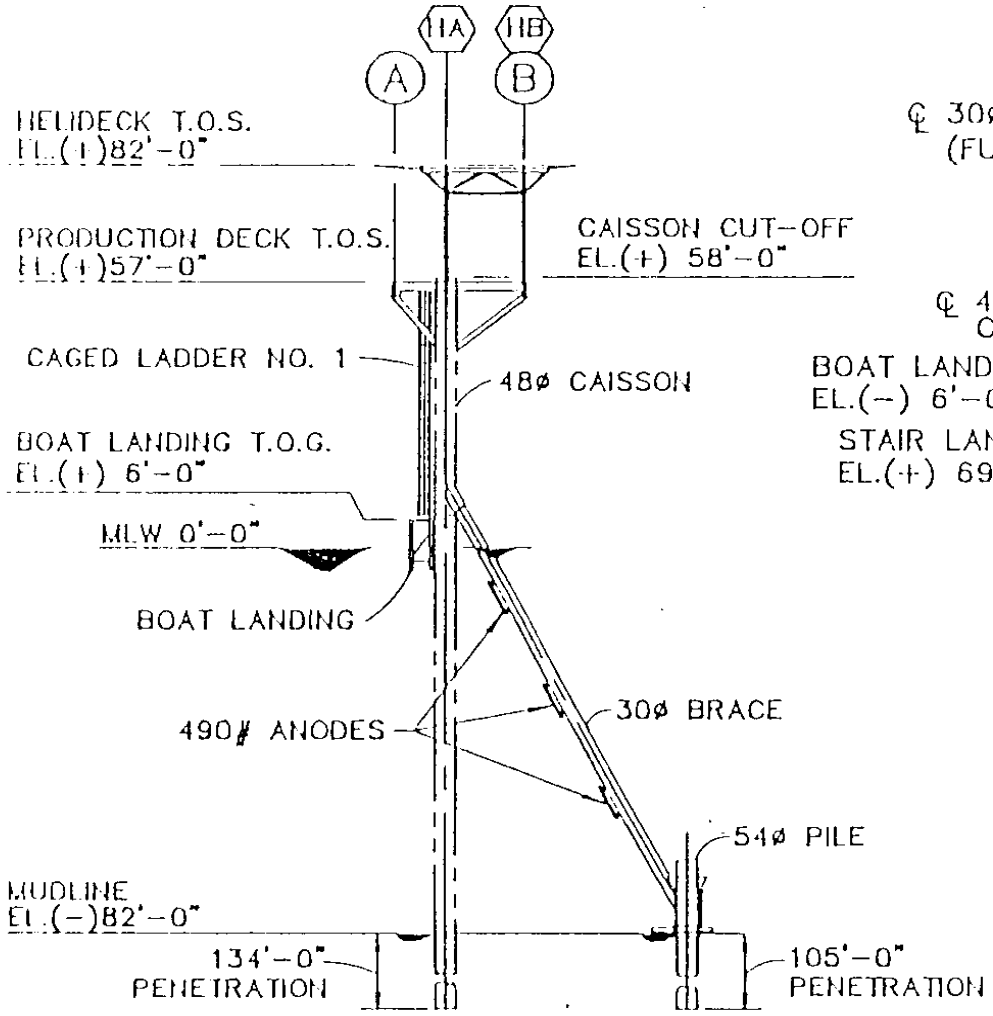
MUSTANG ENGINEERING, INC.
HOUSTON, TEXAS

santa fe international corp.
4-PILE, 7-WELL PRODUCTION PLATFORM
MATAGORDA ISLAND 633 "A" - 84 FT. W.D.
ASSEMBLY ELEVATION

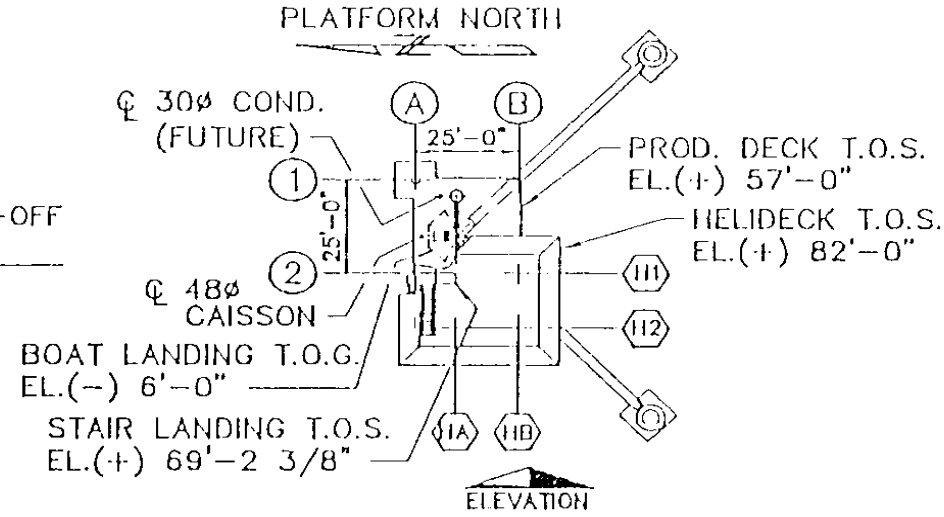
DRAWN	DATE	SCALE	ENGINEER	PROJECT NUMBER	DRAWING NUMBER
KALEY	12/21/91	1"=30'-0"	T. GAUTHEY	1001	OCS - 001

OCS-001.DWG 21DEC91 1627 SF360

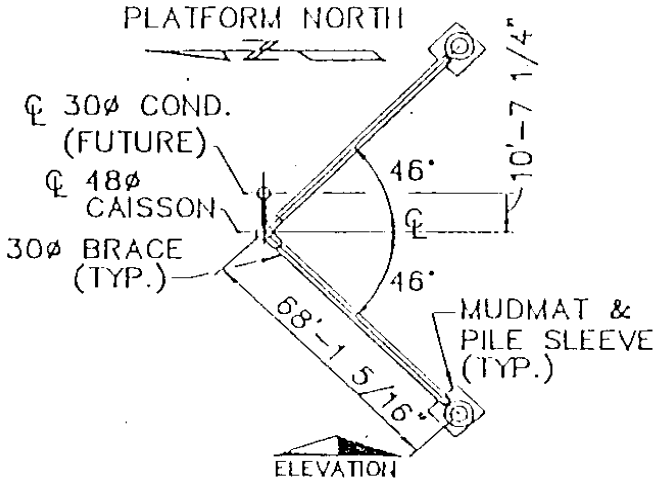
Exhibit 2



ELEVATION



DECK ORIENTATION PLAN



JACKET ORIENTATION PLAN

OCT 10 1991

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY NICHOLAS A. GOODWIN, P.E. 45362 ON 10/10/91

APPLICATION BY:

COMPANY SANTA FE INTERNATIONAL CORP.

SIGNATURE _____

TITLE _____

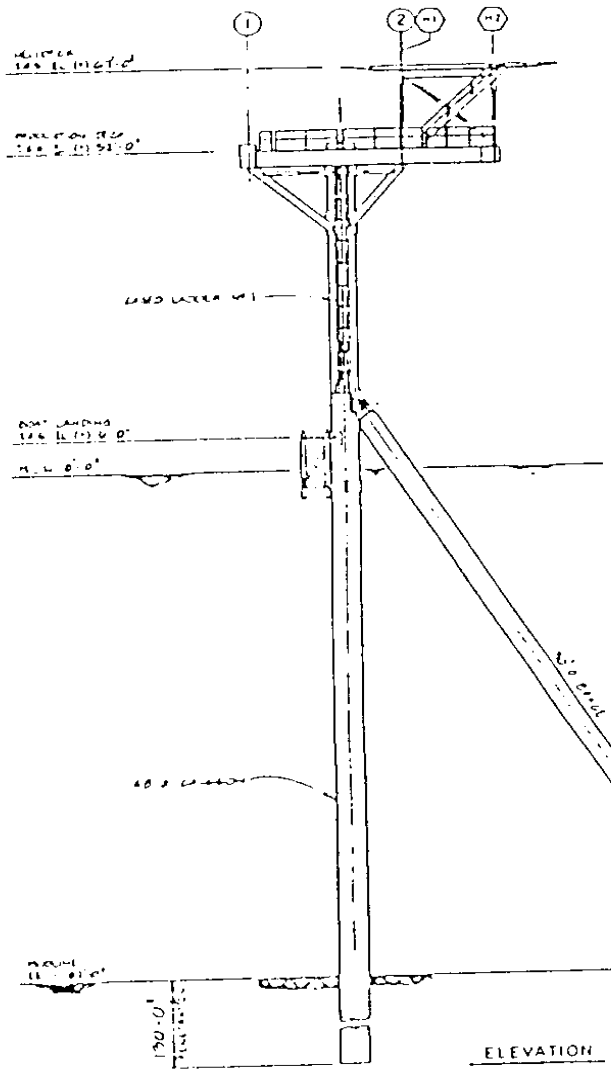
LEASE NO. OCS-G-7202

BLOCK NO. BLOCK 634F WELL "A"

AREA MATAGORDA ISLAND

OPERATOR SANTA FE INTERNATIONAL CORP.

