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 #	-	S-06482
Type	-	Supplemental Development Operations Coordinations Document
Lease(s)	-	OCS-G04559 Block - A 39 Brazos Area
Operator	-	Pioneer Natural Resources USA, Inc.
Description	-	Well and Caisson No. 5
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.

Karen Dunlap
Plan Coordinator

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
CAIS/NO. 5		4040 FSL, 3791 FWL	G04559/BA/A 39
WELL/NO. 5	G04559/BA/A 39	4040 FSL, 3791 FWL	G04559/BA/A 39

ISS AUG 6'04AM10:56

S-6482

Appendix F
Oil Spill Response and Chemical Information

1. Statement
Activities proposed in this DOCD will be covered by Pioneer's approved Regional OSRP.

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

3. Worst-case scenario comparison

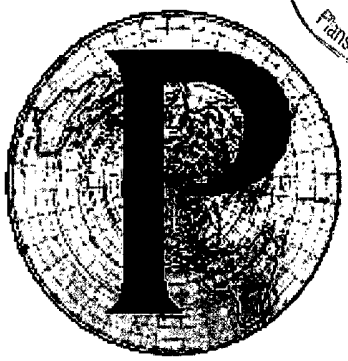
Category	Regional OSRP	DOCD (caisson)
Type of Activity	Production	Production
Facility Location (area/block)	EI 208	BA A39
Facility Designation	Platform K	BA A39 005
Distance to Nearest Shoreline	48 miles	39 miles
Volume (bbls)		
-Storage tanks (total)	**73**	**0**
-Flowlines (on facility)	**0**	**0**
-Leaseterm Pipelines	**9**	**0**
-Uncontrolled blowout (BPD)	**1380**	**1000**
Total Volume	**1462**	**1000**
Type of Oil	Condensate	Condensate
API Gravity	**36°**	**°50**

Since Pioneer Natural Resources USA, Inc has the capability to respond to the worst-case spill scenario included in its regional OSRP modified on ~~July 25, 2003~~ 8/21/03, 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 Pioneer 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.

4. Facility tanks, production vessels.
Derrick Barge, total capacity 8,063 bbls. Fluid Gravity #2 diesel, 4 TANKS

5. Spill response sites
Not required for supplemental DOCD's with no new multiwell structures in which Texas is an affected State.

6. Diesel oil supply vessels
Not required in DOCD's in which Texas is an affected State.



PIONEER
NATURAL RESOURCES

MIDWAY PROJECT

BRAZOS BLOCK A39, OCS-G 04559

SUPPLEMENTAL DEVELOPMENT COORDINATION DOCUMENT

JULY 2004

PUBLIC INFORMATION

Prepared by Pioneer Natural Resources USA, Inc.

Appendix A
Contents of Plan

(A) Description, objectives and schedule

The current Brazos A39 lease, operated by Pioneer Natural Resources USA, Inc. was acquired as OCS-G 04559 in January 1981. The lease was held by production until approximately January 6, 2004 by the A-1 well located on the Brazos A39 "A" Platform. The platform and producing wells were covered under a previously approved DOCD (Control No. N-1111). According to the Minerals Management Service (MMS) operators have 180 days to `initiate operations to restore production once the well production stops or starting at the rig release date, February 8, 2004. A Suspension of Production request was filed on May 3, 2004.

Brazos A39 005 ST00BP01 was drilled under an approved MMS Exploration Plan, Control Number S-6050. The objective of the exploration well was to drill through the deep Big Hum Sands, evaluate the logs and temporarily abandon the well via mudline suspension system. Brazos A39 005 ST00BP01 well will be developed via a braced caisson driven over the well casing stub, completed and tested, per a verbally approved downhole commingling scenario.

A 4-1/2 inch ROW pipeline will be installed back to the Brazos A52 "C", OCSG 06085, which is the host platform. Brazos A52 "C" is owned by Noble Energy and operated by Arena Offshore and the platform is located approximately 3.5 miles southeast.

The reserves to be developed are located in the Miocene sands, Big Hum 4 and Big Hum 6.

The following is a tentative schedule for the development and production activities proposes as a part of this plan.

Activity	Start Date
Installation of Braced Caisson	September 1, 2004
Completion & Testing Operations for well BA39 005 ST00BP01	September 15, 2004 (Covered under approved E.P. not a part of this plan)
Deck & Pipeline Installation	November / December 2004
ROW Pipeline Installation (not a part of this Plan)	December 2004
Commence Production BA A39 005	January 2005

(B) Location

Completion activities will be conducted under the approved Exploration Plan, Control Number S-6050) for the subject block.

Attachment A-1 for a table showing the location of the BA 39 005.

Attachment A-2 is the Batthymetry map sowing surface location of the well and existing facilities in the block..

Please see ***Attachment A-3*** is a plat showing the surface and bottomhole location of the well.

(B) Drilling Unit

All Completion activities are covered under the Exploration Plan. When a rig is selected, the rig specifications will be made part of the appropriate Application for Permit Modify.

(D) Production Facilities

Installation of the Braced Caisson is planned with a typical jack up boat prior to completion activities. The Brazos A52 "C" will be the host platform. A proposed 4"right-of-way pipeline will be laid to the facility and production should commence around January 2005.

Please see ***Attachment A-4*** for a diagram of the development scheme.

PIONEER NATURAL RESOURCES	Brazos A 39, OCS-G 04559 Supplemental DOCD

Attachment A-1

OCS PLAN INFORMATION FORM

(USE SEPARATE FORM FOR EACH LEASE)

EXPLORATION PLAN		DEVELOPMENT OPERATIONS COORDINATION DOCUMENT	X	DEVELOPMENT & PRODUCTION PLAN	

OPERATOR: Pioneer Natural Resources USA, Inc	ADDRESS: 5205 N. O'Connor Blvd, Suite 900, Irving, TX 75039-3746
MMS OPERATOR NO.:01935	
CONTACT PERSON: Lynne W. Foote, St. Regulatory Analyst Rusty Cooper, Sr. Completions & Drilling Engineer John Pry, Sr. Operations Engineer	PHONE NO. 972-969-3957 972-969-4419 972-969-3977

