

UNITED STATES GOVERNMENT
MEMORANDUM

September 21, 2011

To: Public Information (MS 5030)
From: Plan Coordinator, FO, Plans Section (MS
5231)

Subject: Public Information copy of plan
Control # - N-09577
Type - Initial Exploration Plan
Lease(s) - OCS-G22896 Block - 710 Mississippi Canyon Area
Operator - ATP Oil & Gas Corporation
Description - Subsea Wells A and B
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.

Michelle Griffitt
Plan Coordinator

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
WELL/A	G22896/MC/710	1200 FNL, 7934 FEL	G22896/MC/710
WELL/B	G22896/MC/710	1200 FNL, 7984 FEL	G22896/MC/710

RECORD OF CHANGE

EP- N-9577 ATP Oil & Gas Corporation

OCS-G 22896/MC 710



Original Submission: 05/23/2011

Date Amended	Amendment
06/17/2011	Revised Deepwater Benthic Communities Statement (Section 5), Air Emissions Questions (Section 7), Oil Spill OSRP Certification Statement (Section 8), and Aircraft Fuel Capacity (Section 12). Submitted cross section and seismic lines for proposed Well No. 001 (Exhibit 4).
07/12/2011	Submitted Archaeological & Benthic Study conducted November 2010 Revised WCD & affected pages of the EP to reflect BOEMREs calculated 143,374 BOPD spill volume (Section 8)
07/21/2011	Submitted revised Spill Response Discussion to reflect new WCD volume of 143,374 (Section 8)
08/09/2011	Submitted revised Oil Spill Info (Section 8) to include the date the Regional OSRP was modified; updated NTL-N06 information (Exhibit 8) to reflect BOEMs WCD calculation

INITIAL EXPLORATION PLAN

MISSISSIPPI CANYON BLOCK 710

LEASE OCS-G 22896

GOMEZ PROSPECT

MAY 23, 2011

Estimated Start-up Date: October 1, 2011

PUBLIC COPY

ATP OIL & GAS CORPORATION

4600 Post Oak Place, Suite 200

Houston, Texas 77027

Erin Rachal

Regulatory Manager

erachal@atpog.com

713-386-2418

SECTION 1

PLAN CONTENTS

(30 CFR 250.211 & 250.241)

A. Plan Contents:

ATP Oil & Gas Corporation proposes to install subsea wellheads, drill, and complete two well locations, namely A & B, in Mississippi Canyon Block 710. See attached OCS Plan Information Form – Form MMS-137, included as **Exhibit 1**.

B. Location:

Included are maps at a scale of 1 inch = 2,000 feet, that depict the surface location and water depth of each proposed well and the proposed radius of the associated drilling unit. These maps are included as the following Exhibits:

Exhibit 2: Well Location Plat

Exhibit 3: Bathymetry map

C. Safety and Pollution Prevention Features:

ATP will use a semi-submersible drilling unit with a subsea BOP stack to conduct the proposed operations. A description of the drilling unit is included on the OCS Plan Information Form. Rig specifications will be made part of each Application for Permit to Drill.

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

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

D. Storage Tanks and Production Vessels:

The following table includes only 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)
Fuel Oil (Marine Diesel)	Semi-submersible	4750	4	19000	32.4°

F. Additional Measures:

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

EXHIBIT 1

OCS PLAN INFORMATION FORM

OCS PLAN INFORMATION FORM

General Information												
Type of OCS Plan:	<input checked="" type="checkbox"/>	Exploration Plan (EP)	Development Operations Coordination Document (DOCD)									
Company Name: ATP Oil & Gas Corporation					MMS Operator Number: 01819							
Address: 4600 Post Oak Place					Contact Person: Erin Rachal							
Suite 100					Phone Number: 713-386-2418							
Houston, Texas 77027					E-Mail Address: erachal@atpog.com							
Lease(s): OCS-G 22896			Area: MC		Block(s): 710		Project Name (If Applicable): Gomez					
Objective(s):	<input checked="" type="checkbox"/>	Oil	<input type="checkbox"/>	Gas	<input type="checkbox"/>	Sulphur	<input type="checkbox"/>	Salt	Onshore Base: Fourchon, LA	Distance to Closest Land (Miles): 49		
Description of Proposed Activities (Mark all that apply)												
<input checked="" type="checkbox"/>	Exploration drilling					Development drilling						
<input checked="" type="checkbox"/>	Well completion					Installation of production platform						
<input type="checkbox"/>	Well test flaring (for more than 48 hours)					Installation of production facilities						
<input type="checkbox"/>	Installation of caisson or platform as well protection structure					Installation of satellite structure						
<input checked="" type="checkbox"/>	Installation of subsea wellheads and/or manifolds					Commence production						
<input type="checkbox"/>	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	<input checked="" type="checkbox"/>	No		
Do you propose to use new or unusual technology to conduct your activities?								Yes	<input checked="" type="checkbox"/>	No		
Do you propose any facility that will serve as a host facility for deepwater subsea development?								Yes	<input checked="" type="checkbox"/>	No		
Do you propose any activities that may disturb an MMS-designated high-probability archaeological area?								<input checked="" type="checkbox"/>	Yes	No		
Have all of the surface locations of your proposed activities been previously reviewed and approved by MMS?								Yes	<input checked="" type="checkbox"/>	No		
Tentative Schedule of Proposed Activities												
Proposed Activity					Start Date	End Date	No. of Days					
Drill, complete, test and install a subsea wellhead over Well Location A					10/01/2011	12/02/2011	62					
Drill, complete, test and install a subsea wellhead over Well Location B					01/01/2012	03/03/2012	62					
Description of Drilling Rig					Description of Production Platform							
<input type="checkbox"/>	Jackup		<input type="checkbox"/>	Drillship		<input type="checkbox"/>	Caisson			<input type="checkbox"/>	Tension leg platform	
<input type="checkbox"/>	Gorilla Jackup		<input type="checkbox"/>	Platform rig		<input type="checkbox"/>	Well protector			<input type="checkbox"/>	Compliant tower	
<input checked="" type="checkbox"/>	Semisubmersible		<input type="checkbox"/>	Submersible		<input type="checkbox"/>	Fixed platform			<input type="checkbox"/>	Guyed tower	
<input type="checkbox"/>	DP Semisubmersible		<input type="checkbox"/>	Other (Attach Description)		<input checked="" type="checkbox"/>	Subsea manifold			<input type="checkbox"/>	Floating production system	
Drilling Rig Name (If Known):					<input type="checkbox"/>	Spar			<input type="checkbox"/>	Other (Attach Description)		
Description of Lease Term Pipelines												
From (Facility/Area/Block)				To (Facility/Area/Block)				Diameter (Inches)		Length (Feet)		

