

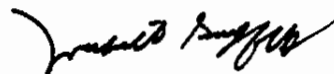
UNITED STATES GOVERNMENT
MEMORANDUM

September 26, 2003

To: Public Information (MS 5034)
From: Plan Coordinator, FO, Plans Section (MS 5231)
Subject: Public Information copy of plan
Control # - S-06274
Type - Supplemental Development Operations Coordinations Document
Lease(s) - OCS-G02110 Block - 307 Eugene Island Area
Operator - Mission Resources Corporation
Description - Well B009
Rig Type - JACKUP

Attached is a copy of the subject plan.

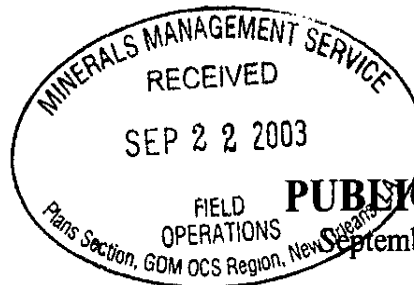
It has been deemed submitted as of this date and is under review for approval.


Michelle Griffitt
Plan Coordinator

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
WELL/B009	G02110/EI/307	3606 FSL, 3771 FEL	G02110/EI/307

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NOTED - SCHEXNAILDRE



PUBLIC COPY

September 19, 2003

SUPPLEMENTAL DEVELOPMENT OPERATIONS COORDINATION DOCUMENT

Lease Number (s): OCS-G 02110
Area/Block: Eugene Island Block 307
Prospect Name: EI307
Offshore: Louisiana

Submitted by: Mission Resources Corp.
1331 Lamar
Suite 1455
Houston, Texas 77010-3039

Nancy Gatti
(713) 495-3000
nancy.gatti@mrcorp.com

Estimated start up date: December 1, 2003



Authorized Representative:
Cheryl Murphy
J. Connor Consulting, Inc.
16225 Park Ten Place, Suite 700
Houston, Texas 77084
(281) 578-3388
cheryl.murphy@jccteam.com

No. Copies Being Submitted:
Proprietary: 5
Public Info: 4

For MMS:
Plan No. _____
Assigned to: _____

MISSION RESOURCES CORP.

SUPPLEMENTAL

DEVELOPMENT OPERATIONS COORDINATION DOCUMENT

LEASE OCS-G 02110

EUGENE ISLAND BLOCK 307

APPENDIX A	<i>Contents of Plan</i>
APPENDIX B	<i>General Information</i>
APPENDIX C	<i>Geological, Geophysical & H₂S Information</i>
APPENDIX D	<i>Biological and Physical Information</i>
APPENDIX E	<i>Wastes and Discharge Information</i>
APPENDIX F	<i>Oil Spill Information</i>
APPENDIX G	<i>Air Emissions Information</i>
APPENDIX H	<i>Environmental Impact Analysis</i>
APPENDIX I	<i>Coastal Zone Management Consistency Information</i>
APPENDIX J	<i>Plan Information Form</i>

APPENDIX A CONTENTS OF PLAN

Mission Resources Corp. (Mission) is the designated operator of the subject oil and gas leases.

(A) DESCRIPTION, OBJECTIVES AND SCHEDULE

This DOCD provides for the drilling and completion of Well No. B009, installation of a lease term pipeline and commencement of production from the target sands as detailed in Appendix C of this DOCD.

Appendix J contains a Plan Information Form, which provides a description of proposed activities, and a tentative schedule.

(B) LOCATION

Included as *Attachment A-1* is a map showing the proposed location of wells. A bathymetry map was submitted with the previously approved DOCD (Plan Control No. S-00535). Additional well information is included on the Well Information Form.

(C) DRILLING UNIT

A description of the drilling unit is included in Appendix J, on the Plan Information Form. The rig specifications will be made a part of the Application for Permit to Drill.

Safety features on the drilling unit will include well control, pollution prevention, welding procedures, and blowout prevention equipment as described in Title 30 CFR Part 250, Subparts C, D, E, and G; and as further clarified by MMS Notices to Lessees, and current policy making invoked by the MMS, Environmental Protection Agency and the U.S. Coast Guard. Appropriate life rafts, life jackets, ring buoys, etc., will be maintained on the facility at all times.

Operator will ensure employees and contractor personnel engaged in well control or production safety operations understand and can properly perform their duties.

Pollution prevention measures include installation of curbs, gutters, drip pans, and drains on drilling deck areas to collect all contaminants and debris.

Mission does not propose additional safety, pollution prevention, or early spill detection measures beyond those required by 30 CFR 250.

(D) PRODUCTION FACILITIES

The subject well will be protected by Mission's existing B Platform in Eugene Island Block 307.

A lease term pipeline will be installed to transport produced hydrocarbons from the subject structure to the A Platform within Eugene Island Block 307. No new nearshore or onshore pipelines or facilities will be constructed.

The facility will be designed, installed and operated in accordance with current regulations, engineering documents incorporated by reference, and industry practice in order to ensure

protection of personnel, environment and the facilities. When necessary, maintenance or repairs that are necessary to prevent pollution of offshore waters shall be undertaken immediately.

EI294

EI308

FOREST
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MISSION
○²
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MISSION
■^A
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OCS-G-21643
MISSION RESOURCES

OCS-G-02110
MISSION RESOURCES

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EI307

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○¹
G02110

EI306

FOREST
○³
G01980

FOREST
○¹
G01980

B-9 SURFACE ■^B

○²

○³

PROPOSED LOCATIONS

LOCATION	NSCALLS	WECALLS	XCOORD	YCOORD	LATITUDE	LONG	WD	TVD	MD
B-9 SURFACE	3,606.14' FSL	3,770.92' FEL	1,906,096.12'	-132,461.53'	28° 18' 07.647"N	91° 37' 30.098"W	227'		

EI316

**PUBLIC
INFORMATION**

ATTACHMENT A-1

MISSION RESOURCES CORPORATION

**SUPPLEMENTAL
DEVELOPMENT & PRODUCTION PLAN**

OCS-G-02110
BLOCK 307 EUGENE ISLAND AREA
GULF OF MEXICO

FUGRO CHANCE INC.

200 Dulles Dr., Lafayette, Louisiana 70506-3001 (337) 237-1300



GEODETIC DATUM: NAD27
PROJECTION: LOUISIANA SOUTH
GRID UNITS: US SURVEY FEET

SCALE
IN FEET 0 2,000'

Job No.: 03-2987 Date: 9/11/03

Drwn: RDT

Chart: Of: 1 1

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Printed: 9/11/03

APPENDIX B GENERAL INFORMATION

(A) CONTACT

Inquiries may be made to the following authorized representative:

Cheryl Murphy
J. Connor Consulting, Inc.
16225 Park Ten Place, Suite 700
Houston, Texas 77084
(281) 578-3388
E-mail address: cheryl.murphy@jccteam.com

(B) PROJECT NAME

The development project is named EI307.

(C) PRODUCTION RATES AND LIFE OF RESERVOIR

Type of Production	Average Estimated Rates	Estimated Peak
1) Crude Oil		
2) Gas		
3) Condensate		
Estimated Life of the Reservoir = PROPRIETARY DATA		

(D) NEW OR UNUSUAL TECHNOLOGY

Mission does not propose to use any new or unusual technology to carry out the proposed development/production activities. New or unusual technology is defined as equipment and/or procedures that:

1. Function in a manner that potentially causes different impacts to the environment than the equipment or procedures did in the past;
2. Have not been used previously or extensively in an MMS OCS Region;
3. Have not been used previously under the anticipated operating conditions; or
4. Have operating characteristics that are outside the performance parameters established by 30 CFR 250.

(E) BONDING INFORMATION

The bond requirements for the activities and facilities proposed in this DOCD are satisfied by an area wide bond, furnished and maintained according to 30 CFR 256, subpart I; NTL No. N2000-G16, "Guidelines for General Lease Surety Bonds", dated September 7, 2000.

(F) ONSHORE BASE AND SUPPORT VESSELS

A Vicinity Map is included as **Attachment B-1** showing Eugene Island Block 307 located approximately 66 miles from the nearest shoreline and approximately 73 miles from the onshore support base in Intracoastal City, Louisiana.