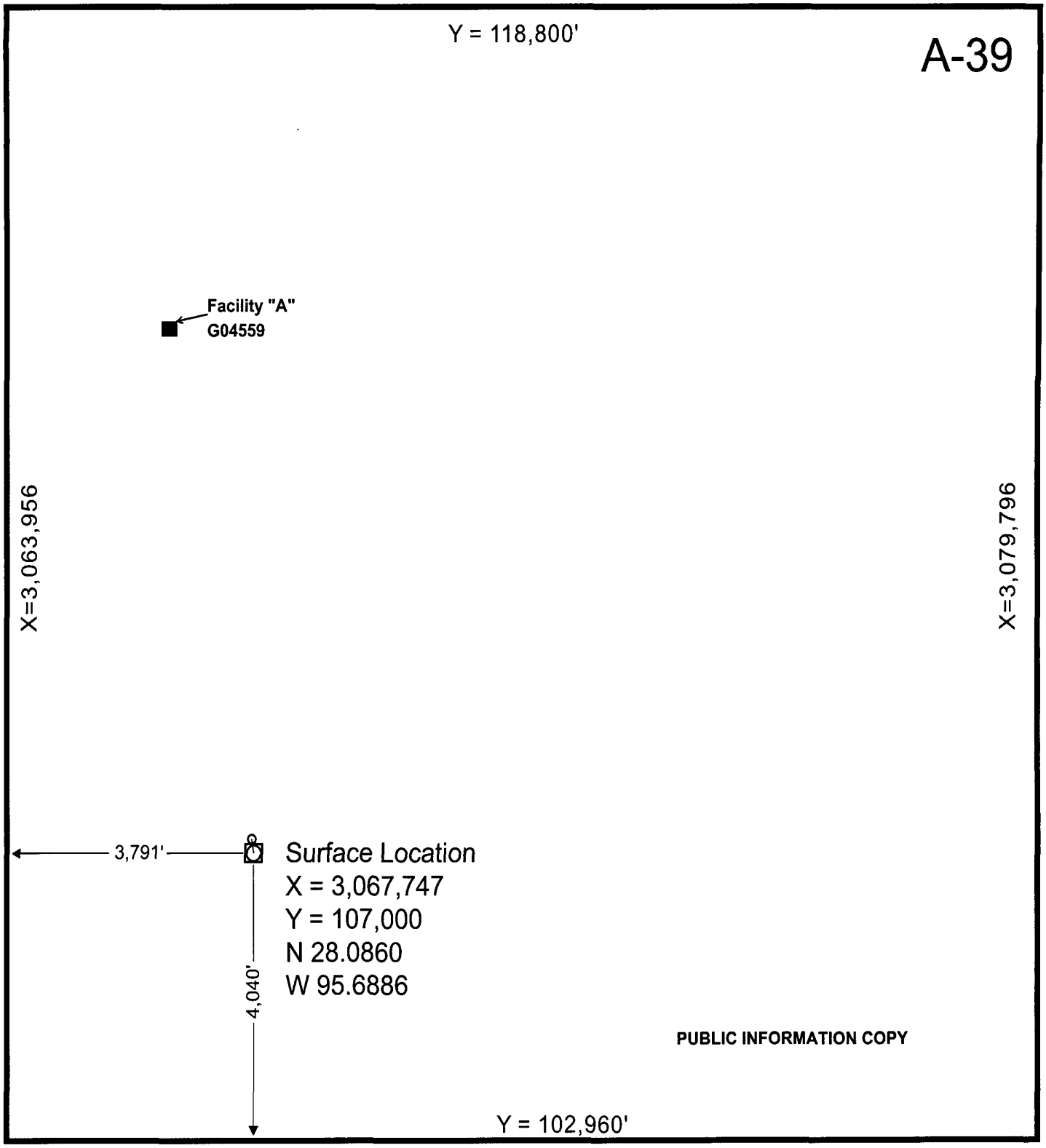
PROPOSED START DATE: September 1, 2004	RIG TYPE: JU		DISTANCE TO CLOSEST LAND (IN MILES): 39
NEW OR UNUSUAL TECHNOLOGY	YES	NO X	ONSHORE SUPPORT BASE(S): Galveston, TX
NARRATIVE DESCRIPTION OF PROPOSED ACTIVITIES:			
Installation of Braced Caisson prior to commencement of initial completion activities.			
PROJECT NAME, IF APPLICABLE: Midway			

PROPOSED WELL/STRUCTURE LOCATIONS

WELL/ STRUCTURE NAME	SURFACE LOCATION	BOTTOM-HOLE LOCATION (FOR WELLS)
BA A39 005	CALLS: 3,791.08' F W L and 4,040.02' F S L OF LEASE OCS G 04559, Brazos, AREA BLOCK A39	
	X: 3,067,747° Y: 107,000°	
	LAT: 28° 0860° N LONG: 95. 6866° W	
	TVD(IN FEET / MD (IN FEET / WATER DEPTH (IN FEET): 149	

Proprietary Information

Attachment A-2



GEODETIC DATUM: NAD 1927
PROJECTION: TEXAS SOUTH CENTRAL
GRID UNITS: US SURVEY FEET

June 4, 2004
NA-US-0398

PIONEER
NATURAL RESOURCES

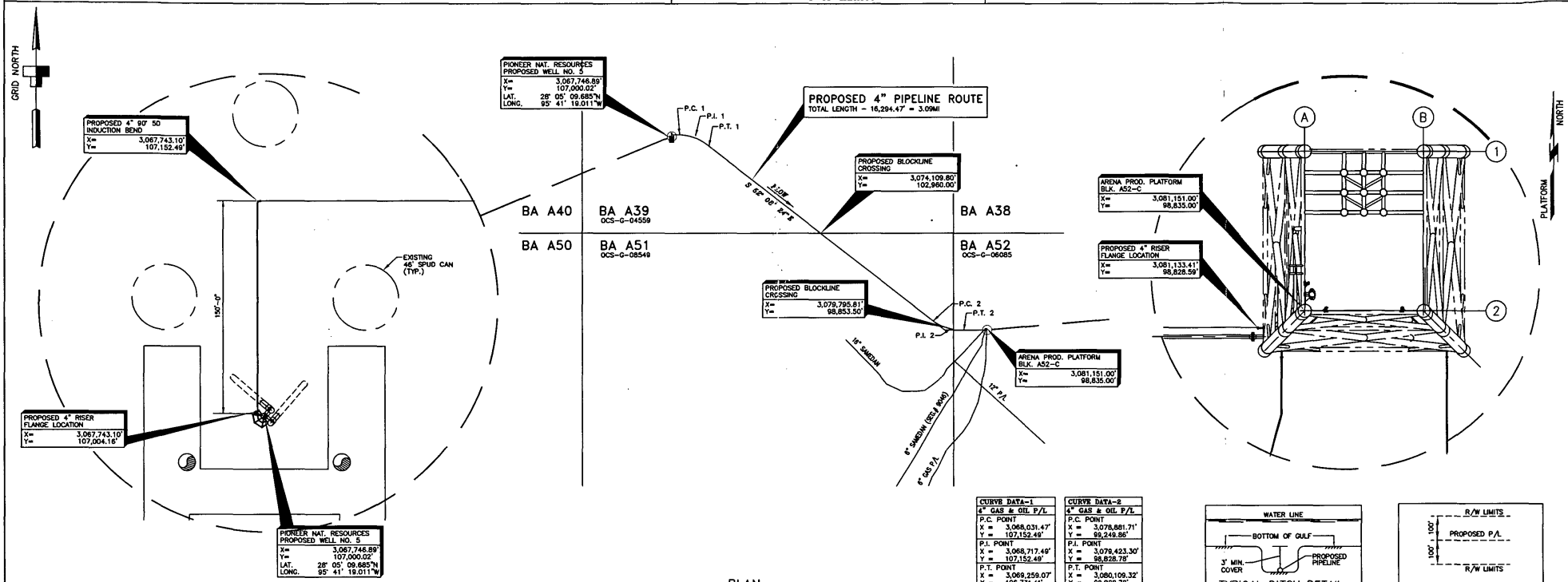
BRAZOS AREA BLK. A-39 (Midway)
OCS-G-04559
Surface & Bottom Hole Locations

