UNITED STATES GOVERNMENT
MEMORANDUM

09/17/97

To: Public Information, (MS 5034)

From: Exploration/Development Plans Unit, (MS 5231)

Reference is made to the following plan received September 8, 1997:

Type Plan - Initial Development Operations Coordination Document
Lease - OCS-G 18056
Block - 249
Area - South Timbalier
Activities Proposed - Well A-4
Control Number - N-5915

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

Michael Tolbert
for Unit Supervisor

mailed 9e

KERR-McGEE CORPORATION
16666 NORTHCHASE • HOUSTON, TEXAS 77060

September 4, 1997

EXPLORATION AND PRODUCTION DIVISION

PHONE: 281/618-6000
FAX: 281/618-6222

U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico, OCS Region
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

Attention: Regional Supervisor
Field Operations

REFER TO CONTROL NO. N-5915

Re: Development Operations
Coordination Document
OCS-G 18056 Well A-4
South Timbalier Block 249

Gentlemen:

This Initial Development Operations Coordination Document is submitted for your approval. The information you require is as follows:

DESCRIPTION & SCHEDULE

Kerr-McGee plans to drill the exploratory well, OCSG 18056 Well A-4, South Timbalier Block 249. The surface location of the well is at South Timbalier Block 265 "A" Platform. Drilling operations are expected to begin on October 1, 1997. It is estimated that it will take a total of 60 days to drill and complete the well. If no unexpected delays are encountered, drilling operations should be completed by November 30, 1997.

If this well proves productive, no additional processing equipment will be needed to produce the well at South Timbalier Block 265 "A" Platform..

Kerr-McGee Corporation has complied with the $3,000,000 bond option as required by the Minerals Management Service.

LOCATION

Details of the proposed well is shown in the table below. Specific information concerning these locations are located on the bathymetry map, location plat, and vicinity plat enclosed.

Well No.	(South Timbalier 265) Surface Location	(South Timbalier 249) Bottom Hole Location	MD	TVD	Water Depth
A-4	1497' FNL & 786' FWL		16360'		195'

Onshore base operations will be conducted from a temporary base in Fourchon, Louisiana base. There will be no significant impact on the onshore support facilities as a direct result of the drilling of this well.

Enclosures:
A. Location Plat
B. Vicinity Plat

GEOLOGICAL & GEOPHYSICAL INFORMATION

Hydrogen sulfide (H_2S) has not been encountered in this area as shown in the attached letter. In addition, Kerr-McGee Corporation requests that the proposed area be classified as a "Zone where the absence of H_2S has been confirmed." Other reports containing specific information to the subsurface are as follows:

Enclosures:

C. Shallow Hazard Letter
D. H2S Letter
E. Structure Map
F. Abnormal Pressure Map
G. Pipeline Map
H. 3-D Seismic Line
I. Bathymetry Map
J. Anomaly Map
K. Deep Isopach
L. Common Depth Point Lines
  - L-1. Sub Bottom Profile (Line 1A)
  - L-2. Sub Bottom Profile (Line 2A)
  - L-3. Side Scan Sonar (Line 1A)
  - L-4. Side Scan Sonar (Line 2A)
  - L-5. Sparker (Line 1A)
  - L-6. Sparker (Line 2A)
  - L-7. Magnetometer (Line 1A)
  - L-8. Magnetometer (Line 2A)

OPERATIONAL LEASE STIPULATIONS

Lease Stipulation No. 1 applies to this lease, and the location of the proposed well meets with those provisions.

OIL SPILL INFORMATION

All drilling, construction and production operations shall be performed in accordance with industry standards to prevent pollution of the environment. Kerr-McGee Corporation's Regional Oil Spill Contingency Plan was submitted to the M.M.S. on July 23, 1991 and approved August 26, 1991. This plan designates an Oil Spill Team consisting of Kerr-McGee's personnel and contract personnel.

This team's duties are to eliminate the source of any spill, remove all sources of possible ignition, deploy the most reliable means of available transportation to monitor the movement of a slick, and contain and remove the slick, if possible.

Kerr-McGee Corporation is a member of Clean Gulf Associates (CGA). The CGA has two permanent equipment bases in Texas (Port Aransas and Galveston) and five bases in Louisiana (Venice, Grand Isle, Houma, Intracoastal City and Cameron). Each base is equipped with fast-response skimmers and there is a barge-mounted, high-volume, open-sea skimmer based at Grand Isle, Louisiana. In addition to providing equipment, the CGA also supplies advisors for clean-up operations. Equipment available from CGA and its location is listed in the CGA Manual, Volume I, Section III.

In the event a spill occurs from operations while drilling the subject well, OCSG 18056 Well A-4, South Timbalier Block 249, our company has projected the path of a spill utilizing information in the Environmental Impact Statement (EIS) for OCS Lease Sales 157 and 161.

Enclosure: M. Oil Spill Trajectory Analysis

A table indicating the response time required for a spill in this area is attached.

Enclosure: N. Oil Spill Response Time

WASTES & POLLUTANTS

This exploratory well will be drilled with the Noble Lynn Richardson jackup drilling rig. Drip pans are installed under all equipment which could be a source of pollution. All waste products which contain oil will be properly transported to land and disposed at approved disposal facilities. Domestic wastes will be treated by onboard sanitation treatment facilities and will be disposed into Gulf of Mexico waters. These waters, plus formation and water base drill waters, will be discharged overboard at the site in accordance with NPDES regulations. All other solid and liquid waste which cannot be disposed at the site will be transported to land in approved containers and then disposed in accordance with local and state regulations.

The composition and projected amounts and rates of drilling fluid and cuttings discharge are shown on the table enclosed.

WASTE & POLLUTANTS (continued)

Enclosures:
- O. List of Mud Components and Additives
- P. Drilling Fluid & Cuttings Discharge Table

OTHER INFORMATION

The Noble Lynn Richardson jackup drilling rig, will be utilized to drill this well. A description of the rig and features pertaining to pollution prevention, control and air emissions is enclosed.

Enclosures:
- Q. Rig Specifications
- R. Air Quality Emissions Schedule
  1. Title Page
  2. Emissions Spreadsheet
  3. Summary Sheet
  4. Emission Factor Sheet
  5. Calculation Sheets (3)
- S. Environmental Report
- T. Coastal Zone Management
- U. Public Notice
- V. Structure: South Timbalier Block 265 "A" Structure
- W. Certificate of Financial Responsibility

Kerr-McGee Corporation plans to develop this lease with a minimum number of surface structures, which will be determined as developmental drilling takes place. If the well is plugged and abandoned, the work shall be done in accordance with 30 CFR Subpart G, Part 250.110. Should the well be temporarily abandoned with casing stubs, the stubs shall be marked in accordance with Coast Guard regulations. The well will then be reported on the semi-annual report of Subsea Casing Stubs to the District Supervisor.

It is understood that the well shall not be produced until it can be demonstrated by additional drilling and/or geological and engineering data that it is needed for proper production of the lease, and until final approval of a production platform is obtained.

Kerr-McGee Corporation will drill this well according to regulations as set forth in the 30 CFR Subpart D, Part 250.51, effective May 31, 1988.

Kerr-McGee Corporation is of the opinion that all information supplied in this communication will be exempt from disclosure under the "Freedom of Information Act" (5 U.S.C. 522) and implementing regulations (43 CFR Part 2).

It is believed that the data in this communication and its attachments provide the information required by 30 CFR Subpart B, 250.33. Therefore, it is respectfully requested that this Initial Development Operations Coordination Document be considered as soon as possible since drilling operations are to commence October 1, 1997.

Should you have any questions, or if additional information is required, please contact the undersigned in our Houston, Texas office @ (281)_618_6338 or G.J. Wiltz @ (281)_618_6339.

Very truly yours,

C.V. Bradford
Manager - Regulatory Affairs

GJW

Enclosures

xc: Copies furnished w/attachments

Distribution:

CFR (DOCD File)
DRLG
CVB

South Timbalier Block 249

OCSG 18056 Well A-4

Attachments

A. Location Plat
B. Vicinity Plat
C. Shallow Hazard Letter
D. H2S Letter
E. Structure Map
F. Abnormal Pressure Map
G. Pipeline Map
H. 3-D Seismic Line
I. Bathymetry Map
J. Anomaly Map
K. Deep Isopach
L. Common Depth Point Lines
    L-1. Sub Bottom Profile (Line 1A)
    L-2. Sub Bottom Profile (Line 2A)
    L-3. Side Scan Sonar (Line 1A)
    L-4. Side Scan Sonar (Line 2A)
    L-5. Sparker (Line 1A)
    L-6. Sparker (Line 2A)
    L-7. Magnetometer (Line 1A)
    L-8. Magnetometer (Line 2A)
M. Oil Spill Trajectory Analysis
N. Oil Spill Response Time
O. List of Mud Components and Additives
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S. Environmental Report
T. Coastal Zone Management
U. Public Notice
V. Structure: South Timbalier Block 265 "A" Structure
W. Certificate of Financial Responsibility

249

KERR-McGEE CORPORATION
OCS-G-18056

250

KERR-McGEE CORPORATION
OCS-G-15336

BEST AVAILABLE COPY

CAIRN
O 1
G-12977

1,497'

786' A

A-4 Prop. Well Surf.
X=2,276,365.95'
Y=-132,811.38'
Lat. 28° 17' 55.121"
Long.90° 28' 29.567"

