In Reply Refer To: MS 5231

September 12, 1996

Newfield Exploration Company
Attention: Mr. Robert W. Waldrup
363 North Sam Houston Parkway East
Suite 2020
Houston, Texas 77060

Gentlemen:

Reference is made to the following plan received August 29, 1996:

Type Plan - Unit Development Operations Coordination Document
Lease - OCS-G 10988
Block - 357
Area - Mississippi Canyon
Activities Proposed - Wells FF, GG, and HH

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-4121 and should be referenced in your communication and correspondence concerning this plan.

Sincerely,

(for) Donald C. Howard
Regional Supervisor
Field Operations

bcc: Lease OCS-G 10988 POD File (MS 5032)
MS 5034 w/public info. copy of the plan
and accomp. info.

MTolbert:cic:09/10/96:DOCDCOM

NOTED-SCHEXNAILDRE

NEWFIELD

August 22, 1996

Mr. Donald C. Howard
Regional Supervisor
Office of Field Operations
U.S. Department of the Interior
Minerals Management Service
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

RE: Supplemental Unit Development Operations Coordination Document
Lease OCS-G 10988, Mississippi Canyon Block 357
OCS Federal Waters, Gulf of Mexico, Offshore, Louisiana

Gentlemen:

In accordance with the provisions of Title 30 CFR 250.34, Newfield Exploration Company (Newfield) hereby submits for your review and approval eleven (11) copies of a Supplemental Unit Development Operations Coordination Document for Lease OCS-G 10988, Mississippi Canyon Block 357 (Federal Unit Agreement No. 754388001), Offshore, Louisiana. Five (5) copies are "Proprietary Information" and four (4) copies are "Public Information".

Excluded from the Public Information copies are certain geologic discussions, depth of wells and structure map.

Newfield anticipates commencing activities under this proposed Supplemental Unit Development Operations Coordination Document October 15, 1996.

Should additional information be required please contact the undersigned or Newfield's regulatory agent, Cheryl P. Murphy, J. Connor Consulting, Inc., at (713) 578-3388.

Sincerely,

NEWFIELD EXPLORATION COMPANY

Robert W. Waldrup/cpm

Robert W. Waldrup
Vice President, Operations

"Public Information"

RWW:CPM:vdl

Newfield Exploration Company 363 N. Sam Houston Pkwy. E. Suite 2020 Houston, Texas 77060 (713) 847-6000 Fax (713) 847-6006

NEWFIELD EXPLORATION COMPANY

SUPPLEMENTAL UNIT DEVELOPMENT COORDINATION DOCUMENT

MISSISSIPPI CANYON 400 UNIT

UNIT AGREEMENT NO. 754388001

Newfield Exploration Company, as designated Unit Sub-Operator of Lease OCS-G 10988, Mississippi Canyon 357, submits this proposed Supplemental Unit Development Operations Coordination Document in accordance with the regulations contained in Title 30 CFR 250.34 and more specifically defined in the Minerals Management Service Letters to Lessees and Operators dated October 12, 1988 and September 5, 1989.

HISTORY OF LEASE

The Minerals Management Service approved the Unit Operating Agreement for the Mississippi Canyon 400 Federal Unit (Agreement No. 754388001), consisting of acreage in portions of Mississippi Canyon Area Blocks 356, 400, 401, 444 and 445, Lease No.'s OCS-G 5837, OCS-G 5844, OCS-G 5845, OCS-G 6950 and OCS-G 6951 on October 20, 1987.

The Mississippi Canyon 400 Federal Unit was amended and approved on January 2, 1990 to include Lease OCS-G 10988, Mississippi Canyon 357.

Newfield Exploration Company is the designated Sub-Operator of Lease OCS-G 10988, Mississippi Canyon Block 357.

By letter dated February 26, 1996, Minerals Management Service approved an Initial Unit Development Operations Coordination Document which provided for Wells No. CC, DD, and EE from the existing surface location Platform "A" in West Delta Block 152.

Newfield Exploration Company has submitted a $3,000,000 areawide oil and gas lease bond as required by the regulations and certain Letter to Lessees and Operators (LTL) dated November 5, 1993.

SCHEDULE OF OPERATIONS

Under this proposed Supplemental Unit Development Operations Coordination Document, Newfield proposes to drill Well Locations FF, GG and HH from Newfield's existing surface location Platform "A" in West Delta Block 152. The proposed wells will be drilled as sidetrack wells utilizing existing wellbores previously drilled into West Delta Block 152.

Hydrocarbon production will be transported from Newfield's West Delta 152 Platform "A" via an existing 8" right-of-way pipeline terminating at Shell's Mississippi Canyon 311, Platform "A" and Taylor's West Delta Block 133, Platform "A".

No new nearshore or onshore pipelines or facilities will be constructed.

A well location plat and table showing the surface and bottom hole locations, total well depths and water depths of the subject wells is included as Attachments A-1 and A-2.

Activities under this Supplemental Unit Development Operations Coordination Document for Mississippi Canyon Block 357 will commence on October 15, 1996.

The following schedule details the chronological order of the proposed events leading to the full start up of production.

Activity Schedule

	Activity	Approximate Date
1.	Commence Drilling/Completion Operations of Wells No. FF, GG, and HH	October 15, 1996
2.	Hook-up and Commence Production of Wells No. FF, GG and HH	January 28, 1997

DESCRIPTION OF DRILLING UNIT

A typical platform rig will be utilized to drill and complete the subject wells. Typical Diverter and BOP schematics are included as Attachments B-1 and B-2.

Safety features will include well control and blowout prevention equipment as described in Title 30 CFR 250.50. The appropriate life rafts, life jackets, ring buoys, etc., as prescribed by the U. S. Coast Guard will be maintained on the facility at all times.

DESCRIPTION OF PLATFORM

The proposed wells will be drilled from an existing four (4) pile, twenty-four (24) slot, two (2) deck structure designated as West Delta Area Block 152, Platform "A". A schematic of the structure was included with the Initial Unit Development Operations Coordination Document.