0' 2000' 4000'

1" = 2000 feet

Attachment A-3

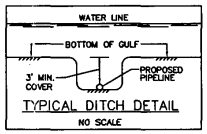
TAX DISTRICT DATA		ZONE	
		BEGIN LINE — END LINE	
		FEDERAL OFFSHORE	
		16,294.47	
		UNITED STATES OF AMERICA GULF OF MEXICO	



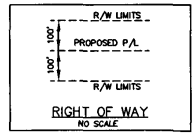
PLAN
SCALE: 1"=2000'

CURVE DATA-1 4" GAS & OIL P/L	
P.C. POINT	
X =	3,068,031.47'
Y =	107,152.49'
P.I. POINT	
X =	3,068,717.49'
Y =	107,152.49'
P.T. POINT	
X =	3,069,259.07'
Y =	106,731.41'
RADIUS=	2000'
LENGTH=	1,321.73'

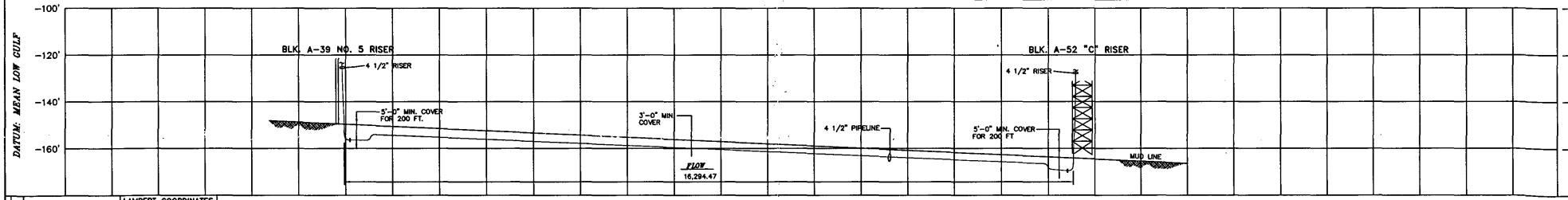
CURVE DATA-2 4" GAS & OIL P/L	
P.C. POINT	
X =	3,078,881.71'
Y =	99,249.86'
P.I. POINT	
X =	3,079,423.30'
Y =	98,828.78'
P.T. POINT	
X =	3,080,109.32'
Y =	98,828.78'
RADIUS=	2000'
LENGTH=	1,321.73'



TYPICAL DITCH DETAIL
NO SCALE



RIGHT OF WAY
NO SCALE



PROFILE
SCALE: HORZ: 1"=1000'
SCALE: VERT: 1"=20'

PT.	BEARING & DISTANCE	LAMBERT COORDINATES X	Y
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
TOTAL LENGTH			

MATERIAL SUMMARY

1 ONE 4.5 INCH NATURAL GAS & CONDENSATE PIPELINE
DESIGN:
A. MAXIMUM ALLOWABLE OPERATING PRESSURE = 2220 psig
B. DESIGN CAPACITY = 10 MMSCFD, 100 BOPD

2 PIPE AND COATINGS
A. PIPELINE: 4 1/2" INCH O.D. x 0.337 INCH W.T. API-5L GR. X42, SEAMLESS, COATED WITH 14 MILS OF FUSION BONDED EPOXY, WELDED JOINTS WILL BE PROTECTED BY EPOXY COATING.

B. RISER PIPE: 4 1/2" INCH O.D. x 0.337 INCH W.T. API-5L GR. X42 SEAMLESS, COATED WITH 14 MILS OF FUSION BONDED EPOXY, WELDED JOINTS WILL BE PROTECTED BY EPOXY COATING ABOVE SPLASH ZONE. THE LINE IS PROTECTED BY PLATFORM PAINT SYSTEM.

3 CATHODIC PROTECTION
23# POUND NET WEIGHT GALVALUM III ALLOY TAPERED SEMI-CYLINDRICAL BRACELET TYPE ANODES WILL BE ATTACHED TO THE PIPELINE AT A SPACING NOT TO EXCEED 900 FEET.
HYDROSTATIC TEST PRESSURE
A. THE FLOWLINE AND RISER SHALL BE HYDROSTATICALLY TESTED TO 3330 psig FOR A DURATION OF 8 HOURS.

4 CONSTRUCTION
A. ALL OFFSHORE CONSTRUCTION, INCLUDING THE WELDING OF THE PIPE, SHALL BE PERFORMED IN ACCORDANCE WITH PIONEER NATURAL RESOURCES TECHNICAL SPECIFICATIONS.

NOTE:
COORDINATES WERE ESTABLISHED BY SURVEY BEARINGS AND DISTANCES USING THE LAMBERT GRID (TEXAS SOUTH CENTRAL ZONE) SYSTEM.

MARK	APP'D.	CHK'D.	DRAFT	DATE	REVISION
			REB	5/26/04	ISSUED FOR APPROVAL

PIONEER NATURAL RESOURCES USA INC.