KERR-McGEE CORPORATION
OCS-G-15338

KERR-McGEE CORPORATION
OCS-G-12980

BLK. 266

BLK. 265

SHELL
O 1
G-5210

PUBLIC
INFORMATION
PLAT

LA SOUTH ZONE
NAD 27 CLARKE 1866

Attachment A
Location Plat

KERR-McGEE CORPORATION
OCS-G-18056

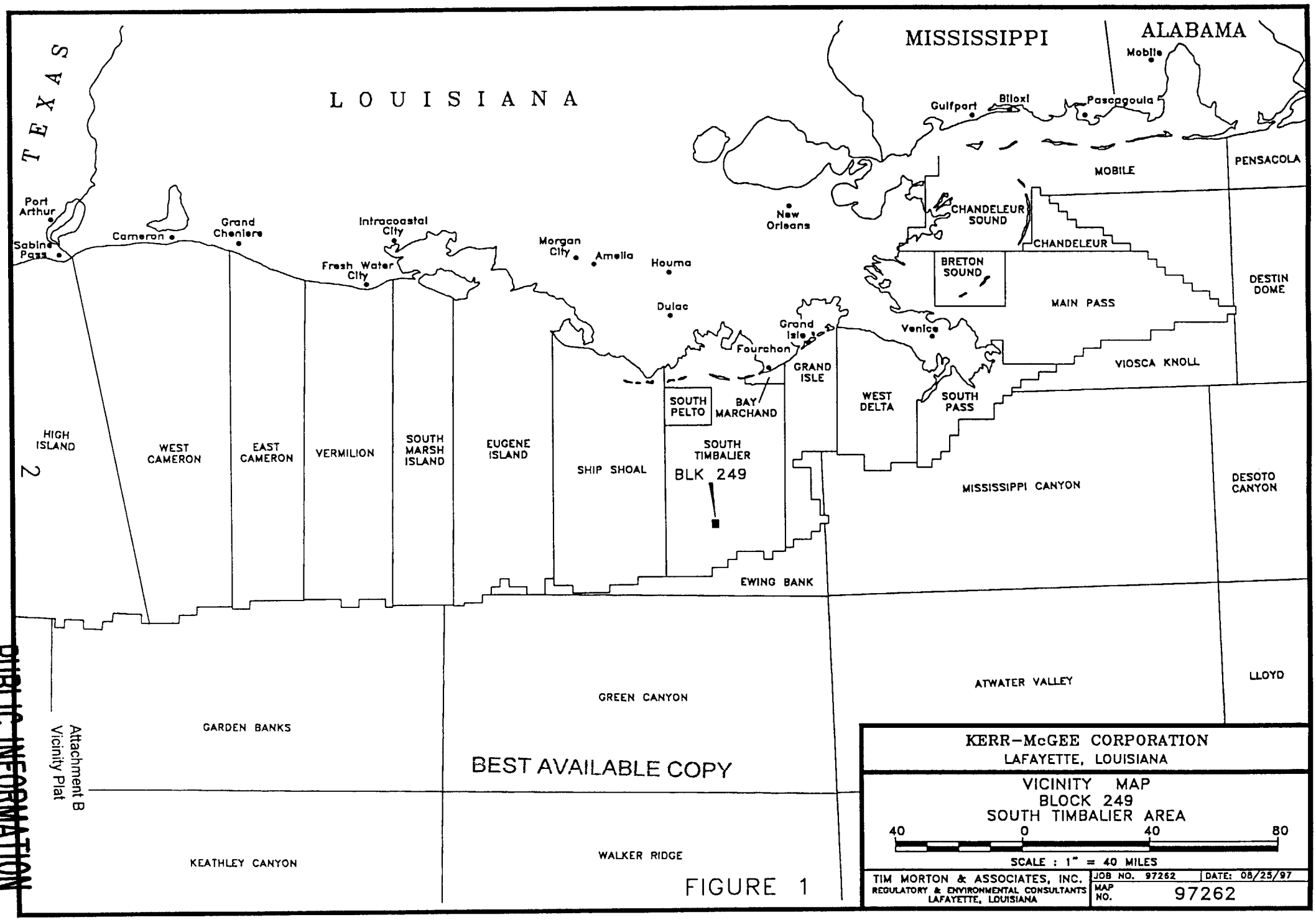
DEVELOPMENT OPERATIONS
COORDINATION DOCUMENT

PUBLIC INFORMATION

Prepared by:
JOHN E. CHANCE & ASSOCIATES, INC.

SOUTH TIMBALIER AREA
SCALE:1"=2000'

BLOCK 249
8/26/97



PUBLIC INFORMATION

Attachment B
Vicinity Plat

BEST AVAILABLE COPY

FIGURE 1

KERR-McGEE CORPORATION
LAFAYETTE, LOUISIANA

VICINITY MAP
BLOCK 249
SOUTH TIMBALIER AREA

40 0 40 80

SCALE : 1" = 40 MILES

TIM MORTON & ASSOCIATES, INC.
REGULATORY & ENVIRONMENTAL CONSULTANTS
LAFAYETTE, LOUISIANA

JOB NO. 97262 | DATE: 08/25/97

MAP NO. 97262

KERR-McGEE CORPORATION
OIL SPILL TRAJECTORY ANALYSIS
South Timbalier Block 249
OCSG 18056 Well No. A-4

In the event a spill occurs from South Timbalier Block 249, Kerr-McGee Corporation has projected the direction of a spill utilizing information in the Environmental Impact Statement (EIS) for OCS Lease Sales 157 and 161.

The EIS contains oil spill trajectory simulations using seasonal surface currents, coupled with wind data, adjusted every three (3) hours for thirty (30) days or until a target is contacted.

Hypothetical spill trajectories were simulated for each of the potential launch sites across the entire Gulf. These simulations presume 500 spills occurring in each of the four (4) seasons of the year. The results in the EIS were presented as probabilities that an oil spill beginning from a particular launch site would contact a certain land segment within three (3), ten (10), or thirty (30) days. Utilizing the summary of the trajectory analysis (for ten (10) days) as presented in Table IV-22 on pages IV-112 and IV-113, the probable land fall of an oil spill from this site is as follows. Also listed is the CGA map number corresponding to the land segment which will be utilized to determine environmentally sensitive areas that may be affected by a spill.

AREA	L AND SEGMENT CONTACT - %		CGA MAP CO.
South Timbalier Block 249	Vermilion Parish	1%	LA Map 5
	New Iberia Parish	1%	LA Map 6
	Terrebonne Parish	8%	LA Map 6
	Lafourche Parish	1%	LA Map 6

Section V, Volume II of the CGA Manual containing maps as listed above, also includes equipment containment/cleanup protection response modes for the sensitive areas. Pollution response equipment available for CGA and its stockpiled base is listed in the CGA Manual Volume I, Section III.

Section VI, Volume II of the CGA Operations Manual depicts the protection response modes that are applicable for oil spill clean-up operations. Each response mode is schematically represented to show optimum deployment and operation of the equipment in areas of environmental concern. Implementation of the suggested procedures assures the most effective use of the equipment and will result in reduced adverse impact of oil spills on the environment. Supervisory personnel have the option to modify the deployment and operation of equipment to more effectively respond to site-specific circumstances.

GJW (OS_TRAJ1.DOC)

Attachment M
Oil Spill Trajectory Analysis

OIL SPILL RESPONSE IN HOURS
SOUTH TIMBALIER 249
OCS-G 18056 WELL NO. A-4

PRIMARY RESPONSE

Oil Spill Equipment Location	Location of Transportation	Response Time
Grand Isle, LA	Fouchon La	**14½ hrs.**

Procurement of Equipment & Personnel

Equipment on Premises	1 hr. *	
Personnel to CGA Location	1½ hrs. *	
Unload Vessel	1 hr. *	
Load Vessel	1 hr.	2½ hrs.

Travel to CGA Spill Location

Inland Waters (1 Way)	4 hrs.	
Open Waters (1 Way)	8 hrs.	12 hrs.

Time to Deploy Equipment**	1 hr. **	
TOTAL RESPONSE TIME →		**14½ hrs.**

SECONDARY RESPONSE

Our initial effort will be to locate a vessel in or near Fourchon, Louisiana. This will reduce our response time by 8 hours.

* This operation occurs simultaneously with other procurement of equipment so that only the greater time is calculated into response time.

** Preparation of equipment will take place while enroute to spill location. Hours shown is length of time to offload.

GJW (OS_RSP_1.DOC)

Attachment N
Oil Spill Response Time

SOUTH TIMBALIER BLOCK 249
OCSG 18056 Well No. A-4

DETAILED LIST OF DRILLING MUD COMPONENTS & MUD ADDITIVES

1. Bulk Barite/Sack Barite (Weight Material)
2. Gel (Bentonite)
3. Caustic (Sodium Hydroxide)
4. Sodium Bicarbonate
5. CLS (Lignosulfonate)
6. Lignite
7. Aluminum Stearate
8. Soda Ash
9. Lime
10. Tem-Flo C (High Temperature Fluid Loss Agent)
11. Asphalt Based Fluid Loss Agent
12. HEC (Polymer Viscosifier)
13. Polymer Viscosifier, Fluid Loss Agent
14. Mica (Lost Circulation Material - LCM)
15. Nut Plug (Ground Walnut Shells
16. KOH (Potassium Hydroxide)

SPECIALTY MUD PRODUCTS FOR STUCK PIPE APPLICATIONS

1. Bio Spot (Non-Oil Based Stuck Pipe Spotting Fluid)

All non-toxic (as determined by LC-50 toxicity test per EPA guidelines) mud and cuttings will be disposed of in the following manners: (1) Cuttings disposed of overboard as drilled, (2) if required, mud may be disposed of during operations to permit safe operations and (3) at termination of drilling operations and prior to moving off of location, mud may be disposed of overboard to permit rig move.

Any mud or associated cuttings from a mud which does not meet the LC-50 toxicity limitation will be transported to shore for proper disposal.

GJW 08-27-97

ATTACHMENT O
DETAILED LIST OF
MUD COMPONENTS & ADDITIVES

LINN RICHARDSON

EXHIBIT "A"

CONTRACTOR FURNISHED EQUIPMENT

The Linn Richardson is a Bethlehem Model 250-MS jack-up Mobile Offshore Drilling Unit for operation in 250 feet of water.

Contractor shall furnish the materials and services specified below. All other equipment, materials and services required for the operations and activities hereunder shall be furnished by Operator.

1. DRILLING UNIT EQUIPMENT

A. DRAWWORKS - National 1320-UE, Elmagco auxiliary brake and driven by two E 752, 750 HP, DC electric motors.

B. RIG POWER - Two (2) General Motors EMD Model 16-645 engines, each rated at 2,200 BHP and driving an AC generator.

One (1) General Motors EMD Model 8-645 engine, rated at 1100 BHP and driving an AC generator.

Ross Hill SCR AC to DC conversion system.

C. MUD PUMPS - Two (2) National 12-P-160, 1600 HP triplex pumps, each driven by two (2) GE 752 DC electric motors and supplied by two (2) 6" x 8" centrifugal supercharging pumps.

D. MUD MIXING PUMPS - Two (2) 6" x 8" centrifugal pumps, each driven by a 75 HP AC electric motor.

Attachment Q
Rig Specifications

NOBLE LINN RICHARDSON

DRILLING VESSEL DESCRIPTION

The is of the Bethlehem JU-250-MS class, self-elevating mat-supported jack-up drilling unit equipped to operate in water depths up to 250 feet.

Accommodations for 84 men are provided in the three-level quarters complete with galley, sick bay and recreation room.

DESIGN OPERATING CONDITIONS

Maximum water depth	250'
Minimum water depth	25'
Drilling depth capacity	20,000'

MAXIMUM OPERATING/ENVIRONMENTAL CONDITIONS

- *Normal Drilling:*

Max. variable load (kips) (Incl. Drlg. Load)	3,960
Max. drilling load (kips)	950
Wind speed (knots)	58
Wave height (ft.)	33

DERRICK

Pyramid, 147' x 30' x 30'

Nominal hookload 1,300,000 lbs.

DRILLING EQUIPMENT

- *Drawworks:* National 1320-UE
- *Mud Pumps:* Two National 12-P-160
- *Rotary Table:* National 37½" Model C-375

WELL CONTROL EQUIPMENT (TRIMMED FOR H_2S SERVICE)

- *BOP System and Handling Equipment*

  One Cameron Type U, 13⅝", 10,000 psi WP single ram unit
  One Cameron Type U, 13⅝", 10,000 psi WP double ram unit
  One Shaffer, 13⅝", 5,000 psi WP spherical unit
  One Shaffer, 21¼", 2,000 psi WP spherical unit
  One Hydril MSP 29½", 500 psi WP annular diverter

- *BOP Choke & Kill Manifold:*

  One 2½", 10,000 psi WP with a Swaco Super adjustable choke and two CIW Type H-2 adjustable chokes

RIG STORAGE CAPACITIES

- *Pipe Racks:*

Main Deck	3,400 sq.ft.; 1,200,000 lbs.
Per linear ft. of beam	3,300 lbs.

