In Reply Refer To: MS 5231

January 13, 1995

Vastar Resources, Inc.
Attention: Mr. Dennis Sustala
15375 Memorial Drive
Houston, Texas 77079

Gentlemen:

Reference is made to the following plan received December 30, 1994:

Type Plan - Initial Plan of Exploration
Lease - OCS-G 14102
Block - 756
Area - Mustang Island
Activities Proposed - Wells A through E

In accordance with 30 CFR 250.33, this plan is hereby deemed submitted and is now being considered for approval.

Your control number is N-4985 and should be referenced in your communication and correspondence concerning this plan.

Sincerely,

(Orig. Sgd.) Kent E. Stauffer

Donald C. Howard
Regional Supervisor
Field Operations

bcc: Lease OCS-G 14102 POD File (MS 5032)
MS 5034 w/public info. copy of the plan
and accomp. info.

AGobert:cic:01/12/95:POECOM

NOTED-SCHEXNAILDRE

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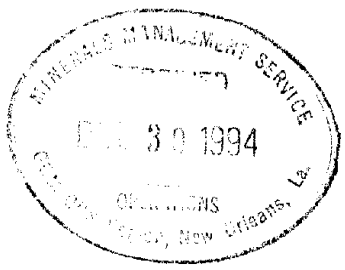

Vastar Resources, Inc.
PLAN OF EXPLORATION
For
Mustang Island 756

This Plan of Exploration for, OCS-G 14,102 , was prepared in accordance with 30 CFR 250.33, Notice to Lessees 83-3, Letters to Lessees dated October 12, 1988 and September 5, 1989, and Department of Interior Secretarial Order 2974, revised January 19, 1977.

Mustang Island Block 756 was leased by Vastar Resources, Inc. in the Gulf of Mexico Oil and Gas Lease Sale 143. The lease is effective as of December 1, 1993. Vastar Resources, Inc. is covered by bonds U-8003845 and U-8003846 in accordance with requirements of Letter to Lessees and Operators (LTL) dated November 5, 1993, concerning bond coverage requirements for Outer Continental Shelf (OCS) oil and gas leases and post lease operations.

This POE describes the proposed drilling of five wells. Drilling of the first well is scheduled to begin about March 1, 1995, subject to approval of the Plan and subsequent Permit to Drill. The proposed well locations and spud dates are as follows.

Well & Surface Location		Depth PTVD	Water Depth	Drilling Days	Anticipated Spud Date
A	3,650 FNL & 4,335 FEL X: 2597000.32' Y: 757579.75'		125'	45	March 1, 1995
B	7,000 FNL & 3,000 FEL X: 2598335.32' Y: 754229.75'		128'	45	May 1, 1995
C	4,500 FNL & 1,000 FEL X: 2600335.32' Y: 756729.75'		127'	45	July 1, 1995
D	2,500 FNL & 3,000 FEL X: 2598335.32' Y: 758729.75'		125'	45	September 1, 1995
E	4,700 FNL & 1,000 FEL X: 2600335.32' Y: 756529.75'		128'	45	November 1, 1995

Additional exploratory drilling must be predicated upon the need to define reservoir limits and/or structures. The installation of platforms, producing facilities, and pipelines are contingent upon the success of the proposed wells. Other exploratory activities which may be conducted under this plan are a wellbore velocity survey and soil boring.

The exploratory wells proposed for this Block will be drilled using a rig such as the mobile offshore drilling unit (MODU), Falcon 18. This is a Bethlehem mat supported mobile jackup drilling rig with a cantilevered skid unit. The rig is capable of drilling to 25,000 foot depths in 17 feet to 250 feet of water. A schematic of the rig is attached with a description of the safety and pollution-prevention equipment system. Vastar Resources, Inc. supervisory drilling personnel are trained in blowout prevention and control procedures.

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SUPPORTING INFORMATION FOR PLAN OF EXPLORATION
MUSTANG ISLAND BLOCK 756

1. A structure map showing the proposed well locations is attached.

2. The water depth across the Block varies from 110 to 138 feet. The seafloor slopes to the southeast at approximately 6.6 ft per mile. A map showing the proposed well locations and bathymetry is attached.