The existing onshore base provides 24-hour service, a radio tower with a phone patch, dock space, equipment, and supply storage area, drinking and drill water, etc. The base serves as a loading point for tools, equipment, and machinery, and temporary storage for materials and equipment. The base also supports crew change activities. The proposed operations do not require expansion or major modifications to the base.

During the proposed activities, support vessels/helicopters and travel frequency are as follows:

Type	Weekly Estimate (No.) of Roundtrips	
	Drilling & Completion	Production Operations
Crew Boat	6	NA
Supply Boat	2	1
Helicopter	7	1

The most practical, direct route from the shorebase as permitted by the weather and traffic conditions will be utilized.

(G) LEASE STIPULATIONS

The following lease stipulation is attached to OCS-G 02110, Eugene Island Block 307.

1. Military Warning Area (MWA)

Eugene Island Block 307 is located within designated MWA-59A. The Naval Air Station will be contacted in order to coordinate and control the electromagnetic emissions during the proposed operations.

SPECIAL CONDITIONS

There are no related OCS facilities other than those proposed in this plan.

ARCHAEOLOGY SURVEY BLOCKS

Review of the data obtained during the shallow hazard study does not indicate the presence of archaeological properties or any historic period shipwrecks.

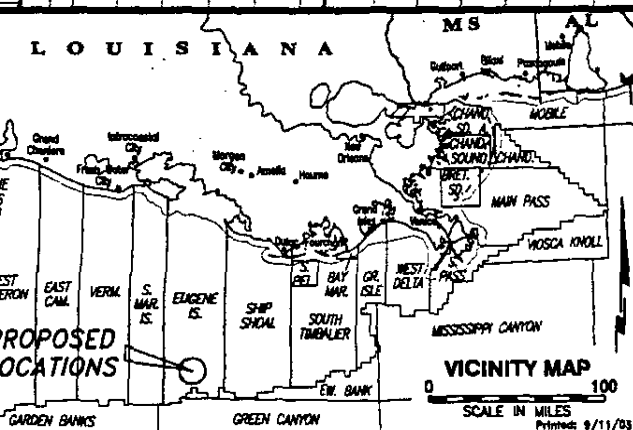
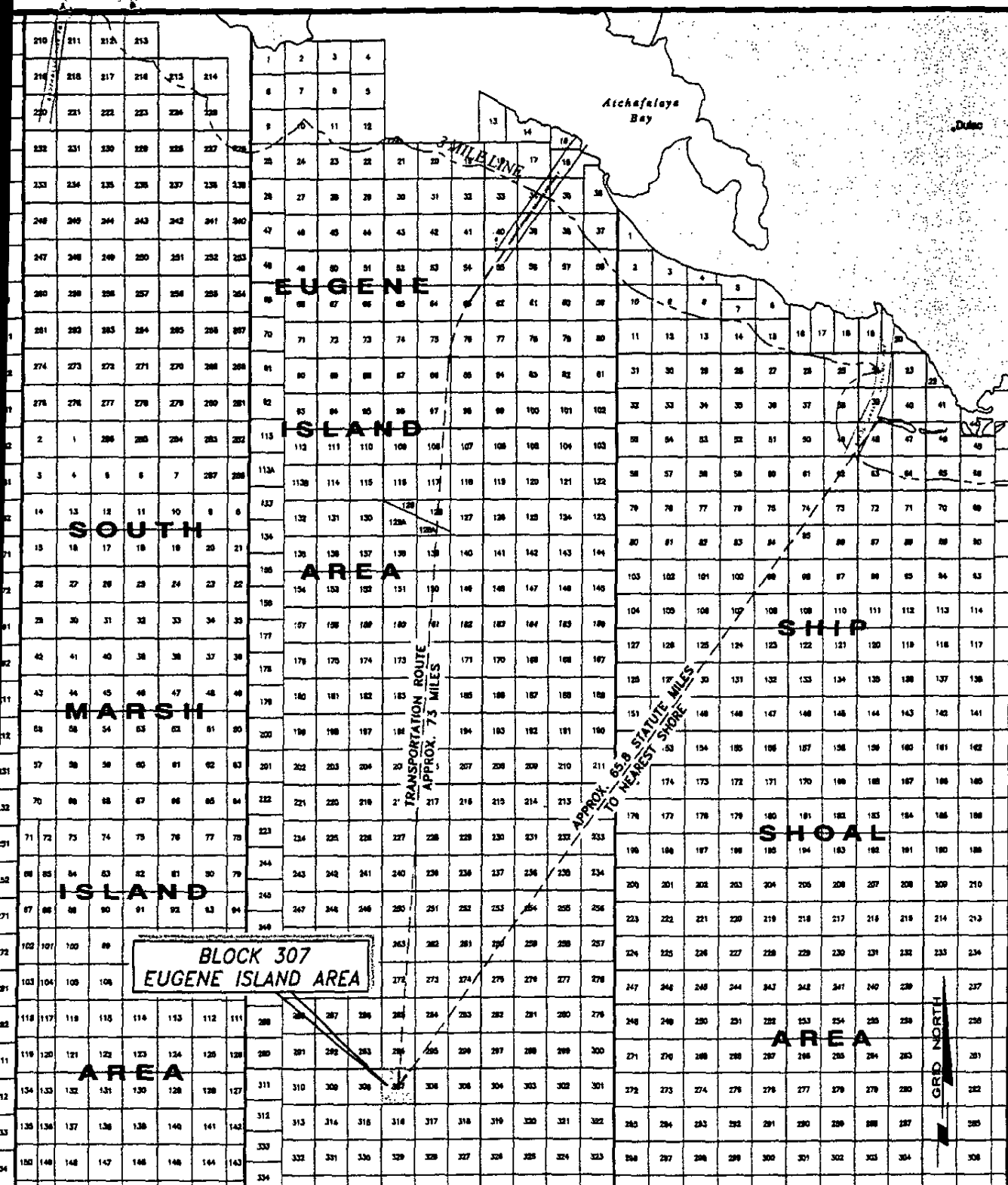
(H) RELATED OCS FACILITIES AND OPERATIONS

Mission will utilize a typical jack-up rig for their drilling operations. A 3200', 6" oil pipeline will be installed and will flow to the existing A Platform in Eugene Island Block 307.

Mission anticipates maximum flow rates to be 750 BOPD with a shut in time of approximately 15 seconds.

(I) TRANSPORTATION INFORMATION

The above mentioned pipeline will flow full well stream to the A Platform in Eugene Island Block 307 for further processing.



MISSION RESOURCES CORPORATION

VICINITY MAP
OCS-G-02110
BLOCK 307
EUGENE ISLAND AREA
GULF OF MEXICO

FUGRO CHANCE INC.

200 Dallas Dr. Lafayette, Louisiana 70506-3001 (337) 237-1300

GEODETIC DATUM: NAD27
PROJECTION: LOUISIANA SOUTH
GRID UNITS: US SURVEY FEET

SCALE 0 60,000'
IN FEET

Job No.: 03-2987 Date: 9/11/03

Drawn: RDT

Chart: Of:

Dwgfile: H:\2003\032987\CAD\Marine\032987VIC

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APPENDIX C

GEOLOGICAL, GEOPHYSICAL, AND H₂S INFORMATION

(A) STRUCTURE CONTOUR MAPS

A current structure contour map drawn on the top of each productive hydrocarbon sand, showing the entire lease block the location of each proposed well, and the locations of geological cross-sections is included as proprietary data.

(B) TRAPPING FEATURES

Proprietary data.

(C) DEPTH OF GEOPRESSURE

Proprietary data.

(D) INTERPRETED 3-D SEISMIC LINES

Attached to one Proprietary Information copy of this plan are interpreted 3-D seismic lines. These lines are migrated, annotated with depth scale, and are within 500' of the surface location of the proposed well.

(E) GEOLOGICAL STRUCTURE CROSS-SECTIONS

An interpreted geological structure cross-section showing the location and depth of the proposed well and at least one key horizon or objective sand, is included as proprietary data.