Weight Material & Cement	
Bulk	7,500 cu.ft.
Sack	3,000 sacks

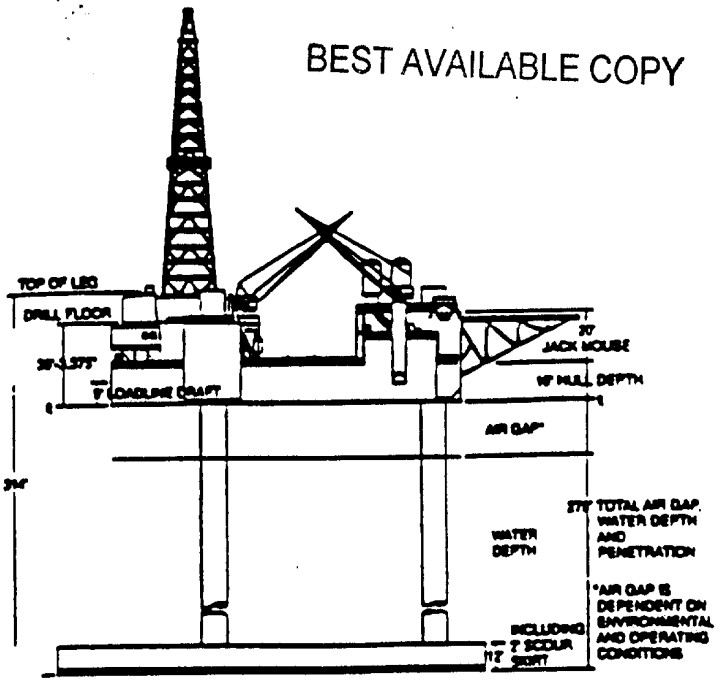
- *Liquids:*

Drilling Mud	1,565 barrels
Drill Water	4,705 barrels
Diesel Fuel	1,742 barrels
Potable Water	893 barrels

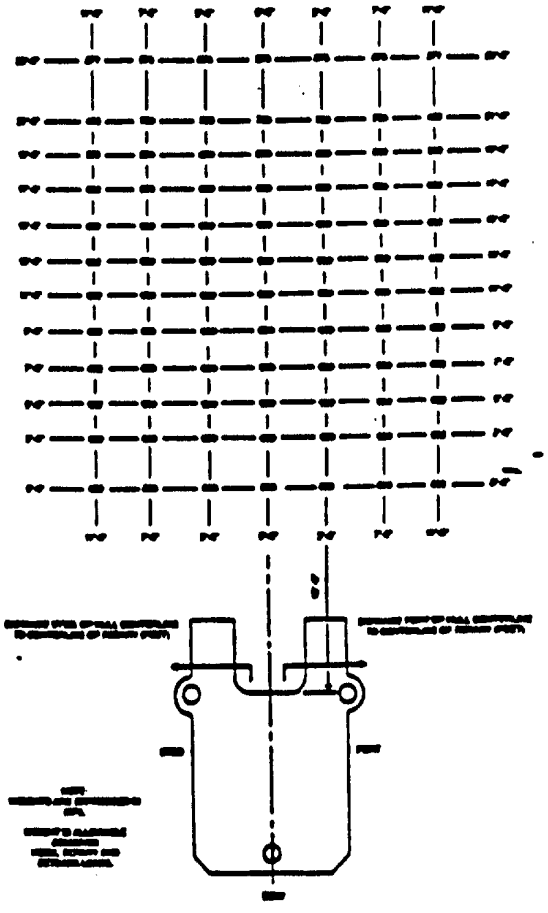
SPECIAL FEATURES

• Sweco Mud Cleaner • Two Thule Rigtech VSM 100, Linear Motion Shakers with Scalping Screens • Mansat Unit • D-30 Hammer

OUTBOARD PROFILE



SKID UNIT LOAD CHART FOR BETH JU-250-MS



Attachment Q
Rig Specifications

R-MCGEE CORPORATION
TH TIMBALIER
bottom hole location) 265 (surface location)
G 18056
65 "A"
7 55.121
8 29.567
GORY J. WILTZ
618-6339
49, OCSG 18056 Well A-4 will be drilled from S.T. 265 "A" Platform.

[1997 Emissions: Drilling, Completion, Production]

	BLOCK	LEASE	PLATFORM	WELL	LATITUDE	LONGITUDE	CONTACT	PHONE	REMARKS
IER	249	OCSG 18056	S.T. 265 "A"	A-4	28 17 55.121	90 28 29.567	GREGORY J. WILTZ	(281) 618-6339	S.T. 249, Well A-4 will be drilled from S.T. Block 265 "A" Platform.

		MAX. FUEL	ACT. FUEL	RUN TIME		POUNDS PER HOUR					TONS PER YEAR				
s	HP	GAL/HR	GAL/D												
es	HP	SCF/HR	SCF/D												
	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	TSP	SOx	NOx	VOC	CO	TSP	SOx	NOx	VOC	CO
E (diesel)	1950	94.19	1260.00	24	60	1.03	6.40	47.25	1.42	10.31	0.41	2.57	18.96	0.57	4.14
E (diesel)	1950	94.19	1260.00	24	60	1.03	6.40	47.25	1.42	10.31	0.41	2.57	18.96	0.57	4.14
	1540	74.38	1785.17	0	0	3.39	3.16	47.49	3.80	10.28	0.00	0.00	0.00	0.00	0.00
el)	225	10.87	260.82	8	8	0.50	0.46	6.94	0.56	1.50	0.02	0.01	0.22	0.02	0.05
	3000	144.90	2880.00	24	30	1.59	9.85	72.69	2.18	15.86	0.47	2.94	21.67	0.65	4.73
	1800	86.94	1920.00	24	30	0.95	5.91	43.61	1.31	9.52	0.32	1.96	14.45	0.43	3.15
diesel	2500	120.75	2898.00	0	0	1.32	8.20	60.57	1.82	13.22	0.00	0.00	0.00	0.00	0.00
sel	2500	120.75	2898.00	0	0	1.32	8.20	60.57	1.82	13.22	0.00	0.00	0.00	0.00	0.00
E diesel	2500	120.75	2898.00	0	0	1.32	8.20	60.57	1.82	13.22	0.00	0.00	0.00	0.00	0.00
sel	2500	120.75	2898.00	0	0	1.32	8.20	60.57	1.82	13.22	0.00	0.00	0.00	0.00	0.00
l	2500	120.75	2898.00	0	0	1.32	8.20	60.57	1.82	13.22	0.00	0.00	0.00	0.00	0.00
	3600	173.88	4173.12	0	0	1.90	11.81	87.22	2.62	19.03	0.00	0.00	0.00	0.00	0.00
l	2500	120.75	2898.00	0	0	1.32	8.20	60.57	1.82	13.22	0.00	0.00	0.00	0.00	0.00
	3600	173.88	4173.12	0	0	1.90	11.81	87.22	2.62	19.03	0.00	0.00	0.00	0.00	0.00
l	2500	120.75	2898.00	0	0	1.32	8.20	60.57	1.82	13.22	0.00	0.00	0.00	0.00	0.00
	3600	173.88	4173.12	0	0	1.90	11.81	87.22	2.62	19.03	0.00	0.00	0.00	0.00	0.00
l	2500	120.75	2898.00	0	0	1.32	8.20	60.57	1.82	13.22	0.00	0.00	0.00	0.00	0.00
	3600	173.88	4173.12	0	0	1.90	11.81	87.22	2.62	19.03	0.00	0.00	0.00	0.00	0.00
rane	250	12.08	48.30	2	30	0.55	0.51	7.71	0.62	1.67	0.00	0.00	0.04	0.00	0.01
re pump	125	6.04	24.15	1	30	0.28	0.26	3.85	0.31	0.83	0.00	0.00	0.01	0.00	0.00
Comp	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
	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
sel	2500	120.75	483.00	12	4	1.32	8.20	60.57	1.82	13.22	0.01	0.03	0.24	0.01	0.05
	0	0.00	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
as	0	0.00	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
as	0	0.00	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
as	0	0.00	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
gas	1410	10071.63	40286.52	24	30		0.01	31.06	0.43	26.71		0.00	1.86	0.03	1.60
gas	1410	10071.63	40286.52	24	30		0.01	31.06	0.43	26.71		0.00	1.86	0.03	1.60
as	0	0.00	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
as	0	0.00	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
treater	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
treater	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
ater	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
ater	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
eboiler	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
	BPD	SCF/HR	COUNT												
	0			0	0				0.00						
		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
		0		0	0				0.00						
			5000.0		30				0.13					0.00	
			1000.0		30				0.03					0.05	
		0		0	0				0.00					0.01	
	0			0	0									0.00	
		0		0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
							0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
						28.82	154.06	1232.95	39.44	308.76	1.64	10.08	78.28	2.36	19.47
IN MILES											1798.20	1798.20	1798.20	1798.20	49224.66
54.0															

Attachment R-2
Air Quality
Emissions Schedule

[1998 through 2003 Emissions: Production]

	BLOCK	LEASE	PLATFORM	WELL	LATITUDE	LONGITUDE	CONTACT	PHONE	REMARKS
ER	249	OCSG 18056	S.T. 265 "A"	A-4	28 17 55.121	90 28 29.567	GREGORY J. WILTZ	(281) 618-6339	S.T. 249, Well A-4 will be drilled from S.T. Block 265 "A" Platform.