Exhibit 3



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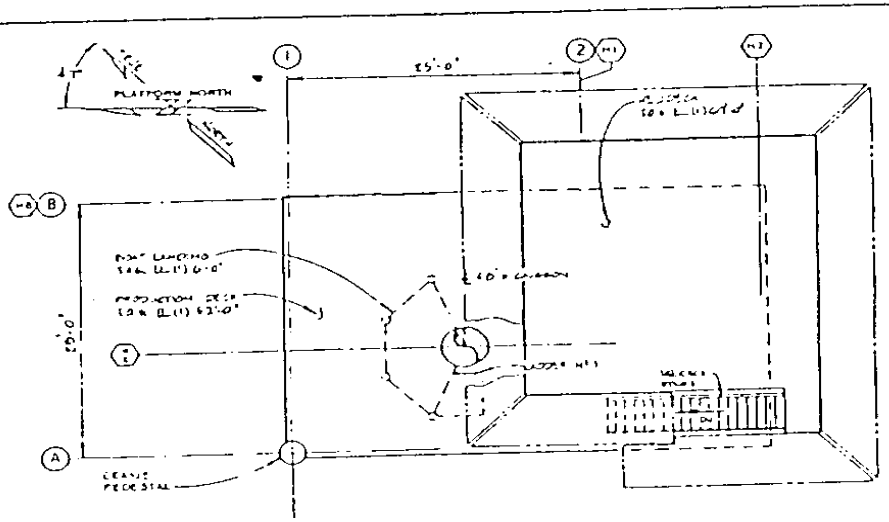

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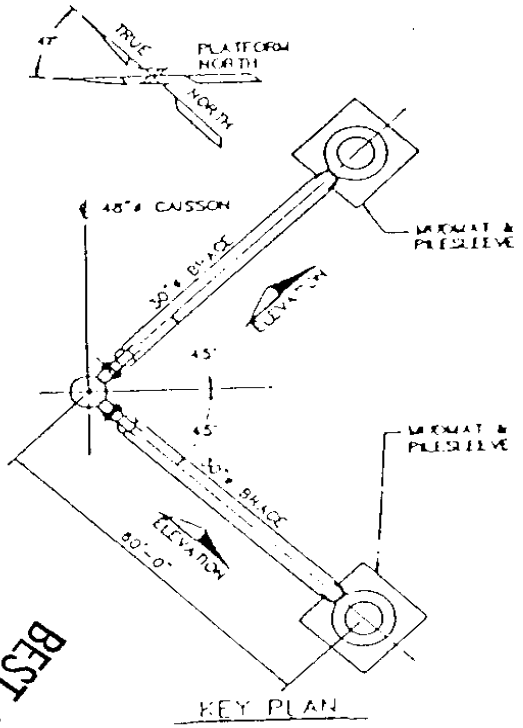


KEY PLAN

DEC 07 1989

STATE OF TEXAS
SUSAN FERRELL HYATT
65229
REGISTERED PROFESSIONAL ENGINEER

SEAL

APP'D. Susan Ferrell Hyatt

DATE 10/3/89

APPLICATION BY:

COMPANY SANTA FE INTERNATIONAL CORP

SIGNATURE

TITLE

LEASE NO. OCS-G-6042

BLOCK NO. BLOCK 633 WELL #3

AREA MATAGORDA ISLAND

OPERATOR SANTA FE INTERNATIONAL CORP.

Exhibit 3

February 15, 1994

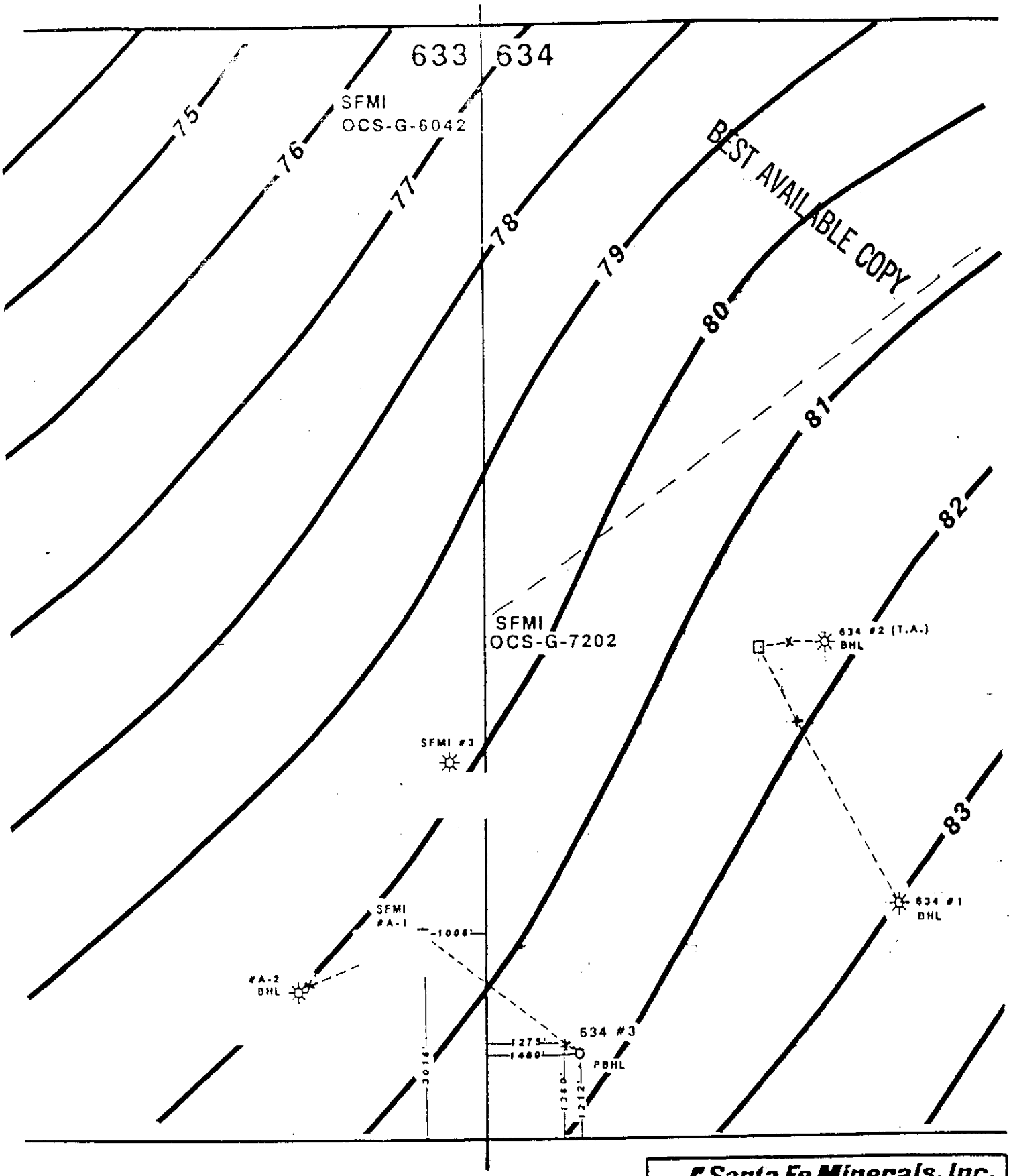
WELL INFORMATION SHEET

MATAGORDA ISLAND BLOCKS 633/634F
OCS-G 6042
OCS-G 7202

Well No.	Surface Location
7	3015' FSL & 1013' FEL of Block 633
8	3015' FSL & 1013' FEL of Block 633
9	3015' FSL & 1013' FEL of Block 633
10	5280' FSL & 570' FEL of Block 633

Exhibit 4

sy162c



Exhibit

Santa Fe Minerals, Inc.
A DIVISION OF SANTA FE INTERNATIONAL CORPORATION

MATAGORDA ISL. 633/634

BATHYMETRY MAP

DALLAS		Drawn By: PA Date: 2/94
GEOL.	GEOP.	
DATE: 2/7/94	DATUM:	
CONTOUR INT.:	SCALE: 1"=2000'	FILE NO.

February 18, 1994

DRILLING HAZARDS

MATAGORDA ISLAND BLOCKS 633/634F
OCS-G 6042
OCS-G 7202

Cultural Resources conducted a geophysical survey over Matagorda Island Block 633. The geophysical systems used during the survey were comprised of a sub-bottom profiler, side scan sonar, magnetometer, depth sounder and 6-fold CDP Super Sparker.

Water depths over Matagorda Island Block 633 range from 73 feet in the northwest corner to 81 feet in the southeast. Water depth over the proposed drilling locations is approximately 80 feet.

Location D: Shallow hazard surveys conducted over this location indicate no shallow gas, river channels, or bottom conditions to hamper drilling operations.

George F. Getten
Vice President

Exhibit 7

sy162d

OIL SPILL PLAN AND TRAJECTORY ANALYSIS

MATAGORDA ISLAND BLOCKS 633/634F

Santa Fe Minerals, Inc. has an approved Oil Spill Contingency Plan for the Gulf of Mexico. An updated plan was submitted to Minerals Management Service on November 30, 1993 in accordance with 30 CFR 250.42 (a-i). In the event of a spill, this plan will be activated.

Santa Fe is a member of Clean Gulf Associates (CGA), and in the event of a spill at Matagorda Island Blocks 633/634F, equipment would be mobilized from the CGA stockpile at Aransas Pass, Texas.

Estimated response time for a spill at Matagorda Island Blocks 633/634F during normal weather conditions would be 10 hours based on the following:

A.	Procurement Time:	
	1. Estimated time to assemble the equipment	2.0 Hours
	2. Estimated time to procure transportation vessel and deployment to CGA base at Aransas Pass, Texas	4.0 Hours
	3. Secure personnel to load and operated the equipment	2.5 Hours
	Maximum Procurement Time	4.0 Hours
B.	Equipment Load Out	2.0 Hours
C.	Travel to lease site from CGA Base (30 miles at 10 miles/hour = 3 hours) (1/2 hour to travel to open water)	
D.	Deployment of equipment at spill site	0.5 Hours
		10.0 Hours

The Minerals Management Service published an Oil Spill Risk Estimate for the Lease Sales 131, 135 and 137 (Hannon and Lear, 1989). The results of that analysis as it related to Matagorda Island Blocks 633/634F are summarized in the following paragraphs. A detailed description of the model used in the Mineals Management Service analysis can be found in papers by Smith et al (1982), Lafear and Samuels (1981), La Belle and Anderson (1985), and La Belle (1986).