3. This summary regarding the shallow foundation and drilling conditions at the proposed drilling sites in Mustang Island Block 756, OCS-G-14,102, is based on a review of marine geohazards survey data and other published and unpublished regional data. The survey was conducted by Intersea Research for Kerr-McGee in February, 1984. Vastar purchased this survey from Kerr-McGee. The following geophysical systems were employed: 1) fathometer; 2) magnetometer; 3) side-scan sonar; 4) subbottom profiler 5) water gun, 6) sparker.

   A new Cultural Resource Assessment was complied by Dr. William Marmaduke of Northland Research in April, 1994. Dr. Marmaduke stated that there are no archaeological reasons for special precautions to be taken when operating within Block 756.

   Mustang Island Block 756 is located about 45 statute miles east of Corpus Christi, Texas. Water depths range from 110 to 138 ft. The seafloor slopes to the southeast at approximately 6.6 ft per mile. The surficial sediments in the area are reportedly clays and silty clays (MMS, 1983). Holocene sediments in this are approximately 74 feet thick (Berryhill, 1976). Buried channels are present in the data. No proposed sites are located over one of these relict erosional features. The water gun data suggest a normal fault in the northeast corner of the block.

   One well has been previously drilled in Block 756 and two pipelines cross the survey area. The proposed locations do not come within 1,000 feet of these structures.

   Location A: The water depth at this location is approximately 125 ft. This location lies 500 ft east of a side-scan sonar target of unknown identity. This proposed drill site is located 1,200 ft east-southeast from the margin of a relict channel feature. This location is located more than 1,500 ft from any other mapped anomaly such as: magnetic anomaly, possible shallow sediment gas accumulation, deeper amplitude anomaly, buried channel, fault, pipeline or well head.

   Location B: The water depth at this location is about 128 ft. This site is located >1,000 ft from any anomalous feature.

   Location C: The water depth at this location is about 127 ft. This site is located >1,000 ft from any anomalous feature.

   Location D: The water depth at this proposed site is about 125 ft. This site lies 700 ft southeast of buried channel margin and 1,400 ft west of the Kerr-McGee #1 well head and associated pipeline. No other anomalous feature lies within 1,000 ft of this site.

   Location E: The water depth at this location is about 128 ft. This site is located >1,000 ft from any anomalous feature.

   In general, these locations are located safe distances from potential hazards. Overall these locations should provide adequate foundation conditions for drilling operations at these water depths.

   Actual lines of data may be obtained from Mr. Nat Usher, Vastar Geophysicist. Mr. Usher can be reached at (713) 584-3214.

4. b. VASTAR has an Oil Spill Contingency Plan which was approved by the MMS on July 6, 1993. Spill reporting procedures and a list of company personnel responsible for pollutant spill cleanup are contained in the Oil Spill Contingency Plan. VASTAR's onshore base in Ingleside will be used for support during the proposed drilling operations and in the event of an oil spill. Clean Gulf Associates (CGA) has oil spill cleanup equipment available for use by VASTAR, as a member company. The equipment is stored at Grand Isle, Venice, Cameron, Houma, Theodore and Intercoastal City, Louisiana and at Galveston, Texas City, Port Aransas, and Fulton, Texas.

(1)Gas and condensate production is expected to be found on this lease. Should a spill occur a Fast Response Unit would be obtained from the Clean Gulf Associates inventory to remove oil from the ocean in order to prevent or minimize any potential shoreline impacts. As indicated in Vastar's Oil Spill Contingency Plan additional equipment for the removal of oil at sea and for shoreline cleanup would be obtained from CGA as needed for the particular situation. The location of the Clean Gulf Association FRU which would respond to a spill from the Mustang Island area is in Port Aransas, Texas. Mustang Island Block 756 is approximately 35 miles from the Ingleside shorebase and 25 miles from the Port Aransas CGA base.

(2)Response time to Block 756 is estimated at 7.0 hours. Response time is estimated as follows. All travel times are based on boat speed of 10 mph.