OCS PLAN INFORMATION FORM (CONTINUED)
Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location					
Well or Structure Name/Number (If renaming well or structure, reference previous name): Well Location A					Subsea Completion
Anchor Radius (if applicable) in feet: 11,000					<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Surface Location			Bottom-Hole Location (For Wells)		
Lease No.	OCS G22896		OCS		
Area Name	Mississippi Canyon				
Block No.	710				
Blockline Departures (in feet)	N/S Departure: F___ L 1200' FNL		N/S Departure: F___ L		
	E/W Departure: 7934' FEL F___ L		E/W Departure: F___ L		
Lambert X-Y coordinates	X: 784066'		X:		
	Y: 10263120'		Y:		
Latitude/Longitude	Latitude 28° 15' 19.661"N		Latitude		
	Longitude 89° 39' 37.505"W		Longitude		
TVD (Feet):		MD (Feet):		Water Depth (Feet): 2810'	
Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)					
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 =	
<p>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 250.197. 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 600 hours per response, or 640 with an accompanying EP (1,000 hours in AKOCSR), or 690 (1,700 in AKOCSR) with an accompanying DPP or DOCD, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the forms associated with subpart B. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 5438, Minerals Management Service, 1849 C Street, NW., Washington, DC 20240.</p>					

OCS PLAN INFORMATION FORM (CONTINUED)
Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location						
Well or Structure Name/Number (If renaming well or structure, reference previous name): Well Location B					Subsea Completion	
Anchor Radius (if applicable) in feet: 11,000					<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	Surface Location			Bottom-Hole Location (For Wells)		
Lease No.	OCS G22896			OCS		
Area Name	Mississippi Canyon					
Block No.	710					
Blockline Departures (in feet)	N/S Departure: F ___ L 1200' FNL			N/S Departure: F ___ L		
	E/W Departure: 7984' FEL F ___ L			E/W Departure: F ___ L		
Lambert X-Y coordinates	X: 784016'			X:		
	Y: 10263120'			Y:		
Latitude/ Longitude	Latitude 28° 15' 19.650"N			Latitude		
	Longitude 89° 39' 38.064"W			Longitude		
TVD (Feet):			MD (Feet):	Water Depth (Feet): 2810'		
Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)						
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 =		
<p>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 250.197. 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 600 hours per response, or 640 with an accompanying EP (1,000 hours in AKOCSR), or 690 (1,700 in AKOCSR) with an accompanying DPP or DOCD, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the forms associated with subpart B. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 5438, Minerals Management Service, 1849 C Street, NW., Washington, DC 20240.</p>						

EXHIBIT 2

WELL LOCATION PLAT

MC666

OCS-G-22896
Well #1

Y=10,264,320.00'

7,934.00'

1,200.00'

OCS-G-22896 WELL No. 1
PROP. SURF. LOCATION
X= 784,066.00'
Y= 10,263,120.00'
Lat= 28°15'19.864"N
Lon= 89°39'37.493"W



X=792,000.00'

MC709

MC710

OCS-G-22896

ATP

MC711

X=776,160.00'

MISSISSIPPI CANYON AREA
GULF OF MEXICO

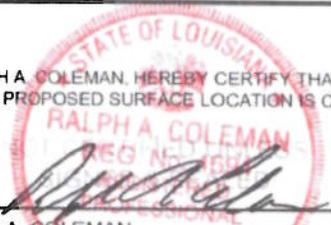
Y=10,248,480.00'

MC754

SCALE: 1"=2,000'

TRANSFORMATION METHOD (WGS84-NAD27) = NADCON v2.1

I, RALPH A. COLEMAN, HEREBY CERTIFY THAT THE ABOVE PROPOSED SURFACE LOCATION IS CORRECT.



RALPH A. COLEMAN
PROFESSIONAL LAND SURVEYOR
LOUISIANA REGISTRATION No. 4691

DATE: 05/12/2011 TIME: 15:46 FILENAME: Z:\110424\ACAD\PERMIT\110424APD_1.DWG

PUBLIC INFORMATION



OCS-G-22896 Well No. 1

BLOCK 710 - MISSISSIPPI CANYON AREA

PREPARED BY



JOB No: 110424

REVISED:

DATE: May. 12, 2011

FILENAME: 110424APD_1.DWG

SHEET 1 OF 1

MC666

OCS-G-22896
Well #2

1,200.00'

7,984.00'

Y=10,264,320.00'

OCS-G-22896 WELL No. 2	
PROP. SURF. LOCATION	
X=	784,016.00'
Y=	10,263,120.00'
Lat=	28°15'19.853"N
Lon=	89°39'38.051"W

X=792,000.00'



MC711

MC710
OCS-G-22896
ATP

MC709

MISSISSIPPI CANYON AREA
GULF OF MEXICO

X=776,160.00'

Y=10,248,480.00'

MC754

SCALE: 1"=2,000'

TRANSFORMATION METHOD (WGS84-NAD27) = NADCON v2.1

I, RALPH A. COLEMAN, HEREBY CERTIFY THAT THE ABOVE PROPOSED SURFACE LOCATION IS CORRECT.

RALPH A. COLEMAN

RALPH A. COLEMAN
PROFESSIONAL LAND SURVEYOR
LOUISIANA REGISTRATION No. 4691

DATE: 05/12/2011 TIME: 15:49 FILENAME: Z:\110424\ACAD\PERMIT\110424APD_2.DWG

PUBLIC INFORMATION



OCS-G-OCS-G-22896 Well No. 2

BLOCK 710 - MISSISSIPPI CANYON AREA

PREPARED BY:



JOB No: 110424

REVISED:

DATE: May, 12, 2011

FILENAME: 110424APD_2.DWG

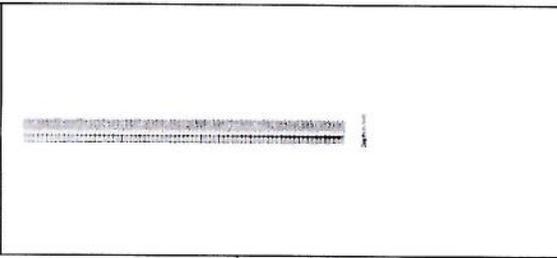
SHEET 1 OF 1

EXHIBIT 3

BATHYMETRY MAP

PLAN VIEW

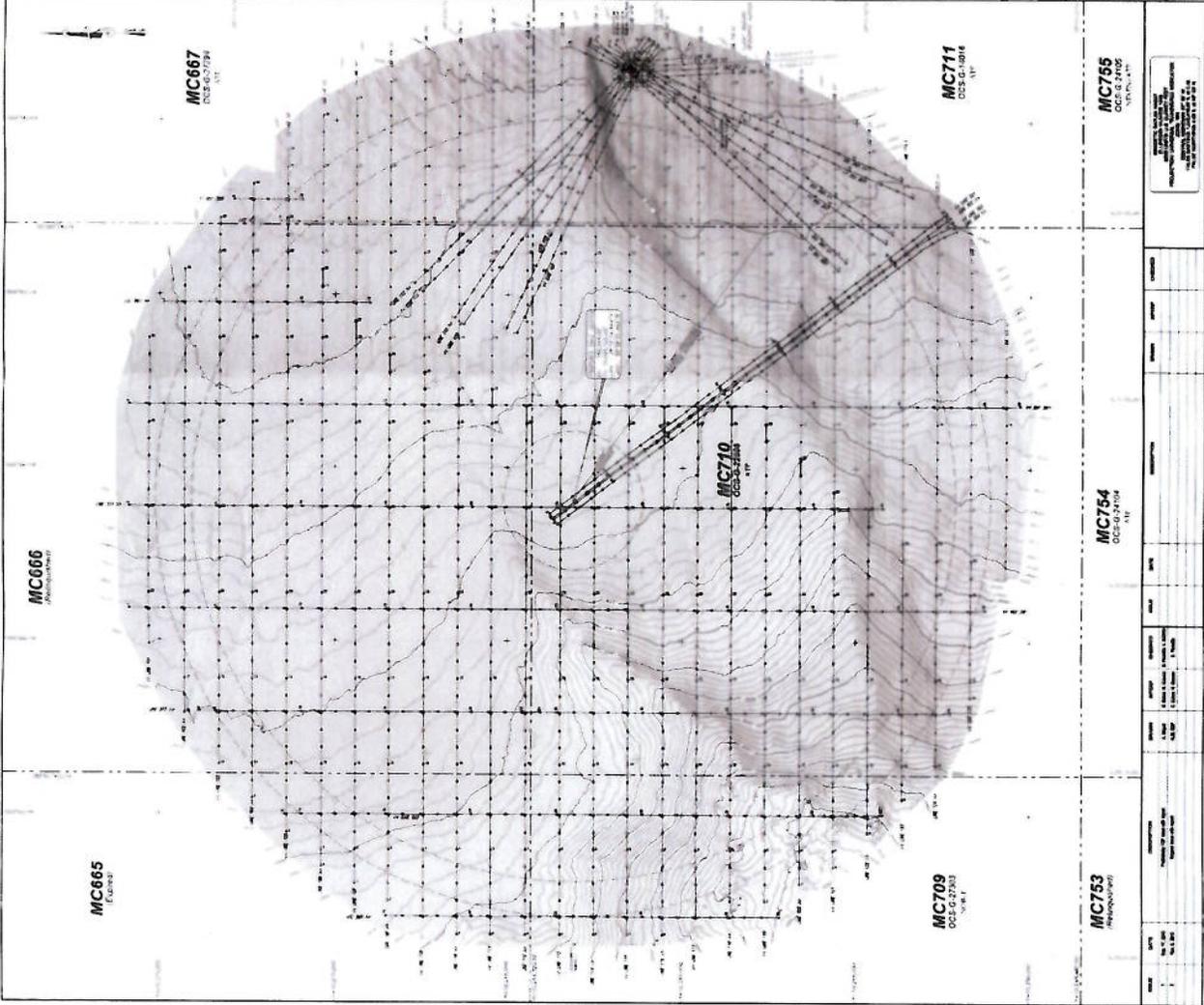
DATE: 08/14/18
 DRAWN BY: J. H. HARRIS
 CHECKED BY: J. H. HARRIS
 PROJECT: MC710
 SHEET: 1 OF 5



ATP ARCHITECTURAL TECHNOLOGICAL PRACTICE

COLOR SENSITIVE INK MAP
 ARCHAEOLOGICAL DEEPWATER BENTHIC
 ASSESSMENT
 # PROPOSED DREDGING AND FILLING OF WELLS #1 AND #2
 WASHINGTON COUNTY, ARIZONA

DATE: 08/14/18
 DRAWN BY: J. H. HARRIS
 CHECKED BY: J. H. HARRIS
 PROJECT: MC710
 SHEET: 1 OF 5



DATE: 08/14/18
 DRAWN BY: J. H. HARRIS
 CHECKED BY: J. H. HARRIS
 PROJECT: MC710
 SHEET: 1 OF 5

SECTION 2 GENERAL INFORMATION (30 CFR 250.213 & 250.243)

A. Applications and Permits:

Listed in the table below are additional permits/applications to be filed before operations can commence under this EP:

Application/Permit	Issuing Agency	Status
Application for Permit to Drill	BOEMRE	To be submitted

B. Drilling Fluids:

Type of Drilling Fluid	Estimated Volume of Drilling Fluid to be Used per Well
Water-based (seawater, freshwater, barite)	8000 bbls
Oil-based (diesel, minerals, oil)	N/A
Synthetic-based (internal olefin, ester)	7245 bbls

C. New or Unusual Technology

ATP does not propose to use any new or unusual technology to carry out the proposed exploration activities.

D. Bonding Statement

The bond requirements for the activities and facilities proposed in this EP are satisfied by a \$3,000,000.00 areawide development bond, furnished and maintained according to 30 CFR 256, subpart I; NTL No. 2000-G16, "Guidelines for General Lease Surety Bonds;" and additional security under 30 CFR 256.53(d) and National NTL No. 2008-N07, "Supplemental Bond Procedures."

E. Oil Spill Financial Responsibility (OSFR)

ATP Oil & Gas Corporation, MMS company number 01819 has demonstrated oil spill financial responsibility for the facilities proposed in this EP according to 30 CFR Part 253; and NTL No. 2008-N05, "Guidelines for Oil Spill Financial Responsibility for Covered Facilities".

F. Deepwater Well Control Statement

ATP Oil & Gas Corporation, MMS company number 01819 has the financial capability to drill a relief well and conduct other emergency well control operations.

G. Blowout Scenario:

The maximum duration of an uncontrolled blowout depends on the time it takes for the well to bridge over. History has shown that most open-hole blowouts bridge over within 72 hours. BOEM reports that 49% of all blowout events during 1992 – 2006 stopped flowing in 24 hours or less, 41% lasted seven days or less and the longest blowout lasted eleven days. Please note, this information was gathered prior to the BP Macondo which was a cased-hole blowout and therefore a much more onerous scenario. Over 50% of blowouts were controlled by surface intervention, 36% of the blowouts bridged over and the rest depleted. Two relief wells were initiated but both blowouts were controlled by other means prior to completing their relief wells. Blowout simulations confirm that, due to the typically large induced draw down, open hole blowouts in sandstone reservoirs like the 3750 B/C Sand usually fall below the collapse gradient of the open formations and the formation bridges off.

The objective sand at the proposed well locations is poorly consolidated sandstone reservoir making bridging likely in a blowout event. Similar rock properties and analogous seismic amplitudes in formations known to have high porosity, high permeability and poor consolidation support the high potential of wellbore bridging within 72 hours in the event of an open-hole blowout at the proposed MC 710 well locations.

Concurrent with surface or subsea intervention equipment, subsea containment equipment and spill response equipment mobilization a drilling rig would be mobilized to location to begin relief well operations. There are approximately 25 rigs in the GOM which are working or stacked and capable of drilling a relief well in MC 710 open water location with 2,810' water depth. The stacked rigs in the GOM could be "crewed up" in 3 to 7 days depending on contractor. Rig acquisition, transit & load out for relief well operations is estimated at no more than ten days. ATP has alliances with diversified engineering consulting firms which would provide drilling operations, engineering, logistical, materials management, QA/QC and well-site supervision support.

