In Reply Refer To: MS 5231

November 29, 1991

NERCO Oil & Gas, Inc.
Attention: Ms. Bekki Long
Post Office Box 770909
Houston, Texas 77215-0909

NOTED — KRAMER

Gentlemen:

Reference is made to the following plan received November 15, 1991:

Type Plan - Supplemental Development Operations Coordination Document
Leases - OCS-G 6685 and 8678
Blocks - 412 and 404
Area - Vermilion
Activities Proposed - A-5, A-6, A-7, A-10, A-11, and A-12

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

Your control number is S-2712 and should be referenced in your communication and correspondence concerning this plan.

Sincerely,

(Orig. Sgd.) A. Donald Giroir

for D. J. Bourgeois
Regional Supervisor
Field Operations

bcc: Lease OCS-G 6685 POD File (MS 5032)
Lease OCS-G 8678 POD File (MS 5032)
MS 5034 w/public info. copy of the plan and accomp. info.

MTolbert:cic:11/18/91:DOCDCOM

Office of Program Services
DEC 02 1991
Information Services Section

NERCO

NERCO OIL & GAS, INC.
10375 RICHMOND AVE. SUITE 600
HOUSTON, TX 77042
P.O. BOX 770909
HOUSTON, TX 77215-0909
TELEPHONE (713) 266-4040
TELECOPIER (713) 260-5605

November 12, 1991

United States Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70213-2394

Attn: Mr. Daniel J. Bourgeois
Regional Supervisor
Field Operations

RE: Supplemental Development Operations Coordination Document
Vermilion Blocks 412/404, OCS-G 6685/8678
Offshore, Louisiana

Gentlemen:

NERCO Oil & Gas, Inc., as Operator of the subject leases, herein submits for your review and ultimate approval five (5) Proprietary and three (3) Public Information copies of the Supplemental Development Operations Coordination Document (DOCD) for Vermilion Blocks 404/412.

The initial Development Operations Coordination Document was approved on February 23, 1990. NERCO Oil & Gas, Inc. now plans to add four (4) additional wells in Block 404, and two (2) additional wells in Block 412. Drilling operations are scheduled to commence on or about February 1, 1992.

Should you have any questions concerning this submittal or require additional information to deem the plan complete, please contact me at (713) 260-5654 at your earliest convenience.

Sincerely,

Bekki Long

Bekki Long
Permit Coordinator

RLL:bl

{VR412.SDO:RK}

cc: Minerals Management Service
Attn: Mr. Elmo Hubble
825 Kaliste Saloom Road
Lafayette, Louisiana 70508

PUBLIC INFORMATION

NERCO OIL & GAS, INC.
SUPPLEMENTAL DEVELOPMENT OPERATIONS COORDINATION DOCUMENT
VERMILION BLOCKS 412/404, OCS-G 6685/8678

In compliance with 30 CFR 250.34, and the MMS letter of October 12, 1988 giving POE/DOCD guidelines, the following information is submitted for the planned development and production activities in Vermilion Blocks 412 and 404. Vermilion Block 412 is currently held by Suspension of Production.

I. DESCRIPTION

The Initial DOCD for Vermilion Blocks 412/404 described development and production of Wells 3 through 7 on Block 412 and Wells 1 and 2 on Block 404.

A Supplemental Development Operations Coordination Document submitted in March, 1990 described the drilling of three (3) additional wells in Vermilion Block 404 and one (1) well in Vermilion Block 412 from Platform "A".

NERCO Oil & Gas, Inc. now plans to drill four (4) additional wells in Vermilion Block 404 and two (2) additional wells in Vermilion Block 412 from newly installed Vermilion 412 Platform "A".

II. SCHEDULE

It is anticipated that drilling operations on Vermilion Block 412, Well A-5 may commence on or about February 1, 1992.

III. GEOLOGICAL AND GEOPHYSICAL DATA

A shallow hazards survey was done on Vermilion Block 412 by Intersea Research in February 1985. The location was cleared for drilling in our Supplemental Plan of Exploration approved on May 24, 1989.

The bottom-hole locations of the wells are considered to be CONFIDENTIAL information and are included (excluded from Public Information copies) as Attachment B-1.

IV. DESCRIPTION OF DRILLING RIG AND POLLUTION PREVENTION EQUIPMENT

NERCO Oil & Gas, Inc. will utilize a platform rig to drill and complete the development wells. The rig will be equipped with typical pollution control equipment including, but not limited to, deck drains, sumps, drip pans, sewage treatment facilities. A detailed rig description will be submitted with the individual applications to drill.

Included as Attachment A a is schematic of the diverter system planned to be utilized for well control during the development program. A list of mud additives is included in conformance with the non-pollution requirements 30 CFR 250.33 Subpart C. All drill cuttings and drilling fluids will be shunted through a downpipe that terminates no more than 10 meters above the mudline, in accordance with lease stipulations. Items that cannot be treated properly will be transported to shore for disposal.

The goal of this development program is the gathering of information on the productivity of the leased areas, in a safe manner, with minimal disruption of the environment. Drilling operations will be conducted by a contractor under supervision of a qualified NERCO Oil & Gas, Inc. representative who will he on the rig at all times. Regular training of operations personnel is a necessary complement to the pollution prevention features in the design of equipment and operations.

V. OIL SPILL CONTINGENCY PLAN

The Oil Spill Contingency Plan for NERCO Oil & Gas, Inc. was approved by the Minerals Management Service. An annual revision is pending approval.