		MAX. FUEL	ACT. FUEL	RUN TIME		POUNDS PER HOUR					TONS PER YEAR				
	HP	GAL/HR	GAL/D												
s	HP	SCF/HR	SCF/D												
	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	TSP	SOx	NOx	VOC	CO	TSP	SOx	NOx	VOC	CO
(diesel)	1950	94.19	1260.00	0	0	1.03	6.40	47.25	1.42	10.31	0.00	0.00	0.00	0.00	0.00
(diesel)	1950	94.19	1260.00	0	0	1.03	6.40	47.25	1.42	10.31	0.00	0.00	0.00	0.00	0.00
	1540	74.38	1785.17	0	0	3.39	3.16	47.49	3.80	10.28	0.00	0.00	0.00	0.00	0.00
l)	225	10.87	260.82	0	0	0.50	0.46	6.94	0.56	1.50	0.00	0.00	0.00	0.00	0.00
	3000	144.90	2880.00	0	0	1.59	9.85	72.69	2.18	15.86	0.00	0.00	0.00	0.00	0.00
	1800	86.94	1920.00	0	0	0.95	5.91	43.61	1.31	9.52	0.00	0.00	0.00	0.00	0.00
iesel	2500	120.75	2898.00	0	0	1.32	8.20	60.57	1.82	13.22	0.00	0.00	0.00	0.00	0.00
el	2500	120.75	2898.00	0	0	1.32	8.20	60.57	1.82	13.22	0.00	0.00	0.00	0.00	0.00
diesel	2500	120.75	2898.00	0	0	1.32	8.20	60.57	1.82	13.22	0.00	0.00	0.00	0.00	0.00
el	2500	120.75	2898.00	0	0	1.32	8.20	60.57	1.82	13.22	0.00	0.00	0.00	0.00	0.00
	2500	120.75	2898.00	0	0	1.32	8.20	60.57	1.82	13.22	0.00	0.00	0.00	0.00	0.00
	3600	173.88	4173.12	0	0	1.90	11.81	87.22	2.62	19.03	0.00	0.00	0.00	0.00	0.00
	2500	120.75	2898.00	0	0	1.32	8.20	60.57	1.82	13.22	0.00	0.00	0.00	0.00	0.00
	3600	173.88	4173.12	0	0	1.90	11.81	87.22	2.62	19.03	0.00	0.00	0.00	0.00	0.00
	2500	120.75	2898.00	0	0	1.32	8.20	60.57	1.82	13.22	0.00	0.00	0.00	0.00	0.00
	3600	173.88	4173.12	0	0	1.90	11.81	87.22	2.62	19.03	0.00	0.00	0.00	0.00	0.00
	2500	120.75	2898.00	0	0	1.32	8.20	60.57	1.82	13.22	0.00	0.00	0.00	0.00	0.00
	3600	173.88	4173.12	0	0	1.90	11.81	87.22	2.62	19.03	0.00	0.00	0.00	0.00	0.00
ane	250	12.08	48.30	2	365	0.55	0.51	7.71	0.62	1.67	0.03	0.03	0.47	0.04	0.10
e pump	125	6.04	24.15	1	365	0.28	0.26	3.85	0.31	0.83	0.01	0.01	0.12	0.01	0.03
Comp	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
	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
sel	2500	120.75	483.00	12	52	1.32	8.20	60.57	1.82	13.22	0.07	0.43	3.15	0.09	0.69
	0	0.00	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
s	0	0.00	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
s	0	0.00	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
s	0	0.00	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
as	1410	10071.63	40286.52	24	365		0.01	31.06	0.43	26.71		0.00	22.67	0.32	19.50
as	1410	10071.63	40286.52	24	365		0.01	31.06	0.43	26.71		0.00	22.67	0.32	19.50
s	0	0.00	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
s	0	0.00	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
reater	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
reater	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
ter	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
ter	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
eboiler	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
	BPD	SCF/HR	COUNT												
	0			0	0				0.00					0.00	
		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
		0		0	0				0.00					0.00	
			5000.0		365				0.13					0.55	
			1000.0		365				0.03					0.11	
		0		0	0				0.00					0.00	
	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
						28.82	154.06	1232.95	39.44	308.76	0.11	0.47	49.08	1.43	39.81
N MILES															
54.0											1798.20	1798.20	1798.20	1798.20	49224.66

BEST AVAILABLE COPY

PUBLIC INFORMATION

Attachment R-2
Air Quality
Emissions Schedule

T

EA	BLOCK	LEASE	PLATFORM	WELL
MBALIER	249	OCSG 18056	S.T. 265 "A"	"A"
	EMITTED SUBSTANCE			
P	SOx	NOx	HC	CO
1.64	10.08	78.28	2.36	19.47
0.11	0.47	49.08	1.43	39.81
0.11	0.47	49.08	1.43	39.81
0.11	0.47	49.08	1.43	39.81
0.11	0.47	49.08	1.43	39.81
0.11	0.47	49.08	1.43	39.81
0.11	0.47	49.08	1.43	39.81
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
1798.20	1798.20	1798.20	1798.20	49224.66

Attachment R-3
Air Quality
Emissions Schedule

PUBLIC INFORMATION

ACTORS SHEET

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

units	TSP	SOx	NOx	VOC	CO	REF.	DATE
ms/hp-hr		0.00247	1.3	0.01	0.83	AP42 3.2-2	4/93
ms/hp-hr		0.00185	11	0.43	1.5	AP42 3.2-2	4/93
ms/hp-hr		0.00185	12	0.72	1.6	AP42 3.2-2	4/93
ms/hp-hr		0.00185	10	0.14	8.6	AP42 3.2-2	4/93
ms/hp-hr	1	0.931	14	1.12	3.03	AP42 3.3-1	4/93
ms/hp-hr	0.24	1.49	11	0.33	2.4	AP42 3.4-1	4/93
s/mmscf	5	0.6	140	2.8	35	AP42 1.4-1	4/93
s/mmscf		0.57	71.4	60.3	388.5	AP42 11.5-1	9/91
bs/bbls	0.42	6.6	2.3	0.01	0.21	AP421.3-1	4/93
lbs/bbl				0.03		E&P Forum	1/93
/hr/comp.				0.000025		API Study	12/93
s/mmscf				6.6		La. DEQ	1991
bs/scf				0.0034			

PUBLIC INFORMATION

Attachment R-4
Air Quality
Emissions Schedule

API/OOC GULF OF MEXICO AIR QUALITY TASK FORCE
GENERAL INSTRUCTIONS
GULF OF MEXICO AIR EMISSION CALCULATIONS

General

This document (MMS.XLW) was prepared through the cooperative efforts of those professionals in the oil industry including the API/OOC Gulf of Mexico Air Quality Task Force, who deal with air emission issues. This document is intended to standardize the way we estimate an air emission inventory for Plans of Exploration (POE) and Development, Operations, Coordination Documents (DOCD) approved by the Minerals Management Service (MMS). It is intended to be thorough but flexible to meet the needs of different operators.This first file gives the basis for the emission factors used in the emission spreadsheet as well as some general instructions. The following files, Title Sheet, Factors Sheet,Emissions Spreadsheet,and Summary Sheet will describe and calculate emissions from an activity.

Title Sheet

The Title Sheet requires input of the company's name, area, block, OCS-G number, platform and/or well(s) in the necessary lines. This data will automatically be transferred to the spreadsheet and summary sheet.

Factor Sheet

The emission factors were compiled from the latest AP-42 references or from industry studies if no AP-42 reference was available. Factors can be revised as more data becomes available. A change to this Factor Sheet will be automatically changed in Emission Spreadsheet.

The basis for the factors is as follows:

1. NG Turbines — Fuel usage scf/hr = HP X 9.524 (10,000 btu/HP-hr / 1050 btu/scf)
2. NG Engines — Fuel usage scf/hr = HP X 7.143 (7,500 btu/HP-hr / 1050 btu/scf)
3. Diesel — Fuel usage gals/hr = HP X 0.0483 (7,000 btu/HP-hr / 145,000 btu/gal)

Emission Factors

Natural Gas Prime Movers

1. TNMOC refers to total non-methane organic carbon emissions and these can be assumed equivalent to VOC emissions.

3. The sulfur content assumed is 2000 grains /mmscf (3.33 ppm). If your concentration is different then ratio your emission factor up or down.

Attachment R-5
Calculation Sheets (3)

Diesel-Fired Prime Movers

1. Diesel sulfur level 0.4% by wt

2. For boats use > 600 HP factors based on AP-42 Vol. II, Table II-3-3.
   Those figures closely match the above values. Include only the emissions from the boats within 25 mile radius of the well/platform.

3. For diesel engines <600 HP VOC emissions equal total HC emissions; for diesel engines>600 HP VOC emissions equal non-methane HC emissions.

Heaters/Boilers/Firetubes/NG-Fired

1. NG Sulfur content is 2000 grains per million cu ft

2. VOCs emissions based on total non-methane HCs

Gas Flares

1. Flare is non-smoking

2. 1050 btu/cu. ft. for NG heating value

3. The sulfur content assumed is 2000 grains /mmscf (3.33 ppm). If your concentration is different then ratio your emission factor up or down or you may use the following formula:

   H2S flared (lbs/hr) = Gas flared (cu ft/hr) X ppm H2S X 10E-06 X 34/379

   SOx emis (lbs/hr) = H2S flared (lbs/hr) X 64/34

Liquid Flares

1. Assume 1% by wt Sulfur maximum in the crude oil.

2. VOC equals non-methane HCs

3. Particulate emissions assumes Grade 5 oil.

Tanks

1. Tank emissions assumes uncontrolled fixed roof tank.

Fugitives

1. Fugitives are based on the 1993 Star Environmental Report. It requires that you count or estimate your components.

Glycol Dehydrator Vent

1. The dehydrated gas rate in SCF/HR must be entered in the spreadsheet. The emission factor is from the compilation of the Louisiana Survey and an average emissions per gas rate.

Gas Venting

1.The emission factor is based on venting unburned natural gas of average weight.

Emissions Spreadsheet

The emissions from an operation should be presented for a calendar year (1994, 1995, etc.). The operation may include drilling only or drilling in conjunction with other activities such as pipeline installation or production operations. For additional years the Emissions Spreadsheet is renamed Emissions 2, 3, etc.The different operating parameters for each year should entered to calculate revised emissions for that year. The spreadsheet will calculate maximum fuel usage (UNIT/HR) using the known horsepower. It will assume maximum fuel usage is equal to actual fuel (UNIT/DAY) usage unless the actual fuel usage is known. If so, insert actual fuel usage in appropriate column. The emissions will be calculated as follows:

Emission rate (lb/hr) = (HP or fuel rate) X Emission Factor (Potential to emit)

Emissions (tpy)=Emission rate (lb/hr) X load factor(Act Fuel/Max Fuel) X hrsX daysX ton/2000 lbs (Actual emissions)

To customize the spreadsheet for your application it is possible to delete lines for non-applicable equipment/activities or copy/insert an entire line if more than one similiar type of equipment is present.

Also, the production equipment can be customized further by adding the use of the equipment behind each type of engine, i.e.,

Turbine
Turbine - Gas Compressor

Burner
Burner - Line Heater

Summary Sheet

The Summary Sheet is designed to show a proposed estimate of emissions from an activity over a future period of time. In this example ten years was chosen. The first line (Row 7-1994) of the summary sheet is linked to the yearly totals in the Emissions Spreadsheet. The second line (Row 8-1995) is referenced to Emissions2 Spreadsheet. The third line (Row 9- 1996) is referenced to Emissions3 Spreadsheet. If more years of calculations are necessary to reach a constant then the spreadsheet can be copied and linked to the summary sheet for years 1997,1998 etc. Once emissions are constant the values are carried to the end of the ten year period.

ENVIRONMENTAL REPORT

FOR COASTAL MANAGEMENT CONSISTENCY DETERMINATION

DEVELOPMENT OPERATIONS COORDINATION DOCUMENT

GULF OF MEXICO

FOR

SOUTH TIMBALIER AREA BLOCK 249 (OCS-G-18056)

SUBMITTED TO:

MR GREG J. WILTZ

SR. PETROLEUM ENGINEER

KERR-MCGEE CORPORATION

16666 NORTHCHASE

HOUSTON, TEXAS 77060

(281/618-6339)

AUGUST 25, 1997

PREPARED BY:

TIM MORTON & ASSOCIATES, INC.

REGULATORY & ENVIRONMENTAL CONSULTANTS

PROJECT NO. 97-262

TABLE OF CONTENTS

LIST OF FIGURES

FIGURE

II. DESCRIPTION OF THE PROPOSED ACTION

This environmental report addresses the activity proposed by Kerr-McGee Corporation for South Timbalier Area Block 249 (OCS-G-18056). The approximate location of the activity is presented on a general vicinity map of the Outer Continental Shelf (OCS) lease areas off the coast of Louisiana (Figure 1).

Kerr-McGee Corporation proposes to utilize a jack-up rig to drill one well from the South Timbalier Area Block 265 "A" Platform to a bottomhole location in South Timbalier Area Block 249. Hydrocarbons will be transported from the "A" Platform to shore via an existing pipeline gathering system. More specific information can be found in the attached Development Operations Coordination Document.