TECHNICAL ENGINEERING CONSULTANTS INC.
GRETNA LOUISIANA

APPROVED	DATE
CLIENT	
PROJECT WPR	
DESIGN WPR	
CHECK	
DRAFT REB	5/21/04

TITLE
BRAZOS BLOCK A-39 #5 149'-0" W.D.
4" GAS/CONDENSATE PIPELINE TO BRAZOS A-52 "C"
PLAN AND PROFILE

CLIENT PIONEER NATURAL RESOURCES | JOB NO. 110314 | DWG. NO. 800A

REB - Z:\Pioneer\110314\ROUTEMAP\110314800A.dwg - Wed, 2 Jun 2004 - 11:19 AM

Attachment A-4

Appendix B
General Information

(A) Contact
Lynne W. Foote
Pioneer Natural Resources USA, Inc.
972-969-3957 Office
972-969-3559 Fax
wootenl@pioneernrc.com

(B) Project Name:
Midway Project

(C) Production Rates and Life of Reserves
The well will be completed with a single-string selective completion in the Big Hum 6 and Big Hum 4. The anticipated peak production rate of the Big Hum 6 is 6 MMCFPD and 300 BCPD. Over the life of the project, the average production rate is anticipated to be 1 MMCFPD and 50 BCPD. The life of the reserves is currently estimated to be less than 7 years.

Anticipated peak production rate of the Big Hum 4 is 8 MMCFPD and 400 BCPD. Over the life of the project, the average production rate is anticipated to be 1 MMCFPD and 50 BCPD. The life of reserves is estimated to be 6 years.

(D) New or unusual technology
No new or unusual technology is proposed to be utilized as a part of this project.

(E) Bonding Information
Pioneer Natural Resources USA, Inc has complied with the $3,000,000 bond option as required by the Minerals Management Service in 30 CFR 256, Subpart I. Pioneer is currently on the MMS Exempt list for supplemental bonding.

(F) Onshore base and support vessels
Onshore bases will be located in Galveston, Texas will be utilized to support any completion or production activities. Travel routes used by vessels normally will be from shore base directly to the surface location; however, from time to time this route may vary. ***Attachment B-1*** is a map showing the expected travel routes.

Support Vessel	Production Activities - Trips per Week
Supply Boat	1

Support Vessels	Construction Activities – Trips Per Week
Supply Boat	1 trip / day during construction activities

(G) Lease Stipulations

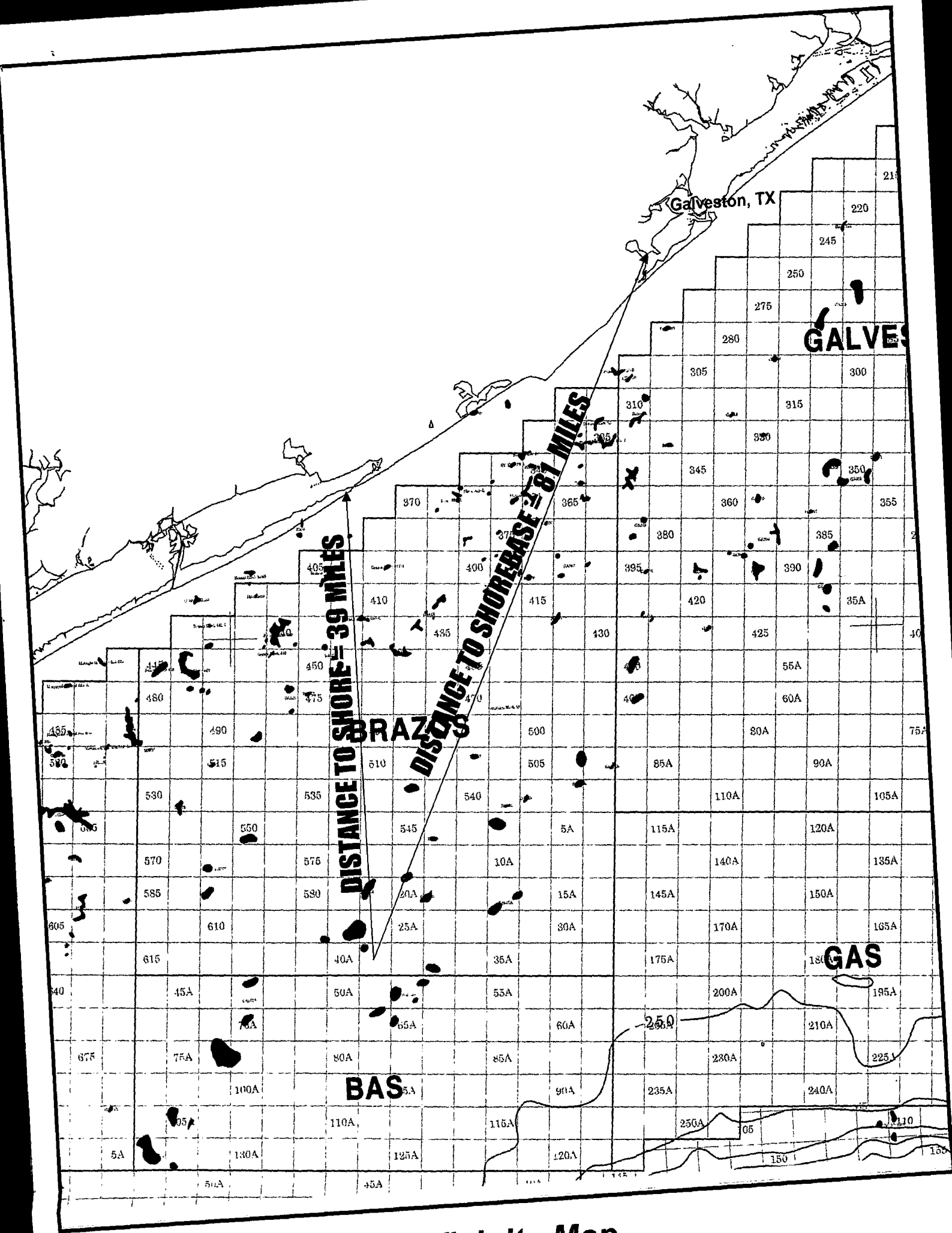
Brazos A39 is located within or could traverse Military Warning Area W-147. Pioneer will enter into an agreement with the 147th Fighter Wing, Operations Officer, Houston, Texas concerning the control of electromagnetic emissions and use of boats and aircraft in Military Warning Area W-147.

(H) Related OCS facilities and operations

As shown in Attachment A-4, the well will be tied back to an existing platform owned by Noble Energy located in Brazos A52 "C", using ROW gas pipelines. The distance between the braced caisson and host platform is approximately 3.5 miles, operated by Arena Offshore. From the host platform, the production stream will then enter into the existing infrastructure to shore.