The estimated time to drill a relief well approximately 10,840' upstream of prevailing wind and currents is 43 days. This includes 10 days to mobilize a rig and 33 days to drill, intersect and kill. There are no available platforms in the area which would provide an advantage for drilling the relief well. A relief well could not be drilled from an onshore location.

SECTION 3
GEOLOGICAL & GEOPHYSICAL INFORMATION
(30 CFR 250.214 & 250.244)

A. Geological Description:

Proprietary data.

B. Structure Contour Maps:

Current structure contour maps drawn on the top of each prospective hydrocarbon sand, showing the entire lease block, the location of each proposed well, and the locations of geological cross-sections are included as proprietary data.

C. Interpreted 2-D/3-D Seismic Lines:

Interpreted 3-D seismic lines which are migrated, annotated with depth scale, and are within 500' of the surface locations of the proposed wells are included as proprietary data.

D. Geological Structure Cross-Sections:

Enclosed in the proprietary copy are interpreted geological structure cross-sections showing at least one key horizon and the objective sands; labeled using standard biostratigraphic terms.

E. Shallow Hazards Report:

A shallow hazards survey was conducted over Mississippi Canyon Block 710. Four copies of the Shallow Hazards Report were previously submitted to the BOEMRE.

F. Shallow Hazards Assessment:

Conditions that may adversely affect drilling operations, evaluating seafloor and subsurface geological and manmade features, for each proposed surface location is described in the Shallow Hazards Assessment included in *Exhibit 4*.

G. High Resolution Seismic Lines:

Enclosed as proprietary data is 3-D survey information including swath bathymetry, seafloor rendering, and edge detection overlain with seafloor amplitude.

H. Stratigraphic Column

A general biostratigraphic/lithostratigraphic column showing each well from seafloor to total depth, with each objective horizon labeled is included as proprietary data.

I. Time vs. Depth Table

Seismic time versus depth tables are not being provided, as sufficient well control data exists for the targeted areas proposed in this EP.

EXHIBIT 4

GEOLOGICAL AND GEOPHYSICAL INFORMATION



**AUV/3D SITE SPECIFIC
GEOHAZARD ASSESSMENT
PROPOSED WELL NOS. 1 & 2**

**BLOCK 710 (OCS-G-22896)
MISSISSIPPI CANYON AREA
GULF OF MEXICO**

SUBMITTED BY



MAY 2011

C & C Project No. 110424

A handwritten signature in blue ink that reads 'Hallie Graves'.

Hallie Graves
Marine Geologist

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APPENDICES

Appendix A

Geophysical Data Reproductions
Top Hole Prognosis

Appendix B

Sonar Contact Tables

Appendix C

3D Seismic Acquisition and Data Processing Parameters
Power Spectrums

ENCLOSURES

Sheet No. 1	Navigation Post Plot Map	1"=1,000'
Sheet No. 2	Color Shaded Bathymetry Map	1"=1,000'
Sheet No. 3	Side Scan Sonar Mosaic Map	1"=1,000'
Sheet No. 4	Seafloor and Subsurface Hazard Map	1"=1,000'
Sheet No. 5	Geological Profile Inline 1682 & Crossline 4956	1"=1,000'
Sheet No. 6	Structure Map of Horizon 2	1"=1,000'
Sheet No. 7	Isopach Map of Unit C	1"=1,000'

EXECUTIVE SUMMARY

- ATP Oil & Gas Corporation plans to drill Well Nos. 1 and 2 in Block 710 (OCS-G-22896), Mississippi Canyon Area using a moored drilling rig.
- This site specific geohazard assessment is based on the interpretation of four high-resolution AUV geophysical datasets collected by C & C and one 3D seismic dataset provided by ATP.
- Water depths within the survey area range from 2,260 feet to 2,960 feet Mean Sea Level (MSL). Water depth at the drill site is 2,764 feet MSL.
- The bathymetry within the majority of the assessment area gently dips to the east and northeast at gradients less than 1.0°. The seafloor gently slopes to the northeast at a gradient of 0.7° across the proposed well locations.
- In the southwestern quadrant, an uplifted area was observed in the bathymetric data, which has an average gradient of 3.0° to 4.5°.
- There were numerous faults identified within the survey area, none of which cross the proposed well bores.
- The seafloor reflector generally displays low to moderate amplitudes indicating finely textured sediments.
- Six subsurface units were assessed to two and a half seconds of two-way traveltime below sea level. Interval amplitude anomalies within Units C and F are considered a moderate risk for gas potential.
- The assessment suggests coarser, potentially sand-prone sediments are present in Unit C and exhibit a high risk of shallow water flow potential.
- The proposed Well Nos. 1 and 2 locations and the surrounding 2,000 feet of seafloor are free from high-density deepwater benthic communities. Possible areas that could support deepwater benthic communities are evident in the southwestern portion of the assessment area.
- No infrastructure exists within the 11,000-foot anchor radius assessment area.
- Three hundred and nine unidentified sonar contacts and twelve debris zones are delineated in the survey areas.
- None of the sonar contacts are recommended for archaeological avoidance on the basis of historic site potential.

1.0 INTRODUCTION

ATP Oil and Gas Corporation (ATP) proposes to drill the Well Nos. 1 and 2 in Block 710 (OCS-G-22896), Mississippi Canyon Area (MC). A moored drilling rig is proposed at the Well Nos. 1 and 2 sites, with a maximum anchor spread of 11,000 feet (Regional and Vicinity Maps, Illustration Nos. 1 and 2, respectively). The surface locations for these two wells are separated by 50 feet. The data used for this Site Specific Geohazard Assessment consists of high-resolution geophysical data collected by C & C Technologies (C & C) and an exploration-quality 3D seismic volume, collected by WesternGeco, and provided by ATP. C & C has performed four Autonomous Underwater Vehicle (AUV) surveys in the area for ATP. The table below contains information and coverage for each AUV survey conducted. The data and interpretation results from the AUV surveys and 3D seismic volume are merged and displayed on the enclosed maps, intended to be viewed with this letter. The results and findings from the AUV surveys and 3D seismic volume were used to clear the proposed well sites and anchor spread.

Table 1 Information and Coverage for AUV Surveys

Report	C & C Job No.	Blocks	Survey Date	System	Report Date
Archaeological Assessment and Anchor Clearance	061435-061438	MC666, 667, 710 & 711	June 10, 2006	C-Surveyor II™	June 2006
Archaeological, Engineering, and Hazard Report of Proposed Flowline and Umbilical Routes	061646-061658	MC711	Aug. 13-14, 2006	C-Surveyor II™	September 2006
Archaeological Assessment	062037	MC711 & Vicinity	Nov. 25-30, 2006	C-Surveyor II™	December 2006
Archaeological and Benthic Study	100465	MC710 & Vicinity	Aug. 5-8, 2010	C-Surveyor III™	November 2010

The proposed well locations and supporting anchor radius are displayed on the enclosed maps. The bounds of the seafloor assessment for Well Nos. 1 and 2 extend to cover the maximum anchor distance with an additional 1,000-foot buffer (Sheet 1). This letter addresses seafloor conditions and shallow subsurface conditions within the 11,000-foot anchor spread. The 3D subsurface mapping limits are a 1,800-meter square centered on the well locations. A tophole drilling prognosis is provided for each proposed well location in Appendix A.