NERCO Oil & Gas, Inc. is a member of Clean Gulf Associates, and should a spill occur during thses proposed development operations, CGA equipment would be utilized. An estimate of procurement, load-out of equipment, travel, and equipment deployment follows:

Procurement of Equipment, Equipment Transportation Vessel & Personnel to Operate Equipment	± 2 Hours
Equipment Loadout at the CGA Base in Intracoastal City, Louisiana	± 2 Hours
Travel from Intracoastal City to Vermilion Block 412 (±123 miles)	±12 Hours
Deployment of Equipment	± 1 Hour

Therefore, under normal weather and operating conditions, oil spill cleanup could begin within 17 hours of notification of a spill.

Reference is made to the Draft Environmental Impact Statement for the Gulf of Mexico Sale 139/141 concerning the following trajectory analysis.

Section IV, Page 90 indicates that Vermilion Block 412 falls within Grid Block 35. Section IV, Page 91 and 92 indicate that there is less than a 0.5% chance that any land segments should be impacted by a spill within 10 days of occurance in Vermilion Block 412.

Any spill occuring as a result of operations conducted by NERCO Oil & Gas, Inc. will be cleaned up in an expeditious manner.

VI. HYDROGEN SULFIDE - H_2S

NERCO Oil & Gas, Inc. has reviewed the data available on the three wells previously drilled by Mobil in Vermilion Block 412, and the Vermilion 412 and Vermilion 404 wells drilled by Union Texas Petroleum. There was nothing found to indicate the presence of H_2S.

In accordance with 30 CFR 250.33 (b)(5), we respectfully request that a classification of Leases OCS-G 6685 and 8678 be made by the MMS as to whether they are within an area known to contain H_2S, an area where the presence of H_2S is unknown, or an area where the absence of H_2S has been confirmed as described in 30 CFR 250.67.

NERCO Oil & Gas, Inc. feels that the presence of H_2S is extremely unlikely in Leases OCS-G 6685/8678, and recommends that it be classified by the MMS as an area where the absence of H_2S has been confirmed.

VII. POLLUTION PREVENTION

A list of mud additives that may be used while conducting development drilling operations are enclosed as Attachment E. Mud and drill cuttings will be discharged at the well site, in accordance with EPA regulations. Mud, cuttings, and deck drainage which have been contaminated with oil will be transported to shore for proper disposal at an authorized disposal site.

The anticipated quantities and rates of discharged wastes are included as Attachment F.

The discharge rate will not exceed 1000 bbls./hour, in accordance with EPA regulations.

Sewage is treated on location. Drilling fluid components are stored on location in sacks and drums. Solid domestic wastes are transported to shore for proper disposal at an authorized disposal site.

VIII. LOCATION OF THE LEASE BLOCK, PLATFORM AND ONSHORE FACILITIES

Vermilion Block 412 (which contains Platform "A") is located approximately 109 miles from the nearest Louisiana coastline. A vicinity map of Block 412 and 404 is included in this plan as Attachment H.

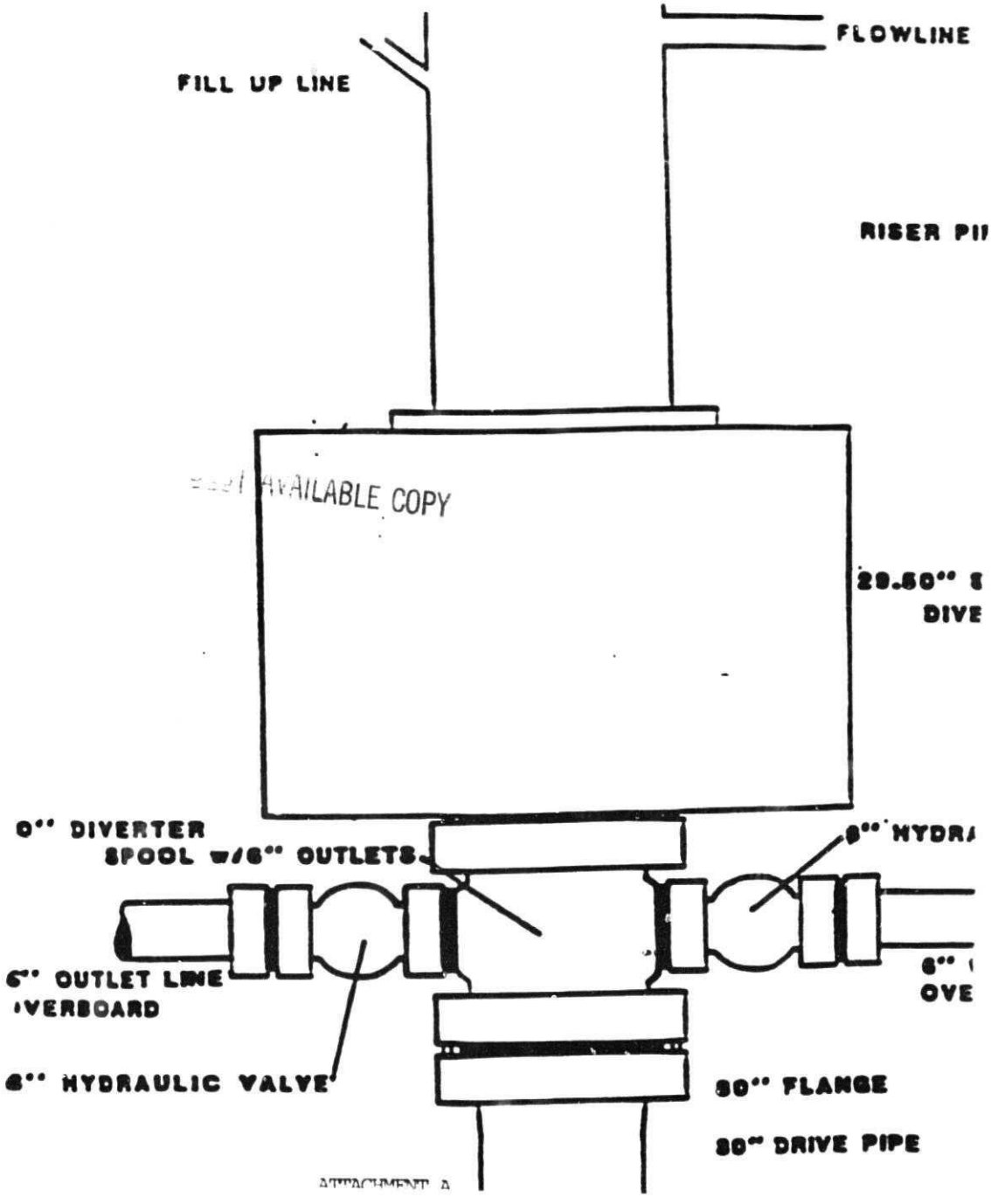
The onshore support base required to support these offshore operations will be located in Intracoastal City, Louisiana. The base will be an existing facility in which NERCO Oil & Gas, Inc. will lease space. Various facilities such as office space, mud companies, dock space, warehouses and helipads are found in Intracoastal City. Existing facilities are judged adequate for handling various activities and no additional space will be required at this time.

