UNITED STATES GOVERNMENT
MEMORANDUM

August 6, 2004

To: Public Information (MS 5034)

From: Plan Coordinator, FO, Plans Section (MS 5231)

Subject: Public Information copy of plan

Control #	-	N-08151
Type	-	Initial Exploration Plan
Lease(s)	-	OCS-G18537 Block - 267 Atwater Valley Area OCS-G23027 Block - 268 Atwater Valley Area
Operator	-	Shell Offshore Inc.
Description	-	Wells A, B, C, D, and E
Rig Type	-	SEMISUBMERSIBLE

Attached is a copy of the subject plan.

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

Karen Dunlap
Plan Coordinator

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
WELL/A	G18537/AT/267	6848 FNL, 2504 FEL	G18537/AT/267
WELL/B	G18537/AT/267	3772 FNL, 1126 FEL	G18537/AT/267
WELL/C	G18537/AT/267	434 FNL, 521 FEL	G18537/AT/267
WELL/D	G23027/AT/268	4716 FNL, 909 FWL	G23027/AT/268
WELL/E	G18537/AT/267	2953 FNL, 2899 FEL	G18537/AT/267

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LOUISIANA
COASTAL ZONE MANAGEMENT
CONSISTENCY CERTIFICATION

INITIAL EXPLORATION PLAN
Type of Plan

Atwater Valley Block 267
Atwater Valley Block 268
Area and Blocks

OCS-G 18537
OCS-G 23037
Lease Numbers

The proposed activities described in detail in this Plan will comply with Louisiana's State and Local Coastal Resources Management Act of 1978, Coastal Resources Program, and Coastal Area Management Enforceable Policies.

We have considered all of Louisiana's Enforceable Policies in making this certification of consistency.

SHELL OFFSHORE INC. (SOI)
Operator

Sylvia A. Bellone
Certifying Official

7/23/04
Date

N-8151

OCS-G 18537, Atwater Valley Block 267
OCS-G 23027, Atwater Valley Block 268
Offshore Louisiana

WASTES TO BE DISCHARGED **APPENDIX E**

Type of Waste	Approximate Composition	Amount to be Discharged	Maximum Discharge Rate	Treatment Method	Treatment and/or Storage Discharge Location and Discharge Method
Drilling Fluids – WBM	Water-based drilling muds	30,000 bbls/well	1500 bbls/hour	Minimization – Enhanced Solids Control Process	AT 267, 268 Overboard and seafloor discharge *prior to marine riser* installation.
Drill Cuttings – WBM	Formation cuttings containing water-based mud	1700 bbls/well	380 bbls/day	Enhanced Solids Control Process	AT 267, 268 Cuttings Chute and Discharged at mudline prior to riser installation
Drill Cuttings – SBM	Formation cuttings containing synthetic-based mud	6,700 bbls/well	95 bbls/day	Cuttings Dryer treatment to average ROC of 2.4%	AT 267, 268 Cutting chute. Includes about 300 bbls of SBM retained on cuttings
Excess Cement	Portland cement including additives and washdown water	240 bbls/well	NA	NA	AT 267, 268 Discharged at seafloor
Produced Water	NA	NA	NA	NA	NA
Sanitary Waste	Human body waste from toilets	25 gal/day/person	3,000 gal/day	USCG-approved MSD with chlorination	AT 267, 268 Starboard Caisson
Domestic Waste	Discharge from galley, showers, sinks	75 gal/day/person	9,000 gal/day	Food grinder	AT 267, 268 Starboard Caisson
Deck Drainage	Platform washings and rainwater	Dependent on rainfall	10 bbls/hour (Maximum separator discharge)	Oily water is treated in Oily Water Separator	AT 267, 268 Starboard Caisson
Well treatment, workover or completion fluids	NA	NA	NA	NA	NA
Uncontaminated Seawater	Seawater without the addition of chemicals	130,594 bpd cooling 130,594 bpd firewater bypass	N/A	N/A	AT 267, 268 Starboard Caisson
Uncontaminated Freshwater	Freshwater without the addition of chemicals	N/A	NA	NA	AT 267, 268 Starboard Caisson
Desalination Unit Water	Concentrated brine from the process of producing freshwater from seawater	400 gal/day of water production	N/A	N/A	AT 267, 268 Cuttings Chute
Uncontaminated Ballast Water	Seawater used to maintain proper draft	413,610 bbls	4,308 bbls/hour	N/A	AT 267, 268 Starboard Caisson
Blowout Preventer Fluid	Stackmagic 200/0/5% glycol based on 2% mixture with potable water	80 bbls	40 gals/day	NA	AT 267, 268 Discharged at seafloor

Initial Exploration Plan
OCS-G 18537, Atwater Valley Block 267
OCS-G 23027, Atwater Valley Block 268
Offshore Louisiana

WASTES TO BE DISPOSED OF

Type of Waste	Approximate Composition	Projected Amount	Rate per Day	Name/Location of Disposal Facility	Treatment and/or Storage, Transport and disposal Method
Drilling Fluids SBM	Synthetic-based drilling muds	8000 bbls* max mud volume.	66.6 bbls/day	Enhanced Solids Control Process to recover mud from cuttings.	Re-used. 300 bbls SBM retained on cuttings as reported under Drill Cuttings – SBM above.
Drilling Fluids Oil Based	NA	NA	NA	NA	NA
Oil Contaminated produced sand	NA	N/A	NA	NA	NA
Waste Oil	NA	NA	NA	NA	NA
Produced Water	N/A	N/A	NA	NA	NA
Trash and Debris	Plastic, Paper, Aluminum, Glass, and other refuse	120 cubic meters	1 cubic meter	Sorting and recycling	Recyclables to ARC, New Iberia, LA Non- recycleables to landfill at Avondale, LA Transported in big bags.
NORM	NA	NA	NA	N/A	NA
Well Treatment, Completion, or Workover Fluids	N/A	N/A	NA	N/A	NA
Chemical Product Wastes	NA	NA	NA	NA	NA

*Maximum synthetic base mud volume is 8000 bbls for the well including hole volume, marine riser and surface tanks; no whole synthetic based mud will be discharged, only what is retained on the cuttings

Initial Exploration Plan
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OCS-G 23027, Atwater Valley Block 268
Offshore Louisiana

INDEX OF ATTACHMENTS

APPENDIX	DESCRIPTION
A-1	Project Description, Location & Drilling Unit Information
A-2	Surface Location and Bathymetry Map
B-1	General Information (Contact, Prospect Name, New or Unusual Technology, Bond Information, Onshore Base & Support Vessels, Lease Stipulations)
B-2	Vicinity Map
C-1	Enhanced Seafloor Renderings and Anchor Radius Plat
C-2*	Geological Description, H_2S Determination
C-3*	Geologic Structure Maps
C-4*	Geologic Cross Sections
C-5	Shallow Hazards Report
C-6*	Shallow Hazards Site Specific Comments
C-7*	Time Migration Seismic Lines (Original only)
C-8*	Stratigraphic Column with Time vs Depth Table
C-9*	Bottom Hole Locations Plat
C-10*	OCS Plan Information Form (Appendix J), Confidential
D-1	Chemosynthetic Information, ROV Survey Plan, & Archeological Information
E-1	Discharge Information
E-2	Waste Information
F-1	Oil Spill Information
G-1	Projected Air Emissions
I-1	Coastal Zone Management Consistency Information
H-1	Environmental Impact Analysis
~~I-1, I-2~~, I-3	Coastal Zone Management Consistency Information
J	OCS Plan Information Form, Public Information

*Confidential Information that has been omitted from the Public Information copies of the plan

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The proposed activities described in detail in this Plan will comply with Louisiana's State and Local Coastal Resources Management Act of 1978, Coastal Resources Program, and Coastal Area Management Enforceable Policies.

SHELL OFFSHORE INC. (SOI)
Operator

Sylvia A Bellone

Sylvia A. Bellone
Certifying Official

7/23/04

Date

Initial Exploration Plan
OCS-G 18537, Atwater Valley Block 267
OCS-G 23027, Atwater Valley Block 268
Offshore Louisiana

APPENDIX F

OIL SPILL AND CHEMICAL INFORMATION

Regional OSRP Information:

A. Shell Offshore Companies Oil Spill Response Plan (OSRP) was approved by the MMS on November 26, 2001. A biannual update was submitted to the MMS for the OSRP on May 30, 2003 and a revision submitted December 4, 2003. These updates were approved by the MMS January 20, 2004. Activities proposed in this plan will be covered by this OSRP. Copies of the OSRP are available for review in the Shell Offshore Inc.'s Regulatory Affairs Library in New Orleans and at the MMS Field Operations, Gulf of Mexico OCS Region, office.

B. OSRO Information:

The names of SOI's OSROs are: O'Brein (OOPS), Marine Spill Response Corporation (MSRC), and National Response Corporation (NRC).

C. Worst case scenario comparison:

Category	Regional OSRP	EP
Type of Activity[1]	Exploration Drilling	SS Drill Rig
Facility Location (area/block)	MC 762	AT 267, 268
Facility Designation[2]	A Platform	NA
Distance to Nearest Shoreline (miles)	50	87
Volume[3]		
Storage tanks (total)	NA	NA
Flowlines (on facility)	NA	NA
Lease term pipelines	NA	NA
Uncontrolled blowout (volume per day)	80,000 BOPD	70,000 BOPD
Total Volume	80,000	70,000
Type of Oil(s) - (crude oil, condensate, diesel)	Crude oil	Crude Oil
API Gravity(s)[4]	28°	25°

Footnotes:

1. Types of activities include pipeline, platform, caisson, subsea completion or manifold, and mobile drilling rig.
2. E.g., Well No. 2, Platform JA, Pipeline Segment No. 6373.
3. Your regional OSRP worst-case scenario volume must be taken from the appropriate section of your regional OSRP. For EP's, the worst-case scenario volume must be determined by using the daily worst-case discharge volume determined using the guidance at 30 CFR 254.47(b). For DOCD's, the daily worst-case discharge volume must be determined by using the guidance at 30 CFR 254.47 (a) and/or (b), as appropriate.
4. Provide API gravity of all oils given under "Type of Oil(s)" above. Estimate for EP's.

Since SOI has the capability to respond to the worst-case spill scenario included in its approved regional OSRP approved on November 26, 2001, and since the worst-case scenario determined for this plan does not replace the worst case scenario in our approved regional OSRP, I hereby certify that SOI has the capability to respond, the maximum extent practicable, to a worst-case discharge, or a substantial threat of such a discharge, resulting from the activities proposed in our plan.

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July 23, 2004

Mr. Don Howard
Regional Supervisor
Office of Field Operations
Minerals Management Service
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

Dear Mr. Howard

SUBJECT: Initial Exploration Plan
OCS-G 18537, Atwater Valley Block 267
OCS-G 23027, Atwater Valley Block 268
Offshore Louisiana

In compliance with 30 CFR 250.204 and NTL 2003-G17 giving Exploration Plan guidelines, Shell Offshore Inc. (SOI) requests your approval of this Initial Plan of Exploration to drill Well Locations A, B, C, D & E. If the Transocean Nautilus Rig is available drilling could commence as early as ~~August 6,~~ Sept 2004.