(F) SHALLOW HAZARDS REPORT

A Shallow Hazards Report was previously submitted to MMS.

(G) SHALLOW HAZARDS ASSESSMENT

The proposed operations will be conducted from an MMS approved surface location in DOCD (Control No. S-00535); therefore, a shallow hazards assessment is not being provided.

(H) HIGH-RESOLUTION SEISMIC LINES

The proposed operations will be conducted from a previously approved surface location in DOCD (Control No. S-00535); therefore high-resolution seismic lines are not being submitted.

(I) HYDROGEN SULFIDE INFORMATION

In accordance with Title 30 CFR 250.417(c), Mission requests that Eugene Island Block 307 be classified by the MMS as H₂S absent.

APPENDIX D

BIOLOGICAL AND PHYSICAL INFORMATION

CHEMOSYNTHETIC INFORMATION

This DOCD does not proposed activities that could disturb seafloor areas in water depths of 400 meters (1312 feet) or greater, therefore chemosynthetic information is not required.

TOPOGRAPHIC FEATURES INFORMATION

The activities proposed in this plan will not take place within 500 feet of any identified topographic feature, therefore topographic features information is not required.

LIVE BOTTOM (PINNACLE TREND) INFORMATION

Eugene Island Block 307 is not located within 100 feet of any pinnacle trend feature with vertical relief equal to or greater than 8 feet; therefore, live bottom information is not required.

ARCHAEOLOGICAL INFORMATION

The shallow hazard study does not indicate the presence of archaeological properties or any historic period shipwrecks.

APPENDIX E WASTES AND DISCHARGES INFORMATION

DISCHARGES

Discharge information is not required per NTL No. 2003-G17.

WASTES

For disposed wastes, the type and general characteristics of the wastes, the amount to be disposed of (volume, rate, or weight), the daily rate, the name and location of the disposal facility, a description of any treatment or storage, and the methods for transporting and final disposal are provided in tabular format in *Attachment E-1*. For purposes of this Appendix, disposed wastes describes those wastes generated by the proposed activities that are disposed of by means other than by releasing them in to the waters of the Gulf of Mexico at the site where they are generated. These wastes can be disposed of by offsite release, injection, encapsulation, or placement at either onshore or offshore permitted locations for the purpose of returning them back to the environment.

Option b

Disposal information is not required per NTL No. 2003-G-17.

Disposal Table Example (Wastes to be disposed of, not discharged)

Type of Waste Approximate Composition	Amount*	Rate per Day	Name/Location of Disposal Facility	Treatment and/or Storage, Transport and Disposal Method
Spent oil-based drilling fluids and cuttings	NA	NA	NA	NA
Spent synthetic- based drilling fluids and cuttings	NA	NA	NA	NA
Oil-contaminated produced sand	200 lb/yr	0.6 bbl/day	Waste Management Walker, LA	Store in a cuttings box and transport to a land farm
Waste Oil	200 bbl/yr	0.5 bbl/day	Waste Management Walker, LA	Pack in drums and transport to an onshore Incineration site
Produced water	NA	NA	NA	NA
Produced water	NA	NA	NA	NA
Norm- contaminated wastes	NA	NA	NA	NA
Trash and debris	1,000 ft ³	3 ft ³ /day	Waste Management Walker, LA	Transport in storage bins on crew boat to shorebase; truck to landfill
Chemical product wastes	NA	NA	NA	NA
Chemical product wastes	NA	NA	NA	NA
Workover fluids	NA	NA	NA	NA

*can be expressed as a volume, weight, or rate



APPENDIX F OIL SPILL INFORMATION

1. SITE-SPECIFIC OSRP

N/A

2. REGIONAL OSRP INFORMATION

Mission's Regional Oil Spill Response Plan (OSRP) was approved on May 23, 2003. Activities proposed in this DOCD will be covered by the Regional OSRP.

3. OSRO INFORMATION

Mission's primary equipment provider is Clean Gulf Associates (CGA). The Marine Spill Response Corporation's (MSRC) STARS network will provide closest available personnel, as well as an MSRC supervisor to operate the equipment.

4. WORST-CASE SCENARIO COMPARISON

Category	Regional OSRP WCD	DOCD WCD
Type of Activity	Production	Drilling
Facility Location (Area/Block)	HI 553	EI 307
Facility Designation		Well No. B009
Distance to Nearest Shoreline (miles)	110	66
Volume		
Storage tanks (total)	1447	0
Flowlines (on facility)	150	0
Lease pipelines	638	0
Uncontrolled blowout	7840	1500
Total Volume	10075	1500
Type of Oil(s) (crude, condensate, diesel)	Condensate	Crude
API Gravity	40°	44.2°

Mission has determined that the worst-case scenario from the activities proposed in this DOCD does not supercede the worst-case scenario from our approved regional OSRP for far-shore activities.

Since Mission has the capability to respond to the worst-case spill scenario included in its regional OSRP approved on May 23, 2003, and since the worst-case scenario determined for our DOCD does not replace the worst-case scenario in our regional OSRP, I hereby certify that

Mision has the capability to respond, to the maximum extent practicable, to a worst-case discharge, or a substantial threat of such a discharge, resulting from the activities proposed in our DOCD.

5. FACILITY TANKS, PRODUCTION VESSELS

There will be no facility tanks of 25 barrels or more associated with the proposed operations in this DOCD.

Type of Storage Tank	Type of Facility	Tank Capacity (bbls)	Number of Tanks	Total Capacity (bbls)	Fluid Gravity (API)
Fuel Oil (Marine Diesel)	NA	NA	NA	NA	NA
Production	NA	NA	NA	NA	NA



APPENDIX G

AIR EMISSIONS INFORMATION

AIR EMISSIONS INFORMATION

Screening Questions for DOCD's	Yes	No
Is any calculated Complex Total (CT) Emission amount (tons) associated with your proposed exploration activities more than 90% of the amounts calculated using the following formulas: $CT = 3400D^{2/3}$ for CO, and $CT = 33.3D$ for the other air pollutants (where D = distance to shore in miles)?		X
Do your emission calculations include any emission reduction measures or modified emission factors?		X
Does or will the facility complex associated with your proposed development and production activities process production from eight or more wells?	X	
Do you expect to encounter H ₂ S at concentrations greater than 20 parts per million (ppm)?		X
Do you propose to flare or vent natural gas in excess of the criteria set forth under 250.1105(a)(2) and (3)?		X
Do you propose to burn produced hydrocarbon liquids?		X
Are your proposed development and production activities located within 25 miles from shore?		X
Are your proposed development and production activities located within 200 kilometers of the Breton Wilderness Area?		X

Summary Information

Summary information regarding the peak year emissions for Plan Emissions and Complex Total Emissions are provided in the table below.

Air Pollutant	Plan Emission Amounts¹ (tons)	Calculated Exemption Amounts² (tons)	Calculated Complex Total Emission Amounts³ (tons)
Carbon Monoxide (CO)	34.07	55527.51	34.07
Particular matter (PM)	4.54	2197.80	4.54
Sulphur dioxide (SO ₂)	20.84	2197.80	20.84
Nitrogen oxides (NO _x)	156.14	2197.80	156.14
Volatile organic compounds (VOC)	4.68	2197.80	4.68

¹For activities proposed in your DOCD, list the projected emissions calculated from the worksheets.

²List the exemption amounts for your proposed activities calculated by using the formulas in 30 CFR 250.303(d).

³List the complex total emissions associated with your proposed activities calculated from the worksheets.

This information was calculated by: Cheryl Murphy
(281) 578-3388
cheryl.murphy@jccteam.com

Based on this data, emissions from the proposed activities will not cause any significant effect on onshore air quality. A copy of the

DOCD AIR QUALITY SCREENING CHECKLIST

OMB Control No. xxxx-xxxx
Expiration Date: Pending

COMPANY	MISSION RESOURCES CORP.
AREA	EUGENE ISLAND
BLOCK	307
LEASE	G 02110
PLATFORM	NA
WELL	NO. B009
COMPANY CONTACT	CHERYL MURPHY
TELEPHONE NO.	(281) 578-3388
REMARKS	DRILL, COMPLETE AND PRODUCE WELL NO. B009. INSTALL 6" LEASE TERM PIPELINE.