Both helicopters and boats will be used in the transportation network. Dependent on weather conditions, travel routes will be the most direct feasible from the Intracoastal City shorebase. A crewboat, supply boat and helicopter will be utilized. During drilling operations it is estimated that the crewboats will average five (5) trips weekly, supply boats will average three (3) trips weekly and helicopters will average five (5) trips weekly. During the production phase, helicopters will average seven (7) trips weekly and supply boats will average one trip weekly.

ATTACHMENTS

Attachment A - Typical Diverter System
Attachment B - Location Table & Plat
Attachment C - Structure Map
Attachment D - Bathymetry Map
Attachment E - Typical Mud Components
Attachment F - Quantities and Rates of Discharge
Attachment G - Projected Air Emissions
Attachment H - Vicinity Map

30" DIVERTER SYSTEM



ATTACHMENT A

PLATFORM AND WELL LOCATIONS

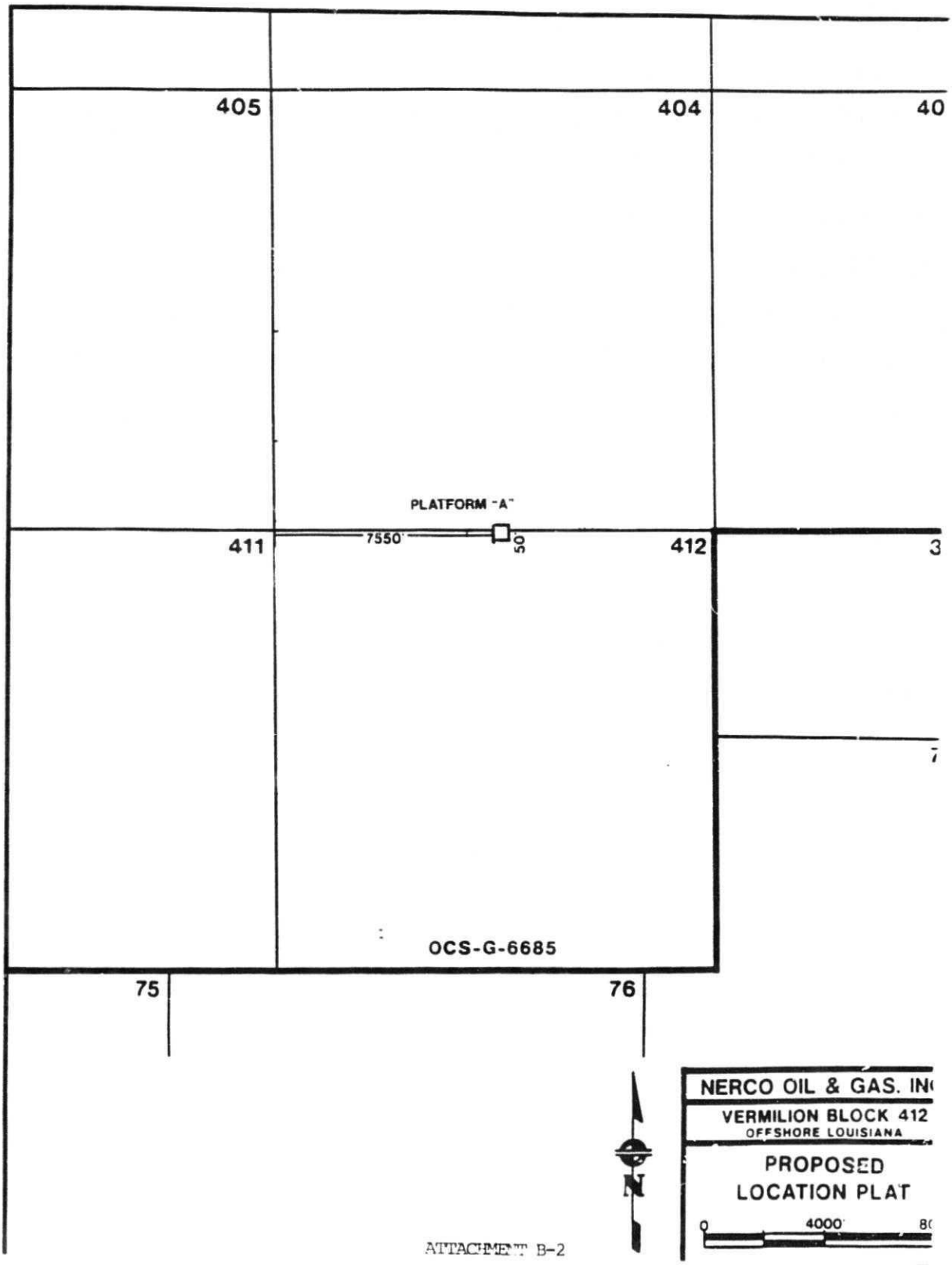
VERMILION BLOCKS 412/404

OCS-G 6685/8678

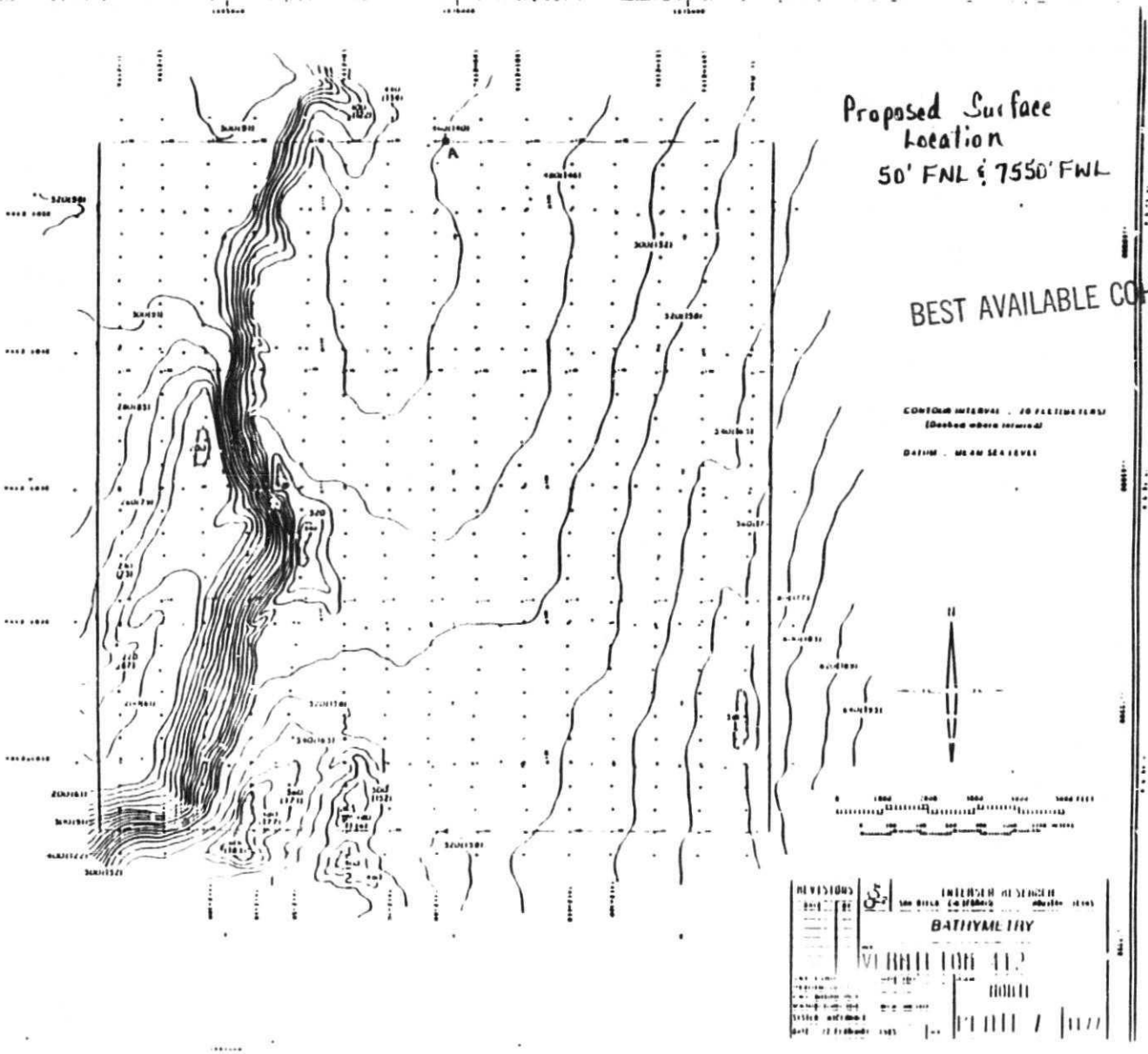
SUPPLEMENTAL DEVELOPMENT OPERATIONS COORDINATION DOCUMENT

Well	Surface Location (Platform "A")	Bottom-Hole Location	Total Depth	Water Depth
#A-5 OCS-G 6685	50' FNL 7550' FWL (Block 412)			468'
#A-6 OCS-G 8678	50' FNL 7550' FWL (Block 412)			468'
#A-7 OCS-G 8678	50' FNL 7550' FWL (Block 412)			468'
#A-10 OCS-G 8678	50' FNL 7550' FWL (Block 412)			468'
#A-11 OCS-G 8678	50' FNL 7550' FWL (Block 412)			468'
#A-12 OCS-G 6685	50' FNL 7550' FWL (Block 412)			468'