Matagorda Island Blocks 633/634F falls in Launch Site 4 (ref: oil spill launch map furnished by Minerals Mangement Service on June 2, 1989). The probabilities (expressed as percentage of chance) that a spill occurring in this block will contact land within 10 days are listed below:

Environmental Resource Catagory		Probability
Land Segment 5	Nueces, Texas San Patricio, Texas	1%
Land Segment 6	Aransas, Texas	4%
Land Segment 7	Calhoun, Texas	41%
Land Segment 8	Matagorda, Texas	23%

Exhibit 8

sy162e

The Environmental resources that are located within these land segments are depicted on the maps listed below foundin Section V, Volume II of the Clean Gulf Associates Operations Manual.

Texas

Map 2 Identification of the Biologically Sensitive Areas V-32.0a through V-42.0b and Protection Response Modes for the Biologically Sensitive Areas V-43.0 through V--52.0a.

Map 3 Idenitification of the Biologically Sensitive Areas V-54.0a through V-62.0b and Protection Response Modes for the Biologically Sensitive Areas V-63.0a through V-;68.0a.

The recommended response strategies to protect these resources are presented on pages VI-1.0b through VI-23.0 of Section II of the CGA Operations Manual.

Literature Cited

Hannon, L. J. and Eileen M. Lear
1989 Draft oil-spill risk analysis: Gulf of Mexico (proposed sales 131, 135 and 137) outer continental shelf. USDO1, MMS, Offshore Environmental Assessment Division, Branch of Environmental Modeling, Herndon, VA.

La Belle, R. P.
1986 Use of applied oceanography in stochastic modeling of oil spills on the outer continental shelf. Proceedings of OCEANS 86 Conference, September 1986.

La Belle, R. P. and C. M. Anderson
1985 The application of oceanography to oil-spill modeling for the outer continental shelf oil and gas leasing program. Marine Tech. Soc. Journal 19(2):19-26.

Lanfear, K. J. and W.B. Samuels
1981 Documentation of user's guide to the U. S. Geological Survey oil spill risk analysis model: oil spill trajectories and the calculation of conditional probabilities. USGS Open-File Report 81-316. 95 pp.

Smith, R. A., J. R. Slack, T. Wyant, and K. J. Lanfear
1982 The oil spill risk analysis model of the U. S. Geological Survey, USGS Professional Paper 1227. 40 pp.

February 17, 1994

DRILLING MUD COMPONENTS

COMMON CHEMICAL OR CHEMICAL TRADE NAME	DESCRIPTION OF MATERIAL
Aluminum Stearate	Aluminum Stearate
"AXTAFLO-S"	Nonionic Surfactant
Barite	Barium Sulfate ($BaSo_4$)
Calcium Carbonate	Aragonite ($CaCo_3$)
Calcium Chloride	Hydrophilite ($CaCl_2$)
Calcium Oxide	Lime (Quick)
Calcium Sulfate	Anhydriate ($CaSO_6$)
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	Sodium montmorilloniate, bentonite, attapulgite
Gel	$CaSo4.2H20$
Gypsum	Lignite
Lignite	Lignosulfonate
Lignosulfonate	Cement Pre-flush
"Mud Sweep"	Hydroloyzed Cereal Solid
"MOR-REX"	Organo-aluminum complex
"Shale-Trol"	Sodium Acid Pyrophosphate
Sapp	Sodium Carbonate
Soda Ash	NaHC03
Sodium Bicarbonate	Sodium Carboxymethyl Cellulose
Sodium Carboxymethyl Cellulose	NaCl
Sodium Chloride	NaCr04.10H20
Sodium Chromate	Corn Starch
Starch	Biodegradable drilling lubricant
"TX-9010"	Biodegradable drilling lubricant
"TORQ-Trim"	Oil base mud conc.
"Black Magic"	Sacked concentrated oil base mud
"Black Magic Supermix"	Used to mix certain loss-circulation pills
Diesel	Plastic foil, shredded cellophane
"Jelflake"	Loss-circulation material
MICA	Surfactant mixed with diesel
"Pipe-Lax"	Ground walnut shells
"Wall-Nut"	Loss-circulation material
Wood Fibers	

AIR QUALITY REVIEW
FOR
MATAGORDA ISLAND AREA BLOCKS 633, 634
OCS-G-6042, 7202

Santa Fe Minerals, Inc.
2 Lincoln Center
5420 LBJ Freeway
Dallas Texas, 75240-2648

Submitted To:
Ms. Suzy Younger
Regulatory Specialist

1 February 1994

Prepared By:
John E. Chance & Associates
Regulatory & Environmental Division
Project No. 94-8102

PROJECTED EMISSIONS FOR THE PROJECT

I. General Information

Project: Drilling of 4 new wells in Matagorda Island Area Blocks 633 and 634, the installation of flowlines from these wells to production facilities on Platform 633A in Matagorda Island Area Block 633, and the production of gas / condensate from these and existing wells in Blocks 633 and 634

Location of Facility: Matagorda Island Area Blocks 633 and 634, Production on 633A

Owner / Operator: Santa Fe Minerals, Inc.
2 Lincoln Center
5420 LBJ Freeway
Houston, TX 75240-2648

Contact Person: Ms. Suzy Younger
Regulatory Specialist
(214) 701-7599

Project Start Date: February 15, 1994

Project End Date: February 15, 2003

Drilling Schedule To Be As Follows:

Well #	Begin Date	End Date	Depth
634 A3	2/15/94	3/25/94	10,000 ft
633 A4	3/30/94	5/10/94	10,000 ft
633 A5	6/1/95	7/10/95	10,000 ft
633 A6	7/10/95	8/20/95	10,000 ft

Construction Schedule To Be As Follows:

All pipeline installation to occur in 1994 and to take nine days

Production Schedule To Be As Follows:

Two wells to be online in 1994, and two in 1995
Gas production to decline to zero in 10 years
Condensate production to decline to zero in five years

II. **Drilling Emissions Calculated Using The Following Factors:**

Jack-up Rig horsepower of 3000
operated 37 days per well, 75 days in 1994 and 75 days in 1995

Tow Tug Boat horsepower of 3500
operated 1 day per well

Crew Boat horsepower of 2200
Port O'Connor, TX - 22 miles from site
7 trips per week
4 hours per trip

Supply Boat horsepower of 2500
Port O'Connor, TX - 22 miles from site
7 trips per week
5 hours per trip

Cement Skid horsepower of 40
operated 1 (24 hr) day per well

Cranes horsepower of 110
2 cranes operated 4 hours per drilling day

Welding Machine horsepower of 60
operated 4 hours per drilling day

III. **Construction Emissions Calculated Using The Following Factors:**

Approximately 2400 feet of flowline to be installed

Pipeline Lay/Bury Barge total horsepower of 5310
operated 24 hours / day for 9 days
barge horsepower includes generators, welding machines, winches, water pumps, compressors, cranes, accessories

Towing Tugboat horsepower of 3500
operated for 24 hours per day for 9 days

IV. **Production Emissions Calculated Using The Following Factors:**

Current Natural Gas Production Of 22 MMCF

Future Natural Gas Production to increase to 40 MMCF / day (in 1995) with 4 new wells (2 in 1994, 2 in 1995) and to decline to 0.0 in 10 years

Current Condensate Production of 425 BBL's / day

Future Condensate Production to increase to 2100 BBL's / day (in 1995) with the 4 new wells (2 in 1994, 2 in 1995) and to decline to 0.0 in 5 years

Production Facility with a component count of 1000, and 150 horsepower 4-cycle natural gas fueled generator with a fuel use rate of approx. 26 MCF

Gas Compression with a natural gas fueled 4-cycle engine of 120 horsepower operated 24 hours per day

Supply Boat horsepower of 2500
Port O'Connor, TX - 22 miles from site
1 trip per week
5 hours per trip

Crane horsepower of 110
1 crane operated 2 hours per day

Welding Machine horsepower of 60
operated 4 hours per drilling day

V. **Methodology:**

A model cooperatively developed by Offshore Operator's Committee Gulf of Mexico Task Force and API was utilized to predict the emissions from the project. This model calculates maximum fuel usage for each emission source based upon horsepower and engine type. Emission factors from AP-42, or from industry studies if none are available elsewhere are then used to estimate or project emissions from the project in pounds per hour and tons per year. Emission rate (lb/hr) equals hp or fuel rate x emission factor.

The model assumes the following:

NG Turbines fuel use scf/hr = hp x 9.524 (10,000 btu/hp-hr/1050 btu/scf)
NG Engines fuel use scf/hr = hp x 7.143 (7,500 btu/hp-hr/1050 btu/scf)
Diesel fuel use scf/hr = hp x 0.0483 (7,000 btu/hp-hr/145,000 btu/gal)
NG Prime Movers TNMOC refers to total nonmethane organic carbon emissions and these are assumed equal to VOC
Diesel Prime Movers diesel sulfur 0.4% by wt.
Diesel Engines < 600 hp VOC equals total HC
Diesel Engines > 600 hp VOC equals nonmethane HC emissions
Heaters/Boilers NG sulfur content is 2000 grains per million cu ft
Heaters/Boilers VOC emissions based on total nonmethane HC's
Gas Flares assumed to be nonsmoking
1050 btu/cu ft for NG heating value
Liquid Flares assume 1% by wt. sulfur maximum in crude oil
VOC equals nonmethane HC's
particulate emission assumes grade 5 oil
Tanks assumed to be uncontrolled fixed roof tanks

Emission factors are provided in the attached air emission calculation sheet.

V. Emission Schedule:

Attached are air emission calculation sheets (Tables 1-10) for each of the 10 years of the project, which indicate the characteristics, utilization rates, and projected emissions of each source. Projected emissions are provided in both pounds per hour and tons per year.