"Yes"	"No"	Air Quality Screening Questions
	X	1. Is any calculated Complex Total (CT) Emission amount (in tons) associated with your proposed exploration activities more than 90% of the amounts calculated using the following formulas: $CT = 3400D^{2/3}$ for CO, and $CT = 33.3D$ for the other air pollutants (where D = distance to shore in miles)?
	X	2. Do your emission calculations include any emission reduction measures or modified emission factors?
X		3. Does or will the facility complex associated with your proposed development and production activities process production from eight or more wells?
	X	4. Do you expect to encounter H_2S at concentrations greater than 20 parts per million?
	X	5. Do you propose to flare or vent natural gas in excess of the criteria set forth under 250.1105(a)(2) and (3)?
	X	6. Do you propose to burn produced hydrocarbon liquids?
	X	7. Are your proposed development and production activities located within 25 miles from shore?
	X	8. Are your proposed development and production activities located within 200 kilometers of the Breton Wilderness Area?

If ALL questions are answered "No":

Fill in the information below about your lease term pipelines and submit only this coversheet with your plan.

If ANY question is answered "Yes":

Prepare and submit a full set of spreadsheets with your plan.

LEASE TERM PIPELINE CONSTRUCTION INFORMATION:		
YEAR	NUMBER OF PIPELINES	TOTAL NUMBER OF CONSTRUCTION DAYS
2003	ONE (1)	SIX (6) DAYS
2004		
2005		
2006		
2007		
2008		
2009		
2010		
2011		
2012		

AIR EMISSION COMPUTATION FACTORS

OMB Control No. xxxx-xxxx

Expiration Date: Pending

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	PM	SOx	NOx	VOC	CO	REF.	DATE
NG Turbines	gms/hp-hr		0.00247	1.3	0.01	0.83	AP42 3.2-1 & 3.1-1	10/96
NG 2-cycle lean	gms/hp-hr		0.00185	10.9	0.43	1.5	AP42 3.2-1	10/96
NG 4-cycle lean	gms/hp-hr		0.00185	11.8	0.72	1.6	AP42 3.2-1	10/96
NG 4-cycle rich	gms/hp-hr		0.00185	10	0.14	8.6	AP42 3.2-1	10/96
Diesel Recip. < 600 hp.	gms/hp-hr	1	1.468	14	1.12	3.03	AP42 3.3-1	10/96
Diesel Recip. > 600 hp.	gms/hp-hr	0.32	1.468	11	0.33	2.4	AP42 3.4-1	10/96
Diesel Boiler	lbs/bbl	0.084	2.42	0.84	0.008	0.21	AP42 1.3-12,14	9/98
NG Heaters/Boilers/Burners	lbs/mmscf	7.6	0.593	100	5.5	84	AP42 1.4-1, 14-2, & 14	7/98
NG Flares	lbs/mmscf		0.593	71.4	60.3	388.5	AP42 11.5-1	9/91
Liquid Flaring	lbs/bbl	0.42	6.83	2	0.01	0.21	AP42 1.3-1 & 1.3-3	9/98
Tank Vapors	lbs/bbl				0.03		E&P Forum	1/93
Fugitives	lbs/hr/comp.				0.0005		API Study	12/93
Glycol Dehydrator Vent	lbs/mmscf				6.6		La. DEQ	1991
Gas Venting	lbs/scf				0.0034			

Sulfur Content Source	Value	Units
Fuel Gas	3.33	ppm
Diesel Fuel	0.4	% weight
Produced Gas(Flares)	3.33	ppm
Produced Oil (Liquid Flaring)	1	% weight

AIR EMISSION CALCULATIONS - FIRST YEAR

OMB Control No. xxxx-xxxx
Expiration Date: Pending

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	CONTACT	PHONE	REMARKS								
MISSION RESOURCES	EUGENE ISLAND	307	G 02110	NA	NO B009	CHERYL MURPHY	(261) 578-3388	#REF!								
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN TIME		MAXIMUM POUNDS PER HOUR					ESTIMATED TONS				
	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	PM	SOx	NOx	VOC	CO	PM	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	16975	819.8925	19677.42	24	30	11.96	54.89	411.29	12.34	89.74	4.31	19.76	148.06	4.44	32.30
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER diesel	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	2065	99.7395	2393.75	6	26	1.46	6.68	50.03	1.50	10.92	0.11	0.52	3.90	0.12	0.85
	VESSELS>600hp diesel(supply)	2065	99.7395	2393.75	10	9	1.46	6.68	50.03	1.50	10.92	0.07	0.30	2.25	0.07	0.49
	VESSELS>600hp diesel(tugs)	4400	212.52	5100.48	18	2	3.10	14.23	106.61	3.20	23.26	0.06	0.26	1.92	0.06	0.42
PIPELINE INSTALLATION	PIPELINE LAY BARGE diesel	0	0	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	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	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	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	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 INSTALLATION	DERRICK BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MATERIAL TUG diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	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	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	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	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	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	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	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	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			0.00	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			0.00	0.00	0.00
	FUGITIVES-			0.0		0				0.00	0.00			0.00	0.00	0.00
	GLYCOL STILL VENT-		0		0	0				0.00	0.00			0.00	0.00	0.00
	DRILLING	OIL BURN	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WELL TEST	GAS FLARE		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
2003 YEAR TOTAL							17.98	82.47	617.96	18.54	134.83	4.54	20.84	156.14	4.68	34.07
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											2197.80	2197.80	2197.80	2197.80	55527.51
	66.0															

AIR EMISSIONS CALCULATIONS - SECOND YEAR

OMB Control No. xxxx-xxxx
Expiration Date: Pending

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL		CONTACT				PHONE	REMARKS				
MISSION RESOURCES	EUGENE ISLAND	307	G 02110	NA	NO. B009		CHERYL MURPHY				(281) 578-3388	#REF!				
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN TIME		MAXIMUM POUNDS PER HOUR					ESTIMATED TONS				
	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	PM	SOx	NOx	VOC	CO	PM	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER diesel	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(tugs)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE INSTALLATION	PIPELINE LAY BARGE diesel	0	0	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	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	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	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY INSTALLATION	DERRICK BARGE diesel	4600	222.18	5332.32	24	6	3.24	14.87	111.45	3.34	24.32	0.23	1.07	8.02	0.24	1.75
	MATERIAL TUG diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	RECIP.<600hp diesel	0	0	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	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	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	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	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	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	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-			81.0		346				0.04				0.17		
	GLYCOL STILL VENT-		0		0	0				0.00				0.00		
DRILLING WELL TEST	OIL BURN	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	GAS FLARE		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
2004 YEAR TOTAL							3.24	14.87	111.45	3.38	24.32	0.23	1.07	8.02	0.41	1.75
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											2197.80	2197.80	2197.80	2197.80	55527.51
	66.0															

AIR EMISSION CALCULATIONS

OMB Control No. xxxx-xxxx

Expiration Date: Pending

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL
MISSION RESC	EUGENE ISLAND	307	G 02110	NA	NO. B009
Year	Emitted Substance				
	PM	SOx	NOx	VOC	CO
2004	4.54	20.84	156.14	4.68	34.07
2005	0.23	1.07	8.02	0.41	1.75
2006	0.23	1.07	8.02	0.41	1.75
2007	0.23	1.07	8.02	0.41	1.75
2008	0.23	1.07	8.02	0.41	1.75
2009	0.23	1.07	8.02	0.41	1.75
Allowable	2197.80	2197.80	2197.80	2197.80	55527.51

APPENDIX H ENVIRONMENTAL IMPACT ANALYSIS (EIA)

(B) Analysis

Site-Specific at Eugene Island Block 307

Proposed operations consist of the drilling, completing and producing well no. B009, and installing a 6 inch lease term pipeline.

1. Designated Topographic Features

Potential IPFs on topographic features include physical disturbances to the seafloor, effluents, and accidents.

Physical disturbances to the seafloor and effluents: Eugene Island Block 307 is 10 miles from the closest designated Topographic Features Stipulation Block (Fishnet Bank), and therefore no adverse impacts are expected.