The proposed activities will be carried out by Kerr-McGee Corporation 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 M.M.S. approved Oil Spill Contingency Plan.
3. All applicable Federal, State, and local requirements regarding air emissions, water quality, and discharge for the proposed

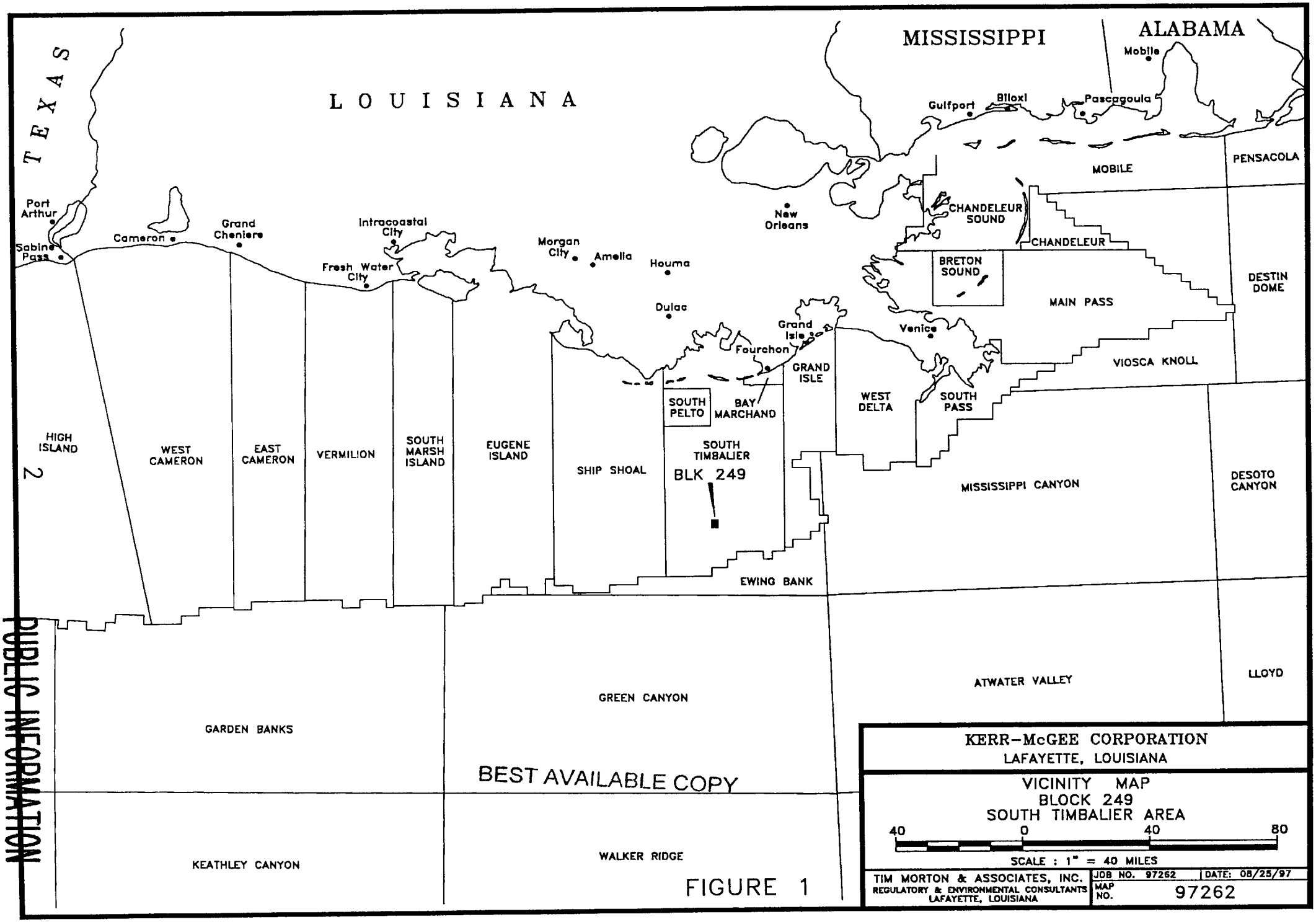


FIGURE 1

KERR-McGEE CORPORATION
LAFAYETTE, LOUISIANA

VICINITY MAP
BLOCK 249
SOUTH TIMBALIER AREA

40 0 40 80

SCALE : 1" = 40 MILES

TIM MORTON & ASSOCIATES, INC.
REGULATORY & ENVIRONMENTAL CONSULTANTS
LAFAYETTE, LOUISIANA

JOB NO. 97262 | DATE: 08/25/97

MAP NO. 97262

activities, as well as any other permit conditions, will be complied with.

A. Travel Modes, Routes, and Frequencies

Kerr-McGee Corporation will operate out of their service base facilities established in Fourchon, Louisiana. Kerr-McGee Corporation proposes to use one helicopter, one supply boat, and one crew boat to support the South Timbalier Area Block 249 activities.

The helicopter will travel to the location as needed. The crew boat will travel to the location a total of three times per week, and the supply boat will travel to the location a total of four times per week.

Transportation vessels will utilize the most direct route from the Fourchon, Louisiana service base. Because a vessel supporting the South Timbalier Area Block 249 production activities, as outlined in the Development Operations Coordination Document, may be scheduled for other stops in the area, the exact route for each vessel on each particular trip cannot be predetermined.

B. Support Base and New Personnel

Kerr-McGee Corporation will utilize support base facilities established in Fourchon, Louisiana. The Fourchon, Louisiana support base is located approximately fifty-nine miles from the block.

Helicopter and marine facilities are currently available at the service base and are presently and continuously manned, therefore, no additional onshore employment is expected to be generated as a result of these activities. The initial OCS Socio-Economic Data Base Report for the service base facilities utilized by Kerr-McGee Corporation will be prepared for submission upon issuance of the specific parameters to be established by the DOI/MMS.

C. New Support Facilities

Production activities for South Timbalier Area Block 249 will not require the development of any new support facilities.

D. New or Unusual Technology

Production activities in South Timbalier Area Block 249 will not warrant utilizing any new or unusual technology that may affect coastal waters.

E. Location of the Proposed Activities

South Timbalier Area Block 249 is located approximately fifty-nine miles from Fourchon, Louisiana and approximately fifty-one miles from the shore of Terrebonne Parish, Louisiana. Figure 1 presents the location of the block in relation to the Louisiana coast, as well as the geographic relationship between other OCS lease areas and South Timbalier Area Block 249.

F. Proposed Means of Transporting Oil and Gas

The proposed well will be drilled from the South Timbalier Area Block 265 "A" Platform. Hydrocarbons will be transported from this platform to shore via an existing pipeline gathering system.

III. DESCRIPTION OF THE AFFECTED ENVIRONMENT AND IMPACTS

A. Physical and Environmental

1. Commercial Fishing

Louisiana is traditionally one of the top states in the nation in terms of commercial fisheries. In 1993, Louisiana's commercial landings amounted to 1,242,811,935 pounds worth $243,262,266 (USDC, NMFS 1994). Nine families of finfish and shellfish represented 95 percent of the dockside value (dollars) of Louisiana's marine and estuarine commercial fishery landings.

The most valuable commercial species in Louisiana are the brown shrimp (Penaeus aztecus) and white shrimp (P. setiferus), which together produce by far the greatest shrimp harvest in the Gulf of Mexico. Louisiana fishermen harvested 78,070,808 pounds (heads-on) of shrimp worth $110,816,447 in 1993 (USDC, NMFS 1994). The brown shrimp dominates the Louisiana shrimp harvest, as it is the most abundant species in that region of the gulf (White and Boudreaux 1977). Both the white shrimp and the brown shrimp are estuarine dependent and have similar life histories, with the major differences being the time and location that the various life stages begin and reach their maximum levels. Generally, spawning occurs offshore with the resulting larvae migrating inshore to develop in estuaries. Brown shrimp spawn from November to April in water depths of 30 to 120 meters, while white shrimp spawn from March to October in water depths of 8 to 34 meters (Benson 1982). Juvenile and adult brown shrimp

migrate offshore from May to July, and white shrimp migrate between June and November (Benson 1982).

The proposed petroleum activities in South Timbalier Area Block 249 are expected to have no impact on the harvest of brown or white shrimp as this block is beyond the outer limits of the harvest area for these species (USDOI, MMS 1986, Visual No. 2).

The Gulf menhaden (Brevoortia patronus) or "pogy" fish constitutes Louisiana's second most valuable fishery, accounting for 1,058,398,657 pounds worth $51,190,652 in 1993 (USDC, NMFS 1994). Gulf menhaden spawn offshore from mid-October through March in 40 to 140 meters of water, with the larvae subsequently moving into shallow, low salinity estuaries from February to May (Benson 1982). In the shallow estuaries, the larvae metamorphose into juveniles and change from being carnivores to filter-feeding omnivores. The juveniles and subadults migrate from the estuaries into offshore waters from December through February (Benson 1982). Adults rarely venture far offshore (Hoese and Moore 1977); indeed, about 93 percent of the commercial fishing effort occurs within ten miles of shore (USDOI, MMS 1983).

The activities as proposed are unlikely to have any adverse effect on the menhaden fishing as South Timbalier Area Block 249 lies outside the "Principle Menhaden Harvest Area" (USDOI, MMS 1986, Visual No. 2).

Blue crabs (Callinectes sapidus) range from Nova Scotia to Uruguay and support the largest crab fishery in the United States (Marine Experiment

Station 1973). In 1993, 45,945,372 pounds of crabs worth $24,465,305 were landed in Louisiana (USDC, NMFS 1994). Blue crabs inhabit shallow water and can be found in high salinity sounds, bays, and channels where they spawn from March through November, with a peak from May to September (Benson 1982). The resulting planktonic larvae pass through several molts and stages before the juveniles drop to the bottom of the estuarine nurseries, where they remain throughout the year (Benson 1982). The blue crab fishery will not be significantly affected by production activities in this block because these activities will be conducted offshore of the coastal and estuarine waters in which this fishery occurs.

The Eastern oyster (Crassostrea virginica) is most abundant in the Gulf of Mexico from Aransas Bay, Texas to Apalachicola Bay, Florida (Beccasio et al. 1982). Louisiana oystermen landed 10,314,823 pounds of oysters worth $17,143,973 in 1993, making oysters Louisiana's fourth most valuable fishery (USDC, NMFS 1994). Optimum conditions for oysters are found at salinities between 5 and 15 parts per thousand and water depths of 2.5 to 8 meters (Beccasio et al. 1982). Oysters spawn during the summer, and the free-swimming larvae attach and develop in the same estuarine habitat. The activities proposed in South Timbalier Area Block 249 are not expected to have any impact on the oyster fishery in Louisiana.

In 1993, Louisiana landed a total of 6,071,695 pounds of tuna (Scombroidae) worth $14,869,966 (USDC, NMFS 1994). Six species of tuna were commercially important to Louisiana. These included albacore (Thunnus

alalunga), bluefin tuna (T. thynnus), little tunny (Euthynnus alletteratus), yellowfin tuna (T. albacares), bigeye tuna (T. obesus), and blackfin tuna (T. atlanticus).

Most species of tuna travel in schools and feed on smaller fish or squid. Most are highly regarded both as game fish and as food fish, with some species supporting extensive commercial fisheries (Hoese and Moore 1977).

Tunas are mass spawners, so that the details of spawning behavior are difficult to observe. These fishes do not protect their eggs and young after spawning, but leave them scattered over the bottom, on aquatic plants, or drifting in the water (Moyle 1993).