ATTACHMENT B-1



ATTACHMENT B-2



ATTACHMENT D

14.0 COMPETITIVE MUD PRODUCTS

Description	M-I Drilling Fluids	Baroid	IDF	Milpark	Primary Application
Weight Materials and Viscosifiers					
Standard barite	M-I BAR	Baroid	Barite	Mil-Bar	For increasing density to 20 #/gal
High density hematite	FER-OX	Barodense		Mil Dense	For increasing density to 25 #/gal
Acid soluble-low density calcium carbonate	LO-WATE	Baracarb	Calcium Carbonate	WO 30	For increasing density to 12 #/gal
Wyoming bentonite	M-I GEL	Aquagel	Wyoming Bentonite	Milgel	Viscosity and filtration control
Beneficiated bentonite	KWIK-THIK	Quik-Gel		Super-Col	Quick viscosity for fresh water upper hole muds
Attapulgite	SALT GEL	Zeogel	Salt Gel	Salt Water Gel	Viscosity in salt water muds
Sepiolite	DUROGEL	Sea-Mud		Geltherm	Viscosity for fresh, salt water, and high temperature geothermal muds
Polyacrylamide-high molecular weight	POLY-PLUS	EZ-Mud		New-Drill	Viscosity for fresh and salt water muds
Bentonite extender and flocculant	GELEX	X-Tend II	DV-68		For extending the yield of bentonite in low solids muds and as selective flocculant
Selective flocculant	FLOXIT	Barafloc	Idfloc/DF-19		Flocculant to settle solids in "clear water" drilling
Xanthan gum biopolymer	XC-POLYMER XCD	Barazan Bio-Vis	Idvis	New-Vis	Bacterially produced xanthan gum for viscosity and suspension in water base muds
Guar gum	LO-LOSS		SM (X)		Viscosity and fluid loss control in low solids muds
Hydroxyethyl cellulose	HEC	Baravis	Idhec		Viscosity in brine workover/completion fluids and water-base muds

* UNDERLINED PRODUCTS ARE M-I TRADE NAMES

COMPETITIVE MUD PRODUCTS

Description	M-I Drilling Fluids	Baroid	IDF	Milpark	Primary Application
		Dispersants and Deflocculants			
Lignite	TANNATHIN	Carbonox		Ligco	Thinner, emulsifier, and fluid loss control
Causticized lignite	CAUSTILIG	CC-16		Ligcon	Thinner, emulsifier, and fluid loss control for higher pH muds
Potassium lignite	K-17	K-Lig		XKB-Lig	Thinner, emulsifier, and fluid loss control for potassium-base muds
Chrome lignite	XP-20		Chrome Lignite		High temperature thinner, emulsifier, and fluid loss control
Chrome lignosulfonate	SPERSENE	Q-Broxin	Ferrochrome Lignosulfonate	Uni-Cal	Thinner, inhibitor, and fluid loss control
Chrome-free lignosulfonate	SPERSENE CF	Q-B II	Chrome Free Lignosulfonate	Uni-Cal CF	Thinner, inhibitor, and fluid loss control
Calcium lignosulfonate	Setan	Lignox		Mil-Kem	Thinner, inhibitor, and fluid loss control
Modified melanin polymer	MELANEX-T				High temperature thinner
Tannin extract blend	QUEBRACHO	Tannex			Thinner and fluid loss control
Polyacrylate-low molecular weight	TACKLE	Therma-Thin Barothin	Idthin Idsperse HT	New-Thin	High temperature polymer thinner
Modified chrome tannin	Desco				Thinner and protective colloid
Modified chrome-free tannin	Desco CF				Chrome-free thinner and protective colloid
Sodium tetraphosphate	PHOS	Barafos	STP	STP	Thinner in low pH muds and calcium sequestering agent
Sodium acid pyrophosphate	SAPP				Thinner in low pH muds and calcium sequestering agent

* UNDERLINED PRODUCTS ARE M-I TRADE NAMES

COMPETITIVE MUD PRODUCTS

Description	M-I Drilling Fluids	Baroid	IDF	Milpark	Primary Application
		Filtration Control Agents			
Organic polymer	RESINEX	Baranex Durenex	IDF Hi-Temp	Filtrex Mil-Rez	High temperature fluid loss control and rheology stabilizer for all water-base muds
Pregelatinized starch	MY-LO-JEL	Impermex	Starch	Milstarch	Fluid loss control and rheology stabilizer for saturated salt water, lime, and fresh water muds
Modified polysaccharide	POLY-SAL	Dextrid	Idflo	Perma-lose HT	Non-fermenting fluid loss control, viscosifier, & shale stabilizer for salt and fresh water muds
Modified polysaccharide	THERMPAC UL				Fluid loss control
Sodium carboxymethyl cellulose	CMC	Cellex			Fluid loss control and viscosifier
Polyanionic cellulose	POLYPAC	PAC	IDF FLR		Fluid loss control and viscosifier
Sodium polyacrylate	SP-101	Polyac	Polytemp	New-Trol	High temperature fluid loss and rheology stabilizer for low calcium low solids and non-dispersed muds
Starch preservative	BACBAN II BACBAN III	Aldacide	Idcide	Mil-Bio	Bactericide used with starch in water-base muds