This Plan consists of a series of attachments, as detailed in Attachment 1, describing our intended operations. The attachments we desire to be exempted from disclosure under the Freedom of Information Act are marked "Confidential" and excluded from the Public Information Copies of this submittal. Enclosed are the original plus nine copies with five marked Public Information.

Should you require additional information, please contact me as indicated above.

Kind regards

Sylvia A. Bellone

PUBLIC INFORMATION

Initial Exploration Plan
OCS-G 18537, Atwater Valley Block 267
OCS-G 23027, Atwater Valley Block 268
Offshore Louisiana

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Initial Exploration Plan
OCS-G 18537, Atwater Valley Block 267
OCS-G 23027, Atwater Valley Block 268
Offshore Louisiana

APPENDIX A
CONTENTS OF PLAN

DESCRIPTION, OBJECTIVES, AND SCHEDULE

Plans are to drill one to five exploration wells each taking approximately 120 days to drill. Upon completion of drilling the subsea well(s), they will be either temporarily or permanently abandoned in accordance with 30 CFR, Subpart G. If further exploration, development, or production activities re to be undertaken, appropriate plans will be submitted.

See Appendix J for schedule and Appendix C-2 for geological objectives (confidential copies).

LOCATION
See Appendix J for proposed surface locations. See Appendix C-10 for proposed bottom hole locations and total depths (confidential copies).

DRILLING UNIT
The Semi-submersible Transocean Nautilus we plan to use will comply with all of the regulations of the American Bureau of Shipping (ABS), International Maritime Organization (IMO) and the United States Coast Guard (USCG).

Pollution Prevention Equipment:

See detailed description in Appendix F-3 & F-4

Rig Safety Features:

All drilling operations will be conducted under the provisions of 30 CFR, Part 250, Subpart D, and other applicable regulations and notices, including those regarding the avoidance of potential drilling hazards and safety and pollution prevention control.

Inflow Detection and Well control

Wellbore and formation pressures are controlled by two methods described as primary, and secondary, which will be described in this text. Primary control is the proper use of the hydrostatic head of fluid to overbalance the formation pressure and prevent entry of foreign fluids into the wellbore. A "kick" is defined as an entry of formation fluid into the well bore which is sufficient to cause the well to flow. When a well kicks it means that primary control has been lost, at least temporarily and then secondary measures are the required. The primary methods for detecting an inflow to the wellbore are a gain in pit volume while drilling, flow from the annulus when the pumps are shut off and readings from the downhole MWD (measure while drilling) tool.

Once a well inflow has been determined, secondary well control operations are begun to regain primary control of the well. The steps that are taken in secondary control are:

1. Shut the well in by closing the BOP's and reading the increase in pressure on the drill string.
2. Determine the increase in mud weight that is required in order to offset the increase in bottom hole pressure and weight up the mud system to this mud weight.
3. Increase the bottom hole pressure by maintaining enough backpressure at the choke while circulating to prevent further fluid entry.
4. Circulate the foreign fluid out of the hole while maintaining choke pressure.
5. Circulate the weighted up mud into the well so that choking the well during circulation can be eliminated and primary control is regained.

Once primary control is regained the BOP's are opened, the well is checked for flow, and given no flow from the annulus drilling operations are resumed.

Loss of Circulation

Once loss of circulation due to annulus equivalent mud weight exceeding the fracture pressure of the formations drilled occurs, several methods of regaining returns can be considered. Initially, the annulus should be filled with fluid and the pipe kept moving to prevent differential sticking. Procedures that should be evaluated in view of the exiting loss of circulation based on well conditions and subsurface information are as follows:

1. Reduce the mud weight (if practicable), circulating rate or mud viscosity.
2. Mix a volume of mud containing a high concentration of various sized lost circulation materials design to plug fractures and flow paths and spot this fluid to seal the loss zones.
3. Mix a special lost circulation plug such as Diaseal-M and spot this plugging material to seal the loss zone.
4. Mix and pump cement down the drill string and spot the cement across the loss zone and then drill out the open hole section again and watch for loss circulation.
5.

Seepage Loss

Seepage losses occur when the formations drilled have porosities and permabilies greater than the bridging capability of the solids in the drilling fluid (mud) system. This situation is usually detected by a slow decrease in pit volume while drilling in open hole section. The method used to control this situation is as follows:

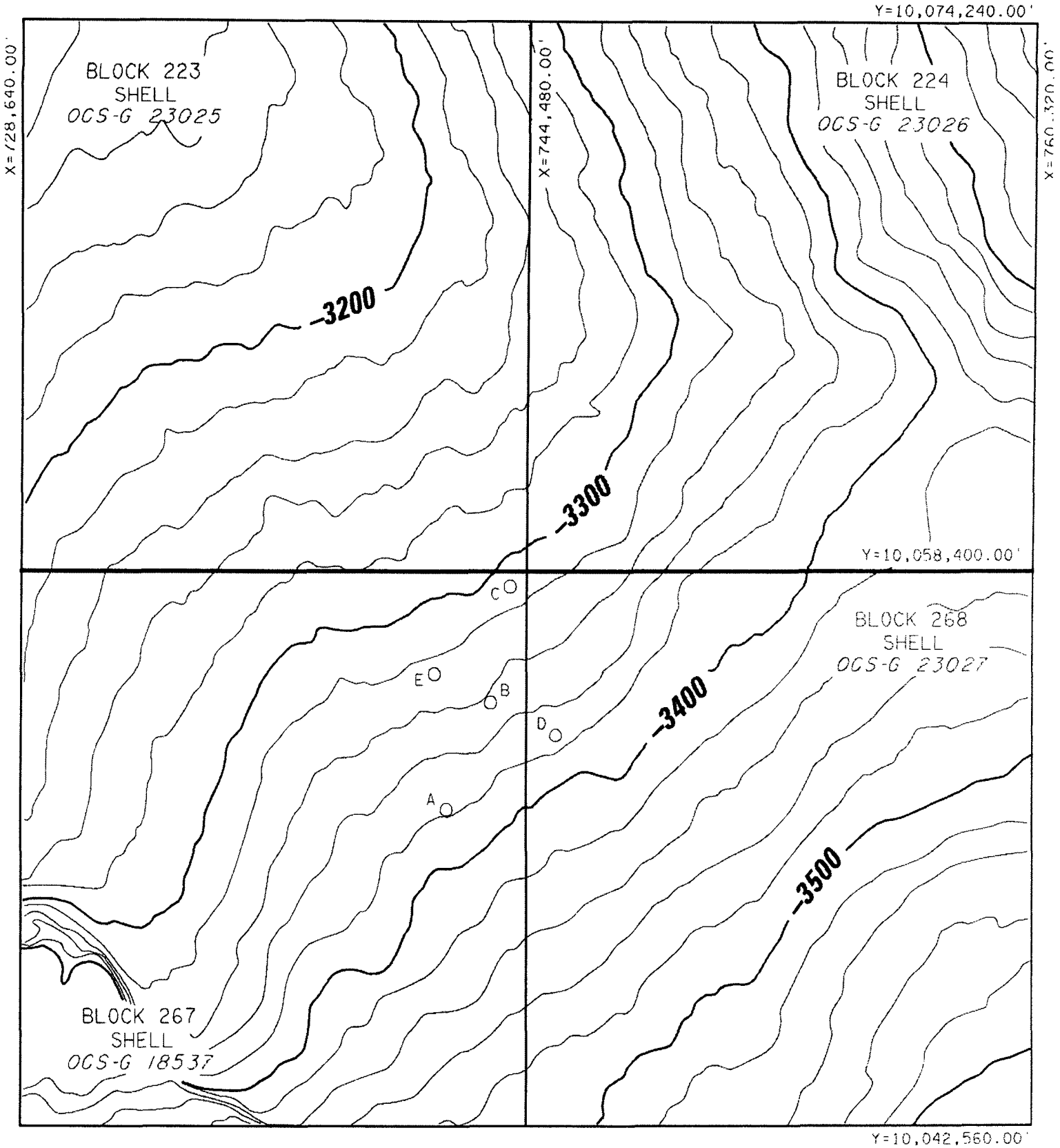
1. Lost circulation materials that are sized smaller than those used to control lost circulation are added to the mud system.
2. The well is circulated and the pit volume is monitored for seepage loss. If seepage loss continues a higher concentration of loss circulation material is added to the system including larger sized materials.
3. Once the seepage is controlled drill operations are continued.

Casing Design

For some years the maximum burst pressure to be used in the design of casing strings has been taken as one third the bottom hole hydrostatic pressure anticipated for the next casing string. This is assumed to be the maximum pressure reached as the top of a kick "bubble" is circulated out of a well. Calculations show that in almost all situations that this would require a kick of over 100 barrels and a differential into the well of +500 psi and therefore the design is conservative. The pipe burst safety factor used in the casing design is 1.25 including "triaxial loading" conditions of internal pressure and axial load.

In designing the casing string for collapse the internal pressure profile to be used in the design calculations is full evacuation to 1/3 depth of the next casing point (max. 5000 ft. evacuation) and mud gradient from this point to the casing shoe. The collapse design safety factor used in the selection of the casing is 1.0.

The casing design for a given casing string must also be designed to accommodate axial loads as well as internal and external pressures. An axial load case of the weight of the casing string hanging from the wellhead in a full column of drilling fluid without applied pressure with a factor of safety of 1.5 is used.



NOTE: COORDINATES ARE BASED ON THE UNIVERSAL TRANSVERSE MERCATOR GRID SYSTEM. ZONE 16. NAD27.

O PROPOSED SURFACE LOCATIONS

A 2,504' FEL & 6,848' FNL OF BLK. 267
X= 741,976.00' Y=10,051,552.00'

B 1,126' FEL & 3,772' FNL OF BLK. 267
X= 743,354.00' Y=10,054,628.00'

C 521' FEL & 434' FNL OF BLK. 267
X= 743,959.00' Y=10,057,966.00'

D 909' FWL & 4,716' FNL OF BLK. 268
X= 745,389.00' Y=10,053,684.00'

E 2,899' FEL & 2,953' FNL OF BLK. 267
X= 741,581.00' Y=10,055,447.00'

ATTACHMENT A2

SHELL

PROPOSED SURFACE LOCATIONS & BATHYMETRY

EXPLORATION PLAN

SHELL, OSC-G 23025, ATWATER BLK. 223
SHELL, OSC-G 23026, ATWATER BLK. 224
SHELL, OSC-G 18537, ATWATER BLK. 267
SHELL, OSC-G 23027, ATWATER BLK. 268

ATWATER AREA

OFFSHORE LOUISIANA

0 4000'

Initial Exploration Plan
OCS-G 18537, Atwater Valley Block 267
OCS-G 23027, Atwater Valley Block 268
Offshore Louisiana

APPENDIX B
GENERAL INFORMATION

CONTACT

Sylvia Bellone,
504-728-7215
Sylvia.bellone@shell.com
504-728- 0778 Fax

PROSPECT NAME

Not Applicable

NEW OR UNUSUAL TECHNOLOGY

No new or unusual technology is proposed in this operation.