I. Procurement Time: (Maximum Time of Categories A,B, or C):...	3.0 hrs
A. Locate & move boat to CGA base 1 hrs.	
B. Transport Contract labor to base 3 hrs.	
C. Travel time for CGA Supervisor 3 hrs.	
II. Loadout of Equipment:	1.0 hrs
III. Transportation Time From CGA base to Site:.....	2.5 hrs
IV. Equipment Deployment Time:.....	.5 hrs
TOTAL RESPONSE TIME.....	**7.0 HRS.**

(3) Site-specific review of the planned activities have been conducted using Environmental Impact Statements 1-42 and 1-43 and the methodology employed in the Letter to Lessees and Operators (LTL) dated November 4, 1991, which addresses updated launch area maps and oil spill trajectory probability tables. According to these maps the proposed drilling location is in launch site W03 and probabilities for landfall of spilled oil within 10 days are as follows:

Percent Chance	Land Segment	Segment Name _
2%	3	Kenedy, TX
8%	4	Kleberg,TX
17%	5	Nueces, San Patricio TX
22%	6	Aransas,TX
12%	7	Calhoun,TX

A review of Texas Biological Maps No. 1,and 2 included in the CGA Manual Volume II indicate that the Southwest Texas coastal areas known as land segments 3 through 7 to be mainly recreational beaches interspersed with marshes, fish and shellfish nursery grounds and unique botanical areas, natural areas, federal and state lands and refuges and areas of ecological concern. Endangered species include the Bald Eagle, Peregrine Falcon and American Alligator, Brown Pelican, Whooping Crane, Jaguarundi, SeaTurtle, and West Indian Manatee. Also in the area are the Padre Island National Seashore, the Laguna Madre, Mustang Island Shore Natural Area, St. Joseph Island Marsh, Matagorda Island Natural Area, Matagorda Island Marsh and Matagorda Bay Underwater District. Also in the area predicted for landfall of oil are lesser-known recreational beaches, state lands and parks, wildlife sanctuaries and refuges, natural areas, barrier islands, marshes, oyster beds and sites listed in the National Register of Historic Places.

Response modes for onshore protection and cleanup are referenced in the CGA Manual Volume II, on the pages immediately following the above mentioned maps of biological sensitivity. Priority for a shoreline cleanup would be given to environmentally sensitive areas which would be cleaned using these recommended methods as outlined in the CGA Manual Volume II.

5. No new or unusual technology is to be utilized for the proposed exploratory drilling on Block 756.

6. A Cultural Resource Assessment was prepared by Mr. William S. Marmaduke. Ph.D with Northland Exploration Surveys, Inc. as required by Lease Stipulation No. 1. As required by Stipulation No. 3, Vastar assumes all risks as described by language in paragraphs (a) of Stipulation No. 3 which occur in connection with activities planned for this block and to control electromagnetic emissions as required by the commander of the warning area W-228.

7. Effluent waters, deck drainage, formation waters, and drilling fluids will be disposed of according to the stipulations of the U.S. Environmental Protection Agency's National Pollutant Discharge Elimination System (NPDES) General Permit GMG 290009. Water based drilling fluid and cuttings which meet the NPDES General Permit toxicity limitation of a 96 hr LC50 of greater than 30,000 ppm will be discharged overboard. Other water based muds and oil based muds will either be transported back to shore for reclamation or disposal at an approved commercial facility or will be disposed by annular injection in an offshore well on the lease. No waste products which contain oil will be disposed of into the Gulf of Mexico.

   During the proposed drilling on this lease wastes likely to be generated per well include 1664 bbls drilling fluid and 4016 bbls cuttings estimated based on drilling a 30" hole to 450', 26" hole to 1000', 17-1/2" hole to 4500', 12-1/4" hole to 9000', a 8-1/2" hole to 12000', and a 6-1/2" hole to TD, based on the depth of the deepest proposed well. If waterbased fluid is used the mud and cuttings will be discharged overboard at rates of less than 1000 BPD. A list of typical mud system additives is attached.

   Also generated will be an estimated 12 bbls/day sanitary waste, 160 bbls/month deck drainage from rainfall and equipment and drilling deck washings. Sanitary wastes will be treated onboard with U.S. Coast Guard approved sanitation treatment facilities. Deck drainage will be routed through a skimming system to remove any free oil. No waste will be discharged that contains free oil. Domestic wastes and any chemicals generated will be brought to shore for disposal at a commercial facility.

8. Vastar Resources, Inc., hereby requests that in accordance with 30 CFR 250.67(c) the above area be classified as "Zones where the absence of H_2S has been confirmed." Based on an analysis of offset wells along strike which penetrate portions of the prospective section including Tenneco MU 765, Well No. 1, Diamond Shamrock MU 755, Well No. 1 , Amoco MU 755, Well No. 1, Kerr McGee MU 756, Well No. 1, Sonat MU 739, Well No. 1, Unocal MU 740, Well No. 1, Unocal MU 740, Well No. 2, the proposed activities will be conducted in areas that we recommend be classified as "Zones where the absence of H2S has been conformed". None of these wells have encountered the presence of H2S gas in quantities greater than or equal to 20 ppm, and the Mustang Island Block 756 Wells will be completed in equivalent stratigraphic units.