* UNDERLINED PRODUCTS ARE M-I TRADE NAMES

COMPETITIVE MUD PRODUCTS

Description	M-I Drilling Fluids	Baroid	IDF	Milpark	Primary Application
Lubricants, Shale Stabilizers, Emulsifiers, and Surfactants					
Extreme pressure lubricant	E P LUBE	EP Mudlube	Idlube HP Dyna-lube		Extreme Pressure Lubricant to reduce torque & drag
Low-toxicity lubricant	LUBE-153	Torque Trim II Enviro-Torq	Idlube	Mil-Lube Lubri-Film	Low-toxicity lubricant for water-base muds
Blown asphalt	STABILHOLE	AK-70	Asphalt	Protectomagic	Shale stabilizer and lubricant
Sulfonated asphalt	Soltex	Baratrol	ID-Tex	Shale Gard	Shale stabilizer, fluid loss control and lubricant
Graphite	Graphite				Mechanical lubricant for reducing torque and drag
Drilling detergent	DD	Con-Det	Drilling Detergent	MD	Surface tension reducer to prevent balling, drop sand and emulsify oil
Non-ionic surfactant	DMS	Aktaflo-S	Drlg Fld Surf	Atkosol S	Primary surfactant for surfactant muds
Non-ionic emulsifier	DME	Aktaflo-E	Idmul 80		Emulsifier for surfactant muds
Blend of anionic surfactants	SALINEX	Trimulso	Hymul		Emulsifier for saturated, salt, or fresh water muds
Non-ionic surfactant gilsonite coupler	HME				Emulsifier for gilsonite or asphalt
Oil soluble surfactant for stuck pipe	PIPE-LAX		Idfree	Mil-Free	Stuck pipe liberator-spotting fluids
	PIPE-LAX W	Enviro-Spot	B-Free	Black Magic	
Defoamer	DEFOAM X	Bara Defoam W-300 Antifoam	Idbreak	WO Defoam Foam Ban/LD-8	All purpose defoamer for water-base mud

* UNDERLINED PRODUCTS ARE M-I TRADE NAMES

COMPETITIVE MUD PRODUCTS

Description	M-I Drilling Fluids	Baroid	IDF	Milpark	Primary Application
Corrosion Inhibitors					
Water dispersible blended amine	CONQOR 101			Mud-Pac/Brine-Pac	Water dispersible product for packer fluids
Brine soluble blended amine	CONQOR 303	B1400 (Baracor A) Coat 122	Idfilm 220	Aquatec	Water soluble corrosion inhibitor for brine systems and water-base muds
Modified organic inhibitor blend	CONQOR 404				Low toxicity product for oxygen corrosion in water-base and aerated muds
Scale inhibitor	SI-1000	Surflo H-35		Scale-Ban	Tubular goods scale inhibitor
Sulfide scavenger	SULF-X	No-Sulf	Idzac	Milgard	Zinc based H_2S scavenger
Biocide	BACBAN II BACBAN III	Aldacide	Idcide	Mil-Bio	Bactericide
Persistent filming amine	CONQOR 202	Coat 415 Bara-Film	Idfilm 120	Ami-Tec	Persistent film forming amine for direct application to the drill string
Oxygen scavenger	Oxygen Scavenger	Coat 777/888 Bara Scav DP	Idscav-110 210/310/410	Noxygen Deox	Removes oxygen from water-base muds
Corrosion/erosion inhibitor	Unisteam				Geothermal air drilling resinous amine

* UNDERLINED PRODUCTS ARE M-I TRADE NAMES

COMPETITIVE MUD PRODUCTS

Description	M-I Drilling Fluids	Baroid	IDF	Milpark	Primary Application
			Lost Circulation Materials		
Nut shells	NUT PLUG	Wall-Nut	Walnut Shells	Mil-Plug	Granular lost circulation material (LCM)
Mica	MICA	Micatex	Mica	MilMica	Flake LCM for seepage losses and prevention
Shredded wood fiber	CEDAR FIBER	Plug-Git	Di-Plug	Mil-Cedar Fiber	Fibrous LCM for general loss of returns
Cane Fiber	CANE FIBER	Fibertex	Mud-Fiber	Mil-Fiber	Fibrous LCM for general loss of returns
Cellophane Flakes	FLAKE	JelFlake	Cellophane Flakes	Mil-Flake	Flake LCM matting agent
Blended LCM	Kwik-Seal	Baro-Seal	ID-Seal	Mil-Seal	Blend of fibrous, flaky and granular LCM
Cottonseed hulls	Cottonseed hulls				For all types of lost circulation
Blended high fluid loss LCM	Diaseal M				Diatomaceous earth blend for preparing soft plugs for severe lost circulation
Low density inert solid LCM	Diaseal D				Inert solids for high fluid loss soft plug squeezes
Shredded paper	Drilling Paper	Hy-Seal		Paper	Shredded paper for seepage losses
Granular plastic chips	Pheno-Seal (Montello)				Granular phenolic plastic chip LCM