BONDING INFORMATION

SOI's area wide bond coverage is $3,000,000 and complies with the Letter to Lessees and Operators dated November 5, 1993. (30 CFR Part 256)

ONSHORE BASE AND SUPPORT VESSELS

The onshore support base for air transportation will be the existing PHI Boothville Terminal located at 38963 Highway 23, Boothville, LA. The onshore support base for water traffic will be Fourchon Terminal operated by Shell and located on Bayou LaFourche, south of Leesville, LA approximately 3 miles from the Gulf of Mexico. Distances to the proposed location are shown on Appendix B-2.

No expansion of the terminals will be required for the planned activity.

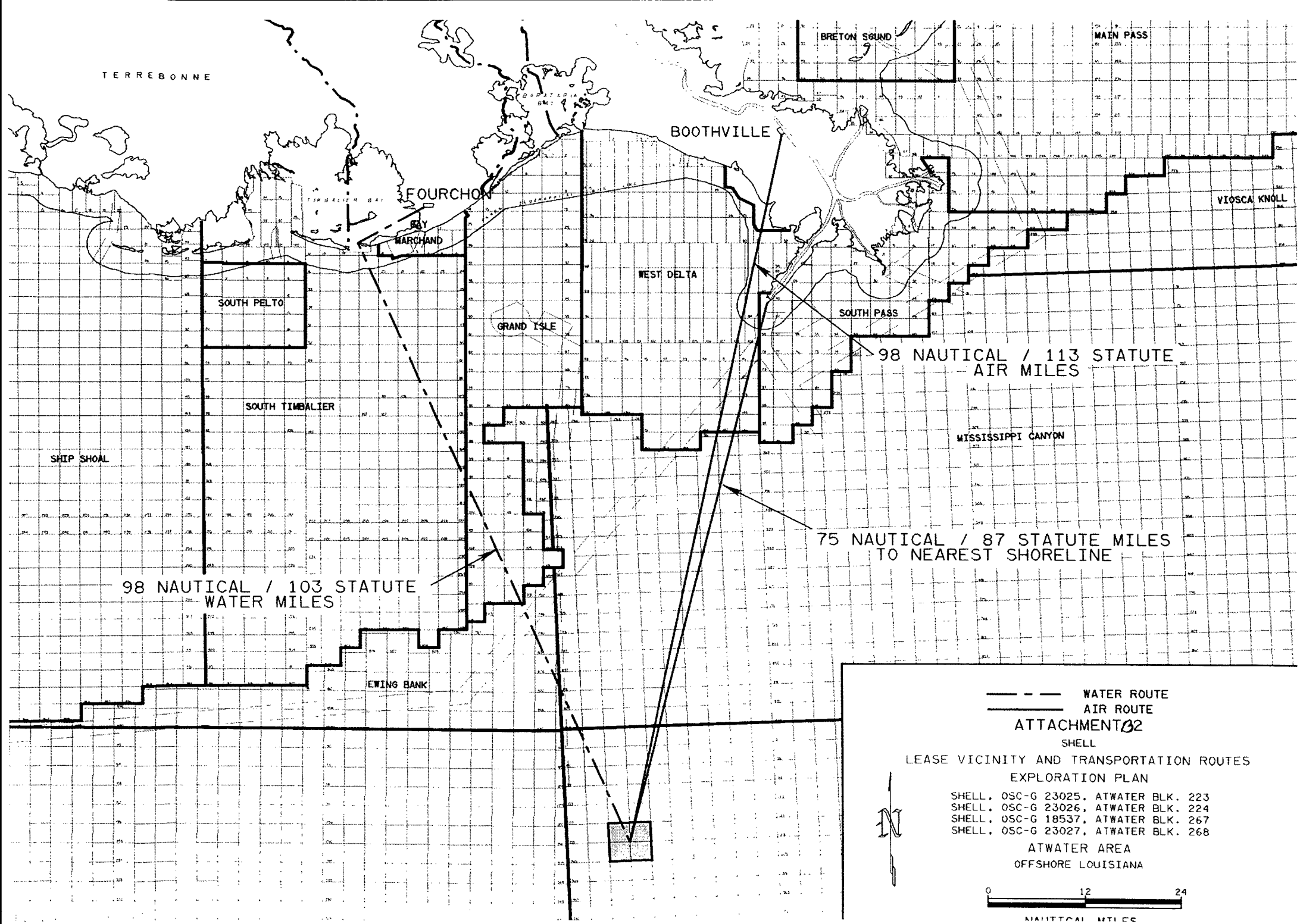
SUPPORT VESSELS

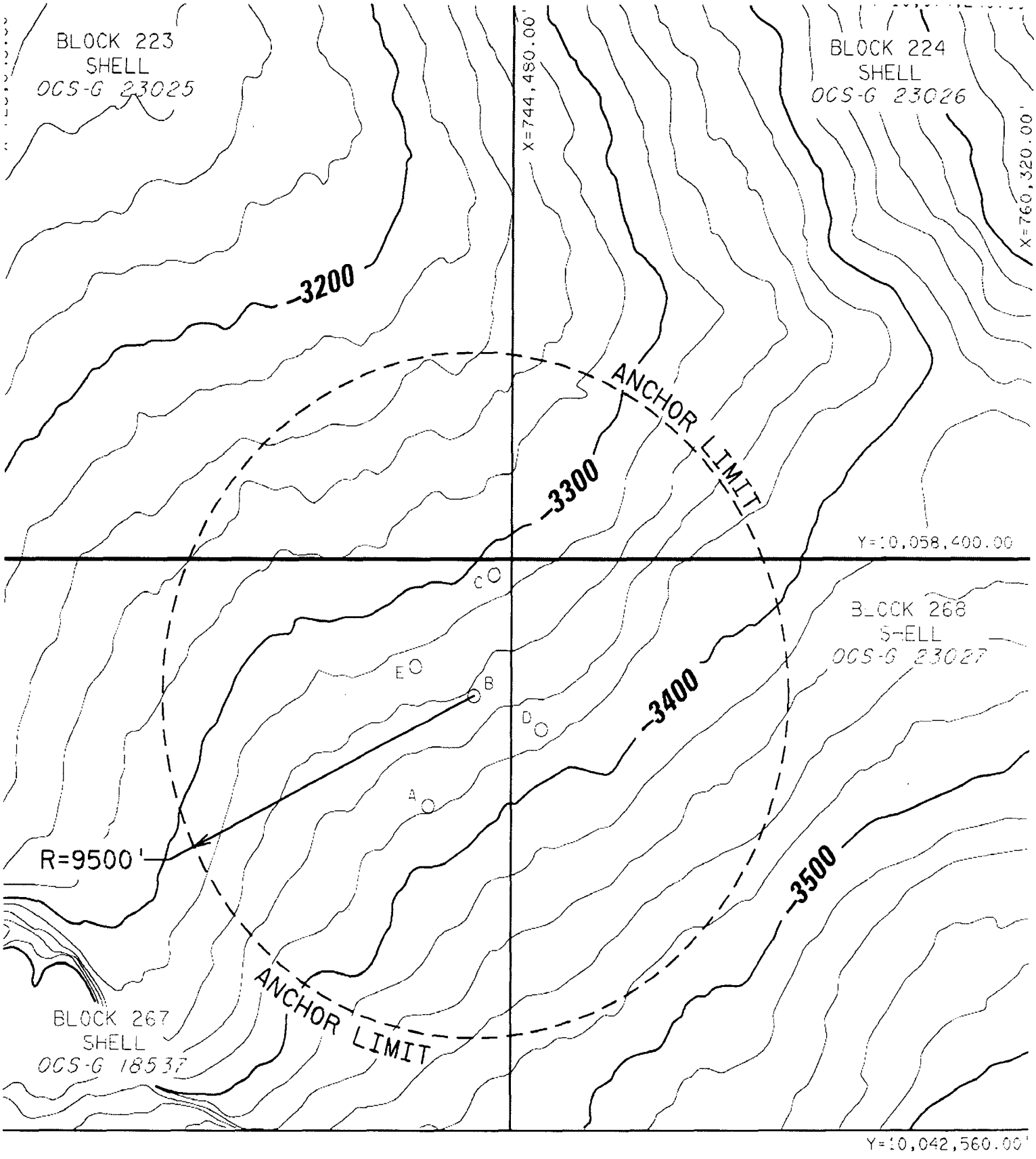
ITEM	SIZE OR MODEL	USE	TRIPS PER WEEK
Boats	240 ±	Crew/Work	0/7
Helicopter	Bell 214 or 412 Boelkow 105 Sikorsky S-76	Crew Change and Misc.	8

LEASE STIPULATIONS

Leases OCS-G 18537 and OCS-G 23027 were issued to Shell Offshore Inc. for a period of ten years.

The leases are not part of Biological Sensitive, known Chemosynthetic, Shipping Fairway, or Archeological Areas, or Military Warning Area.


TERREBONNE
BRETON SOUND
MAIN PASS
BOOTHVILLE
FOURCHON
BAY MARCHAND
VIOSCA KNOLL
WEST DELTA
SOUTH PELTO
GRAND ISLE
SOUTH PASS
98 NAUTICAL / 113 STATUTE AIR MILES
SOUTH TIMBALIER
MISSISSIPPI CANYON
SHIP SHOAL
75 NAUTICAL / 87 STATUTE MILES TO NEAREST SHORELINE
98 NAUTICAL / 103 STATUTE WATER MILES
EWING BANK
WATER ROUTE
AIR ROUTE
ATTACHMENT 2
SHELL
LEASE VICINITY AND TRANSPORTATION ROUTES
EXPLORATION PLAN
SHELL, OSC-G 23025, ATWATER BLK. 223
SHELL, OSC-G 23026, ATWATER BLK. 224
SHELL, OSC-G 18537, ATWATER BLK. 267
SHELL, OSC-G 23027, ATWATER BLK. 268
ATWATER AREA
OFFSHORE LOUISIANA
N
0
12
24
NAUTICAL MILES



NOTE: COORDINATES ARE BASED ON THE UNIVERSAL TRANSVERSE MERCATOR GRID SYSTEM. ZONE 16. NAD27.

ATTACHMENT C-1

SHELL

ANCHOR SITE LOCATIONS

EXPLORATION PLAN

SHELL, OSC-G 23025, ATWATER BLK. 223
SHELL, OSC-G 23026, ATWATER BLK. 224
SHELL, OSC-G 18537, ATWATER BLK. 267
SHELL, OSC-G 23027, ATWATER BLK. 268

ATWATER AREA

OFFSHORE LOUISIANA

0 4000'

Initial Exploration Plan
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Offshore Louisiana

APPENDIX C

Geological Geophysical, and H2S Information

Structure Contour Maps

Omitted from Public Information

Interpreted 2D or 3-D seismic lines

See Appendix C-1

Geological Structure Cross-Sections

Omitted from Public Information

Shallow Hazards Report

Omitted from Public Information

Shallow Hazards Assessment

Fugro Geoservices, Inc. prepared a Geologic and Stratigraphic Assessment Report (Number 2404-2041) for Shell on July 16, 2004. The report covers blocks 223, 224, 267, and 268 in Atwater Valley of the Gulf of Mexico.