(I) Transportation Information

All production will be transported with existing export pipelines.



Vicinity Map

Attachment B-1

Appendix C
Geological, Geophysical and H_2S Information

No new wells are planned to be drilled as a part of this plan; therefore, no structure contour maps, seismic lines, geological structure cross sections, shallow hazards report, shallow hazards assessment or high-resolution seismic lines have been submitted with this plan. This information was previously submitted with the Exploration Plan covering the drilling, completion and TA operation for the well. Per MMS request, a structure map is included. ***(Attachment C-1)***

A Shallow Hazards Report and Assessment will be submitted with the pipeline application.

H_2S Information

(A) Classification

Pioneer's Supplemental Exploration Plan (S-6050) approved by the Minerals Management Service classified the area's H_2S as "unknown". During drilling operations no H_2S was encountered, therefore Pioneer respectfully requests that H_2S be classified as "absent."

Proprietary Information

Attachment C-1

Proprietary Information

Attachment C-2

Appendix D
Biological Information

(A) Chemosynthetic Information
Not applicable due to water depth.

(B) Topographic Features Information
The activities proposed in this plan are not affected by any topographic features.

(C) Live Bottom (Pinnacle Trend) Information
The activities proposed in this plan are not located within the Pinnacle Trend area.

(D) Remotely Operated Vehicle (ROV) Surveys
Pioneer is familiar with the requirements of NTL 2001-G04. No ROV surveys as required in NTL 2001-G04 are proposed to be conducted. Further, we note that in the approval of the Exploration Plan for this block, Minerals Management Service determined that the proposed ROV surveys did not need to be conducted.

Appendix E
Wastes and Discharges Information

(A) Discharges

The information provided in Table 2 are estimates only and are based on information and plans known at the time this plan was prepared. The type of waste, amount and rate to be discharged, recycled or disposed may change from time to time during the project life.

Table 1: Discharge Table:

Not applicable to this Plan since it is Supplemental DOCD that does not include new multi well structure.

Table 2
Disposal Table—Wastes Not Discharged

The waste disposal shown below do not include any disposals on the host platform (Brazos A52 "C") which are not directly related to the proposed activities.

Type of Waste Approximate Composition	Amount	Rate per Day	Name/Location of Disposal Facility	Treatment and/or Storage, Transport and Disposal Method[4]
Spent oil-based drilling fluids and cuttings	None	None	None	None
Spent synthetic-based drilling fluids	None	None	None	None
Oil-contaminated produced sand	None	None	None	None
Waste Oil	None	None	None	None
Norm-contaminated wastes	None	None	None	None
Trash and debris	None	None	None	None
Chemical product wastes	None	None	None	None
Workover fluids-Not Discharged	None	None	None	None

Appendix F
Oil Spill Response and Chemical Information

1. Statement
Activities proposed in this DOCD will be covered by Pioneer's approved Regional OSRP.

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

3. Worst-case scenario comparison

Category	Regional OSRP	DOCD (caisson)
Type of Activity	Production	Production
Facility Location (area/block)	EI 208	BA A39
Facility Designation	Platform K	BA A39 005
Distance to Nearest Shoreline	48 miles	39 miles
Volume (bbls)		
-Storage tanks (total)	**73**	**0**
-Flowlines (on facility)	**0**	**0**
-Leaseterm Pipelines	**9**	**0**
-Uncontrolled blowout (BPD)	**1380**	**1000**
Total Volume	**1462**	**1000**
Type of Oil	Condensate	Condensate
API Gravity	**36°**	**°50**

Since Pioneer Natural Resources USA, Inc has the capability ~~to~~ 8/21/03 respond to the worst-case spill scenario included in its regional OSRP modified on July ~~25, 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 Pioneer 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.

4. Facility tanks, production vessels.
Derrick Barge, total capacity 8,063 bbls. Fluid Gravity #2 diesel.

5. Spill response sites
Not required for supplemental DOCD's with no new multiwell structures in which Texas is an affected State.

6. Diesel oil supply vessels
Not required in DOCD's in which Texas is an affected State.

7. Support vessels fuel tanks
Not required in DOCD's in which Texas is an affected State.

8. Produced liquid hydrocarbons transportation vessels
No liquid hydrocarbons are proposed to be transported by means other than pipeline.

10. Oil and synthetic based drilling fluids
Not applicable. No drilling is proposed as part of this plan.

12. Oils characteristics
Not required.

13. Blowout scenario
Not required.

14. Spill response discussion
Not required for supplemental DOCD's with no new multiwell structures in which Texas is an affected State.

15. Pollution prevention measures.
Not required for supplemental DOCD's with no new multiwell structures in which Texas is an affected State.

16. FGBNMS Monitoring Plans
Not applicable

Appendix G
Air Emissions Information

Screening Questions for DOCD'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 $=3400D^{2/3}$ 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_2S 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 150.1105(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

Air Pollutant	Plan Emission Amount (tons)	Calculated Exemption Amounts (tons) *From allowable lines in emission table*	Calculated Complex Total Emission Amounts (tons)
Carbon Monoxide (CO)	3.49	39101.07	0
Particulate matter (PM)	0.47	1298.70	0
Sulphur dioxide (SO_2)	2.13	1298.70	0
Nitrogen oxide (NOx)	15.99	1298.70	0
Volatile organic compounds (VOC)	0.48	1298.70	0

Contact Information:

Lynne W. Foote, Sr. Regulatory Analyst
Pioneer Natural Resources USA, Inc.
972-969-3957 office
972-969-3559 fax
214-755-7854 cell
wootenl@pioneernrc.com

Carrie Wittkopf, Staff Facilities Engineer
Pioneer Natural Resources USA, Inc.
972-969-4417 office
972-969-3564 fax
214-808-9442 cell
wittkopc@pioneernrc.com

Rusty Cooper, Sr. Staff Engineer
Pioneer Natural Resources USA, Inc.
972-969-4419 office
972-969-3559 fax
214-794-0953 cell
cooperg@pioneernrc.com

John Pry, Sr. Staff Operations Engineer
Pioneer Natural Resources USA, Inc.
972-969-3977 office
972-969-3544 fax
214-478-1201 cell
pryj@pioneernrc.com

Steven Zrake, Regulatory Manager
Pioneer Natural Resources USA, Inc.
972-969-3997 office
972-969-3588 fax
214-808-4704 cell
zrakes@pioneernrc.com

Appendix H
Environmental Impact Analysis (EIA)

(A) Impact-producing factors (IPF's)

The worksheet provided by MMS below was utilized to identify the environmental resources that could be impacted by these IPFs. An "X" has been placed in the space under each IPF category associated with the proposed activities the may impact a particular environmental resource. For those cells which are footnoted, a statement has been provided in the table below as to the applicability to the proposed operations, and where there may be any effect, provide an analysis of the effect.