Effluents: Eugene Island Block 307 is 10 miles from the closest designated Topographic Features Stipulation Block (Fishnet Bank), and therefore no adverse impacts are expected.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in **Item 5, Water Quality**). Oil spills cause damage to benthic organisms only if the oil contacts the organisms. Oil from a surface spill can be driven into the water column; measurable amounts have been documented down to a 10 m depth. At this depth, the oil is found only at concentrations several orders of magnitude lower than the amount shown to have an effect on corals. Because the crests of topographic features in the Northern Gulf of Mexico are found below 10 m, no oil from a surface spill could reach their sessile biota. Oil from a subsurface spill is not applicable due to the distance of these blocks from a topographic area. The activities proposed in this plan will be covered by Mission's Regional Oil Spill Response Plan (refer to information submitted in **Appendix F**).

There are no other IPFs (including emissions and wastes sent to shore for disposal) from the proposed activities, which could impact topographic features.

2. Pinnacle Trend Area Live Bottoms

Potential IPFs on pinnacle trend area live bottoms include physical disturbances to the seafloor, effluents, and accidents.

Physical disturbances to the seafloor and effluents: Eugene Island Block 307 is 200 miles from the closest live bottom (pinnacle trend) area, and therefore no adverse impacts are expected.

Effluents: Eugene Island Block 307 is 200 miles from the closest live bottom (pinnacle trend) area, and therefore no adverse impacts are expected.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in **Item 5**, Water Quality). Oil spills have the potential to foul benthic communities and cause lethal and sublethal effects on live bottom organisms. Oil from a surface spill can be driven into the water column; measurable amounts have been documented down to a 10 m depth. At this depth, the oil is found only at concentrations several orders of magnitude lower than the amount shown to have an effect on marine organisms. Oil from a subsurface spill is not applicable due to the distance of these blocks from a live bottom (pinnacle trend) area. The activities proposed in this plan will be covered by Mission's Regional Oil Spill Response Plan (refer to information submitted in **Appendix F**).

There are no other IPFs (including emissions and wastes sent to shore for disposal) from the proposed activities which could impact a live bottom (pinnacle trend) area.

3. Eastern Gulf Live Bottoms

Potential IPFs on Eastern Gulf live bottoms include physical disturbances to the seafloor, effluents, and accidents.

Physical disturbances to the seafloor and effluents: Eugene Island Block 307 is not located in an area characterized by the existence of live bottoms, and this lease does not contain a Live-Bottom Stipulation requiring a photo documentation survey and survey report.

Effluents: Eugene Island Block 307 is not located in an area characterized by the existence of live bottoms; therefore, no adverse impacts are expected.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in **Item 5**, Water Quality). Oil spills cause damage to live bottom organisms only if the oil contacts the organisms. Oil from a surface spill can be driven into the water column; measurable amounts have been documented down to a 10 m depth. At this depth, the oil is found only at concentrations several orders of magnitude lower than the amount shown to have an effect on marine invertebrates. Oil from a subsurface spill is not applicable due to the distance of these blocks from a live bottom area. The activities proposed in this plan will be covered by Mission's Regional Oil Spill Response Plan (refer to information submitted in **Appendix F**).

There are no other IPFs (including emissions and wastes sent to shore for disposal) from the proposed activities which could impact an Eastern Gulf live bottom area.

4. Chemosynthetic Communities

There are no IPFs (including emissions, physical disturbances to the seafloor, wastes sent to shore for disposal, or accidents) from the proposed activities that could cause impacts to chemosynthetic communities.

Operations proposed in this plan are in water depths of 227 feet. High-density chemosynthetic communities are found only in water depths greater than 400 m, therefore Mission's proposed operations in Eugene Island Block 307 would not cause impacts to chemosynthetic communities.

5. Water Quality

IPFs that could result in water quality degradation from the proposed operations in Eugene Island Block 307 include disturbances to the seafloor, effluents and accidents.

Physical disturbances to the seafloor: Bottom area disturbances resulting from the emplacement of drill rigs, the drilling of wells, and the installation of platforms and pipelines, would increase water-column turbidity and re-suspension of any accumulated pollutants, such as trace metals and excess nutrients. This would cause short-lived impacts on water quality conditions in the immediate vicinity of the emplacement operations.

Effluents: Levels of contaminants in drilling muds and cuttings and produced water discharges, discharge-rate restrictions, and monitoring and toxicity testing are regulated by the EPA NPDES permit, thereby eliminating many significant biological or ecological effects. Operational discharges are not expected to cause significant adverse impacts to water quality.

Accidents: Oil spills have the potential to alter offshore water quality; however, it is unlikely that an accidental surface or subsurface spill would occur from the proposed activities. Between 1980 and 2000, OCS operations produced 4.7 billion barrels of oil and spilled only 0.001 percent of this oil, or 1 bbl for every 81,000 bbl produced. The spill risk related to a diesel spill from drilling operations is even less. Between 1976 and 1985, (years for which data were collected), there were 80 reported diesel spills greater than one barrel associated with drilling activities. Considering that there were 11,944 wells drilled, this is a 0.7 percent probability of an occurrence. If a spill were to occur, the water quality of marine waters would be temporarily affected by the dissolved components and small oil droplets. Dispersion by currents and microbial degradation would remove the oil from the water column and dilute the constituents to background levels. Historically, changes in offshore water quality from oil spills have only been detected during the life of the spill and up to several months afterwards. Most of the components of oil are insoluble in water and therefore float. The activities proposed in this plan will be

covered by Mission's Regional Oil Spill Response Plan (refer to information submitted in **Appendix F**).

There are no other IPFs (including emissions, physical disturbances to the seafloor, and wastes sent to shore for disposal) from the proposed activities which could cause impacts to water quality.

6. Fisheries

IPFs that could cause impacts to fisheries as a result of the proposed operations in Eugene Island Block 307 include physical disturbances to the seafloor, effluents and accidents.

Physical disturbances to the seafloor: The emplacement of a structure or drilling rig results in minimal loss of bottom trawling area to commercial fishermen. Pipelines cause gear conflicts which result in losses of trawls and shrimp catch, business downtime, and vessel damage. Most financial losses from gear conflicts are covered by the Fishermen's Contingency Fund (FCF). The emplacement and removal of facilities are not expected to cause significant adverse impacts to fisheries.

Effluents: Effluents such as drilling fluids and cuttings discharges contain components and properties which are detrimental to fishery resources. Moderate petroleum and metal contamination of sediments and the water column can occur out to several hundred meters down-current from the discharge point. Offshore discharges are expected to disperse and dilute to very near background levels in the water column or on the seafloor within 3,000 m of the discharge point, and are expected to have negligible effect on fisheries.

Accidents: An accidental oil spill has the potential to cause some detrimental effects on fisheries, however, it is unlikely that such an event would occur from the proposed activities (refer to **Item 5, Water Quality**). The effects of oil on mobile adult finfish or shellfish would likely be sublethal and the extent of damage would be reduced to the capacity of adult fish and shell fish to avoid the spill, to metabolize hydrocarbons, and to excrete both metabolites and parent compounds. The activities proposed in this plan will be covered by Mission's Regional Oil Spill Response Plan (refer to information submitted in **Appendix F**).

There are no IPFs from emissions, or wastes sent to shore for disposal from the proposed activities which could cause impacts to fisheries.

7. Marine Mammals

GulfCet II studies revealed that cetaceans of the continental shelf and shelf-edge were almost exclusively bottlenose dolphin and Atlantic spotted dolphin. Squid eaters, including dwarf and pygmy killer whale, Risso's dolphin, rough-toothed dolphin, and Cuvier's beaked whale,

occurred most frequently along the upper slope in areas outside of anticyclones. IPFs that could cause impacts to marine mammals as a result of the proposed operations in Eugene Island Block 307 include emissions, effluents, discarded trash and debris, and accidents.

Emissions: Noises from drilling activities, support vessels and helicopters may elicit a startle reaction from marine mammals. This reaction may lead to disruption of marine mammals' normal activities. Stress may make them more vulnerable to parasites, disease, environmental contaminants, and/or predation (Majors and Myrick, 1990). There is little conclusive evidence for long-term displacements and population trends for marine mammals relative to noise.