Shell seeks MMS approval to drill Proposed Locations A, B, C, D and E in the above blocks using the Nautilus drilling rig.

The British Petroleum Well # 1 in AT Block 222 is currently the only well in the vicinity of Proposed Locations A, B, C, D, and E. There are no other known manmade features in the vicinity.

Based on a high-resolution geophysical survey that consists of reprocessed 3-D seismic, Enhanced Surface Renderings, and Enhanced Surface Renderings with amplitudes applied, Proposed Locations A, B, C, D, and E appear suitable for the planned activity.

High-Resolution Seismic Lines

Omitted from Public Information

Stratigraphic Column with Time vs Depth Tables

Omitted from Public Information

Description of Geological Objectives

Omitted from Public Information

Hydrogen Sulfide Determination

Based on 30 CFR 250.67 (c), SOI requests that the Regional Supervisor, Field Operations, determine the zones in the proposed drilling operations in this plan are classified as an area where the absence of H_2S has been confirmed.

PUBLIC INFORMATION

Initial Exploration Plan
OCS-G 18537, Atwater Valley Block 267
OCS-G 23027, Atwater Valley Block 268
Offshore Louisiana

APPENDIX D

CHEMOSYNTHETIC INFORMATION

History

Fugro Geoservices, Inc. prepared a Geologic and Stratigraphic Assessment Report (Number 2404-2041) for Shell on July 16, 2004. The report covers blocks 223, 224, 267, and 268 in Atwater Valley of the Gulf of Mexico.

Shell seeks MMS approval to use the coordinates of Proposed Location B as its radius center to drill Proposed Locations A, B, C, D and E in the above blocks using the Nautilus drilling rig. From Proposed Location B, a radius of 9,500 feet has been drawn. This radius would allow Shell to drill from any of these five locations.

The British Petroleum Well # 1 in AT Block 222 is currently the only well in the vicinity of Proposed Locations A, B, C, D, and E. There are no other known manmade features in the vicinity.

Chemosynthetic Community Statement

Per MMS NTL No. 2000-G20, Attachment B, Page 2:

ASSOCIATED ANCHORS – NO ANCHOR DISTURBANCES WITHIN 500 FEET OF CHEMOSYNTHETIC COMMUNITIES

Proposed Locations A, B, C, D, and E and the associated anchor pattern:
Features or areas that could support high-density chemosynthetic communities are **not** located within 1500 feet of each proposed muds and cuttings discharge.

Features or areas that could support high-density chemosynthetic communities are not located within 500 feet of any seafloor disturbances resulting from our use of anchors (including those caused by anchors, anchor chains, and wire ropes).

Regional Overview

The prospect lies 110 statute miles south-southwest of Venice, Louisiana in the western portion of Atwater Valley. Blocks 223, 224, 267, and 268 lie in an area of south-southeast gently sloping, smooth seafloor with subtle lineations, less than 10 feet deep, believed to be caused by wave action as well as seafloor expression of shallow buried slump headscarps and mass transport complex deposits. The well is about 9 miles north-northwest of the Sigsbee

Escarpment, just northwest of the Upper Mississippi Fan, and 23 miles southwest of Mississippi Canyon proper. There are localized areas of seafloor faulting and fluid expulsion outside the area of drilling interest.

Water depth in the study area ranges from 3,046 at the western edge of AT 222 to 3,933 feet at the eastern edge in AT 313. Slopes range from 1 to 2 degrees over most of the area except in the area of fluid expulsion mounds where the slope ranges from 10 to 20 degrees. The area is open to the upper continental slope and shelf, and thus served as a sediment transport corridor, 100 feet BML.

Well and Anchor Pattern Information

Radius Center for Proposed Locations A, B, C, D, and E:

X = 743,354	3,772' FNL
Y = 10,054,628	1,126' FEL

Following are the individual locations' proposed coordinates:

Atwater Valley 267, Proposed Location A:

X = 741,976	6,848' FNL
Y = 10,051,552	2,504' FEL

Location A is positioned in a water depth of 3,377 feet with 0.8 degrees of southeast dipping slope. The seafloor is generally smooth and featureless except the seafloor expression of lineations. The nearest lineation axis is 1,150 feet southwest of Proposed Location A.

Atwater Valley 267, Proposed Location B:

X = 743,354	3,772' FNL
Y = 10,054,628	1,126' FEL

Location B is positioned in a water depth of 3,345 feet with 0.9 degrees of southeast dipping slope. The seafloor is generally smooth and featureless except the seafloor expression of lineations. The nearest lineation axis is 3,750 feet southwest of Proposed Location B.

Atwater Valley 267, Proposed Location C:

X = 743,959	434' FNL
Y = 10,057,966	521' FEL

Location C is positioned in a water depth of 3,310 feet with 0.8 degrees of southeast dipping slope. The seafloor is generally smooth and featureless except the seafloor expression of lineations. The nearest lineation axis is 6,000 feet southwest of Proposed Location C.

Atwater Valley 268, Proposed Location D:

X = 745,389	4,716' FNL
Y = 10,053,684	909' FWL

Location D is positioned in a water depth of 3,371 feet with 1.0 degrees of southeast dipping slope. The seafloor is generally smooth and featureless except the seafloor expression of lineations. The nearest lineation axis is 3,200 feet south of Proposed Location D.

Atwater Valley 267, Proposed Location E:

X = 741,581	2,953' FNL
Y = 10,055,447	2,899' FEL

Location E is positioned in a water depth of 3,328 feet with 0.8 degrees of southeast dipping slope. The seafloor is generally smooth and featureless except the seafloor expression of lineations. The nearest lineation axis is 2,600 feet southwest of Proposed Location E.

Shell has examined the data covering the requested 9500-foot radius. There are no faults, amplitudes, or fluid expulsion features in the vicinity of the radius for Proposed Locations A, B, C, D, and E.

General Comments

Currently, there are no pipelines in the vicinity of Proposed Locations, A, B, C, and E in AT Block 267 or Location D in AT Block 268. The wells will not be in the vicinity of any chemosynthetic communities.

Based on a high-resolution geophysical survey consisting of frequency enhanced 3-D seismic, Enhanced Surface Renderings, and Enhanced Surface Renderings with Amplitudes applied, Atwater Valley 267 and 268, Proposed Locations A, B, C, D, and E and their associated anchors and the requested 9500 foot radius will not disturb any chemosynthetic communities and is suitable for the proposed drilling activity.

Marc P. Deshowitz
Staff Geologist
July 21, 2004

Vernessa J. Bradford
Shallow Hazards Interpreter
July 22, 2004

ROV SURVEY PLAN

In accordance with the provisions of NTL No. 2003-G03, Remotely Operated Vehicle Surveys in Deepwater, the following surveys will be conducted at the site of AT 267, 268:

Survey #1 will be conducted using the Rig based ROV equipped with video imaging capabilities prior to commencing operations on the well. The survey pattern will consist of six transects centered on the existing well with tracks extending 100 meters away from the well on bearings of 30°, 90°, 150°, 210°, 270°, and 330°. The seafloor will be videotaped continuously along each track and close-up footage recorded of any animals or features as per NTL No. 2003-G03. An identical survey will be conducted following drilling operations but prior to moving the rig off location. During both surveys, all biological and physical observations will be documented in accordance with NTL No. 2003-G03 using Form MMS-141. Complete documentation, including videotapes, of both surveys will be submitted to the GOMR within 60 days of the final survey.

ARCHEOLOGICAL INFORMATION

AT Blocks 267 & 268 are not identified as having a high probability of archeological features.

APPENDIX E

WASTES TO BE DISCHARGED

Type of Waste	Composition	Projected Amount	Discharge Rate	Treatment Method	Comments
Drilling Fluids – WBM	Water-based drilling muds	30,000 bbls/well	1500 bbls/hour	Minimization – Enhanced Solids Control Process	Includes seafloor discharge prior to marine riser installation.
Drill Cuttings – WBM	Formation cuttings containing water-based mud	1700 bbls/well	380 bbls/day	Enhanced Solids Control Process	Discharged at mudline riserless
Drill Cuttings – SBM	Formation cuttings containing synthetic-based mud	9,257 bbls/well	87 bbls/day	Cuttings Dryer treatment to average ROC of 2.4%	Includes about 60 bbls of SBM retained on cuttings
Excess Cement	Portland cement including additives and washdown water	225 bbls/well	NA	NA	Discharged at seafloor
Produced Water	NA	NA	NA	NA	
Sanitary Waste	Human body waste from toilets	25 gal/day/person	3,750gal/day	USCG-approved MSD with chlorination	
Domestic Waste	Discharge from galley, showers, sinks	75 gal/day/person	11,250 gal/day	Food grinder	
Deck Drainage	Platform washings and rainwater	Dependent on rainfall	10 bbls/hour (Maximum separator discharge)	Oily water is treated in Oily Water Separator	
Well treatment, workover or completion fluids	NA	NA	NA	NA	
Uncontaminated Seawater	Seawater without the addition of chemicals	130,594 bbls/day cooling 130,594 bbls/day firewater bypass	N/A	N/A	
Uncontaminated Freshwater	Freshwater without the addition of chemicals	N/A	NA	NA	
Desalination Unit Water	Concentrated brine from the process of producing freshwater from seawater	400 gal/day of water production	N/A	N/A	
Uncontaminated Ballast Water	Seawater used to maintain proper draft	413,610 bbls	4,308 bbls/hour	N/A	
Blowout Preventer Fluid	Stackmagic 200/0/5% glycol based on 2% mixture with potable water	80 bbls	40 gals/day	NA	Discharged at seafloor

WASTES TO BE DISPOSED OF

Type of Waste	Composition	Projected Amount	Treatment Method	Comments
Drilling Fluids SBM	Synthetic-based drilling muds	8,000 bbls/well*	N/A	Recycled
Drilling Fluids Oil Based	NA	NA	NA	
Oil Contaminated produced sand	NA	N/A	NA	
Waste Oil	NA	NA	NA	
Produced Water	N/A	N/A		
Trash and Debris	Plastic, Paper, Aluminum, Glass, Food, and other refuse	120 cubic meters	Sorting and recycling	Disposal in Avondale, LA
NORM	NA	NA	N/A	
Well Treatment, Completion, or Workover Fluids	N/A	N/A	N/A	
Chemical Product Wastes	NA	NA	NA	

*Based on total synthetic base mud volume for riser and surface tanks; no whole synthetic based mud will be discharged, only what is retained on the cuttings

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APPENDIX F

OIL SPILL AND CHEMICAL INFORMATION

Regional OSRP Information:

A. Shell Offshore Companies Oil Spill Response Plan (OSRP) was approved by the MMS on November 26, 2001. A biannual update was submitted to the MMS for the OSRP on May 30, 2003 and an update submitted December 4, 2003. These updates were approved by the MMS January 20, 2004. Activities proposed in this plan will be covered by this OSRP. Copies of the OSRP are available for review in the Shell Offshore Inc.'s Regulatory Affairs Library in New Orleans and at the MMS Field Operations, Gulf of Mexico OCS Region, office.