ENVIRONMENTAL IMPACT ANALYSIS Worksheet

Environmental Resources	Impact Producing Factors (IPFs) Categories and Examples Refer to a recent GOM OCS Lease Sale EIS for a more complete list of IPFs					
	Emissions (air, noise, light, etc.)	Effluents (muds, cuttings, 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_2S releases)	Other IPFs you identify
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	
Fisheries			X		X	
Marine mammals	X(8)				X(8)	
Sea turtles	X(8)				X(8)	
Air quality	X(9)					
Shipwreck sites (known or potential)			(7)			
Prehistoric archaeological sites			X(7)			
Vicinity of Offshore Location						
Essential fish habitat					X(6)	
Marine and pelagic birds					X	
Public health and safety					(5)	
Coastal and Onshore						
Beaches					(6)	
Wetlands					(6)	
Shore birds and coastal nesting birds					(6)	
Coastal wildlife refuges					(6)	
Wilderness areas					(6)	
Other Resources You Identify						

The numbers in parentheses refer to the footnotes on page 2 of this form.

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:
   (a) 4-mile zone of the Flower Garden Banks, or the 3-mile zone of Stetson Bank,
   (b) 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;
   (c) Essential Fish Habitat (EFH) criteria of 500 ft from any no-activity zone; or
   (d) 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 a 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 H_2S concentrations greater than 20 ppm might be encountered.
6. All activities that could result in an accidental spill of produced liquid hydrocarbons or diesel fuel that you judge 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 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.

(b) Analysis:

Site-Specific at Offshore Location

(1) Designated topographic features: There are no IPF's (including effluents, physical disturbances to the seafloor and accidents) from the proposed activities that could cause impacts to topographical features. The site-specific offshore location of the proposed activities is approximately 60 miles away from the closest designated topographic feature.

It is unlikely that an accidental surface or subsurface oil spill will occur from the proposed activities. 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.

Even if a subsurface spill were to occur very near a designated topographic feature, subsurface oil should rise to the surface, and any oil remaining at depth would probably be swept clear of the banks by currents moving around the banks. The activities proposed in this plan will be covered by our regional OSRP as discussed in Appendix F of this plan.

(2) Pinnacle Trend area live bottoms: There are no IPF's (including effluents, physical disturbances to the seafloor and accidents) from the proposed activities that could cause impacts to the Pinnacle Trend area live bottoms. The site-specific offshore location is located in the Western planning area of the Gulf of Mexico, hundreds of miles away from the closest Pinnacle Trend live bottom stipulated block.

It is unlikely that an accidental surface or subsurface oil spill will occur from the proposed activities. Any surface oil spill resulting from the proposed action would likely have no impact on the biota of the Pinnacle Trend because the crests of these features are much deeper than 20 m. Even if a subsurface spill were to occur very near Pinnacle Trend live bottom areas, subsurface oil should rise in the water column, surfacing almost directly over the source location and thus not impact pinnacles. The activities proposed in this plan will be covered by our regional OSRP as discussed in Appendix F of this plan.

(3) Eastern Gulf live bottoms: There are no IPF's (including effluents, physical disturbances to the seafloor, or potential accidents) from the proposed activities that could cause impact to Eastern Gulf live bottoms. The site-specific offshore location of the proposed activities is located in the Western planning area of the Gulf of Mexico, hundreds of miles away from the closest eastern gulf live bottom stipulated block.

It is unlikely that an accidental surface or subsurface oil spill will 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). The activities proposed in this plan will be covered by our regional OSRP as discussed in Appendix F of this plan.

(4) Chemosynthetic communities: There are no IPF's (e.g. physical disturbances to the seafloor) from the proposed activities have the potential to cause impacts to chemosynthetic communities. The water depth of the proposed location is 149'.

(5) Water Quality: Effluents and accidents from the proposed activities could potentially cause impacts to water quality. However, since all discharges will be made in accordance with a general National Pollutant Discharge Elimination System (NPDES) permit issued by the U. S. Environmental Protection Agency (USEPA), operational discharges are not expected to cause significant adverse impacts to water quality.

It is unlikely that an accidental oil spill will occur from the proposed activities. If a spill were to occur, the water quality of marine waters would be temporarily affected by the dissolved

components and small oil droplets. The effect would be extremely minor and localized. Dispersion by currents and microbial degradation would remove the oil from the water column or dilute the constituents to background levels. The activities proposed in this plan will be covered by our regional OSRP as discussed in Appendix F of this plan.

(6) Fisheries: An accidental oil spill that may occur as a result of the proposed action has the potential to cause some detrimental effects to fisheries. However, it is unlikely that an accidental surface or subsurface oil spill will 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 by the capability of adult fish and shellfish to avoid a spill, to metabolize hydrocarbons, and excrete both metabolites and parent compounds. The activities proposed in this plan will be covered by our regional OSRP as discussed in Appendix F of this plan.

(7) Marine mammals: Marine mammals may be adversely impacted by several IPF's (including vessel traffic, noise, accidental oil spills, and loss of trash and debris), all of which could occur due to the proposed action. Chronic and sporadic sublethal effects could occur that may stress and/or weaken individuals of a local group or population and make them more susceptible to infection from natural or anthropogenic sources. Few lethal effects are expected from oil spills, chance collisions with service vessels and ingestion of plastic material. Oil spills of any size are estimated to be aperiodic events that may contact cetaceans. Disturbance (e.g. noise) may stress animals, weaken their immune systems, and make them more vulnerable to parasites and diseases that normally would not be fatal.

The net result of any disturbance would depend on the size and percentage of the population affected, ecological importance of the disturbed area, environmental and biological parameters that influence an animal's sensitivity to disturbance and stress, and the accommodation time in response to prolonged disturbance (Geraci and St. Aubin, 1980). 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.

(8) Sea turtles: IPF's that could affect sea turtles include vessel traffic, noise, trash and debris, and accidental oil spills. 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 affected areas could cause declines in survival or productivity, resulting in gradual population declines.

(9) Air quality: Setting of the braced caisson and production are the only activities planned under this DOCD. All of the emissions are lower than the calculation exemption amount for this location. See Appendix G.