Scombroids range around the world in tropical, temperate, and even cold seas (Herald 1972). Tuna are sometimes found in shallow water, especially in places where deep water is immediately adjacent. The presence of tuna at the surface or at greater depths is determined by the water temperature as well as by the composition of the pelagic community (Herald 1972). The activities proposed in South Timbalier Area Block 249 are not expected to have any impact on the scombroids.

Red snapper (Lutjanus campechanus) and Vermilion snapper (Rhomboplites aurorubens) accounted for the majority of the snapper landings in Louisiana which amounted to 2,406,526 pounds worth $4,358,039 in 1993 (USDC, NMFS 1994). Snappers are common over or near banks, coral reefs and outcrops, submarine ridges, rocks, and man-made structures such as shipwrecks and offshore drilling

platforms, especially offshore Louisiana (Benson 1982; Hardy 1978). Red snapper spawn in the Gulf of Mexico from June to Mid-September, in water depths of 16-37 meters, over bottoms of hard sand and shell with rocky reef areas; spawning may actually take place at the surface (Hardy 1978). Little or no information is available about larval red snapper, but juveniles are typically found inshore in high salinity (24 to 40 ppt) water 9-91 meters in depth (Benson 1982). The vermilion snapper has a life history and habits similar to the red snapper. The proposed activities should create a suitable habitat for snapper.

Louisiana harvested 7,992,820 pounds of striped mullet (Mugil cephalus) worth $3,730,185 in 1993 (USDC, NMFS 1994). Mullets are one of the most abundant fishes in the Gulf of Mexico (Hoese and Moore 1977). Mullet have been observed in Alabama inland as far as 607 kilometers from the Gulf, and offshore as far as 80 kilometers and as deep as 1,385 meters (Benson 1982). Mullet spawn from October to May, and some females spawn more than once in a season (Benson 1982). Larvae move inshore in the spring and the juveniles are found in the shallow areas of the estuaries. Offshore movement from the estuaries occurs during the fall (Beccasio et al. 1982). No impacts to mullets are anticipated as a result of the proposed activities.

The drums (Sciaenidae) are one of the three most abundant families of fishes in the Gulf of Mexico in terms of biomass, and they outnumber all other families in the number of species (Hoese and Moore 1977). Three species of drums are commercially important to Louisiana. These include black drum (Pogonias cromis), spotted seatrout (Cynoscion nebulosus), and sand seatrout

(*C. arenarius*). In 1993, Louisiana landed a total of 4,455,212 pounds of drums worth $3,318,964 (USDC, NMFS 1994).

Typically, sciaenids are euryhaline species that spawn in shallow nearshore Gulf waters, producing larvae that enter coastal estuaries for development (Benson 1982; Johnson 1978; Hoese and Moore 1977). Spotted seatrout spawn at night in deep channels and depressions adjacent to shallow flats, grass beds, and bayous in the estuary, from March to September with a peak from April through July (Benson 1982). The larvae associate with bottom vegetation (predominantly sea grasses) or shell rubble in channel bottoms (Johnson 1978). The juveniles spend at least their first 6 to 8 weeks on the nursery grounds, usually within 50 meters of the shoreline, until late fall when they move into the deeper parts of the estuary (Benson 1982). Adult spotted seatrout rarely leave the estuaries (Benson 1982).

Black drum spawn from February to April in or near tidal passes and in open bays and estuaries (Benson 1982). The larvae are transported to shallow estuarine marshes, but may move to deeper estuarine waters or shallow waters off sandy beaches as large juveniles (Johnson 1978). Adult migration is largely restricted to spring and fall movement through the passes between estuaries and nearshore environments (Beccasio et al. 1982).

Sand seatrout spawn from March to September offshore near passes and inlets to estuaries. Larvae migrate into shallow areas of the upper estuaries. Adults apparently move farther offshore than most members of the family (Benson 1982). In the fall most adults and juveniles migrate to offshore waters

(Benson 1982). The activities proposed are not expected to have any impact on the drums in Louisiana.

The most common species of sharks found in the Gulf of Mexico include the tiger shark (Galeocerdo cuvier), blacknose shark (Carcharhinus acronotus), spinner shark (C. brevipinna), blacktip shark (C. limbatus), sandbar shark (C. plumbeus), Atlantic sharpnose shark (Rhizoprionodon terraenovae), and scalloped hammerhead (Sphyrna lewini) (Branstetter 1981). A total of 2,698,050 pounds of shark worth $1,105,605 were landed offshore Louisiana in 1993 (USDC, NMFS 1994).

The following discussion is summarized from Castro (1983). Shark reproduction is achieved through internal fertilization, usually during the months of June and July. Many species migrate to specific mating areas for this purpose. After a gestation period of ten to twelve months, sharks migrate to the nursery areas for the birth of small litters of large pups. These nursery areas are typically highly productive coastal or estuarine waters able to provide ample food for the growing pups.

Sharks are cold blooded and their body temperature usually corresponds to the temperature of the surrounding water. Each species lives within a relatively narrow temperature range determined by its metabolism. Many species migrate to remain within their temperature tolerance limits. In general these migrations are directed northward and inshore during the summer and southward and offshore in the winter months. No impacts to sharks are expected as a result of the proposed activities.

2. Shipping

A designated shipping fairway is located approximately twenty-one miles south of South Timbalier Area Block 249. It is unlikely that marine vessels supporting this block will utilize the shipping fairway to gain access to the support base. The production platform and each of the marine vessels will be equipped with all U. S. Coast Guard required navigational safety aids.

3. Recreation

The open Gulf encompasses a broad expanse of saltwater which is utilized by numerous sports fishermen. Many fishermen charter boats to fish and sport dive in the northern Gulf. The states of Alabama, Mississippi, and Louisiana support approximately 120 charter boats which conduct fishing activities in the waters of the OCS (USDOI, MMS 1983). Petroleum platforms 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 the numerous private boat owners who regularly fish at offshore facilities.

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. The installation and use of navigational aids, lifesaving equipment, and other safety requirements pursuant to Coast Guard

regulations are standard procedure for production platforms and marine vessels utilized by Kerr-McGee Corporation.

4. Cultural Resources

Visual No. 4 from the Final Environmental Impact Statement (USDOI, MMS 1986) indicates that South Timbalier Area Block 249 falls outside the zone designated as an area with a high probability of historic and pre-historic cultural resources; therefore, it is unlikely that there will be any significant impacts upon culturally significant features.

5. Ecologically Sensitive Features

South Timbalier Area Block 249 is located approximately thirty-four and twenty miles northeast, respectively, of Ewing and Diaphus Banks (USDOI, MMS 1986, Visual No. 4). There are no other known ecologically sensitive areas near South Timbalier Area Block 249.

The Fourchon, Louisiana support base which will be utilized as the operations base for the South Timbalier Area Block 249 production activities is located approximately two miles south of Wisner Wildlife Management Area (USDOI, MMS 1986, Visual No. 3). In general, if all activities are executed as planned, the environmentally sensitive areas will not be affected.

The following discussion of wetlands is summarized from the Final Environmental Impact Statement for Proposed Gulf of Mexico OCS Lease Sales 147

and 150 (USDOI, MMS 1993). Wetland habitat types occurring along the Gulf coast include fresh, brackish, and saline marshes; forested wetlands; and small areas of mangroves. Wetland habitats may occur along narrow bands or across broad expanses. They can support sharply delineated zones of different species, monotonous stands of a single species, or mixed communities of plant species.

Coastal wetlands are characterized by high organic productivity, high detritus production, and efficient nutrient recycling. Wetlands provide habitat for a great number and wide diversity of invertebrates, fish, reptiles, birds, and mammals. Wetlands are particularly important as nursery grounds for juvenile forms of many important fish species. The Louisiana coastal wetlands support over two-thirds of the Mississippi Flyway wintering waterfowl population and the largest fur harvest in North America.

Louisiana contains most of the Gulf coastal wetlands. These wetlands occur in two physiographic settings -- the Mississippi River Deltaic Plain and the Chenier Plain. Wetlands on the deltaic plain are situated on a series of overlapping riverine deltas that have extended onto the continental shelf during the past 6,000 years. The alluvial and organic-rich sediments found on these areas are subject to high, natural-subsidence rates. The effects of subsidence are compounded by sea-level rise. Under natural conditions, sedimentation encourages vertical accretion of wetland areas and may offset the submergence and inundation that result from subsidence and sea-level rise. Historically, areas of the deltaic plain that were located near an active channel of the Mississippi River tended to build outward, and marsh areas

tended to expand. At the same time, areas located near inactive, abandoned channels tended to deteriorate and erode as a result of the lack of sediment. Today, the Mississippi River is leveed, which greatly reduces the once natural formation of deltaic wetlands.

The Chenier Plain, located to the west of the Atchafalaya Bay in the western part of coastal Louisiana, is a series of separate ridges of shell and sand, oriented parallel or oblique to the Gulf Coast. These ridges are separated by progradational mudflats that are now marshes or open water. The mudflats were built during times when the Mississippi River channel was located on the western side of the deltaic plain or when minor changes in localized hydrologic and sedimentation patterns favored deposition in the Chenier Plain.

The deterioration of coastal wetlands, particularly in Louisiana, is an issue of concern. Several factors contribute to wetlands loss in coastal Louisiana. Sediment deprivation is a result of a 50 percent decrease in the suspended-sediment load of the river since the 1950's, the channelization of the river, and the primary cause, the construction of the flood protection levees. Subsidence and sea level rise have caused submergence of lower wetland areas. Construction of ring levees have allowed drainage and development of extensive wetlands. Development activities in low areas, outside leveed areas, have caused the filling of wetlands. Construction of canals have converted wetlands to open water and upland spoilbanks. Canals and subsidence have also contributed to increased tidal influence and salinities in freshwater and low-salinity wetlands, which in turn has increased erosion and sediment export.

Wetlands and estuaries could be affected by OCS-related activities. These activities include construction of new onshore facilities in wetland areas; pipeline placement in wetland areas; vessel usage of navigation channels and access canals; maintenance of navigation channels; onshore disposal of OCS-generated oil-field wastes; and oil and chemical spills from both onshore and offshore OCS support activities. No direct wetland losses are anticipated as a result of the proposed activities.

6. Existing Pipelines and Cables

Kerr-McGee Corporation is not aware of any pipelines or cables located in South Timbalier Area Block 249.

7. Other Mineral Uses

There are no other known mineral resources located in or near South Timbalier Area Block 249.

8. Ocean Dumping

The major sources of ocean dumping related to OCS petroleum exploration activity are drilling fluids, or "muds", and drill cuttings. After the drilling and completion activities in South Timbalier Area Block 249 are completed, Kerr-McGee Corporation does anticipate dumping their excess water-based drilling fluids. If any oil-based mud is used in the drilling operations, it will be transported to shore for proper disposal.

Drill cuttings are brought up by the drilling mud and range in size from grains of sand to pebbles. These cuttings are separated and sifted and then disposed overboard. Treated domestic wastes and drill waters will also be disposed at the proposed drilling site.

The major sources of ocean dumping related to the proposed production activity will be the discharge of produced water and treated domestic wastes. There will be no intentional discharge of any oily or hazardous materials in violation of DOI or EPA regulations.