B. OSRO Information:

The names of SOI's OSROs are: O'Brein (OOPS), Marine Spill Response Corporation (MSRC), and National Response Corporation (NRC).

C. Worst case scenario comparison:

Category	Regional OSRP	EP
Type of Activity[1]	Platform (TLP)	SS Drill Rig
Facility Location (area/block)	MC 809	AT 267, 268
Facility Designation[2]	A Platform	NA
Distance to Nearest Shoreline (miles)	56	87
Volume[3]		
Storage tanks (total)	NA	NA
Flowlines (on facility)	NA	NA
Lease term pipelines	NA	NA
Uncontrolled blowout (volume per day)	116,000 BOPD	70,000 BOPD
Total Volume	116,000	70,000
Type of Oil(s) - (crude oil, condensate, diesel)	Crude oil	Crude Oil
API Gravity(s)[4]	28°	25°

Footnotes:

1. Types of activities include pipeline, platform, caisson, subsea completion or manifold, and mobile drilling rig.
2. E.g., Well No. 2, Platform JA, Pipeline Segment No. 6373.
3. Your regional OSRP worst-case scenario volume must be taken from the appropriate section of your regional OSRP. For EP's, the worst-case scenario volume must be determined by using the daily worst-case discharge volume determined using the guidance at 30 CFR 254.47(b). For DOCD's, the daily worst-case discharge volume must be determined by using the guidance at 30 CFR 254.47 (a) and/or (b), as appropriate.
4. Provide API gravity of all oils given under "Type of Oil(s)" above. Estimate for EP's.

Since SOI has the capability to respond to the worst-case spill scenario included in its approved regional OSRP approved on November 26, 2001, and since the worst-case scenario determined for this plan does not replace the worst case scenario in our approved regional OSRP, I hereby certify that SOI has the capability to respond, the maximum extent practicable, to a worst-case discharge, or a substantial threat of such a discharge, resulting from the activities proposed in our plan.

Facility tanks, production vessels. Provide information on tanks and/or production vessels at the facility (including barges, drilling rigs, platform, etc.) that will store oil, as defined at 30 CFR 254.6. List only those tanks with a capacity of 25 barrels or more.

Type of Storage Tank	Type of Facility	Tank Capacity (bbls)	Number of Tanks	Total Capacity (bbls)	Fluid Gravity (API)
Diesel Tank in Pontoon	Drilling Rig	2202	4	8808	Marine Diesel (0.87 SG)
Diesel Tank in Pontoon	Drilling Rig	4554	4	18,216	Marine Diesel (0.87 SG)
Diesel Day Tank 3rd Deck	Drilling Rig	196	2	392	Marine Diesel (0.87 SG)
Diesel Settling Tank 3rd Deck	Drilling Rig	225	1	225	Marine Diesel (0.87 SG)
Diesel Settling Tank 3rd Deck	Drilling Rig	271	1	271	Marine Diesel (0.87 SG)
Lube Oil Tank 3rd Deck	Drilling Rig	55	1	55	Lube Oil (0.93 SG)
Lube Oil Tank 3rd Deck	Drilling Rig	37	2	74	Lube Oil (0.93 SG)
Hyd. Oil Tank 3rd Deck	Drilling Rig	55	1	55	Hydraulic Oil (0.93 SG)
Synthetic Drilling Fluid Base Oil Column Tank	Drilling Rig	1484	2	2968	Synthetic Base Oil (0.93 SG)
Mud Pit 1 2nd Deck	Drilling Rig	132	1	132	Drilling Mud
Mud Pit 2 2nd Deck	Drilling Rig	195	1	195	Drilling Mud
Mud Pit 3 2nd Deck	Drilling Rig	125	1	125	Drilling Mud
Mud Pit 4 2nd Deck	Drilling Rig	182	1	182	Drilling Mud
Mud Pit 5 2nd Deck	Drilling Rig	717	1	717	Drilling Mud
Mud Pit 6 2nd Deck	Drilling Rig	648	1	648	Drilling Mud
Mud Pit 7 2nd Deck	Drilling Rig	635	1	635	Drilling Mud
Mud Pit 8 2nd Deck	Drilling Rig	434	1	434	Drilling Mud
Mud Pit 9 2nd Deck	Drilling Rig	509	1	509	Drilling Mud
Mud Pit 10 2nd Deck	Drilling Rig	377	1	377	Drilling Mud
Slug Pit – Mud 2nd Deck	Drilling Rig	182	1	182	Drilling Mud
Reserve Mud Pit Starboard Column	Drilling Rig	1428	2	2856	Drilling Mud
Reserve Mud Pit Port Column	Drilling Rig	1428	2	2856	Drilling Mud

Spill response Sites:

Primary Response Equipment Location	Preplanning Staging Location(s)
Fort Jackson, LA	Fort Jackson, LA

Diesel Oil supply Vessels:

Not applicable to plan

Support vessels fuel tanks:

Not applicable to plan

Produced liquid hydrocarbons transportation vessels:

Not applicable – no produced liquid hydrocarbons proposed.

Oil- and synthetic-based drilling fluids:

Not applicable to this plan.

Oil Characteristics:

Not applicable to this plan

Blowout Scenario:

Not applicable to this plan.

Spill Response Discussion:

In the event of a spill less than 100 bbls at Atwater Block(s) 267-268, our primary response would be an Oil Spill Response vessel (OSRP) from the Marine Spill Response Corporation. The initial response, and subsequent staging area for additional equipment would likely be from Fort Jackson, LA. Derated recovery capacity of the OSRP would be 10,587 bbls/day, and storage capacity would be 4,000 bbls. With a maximum procurement time of 2 hours, river run time of 2.5 hrs (30 miles at 12 knots), and a maximum planning run time of 6.5 hours from the mouth of the river to the exploration site (approximately 90 miles at 12 knots), the response vessel would be on site in approximately 11 hours. Actual response times are generally quicker that planning times, since the vessel can be mobilized within one hour, and the actual maximum speed of the vessel approaches 25 knots, weather permitting. As with any spill, additional "cascading" response equipment would be mobilized to the site from various MSRC bases and National Response Corporation ID boat sites. For spills larger that 100 bbls., dispersants may also be mobilized by plane from Houma, La, pending approval from the USCG.

Pollution Prevention Measures

I. DRAIN SYSTEM

Drains are provided on the rig in all spaces and on all decks where water or oil can accumulate. The drains are divided into two categories, non-contaminated and contaminated. All deck drains are fitted with a removable strainer plate to prevent debris entering the system.

1.) Non-contaminated Drains

Non-contaminated drains are designated as drains that do not contain hydrocarbons and can be discharged directly overboard. The salt water from the discharge of the fresh water makers and engine coolers is routed to the cuttings chute to provide a flush to keep the chute clear. All other non-contaminated drains are, where feasible, routed to the starboard caisson.

2.) Contaminated Drains

Contaminated drains are designated as drains that contain hydrocarbons and cannot be discharged overboard. When oil-based mud is used for drilling it will have to be collected in portable tanks and sent to shore for processing. Two headers are routed for the contaminated drains, one for oily water, which is routed to the separator tanks, and one for waste oil, which is routed to the waste oil tanks. In the areas where a spillage of oily water or hydrocarbon is possible, two foot valves are supplied, one for each header. The operator will make the decision on where to route the spillage. Separation and waste oil tanks are supplied in each of the aft columns. The headers in each of the decks are sealed from one another by using seal pots to prevent gas migration throughout the rig.

3.) Mud Drain System

A separate drain system is furnished for the mud handling areas. Sumps are provided in the following areas to collect mud spills:

- Mud Pump Rooms
- Auxiliary Machinery Room
- Sack Storage Room
- Shale Shaker Room

The drains are pumped by two pneumatic mud drain pumps, which can route the drains either to overboard in the case of water-based muds, or to the main deck for collection into drums in the case of oil-based muds.

4.) Oily Water Processing

The oily water is initially routed to the Separator Tanks. One tank is located in the 28.5 m flat in each of the aft columns. The tank has sufficient residence time to allow for natural separation of oil and water. The oil is manually drained to the Waste Oil Holding Tank located in the 28.5 m flat in each of the aft columns from where it is pumped to the International Shore Connection for collection into drums. The residual water in the separator is routed to the Oily Water Separator for further processing.

The Oily Water Separator is a compact, single stage, gravity-type vessel using a coalescer plate pack principle of separation. The oily water is drawn into the separator where the majority of the oil separates in the gravity stage below the oil chamber into which it rises and collects. The water pump draws the liquid through a multi-stage plate pack, which encourages the remaining oil droplets to coalesce and rise through the pack to the oil chamber. Clean water is drawn from the rear end of the unit by the water pump to an overboard discharge connection. Capacitance probes are fitted to detect the oil level in the oil chamber, controlling the pump to give fully automatic operation. A 15 ppm oil content meter is installed on the water outlet to prevent oil discharges to the sea if any of the separation or monitoring systems should fail.

When oil/air covers the lower probe, the water pump stops, the oily water inlet valve closes, and the water inlet and oil/air discharge valves open to discharge the oil to the Waste Oil Holding Tank. When the top probe again senses water, the inlet oily water valve opens, the oil/air and water inlet valves close, and the pump again starts.

FGBNMS Monitoring Plans:

Not applicable to this plan.

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AIR EMISSIONS

APPENDIX G

Screening Questions for EP's	Yes	No
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 =3400$D^{2/3}$ 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
Are your proposed exploration activities located east of 87.5° W longitude?		X
Do you expect to encounter H_2S at concentrations greater than 20 parts per million (ppm)?		X
Do you propose to flare or vent natural gas for more than 48 continuous hours From any proposed well?		X
Do you propose to burn produced hydrocarbon liquids?		X

(1) If you answer ***no*** to all of the above screening questions from the appropriate table, provide:

(a) Summary information regarding the peak year emissions for both Plan Emissions and Complex Total Emissions, if applicable. This information is compiled on the summary form of the two sets of worksheets. You can submit either these summary forms or use the format below. You do not need to include the entire set of worksheets.

Air Pollutant		Plan Emission[1] Amounts(tons)	Calculated Exemption[2] Amounts (tons)		Calculated Complex Total Emission Amounts[3] (tons)
Carbon monoxide CO		461	66,756		NA
Particulate matter (PM)		19	2,897		NA
Sulphur dioxide (SO_2)		280	2,897		NA
Nitrogen oxides (NO_x)		2,112	2,897		NA
Volatile organic compounds (VOC)		67	2,897		NA

[1] For activities proposed in your EP or DOCD, list the projected emissions calculated from the worksheets.
[2] List the exemption amounts for your proposed activities calculated by using the formulas in 30 CFR 250.303(d).
[3] List the complex total emissions associated with your proposed activities calculated from the worksheets

ENVIRONMENTAL IMPACT ANALYSIS

APPENDIX H

INITIAL EXPLORATION PLAN
ATWATER VALLEY BLOCK 267, OCS-G 18537
ATWATER VALLEY BLOCK 268, OCS-G 23027

GULF OF MEXICO
OFFSHORE, LOUISIANA
AREA I

PREPARED FOR

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July 19, 2004

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DESCRIPTION OF THE PROPOSED ACTION

This Environmental Impact Analysis addresses the exploratory activities proposed by Shell Offshore, Inc. (Shell) for Atwater Valley Blocks 267 & 268. The proposed activities will be located approximately 87 statute miles from the Louisiana shoreline in water depths from 3310'-3377'. As proposed, the Exploration Plan (EP) provides for the drilling of five (5) wells, beginning September 6, 2004. Each well is expected to take approximately 120 days to drill. Shell will utilize the Transocean Nautilus semi-submersible rig for the proposed drilling operations.