9. A Certificate for Coastal Zone Consistency is not required for drilling offshore of the State of Texas.

10. Air Emissions:

    Emissions have been calculated using the format of the standardized API/OOC electronic spreadsheet. Use of the spreadsheet was endorsed by the MMS in a letter dated May 5, 1994. Emissions were calculated based on equipment used with the Falcon 18 jack up rig.

    The following forms have been submitted:

    Title Page
    Emissions Spreadsheets
    Summary Sheet
    Emissions Factors Sheet
    Basis of Calculation

11. A Environmental Report is not required.

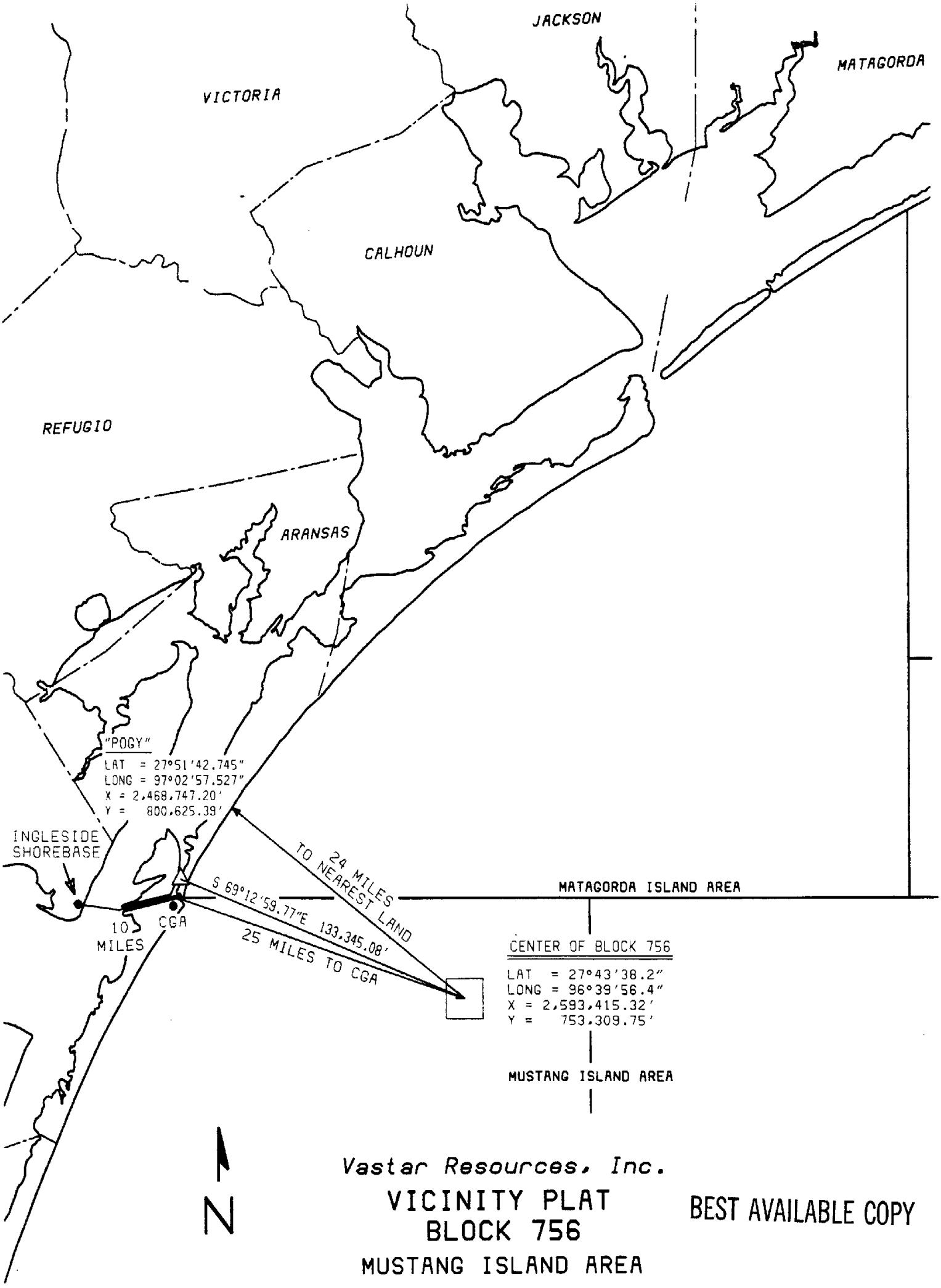
12. Mustang Island Block 756 is located approximately 35 miles from Vastar Resources, Inc. 's Ingleside shorebase. No new facilities are expected to be required to support the proposed drilling operations. The frequency of helicopter flights for transportation of drilling and contract personnel to the Block during drilling operations is estimated to be 10 round trips per week. During drilling activities one workboat will average about 1.5 round trips per week. Workboats are typically 160' to 200' in length and travel up to 9 knots in open waters. A utility boat may also be used to supplement the workboat as needed. Utility boats are somewhat smaller than workboats, generally only 100' to 110' in length. A crewboat will also be utilized for the weekly crew change during times when helicopter travel is restricted due to weather. Crew boats are generally 110' to 120' in length with and aluminum hull and travel at about 20 knots. A Vicinity Plat is attached for reference which shows the likely route for travel between the shorebase and the block.