(10) Shipwreck sites (known or potential): There are no IPF's (including physical disturbances to the seafloor) from the proposed activities that could cause impacts to known or potential shipwreck sites. The proposed activities are located in or adjacent to an OCS block designated by MMS as having high-probability for the occurrence of shipwrecks and review of the Shallow Hazards Report (submitted in accordance with NTL 2002-G08, Appendix C, and NTL 98-20) indicates that there are no known or potential shipwreck sites located within the survey area.

(11) Prehistoric archaeological sites: There are no IPF's (including physical disturbances to the seafloor) from the proposed activities that could cause impacts to prehistoric archaeological sites. The proposed activities are located in an OCS block designated by MMS as having high-probability for the occurrence of prehistoric archaeological sites. As stated in the Archaeological and Hazard Analysis, Site Clearance letter the near-seafloor starta at the location will provide a suitable foundation for a jack-up rig, and there were no high probability zones for archaeological resources near the planned drill site.

Vicinity of Offshore Location

(1) Essential fish habitat: 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 as discussed in Appendix F of this plan.

(2) Marine and pelagic birds: 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 will occur from the proposed activities. The activities proposed in this plan will be covered by our regional OSRP as discussed in Appendix F of this plan.

(3) Public health and safety due to accidents: There are no IPF's (including an accidental H_2S release) from the proposed activities that could cause impacts to public health and safety.

In accordance with 20 CFR 150.417(c) and Appendix C of this plan, sufficient information has been submitted to justify our request that the area of our proposed activities be classified by Minerals Management Service as H_2S absent.

Coastal and Onshore

(1) Beaches: An accidental oil spill from the proposed activities could cause impacts to beaches. However, due to the distance from shore (39 miles) and the response capabilities 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 as discussed in Appendix F of this plan.

(2) Wetlands: An accidental oil spill from the proposed activities could cause impacts to wetlands. However, due to the distance from shore (39 miles) and the response capabilities 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 as discussed in Appendix F of this plan.

(3) Shore birds and coastal nesting birds: 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 (39 miles) and the response capabilities 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 as discussed in Appendix F of this plan.

(4) Coastal wildlife refuges: An accidental oil spill from the proposed activities could cause impacts to coastal wildlife refuges. However, due to the distance from shore (39 miles) and the response capabilities 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 as discussed in Appendix F of this plan.

(5) Wilderness areas: An accidental oil spill from the proposed activities could cause impacts to wilderness areas. However, due to the distance from shore (39 miles) and the response capabilities 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 as discussed in Appendix F of this plan.

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.

Shallow Hazards reports were submitted in accordance with Appendix C of this plan and NTL 98-20. A Shallow Hazards Assessment of the any seafloor and subsurface geological and manmade features and conditions that may adversely affect operations was submitted in accordance with Appendix C of this plan and NTL 98-20.

(D) Alternatives: No alternatives to the proposed activities were considered to reduce the potential environmental impacts of the proposed activity.

(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 EIA:

Geraci, J.R. and D.J. St. Aubin. 1980. Offshore Petroleum Resource Development and Marine Mammals: A review and research recommendations. Marine Fisheries Review 42:1-12.

Laist, D.W., A.R. Knowlton, J.G. Mead, A.S. Collet, and M. Podesta. 2001. Collisions Between Ships and Whales. Mar. Mamm. Sci. 17:35-75.

Pioneer Natural Resources 2002. Supplemental Exploration Plan S-6050 for Leases OCS-G04559 and OCS Federal Waters, Gulf of Mexico, Offshore, Texas.

U. S. Dept of the Interior. Minerals Management Service 2002, OCS EIS/EA MMS 2002-052, Gulf of Mexico OCS Oil and Gas Lease Sales: 2003-2007, Central Planning Area Sales 185, 190, 194, 198, and 201; Western Planning Area Sales 187, 192, 196, and 200; Final Environmental Impact Statement, Volume I: Chapters 1-10; Volume II: Figures and Tables.

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:
   (a) 4-mile zone of the Flower Garden Banks, or the 3-mile zone of Stetson Bank,
   (b) 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;
   (c) Essential Fish Habitat (EFH) criteria of 500 ft from any no-activity zone; or
   (d) 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 a 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 H_2S concentrations greater than 20 ppm might be encountered.
6. All activities that could result in an accidental spill of produced liquid hydrocarbons or diesel fuel that you judge 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 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.

(b) Analysis:

Site-Specific at Offshore Location

(1) Designated topographic features: There are no IPF's (including effluents, physical disturbances to the seafloor and accidents) from the proposed activities that could cause impacts to topographical features. The site-specific offshore location of the proposed activities is approximately 60 miles away from the closest designated topographic feature.

It is unlikely that an accidental surface or subsurface oil spill will occur from the proposed activities. 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.

Even if a subsurface spill were to occur very near a designated topographic feature, subsurface oil should rise to the surface, and any oil remaining at depth would probably be swept clear of the banks by currents moving around the banks. The activities proposed in this plan will be covered by our regional OSRP as discussed in Appendix F of this plan.

(2) Pinnacle Trend area live bottoms: There are no IPF's (including effluents, physical disturbances to the seafloor and accidents) from the proposed activities that could cause impacts to the Pinnacle Trend area live bottoms. The site-specific offshore location is located in the Western planning area of the Gulf of Mexico, hundreds of miles away from the closest Pinnacle Trend live bottom stipulated block.

It is unlikely that an accidental surface or subsurface oil spill will occur from the proposed activities. Any surface oil spill resulting from the proposed action would likely have no impact on the biota of the Pinnacle Trend because the crests of these features are much deeper than 20 m. Even if a subsurface spill were to occur very near Pinnacle Trend live bottom areas, subsurface oil should rise in the water column, surfacing almost directly over the source location and thus not impact pinnacles. The activities proposed in this plan will be covered by our regional OSRP as discussed in Appendix F of this plan.

(3) Eastern Gulf live bottoms: There are no IPF's (including effluents, physical disturbances to the seafloor, or potential accidents) from the proposed activities that could cause impact to Eastern Gulf live bottoms. The site-specific offshore location of the proposed activities is located in the Western planning area of the Gulf of Mexico, hundreds of miles away from the closest eastern gulf live bottom stipulated block.

It is unlikely that an accidental surface or subsurface oil spill will 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). The activities proposed in this plan will be covered by our regional OSRP as discussed in Appendix F of this plan.