Effluents: Drilling fluids and cuttings discharges contain components which may be detrimental to marine mammals. Most operational discharges are diluted and dispersed upon release. Any potential impact from drilling fluids would be indirect, either as a result of impacts on prey items or possibly through ingestion in the food chain (API, 1989).

Discarded trash and debris: Both entanglement in, and ingestion of, debris have caused the death or serious injury of marine mammals (Laist, 1997; MMC, 1999). The limited amount of marine debris, if any, resulting from the proposed activities is not expected to substantially harm marine mammals. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA).

Mission will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video, "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually.

Accidents: Collisions between support vessels and cetaceans would be unusual events, however should one occur, death or injury to marine mammals is possible. Contract vessel operators can avoid marine mammals and reduce potential deaths by maintaining a vigilant watch for marine mammals and maintaining a safe distance when they are sighted. Vessel crews should use a reference guide to help identify the twenty-eight species of whales and dolphins, and the single species of manatee that may be encountered in the Gulf of Mexico OCS. Vessel crews must

report sightings of any injured or dead protected marine mammal species immediately, regardless of whether the injury or death is caused by their vessel, to the Marine Mammal and Sea Turtle Stranding Hotline at (800) 799-6637, or the Marine Mammal Stranding Network at (305) 862-2850. In addition, if the injury or death was caused by a collision with a contract vessel, the MMS must be notified within 24 hours of the strike by email to protectedspecies@mms.gov. If the vessel is the responsible party, it is required to remain available to assist the respective salvage and stranding network as needed.

Oil spills have the potential to cause sublethal oil-related injuries and spill-related deaths to marine mammals. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to **Item 5, Water Quality**). Oil spill response activities may increase vessel traffic in the area, which could add to changes in cetacean behavior and/or distribution, thereby causing additional stress to the animals. The effect of oil dispersants on cetaceans is not known. The acute toxicity of oil dispersant chemicals included in Mission's OSRP is considered to be low when compared with the constituents and fractions of crude oils and diesel products. The activities proposed in this plan will be covered by Mission's Oil Spill Response Plan (refer to information submitted in accordance with **Appendix F**).

There are no other IPFs (including physical disturbances to the seafloor) from the proposed activities which could impact marine mammals.

8. Sea Turtles

IPFs that could cause impacts to sea turtles as a result of the proposed operations include emissions, effluents, discarded trash and debris, and accidents. GulfCet II studies sighted most loggerhead, Kemp's ridley, and leatherback sea turtles over shelf waters. Historically these species have been sighted up to the shelf's edge. They appear to be more abundant east of the Mississippi River than they are west of the river (Fritts et al., 1983b; Lohoefer et al., 1990). Deep waters may be used by all species as a transitory habitat.

Emissions: Noise from drilling activities, support vessels, and helicopters may elicit a startle reaction from sea turtles, but this is a temporary disturbance.

Effluents: Drilling fluids and cuttings discharges are not known to be lethal to sea turtles. Most operational discharges are diluted and dispersed upon release. Any potential impact from drilling fluids would be indirect, either as a result of impacts on prey items or possibly through ingestion in the food chain (API, 1989).

Discarded trash and debris: Both entanglement in, and ingestion of, debris have caused the death or serious injury of sea turtles (Balazs, 1985). The limited amount of marine debris, if any, resulting from the proposed activities is not expected to substantially harm sea turtles. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the

Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). Mission will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video, "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually.

Accidents: Collisions between support vessels and sea turtles would be unusual events, however should one occur, death or injury to sea turtles is possible. Contract vessel operators can avoid sea turtles and reduce potential deaths by maintaining a vigilant watch for sea turtles and maintaining a safe distance when they are sighted. Vessel crews should use a reference guide to help identify the five species of sea turtles that may be encountered in the Gulf of Mexico OCS. Vessel crews must report sightings of any injured or dead protected sea turtle species immediately, regardless of whether the injury or death is caused by their vessel, to the Marine Mammal and Sea Turtle Stranding Hotline at (800) 799-6637, or the Marine Mammal Stranding Network at (305) 862-2850. In addition, if the injury or death was caused by a collision with a contract vessel, the MMS must be notified within 24 hours of the strike by email to protectedspecies@mms.gov. If the vessel is the responsible party, it is required to remain available to assist the respective salvage and stranding network as needed.

All sea turtle species and their life stages are vulnerable to the harmful effects of oil through direct contact or by fouling of their food. Exposure to oil can be fatal, particularly to juveniles and hatchlings. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). Oil spill response activities may increase vessel traffic in the area, which could add to the possibility of collisions with sea turtles. The activities proposed in this plan will be covered by Mission's Regional Oil Spill Response Plan (refer to information submitted in accordance with **Appendix F**).

There are no other IPFs (including physical disturbances to the seafloor) from the proposed activities which could impact sea turtles.

9. Air Quality

There would be a limited degree of air quality degradation in the immediate vicinity of the proposed activities. Plan Emissions (Complex Total Emissions are the same as Plan Emissions)

for the proposed activities do not exceed the annual exemption levels as set forth by MMS. There are no other IPFs (including effluents, physical disturbances to the seafloor, wastes sent to shore for treatment or disposal, or accidents) from the proposed activities which could impact air quality.

10. Shipwreck Sites (known or potential)

IPFs that could impact known or unknown shipwreck sites as a result of the proposed operations in Eugene Island Block 307 include disturbances to the seafloor. Eugene Island Block 307 is not located in or adjacent to an OCS block designated by MMS as having a high probability for occurrence of shipwrecks. Mission will report to MMS the discovery of any evidence of a shipwreck and make every reasonable effort to preserve and protect that cultural resource. There are no other IPFs (including emissions, effluents, wastes sent to shore for treatment or disposal, or accidents) from the proposed activities which could impact shipwreck sites.

11. Prehistoric Archaeological Sites

IPFs which could impact prehistoric archaeological sites as a result of the proposed operations in Eugene Island Block 307 include disturbances to the seafloor (structure emplacement) and accidents (oil spill). Eugene Island Block 307 is located outside the Archaeological Prehistoric high probability line. Mission will report to MMS the discovery of any object of prehistoric archaeological significance and make every reasonable effort to preserve and protect that cultural resource.

Accidents: An accidental oil spill has the potential to cause some detrimental effects to prehistoric archaeological sites if the release were to occur subsea. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). The activities proposed in this plan will be covered by Mission's Regional Oil Spill Response Plan (refer to information submitted in accordance with **Appendix F**).

There are no other IPFs (including emissions, effluents, wastes sent to shore for treatment or disposal) from the proposed activities which could impact prehistoric archaeological sites.

Vicinity of Offshore Location

1. Essential Fish Habitat (EFH)

IPFs that could cause impacts to EFH as a result of the proposed operations in Eugene Island Block 307 include physical disturbances to the seafloor, effluents and accidents. EFH includes all estuarine and marine waters and substrates in the Gulf of Mexico.

Physical disturbances to the seafloor: The Live Bottom Low Relief Stipulation, the Live Bottom (Pinnacle Trend) Stipulation, and the Eastern Gulf Pinnacle Trend Stipulation would prevent most of the potential impacts on live-bottom communities and EFH from bottom disturbing activities (e.g., anchoring, structure emplacement and removal).

Effluents: The Live Bottom Low Relief Stipulation, the Live Bottom (Pinnacle Trend) Stipulation, and the Eastern Gulf Pinnacle Trend Stipulation would prevent most of the potential impacts on live-bottom communities and EFH from operational waste discharges. Levels of contaminants in drilling muds and cuttings and produced-water discharges, discharge-rate restrictions, and monitoring and toxicity testing are regulated by the EPA NPDES permit, thereby eliminating many significant biological or ecological effects. Operational discharges are not expected to cause significant adverse impacts to EFH.

Accidents: An accidental oil spill has the potential to cause some detrimental effects on EFH. Oil spills that contact coastal bays and estuaries, as well as OCS waters when pelagic eggs and larvae are present, have the greatest potential to affect fisheries. However, it is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). The activities proposed in this plan will be covered by Mission's Regional Oil Spill Response Plan (refer to information submitted in **Appendix F**).