VI. Total Emissions:

Attached is an air emission calculations sheet which sums the total emissions, in tons per year, for both the projected 10 individual years of the project and for the entire length of the project (Table 11). The total emissions for the project, both for individual years and over the life of the project are well below the allowable limits which are indicated by formula in 30 CFR 250.45 and by number on the attached sheet. The project therefor appears to be exempt from further air quality review.

VII. References:

Atmospheric Emissions From Offshore Oil Development and Production, EPA-450/3-77-026, June 1977

Compilation of Air Pollutant Emissions Factors, EPA Report AP-42, September 1985

Offshore Operators Committee / API Model For The Estimation Of Emissions From Offshore Operations

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	LATITUDE	LONGITUDE	CONTACT	PHONE	REMARKS
SANTA FE MINERALS	MATAGORDA ISLAND	633/634	OCSG 6042/7202	633A	0	0	0	SUZY YOUNGER	214-701-75	0

							POUNDS PER HOUR					TONS PER YEAR				
OPERATIONS	EQUIPMENT		MAX. FUEL	ACT. FUEL	RUN TIME											
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	TSP	SOx	NOx	VOC	CO	TSP	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	3000	144.90	3477.60	24	75	7.27	8.59	72.69	1.92	19.16	8.54	7.73	65.42	1.72	17.25
	PRIME MOVER>600hp diesel	0	0.00	0.00	24	200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0.00	0.00	24	200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0.00	0.00	24	200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TUGBOAT diesel	3500	169.05	4057.20	24	4	8.48	10.02	84.80	2.24	22.36	0.41	0.48	4.07	0.11	1.07
	TWO CRANE<600hp diesel	110	5.31	127.51	4	75	0.24	0.23	3.39	0.27	0.73	0.04	0.03	0.51	0.04	0.11
	CEMENT SKID<600hp diesel	400	19.32	463.68	24	2	0.68	0.82	12.33	0.99	2.67	0.02	0.02	0.30	0.02	0.06
	TUGBOAT diesel	3500														
	CREWBOAT>600hp diesel	2000	96.60	2318.40	4	150	4.85	5.73	48.46	1.28	12.78	1.53	1.80	15.26	0.40	4.02
	SUPPLY BOAT>600hp diesel	2500	120.75	2898.00	5	50	6.06	7.16	60.57	1.60	15.97	0.80	0.95	8.03	0.21	2.12
PIPELINE	LAY/BURY BARGE diesel	5310	256.47	6155.35	24	9	12.87	15.20	128.66	3.39	33.92	1.39	1.64	13.89	0.37	3.66
INSTALLATION	TUGBOAT diesel	3500	169.05	4057.20	24	9	8.48	10.02	84.80	2.24	22.36	0.92	1.08	9.16	0.24	2.41
	CREWBOAT diesel	2000	96.60	2318.40	4	9	4.85	5.73	48.46	1.28	12.78	0.09	0.11	0.92	0.02	0.24
FACILITY	DERRICK BARGE diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	MATERIAL TUG diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	ONE CRANE diesel	110	5.31	127.51	2	365	0.24	0.23	3.39	0.27	0.73	0.09	0.08	1.24	0.10	0.27
	GENERATOR diesel	0	0.00	0.00	24	365	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	WELDING MACHINE diesel	63	3.04	73.03	4	365	0.14	0.13	1.94	0.16	0.42	0.10	0.09	1.42	0.11	0.31
	RECIP.>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	2500	120.75	2898.00	5	52	6.06	7.16	60.57	1.60	15.97	0.83	0.99	8.35	0.22	2.20
	TURBINE nat gas	0	0.00	0.00	24	365			0.00	0.00	0.00			0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0.00	0.00	12	0			0.00	0.00	0.00			0.00	0.00	0.00
	GENERATOR 4 cycle lean nat gas	150	1071.45	25714.80	24	365			3.96	0.24	0.53			17.37	1.04	2.32
	COMPRESSOR 4 cycle lean nat g	120	857.16	20571.84	24	365			3.17	0.19	0.42			13.89	0.83	1.85
	BURNER nat gas	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	1265			24	365				1.58					6.93	
	FLARE-		0		1	0			0.00	0.00	0.00			0.00	0.00	0.00
	PROCESS VENT-		0		24	0				0.00					0.00	
	FUGITIVES-			1000.0		365				0.03					0.11	
	GLYCOL STILL VENT-		1290000		24	365				8.51					37.29	
DRILLING	OIL BURN	0			24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WELL TEST	GAS FLARE		124000		24	4			6.85	7.48	46.17			0.42	0.36	2.31
1994 YEAR TOTAL							60.41	71.01	626.06	35.24	208.97	12.78	15.01	160.24	50.14	40.21
												333.00	333.00	333.00	333.00	15902.99

EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES
	10.0

Table 1. Emission sources and projected emission rates, in pounds per hour and tons per year, for Year #1 of the project.

AIR EMISSION CALCULATIONS

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	LATITUDE	LONGITUDE	CONTACT	PHONE	REMARKS
SANTA FE MINERALS	MATAGORDA ISLAND	633/634	OCSG 6042/1	633A	0	0	0	SUZY YOUNGER	214-701-79	0
OPERATIONS	EQUIPMENT		MAX. FUEL	ACT. FUEL	RUN TIME		POUNDS PER HOUR			TONS PER YEAR
	Diesel Engines	HP	GAL/HR	GAL/D						
	Nat. Gas Engines	HP	SCF/HR	SCF/D						
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	TSP	SOx	NOx	VOC	CO	TSP	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	3000	144.90	3477.60	24	75	7.27	6.59	72.69	1.92	19.16	8.54	7.73	65.42	1.72	17.25
	PRIME MOVER>600hp diesel	0	0.00	0.00	24	200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0.00	0.00	24	200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TUGBOAT diesel	3500	169.05	4057.20	24	200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWO CRANE<600hp diesel	110	5.31	127.51	2	4	8.48	10.02	84.80	2.24	22.36	0.41	0.48	4.07	0.11	1.07
	CEMENT SKID<600hp diesel	400	19.32	463.68	24	75	0.24	0.23	3.39	0.27	0.73	0.02	0.02	0.25	0.02	0.06
	TUGBOAT diesel	3500			24	2	0.85	0.82	12.33	0.99	2.67	0.02	0.02	0.30	0.02	0.06
	CREWBOAT>600hp diesel	2000	96.60	2318.40	4	150	4.85	5.73	48.46	1.28	12.78	1.53	1.80	15.26	0.40	4.02
	SUPPLY BOAT>600hp diesel	2500	120.75	2898.00	5	50	6.06	7.16	60.57	1.60	15.97	0.80	0.95	8.03	0.21	2.12
PIPELINE	LAY/BURY BARGE diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	TUGBOAT diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CREWBOAT diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY	DERRICK BARGE diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	MATERIAL TUG diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	ONE CRANE diesel	110	5.31	127.51	2	365	0.24	0.23	3.39	0.27	0.73	0.09	0.06	1.24	0.10	0.27
	GENERATOR diesel	0	0.00	0.00	24	365	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	WELDING MACHINE diesel	63	3.04	73.03	4	365	0.14	0.13	1.94	0.16	0.42	0.10	0.09	1.42	0.11	0.31
	RECIP.>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	2500	120.75	2898.00	5	52	6.06	7.16	60.57	1.60	15.97	0.83	0.99	8.35	0.22	2.20
	TURBINE nat gas	0	0.00	0.00	24	365			0.00	0.00	0.00			0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0.00	0.00	12	0			0.00	0.00	0.00			0.00	0.00	0.00
	GENERATOR 4 cycle lean nat gas	150	1071.45	25714.80	24	365			3.96	0.24	0.53			17.37	1.04	2.32
	COMPRESSOR 4 cycle lean nat gas	120	857.16	20571.84	24	365			3.17	0.19	0.42			13.89	0.83	1.85
	BURNER nat gas	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TANK-	2100			24	365				2.63					11.50	
	FLARE-		0		24	0			0.00	0.00	0.00			0.00	0.00	0.00
	PROCESS VENT-		0		24	0				0.00					0.00	
	FUGITIVES-			1000.0		365				11.02					35.05	
	GLYCOL STILL VENT-		1670000		24	265				0.03					0.11	
DRILLING	OIL BURN	0			24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WELL TEST	GAS FLARE		124000		24	4			6.85	7.48	48.17			0.42	0.36	2.31
1995 YEAR TOTAL							34.21	40.06	364.14	31.69	139.92	10.34	12.18	136.02	51.81	33.63
												333.00	333.00	333.00	333.00	15902.99
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES															
	10.0															

Table 2. Emission sources and projected emission rates, in pounds per hour and tons per year, for Year #2 of the project.

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	LATITUDE	LONGITUDE	CONTACT		PHONE	REMARKS					
SANTA FE MINERALS	MATAGORDA ISLAND	633/634	OCSG 6042/	633A	0	0	0	SUZY YOUNGER		214-701-75	0					
OPERATIONS	EQUIPMENT		MAX. FUEL	ACT. FUEL	RUN TIME		POUNDS PER HOUR					TONS PER YEAR				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	TSP	SOx	NOx	VOC	CO	TSP	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	ONE CRANE<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CEMENT SKID<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CREWBOAT>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPLYBOAT>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE	LAY/BURY BARGE diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	TUGBOAT diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CREWBOAT diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY	DERRICK BARGE diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	MATERIAL TUG diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	ONE CRANE diesel	110	5.31	127.51	2	365	0.24	0.23	3.39	0.27	0.73	0.09	0.08	1.24	0.10	0.27
	GENERATOR diesel	0	0.00	0.00	24	365	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	WELDING MACHINE diesel	63	3.04	73.03	4	365	0.14	0.13	1.94	0.16	0.42	0.10	0.09	1.42	0.11	0.31
	RECIP.>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	2500	120.75	2898.00	5	52	6.06	7.15	60.57	1.60	15.97	0.83	0.99	8.35	0.22	2.20
	TURBINE nat gas	0	0.00	0.00	24	365			0.00	0.00	0.00			0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0.00	0.00	12	0			0.00	0.00	0.00			0.00	0.00	0.00
	GENERATOR 4 cycle lean nat gas	150	1071.45	25714.80	24	365			3.96	0.24	0.53			17.37	1.04	2.32
	COMPRESSOR 4 cycle lean nat g	120	857.16	20571.84	24	365			3.17	0.19	0.42			13.89	0.83	1.85
	BURNER nat gas	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	1575			24	150				1.97					3.54	
	FLARE-		0		24	0			0.00	0.00	0.00			0.00	0.00	0.00
	PROCESS VENT-		0		24	0				0.00					0.00	
	FUGITIVES-			1000.0		365				0.03					0.11	
	GLYCOL STILL VENT-		1500000		24	0				9.90					0.00	
DRILLING	OIL BURN	0			24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WELL TEST	GAS FLARE		0		24	0			0.00	0.00	0.00			0.00	0.00	0.00
1998 YEAR TOTAL							8.44	7.51	73.04	14.35	18.08	1.02	1.16	42.26	5.96	8.94
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES															
	10.0											333.00	333.00	333.00	333.00	15902.99

Table 3. Emission sources and projected emission rates, in pounds per hour and tons per year, for Year #3 of the project.