WELL LOCATIONS

The coordinates and calls of the proposed surface locations for the MC710 Well Nos. 1 and 2 are:

Well No. 1

X = 784,066' Y = 10,263,120'
7,906' FWL; 1,200' FNL

Well No. 2

X = 784,016' Y = 10,263,120'
7,856' FWL; 1,200' FNL

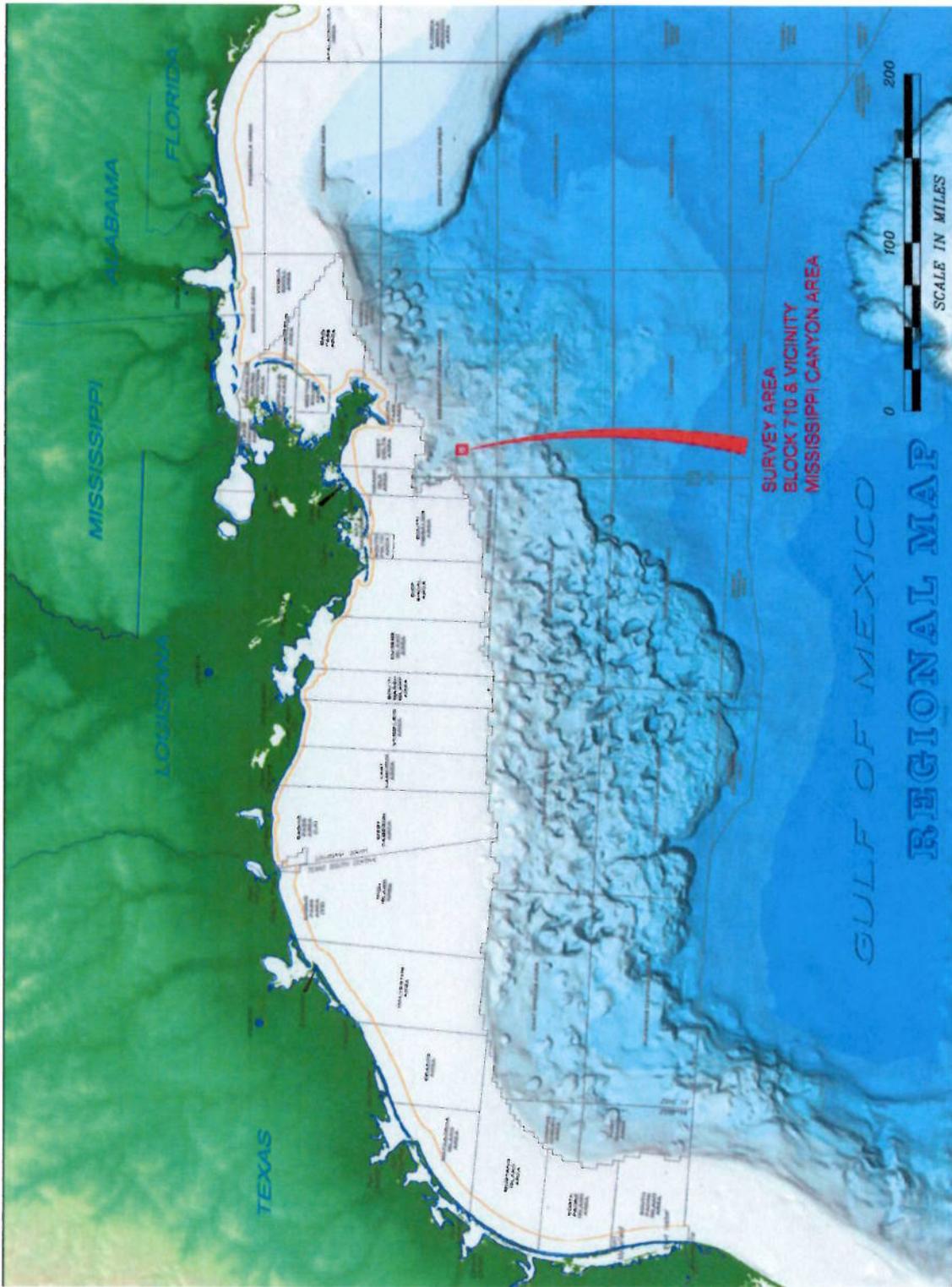


Illustration 1 Regional map showing the location of the assessment area

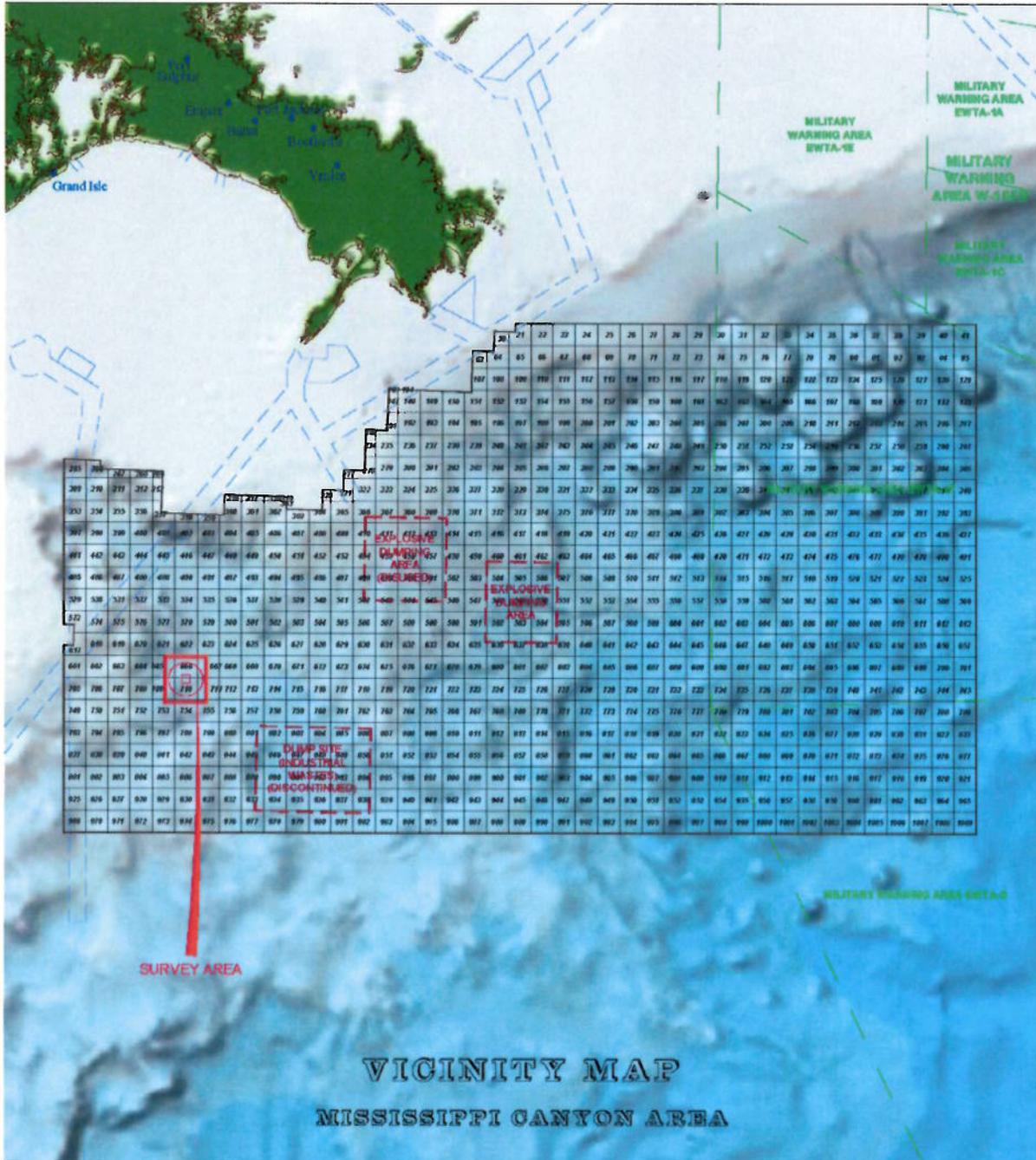


Illustration 2 Vicinity map showing the location of the assessment area

1.1 AUV EQUIPMENT AND METHODS

The survey grids for the AUV surveys and 3D seismic volume provide complete coverage of the proposed well locations and anchor spread (Sheet 1). The assessment and enclosures presented in this letter comply with Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) guidelines provided in NTL 2008-G05 (Shallow Hazards Program), NTL No. 2009-G40 (Deepwater Benthic Communities), and NTL No. 2005-G07 (Archaeological Resource Surveys and Reports). During the archaeological surveys the AUV collected data using 300-meter line spacing. Trackline spacing for pipeline assessment surveys consisted of a primary line along the proposed route, one 50-meter offset line, and a wing line on either side of the centerline.

1.2 3D SEISMIC METHODS

The 3D seismic data, collected by WesternGeco (Mississippi Canyon VI) in 1993, were provided in SEG-Y format and processed for shallow hazards by C & C (Appendix C). The data were loaded into Seismic Micro Technology's (SMT) Kingdom Suite 2D/3D Pak, version 8.5 for interpretation. The time-migrated data volume was processed at a four-millisecond sample rate and was interpreted to two and a half seconds below sea level. ATP provided C & C with depth conversion information from Well No. SS-6 in MC711 to derive depth in feet from the corresponding two-way traveltime in seconds. The inlines of the WesternGeco data set run west-east and are spaced at 82.06-foot (25-meter) intervals. The crosslines run north-south and are spaced at 41.03-foot (12.5-meter) intervals (Sheet 1).