13. Water depth in Block 756 is less than 400 meters; therefore, no effect on chemosynthetic communities is likely.

14. Common Depth Point seismic lines will be submitted upon request.

15. The authorized representative of Vastar Resources, Inc. to whom questions regarding this Plan may be addressed is:

Dennis Sustala
Sr. Regulatory Compliance Coordinator
P.O. Box 1346
Houston, TX 77251
(713) 584-6615



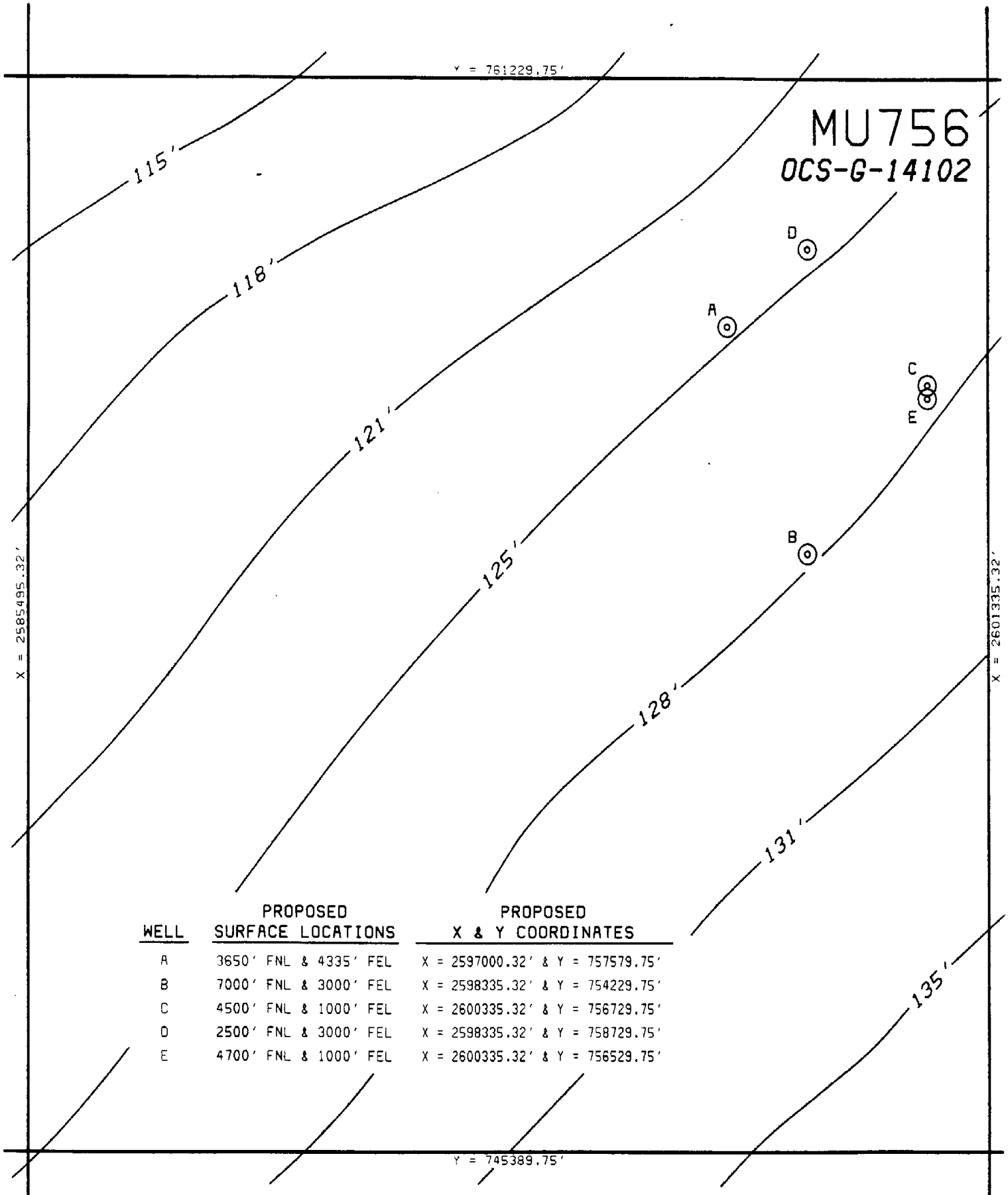
Vastar Resources, Inc.