All hydrocarbon handling equipment installed for testing and production operations have been designed, installed and operated to prevent pollution from the existing structure.

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

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

STRUCTURE MAP

Current structure maps drawn to the top of each prospective hydrocarbon accumulation showing the surface and bottom hole locations of the proposed wells are included as Attachments C-1 thru C-3.

CROSS SECTION MAP

Cross section maps depicting the proposed wells locations, other significant wells, the geologic name and age of the anticipated structure are included as Attachments D-1 thru D-3.

BATHYMETRY MAP

The water depth at the existing Platform "A" in West Delta Area Block 152 is 373 feet. A bathymetry map was previously submitted with the Plan of Exploration.

SHALLOW HAZARDS

A shallow hazards analysis for the existing surface location in West Delta Block 152 evaluating any sea floor and subsurface geologic and manmade features and conditions was included with the previously approved Plan of Exploration.

OIL SPILL CONTINGENCY PLAN

All drilling, construction and production operations shall be performed in accordance with industry standards to prevent pollution of the environment. The Oil Spill Contingency Plan has been approved by MMS. This plan designates an Oil Spill Response Team consisting of the Newfield'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.

Newfield's Oil Spill Response Team attends drills for familiarization with pollution-control equipment and operation procedures on an annual basis.

Newfield is a member of Clean Gulf Associates (CGA). The CGA stores pollution control equipment at two locations in Texas, at Port Aransas and Galveston; five locations in Louisiana, at Venice, Grand Isle, Intracoastal City, Houma and Cameron and one location in Alabama, at Theodore.

Each base is equipped with fast response skimmers and there is a barge mounted high volume open sea skimmer based at Fourchon, Louisiana. In addition to providing equipment, the CGA also supplies advisors for clean-up operations. Equipment available from CGA and the base it is located at is listed in the CGA Manual, Volume I, Section III.

Newfield will make every effort to see that a spill is responded to as quickly as possible. Response equipment and response times will be suitable for anticipated environmental conditions in the area.

In good weather conditions fast response with oil boom, skimmers, pump and storage tanks would require approximately 8 to 9 hours, including preparation time as indicated below. A heavy equipment system response would require approximately 24-36 hours, including 6 hours preparation time.

		Hours
1.	Procurement of marine vessel capable of handling spill containment equipment and deployment to CGA base in Grand Isle, Louisiana	3.0
2.	Travel Time to Lease Site	3.0
3.	Load out Fast Response Unit	1.5
4.	Deployment of Equipment	1.0
	Estimated Total Response Time	8.5

Equipment located in Grand Isle, Louisiana would be utilized first with additional equipment transported from the nearest equipment base as required.

In the event a spill occurs from the surface location in West Delta Block 152, our company has projected trajectory of a spill impacting the coastline, utilizing information in the Minerals Management Service's Oil Spill Risk Analysis for the Central and Western Gulf of Mexico OCS Lease Sales 157 and 161.

The report contains oil spill trajectory simulations using seasonal surface currents coupled with wind data, adjusted every 3 hours for 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 seasons of the year. The results in the report were presented as probabilities that an oil spill beginning from a particular launch site would contact a certain land segment within 3, 10, or 30 days.

Utilizing the summary of the trajectory analysis (for 10 days) as presented in the MMS' report, the probability of an oil spill from West Delta Block 152 is as follows:

AREA/BLOCK	LAND SEGMENT CONTACT	%	CGA MAP
West Delta Block 152	Vermilion Parish, LA	1%	Map No. 5 & 6
	New Iberia Parish, LA	1%	Map No. 6
	Terrebone Parish, LA	10%	Map No. 6
	LaFourche Parish, LA	18%	Map No. 6
	Jefferson Parish, LA	10%	Maps No. 6 & 7
	Plaquemines Parish, LA	23%	Maps No. 6 & 7

If a spill should occur from the existing surface location, Newfield would immediately activate its Emergency Response Team, determine from current conditions the probable location and time of land fall by contacting Spillnet. Then, using the Clean Gulf Operations Manual, Volume II, identify any biologically sensitive areas and determine the appropriate response mode.

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.

NEW OR UNUSUAL TECHNOLOGY

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

LEASE STIPULATIONS

Oil and gas exploration/development activities on the OCS are subject to stipulations developed before the lease sale and would be attached to the lease instrument, as necessary, in the form of mitigating measures. The MMS is responsible for ensuring full compliance with stipulations.

The Minerals Management Service did not invoke any stipulations for Lease OCS-G 1604, West Delta Area Block 152, surface location for the proposed wells.

CULTURAL RESOURCES

By Letter to Lessees (LTL) dated October 21, 1994, Minerals Management Service published a final rule which added a new section, 30 CFR 250.26, titled "Archeological Reports and Surveys" to the MMS Operating Regulations. This final rule, which became effective on November 21, 1994, was developed to convert the requirements contained in the stipulation into regulations which, for the Gulf of Mexico, will apply to all leases located within areas which studies have determined have a high probability for the occurrence of archaeological resources.

By Letter to Lessees (LTL) dated September 5, 1995, Minerals Management Service designated West Delta Block 152 as an area having a low probability for prehistoric archeological resources on the OCS. Therefore, an archeological resources report is not required.

DISCHARGES

All discharges associated with the drilling, completion and production of the subject wells from Platform "A" will be in accordance with regulations implemented by Minerals Management Service (MMS), U. S. Environmental Protection Agency (EPA), and the U. S. Coast Guard (USCG).

The MMS issued a special advisory notice (NTL 86-11) strongly encouraging the oil and gas industry to take special educational, operational and awareness measures to reduce or eliminate contributions to marine debris in the Gulf of Mexico.

Annex V of the International Convention for the Prevention of Pollution from ships, also known as MARPOL Protocol, prohibits the dumping of all plastic wastes, including plastic packaging materials and fishing gear.