Water traffic will travel from the Fouchon boat facility operated by Shell located on Bayou LaFourche, south of Leeville, Louisiana, approximately 3 miles from the Gulf of Mexico, and approximately 98 nautical miles from the proposed operations. Seven (7) workboat trips per week will be required for the proposed activities. Crew boats will not be required for the proposed operations.

Air traffic will travel from the PHI Boothville terminal located at 38963 Hwy 23 in Boothville, Louisiana, which is located approximately 113 statute air miles from the proposed operations. Eight (8) helicopter trips per week are planned to support the proposed activities.

These bases are capable of providing all necessary support functions. The proposed activities will help to maintain the bases at their present level of activity. No expansion of the physical facilities is expected to result from the work planned in conjunction with these blocks. Support vessels will normally move to the blocks via the most direct route, however, vessels operating in the field may travel from other facilities nearby. To ensure that activities in support of OCS operations do not adversely impact endangered or threatened species, all helicopter flights over national parks and wildlife refuges will adhere to a minimum altitude of 2000 feet as required by the Federal Aviation Administration.

The proposed activities will be carried out and completed with the guarantee that:

- The best available and safest technologies will be utilized throughout the project. This includes meeting all applicable requirements for equipment types, general project layout, safety systems, and equipment and monitoring systems.
- All operations will be covered by an approved Oil Spill Response Plan.
- All applicable Federal, State, and Local requirements regarding air emissions and water quality and discharge for the proposed activities, as well as any other permit conditions, will be complied with.
- The proposed activities described in detail in the EIA comply with the enforceable policies of Louisiana's approved Coastal Management Program and will be conducted in a manner consistent with such program.

(A) Environmental Impact Analysis Worksheet

Impact Producing Factors (IPFs) that have the potential to cause impacts to the listed environmental resources are identified by an "x" in the space under each IPF category associated with the proposed activities. If it was determined an IPF would not impact a particular environmental resource, the space was left blank. For those cells that are noted by an "X", a statement is provided as to the applicability to the proposed operations, and, where there may be an effect, an analysis of the effect is provided. If other environmental resources at or near the activity's site that are not included on the worksheet are identified, they are addressed, as well.

Environmental Resources	**Impact Producing Factors (IPFs) Categories and Examples**					
	Emissions (air, noise, light, etc.)	Effluents (muds, cuttings, other discharges to water column or seafloor)	Physical disturbances to seafloor (rig/anchor emplacements, etc.)	Wastes sent to shore (for treatment or disposa	Accidents (oil spills, chemical spills, H2S releases)	Discarded trash and debris
Site-specific at Offshore Location						
Designated topographic features						
Pinnacle Trend area live bottoms						
Eastern Gulf live bottoms						
Chemosynthetic communities		X	X			
Water quality		X			X	
Fisheries					X	
Marine mammals	X				X	
Sea turtles	X				X	
Air quality	X					
Shipwreck sites (known or potential)						
Prehistoric archaeological sites						
Vicinity of Offshore Location						
Essential fish habitat					X	
Marine and pelagic birds					X	
Public health and safety						
Coastal and Offshore						
Beaches					X	
Wetlands					X	
Shore birds and coastal nesting birds					X	
Coastal wildlife refuges					X	
Wilderness areas					X	
Other Resources Identified						

(B) Analysis

Site-specific at Offshore Location:

Accidents: It is unlikely that an accidental surface or subsurface oil spill would occur from the proposed activities. As per the MMS, the volume of spill incidents in U.S. waters has been on a steady downward trend since 1973, and there has been a general downward trend in the number of spills over 1,000 barrels. The majority of spills since 1973 have involved discharges between 1 and 100 gallons. The total volume of oil spilled per year is significantly declining and the total volume spilled in 2000 is at the lowest amount in over 25 years. In addition, spills from tank vessels account for the majority of volume of oil spilled and the rates for spills ≥1,000 bbls from OCS platforms, tankers and barges continues to decline. The decline in oil spill volume represents the combined effects of an increasingly effective campaign of positive prevention and preparedness to protect U.S. waters from oil pollution.

Large oil spills associated with OCS activities are low-probability events. There was an 89% decline in the volume of oil spilled per billion barrels produced from OCS operations during 1980 through the present, a period when oil production has been increasing. The MMS attributes this improvement to MMS operational requirements, ongoing efforts by the oil and gas industry to enhance safety and pollution prevention, and the evolution and improvement of offshore technology. (OCS EIS/EA MMS 2002-052, page 4-57 & page 4-195)

The activities proposed in this plan will be covered by our regional OSRP (Refer to information submitted in Appendix F of the EP).

1. Designated topographic features

Potential Impact Producing Factors: Effluents, physical disturbances to the seafloor, accidents.

There are no IPF's from the proposed activities that are expected to cause impacts to topographic features. The distance from the site-specific offshore location of the proposed activities to the closest designated topographic feature Banks is as follows: Approximately 60 miles southwesterly from Sackett Bank and 60 miles southeast of Diaphus Bank.

Accidents: Oil from a subsurface spill is not an issue due to the distance of the blocks from a designated topographic area. In addition, since the crests of designated topographic features in the northern Gulf are found below 10 m, concentrated oil from a surface spill is not expected to reach their sessile biota. It is unlikely that an accidental surface or subsurface oil spill would occur from the proposed activities. (Please refer to the data under the heading "Accidents" at the beginning of Section "B".) In addition, the activities proposed in this plan will be covered by our regional OSRP (Refer to information submitted in Appendix F of the EP).

2. Pinnacle trend area live bottoms

Potential Impact Producing Factors: Effluents, physical disturbances to the seafloor, accidents.

There are no IPF's from the proposed activities that could cause impacts to pinnacle trend area live bottoms. The site-specific offshore location of the proposed activities is over 130 miles away from the closest pinnacle trend live bottom stipulated block.

Accidents: It is unlikely that an accidental surface or subsurface oil spill would occur from the proposed activities. (Please refer to the data under the heading "Accidents" at the beginning of Section "B".) In addition, the activities proposed in this plan will be covered by our regional OSRP (Refer to information submitted in Appendix F of the EP).

Even if any surface oil spill resulting from the proposed activities were to reach any live bottom areas, it would likely have no impact on the biota of the pinnacle trend because the crests of these features are much deeper than 20 m. Oil from a subsurface spill is not an issue due to the distance of the blocks from a designated live bottom area.

3. Eastern Gulf live bottoms

Potential Impact Producing Factors: Effluents, physical disturbances to the seafloor, accidents.

There are no IPF's from the proposed activities that could cause impacts to Eastern Gulf live bottoms. The site-specific offshore location of the proposed activities is located in the Central Gulf off of the coast of Louisiana.

Accidents: It is unlikely that an accidental oil spill would occur from the proposed activities. Any surface or subsurface oil spill resulting from the proposed action would not be expected to cause adverse impacts to eastern gulf live bottoms because of the depth of the features and dilution of spills (by currents and/or quickly rising oil). (Please refer to the data under the heading "Accidents" at the beginning of Section "B".) In addition, the activities proposed in this plan will be covered by our regional OSRP (Refer to information submitted in Appendix F of the EP).

4. Chemosynthetic communities

Potential Impact Producing Factors: Effluents, physical disturbances to the seafloor.

IPF's from the proposed activities do have the possibility to cause impacts to chemosynthetic communities because the potential for chemosynthetic communities does exist in Atwater Valley Blocks 267 and 268, which are in water depths over 400 meters. The proposed activity is located at least 8 miles from Green Canyon Block 216, in which known chemosynthetic community sites are located.

Effluents: Because of the great water depths, discharges of drilling fluids and cuttings at the surface are spread across broader areas of the seafloor in thin accumulations, with low impact expected.

Physical Disturbances to the Seafloor: Chemosynthetic communities are susceptible to physical impacts from anchoring and pipeline installation, however any potential impacts will be prevented by following the guidance in **NTL No. 2000-G20**, "Deepwater Chemosynthetic Communities

5. Water quality

Potential Impact Producing Factors: Effluents and accidents.

Effluents: All discharges (water-based drilling muds and cuttings, treated sanitary and domestic wastewater, deck drainage, ballast water, etc.) will be made in accordance with a general National Pollutant Discharge Elimination System (NPDES) permit issued by U.S. Environmental Protection Agency (USEPA), therefore operational discharges are not expected to cause significant adverse impacts to water quality.

Accidents: If a spill were to occur, the dissolved components and small oil droplets would temporarily affect the water quality of marine waters. Dispersion by currents and microbial degradation would remove the oil from the water column or dilute the constituents to background levels, although it is unlikely that an accidental surface or subsurface oil spill would occur from the proposed activities. (Please refer to the data under the heading "Accidents" at the beginning of Section "B".) In addition, the activities proposed in this plan will be covered by our regional OSRP (Refer to information submitted in Appendix F of the EP).

6. Fisheries

Potential Impact Producing Factors: Effluents, accidents.

Effluents: Discharges, which are regulated by the USEPA NPDES permit, are diluted and dispersed to very near background levels at a distance of 1000 m and are undetectable at a distance of 3000 m from the discharge point, therefore having little effect on fisheries.

Accidents: If an accidental oil spill were to occur as a result of the proposed action, it would possibly have the potential to cause some detrimental effects to fisheries. If a spill were to occur in open waters of the OCS proximate to mobile adult finfish or shellfish, the effects would likely be sublethal and the extent of damage would be reduced to the capability of adult fish and shellfish to avoid a spill, to metabolize hydrocarbons, and to excrete both metabolites and parent compounds. However, it is unlikely that an accidental surface or subsurface oil spill would occur from the proposed activities. (Please refer to the data under the heading "Accidents" at the beginning of Section "B".) In addition, the activities proposed in this plan will be covered by our regional OSRP (Refer to information submitted in Appendix F of the EP).

7. Marine mammals

Potential Impact Producing Factors: Effluents, noise, and accidents (including accidental oil spills, vessel traffic, and loss of trash and debris)

Effluents: All discharges will be made in accordance with a general National Pollutant Discharge Elimination System (NPDES) permit issued by U.S. Environmental Protection Agency (USEPA), therefore operational discharges are diluted and unlikely to cause any direct effects.