A strong positive amplitude peak, flanked by troughs, represents the seafloor on the seismic volume (Appendix A, Figure No. 1). Amplitude values are represented by IBM 32-bit floating-point numbers, identified during data loading. An 1,800-meter square, centered on the proposed well locations was assessed to determine shallow hazards in the 3D data. The bounds of this block are displayed on Sheets 1, 4, 6 and 7. The data provided were adequate for regional screening of the seafloor and shallow geologic conditions.

The geodetic datum used for this project is the North American Datum of 1927 (NAD27) on the Clark 1866 Ellipsoid, and projected using the Universal Transverse Mercator (UTM) projection Zone 16 North (16N). The Well No. 2 is proposed 50 feet west of the proposed Well No. 1

2.0 REGIONAL GEOLOGIC SETTING

2.1 REGIONAL SETTING

The Gulf of Mexico is a semi-enclosed small ocean basin that formed by Late Triassic to Early Jurassic rifting followed by Late Jurassic to Early Cretaceous seafloor spreading. It has been receiving sediment influx dominated by the Mississippi River since Late Jurassic. Sediments accumulated along the northern margin of the Gulf of Mexico during the Mesozoic and the Cenozoic have attained a thickness in excess of 9.3 miles (Coleman et al., 1991). Rapid deposition along the northern margin of the Gulf of Mexico during the Tertiary and the Quaternary has resulted in the

accumulation of particularly thick sedimentary sequences and an up to 185 miles basinward migration of shelf edge since the Cretaceous at an exceptionally high rate of 3 to 3.7 miles/kyr.

2.2 DEEPWATER DEPOSITIONAL ENVIRONMENTS

Deepwater depositional environments as defined here are the regions that lie beyond the shelf break in the northern Gulf of Mexico. They extend predominantly southward across the continental slope into bathyal and abyssal depths (Figure 3). The northern Gulf of Mexico can be broken up into three unique deepwater depositional environments: the Mississippi Canyon and Fan region, the Texas-Louisiana Slope region, and the Rio Grande Slope region (Bryant et al., 1990) (Illustration 1-3).

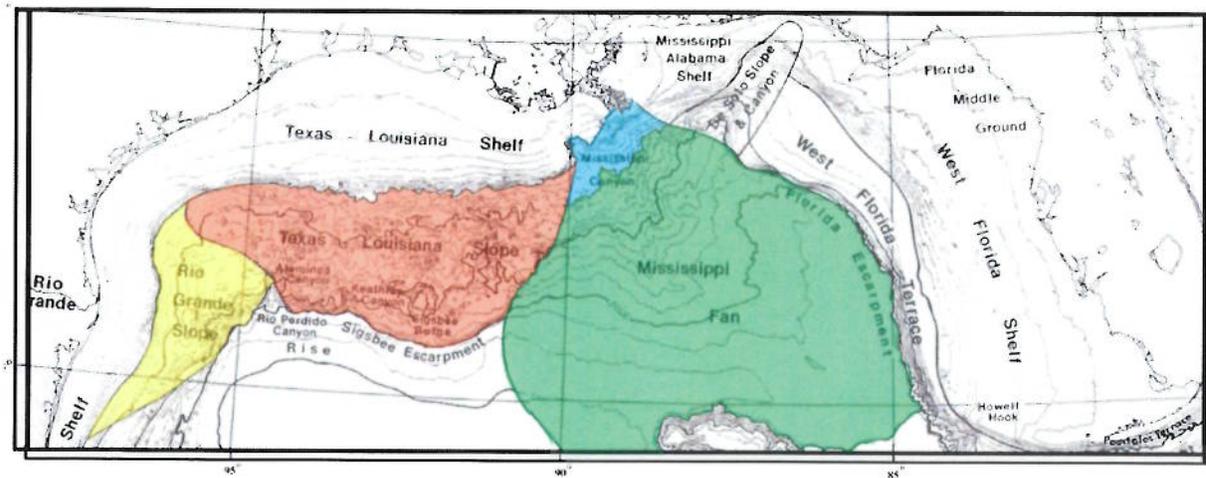


Illustration 3 Deepwater depositional environments of the northern Gulf of Mexico slope

Mississippi Canyon Region

The study area is located at the western edge of the base of the Mississippi Canyon. At approximately the 2,765-foot contour, the complex and high relief submarine topography of the Mississippi Canyon meets the Upper Mississippi Fan.