EPA's Western Gulf of Mexico NPDES General Permit GMG290000 addresses the discharge limitations and testing protocol for drilling fluids, cuttings and associated wastes.

Discharges will contain no free oil and will be in compliance with and monitored as required by the permit. Any drilling fluid contaminated with oil will be transported to shore for proper disposal at an authorized disposal site.

Solid domestic wastes will be transported to shore for proper disposal at an authorized disposal site, and sewage will be treated on location by U. S. Coast Guard approved marine sanitation devices.

Mud may be discharged for purposes of dilution or at end of well. Surveillance of the fluid is accomplished through daily inventory of mud and chemicals added to the system; in addition to monthly and end-of-well LC50 toxicity tests required by EPA. Typical mud components used in the drilling of the subject wells has been included as Attachment E.

The anticipated discharges associated with Newfield's operations in West Delta Block 152 are included as Attachment F.

HYDROGEN SULFIDE

In accordance with Title 30 CFR 250.67, Newfield Exploration Company requests that Mississippi Canyon Block 357 be classified by the Minerals Management Service as an area where the absence of hydrogen sulfide has been confirmed.

PROJECTED EMISSIONS

Offshore air emissions related to the proposed activities result mainly from the drilling rig operations, helicopters and service vessels. These emissions occur mainly from combustion or burning of fuels and natural gas and from venting or evaporation of hydrocarbons. The combustion of fuels occurs primarily on diesel-powered generators, pumps or motors and from lighter fuel motors. Other air emissions can result from catastrophic events such as oil spills or blowouts.

Primary air pollutants associated with OCS activities are nitrogen oxides, carbon monoxide, sulphur oxides, volatile organic compound, and suspended particulate.

Projected Air Quality Emissions which provide for the drilling, completion and production of the subject wells are included as Attachment G.

Newfield does not aniticipate an increase in production on Platform "A" as a result of the proposed activity.

ONSHORE SUPPORT BASE

The surface location in West Delta Block 152 is located approximately 25 miles from the nearest shoreline and 47 miles from the shorebase located in Fourchon, Louisiana. Water depths range from approximately 370 feet to 375 feet. A vicinity map showing the location of West Delta Block 152 relative to the shoreline and onshore base is included as Attachment H.

Newfield will utilize existing onshore facilities located in Fourchon, Louisiana. This will serve as port of debarkation for supplies and crews. No onshore expansion or construction is anticipated with respect to the proposed activities.

This base is capable of providing the services necessary for the proposed activities. It has 24-hour service, a radio tower with a phone patch, dock space, equipment and supply storage base, drinking and drill water, etc. Support vessels and travel frequency during drilling, completion and production activities are as follows:

DRILLING/COMPLETION

Crew Boat	5 Trips Per Week
Supply Boat	5 Trips Per Week
Helicopter	1 Trips Per Week

The support vessels utilized during production operations will not increase the frequency of trips per week, already accountable for the West Delta Area Block 152, Platform "A" production operations.

AUTHORIZED REPRESENTATIVE

Inquiries may be made to the following authorized representative:

Cheryl P. Murphy
J. Connor Consulting, Inc.
16225 Park Ten Place, Suite 500
Houston, Texas 77084
(713) 578-3388

LIST OF ATTACHMENTS

A Well Location Plat and Well Location Table
B Typical BOP and Diverter Schematics
C Structure Map
D Cross Section Map
E Typical Mud Components
F Quantities and Rates of Discharge
G Projected Air Quality Emissions
H Vicinity Map

NEWFIELD EXPLORATION COMPANY

SUPPLEMENT UNIT
DEVELOPMENT OPERATIONS COORDINATION DOCUMENT

LEASE OCS-G 10988

MISSISSIPPI CANYON BLOCK 357

WELL LOCATION TABLE

WELL		LOCATION	TOTAL DEPTH	WATER DEPTH	# OF DAYS
FF	SL:	2089' FSL & 7306' FEL of WD 152		373'	20/15
GG	SL:	2089' FSL & 7306' FEL of WD 152		373'	20/15
HH	SL:	2089' FSL & 7306' FEL of WD 152		373'	20/15

313

BLK. 152

NEWFIELD EXPLORATION CO.
OCS-G-1604

Proposed Locations

AREA	BLK.	LOC'N.	CALLS		LA SOUTH ZONE		UTM 16 ZONE		LATITUDE	LONGITUDE
					X	Y	X	Y		
WD	152	EE,FF,GG SURFS.	2,089' FSL	7,306' FEL	2,524,382.00'	-25,151.00'			28° 35' 14.03"	89° 41' 59.28"