* UNDERLINED PRODUCTS ARE M-I TRADE NAMES

COMPETITIVE MUD PRODUCTS

Description	M-I Drilling Fluids	Baroid	IDF	Milpark	Primary Application
		Oil Mud Products			
Diesel oil mud system	VERSADRIL	Invermul	Interdrill	Carbo-Drill	Diesel oil invert mud system
Mineral oil mud system	VERSACLEAN		Cleandrill		Mineral oil invert mud system
Basic emulsifier package	VERSAMUL	Invermul	Emul	Carbo-Tec L	Forms the basic oil mud system
Organophilic clay	VERSAGEL	Geltone II Petrotone	Vistone	Carbo-Vis Carbo-15	Viscosifier and gelling agent
Primary emulsifier	VERSACOAT	EZ Mul	Emul F.L./ESX	Carbo-Mul Carbo-Tec L	Primary emulsifier for water-in-oil fluids
Oil-wetting agent	VERSAWET	Invermul	O W	Carbo-Tec L Surf-Cote	Improve oil wetting of solids and emulsion stability
Fluid loss control agent	VERSATROL		S F	Carbo-Trol OB	Controls ht-hp fluid loss
	VERSALIG	Durotone HT	S/N-A	Carbo-Trol A-9	
Oil mud thinner	VERSATHIN	OMC Drilltreat	D/Defloc		Reduces viscosity and gel strengths
Viscosifier	VERSAMOD	BaraResin Vis	Visol		Increases yield point, gel strengths, and carrying capacity
	VERSA-HRP				
Surfactant cleaner	KLEEN UP	Slick-5	Idwash Idclean	Mil-Clean	Detergent and degreaser for oil mud cleanup

* UNDERLINED PRODUCTS ARE M-I TRADE NAMES

COMPETITIVE MUD PRODUCTS

Description	M-I Drilling Fluids	Baroid	IDF	Milpark	Primary Application
Completion Fluid Products					
Acid soluble-low density weight material calcium carbonate	LO-WATE	Baracarb	Idacarb	W.O. 30	For increasing density to 12 #/gal calcium carbonate with acid soluble material
Polymer and calcium carbonate	POLYBRINE			W.O. 20	Viscosifier, fluid loss, and pH additive for brines
Polymer and bridging agent	SAFE-LINK				Water soluble bridging agent and viscosifier for fluid loss control in saturated brines
Sized bridging agent	SAFE-BLOCK	Baraplug			Bridging and plugging material for lost circulation
Sized weighting agent	Watesal (TBC)		Idwate	W.O. 35	Weighting and bridging agent for saturated brines

* UNDERLINED PRODUCTS ARE M-I TRADE NAMES

COMPETITIVE MUD PRODUCTS

Description	M-I Drilling Fluids	Baroid	IDF	Milpark	Primary Application
		Commercial Chemicals			
Sodium hydroxide	CAUSTIC soda				Increasing the pH in water-base muds
Sodium bicarbonate	sodium BICARBonate				Treating out cement or calcium in higher pH muds
Sodium carbonate	SODA ASH				Treating out cement or calcium in lower pH muds
Sodium chloride	SALT				Saturated salt muds, workover and completion fluids and resistivity control
Calcium hydroxide	LIME				Calcium source and increasing pH
Calcium oxide	HOT LIME				Calcium source and increasing pH
Calcium sulfate	GYPsum				Calcium source at a neutral pH
Calcium chloride	CALCIUM CHLORIDE				Calcium salt used to control the activity of oil-based muds and workover/completion fluids
Magnesium oxide	MAG OX				Magnesium source and increasing pH
Potassium chloride	POTASSIUM CHLORIDE				Potassium source in inhibitive potassium muds
Potassium hydroxide	CAUSTIC POTASH				Potassium source and increasing pH in potassium muds
Potassium supplement	K-52				Neutral pH potassium source for potassium muds

* UNDERLINED PRODUCTS ARE M-I TRADE NAMES

PROJECTED AIR EMISSION SCHEDULE FOR SUPPLEMENTAL DEVELOPMENT OPERATIONS COORDINATION DOCUMENT

The Supplemental DOCD for Vermilion Blocks 412 and 404 describes two phases of operations: drilling/completion and subsequent production of six (6) additional wells. These wells will be produced through the facilities on Platform "A". No significant increase in emissions should result from the production of these additional wells.

The proposed air emissions for the supplemental drilling and completion operations are given below. Drilling operations are expected to take approximately 181 days and completion operations would take an additional 76 days.

GENERAL INFORMATION

Location of Block:	Vermilion Block 412/404 OCS-G 6685/8678
Distance Offshore:	110 miles
Type of Rig:	Platform Rig
Contact Person:	Ms. Bekki Long
Well Footage to be Drilled:	
Date Drilling Will Begin:	February 1, 1992

MAJOR SOURCE (OFFSHORE)

Power used aboard drilling vessel; approximate footage to be drilled .*

Emitted Substance	Projected Emissions lbs/day*	tons/yr. 1992
CO	(79)	10.20
SO_2	(27)	3.51
NOx	(399)	51.26
VOC	(32)	4.13
TSP	(28)	3.64

* Based on 60 hphr/ft. from Table 4-3, "Atmospheric Emissions from Offshore Oil and Gas Development and Production", EPA No. 450/3-77-026, June 1977.

** Emission factors from Table 3.3.3-1, "Compilation of Air Pollutant Emission Factors", Third Edition, EPA Report AP-42, August, 1977.

ATTACHMENT G

Projected Air Emissions
Vermilion Block 412/404

MINOR SOURCES (OFFSHORE)*

Including crew boat (5 trips/week); supply boat (3 trips/week); helicopter (5 trips/week); and loading and unloading operations.