VICINITY PLAT
BLOCK 756

MUSTANG ISLAND AREA

SCALE: 1"=50,000' DECEMBER 1994

VIC340



WELL	PROPOSED SURFACE LOCATIONS	PROPOSED X & Y COORDINATES
A	3650' FNL & 4335' FEL	X = 2597000.32' & Y = 757579.75'
B	7000' FNL & 3000' FEL	X = 2598335.32' & Y = 754229.75'
C	4500' FNL & 1000' FEL	X = 2600335.32' & Y = 756729.75'
D	2500' FNL & 3000' FEL	X = 2598335.32' & Y = 758729.75'
E	4700' FNL & 1000' FEL	X = 2600335.32' & Y = 756529.75'

N

Vastar Resources, Inc.

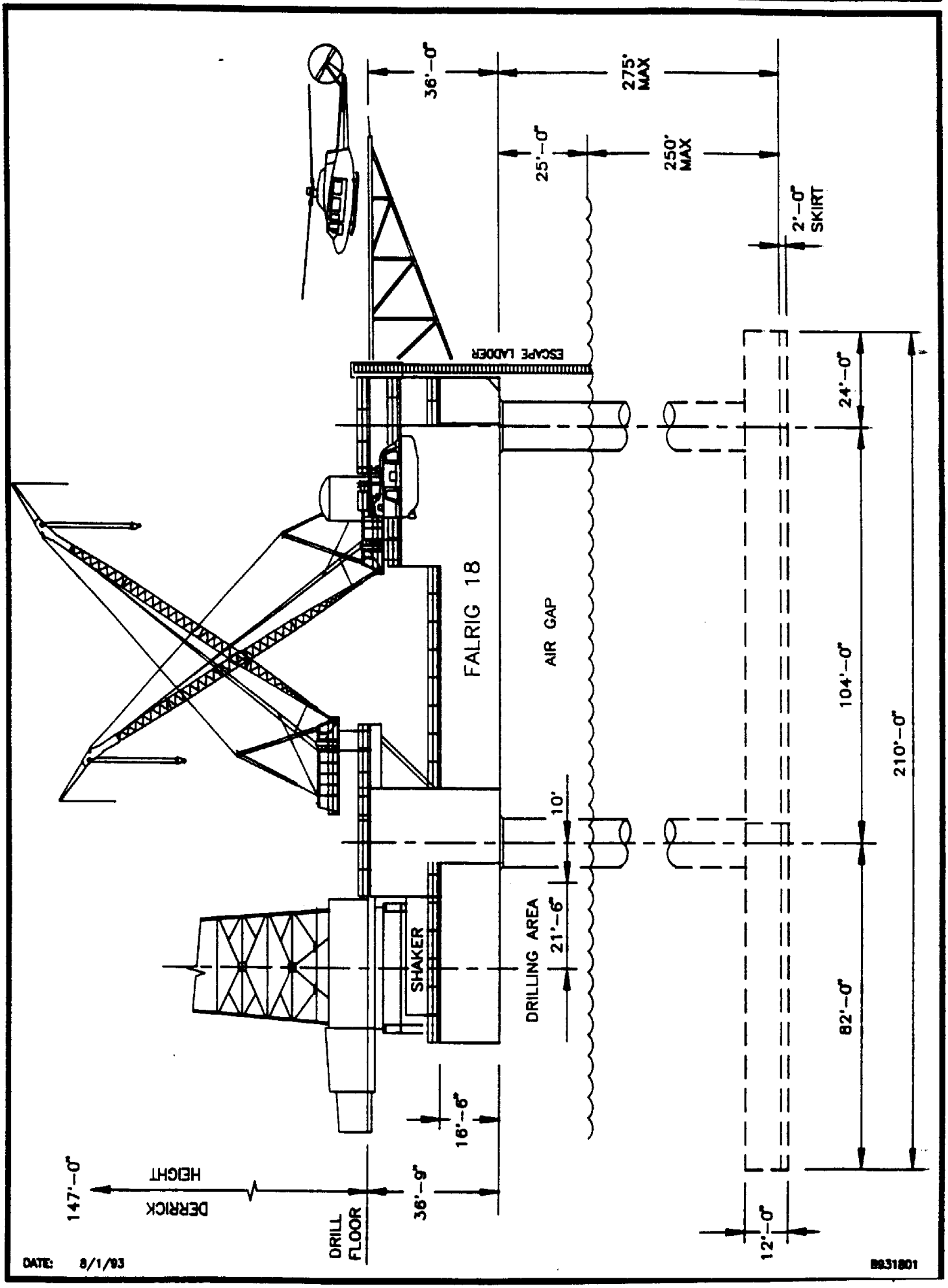
BATHYMETRY PLAT
BLOCK 756
MUSTANG ISLAND AREA

SCALE: 1"=2000' DECEMBER 1994

VIC341

FALCON DRILLING COMPANY, INC.

FALRIG 18
OUTBOARD PROFILE



MUD PRODUCTS FOR USE OFFSHORE

PRIMARY

MUD COMPONENT DESCRIPTION	CHEMICAL NAME	APPLICATION
Barite*	Barium sulfate	For increasing mud weight up to 20 ppg.
Bentonite*	Naturally occurring clay	Viscosity and filtration control in waterbase muds.
Attapulgite*	Naturally occurring clay	Viscosifier in saltwater muds.
Phosphate	Sodium tetraphosphate	Thinner for low pH freshwater muds.
Mined Lignite*	Lignite	Dispersant, emulsifier and supplementary additive for fluid loss control.