153

EE,FF,GG

WEST DELTA AREA

MISSISSIPPI CANYON AREA

NEWFIELD EXPLORATION CO.
OCS-G-15478

NEWFIELD EXPLORATION CO.
OCS-G-10988

BLK. 357

PUBLIC INFORMATION PLAT

AMOCO 1 G-5839

BLK. 358

FAIRWAY

401

LA SOUTH ZONE
NAD 27 CLARKE 1866

NEWFIELD EXPLORATION COMPANY
OCS-G-10988

DEVELOPMENT OPERATIONS COORDINATION DOCUMENT

PROPOSED LOCATIONS

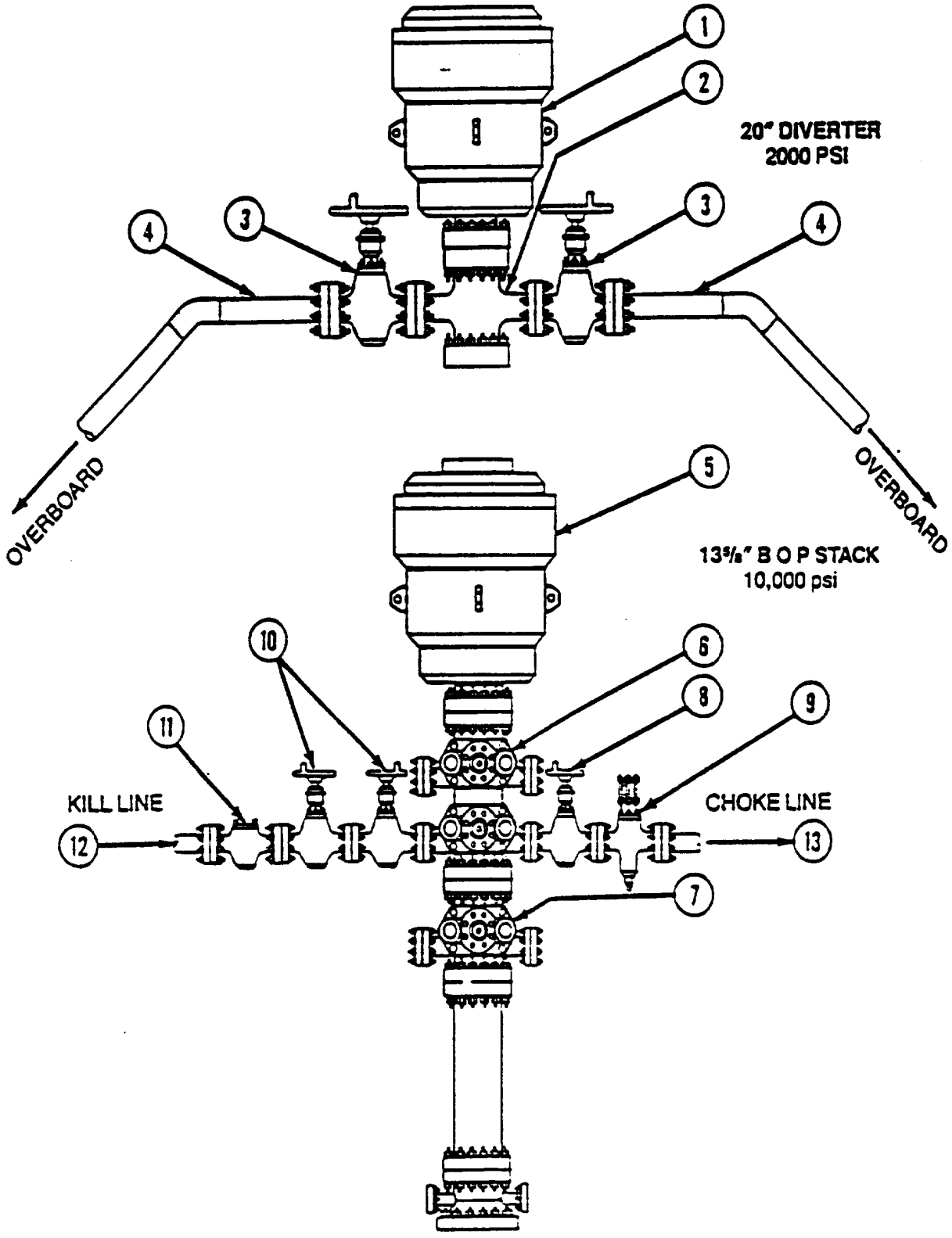
MISSISSIPPI CANYON BLOCK 357

SCALE: 1" = 2000' 8/16/95

Prepared by:
JOHN E. CHANCE & ASSOCIATES, INC.
FILE 15200CD2

ATTACHMENT A-2

BLOWOUT PREVENTER STACK
WITH A
HYDRIL DIVERTER



Refer to following page for description of individual items of this assembly.

20" HYDRIL DIVERTER 2000 psi

ITEM	DESCRIPTION
1	20" HYDRIL 2000 psi Type MSP
2	20" FLANGE SPOOL 2000 psi w/6" 2000 psi Outlets
3	6" GATE VALVE std Low Pressure (REMOTE)
4	6" DIVERTER LINE (To Overboard)

BLOWOUT PREVENTER STACK

13⅝' 10,000 psi

ITEM	DESCRIPTION
5	13⅝" HYDRIL ANNULAR BOP 5000 psi Type GK H25 Trimmed
6	13⅝" CAMERON DOUBLE BOP 10,000 psi WP H_2S Trimmed
7	13⅝" CAMERON SINGLE BOP 10,000 psi WP H_2S Trimmed
8	4 1/16" MANUAL GATE VALVE Cameron Type "F" H_2S
9	2 1/16" REMOTE HYDRAULIC VALVE Cameron Type "F" 10,000 psi H_2S
10	2 1/16" MANUAL GATE VALVE Cameron Type "F" 10,000 psi H_2S
11	2 1/16" CHECK VALVE Cameron Type "R" 10,000 psi H_2S
12	3" 10,000 psi KILL LINE from Choke Manifold
13	3" 10,000 psi CHOKE LINE from choke Manifold

ATTACHMENT B-2

6" LINE

ROWAN COMPANIES, INC.