Noise: All phases of offshore petroleum exploration and production produce an acoustically wide range of sounds at frequencies and intensities that can be detected by cetaceans. Underwater strong noise levels may often be low, steady, and not very disturbing. Some sounds could mask their reception of sounds produced for echolocation and communication. Noise from service-vessel traffic may also produce a startle and/or avoidance reaction from cetaceans. These sounds may frighten, annoy or distract marine mammals and lead to physiological and behavioral disturbances. Tolerance for noise is often demonstrated, but this does not prove that the animals are unaffected by noise; for example, they may become stressed, making them more vulnerable to parasites, disease, environmental contaminants, and/or predation. Of animals responding to noise, females in late pregnancy or lactating would probably be most affected. Temporary disturbances to cetaceans may occur on occasion as helicopters approach or depart OCS facilities, if animals are near the facility. Such disturbance is believed negligible.

An FAA advisory encourages pilots to maintain higher than minimum altitudes over noise-sensitive areas. Corporate helicopter policy states that helicopters should maintain a minimum altitude of 700 feet while in transit offshore and 500 feet while working between platforms. In addition, under the authority of the Marine Mammal Protection Act, NOAA fisheries guidelines and regulations include provisions specifying helicopters to maintain an altitude of 1000 ft within 100 yards of marine mammals. It is unlikely that cetaceans would be affected by routine OCS helicopter traffic operating at these altitudes, provided pilots do not alter their flight patterns to more closely observe marine mammals they see. Occasional overflights probably have no long-term consequences on cetaceans.

Accidents: It is unlikely that an accidental surface or subsurface oil spill would occur from the proposed activities. (Please refer to the data under the heading "Accidents" at the beginning of Section "B".) In addition, the activities proposed in this plan will be covered by our regional OSRP (refer to information submitted in Appendix F).

Disturbances such as noise may stress animals, weaken their immune systems, and make them more vulnerable to parasites and diseases that normally would not be fatal. Collisions between cetaceans and ships could cause serious injury or death (Laist et al., 2001). Sperm whales are one of 11 whale species that are hit commonly by ships (Laist et al., 2001). Collisions between OCS vessels and cetaceans within the project area are expected to be unusual events.

In accordance with **NTL No. 2003-G10** - Vessel Strike Avoidance and Injured/Dead Protected Species Reporting, to reduce the potential taking of marine protected species, Shell shall follow the guidelines specified in the NTL.

Protected Species Identification Training - Vessel crews shall continue to use a Gulf of Mexico reference guide that includes and helps identify the 28 species of whales and dolphins, 5 species of sea turtles and the single species of manatee that might be encountered in the Gulf of Mexico OCS.

Vessel Strike Avoidance

- Vessel operators and crews shall maintain a vigilant watch for marine mammals and slow down or stop the vessel to avoid striking protected species.
- When whales are sighted, a distance of 90 meters or greater from the whale shall be maintained
- When small cetaceans are sighted, a distance of 45 meters or greater shall be maintained whenever possible.
- When cetaceans are sighted while a vessel is underway, an attempt to remain parallel to the animal's course shall be made. Excessive speed or abrupt changes in direction shall be avoided until the cetacean has left the area.
- When pods or large assemblages of cetaceans are observed near an underway vessel, speed shall be reduced to 10 knots or less, since cetaceans at the surface may indicate the presence of submerged animals near the vessel.

- Whales may surface in unpredictable locations or approach slowly moving vessels. When animals are sighted in the vessel's path or in close proximity to a moving vessel, speed shall be reduced and the engine shifted to neutral. The engines will not be engaged until the animals are clear of the area.

Injured/Dead Protected Species Reporting

Vessel crews shall report sightings of any injured or dead marine mammals immediately, regardless of whether the injury or death is caused by our vessel, to either of phone numbers referenced in the NTL. If the injury or death was caused by a collision with our vessel, Shell will notify MMS within 24 hours of the strike and provide the information specified in the NTL.

In accordance with **NTL No. 2003-G11** - Marine Trash and Debris Awareness and Elimination, to reduce the threat of marine mammals being exposed to marine trash and debris, Shell's workers and contractors shall exercise special caution when handling and disposing of small items and packaging materials. Placards with specified language shall be posted in the manner described in the NTL. Annual training and certification for Shell's offshore employees and contractors will be carried out as described in the NTL.

8. Sea turtles

Potential Impact Producing Factors: Effluents, noise, brightly lit platforms and accidents, (including accidental oil spills, vessel traffic, noise, and loss of trash and debris)

Effluents: All discharges will be made in accordance with a general National Pollutant Discharge Elimination System (NPDES) permit issued by U.S. Environmental Protection Agency (USEPA), therefore operational discharges are diluted and considered to have sublethal effects.

Noise: All phases of offshore petroleum exploration and production produce an acoustically wide range of sounds at frequencies and intensities that could possibly be detected by sea turtles. It is assumed that aircraft noise could be heard by a sea turtle at or near the surface and cause the animal to alter its normal behavior pattern. Noise may cause a startle response and produce temporary sublethal stress.

Brightly Lit Platforms: Brightly lit offshore facilities present a potential danger to hatchlings. Hatchlings are known to be attracted to light and may orient toward lighted offshore structures. If this occurs, hatchling predation may increase since large birds and predatory fishes also congregate around structures.

Accidents: It is unlikely that an accidental surface or subsurface oil spill would occur from the proposed activities. (Please refer to the data under the heading "Accidents" at the beginning of Section "B".) In addition, the activities proposed in this plan will be covered by our regional OSRP (refer to information submitted in Appendix F).

Small numbers of turtles could be killed or injured by chance collision with service vessels or by eating indigestible trash, particularly plastic items, accidentally lost from drill rigs, production facilities, and service vessels. Drilling rigs and project vessels produce noise that could disrupt normal behavior patterns and create some stress potentially making sea turtles more susceptible to disease. Oil spills and oil-spill-response activities are potential threats that could have lethal effects on turtles. Contact with oil, consumption of oil particles, and oil-contaminated prey could seriously affect individual sea turtles. Oil-spill-response planning and the habitat protection requirements of the Oil Pollution Act of 1990 should mitigate these threats.

Most OCS-related impacts on sea turtles are expected to be sublethal. Chronic sublethal effects (e.g., stress) resulting in persistent physiological or behavioral changes and/or avoidance of effected areas could cause declines in survival or productivity, resulting in gradual population declines.

In accordance with **NTL No. 2003-G10** - Vessel Strike Avoidance and Injured/Dead Protected Species Reporting, to reduce the potential taking of marine protected species, Shell shall follow the guidelines specified in the NTL.

Protected Species Identification Training - Vessel crews shall continue to use a Gulf of Mexico reference guide that includes and helps identify the 28 species of whales and dolphins, 5 species of sea turtles and the single species of manatee that might be encountered in the Gulf of Mexico OCS.

Vessel Strike Avoidance

- Vessel operators and crews shall maintain a vigilant watch for sea turtles and slow down or stop the vessel to avoid striking protected species.

Injured/Dead Protected Species Reporting

Vessel crews shall report sightings of any injured or dead marine mammals immediately, regardless of whether the injury or death is caused by our vessel, to either of phone numbers referenced in the NTL. If the injury or death was caused by a collision with our vessel, Shell will notify MMS within 24 hours of the strike and provide the information specified in the NTL.

In accordance with **NTL No. 2003-G11** - Marine Trash and Debris Awareness and Elimination, to reduce the threat of sea turtles being exposed to marine trash and debris, Shell's workers and contractors shall exercise special caution when handling and disposing of small items and packaging materials. Placards with specified language shall be posted in the manner described in the NTL. Annual training and certification for Shell's offshore employees and contractors will be carried out as described in the NTL.

9. Air quality

Potential Impact Producing Factors: Emissions.

Emissions: There would be a limited degree of air quality degradation in the immediate vicinity of the proposed activities. Air quality analysis of the proposed activities indicated that the emissions are well below the MMS exemption level. (Refer to information submitted in Appendix G of the EP).

10. Shipwreck sites (known or potential)

Potential Impact Producing Factors: Physical disturbances to the seafloor.

There are no IPF's from the proposed activities that could cause impacts to known or potential shipwreck sites. As per MMS's list of Archaeological Survey blocks referenced in NTL 2002-G01, none of the proposed activities are in a block that has been determined to have a high potential for containing archaeological properties. In addition, a review of the Shallow Hazards Report (See Appendix C of the EP) indicates there are no known or potential shipwreck sites located within the survey area.

11. Prehistoric archaeological sites

Potential Impact Producing Factors: Physical disturbances to the seafloor.

There are no IPF's from the proposed activities that could cause impacts to prehistoric archaeological sites. As per MMS's list of Archaeological Survey blocks referenced in NTL 2002-G01, none of the proposed activities are in a block that has been determined to have a high potential for containing archaeological properties.

Vicinity of Offshore Location:

1. Essential fish habitat

Potential Impact Producing Factors: Effluents, physical disturbances to the seafloor, and accidents.

Effluents: All discharges will be made in accordance with a general National Pollutant Discharge Elimination System (NPDES) permit issued by U.S. Environmental Protection Agency (USEPA), therefore operational discharges are diluted and will not deleteriously effect essential fish habitat.

Physical Disturbances to the Seafloor: Offshore essential fish habitat includes pinnacles and topographic features. No impacts to these features will result from the proposed activities.

Accidents: An accidental oil spill that may occur as a result of the proposed action has the potential to cause some detrimental effects on essential fish habitat. However, it is unlikely that an accidental surface or subsurface oil spill would occur from the proposed activities. If a spill were to occur in open waters of the OCS proximate to mobile adult finfish or shellfish, the effects would likely be sublethal and the extent of damage would be reduced to the capability of adult

fish and shellfish to avoid a spill, to metabolize hydrocarbons, and to excrete both metabolites and parent compounds. The activities proposed in this plan will be covered by our regional OSRP (Refer to information submitted in Appendix F of the EP).

2. Marine and pelagic birds

Potential Impact Producing Factors: Noise, emissions, effluents, accidental oil spills and discarded trash and debris.

Noise: Disturbances from helicopter or service-vessel traffic can result from the mechanical noise or physical presence of the vehicle. To alleviate this, the FAA and corporate helicopter policies advise pilots to maintain minimum altitudes when in transit and while working between platforms. Compliance with the specified minimum altitude requirements greatly reduces the effects of aircraft disturbance on birds.

Emissions: Emissions of pollutants into the atmosphere shall be at concentrations far below those that could harm marine and pelagic birds.

Effluents: Operational discharges could affect seabirds that remain and feed in the vicinity of offshore OCS structures.

Accidents: An accidental oil spill that may occur as a result of the proposed action has the potential to impact marine and pelagic birds—birds could become oiled. However, it is unlikely that an accidental oil spill would occur from the proposed activities. The activities proposed in this plan will be covered by our regional OSRP (refer to information submitted in accordance with NTL 2003-G17 Appendix F).

Birds are susceptible to entanglement in floating, submerged, and beached marine debris. In accordance with **NTL No. 2003-G11** - Marine Trash and Debris Awareness and Elimination, to reduce the threat of marine mammals being exposed to marine trash and debris, Shell's workers and contractors shall exercise special caution when handling and disposing of small items and packaging materials. Placards with specified language shall be posted in the manner described in the NTL. Annual training and certification for Shell's offshore employees and contractors will be carried out as described in the NTL.