Causticized Lignite	NaOH treated Lignite	1-6 ratio caustic-lignite dispersant, emulsifier, and supplementary fluid loss additive.
Modified Lignosulfonate	Sodium Lignosulfonate	Dispersant and fluid loss control additive for waterbase muds.
Blended Lignosulfonate Compound	Compound of chemical	Blended multi-purpose dispersant, fluid loss agent and inhibitor for unique mud systems.
CMC	Sodium Carboxymethyl	For fluid loss control and barite suspension in waterbase muds.
Detergent (Biodegradable)	Compound of vegetable oil	Used in waterbase muds to aid in dropping sand. Emulsifies oil, reduces torque, and minimizes bit-balling.
Caustic Soda	Sodium Hydroxide NaOH	For pH control in waterbase muds.
Soda Ash	Sodium Carbonate	For treating out calcium sulfate in low pH muds.
Sodium Bicarbonate	Sodium Bicarbonate	For treating out calcium sulfate or cement in high pH muds.
Desco	Sulfar Metholate Quebracho	Dispersant and fluid loss control additive for waterbase mud.
PHPA	Polyacrylamide Polyacrylate Polymer	Encapsulating polymer for waterbase mud.
Soltex	Sulfonated Blown Asphalt	Fluid loss control in waterbase mud.