DRILLING FLUID ADDITIVES
PRODUCT CROSS REFERENCE

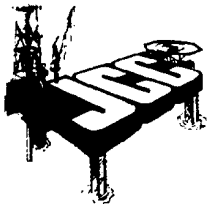
MILPARK	BAROID	M-I	DESCRIPTION
WEIGHT MATERIALS			
MIL-BAR	BAROID	M-I BAR	API bante, 4.2 specific gravity
DENSIMIX	BARODENSE	FER-OX	Macaceous nematite
W.O. 30	BARACARB	LO-WATE	Calcium carbonate
VISCOSIFIERS			
MILGEL	AQUAGEL	M-I GEL	API-grade Wyoming bentonite
MILGEL NT	AQUAGEL GOLD SEAL		Untreated Wyoming bentonite
SALTWATER GEL	ZEOGEL	SALT GEL	API-grade attapulgite
SUPER-COL	QUIK-GEL	KWIK-THIK	High-yield bentonite, treated
NEW-VIS			Organic polymer blend
XCD POLYMER	XCD POLYMER	XCD POLYMER	XC Dispersable
MIL-BEN	SHUR-GEL		Bentonite-OCMA Spec. DFCP4
DEFLOCCULANTS			
MIL-TEMP	THERMA-THIN DP	MELANEX-T	High-temperature deflocculant
NEW-THIN	THERMA-THIN	TACKLE (Liquid)	Polymeric deflocculant
UNI-CAL	Q-BROXIN	SPERSENE	Chrome lignosulfonate
UNI-CAL CF	Q-B II	SPERSENE CF	Chrome-free lignosulfonate
MIL-KEM	LIGNOX	RD 2000	Lime mud thinner
SAPP	SAPP	SAPP	Sodium acid pyrophosphate
OILFOS	BARAFOS	PHOS	Sodium tetraphosphate
MIL-THIN	THERMA-THIN	THIN X (Liquid)	Anionic copolymer thinner
FILTRATION CONTROL AGENTS			
BIO-LOSE			Modified polysacchande
CHEMTROL X	DURENEX	RESINEX	Polymer blend, high-temperature
FILTREX	BARANEX	RESINEX	Polyanionic lignin resin
LIGCO	CARBONOX	TANNATHIN	Lignite
LIGCON	CC-16	CAUSTILIG	Causticized lignite
MILSTARCH	IMPERMEX	MY-LO-GEL	Pregelatinized starch
NEW-TROL	POLYAC	SP-101	Sodium polyacrylate
PERMA-LOSE HT	DEXTRID	POLY-SAL	Nonfermenting starch, high-temp.
PYRO-TROL	THERMA-CHEK	POLY RX	Polymeric, high-temperature
KEM-SEAL	THERMA-CHEK		Copolymer, high-temperature
MIL-PAC	PAC R	POLYPAC	Polyanionic cellulose
MIL-PAC LV	PAC L	POLYPAC	Low-viscosity polyanionic cellulose
MILPARK CMC HV	CELLEX (High Vis)	CMC HV	Sodium carboxymethycellulose
MILPARK CMC LV	CELLEX	CMC LV	Sodium carboxymethycellulose
CORROSION CONTROL CHEMICALS			
MIL-GARD	NO-SULF	SULF-X	Basic zinc carbonate
MIL-GARD R	BARASCAV-L	SULF-X ES	Chelated zinc
NOXYGEN	COAT-888 BARACOR 113	OXYGEN SCAVENGER	Oxygen scavenger
SCALE-BAN	SURFLO-H35 BARACOR 129	SI-1000	Scale inhibitor
AMI-TEC	BARA FILM BARACOR 300 COAT-B1400 COAT-C1815	CONQOR 202 CONQOR 101 CONQOR 303	Film-forming amine
CARBO-DRILL OIL MUD ADDITIVES			
CARBO-MUL	INVERMUL NT VERSACOAT	VERSAWET	Emulsifier (and wetting agent) primarily
CARBO-MUL HT	EZ MUL NT		High-temperature emulsifier and wetting agent
CARBO-TEC	INVERMUL	VERSAMUL	Emulsifier
CARBO-GEL	GELTONE II	VERSAGEL	Organophilic clay nectonte
CARBO-VIS	GELTONE II	VERSAMOD	Organophilic clay
CARBO-TROL		VERSATROL	Filtration control agent
CARBO-TROL A-9	DURATONE HT	VERSALIG	Nonasphaltic filtration control, high-temperature
SURF-COTE	DRILTREAT or OMC	VERSAWET	Oil wetting agent for oil muds
CARBO-MIX	DRILTREAT		Nonionic emulsifier, high-activity
CARBO-TEC HW			HW oil mud emulsifier

DRILLING FLUID ADDITIVES
PRODUCT CROSS REFERENCE

MILPARK	BAROID	M-I	DESCRIPTION
SHALE CONTROL ADDITIVES			
ALPLEX			Aluminum complex
BIO-DRILL 1402			Oil mud alternative
NEW-DRILL	EZ MUD	POLY-PLUS	PHPA liquid
NEW-DRILL HP			Powdered PHPA
NEW-DRILL PLUS	EZ MUD DP		Powdered PHPA
SHALE-BOND	SHALE-BAN	HOLECOAT	Resinous shale stabilizer
PROTECTOMAGIC			Oil-soluble blown asphalt
PROTECTOMAGIC M	AK-70	STABIL-HOLE	Water-dispersants. Blown asphalt
SPOTTING FLUIDS			
BLACK MAGIC			Oil-base spotting fluid
BLACK MAGIC LT	EX SPOT		Low toxicity oil-base spotting fluid
BLACK MAGIC SFT		OIL-FAZE	Oil-base spotting fluid concentrate
MIL-FREE	SCOT-FREE/ ENVIRO-SPOT	PIPE-LAX	Liquid spotting fluid
BIO-SPOT	ENVIRO-SPOT		Nontoxic water-base spotting fluid
BIO-SPOT II			Nontoxic water-base spotting fluid
MIL-SPOT 2	SCOT-FREE	PIPE-LAX W	Weighted (oil-base) spotting fluid concentrate
LUBRICANTS			
AQUA-MAGIC			Low-toxicity lubricant
LUBRI-FILM	EP MUDLUBE	E.P. LUBE	Extreme-pressure lubricant
MIL-LUBE		LUBE-106	General lubricant
DETERGENTS/FOAMERS			
AMPLI-FOAM	DRILFOAM	FOAMER 80	Mist and stiff foaming agent
MIL CLEAN	BAROID RIG WASH BARA-KLEAN	KLEEN-UP	Biodegradeable detergent
MILPARK MD	CON-DET	DD	Drilling detergent
DEFOAMING AGENTS			
LD-8	BARA DEFOAM	DEFOAM-X	Hydrocarbon-base defoamer
W.O. DEFOAM	BARA BRINE DEFOAM	DEFOAM-A	Alcohol-base, saltwater muds
ALUMINUM STEARATE	Aluminum Stearate	Aluminum Stearate	Aluminum Stearate
LOST CIRCULATION MATERIALS			
CHEK-LOSS			Seepage loss control differential sticking preventative
MIL-CEDAR FIBER	PLUG-GIT	M-I CEDAR FIBER	Cedar fiber
MIL-FIBER	FIBERTEX	M-I FIBER	Fiber blend
MILFLAKE	JELFLAKE	FLAKE	Shredded cellophane flake
MILMICA	MICATEX	MICA	(Muscovite) mica graded
MIL-PLUG		NUT PLUG	Ground pecan shells
MIL-SEAL	BARO-SEAL	KWIK SEAL	Blended lost-circualtion material
COTTONSEED HULLS	Cottonseed Hulls	Cottonseed Hulls	Cottonseed Hulls
PAPER			Ground paper
WALNUT SHELLS	WALL-NUT		Ground walnut shells
MAGNE-SET			Acid-soluble cement
WORKOVER AND COMPLETION FLUID ADDITIVES			
MUD-PAC	COAT-44 & 45	CONQOR 404 X-CORE	Corrosion (packer fluid) inhibitor
BRINE-PAC	BARACOR-A		Corrosion inhibitor clean brine fluids
W.O. 21L	LIQUI-VIS	VIS-L	Liquid HEC polymer
PRESERVATIVES			
DRYOCIDE			Dry (biodegradable) biocide
X-CIDE 207	BARA B466	BACBAN II & III	Biocide