9. Endangered or Threatened Species

Endangered or threatened species which might occur in South Timbalier Area Block 249 are northern right whale (Eubalaena glacialis), fin whale (Balaenoptera physalus), humpback whale (Megaptera novaeangliae), sei whale (B. borealis), sperm whale (Physeter macrocephalus), blue whale (B. musculus), Kemp's ridley turtle (Lepidochelys kempii), green turtle (Chelonia mydas), hawksbill turtle (Eretmochelys imbricata), leatherback turtle (Dermochelys coriacea), and loggerhead turtle (Caretta caretta) (USDOI, Region IV Endangered Species Notebook).

Endangered or threatened species expected to occur in the vicinity of the onshore base are Arctic peregrine falcon (Falco peregrinus tundrius), brown pelican (Pelecanus occidentalis), and American alligator (Alligator mississippiensis) (USDOI, Region IV Endangered Species Notebook). The brown pelican was a common resident of Louisiana but this species became virtually

extinct in the late 1950's (Fritts et al. 1983). By 1960, the estimated population of brown pelicans was four birds (NFWL 1980). Re-establishment of a breeding population in Louisiana has met with varying success (Fritts et al. 1983). Arctic peregrine falcons are migrants through the area and are not considered a component of the resident bird population. The American alligator is classified as threatened in Louisiana due to similarity of appearance. This species is neither endangered nor threatened biologically in Louisiana and a regulated harvest is permitted under State Law (USDOI, Region IV Endangered Species Notebook). No impacts on American alligators are expected. The presence of marine mammals in coastal Louisiana is considered sporadic and probably no resident populations exist. It is unlikely that onshore or exploration activities related to South Timbalier Area Block 249 will have any effect on the previously named species.

B. Socio-Economic Impacts

In accordance with DOI/MMS guidelines (OS-7-01), dated November 20, 1980, the initial OCS Data Base Report will be developed for submission on or before the prescribed due date. Subsequent Environmental Reports provided by Kerr-McGee Corporation will address this data and related activity impacts as required.

IV. UNAVOIDABLE ADVERSE IMPACTS

The greatest threat to the natural environment is caused by inadequate operational safeguards that may cause or contribute to an oil spill or well blowout. These accidents can be greatly reduced in number by utilizing trained operational personnel and employing all available safety and pollution control systems. These measures are standard operating procedure for Kerr-McGee Corporation. Kerr-McGee Corporation has an approved Oil Spill Contingency Plan.

It should be noted that most large crude oil and refined products spills have occurred during transportation and not during drilling or production operations. Furthermore, the probability of an oil spill occurring during exploratory drilling operations is low (Danenberger 1976). Transportation and river runoff contribute an estimated 34.9 percent and 26.2 percent, respectively, to the hydrocarbon contamination of the world's oceans while offshore production activities account for only 1.3 percent (National Academy of Sciences 1975). Natural seeps of petroleum and natural gas, which occur throughout the northern Gulf of Mexico (Zo Bell 1954; Geyer 1979), contribute an estimated 9.8 percent to the contamination of the world's oceans (National Academy of Sciences 1975). Additionally, it was noted in the executive summary of a study of petroleum production platforms in the central Gulf of Mexico (Bedinger, 1981), that natural disturbances (i.e. river flooding and storms) can more greatly affect normal biological communities than the current industrial development of the OCS. The preceding discussion is not intended to

minimize the significance of major oil spills resulting from petroleum exploration and production activities but is provided to establish a perspective relative to their probable occurrence.

Thirteen of the forty-six blow-outs on the OCS between 1971 and 1978 were associated with exploratory drilling activities, none of which released any oil to the marine environment (Danenberger 1980). The IXTOC I spill of 1979, however, demonstrates that advanced drilling technology and available safety and pollution control systems are not infallible. Most spills are subjected to immediate containment and clean-up efforts. The ultimate fate of oil spilled in the marine environment is generally considered to be one or a combination of the following: evaporation and decomposition in the atmosphere, dispersal in the water column, incorporation into sediments, and oxidation by chemical or biological means (National Academy of Sciences 1975).

The unavoidable impacts that will occur as a result of drilling, discharging of drilling fluids and treated sewage, and platform installation and production are few in number and temporary in nature. The primary adverse impacts as a result of drilling activity include 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 location of the drilling rig and during disposal of muds, cuttings, and domestic wastes and sewage. As with the drilling activity, the primary adverse impacts that will occur as a result of platform installation and production include a localized

degradation of water quality in the vicinity of the production platform during disposal of produced water, domestic wastes and sewage; the potential obstruction to commercial and recreational fishing vessels; and the disruption and/or killing of benthic and/or pelagic organisms.

Discharging is inevitable during OCS exploration and production operations. Any materials that may contain oil or other hazardous materials, and therefore would have a much greater adverse impact on the environment, will not be discharged intentionally. Any discharging will be done pursuant to all DOI and EPA regulations. The discharges to be disposed overboard as a result of the exploration activity will include domestic waste and sewage that is treated on the rig before discharging, drill cuttings, and excess water-based mud. The discharges to be disposed overboard as a result of production activity will include produced water and domestic waste and sewage that is treated on the platform.

The environmental fate and effects of drilling muds and cuttings has been extensively addressed in a symposium (See Ayers et al. 1980 for detailed discussions). The discharging of drill cuttings and water-based mud will result in an increase in water turbidity, burial of benthic organisms, and possible toxic effects on marine organisms in the immediate vicinity of the drilling rig. A reduction in photosynthetic activity and plankton populations can also be expected as a result of discharging. It is expected, however, that pelagic and benthic organisms will repopulate the area rapidly after discharging if the effects are minimal and intermittent as expected.

The following discussion of produced waters was summarized from the Draft Environmental Impact Statement for the Gulf of Mexico, Lease Sales 131, 135, and 137: Central, Western, and Eastern Planning Areas, March, 1990.

Produced waters discharged from production platforms into offshore waters are briny waters separated from produced hydrocarbons. The volume of produced waters is a variable dependent upon the formation and time. In older wells as oil and gas production declines, most wells produce increasing amounts of water. In some oil fields, water comes with the oil in the early stages of development; whereas in other wells, appreciable water never comes up with the oil.

The concentrations of most trace minerals found in produced waters are comparable to those in seawater. Studies of produced waters seem to indicate that the levels of the six elements most toxic to the marine environment (mercury, cadmium, silver, nickel, selenium, and lead) are not normally higher than the levels found in seawater and that no damage is caused by their presence.

Other contents and properties of produced waters which may have environmental effects are dissolved oxygen, non-hydrocarbon organic compounds, temperature, and salinity. The effects of these have been shown to be minimal and are localized near the discharge site.

Also found in produced waters are radionuclides, products of naturally occurring minerals found in shales and sandstones. The levels of these

radionuclides may be up to four times greater than the concentrations found in open ocean surface waters. These higher levels seem to cause no apparent problems as there is a rapid dilution of formation waters when discharged offshore.

In offshore waters, diffusion and dispersion limit the effects of produced waters to a few meters radius of the discharge site (Harper 1986). Few impacts have been documented in several large investigations (Boesch and Rabalais 1985).

Offshore activities generate a small but significant amount of air pollutants due to the emissions of diesel engines; therefore, the deterioration of air quality is unavoidable in an OCS operation area. In most instances, these emissions affect only the immediate production activity site and are rapidly dissipated by the atmosphere depending upon climatic conditions. An Air Quality Review Report has been prepared for South Timbalier Area Block 249 and is included as an attachment to the Development Operations Coordination Document.

Commercial and recreational fishing would be affected by OCS development, but primarily in terms of inconvenience and interference. Although the unavoidable adverse impacts could include some smothering of shellfish, snagging of trawl nets, reduction of area presently used for unrestricted fishing, and minimal finfish killing, commercial fishing activities would not be significantly affected, except in the unlikely event of an oil spill. An

oil spill would result in serious economic losses due to the contamination of commercial fish species over a large area.

There is a remote possibility that offshore areas of historical, cultural, or biological significance could be damaged or destroyed by OCS production operations. Visual No. 3 from the Final Environmental Impact Statement (USDOI, MMS 1986) indicates that no archeological, cultural, or historic areas are in the vicinity of South Timbalier Area Block 249. Kerr-McGee Corporation will make every effort to avoid disturbing any historically, culturally, or biologically significant feature.

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COASTAL ZONE MANAGEMENT CONSISTENCY CERTIFICATE

DEVELOPMENT OPERATIONS COORDINATION DOCUMENT

GULF OF MEXICO

FOR

SOUTH TIMBALIER AREA BLOCK 249

SUBMITTED TO:

MR GREG J. WILTZ

SR. PETROLEUM ENGINEER

KERR-MCGEE CORPORATION

16666 NORTHCHASE

HOUSTON, TEXAS 77060

(281/618-6339)

AUGUST 25, 1997

PREPARED BY:

TIM MORTON & ASSOCIATES, INC.

REGULATORY & ENVIRONMENTAL CONSULTANTS

PROJECT NO. 97-262

COASTAL ZONE MANAGEMENT

CONSISTENCY CERTIFICATION

DEVELOPMENT/PRODUCTION

.....

Type of Plan

SOUTH TIMBALIER AREA BLOCK 249

.....

Area and Block

OCS-G-18056

.....

Lease Number

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

Arrangements have been made to publish Public Notices regarding the proposed activity no later than September 8, 1997... with THE ADVOCATE, the official journal of Louisiana, with THE DAILY COMET, the official journal of Lafourche Parish, and with the HOUMA DAILY COURIER, the official journal of Terrebonne Parish.

KERR-MCGEE CORPORATION

.....

Lessee or Operator

Gregory J. Wiltz Jr

.....

Certifying Official

September 4, 1997

.....

Date

PUBLIC INFORMATION

Attachment T
Coastal Zone Management

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Public Notice of Federal Consistency Review of an

Initial Development Operations Coordination Document (DOCD)

by the Coastal Management Division/
Louisiana Dept. of Natural Resources

for the Plan's Consistency
with the Louisiana Coastal Resources Program

Applicant:	Kerr-McGee Corporation 16666 Northchase Houston, Texas 77060
Location:	South Timbalier Block 249 Lease OCS-G 18056 Well A-4 Lease Offering Date - 08-01-95
Description:	Proposed Initial Development Operations Coordination Document for the exploration for oil and gas. Exploration activities shall include drilling from a jackup rig at South Timbalier Block 265 "A" Platform and transport of drilling crews and equipment by helicopter and/or cargo vessel from an onshore base located at Fourchon, Louisiana. No ecologically sensitive species or habitats are expected to be located near or affected by these activities.