01-Feb-94 [MMS.WK3]

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	LATITUDE	LONGITUDE	CONTACT	PHONE	REMARKS
SANTA FE MINERALS	MATAGORDA ISLAND	633/634	OCSG 6042/1	633A	0	0	0	SUZY YOUNGER	214-701-75	0

OPERATIONS	EQUIPMENT		MAX. FUEL	ACT. FUEL	RUN TIME		POUNDS PER HOUR					TONS PER YEAR				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	TSP	SOx	NOx	VOC	CO	TSP	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	ONE CRANE<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CEMENT SKID<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CREWBOAT>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPLYBOAT>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE	LAY/BURY BARGE diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	TUGBOAT diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CREWBOAT diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY	DERRICK BARGE diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	MATERIAL TUG diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	ONE CRANE diesel	110	5.31	127.51	2	365	0.24	0.23	3.39	0.27	0.73	0.09	0.08	1.24	0.10	0.27
	GENERATOR diesel	0	0.00	0.00	24	365	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	WELDING MACHINE diesel	63	3.04	73.03	4	365	0.14	0.13	1.94	0.16	0.42	0.10	0.09	1.42	0.11	0.31
	RECIP.>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	2500	120.75	2898.00	5	52	6.06	7.16	60.57	1.60	15.97	0.83	0.99	8.35	0.22	2.20
	TURBINE nat gas	0	0.00	0.00	24	365			0.00	0.00	0.00			0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0.00	0.00	12	0			0.00	0.00	0.00			0.00	0.00	0.00
	GENERATOR 4 cycle lean nat gas	150	1071.45	25714.80	24	365			3.96	0.24	0.53			17.37	1.04	2.32
	COMPRESSOR 4 cycle lean nat g	120	857.16	20571.84	24	365			3.17	0.19	0.42			13.89	0.83	1.85
	BURNER nat gas	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	1050			24	150				1.31					2.36	
	FLARE-		0		24	0			0.00	0.00	0.00			0.00	0.00	0.00
	PROCESS VENT-		0		24	0				0.00					0.00	
	FUGITIVES-			1000.0		365				0.03					0.11	
	GLYCOL STILL VENT-		1330000		24	0				8.78					0.00	
DRILLING	OIL BURN	0				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WELL TEST	GAS FLARE		0		24	0			0.00	0.00	0.00			0.00	0.00	0.00
1997	YEAR TOTAL						6.44	7.51	73.04	12.57	18.06	1.02	1.16	42.26	4.78	6.94
												333.00	333.00	333.00	333.00	15902.99
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES															
	10.0															

Table 4. Emission sources and projected emission rates, in pounds per hour and tons per year, for Year #4 of the project.

01-Feb-94 [MMS.WK3]

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	LATITUDE	LONGITUDE	CONTACT		PHONE	REMARKS					
SANTA FE MINERALS	MATAGORDA ISLAND	633/634	OCSG 6042/7	633A	0	0	0	SUZY YOUNGER		214-701-75	0					
OPERATIONS	EQUIPMENT		MAX. FUEL	ACT. FUEL	RUN TIME		POUNDS PER HOUR					TONS PER YEAR				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	TSP	SOx	NOx	VOC	CO	TSP	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	ONE CRANE<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CEMENT SKID<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CREWBOAT>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPLYBOAT>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE	LAY/BURY BARGE diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	TUGBOAT diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CREWBOAT diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY	DERRICK BARGE diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	MATERIAL TUG diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	ONE CRANE diesel	110	5.31	127.51	2	365	0.24	0.23	3.39	0.27	0.73	0.09	0.08	1.24	0.10	0.27
	GENERATOR diesel	0	0.00	0.00	24	365	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	WELDING MACHINE diesel	63	3.04	73.03	4	365	0.14	0.13	1.94	0.16	0.42	0.10	0.09	1.42	0.11	0.31
	RECIP.>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	2500	120.75	2898.00	5	52	6.06	7.16	60.57	1.60	15.97	0.83	0.99	8.35	0.22	2.20
	TURBINE nat gas	0	0.00	0.00	24	365			0.00	0.00	0.00			0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0.00	0.00	12	0			0.00	0.00	0.00			0.00	0.00	0.00
	GENERATOR 4 cycle lean nat gas	150	1071.45	25714.80	24	365			3.96	0.24	0.53			17.37	1.04	2.32
	COMPRESSOR 4 cycle lean nat g	120	857.16	20571.84	24	365			3.17	0.19	0.42			13.89	0.83	1.85
	BURNER nat gas	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT						0.66					1.18	
	TANK-	525			24	150			0.00	0.00	0.00			0.00	0.00	0.00
	FLARE-		0		24	0				0.00					0.00	
	PROCESS VENT-		0		24	0				0.03					0.11	
	FUGITIVES-			1000.0		365				7.72					0.00	
	GLYCOL STILL VENT-		1170000		24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DRILLING	OIL BURN	0				0			0.00	0.00	0.00			0.00	0.00	0.00
WELL TEST	GAS FLARE		0		24	0										
							6.44	7.51	73.04	10.86	18.08	1.02	1.16	42.28	3.60	6.94
1998	YEAR TOTAL											333.00	333.00	333.00	333.00	15902.99
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES															
	10.0															

Table 5. Emission sources and projected emission rates, in pounds per hour and tons per year, for Year #5 of the project.

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	LATITUDE	LONGITUDE	CONTACT		PHONE	REMARKS					
SANTA FE MINERALS	MATAGORDA ISLAND	633/634	OCSG 6042/1	633A	0	0	0	SUZY YOUNGER		214-701-75	0					
OPERATIONS	EQUIPMENT		MAX. FUEL	ACT. FUEL	RUN TIME		POUNDS PER HOUR					TONS PER YEAR				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	TSP	SOx	NOx	VOC	CO	TSP	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	ONE CRANE<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CEMENT SKID<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CREWBOAT>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPLYBOAT>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE	LAY/BURY BARGE diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	TUGBOAT diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CREWBOAT diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY	DERRICK BARGE diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	MATERIAL TUG diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	ONE CRANE diesel	110	5.31	127.51	2	365	0.24	0.23	3.39	0.27	0.73	0.09	0.08	1.24	0.10	0.27
	GENERATOR diesel	0	0.00	0.00	24	365	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	WELDING MACHINE diesel	63	3.04	73.03	4	365	0.14	0.13	1.94	0.16	0.42	0.10	0.09	1.42	0.11	0.31
	RECIP.>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	2500	120.75	2898.00	5	52	6.06	7.16	60.57	1.60	15.97	0.83	0.99	8.35	0.22	2.20
	TURBINE nat gas	0	0.00	0.00	24	365			0.00	0.00	0.00			0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0.00	0.00	12	0			0.00	0.00	0.00			0.00	0.00	0.00
	GENERATOR 4 cycle lean nat gas	150	1071.45	25714.80	24	365			3.96	0.24	0.53			17.37	1.04	2.32
	COMPRESSOR 4 cycle lean nat g	120	857.16	20571.84	24	365			3.17	0.19	0.42			13.89	0.83	1.85
	BURNER nat gas	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0			24	150				0.00					0.00	
	FLARE-		0		24	0			0.00	0.00	0.00			0.00	0.00	0.00
	PROCESS VENT-		0		24	0				0.00					0.00	
	FUGITIVES-			1000.0		365				0.03					0.11	
	GLYCOL STILL VENT-		1000000		24	365				6.60					28.91	
DRILLING	OIL BURN	0				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WELL TEST	GAS FLARE		0		24	0			0.00	0.00	0.00			0.00	0.00	0.00
1999	YEAR TOTAL						8.44	7.51	73.04	9.08	16.08	1.02	1.16	42.26	31.33	6.94
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											333.00	333.00	333.00	333.00	15902.99
	10.0															

Table 6. Emission sources and projected emission rates, in pounds per hour and tons per year, for Year #6 of the project.