AIR EMISSION CALCULATIONS

J. Connor Consulting, Inc.



AIR QUALITY REVIEW

COMPANY:	**NEWFIELD EXPLORATION COMPANY**
AREA:	**MISSISSIPPI CANYON**
BLOCK:	**357**
LEASE:	**OCS-G 10988**
PLATFORM:	**PLATFORM "A"**
WELL:	**FF THRU HH**
LATITUDE:	**28° 35' 14.03"**
LONGITUDE:	**89° 41' 59.28"**

COMPANY CONTACT:	**CHERYL P. MURPHY**
TELEPHONE NO.:	**(713) 578-3388**

REMARKS:

DRILL, COMPLETE AND PRODUCE THREE (3) WELLS UTILIZING EXISTING WELLBORES FROM THE SURFACE LOCATION PLATFORM "A" IN WEST DELTA BLOCK 152.

PRODUCED HYDROCARBONS FROM PLATFORM "A" WILL BE TRANSPORTED VIA AN EXISTING RIGHT-OF-WAY PIPELINE TO SHELL'S PLATFORM "A", MISSISSIPPI CANYON BLOCK 357, AND TAYLOR'S PLATFORM "A", WEST DELTA BLOCK 152

THERE WILL BE NO INCREASE IN PRODUCTION ON PLATFORM "A" AS A RESULT OF THE PROPOSED ACTIVITY.

ATTACHMENT G

16225 Park Ten Place Suite 500 Houston, Texas 77084 (713) 578-3388 Fax (713) 578-8895

GULF OF MEXICO AIR EMISSION CALCULATIONS

General

This document (MMS.WK3) 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. 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 sheet gives the basis for the emission factors used in the emission spreadsheet as well as some general instructions. This file contains 8 sheets: A,B,C,D,E,F,G,& H. A is the Instruction Sheet, B is the Title Sheet, C is the Factors Sheet, D,E,F, & G are the Emission Spreadsheets and H is the Summary Sheet. These sheets 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.
2. 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 $10E^{6}$ 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 the first year use sheet D, for the second year use sheet E, third use F, fourth use G and if you need more you will have to insert a sheet and copy the spreadsheet to the new sheet. The year (CELL D:A38) should be changed and the different operating parameters entered to calculate revised emissions for that subsequent 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 you may want to delete lines for non-applicable equipment/activities or you can input "0" for the HP of equipment that does not apply. You may also need to 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. Each row links to the corresponding emission calculation spreadsheet for that year. For example, Row 7 of the summary corresponds to the annual totals from Sheet D. Row 8 links to the second emission calculation spreadsheet, Row 9 to the third and Row 10 to the fourth. Row 11 - 16 will carry down the emissions from the last spreadsheet with an emission rate greater than zero. The Summary Sheet will always carry down the last non-zero emission total. For example, if emission calculations are done for the years 1994 and 1995, then the the 1995 total will be carried down through the year 2003. Row 17 of the summary sheet reflects the allowable for the air quality review exemption determination. If more or less years are needed you will will have to modify the spreadsheet.

Print Instructions

The table below lists macros that were written to print sheets A, C, D, E, F, G, & H.

\A - This macro prints 3 pages of instructions (sheet A).
\C - This macro prints the emissions factors sheet (sheet C).
\D - This macro prints the emissions calculations sheet (sheet D).
\E - This macro prints the emissions calculations sheet (sheet E).
\F - This macro prints the emissions calculations sheet (sheet F).
\G - This macro prints the emissions calculations sheet (sheet G).
\H - This macro prints the emissions calculations sheet (sheet H).
\X - This macro prints all sheets - A, C, D, E, F, G, & H.

To run one of these macros, hold down ALT and press the letter in the macro range name. For example, to run the macro \A, press ALT-a.