The Mississippi Canyon is the conduit for source materials that transgress seaward into the Mississippi Fan. Bouma et al. (1985) describe the Mississippi Canyon as a major erosional and partially filled structure. Initial development of this canyon is suggested to have begun about 50,000 to 55,000 years ago in the middle continental slope and retrogressed onto the shelf by 25,000 to 27,000 years before present. Retrogressive large scale slumping on an unstable shelf-slope area during a sea level low stand or during the initial rise of sea level, due to the cessation of the last glacial maximum, is believed to have caused the canyon to widen and lengthen further up-shelf.

For the bulk of the last 50,000 years the Mississippi River is thought to have supplied rapidly deposited unstable sediments to the continental shelf, which fault and fail like the large-scale retrogressive slumps that have carved out the Mississippi Canyon walls. However, within recent geologic history (approximately 18,000 years before present) sea-level rise and delta lobe switching by the Mississippi River have effectively cut off the bulk of the Mississippi Canyon sediment

supply. Current transport and depositional mechanisms active in Mississippi Canyon are muddy turbidite systems and hemipelagic deposition.

3.0 BATHYMETRY

Water depth at the proposed MC710 Well Nos. 1 and 2 locations is 2,764 feet Mean Sea Level (MSL) (Sheet 2). Water depths vary from 2,260 feet in the southwest to 2,960 feet in the southeast across the assessment area. A bathymetric high is evident in the southwest quadrant of the assessment area and the remainder of the seafloor is smooth, gently sloping to the east and northeast at gradients less than 1°. The seafloor gently slopes to the northeast at a gradient of 0.7° across the proposed well locations. Bathymetry data indicate there are no significant seafloor features at the proposed well locations that could impact drilling activities.

4.0 SEAFLOOR FEATURES

The acoustic returns of the seafloor are of low to moderate reflectivity indicating finely textured, sediments at the proposed Well Nos. 1 and 2 (Sheet 3). Localized areas of high reflectivity indicating possible outcrops of authigenic carbonate rocks are evident in the southwest quadrant of the assessment area. Several drag scars are identified within the assessment area and are attributed to lease development activities.

Shallow linear depressions, 120 to 150 feet across and 1 to 5 feet in depth, associated with subsurface dewatering/degassing are evident on the seafloor 374 feet southeast of proposed Well No. 1. Several seafloor fault scarps exist within the assessment area. The nearest is 2,260 feet north of the proposed locations and exhibits 4 feet of seafloor relief.

Three hundred and nine sonar contacts are identified in the side scan sonar data. Six sonar contacts occur within 2,000 feet of the proposed Well Nos. 1 and 2 locations (Sheet 3). The closest is Sonar Contact No. 162 located 533 feet southwest of proposed Well No. 2. This sonar contact is identified within a linear trend of sonar contacts extending northeast to southwest. The majority of the sonar contacts are small with no measurable heights and scattered in similar linear trends (Sheet 3). These contacts are likely barrels of industrial waste dumped from a moving ship or barge and caution should be used as not to disrupt these barrels. Twelve debris zones are also evident within the assessment area and are interpreted to be similar dumped waste (Sheet 4). Several sonar contacts are isolated and not in association with linear trends. These sonar contacts are interpreted as debris from modern shipping and lease development activities, or as being geologic in origin. All sonar contacts identified are included in a table in Appendix B. The proposed Well Nos. 1 and 2 are free from sonar contacts that could impact drilling activities. Anchor placement should be designed to avoid areas where linear trends of sonar contacts are present.

C & C's Marine Archaeologist, Mr. Robert Westrick, reviewed the AUV survey data collected and none of the sonar contacts are recommended for archaeological avoidance on the basis of historic site potential.

5.0 SUBSURFACE FEATURES/STRATIGRAPHY

The near-seafloor subbottom profile record displayed sharp continuous bottom echoes of high intensity. The subbottom profiler recorded 295 feet of data at the proposed well location (Appendix A, Figure No. 2). The underlying sediments exhibit alternating low to high intensity of continuous parallel seismic reflectors mimicking the seafloor topography. The subsurface stratigraphy within the anchor spread is comprised of continuous parallel reflectors, except where interrupted by faulting, mass movements deposits, or masked by gas/fluid saturation. No buried mass movement deposits or shallow fluid/gas saturated sediments are evident beneath the proposed well locations on subbottom profiles.

Six stratigraphic units of distinct seismic character were assessed (Sheet 5) in the 3D seismic volume. ATP provided C & C with depth conversion information from Well No. SS-6 in MC711 to derive depth in feet from the corresponding two-way traveltime in seconds.

Subsurface deposition at Well Nos. 1 and 2, in the upper 263 feet and 262 feet (Unit A) respectively, is mostly comprised of hemipelagic clays laid down as a drape deposit with interbedded layers of fine-grained turbidities, or thin mass transport deposits (Sheet 5). Unit A is categorized by uniform parallel reflectors, which are discontinuous only as a result of faulting.

At the well bores, Unit B contains low amplitude, continuous parallel reflectors at the top of the unit transitioning to discontinuous reflectors at depth resulting from mass transport complexes (Sheet 5). The Unit B sequence is identified 263 to 646 feet below the mudline for Well No. 1 and 262 feet to 644 feet below the mudline for Well No. 2, with numerous mass transport deposits evident (Appendix A, Figure Nos. 3 and 4). A Structure Map of Horizon 2 was generated indicating the chaotic nature of this surface (Sheet 6). The Structure Map indicated the subsurface horizon dips generally east with depths ranging from 2,920 to 3,490 feet BSL. Low amplitude reflectors are interpreted to indicate mud-prone channel fills and fine-grained silts and clays comprise the mass movement deposits. Extensive dewatering/degassing is evident in the northeastern quadrant, at the base of the unit associated with mass movement deposits below.

Unit C consists of low to high, parallel to discontinuous, reflectors with variable acoustic impedance (Figure Nos. 3 and 4) 646 feet to 1,615 feet below the mudline for Well No. 1 and 644 to 1,612 feet below the mudline for Well No. 2 (Sheet 5). An Isopach Map was generated indicating the thickness of the unit (Sheet 7). Thickness ranges from 690 to 1,140 feet. The top of Unit C represents an unconformity, defined by a fine-grained possibly clay rich deposit acting as a potential seal. Unit C is highly channelized with moderate reflectors, indicating sand-prone channel fills and fine-grained mass transport complexes within the upper sediments of the unit. Reflectors transition to a parallel orientation of various thickness indicating fine-grained mass transport deposits. A possible sand sheet is evident at the base of the unit. These parallel reflectors indicate varying stratigraphic thickness.