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	LATITUDE	LONGITUDE	CONTACT			PHONE	REMARKS				
SANTA FE MINERALS	MATAGORDA ISLAND	633/634	OCSG 6042/	633A	0	0	0	SUZY YOUNGER			214-701-7	0				
OPERATIONS	EQUIPMENT		MAX. FUEL	ACT. FUEL	RUN TIME		POUNDS PER HOUR					TONS PER YEAR				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	TSP	SOx	NOx	VOC	CO	TSP	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	ONE CRANE<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CEMENT SKID<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CREWBOAT>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPLYBOAT>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE	LAY/BURY BARGE diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	TUGBOAT diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CREWBOAT diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY	DERRICK BARGE diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	MATERIAL TUG diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	ONE CRANE diesel	110	5.31	127.51	2	365	0.24	0.23	3.39	0.27	0.73	0.09	0.08	1.24	0.10	0.27
	GENERATOR diesel	0	0.00	0.00	24	365	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	WELDING MACHINE diesel	63	3.04	73.03	4	365	0.14	0.13	1.94	0.16	0.42	0.10	0.09	1.42	0.11	0.31
	RECIP.>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	2500	120.75	2898.00	5	52	6.06	7.16	60.57	1.60	15.97	0.83	0.99	8.35	0.22	2.20
	TURBINE nat gas	0	0.00	0.00	24	365			0.00	0.00	0.00			0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0.00	0.00	12	0			0.00	0.00	0.00			0.00	0.00	0.00
	GENERATOR 4 cycle lean nat gas	150	1071.45	25714.80	24	365			3.96	0.24	0.53			17.37	1.04	2.32
	COMPRESSOR 4 cycle lean nat g	120	857.16	20571.84	24	365			3.17	0.19	0.42			13.89	0.83	1.85
	BURNER nat gas	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0			24	150				0.00					0.00	
	FLARE-		0		24	0			0.00	0.00	0.00			0.00	0.00	0.00
	PROCESS VENT-		0		24	0				0.00					0.00	
	FUGITIVES-			1000.0		365				0.03					0.11	
	GLYCOL STILL VENT-		830000		24	365				5.48					23.99	
DRILLING	OIL BURN	0				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WELL TEST	GAS FLARE		0		24	0			0.00	0.00	0.00			0.00	0.00	0.00
2000	YEAR TOTAL						6.44	7.51	73.04	7.95	18.08	1.02	1.16	42.26	26.41	6.94
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											333.00	333.00	333.00	333.00	15902.99
	10.0															

Table 7. Emission sources and projected emission rates, in pounds per hour and tons per year, for Year #7 of the project.

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	LATITUDE	LONGITUDE	CONTACT		PHONE	REMARKS					
SANTA FE MINERALS	MATAGORDA ISLAND	633/634	OCSG 6042/1	633A	0	0	0	SUZY YOUNGER		214-701-75	0					
OPERATIONS	EQUIPMENT		MAX. FUEL	ACT. FUEL	RUN TIME		POUNDS PER HOUR					TONS PER YEAR				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	TSP	SOx	NOx	VOC	CO	TSP	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	ONE CRANE<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CEMENT SKID<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CREWBOAT>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPLYBOAT>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE	LAY/BURY BARGE diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	TUGBOAT diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CREWBOAT diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY	DERRICK BARGE diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	MATERIAL TUG diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	ONE CRANE diesel	110	5.31	127.51	2	365	0.24	0.23	3.39	0.27	0.73	0.09	0.08	1.24	0.10	0.27
	GENERATOR diesel	0	0.00	0.00	24	365	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	WELDING MACHINE diesel	83	3.04	73.03	4	365	0.14	0.13	1.94	0.16	0.42	0.10	0.09	1.42	0.11	0.31
	RECIP.>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	2500	120.75	2898.00	5	52	6.06	7.16	60.57	1.60	15.97	0.83	0.99	8.35	0.22	2.20
	TURBINE nat gas	0	0.00	0.00	24	365			0.00	0.00	0.00			0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0.00	0.00	12	0			0.00	0.00	0.00			0.00	0.00	0.00
	GENERATOR 4 cycle lean nat gas	150	1071.45	25714.80	24	365			3.96	0.24	0.53			17.37	1.04	2.32
	COMPRESSOR 4 cycle lean nat g	120	857.16	20571.84	24	365			3.17	0.19	0.42			13.89	0.83	1.55
	BURNER nat gas	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0			24	150				0.00					0.00	
	FLARE-		0		24	0			0.00	0.00	0.00			0.00	0.00	0.00
	PROCESS VENT-		0		24	0				0.00					0.00	
	FUGITIVES-			1000.0		365				0.03					0.11	
	GLYCOL STILL VENT-		670000		24	365				4.42					19.37	
DRILLING	OIL BURN	0				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WELL TEST	GAS FLARE		0		24	0			0.00	0.00	0.00			0.00	0.00	0.00
2001	YEAR TOTAL						6.44	7.51	73.04	8.90	18.08	1.02	1.16	42.26	21.79	6.94
												333.00	333.00	333.00	333.00	15902.99
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES															
	10.0															

Table 8. Emission sources and projected emission rates, in pounds per hour and tons per year, for Year #8 of the project.

BEST AVAILABLE COPY

01-Feb-94 [MMS.WK3]

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	LATITUDE	LONGITUDE	CONTACT		PHONE	REMARKS					
SANTA FE MINERALS	MATAGORDA ISLAND	633/634	OCSG 6042/	633A	0	0	0	SUZY YOUNGER		214-701-75	0					
OPERATIONS	EQUIPMENT		MAX. FUEL	ACT. FUEL	RUN TIME		POUNDS PER HOUR					TONS PER YEAR				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	TSP	SOx	NOx	VOC	CO	TSP	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	ONE CRANE<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CEMENT SKID<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CREWBOAT>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPLYBOAT>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE	LAY/BURY BARGE diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	TUGBOAT diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CREWBOAT diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY	DERRICK BARGE diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	MATERIAL TUG diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	ONE CRANE diesel	110	5.31	127.51	2	365	0.24	0.23	3.39	0.27	0.73	0.09	0.08	1.24	0.10	0.27
	GENERATOR diesel	0	0.00	0.00	24	365	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	WELDING MACHINE diesel	63	3.04	73.03	4	365	0.14	0.13	1.94	0.18	0.42	0.10	0.09	1.42	0.11	0.31
	RECIP.>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	2500	120.75	2898.00	5	52	6.06	7.16	60.57	1.60	15.97	0.83	0.99	8.35	0.22	2.20
	TURBINE nat gas	0	0.00	0.00	24	365			0.00	0.00	0.00			0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0.00	0.00	12	0			0.00	0.00	0.00			0.00	0.00	0.00
	GENERATOR 4 cycle lean nat gas	150	1071.45	25714.80	24	365			3.96	0.24	0.53			17.37	1.04	2.32
	COMPRESSOR 4 cycle lean nat g	120	857.16	20571.84	24	365			3.17	0.19	0.42			13.89	0.83	1.85
	BURNER nat gas	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0			24	150				0.00					0.00	
	FLARE-		0		24	0			0.00	0.00	0.00			0.00	0.00	0.00
	PROCESS VENT-		0		24	0				0.00					0.00	
	FUGITIVES-			1000.0		365				0.03					0.11	
	GLYCOL STILL VENT-		500000		24	365				3.30					14.45	
DRILLING	OIL BURN	0				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WELL TEST	GAS FLARE		0		24	0			0.00	0.00	0.00			0.00	0.00	0.00
2002	YEAR TOTAL						6.44	7.51	73.04	5.78	18.08	1.02	1.16	42.26	16.67	6.94
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											333.00	333.00	333.00	333.00	15902.99
	10.0															

Table 9. Emission sources and projected emission rates, in pounds per hour and tons per year, for Year #9 of the project.

BEST AVAILABLE COPY

01-Feb-94 (MMS.WK3)

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	LATITUDE	LONGITUDE	CONTACT		PHONE	REMARKS					
SANTA FE MINERALS	MATAGORDA ISLAND	633/634	OCSG 6042/1	633A	0	0	0	SUZY YOUNGER		214-701-75	0					
OPERATIONS	EQUIPMENT		MAX. FUEL	ACT. FUEL	RUN TIME		POUNDS PER HOUR					TONS PER YEAR				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	TSP	SOx	NOx	VOC	CO	TSP	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	ONE CRANE<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CEMENT SKID<600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CREWBOAT>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPLYBOAT>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE	LAY/BURY BARGE diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	TUGBOAT diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	CREWBOAT diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY	DERRICK BARGE diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	MATERIAL TUG diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	ONE CRANE diesel	110	5.31	127.51	2	365	0.24	0.23	3.39	0.27	0.73	0.09	0.08	1.24	0.10	0.27
	GENERATOR diesel	0	0.00	0.00	24	365	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	WELDING MACHINE diesel	63	3.04	73.03	4	365	0.14	0.13	1.94	0.16	0.42	0.10	0.09	1.42	0.11	0.31
	RECIP.>600hp diesel	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	2500	120.75	2898.00	5	52	6.06	7.16	60.57	1.60	15.97	0.83	0.99	6.35	0.22	2.20
	TURBINE nat gas	0	0.00	0.00	24	365			0.00	0.00	0.00			0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0.00	0.00	12	0			0.00	0.00	0.00			0.00	0.00	0.00
	GENERATOR 4 cycle lean nat gas	150	1071.45	25714.80	24	365			3.96	0.24	0.53			17.37	1.04	2.32
	COMPRESSOR 4 cycle lean nat g	120	857.16	20571.84	24	365			3.17	0.19	0.42			13.89	0.83	1.85
	BURNER nat gas	0	0.00	0.00	24	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0			24	150				0.00					0.00	
	FLARE-		0		24	0			0.00	0.00	0.00			0.00	0.00	0.00
	PROCESS VENT-		0		24	0				0.00					0.00	
	FUGITIVES-			1000.0		365				0.03					0.11	
	GLYCOL STILL VENT-		330000		24	365				2.18					9.54	
DRILLING	OIL BURN	0				0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WELL TEST	GAS FLARE		0		24	0			0.00	0.00	0.00			0.00	0.00	0.00
2003	YEAR TOTAL						6.44	7.51	73.04	4.65	18.06	1.02	1.16	42.26	11.96	6.94
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											333.00	333.00	333.00	333.00	15902.99
	10.0															

Table 10. Emission sources and projected emission rates, in pounds per hour and tons per year, for Year #10 of the project.