(4) Chemosynthetic communities: There are no IPF's (e.g. physical disturbances to the seafloor) from the proposed activities have the potential to cause impacts to chemosynthetic communities. The water depth of the proposed location is 149'.

(5) Water Quality: Effluents and accidents from the proposed activities could potentially cause impacts to water quality. However, since all discharges will be made in accordance with a general National Pollutant Discharge Elimination System (NPDES) permit issued by the U. S. Environmental Protection Agency (USEPA), operational discharges are not expected to cause significant adverse impacts to water quality.

It is unlikely that an accidental oil spill will occur from the proposed activities. If a spill were to occur, the water quality of marine waters would be temporarily affected by the dissolved

components and small oil droplets. The effect would be extremely minor and localized. Dispersion by currents and microbial degradation would remove the oil from the water column or dilute the constituents to background levels. The activities proposed in this plan will be covered by our regional OSRP as discussed in Appendix F of this plan.

(6) Fisheries: An accidental oil spill that may occur as a result of the proposed action has the potential to cause some detrimental effects to fisheries. However, it is unlikely that an accidental surface or subsurface oil spill will 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 by the capability of adult fish and shellfish to avoid a spill, to metabolize hydrocarbons, and excrete both metabolites and parent compounds. The activities proposed in this plan will be covered by our regional OSRP as discussed in Appendix F of this plan.

(7) Marine mammals: Marine mammals may be adversely impacted by several IPF's (including vessel traffic, noise, accidental oil spills, and loss of trash and debris), all of which could occur due to the proposed action. Chronic and sporadic sublethal effects could occur that may stress and/or weaken individuals of a local group or population and make them more susceptible to infection from natural or anthropogenic sources. Few lethal effects are expected from oil spills, chance collisions with service vessels and ingestion of plastic material. Oil spills of any size are estimated to be aperiodic events that may contact cetaceans. Disturbance (e.g. noise) may stress animals, weaken their immune systems, and make them more vulnerable to parasites and diseases that normally would not be fatal.

The net result of any disturbance would depend on the size and percentage of the population affected, ecological importance of the disturbed area, environmental and biological parameters that influence an animal's sensitivity to disturbance and stress, and the accommodation time in response to prolonged disturbance (Geraci and St. Aubin, 1980). 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.

(8) Sea turtles: IPF's that could affect sea turtles include vessel traffic, noise, trash and debris, and accidental oil spills. 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 affected areas could cause declines in survival or productivity, resulting in gradual population declines.

(9) Air quality: Setting of the braced caisson and production are the only activities planned under this DOCD. All of the emissions are lower than the calculation exemption amount for this location. See Appendix G.

(10) Shipwreck sites (known or potential): There are no IPF's (including physical disturbances to the seafloor) from the proposed activities that could cause impacts to known or potential shipwreck sites. The proposed activities are located in or adjacent to an OCS block designated by MMS as having high-probability for the occurrence of shipwrecks and review of the Shallow Hazards Report (submitted in accordance with NTL 2002-G08, Appendix C, and NTL 98-20) indicates that there are no known or potential shipwreck sites located within the survey area.

(11) Prehistoric archaeological sites: There are no IPF's (including physical disturbances to the seafloor) from the proposed activities that could cause impacts to prehistoric archaeological sites. The proposed activities are located in an OCS block designated by MMS as having high-probability for the occurrence of prehistoric archaeological sites. As stated in the Archaeological and Hazard Analysis, Site Clearance letter the near-seafloor starta at the location will provide a suitable foundation for a jack-up rig, and there were no high probability zones for archaeological resources near the planned drill site.

Vicinity of Offshore Location

(1) Essential fish habitat: 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 as discussed in Appendix F of this plan.

(2) Marine and pelagic birds: 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 will occur from the proposed activities. The activities proposed in this plan will be covered by our regional OSRP as discussed in Appendix F of this plan.

(3) Public health and safety due to accidents: There are no IPF's (including an accidental H_2S release) from the proposed activities that could cause impacts to public health and safety.

In accordance with 20 CFR 150.417(c) and Appendix C of this plan, sufficient information has been submitted to justify our request that the area of our proposed activities be classified by Minerals Management Service as H_2S absent.

Coastal and Onshore

(1) Beaches: An accidental oil spill from the proposed activities could cause impacts to beaches. However, due to the distance from shore (39 miles) and the response capabilities 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 as discussed in Appendix F of this plan.

(2) Wetlands: An accidental oil spill from the proposed activities could cause impacts to wetlands. However, due to the distance from shore (39 miles) and the response capabilities 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 as discussed in Appendix F of this plan.

(3) Shore birds and coastal nesting birds: 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 (39 miles) and the response capabilities 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 as discussed in Appendix F of this plan.

(4) Coastal wildlife refuges: An accidental oil spill from the proposed activities could cause impacts to coastal wildlife refuges. However, due to the distance from shore (39 miles) and the response capabilities 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 as discussed in Appendix F of this plan.

(5) Wilderness areas: An accidental oil spill from the proposed activities could cause impacts to wilderness areas. However, due to the distance from shore (39 miles) and the response capabilities 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 as discussed in Appendix F of this plan.

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.

Shallow Hazards reports were submitted in accordance with Appendix C of this plan and NTL 98-20. A Shallow Hazards Assessment of the any seafloor and subsurface geological and manmade features and conditions that may adversely affect operations was submitted in accordance with Appendix C of this plan and NTL 98-20.

(D) Alternatives: No alternatives to the proposed activities were considered to reduce the potential environmental impacts of the proposed activity.

(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 EIA:

Geraci, J.R. and D.J. St. Aubin. 1980. Offshore Petroleum Resource Development and Marine Mammals: A review and research recommendations. Marine Fisheries Review 42:1-12.

Laist, D.W., A.R. Knowlton, J.G. Mead, A.S. Collet, and M. Podesta. 2001. Collisions Between Ships and Whales. Mar. Mamm. Sci. 17:35-75.

Pioneer Natural Resources 2002. Supplemental Exploration Plan S-6050 for Leases OCS-G04559 and OCS Federal Waters, Gulf of Mexico, Offshore, Texas.

U. S. Dept of the Interior. Minerals Management Service 2002, OCS EIS/EA MMS 2002-052, Gulf of Mexico OCS Oil and Gas Lease Sales: 2003-2007, Central Planning Area Sales 185, 190, 194, 198, and 201; Western Planning Area Sales 187, 192, 196, and 200; Final Environmental Impact Statement, Volume I: Chapters 1-10; Volume II: Figures and Tables.