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
NG Turbines	gms/hp-hr		0.00247	1.3	0.01	0.83	AP42 3.2-2	4/93
NG 2-cycle lean	gms/hp-hr		0.00185	11	0.43	1.5	AP42 3.2-2	4/93
NG 4-cycle lean	gms/hp-hr		0.00185	12	0.72	1.6	AP42 3.2-2	4/93
NG 4-cycle rich	gms/hp-hr		0.00185	10	0.14	8.6	AP42 3.2-2	4/93
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
NG Heaters/Boilers/Burners	lbs/mmscf	5	0.6	140	2.8	35	AP42 1.4-1	4/93
NG Flares	lbs/mmscf		0.57	71.4	60.3	388.5	AP42 11.5-1	9/91
Liquid Flaring	lbs/bbls	0.42	6.6	2.3	0.01	0.21	AP421.3-1	4/93
Tank Vapors	lbs/bbl				0.03		E&P Forum	1/93
Fugitives	lbs/hr/comp.				0.000025		API Study	12/93
Glycol Dehydrator Vent	lbs/mmscf				6.6		La. DEQ	1991
Gas Venting	lbs/scf				0.0034			

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	LATITUDE	LONGITUDE	CONTACT	PHONE	REMARKS
NEWFIELD EXPLORATION C	MISSISSIPPI CANYON	357	OCS-G 1098	PLATFORM "	FF THRU HH	28° 35' 14.03	89° 41' 59.28	CHERYL P. MURPHY	(713) 578-33	DRILL, COMPLETE AND PRODUCE THREE (3)

OPERATIONS	EQUIPMENT		MAX. FUEL	ACT. FUEL	RUN TIME		POUNDS PER HOUR					TONS PER YEAR				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	TSP	SOx	NOx	VOC	CO	TSP	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	1250	60.38	1449.00	24	77	0.66	4.10	30.29	0.91	6.61	0.61	3.79	27.98	0.84	6.11
	PRIME MOVER>600hp diesel	1250	60.38	1449.00	24	77	0.66	4.10	30.29	0.91	6.61	0.61	3.79	27.98	0.84	6.11
	PRIME MOVER>600hp diesel	1250	60.38	1449.00	24	77	0.66	4.10	30.29	0.91	6.61	0.61	3.79	27.98	0.84	6.11
	AUXILIARY EQUIP<600hp diesel	350	16.91	405.72	24	77	0.77	0.72	10.79	0.86	2.34	0.71	0.66	9.97	0.80	2.16
	VESSELS>600 hp diesel CREW BOAT	2065	99.74	2393.75	6	55	1.09	6.78	50.03	1.50	10.92	0.18	1.12	8.26	0.25	1.80
	VESSELS>600 hp diesel SUPPLY BOA	2065	99.74	2393.75	11	55	1.09	6.78	50.03	1.50	10.92	0.33	2.05	15.13	0.45	3.30
PIPELINE	PIPELINE LAY BARGE diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	SUPPORT VESSEL diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PIPELINE BURY BARGE diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY	DERRICK BARGE diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	MATERIAL TUG diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	RECIP.<600hp diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	RECIP.>600hp diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TURBINE nat gas	0	0.00	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0.00	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle lean nat gas	0	0.00	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle rich nat gas	0	0.00	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	BURNER nat gas	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
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0			0	0				0.00					0.00	
	FLARE-		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	PROCESS VENT-		0		0	0				0.00					0.00	
	FUGITIVES-			0.0		0				0.00					0.00	
	GLYCOL STILL VENT-		0		0	0				0.00					0.00	
DRILLING	OIL BURN	1500			24	6	26.25	412.50	143.75	0.63	13.13	1.89	29.70	10.35	0.05	0.95
WELL TEST	GAS FLARE		416666.66		24	6		0.24	29.75	25.12	161.87		0.02	2.14	1.81	11.65
1996 YEAR TOTAL							31.19	439.32	375.22	32.34	218.99	4.94	44.92	129.81	5.87	38.18
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											832.50	832.50	832.50	832.50	29383.18
	25.0															

AIR EMISSION CALCULATIONS

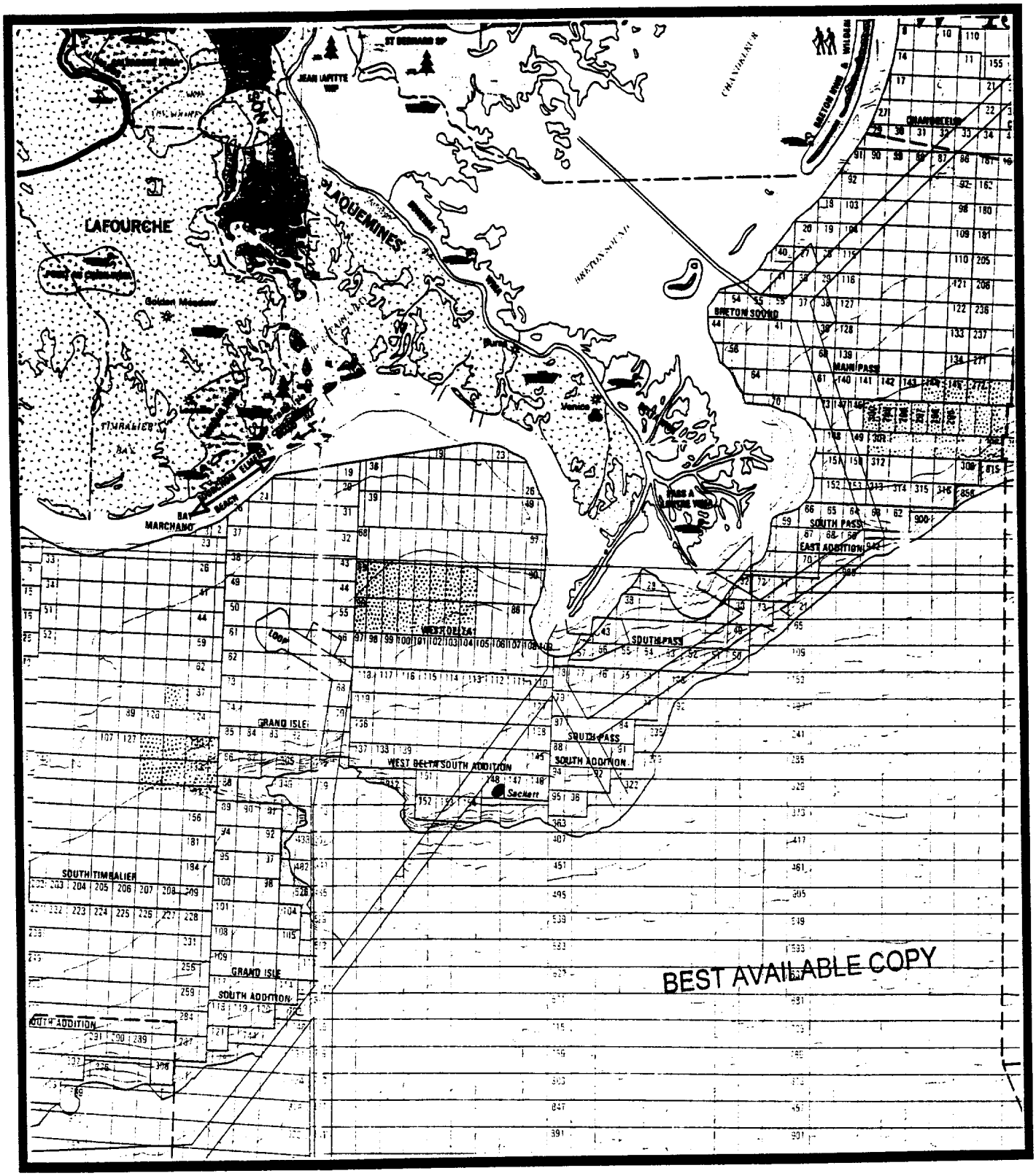
COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	LATITUDE	LONGITUDE	CONTACT	PHONE	REMARKS
NEWFIELD EXPLORATION C	MISSISSIPPI CANYON	357	OCS-G 1098	PLATFORM "	FF THRU HH	28° 35' 14.03'	89° 41' 59.28	CHERYL P. MURPHY	(713) 578-33	DRILL, COMPLETE AND PRODUCE THREE (3)