BEST AVAILABLE COPY

01-Feb-94 (MMS WK3)

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL
SANTA FE MINERALS	MATAGORDA	633/634	OCSG 6042/7202	233A	0

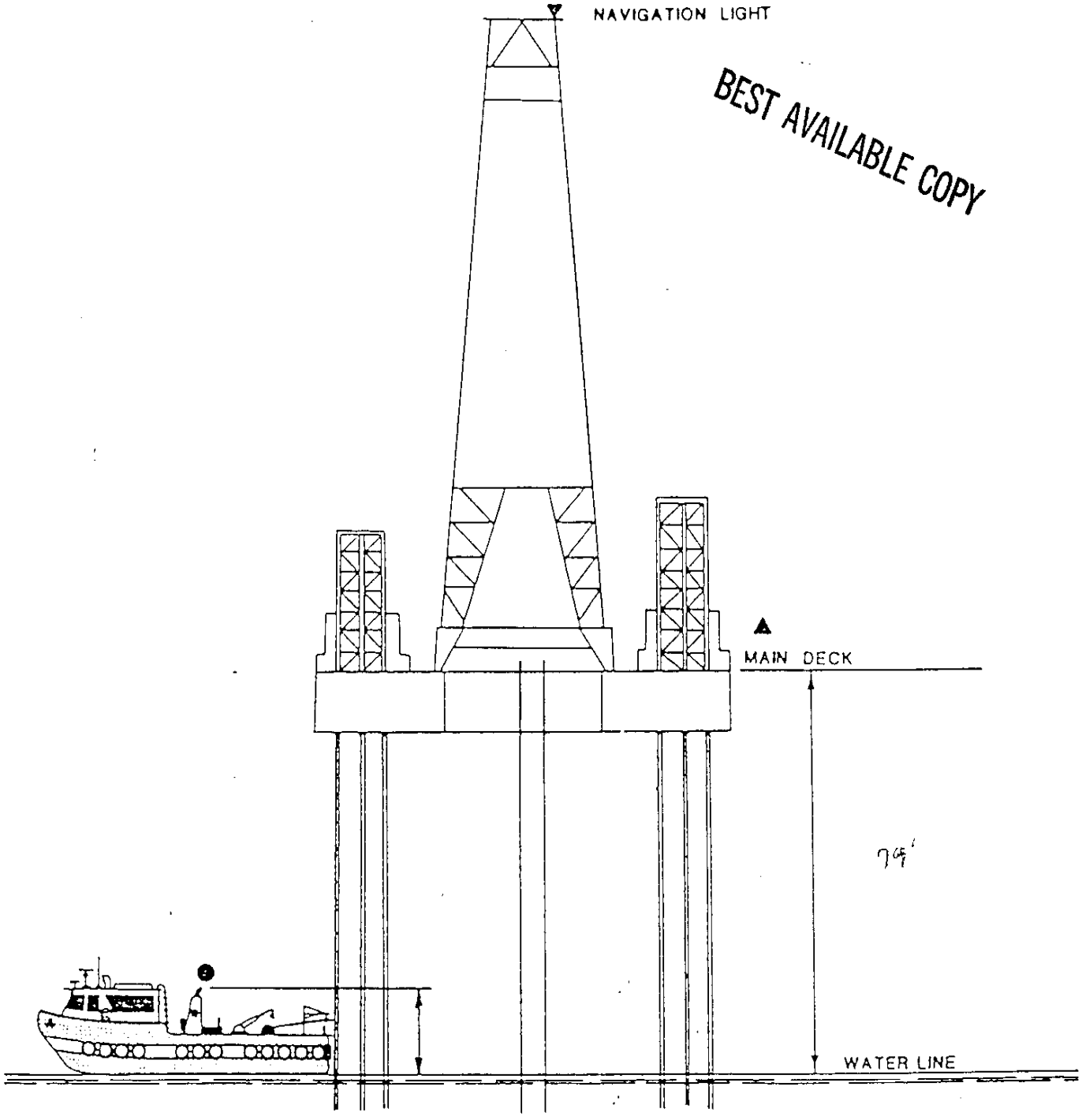
Year	Emitted Substance				
	TSP	SOx	NOx	HC	CO
1994	12.76	15.01	160.24	50.14	40.21
1995	10.34	12.16	136.02	51.81	33.83
1996	1.02	1.16	42.26	5.96	6.94
1997	1.02	1.16	42.26	4.78	6.94
1998	1.02	1.16	42.26	4.78	6.94
1999	1.02	1.16	42.26	4.78	6.94
2000	1.02	1.16	42.26	4.78	6.94
2001	1.02	1.16	42.26	4.78	6.94
2002	1.02	1.16	42.26	4.78	6.94
2003	1.02	1.16	42.26	4.78	6.94
Allowable	333.00	333.00	333.00	333.00	15902.99

Table 11. Total projected emissions for each year of the project, and the allowable emissions based upon the MMS exemption formula in 30 CFR 250.45(d).

Fuel Usage Conversion Factors	Natural Gas Turbines		Natural Gas Engines		Diesel Recip. Engine		REF.	DATE
	SCF/hp-hr	9.524	SCF/hp-hr	7.143	GAL/hp-hr	0.0483	AP42 3.2-1	4/76 & 8/84

Equipment/Emission Factors	units	TSP	SOx	NOx	VOC	CO	REF.	DATE
NG Turbines	gms/hp-hr			1.3	0.01	0.83	AP42 3.2-2	10/92
NG 2-cycle lean	gms/hp-hr			11	0.43	1.5	AP42 3.2-2	10/92
NG 4-cycle lean	gms/hp-hr			12	0.72	1.6	AP42 3.2-2	10/92
NG 4-cycle rich	gms/hp-hr			10	0.14	8.6	AP42 3.2-2	10/92
Diesel Recip. < 600 hp.	gms/hp-hr	1	0.931	14	1.12	3.03	AP42 3.3-1	1/75
Diesel Recip. > 600 hp.	gms/hp-hr	1.1	1.3	11	0.29	2.9	AP42 3.4-1	8/82
NG Heaters/Boilers/Burners	lbs/mmscf	5	0.6	140	2.8	35	AP42 1.4-1	8/82
NG Flares	lbs/mmscf			71.4	60.3	388.5	AP42 11.5-1	9/91
Liquid Flaring	lbs/bbl	0.42	6.6	2.3	0.01	0.21	AP421.3-1	8/82
Tank Vapors	lbs/bbl				0.03		E&P Forum	1/93
Fugitives	lbs/hr/comp.				0.000025		API Study	12/93
Glycol Dehydrator Vent	lbs/mmscf				6.6		La. DEQ	1991
Gas Venting	lbs/scf				0.0034			

Table 12. Fuel use conversion factors and emission factors used in the OOC / API emission projection model.

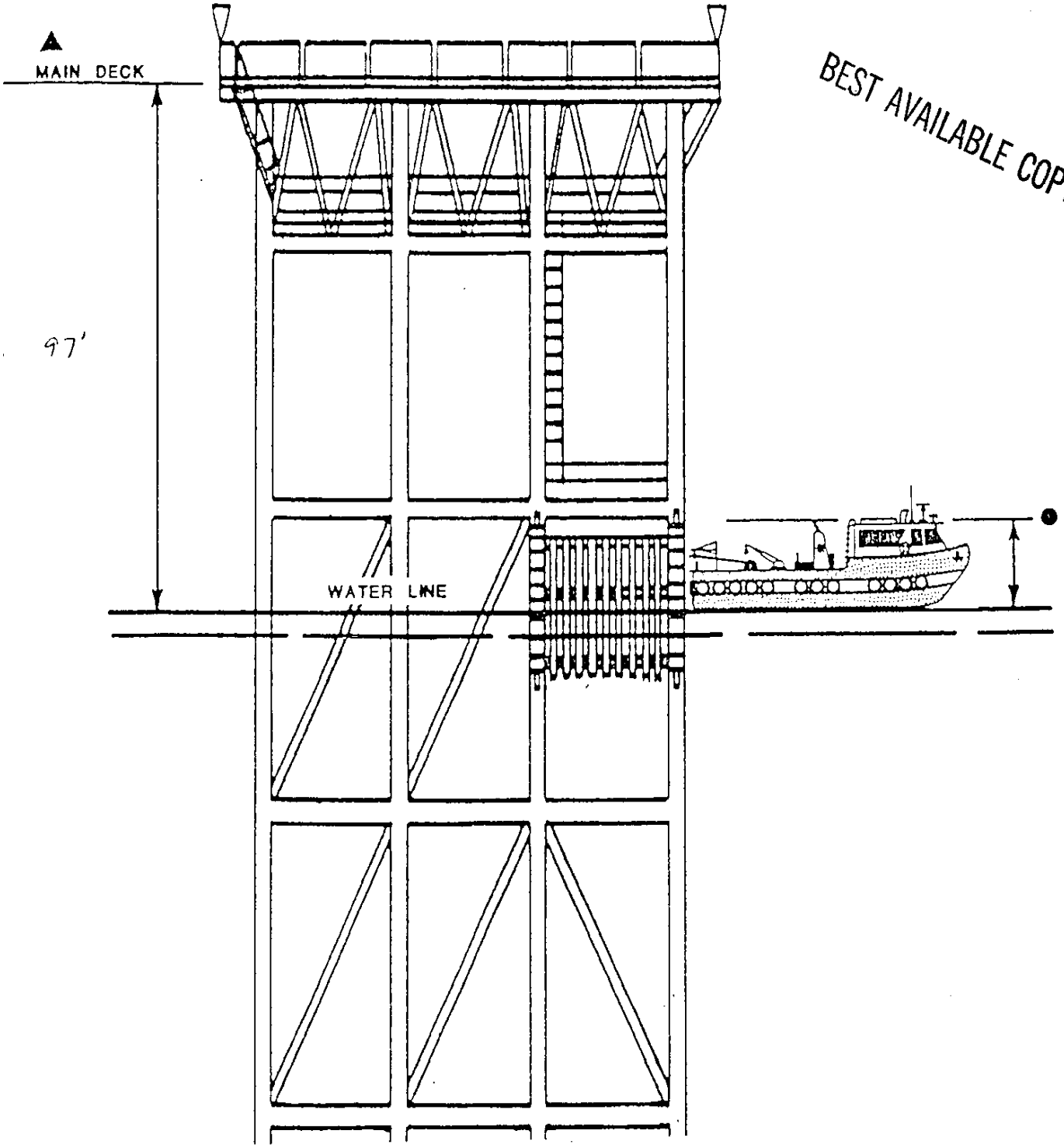


TYPICAL JACK UP RIG

▲ EMISSION SOURCES AT THIS ELEVATION INCLUDE : RIG ENGINES, CRANES, CEMENT UNITS, HELICOPTERS, AND WELDING MACHINES.