There are no other IPFs (including emissions, or wastes sent to shore for treatment or disposal) from the proposed activities which could impact essential fish habitat.

2. Marine and Pelagic Birds

IPFs that could impact marine birds as a result of the proposed activities include air emissions, accidental oil spills, and discarded trash and debris from vessels and the facilities.

Emissions: Emissions of pollutants into the atmosphere from these activities are far below concentrations which could harm coastal and marine birds.

Accidents: An oil spill would cause localized, low-level petroleum hydrocarbon contamination. However, it is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). Marine and pelagic birds feeding at the spill location may experience chronic,

nonfatal, physiological stress. It is expected that few, if any, coastal and marine birds would actually be affected to that extent. The activities proposed in this plan will be covered by Mission's Regional Oil Spill Response Plan (refer to information submitted in **Appendix F**).

Discarded trash and debris: Marine and pelagic birds could become entangled and snared in discarded trash and debris, or ingest small plastic debris, which can cause permanent injuries and death. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). Mission will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass. Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video, "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually. Debris, if any, from these proposed activities will seldom interact with marine and pelagic birds, and therefore, the effects will be negligible.

There are no other IPFs (including effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities which could impact marine and pelagic birds.

3. Public Health and Safety Due to Accidents.

There are no IPFs (emissions, effluents, physical disturbances to the seafloor, wastes sent to shore for treatment or disposal, or accidents, including an accidental H₂S releases) from the proposed activities which could cause impacts to public health and safety. In accordance with 30 CFR 250.417(c) and 2002-G08, sufficient information is included in **Appendix C** to justify our request that our proposed activities be classified by MMS as H₂S absent.

Coastal and Onshore

1. Beaches

IPFs from the proposed activities that could cause impacts to beaches include accidents (oil spills) and discarded trash and debris.

Accidents: Oil spills contacting beaches would have impacts on the use of recreational beaches and associated resources. Due to the distance from shore (66 miles) and the response capabilities

that would be implemented, no significant adverse impacts are expected. The activities proposed in this plan will be covered by Mission's Regional Oil Spill Response Plan (refer to information submitted in **Appendix F**).

Discarded trash and debris: Trash on the beach is recognized as a major threat to the enjoyment and use of beaches. There will only be a limited amount of marine debris, if any, resulting from the proposed activities. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). Mission will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video, "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually.

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities which could impact beaches.

2. Wetlands

Oil spills could cause impacts to wetlands, however, it is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5, Water Quality**). Due to the distance from shore (66 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by Mission's Regional Oil Spill Response Plan (refer to information submitted in **Appendix F**).

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities which could impact wetlands.

3. Shore Birds and Coastal Nesting Birds

Oil spills could cause impacts to shore birds and coastal nesting birds. However, it is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5, Water Quality**). Given the distance from shore (66 miles) and the response capabilities that would be implemented, no

impacts are expected. The activities proposed in this plan will be covered by Mission's Regional Oil Spill Response Plan (refer to information submitted in **Appendix F**).

4. Coastal Wildlife Refuges

An accidental oil spill from the proposed activities could cause impacts to coastal wildlife refuges. However, it is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5, Water Quality**). Due to the distance from shore (66 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by Mission's Regional Oil Spill Response Plan (refer to information submitted in **Appendix F**).

5. Wilderness Areas

An accidental oil spill from the proposed activities could cause impacts to wilderness areas. However, it is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5, Water Quality**). Due to the distance from the nearest designated wilderness area (> 100 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. The activities proposed in this plan will be covered by Mission's Regional Oil Spill Response Plan (refer to information submitted in **Appendix F**).

6. Other Environmental Resources Identified

None

(C) Impacts on your proposed activities.

The site-specific environmental conditions have been taken into account for the proposed activities. No impacts are expected on the proposed activities from site-specific environmental conditions.

(D) Alternatives

No alternatives to the proposed activities were considered to reduce environmental impacts.

(E) Mitigation Measures

No mitigation measures other than those required by regulation will be employed to avoid, diminish, or eliminate potential impacts on environmental resources.

(F) Consultation

No agencies or persons were consulted regarding potential impacts associated with the proposed activities. Therefore, a list of such entities has not been provided.

(G) References

Authors:

- American Petroleum Institute (API). 1989. Effects of offshore petroleum operations on cold water marine mammals: a literature review. Washington, DC: American Petroleum Institute. 385 pp.
- Balazs, G.H. 1985. Impact of ocean debris on marine turtles: entanglement and ingestion. In: Shomura, R.S. and H.O. Yoshida, eds. Proceedings, Workshop on the Fate and Impact of Marine Debris, 26-29 November 1984, Honolulu, HI. U.S. Dept. of Commerce. NOAA Tech. Memo. NOAA-TM-NMFS-SWFC-54. Pp 387-429.
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- Hansen, D.J. 1981. The relative sensitivity of seabird populations in Alaska to oil pollution. U.S. Dept. of the Interior, Bureau of Land Management, Alaska OCS Region, Anchorage. BLM-YK-ES-81-006-1792.
- Laist, D.W. 1997. Impacts of marine debris: entanglement of marine life in marine debris including a comprehensive list of species with entanglement and ingestion records. In: Coe, J.M. and D.B. Rogers, eds. Marine debris: sources, impacts, and solutions. New York, NY: Springer-Verlag. Pp. 99-139
- Majors, A.P. and A.C. Myrick, Jr. 1990. Effects of noise on animals: implications for dolphins exposed to seal bombs in the eastern tropical Pacific purse-seine fishery—an annotated bibliography. NOAA Administrative Report LJ-90-06.
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- Piatt, J.F., C.J. Lensink, W. Butler, M. Kendziorek, and D.R. Nysewander. 1990. Immediate impact of the Exxon Valdez oil spill on marine birds. *The Auk*. 107 (2): 387-397
- Vauk, G., E. Hartwig, B. Reineking, and E. Vauk-Hentzelt. 1989. Losses of seabirds by oil pollution at the German North Sea coast. *Topics in Marine Biology*. Ros, J.D, ed. *Scient. Mar.* 53 (2-3): 749-754
- Vermeer, K. and R. Vermeer, 1975. Oil threat to birds on the Canadian west coast. *The Canadian Field-Naturalist*. 89:278-298.

Although not cited, the following were utilized in preparing this EIA:

- Hazard Surveys
- MMS EIS's:
 - GOM Deepwater Operations and Activities. Environmental Assessment. MMS 2000-001
 - GOM Central and Western Planning Areas Sales 166 and 168 Final Environmental Impact Statement. MMS 96-0058

(A) Impact Producing Factors**ENVIRONMENTAL IMPACT ANALYSIS WORKSHEET**

Environment Resources	Impact Producing Factors (IPFs) Categories and Examples					
	Refer to recent GOM OCS Lease Sale EIS for a more complete list of IPFs					
	Emissions (air, noise, light, etc.)	Effluents (muds, cutting, other discharges to the water column or seafloor)	Physical disturbances to the seafloor (rig or anchor emplacements, etc.)	Wastes sent to shore for treatment or disposal	Accidents (e.g., oil spills, chemical spills, H ₂ S releases)	Discarded Trash & Debris
Site-specific at Offshore Location						
Designated topographic features		(1)	(1)		(1)	
Pinnacle Trend area live bottoms		(2)	(2)		(2)	
Eastern Gulf live bottoms		(3)	(3)		(3)	
Chemosynthetic communities			(4)			
Water quality		X	X		X	
Fisheries		X	X		X	
Marine Mammals	X(8)	X			X(8)	X
Sea Turtles	X(8)	X			X(8)	X
Air quality	X(9)					
Shipwreck sites (known or potential)			(7)			
Prehistoric archaeological sites			(7)			
Vicinity of Offshore Location						
Essential fish habitat		X	X		X(6)	
Marine and pelagic birds	X				X	X
Public health and safety					(5)	
Coastal and Onshore						
Beaches					X(6)	X
Wetlands					(6)	
Shore birds and coastal nesting birds					(6)	
Coastal wildlife refuges						
Wilderness areas						