Emitted Substance	Projected Emissions tons/yr. 1992
CO	1.07
SO_2	.03
NOx	.22
VOC	.10
TSP	.05

* Tables 3.2.1-3, 3.2.3-1 and 2.1-1, "Compilation of Air Pollutant Emission Factors", Third Edition, EPA Report AP-42, August, 1977.

TOTAL ALL SOURCES (ton/year)

1992	CO	SO_2	NOx	VOC	TSP
Major	10.20	3.51	51.26	4.13	3.64
Minor	1.07	.03	.22	.10	.05
Total	11.27	3.54	51.48	4.23	3.69

ONSHORE SOURCES

These should be about the same as minor sources unless new facilities are installed at the onshore base. No additional facilities are required or planned at this time.

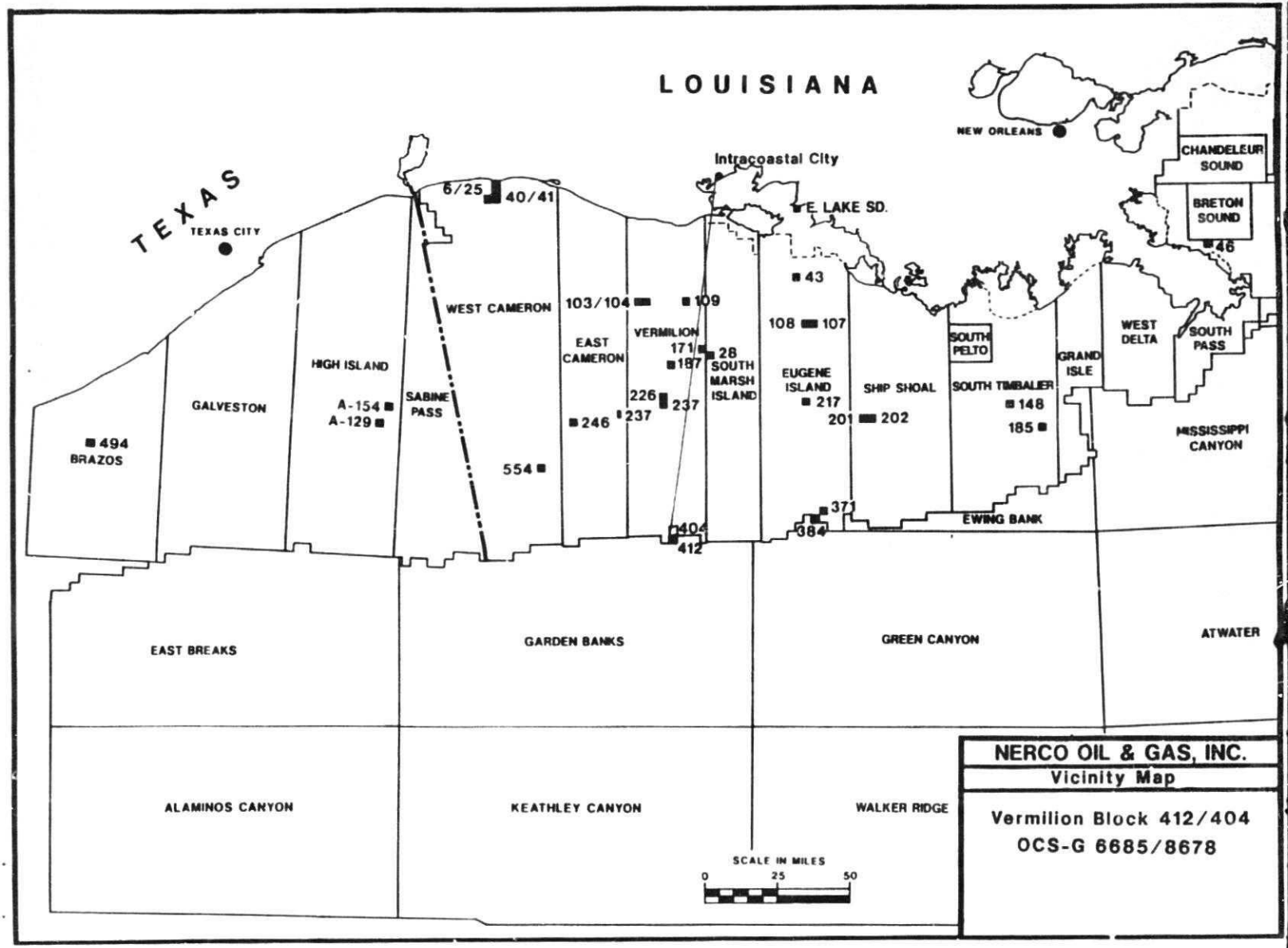
EMISSION EXEMPTION DETERMINATION

For CO: $E = 3400(D)^{2/3} = 3400(110)^{2/3} = 78{,}064$ tons/year
For NOx, VOC, TSP & SO_2: $E = 33.3D = 33.3(110) = 3{,}663$ tons/year

Projected Air Emissions
Vermilion Block 412/404

FINDINGS OF AIR QUALITY REVIEW

As per DOI/MMS regulations, this facility is exempt from further air quality review as it has been determined that its operations will not have a significant adverse impact on air quality.



NERCO OIL & GAS, INC.

Vicinity Map

Vermilion Block 412/404

OCS-G 6685/8678