● EMISSION SOURCES AT THIS ELEVATION INCLUDE : SUPPLY BOATS, CREW BOATS, AND STANDBY BOATS.

PREPARED BY
John E. Chance & Associates, Inc.



TYPICAL PRODUCTION PLATFORM

▲ EMISSION SOURCES AT THIS ELEVATION INCLUDE : POWER GENERATION EQUIPMENT, GAS COMPRESSION, HEATER TREATER, VENTING, HELICOPTERS, AND WELDING MACHINES.

● EMISSION SOURCES AT THIS ELEVATION INCLUDE : SUPPLY BOATS, CREW BOATS, AND STANDBY BOATS.

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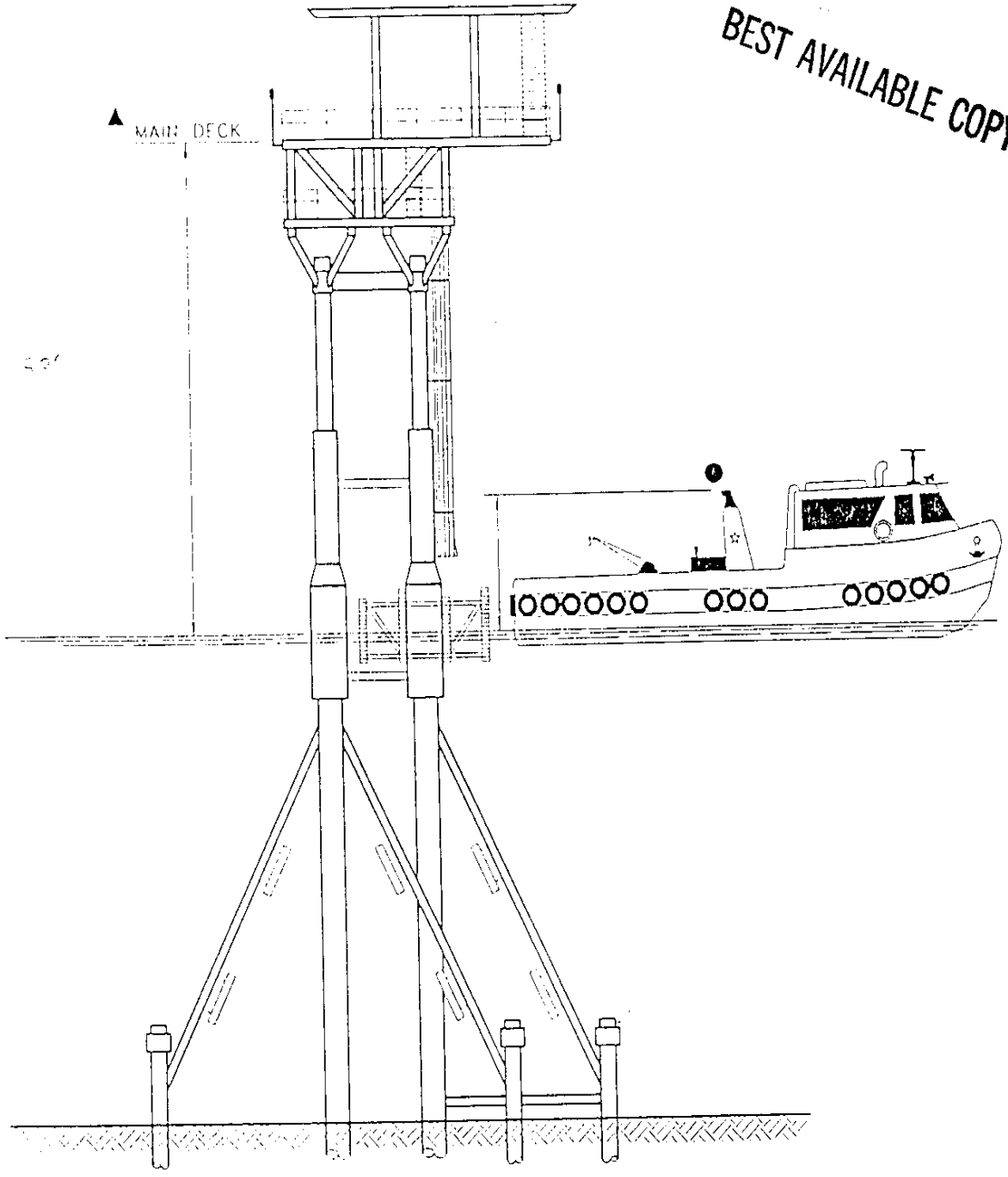
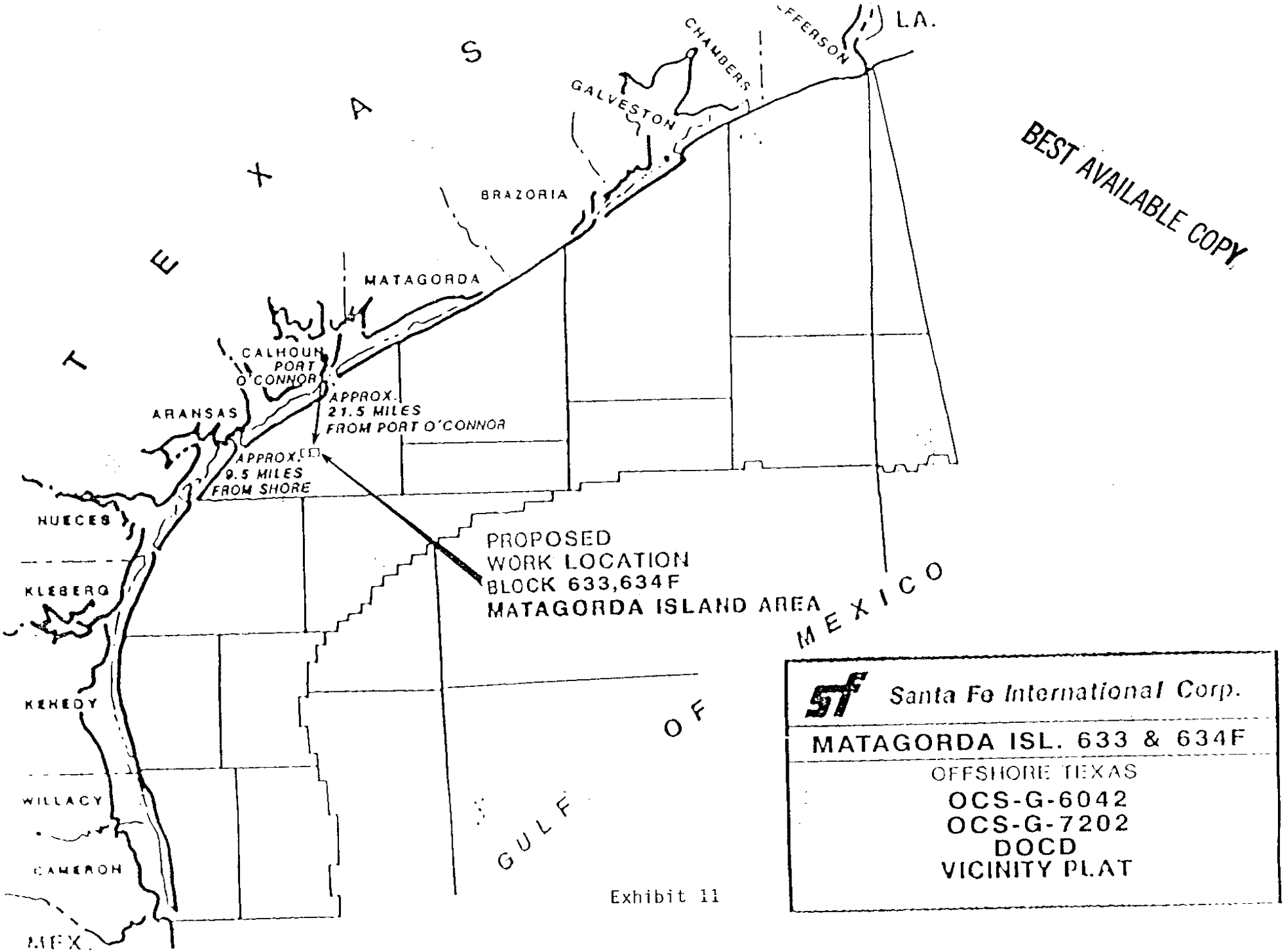
John E. Chance & Associates, Inc.
Lafayette, Louisiana



TYPICAL WELL PROTECTOR

▲ EMISSION SOURCES AT THIS ELEVATION INCLUDE: POWER GENERATION EQUIPMENT, GAS COMPRESSION, HEATER TREATER, VENTING, HELICOPTERS, AND WELDING MACHINES.

● EMISSION SOURCES AT THIS ELEVATION INCLUDE: SUPPLY BOATS, CREW BOATS, AND STANDBY BOATS.



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Santa Fe International Corp.

MATAGORDA ISL. 633 & 634F

OFFSHORE TEXAS

OCS-G-6042
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DOCD
VICINITY PLAT

Exhibit 11