OPERATIONS	EQUIPMENT		MAX. FUEL	ACT. FUEL	RUN TIME		POUNDS PER HOUR					TONS PER YEAR				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	TSP	SOx	NOx	VOC	CO	TSP	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	1250	60.38	1449.00	24	28	0.66	4.10	30.29	0.91	6.61	0.22	1.38	10.18	0.31	2.22
	PRIME MOVER>600hp diesel	1250	60.38	1449.00	24	28	0.66	4.10	30.29	0.91	6.61	0.22	1.38	10.18	0.31	2.22
	PRIME MOVER>600hp diesel	1250	60.38	1449.00	24	28	0.66	4.10	30.29	0.91	6.61	0.22	1.38	10.18	0.31	2.22
	AUXILIARY EQUIP<600hp diesel	350	16.91	405.72	24	28	0.77	0.72	10.79	0.86	2.34	0.26	0.24	3.63	0.29	0.78
	VESSELS>600hp diesel CREW BOAT	2065	99.74	2393.75	6	20	1.09	6.78	50.03	1.50	10.92	0.07	0.41	3.00	0.09	0.65
	VESSELS>600hp diesel SUPPLY BOAT	2065	99.74	2393.75	11	20	1.09	6.78	50.03	1.50	10.92	0.12	0.75	5.50	0.17	1.20
PIPELINE	PIPELINE LAY BARGE diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	SUPPORT VESSEL diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PIPELINE BURY BARGE diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY	DERRICK BARGE diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	MATERIAL TUG diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	RECIP.<600hp diesel-CRANE	160	7.73	185.47	1	148	0.35	0.33	4.93	0.39	1.07	0.03	0.02	0.37	0.03	0.08
	RECIP.>600hp diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TURBINE nat gas	0	0.00	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0.00	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle lean nat gas-COMPRESSO	900	6428.70	154288.80	24	337		0.00	21.81	0.85	2.97		0.00	0.00	0.00	0.00
	RECIP.4 cycle lean nat gas-COMPRESSO	900	6428.70	154288.80	24	337		0.00	21.81	0.85	2.97		0.01	0.00	0.00	0.00
	RECIP.4 cycle lean nat gas-GENERATOR	800	5714.40	137145.60	24	337		0.00	21.15	1.27	2.82		0.01	0.00	0.00	0.00
	RECIP.4 cycle rich nat gas-GENERATOR	800	5714.40	137145.60	24	337		0.00	17.62	0.25	15.15		0.01	0.00	0.00	0.00
	BURNER nat gas	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
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0			0	0				0.00					0.00	
	FLARE-		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	PROCESS VENT-		0		0	0				0.00					0.00	
	FUGITIVES-			4000.0		337				0.10					0.40	
	GLYCOL STILL VENT-		0		0	0				0.00					0.00	
DRILLING	OIL BURN	N/A			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WELL TEST	GAS FLARE		N/A		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
1997	YEAR TOTAL						5.29	26.92	289.03	10.31	68.98	1.14	5.59	43.03	1.89	9.38
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											832.50	832.50	832.50	832.50	29383.18
	25.0															

AIR EMISSION CALCULATIONS

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL
NEWFIELD EXPLORATION COMPANY	MISSISSIPPI CAN	357	OCS-G 10988	PLATFORM "A"	FF THRU HH

Year	Emitted Substance				
	TSP	SOx	NOx	HC	CO
1996	4.94	44.92	129.81	5.87	38.18
1997	1.14	5.59	43.03	1.89	9.38
1998	1.14	5.59	43.03	1.89	9.38
1999	1.14	5.59	43.03	1.89	9.38
2000	1.14	5.59	43.03	1.89	9.38
2001	1.14	5.59	43.03	1.89	9.38
2002	1.14	5.59	43.03	1.89	9.38
2003	1.14	5.59	43.03	1.89	9.38
2004	1.14	5.59	43.03	1.89	9.38
Allowable	832.50	832.50	832.50	832.50	29383.18



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SCALE

NEWFIELD EXPLORATION COMPANY

WEST DELTA BLOCK 152

VICINITY PLAT

SHOREBASE: FOURCHON, LOUISIANA

VDL:08/22/96

ATTACHMENT H