Footnotes for Environmental Impact Analysis Matrix

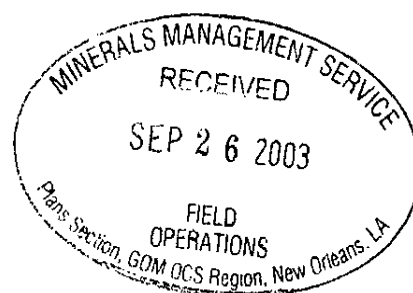
- 1) Activities that may affect a marine sanctuary or topographic feature. Specifically, if the well or platform site or any anchors will be on the seafloor within the:
 - o 4-mile zone of the Flower Garden Banks, or the 3-mile zone of Stetson Bank;
 - o 1000-m, 1-mile or 3-mile zone of any topographic feature (submarine bank) protected by the Topographic Features Stipulation attached to an OCS lease;
 - o Essential Fish Habitat (EFH) criteria of 500 ft. from any no-activity zone; or
 - o Proximity of any submarine bank (500 ft. buffer zone) with relief greater than 2 meters that is not protected by the Topographic Features Stipulation attached to an OCS lease.
- 2) Activities with any bottom disturbance within an OCS lease block protected through the Live Bottom (Pinnacle Trend) Stipulation attached to an OCS lease.
- 3) Activities within any Eastern Gulf OCS block where seafloor habitats are protected by the Live Bottom (Low-Relief) Stipulation attached to an OCS lease.
- 4) Activities on blocks designated by the MMS as being in water depths 400 meters or greater.
- 5) Exploration or production activities where H₂S concentrations greater than 500 ppm might be encountered.
- 6) All activities that could result in an accidental spill of produced liquid hydrocarbons or diesel fuel that you determine would impact these environmental resources. If the proposed action is located a sufficient distance from a resource that no impact would occur, the EIA can note that in a sentence or two.
- 7) All activities that involve seafloor disturbances, including anchor emplacements, in any OCS block designated by the MMS as having high-probability for the occurrence of shipwrecks or prehistoric sites, including such blocks that will be affected that are adjacent to the lease block in which your planned activity will occur. If the proposed activities are located a sufficient distance from a shipwreck or a prehistoric site that no impact would occur, the EIA can note that in a sentence or two.
- 8) All activities that you determine might have an adverse effect on endangered or threatened marine mammals or sea turtles or their critical habitats.
- 9) Production activities that involve transportation of produced fluids to shore using shuttle tankers or barges.

APPENDIX I
COASTAL MANAGEMENT CONSISTENCY INFORMATION

A certificate of Coastal Management Consistency for the State of Louisiana is enclosed as *Attachment I-1*.

APPENDIX I COASTAL MANAGEMENT CONSISTENCY INFORMATION

A certificate of Coastal Management Consistency is not required for the State of Louisiana.



PLAN INFORMATION FORM

GENERAL INFORMATION									
Type of OCS Plan:		Exploration Plan (EP)		X		Supplemental Development Operations Coordination Document (DOCD)			
Company Name:		Mission Resources Corp.				MMS Operator Number: 02819			
Address:		1331 Lamar Suite 1455 Houston, Texas 77010		Contact Person:		Cheryl Murphy			
				Phone Number:		(281) 578-3388			
				Email Address:		cheryl.murphy@jccteam.com			
Lease:	2110	Area:	Eugene Island	Block:	307	Project Name:		EI307	
Objective (s):		<input checked="" type="checkbox"/> Oil <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Sulphur <input type="checkbox"/> Salt		Onshore Base:		Intracoastal City, LA		Distance to Closest Land (Miles): 66	
Description of Proposed Activities (Mark all that apply)									
<input type="checkbox"/> Exploration drilling					<input checked="" type="checkbox"/> Development drilling				
<input checked="" type="checkbox"/> Well completion					<input type="checkbox"/> Installation of production platform				
<input type="checkbox"/> Well test flaring					<input type="checkbox"/> Installation of production facilities				
<input type="checkbox"/> Installation of well protection structure					<input type="checkbox"/> Installation of satellite structure				
<input type="checkbox"/> Installation of subsea wellheads and/or manifolds					<input checked="" type="checkbox"/> Installation of lease term pipelines				
<input type="checkbox"/> Temporary well abandonment					<input checked="" type="checkbox"/> Commence production				
<input type="checkbox"/> Other (specify and describe)									
Do you propose to use new or unusual technology to conduct your activities?								Yes	X No
Do you propose any facility that will serve as a host facility for deepwater subsea development?								Yes	X No
Do you propose any activities that may disturb an MMS-designated high-probability archaeological area?								Yes	X No
Tentative Schedule of Proposed Activities									
Proposed Activity				Start Date	End Date	No. of Days			
Drill & Complete Well No. B009				12/01/03	12/30/03	30			
Install Lease Pipeline				01/15/04	01/20/04	6			
Commence Production				01/21/04					
Description of Drilling Rig				Description of Production Platform					
<input checked="" type="checkbox"/> Jackup		<input type="checkbox"/> Drillship		<input type="checkbox"/> Caisson		<input type="checkbox"/> Tension leg platform			
<input type="checkbox"/> Gorilla Jackup		<input type="checkbox"/> Platform rig		<input type="checkbox"/> Well protector		<input type="checkbox"/> Compliant tower			
<input type="checkbox"/> Semisubmersible		<input type="checkbox"/> Submersible		<input type="checkbox"/> Fixed platform		<input type="checkbox"/> Guyed tower			
<input type="checkbox"/> DP Semisubmersible		<input type="checkbox"/> Other (Attach Description)		<input type="checkbox"/> Subsea manifold		<input type="checkbox"/> Floating production system			
<input type="checkbox"/> Drilling Rig Name (If Known):				<input type="checkbox"/> Spar		<input type="checkbox"/> Other (Attach description)			
Description of Lease Term Pipelines									
From (Facility/Area/Block)		To (Facility/Area/Block)		Diameter (inches)	Length (Feet)	Product			
Eugene Island Block 307, P/F "B"		Eugene Island Block 307, P/F "A"		6"	3200'	Oil			

**WELL INFORMATION FORM
PROPOSED WELL/STRUCTURE LOCATION**

WELL / STRUCTURE NAME	SURFACE LOCATION	BOTTOM-HOLE LOCATION (FOR WELLS)
Platform _ or Well <u>X</u> Name: B009	CALLS: 3606.14' F S L and 3770.92' F E L OF LEASE OCS-G 2110 , EUGENE ISLAND AREA, BLOCK 307	CALLS: F L and F L OF LEASE OCS-G , AREA, BLOCK
	X: 1,906,096.12'	X:
	Y: -132,461.53'	Y:
	LAT: 28° 18' 07.647" LONG: 91° 37' 30.098"	LAT: LONG:
	TVD (IN FEET): MD (IN FEET):	WATER DEPTH (IN FEET): 227'

AMENDMENT

UNITED STATES GOVERNMENT
MEMORANDUM

September 26, 2003


To: Public Information (MS 5034)
From: Plan Coordinator, FO, Plans Section (MS 5231)

Subject: Public Information copy of plan

Control # - S-06274
Type - Supplemental Development Operations Coordinations Document
Lease(s) - OCS-G02110 Block - 307 Eugene Island Area
Operator - Mission Resources Corporation
Description - Well B009
Rig Type - JACKUP

Attached is a copy of the subject plan.

It has been deemed submitted as of this date and is under review for approval.


Michelle Griffitt
Plan Coordinator

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
WELL/B009	G02110/EI/307	3606 FSL, 3771 FEL	G02110/EI/307

ISS SEP30'03pm12:43

NOTED - SCHEXNAILDRE

AMENDMENT

5. FACILITY TANKS, PRODUCTION VESSELS

All facility tanks of 25 barrels or more.

EUGENE ISLAND 307 "B"

Type of Storage Tank	Type of Facility	Tank Capacity (bbls)	Number of Tanks	Total Capacity (bbls)	Fluid Gravity (API)
Fuel Oil (Marine Diesel)	JACK-UP RIG	1150	4	4600	36.0
Production	EI 307 "B"	N/A	N/A	N/A	N/A