MUD COMPONENT DESCRIPTION	CHEMICAL NAME	APPLICATION
Asbestos Fibers*	Asbestos	Viscosifier for fresh or saltwater muds.
Nut Shells: Fine	Natural material	Most often used to prevent lost circulation.
Ground Mica*	Mica	Used for prevention of lost circulation.
Combination of granules, flakes, and fibrous materials of various sizes in one sack.	None	Used where large crevices or fractures are encountered.
Sodium Chromate	Sodium Chromate	Used in waterbase muds to prevent high temperature gelation.
TERTIARY		
Oil Soluble Surfactants	None	Non-weighted fluid for spotting to free differentially stuck pipe.
Blend of fatty acids, sulfonates, and Asphaltic materials.	None	Invert emulsion that may be weighted to desired density for spotting to free differentially stuck pipe.

DEVELOPMENT OPERATIONS COORDINATION DOCUMENTS
ESTIMATED AIR EMISSIONS

COMPANY:	Vastar Resources, Inc.
AREA:	MUSTANG ISLAND
BLOCK:	756
LEASE OCS-G:	14102
PLATFORM:	N/A
WELL:	A,B,C,D,E
LATITUDE:	N 27 44' 11.0"
LONGITUDE:	W 96 38' 38.8"

COMPANY CONTACT:	Dennis Sustala
TELEPHONE NO.:	713/584-6615

We estimate the rig will require 45 days to drill each well.
Wells will be TA'd or SI after drilling.
Production and construction emissions will be addressed in a subsequent DOCD submission.

AIR EMISSION CALCULATIONS

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL
Vastar Resources, Inc.	MUSTANG ISLAND	756	14102	N/A	A,B,C,D,E

Year	Emitted Substance, TPY				
	TSP	SOx	NOx	HC	CO
1994	0.00	0.00	0.00	0.00	0.00
1995	10.74	64.98	482.01	14.68	105.16
1996	0.00	0.00	0.00	0.00	0.00
1997	0.00	0.00	0.00	0.00	0.00
1998	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00
Allowable	799.20	799.20	799.20	799.20	28590.41

AIR EMISSIONS CALCULATIONS - 1995

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	LAT.	LONG.	CONTACT	PHONE	REMARKS
Vastar Resources, Inc.	MUSTANG ISLAND	756	14102	N/A	A,B,C,D,E	N 27 44' 11.0"	W 96 36' 38.6"	Dennis Sustala	713/584-8615	

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												
		MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	TSP	SOx	NOx	VOC	CO	TSP	SOx	NOx	VOC	CO
DRILL & COMPLETE A,B,C,D, E	Prime mover - (1)SR12E1W (full - half hp)	1300	62.79	1506.96	24	225	0.69	4.27	31.50	0.94	6.87	1.86	11.52	85.04	2.55	18.56
	Prime mover - (3)SR12E1W (full - half hp)	3900	188.37	4520.88	24	225	2.06	12.80	94.49	2.83	20.62	5.57	34.56	255.13	7.65	55.67
	Emergency Generator - 16V71-T	575	27.7725	666.54	1	225	1.27	1.18	17.73	1.42	3.84	0.14	0.13	1.99	0.16	0.43
	Cement Pump - (2) V-8 Diesel	500	24.15	579.60	1	225	1.10	1.03	15.42	1.23	3.34	0.12	0.12	1.73	0.14	0.38
	Logging Unit - GIH Idling	90	4.347	104.33	1	225	0.20	0.18	2.78	0.22	0.60	0.02	0.02	0.31	0.02	0.07
	Logging Unit - POH Variable	120	5.796	139.10	1	225	0.26	0.25	3.70	0.30	0.80	0.03	0.03	0.42	0.03	0.09
	Vessel - Workboat	2200	106.26	2550.24	12	225	1.16	7.22	53.30	1.60	11.63	1.57	9.75	71.96	2.16	15.70
	Vessel - Crewboat	2000	96.6	2318.40	12	225	1.06	6.58	48.46	1.45	10.57	1.43	8.86	65.42	1.96	14.27
1995 YEAR TOTAL							7.80	33.49	267.38	10.00	58.27	10.74	64.98	482.01	14.68	105.16
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											799.20	799.20	799.20	799.20	28590.41
	24.0															

AIR EMISSION CALCULATIONS

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
Diesel Recip. < 600 hp.	gms/hp-hr	1	0.931	14	1.12	3.03	AP42 3.3-1	4/93
Diesel Recip. > 600 hp.	gms/hp-hr	0.24	1.49	11	0.33	2.4	AP42 3.4-1	4/93
Fugitives	lbs/hr/comp.				0.000025		API Study	12/93

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.

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.