3. Public health and safety due to accidents

Potential Impact Producing Factors: Accidental H_2S releases

There are no IPF's from the proposed activities that could cause impacts to public health and safety. In accordance with 30 CFR 250.417(c) and NTL 2003-G17 (Appendix C) we have submitted sufficient information to justify our request that the area of our proposed activities be classified by MMS as H_2S absent.

Coastal and Onshore:

1. Beaches

Potential Impact Producing Factors: Accidents, discarded trash and debris.

Accidents: An accidental oil spill from the proposed activities could cause impacts to beaches. However, due to the distance from shore (87 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both the historical spill data and the combined trajectory/risk calculations referenced in the publication OCS EIS/EA MMS 2002-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources. The activities proposed in this plan will be covered by our regional OSRP (Refer to information submitted in Appendix F of the EP).

In accordance with **NTL No. 2003-G11** - Marine Trash and Debris Awareness and Elimination, to reduce the threat of beached marine trash and debris, Shell's workers and contractors shall exercise special caution when handling and disposing of small items and packaging materials. Placards with specified language shall be posted in the manner described in the NTL. Annual training and certification for Shell's offshore employees and contractors will be carried out as described in the NTL.

2. Wetlands

Potential Impact Producing Factors: Accidents.

Accidents: An accidental oil spill from the proposed activities could cause impacts to wetlands. However, due to the distance from shore (87 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both the historical spill data and the combined trajectory/risk calculations referenced in the publication OCS EIS/EA MMS 2002-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources. The activities proposed in this plan will be covered by our regional OSRP (Refer to information submitted in Appendix F of the EP).

3. Shore birds and coastal nesting birds

Potential Impact Producing Factors: Accidents.

Accidents: An accidental oil spill from the proposed activities could cause impacts to shore birds and coastal nesting birds. However, due to the distance from shore (87 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both the historical spill data and the combined trajectory/risk calculations referenced in the publication OCS EIS/EA MMS 2002-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources. The activities proposed in this plan will be covered by our regional OSRP (refer to information submitted in Appendix F of the EP).

4. Coastal wildlife refuges

Potential Impact Producing Factors: Accidents.

Accidents: An accidental oil spill from the proposed activities could cause impacts to coastal wildlife refuges. However, due to the distance from shore (87 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both the historical spill data and the combined trajectory/risk calculations referenced in the publication OCS EIS/EA MMS 2002-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources. The activities proposed in this plan will be covered by our regional OSRP (Refer to information submitted in Appendix F of the EP).

5. Wilderness areas

Potential Impact Producing Factors: Accidents.

Accidents: An accidental oil spill from the proposed activities could cause impacts to wilderness areas. However, due to the distance from shore (87 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both the historical spill data and the combined trajectory/risk calculations referenced in the publication OCS EIS/EA MMS 2002-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources. The activities proposed in this plan will be covered by our regional OSRP (Refer to information submitted in Appendix F of the EP).

Other Environmental Resources Identified:

No other environmental resources were identified.

(C) Impacts on 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.

A Shallow Hazards Assessment of any seafloor and subsurface geological and manmade features and conditions that may adversely affect operations was submitted in accordance with **NTL 98-20** (See Appendix C of the EP).

(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:

Although not always cited, the following were utilized in preparing the EJA:

MMS NTL No. 2003-G17
MMS NTL No. 98-20
MMS NTL No. 2000-G20
MMS NTL No. 2003-G06
MMS NTL No. 2003-G07
Shallow Hazard Assessment Survey Report
MMS OCS EIS/EA MMS 2002-052
Authors: Geraci and St. Aubin, 1980
Laist et al., 2001

ATTACHMENT H-1

LOUISIANA
COASTAL ZONE MANAGEMENT
CONSISTENCY CERTIFICATION

INITIAL EXPLORATION PLAN
Type of Plan

Atwater Valley Block 267
Atwater Valley Block 268
Area and Blocks

OCS-G 18537
OCS-G 23037
Lease Numbers

The proposed activities described in detail in this Plan will comply with Louisiana's State and Local Coastal Resources Management Act of 1978, Coastal Resources Program, and Coastal Area Management Program Policies.

SHELL OFFSHORE INC. (SOI)
Operator

Sylvia A. Bellone
Certifying Official

7/22/04
Date

U. S. Department of the Interior
Minerals Management Service

OMB Control Number: 1010-0049
OMB Approval Expires: August 31, 2006

OCS PLAN INFORMATION FORM

General Information

Type of OCS Plan:	X	Exploration Plan (EP)	Development Operations Coordination Document (DOCD)
Company Name: Shell Offshore Inc.			MMS Operator Number: 0689
Address: P.O. Box 61933			Contact Person: Sylvia Bellone
New Orleans, LA 70161-1933			Phone Number: (504) 728-7215
			E-Mail Address: Sylvia.bellone@shell.com

Lease(s): OCS-G 18537, 23027	Area: Atwater Valley	Block(s): 267, 268	Project Name (If Applicable): NA

Objective(s):	X	Oil		Gas		Sulphur		Salt	Onshore Base: Fourchon, Boothville	Distance to Closest Land (Miles): 87

Description of Proposed Activities (Mark all that apply)

X	Exploration drilling		Development drilling
	Well completion		Installation of production platform
	Well test flaring (for more than 48 hours)		Installation of production facilities
	Installation of caisson or platform as well protection structure		Installation of satellite structure
	Installation of subsea wellheads and/or manifolds		Commence production
	Installation of lease term pipelines		Other (Specify and describe)

Have you submitted or do you plan to submit a Conservation Information Document to accompany this plan?		Yes	X	No
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
Have all of the surface locations of your proposed activities been previously reviewed and approved by MMS?		Yes	X	No

Tentative Schedule of Proposed Activities

Proposed Activity	Start Date	End Date	No. of Days
Drill Well A	9/6/04	1/5/05	120
Drill Well B	1/6/05	5/5/05	120
Drill Well C	5/6/05	9/3/05	120
Drill Well D	9/4/05	1/2/06	120
Drill Well E	1/3/06	5/3/06	120

Description of Drilling Rig

	Jackup		Drillship
	Gorilla Jackup		Platform rig
X	Semisubmersible		Submersible
	DP Semisubmersible		Other (Attach Description)
Drilling Rig Name (If Known): TSF Nautilus			

Description of Production Platform

	Caisson		Tension leg platform
	Well protector		Compliant tower
	Fixed platform		Guyed tower
	Subsea manifold		Floating production system
	Spar		Other (Attach Description)

Description of Lease Term Pipelines

From (Facility/Area/Block)	To (Facility/Area/Block)	Diameter (Inches)	Length (Feet)
N/A			

OCS PLAN INFORMATION FORM (CONTINUED)

Proposed Well/Structure Location

Well or Structure Name/Number (If renaming well or structure, reference previous name): A	Subsea Completion			
Anchor Radius (if applicable) in feet: 9500'	X	Yes		No

	Surface Location	Bottom-Hole Location (For Wells)
Lease No.	OCS – G 18537	
Area Name	Atwater Valley	
Block No.	267	
Blockline Departures (in feet)	N/S Departure: 6848' FNL	
	E/W Departure: 2504' FEL	
Lambert X-Y coordinates	X: 741,976.00'	
	Y: 10,051,552.00'	
Latitude/ Longitude	Latitude : 27.671439	
	Longitude : -89.776122	

TVD (Feet):	MD (Feet):	Water Depth (Feet): 3377'

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires us to inform you that MMS collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for MMS approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 250.196. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. The use of this form is voluntary. The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 580 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 4230, Minerals Management Service, 1849 C Street, N.W., Washington, DC 20240.

OCS PLAN INFORMATION FORM (CONTINUED)

Proposed Well/Structure Location					
Well or Structure Name/Number (If renaming well or structure, reference previous name): B				Subsea Completion	
Anchor Radius (if applicable) in feet: 9500'				X Yes	No
	Surface Location		**Bottom-Hole Location (For Wells)**		
Lease No.	OCS –G-18537				
Area Name	Atwater Valley				
Block No.	267				
Blockline Departures (in feet)	N/S Departure: 3,772' FNL				
	E/W Departure: 1,126' FEL				
Lambert X-Y coordinates	X: 743,354.00'				
	Y: 10,054,628.00'				
Latitude/ Longitude	Latitude : 27.679979				
	Longitude : -89.772081				
	TVD (Feet):	MD (Feet):	Water Depth (Feet): 3345'		

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

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OCS PLAN INFORMATION FORM (CONTINUED)

Proposed Well/Structure Location					
Well or Structure Name/Number (If renaming well or structure, reference previous name): C				Subsea Completion	
Anchor Radius (if applicable) in feet: 9500'				X Yes	No
	Surface Location	**Bottom-Hole Location (For Wells)**			
Lease No.	OCS – G -18537				
Area Name	Atwater Valley				
Block No.	267				
Blockline Departures (in feet)	N/S Departure: 434' FNL				
	E/W Departure: 521' FEL				
Lambert X-Y coordinates	X: 743,959.00'				
	Y: 10,057,966.00'				
Latitude/ Longitude	Latitude : 27.689191				
	Longitude : -89.770445				
	TVD (Feet):	MD (Feet):	Water Depth (Feet): 3,310'		

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

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OCS PLAN INFORMATION FORM (CONTINUED)

Proposed Well/Structure Location					
Well or Structure Name/Number (If renaming well or structure, reference previous name): D				Subsea Completion	
Anchor Radius (if applicable) in feet: 9500'				X Yes	No
	Surface Location	**Bottom-Hole Location (For Wells)**			
Lease No.	OCS – G-23027				
Area Name	Atwater Valley				
Block No.	268				
Blockline Departures (in feet)	N/S Departure: 4,716' FNL				
	E/W Departure: 909' FWL				
Lambert X-Y coordinates	X: 745,389.00'				
	Y: 10,053,684.00'				
Latitude/ Longitude	Latitude : 27.677510				
	Longitude : -89.765734				
	TVD (Feet):	MD (Feet):	Water Depth (Feet): 3,371'		

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires us to inform you that MMS collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for MMS approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 250.196. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. The use of this form is voluntary. The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 580 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 4230, Minerals Management Service, 1849 C Street, N.W., Washington, DC 20240.

OCS PLAN INFORMATION FORM (CONTINUED)

Proposed Well/Structure Location

Well or Structure Name/Number (If renaming well or structure, reference previous name): E	Subsea Completion			
Anchor Radius (if applicable) in feet: 9500'	X	Yes		No

	Surface Location	Bottom-Hole Location (For Wells)
Lease No.	OCS – G- 18537	
Area Name	Atwater Valley	
Block No.	267	
Blockline Departures (in feet)	N/S Departure: 2,953' FNL	
	E/W Departure: 2,899' FEL	
Lambert X-Y coordinates	X: 741,581.00'	
	Y: 10,055,447.00'	
Latitude/ Longitude	Latitude : 27.682120	
	Longitude : -89.777612	
	TVD (Feet):	MD (Feet): Water Depth (Feet): 3,328'

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

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