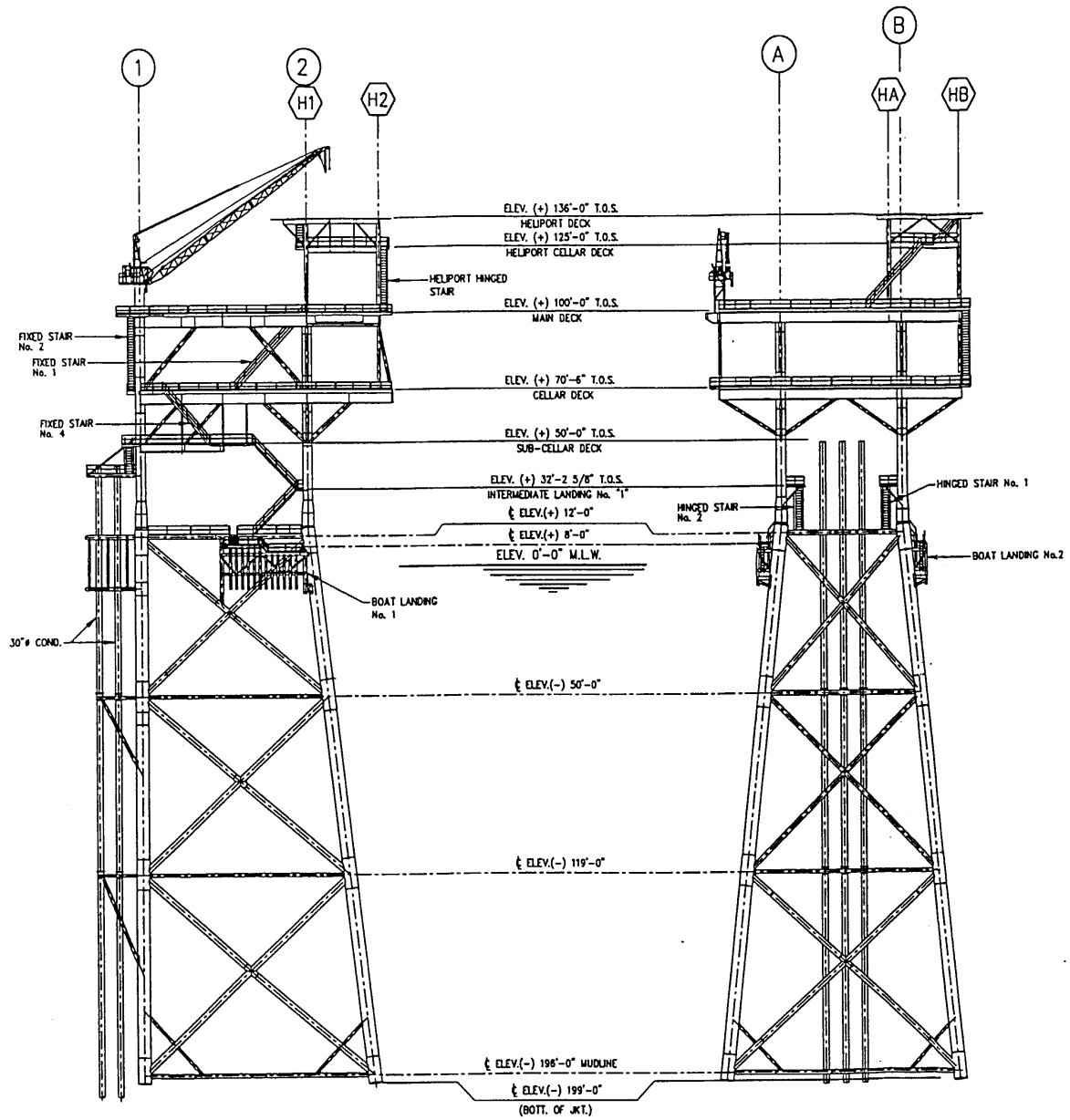
A copy of the plan described above is available for inspection at the Coastal Management Division Office located on the 10th floor of the State Land and Natural Resources Building, 625 North 4th Street, Baton Rouge,Louisiana. Office Hours: 8:00 a.m. to 5:00 p.m., Monday through Friday. The public is requested to submit comments to the Coastal Management Division, Attention: OCS Plans, Post Office Box 44487, Baton Rouge, Louisiana 70804-4487. Comments must be received within 15 days of the date of this notice or 15 days after the Coastal Management Division obtains a copy of the plan and it is available for public inspection. This public notice is provided to meet the requirements of the NOAA Regulations on Federal Consistency with approved Coastal Management Programs.

Ooooooooooooooooooooooooooooooooooooooooooooooooooooooooooooooooooooooooooo

GJW

Attachment U
Public Notice

LIST OF COMPONENTS	
ITEMS	TOTAL WEIGHT (TONS)
JACKET (W/O ANODES)	790.0
BOAT LANDING No. 1 (W/O CONCRETE)	19.5
BOAT LANDING No. 2 (W/O CONCRETE)	19.5
PILING	1045.0
DECK	695.0
HELIPORT	61.0
TOTAL	2630.0



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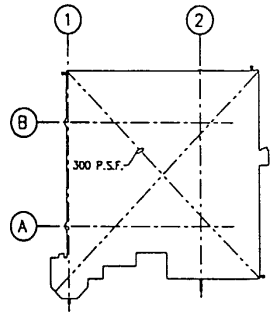
SCALE: NONE

ELEVATION "B"
SCALE: NONE



MAIN DECK LOADING PLAN
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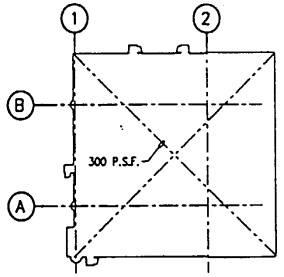
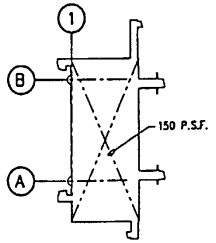
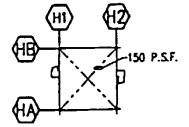


CELLAR DECK LOADING PLAN
SCALE: 1/32" = 1'-0"



SUB-CELLAR DECK LOADING PLAN
SCALE: 1/32" = 1'-0"

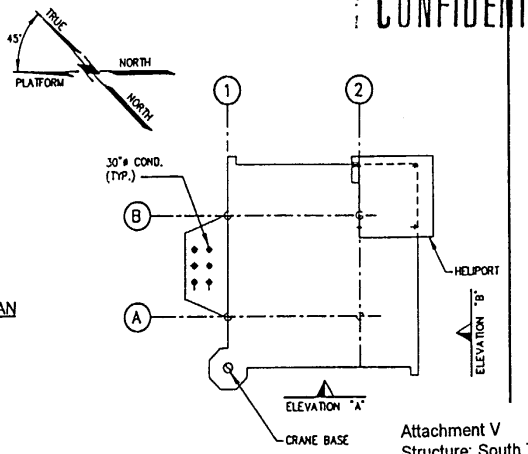


HELIPORT CELLAR DECK LOADING PLAN
SCALE: 1/32" = 1'-0"

PUBLIC INFORMATION

BEST AVAILABLE COPY

CONFIDENTIAL



KEY PLAN
SCALE: 1/32" = 1'-0"

JUL 07 1995

Attachment V
Structure: South Timbalier Block 265 "A" Structure

NOTES:

MARK	REVISION	DATE	APP'D
1	R.T.	8/10/95	

KERR-McGEE CORPORATION
GULF COAST REGION

TECHNICAL ENGINEERING CONSULTANTS, INC.
GRETNA LOUISIANA

APPROVED	DATE
CLIENT	
PROJECT	
DESIGN	
DRAFT	

TITLE: 4-PILE PRODUCTION PLATFORM
SOUTH TIMBALIER BLOCK 265-A 196'-0" W.D.
ASSEMBLY ELEVATION

CLIENT: KERR-McGEE CORPORATION
JCB NO. 33520
DWG. NO. 001

Date: 07/07/95 Time: 15:02 Rev By: JAS F/N: 39520001

U.S. Department of Transportation
United States Coast Guard

Commandant
United States Coast Guard
Facsimile: (202) 267-4095

Washington, D.C. 20593-0001
Staff Symbol: (G-MER-4/Room 2104)
Phone: (202) 267-0535

CERTIFICATE

U. S. COAST GUARD
CERTIFICATE OF FINANCIAL RESPONSIBILITY
OFFSHORE OIL POLLUTION COMPENSATION FUND (LEASEHOLD)
[No. 9000083]

WHEREAS by Section 305(b) of Title III of an act of Congress approved September 18, 1978, entitled "Outer Continental Shelf Lands Act Amendments of 1978" (43 U.S.C. 1811 et. seq.), the owner or operator of an offshore facility which (1) is used for drilling for, producing, or processing oil, or (2) has the capacity to transport, store, transfer, or otherwise handle more than one thousand barrels of oil at any one time, is required to establish and maintain, in accordance with regulations promulgated by the President, evidence of financial responsibility in the amount of $35,000,000;

AND WHEREAS the authority vested in the President by section 305(b) of that act has been delegated to the Commandant, United States Coast Guard;

AND WHEREAS under Subpart C of Part 135 of Title 33, Code of Federal Regulations, an owner or operator of an offshore facility is required to submit evidence of financial responsibility in the amount of $35,000,000 to the Fund Administrator, Offshore Oil Pollution Compensation Fund, acting for and on behalf of the Commandant, United States Coast Guard, before placing such offshore facility into operation;

AND WHEREAS Kerr McGee Corporation has filed an application, dated February 20, 1991, stating that it is the owner, or, if not the owner, the operator (within the meaning of 43 U.S.C. 1811(20) and for all purposes of 43 U.S.C. 1811 et. seq.) of each facility located now or in the future on any lease identified in that application, or as that application may be modified from time to time (the term "facility" does not include transmission pipelines receiving at custody transfer points oil or gas from various blocks to shore);

AND WHEREAS Kerr McGee Corporation has(have) submitted evidence of financial responsibility in the amount of $35,000,000, which is available for the satisfaction of its potential liability under 43 U.S.C. 1811 et. seq.;

NOW THEREFORE, this is to certify that the evidence of financial responsibility submitted is hereby approved by the Fund Administrator, Offshore Oil Pollution Compensation Fund, subject to the following conditions:

Attachment W
Certificate of Financial Responsibility

1. The Certificant shall notify the Fund Administrator in writing within 10 days after any change occurs which prevents meeting in full the obligations for which this Certificate of Financial Responsibility has been issued. Based on any such change in financial capability, the Fund Administrator may revoke this Certificate in accordance with 33 CFR 135.223.

2. Issuance of this Certificate does not relieve the Certificant of the obligation or responsibility for compliance with the provisions of any other law or regulation of any other federal or state authority having cognizance of any aspect of the location, construction, maintenance, or operation of each of said offshore facilities on its leases.

3. In the event the Certificant ceases to be the owner or operator of one or more offshore facilities because of the transfer of a lease or portion of a lease to any other person, or acquires an additional lease(s), the Certificant shall immediately notify the Fund Administrator and as soon as possible confirm in writing to the Fund Administrator the name(s) and address(es) of the person or persons to whom the lease was transferred or from whom the lease was acquired.

Frank A. Martin, Jr.

FRANK A. MARTIN, JR.
Chief, Offshore Facilities Branch
Pollution Funds Division
By direction of the Commandant

Date Issued June 3, 1991

Attachment W
Certificate of Financial
Responsibility

VIRTUE OF SECTION 6001(a) OF THE OIL POLLUTION ACT OF 1990 (PUBLIC LAW 101-380), ALL FERENCES IN THIS CERTIFICATE TO TITLE III OF THE OUTER CONTINENTAL SHELF LANDS ACT IENDMENTS OF 1978, OR TO ANY PROVISION THEREOF, ARE DEEMED TO REFER TO THE RRESPONDING PROVISIONS OF TITLE I OF THE OIL POLLUTION ACT OF 1990.