Unit D consists of low to moderate discontinuous reflectors identified 1,615 feet to 1,855 feet below the mudline for Well No. 1 and 1,612 feet to 1,853 feet below the mudline for Well No. 2. The sediments were likely deposited from clay-prone mass transport deposits with some interbedded silts

and sands. Unit E is located 1,855 feet to 2,432 feet below the mudline at Well No. 1 and 1,853 feet to 2,431 feet below the mudline at Well No. 2 and is primarily characterized by low amplitude reflectors of parallel to slightly discontinuous orientation indicating clay-prone mass movement deposits.

At the well bore, Unit F has moderate to low semi-parallel, discontinuous reflectors identified 2,432 feet to 3,655 feet below the mudline for Well No. 1 and 2,431 feet to 3,653 feet below the mudline for Well No. 2. These reflectors indicate the unit consists of highly channelized sand-prone channel deposits interbedded with mud-prone, mass transport complex deposits.

No regional faulting events are evident within the 1,800-meter site assessment area that crosses the interpreted horizons. Small, localized faulting associated with major channel margins is evident within the units. Regional faulting is present to the west of the 3D assessment boundary.

6.0 SHALLOW GAS

Anomalies of very high amplitude, commonly termed bright spots, are interpreted as potential regions of fluid/gas saturation usually associated with porous sands. Shallow gas is interpreted with amplitude levels and the gas risk is assessed as being at one of four levels within the units. These are:

- **Negligible** - No amplitude anomalies or other gas indicators present.
- **Low risk of gas** - Generally indicated by increased amplitude (2-3x background level) and phase reversal. This may also include diffuse areas of gas blanking.
- **Moderate risk of gas** - Generally indicated by high amplitude (3-4x background level) and phase reversal.
- **High risk of gas** - Generally indicated by the highest amplitudes (in excess of 4x background level), phase reversal, and a combination of other attributes indicative of the presence of gas, particularly velocity pull-down and masking of underlying sediments. Stratigraphic and structural settings may also be taken into account.

Overall shallow gas potential at the well bore for the proposed Well Nos. 1 and 2 ranges from negligible to moderate (Figure Nos. 3 and 4). No high amplitude subsurface amplitude anomalies are noted along the proposed well bores (Sheet 4). A moderate risk of shallow gas exists in Units C and F for the proposed Well Nos. 1 and 2. Amplitude anomalies in the units correlate with highly channelized, possibly sand rich sequences.

7.0 SHALLOW WATER FLOW

Shallow Water Flows (SWF) are overpressured unconsolidated sands encountered in the top-hole sections of some wells drilled in the deepwater areas of the Gulf of Mexico. Sands with SWF potential often lie below a seal that prevents dewatering and compaction after deposition. The sands are usually unconsolidated and overpressured. The pressure rises with overburden causing a potentially disastrous hazard for drilling operations. Two wells that have experienced shallow water flows exist within close vicinity to the proposed well locations. The nearest reported shallow water

flows occurred approximately 2 miles southeast and 4 miles northeast of the proposed well sites. A shallow water flow, with no data provided to the BOEMRE regarding severity, occurred during ATP's drilling of MC711 Well No. 3 (OCS-G-14016) at a depth of 450 feet below the mudline. Anadarko's MC667 Well No. 1 (OCS-G-14013) encountered a shallow water flow, with no severity reported to the BOEMRE, at a depth of 1,028 feet below the mudline.

The assessment of seismic profiles suggests the region is extremely influenced by the deposition of highly channelized sequences and mass movement deposits (Sheet 5). These events have the potential of being sand rich, over pressured and unconsolidated deposits with a possible seal (Horizon 2) on the top of the sediments. Tophole prognosis charts summarizing subsurface conditions and shallow water flow potential are provided as Figure Nos. 3 and 4 in Appendix A. The overall risk of shallow water flow is negligible to high at the proposed well locations. Unit C is given a high risk potential due to reflectors with characteristics that might be SWF prone and the close proximity to wells where SWF have occurred.

8.0 DEEPWATER BENTHIC COMMUNITIES

The water depths of the well locations exceed 300 meters (984 feet), the minimum depth for deepwater benthic community potential as outlined in NTL 2009-G40. The review of the geophysical data indicates the proposed Well Nos. 1 and 2 locations and the surrounding 2,000 feet of seafloor are free from high-density deepwater chemosynthetic and coral communities and impact to communities of these types during drilling activities is considered negligible.

Geophysical data did identify features, within the assessment area, that could support high-density deepwater chemosynthetic and coral communities (Sheet 4). Localized areas of high reflectivity indicating possible outcrops of authigenic carbonate rocks are evident in the southwest quadrant of the assessment area (MC709 and MC710) (Sheet 3). These areas of high reflectivity are associated with seafloor fault scarps, acoustic wipeout zones, subsurface fluid migration, and buried faults suggesting they are likely high-density deepwater benthic communities. Caution should be used during anchor pattern design and placement to avoid these features by a minimum of 250 feet as required by the BOEMRE NTL 2009-G40.

9.0 INFRASTRUCTURE

No pipelines, flowlines or umbilicals exist within 2,000 feet of the proposed Well Nos. 1 and 2 or within the 11,000-foot proposed anchor radius (Sheet 4). The only infrastructure in the assessment area is two temporarily abandoned (TA) wells located inside the 1,000-foot buffer zone southeast of the proposed well locations. Three wells and three pipelines exist to the east of the proposed assessment area. The Gomez Field (MC711) is actively being developed and the drilling rig operator should be made aware of any new construction of pipelines, flowlines, umbilicals, or other infrastructure placement. Caution should be exercised during well drilling activities when operating near existing infrastructure.

10.0 CONCLUSIONS

The proposed surface well site locations and seafloor within a 300-meters radius of the drill locations are clear of geological constraints.

No areas of increased reflectivity that may indicate the occurrence of hardground, carbonates or potential expulsion, are found within 2,000 feet of the proposed Well Nos. 1 and 2. Areas of increased reflectivity are evident in the southwest quadrant of the assessment area and should be avoided as anchor mooring locations.

A negligible to moderate risk of shallow gas exists along the well bores for the proposed Well Nos. 1 and 2 drilling sites. Amplitude anomalies with moderate risk potential for shallow gases are evident in Units C and F.

The assessment of seismic profiles suggest all units exhibit a negligible to moderate risk of shallow water flow, with the exception of Unit C exhibiting a high potential for shallow water flow at the well locations.

No known infrastructure exists in proximity of the Well Nos. 1 and 2 locations.

11.0 REFERENCES

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SECTION 4
HYDROGEN SULFIDE (H₂S) INFORMATION
(30 CFR 250.215 and 250.245)

A. Concentration:

ATP does not anticipate encountering H₂S while conducting the proposed development operations proposed in this plan.

B. Classification:

Pursuant to Title 30 CFR 250.490(c), ATP requests that Mississippi Canyon Block 710 be classified by the BOEMRE as an area where hydrogen sulfide is absent.

SECTION 5
BIOLOGICAL, PHYSICAL, & SOCIOECONOMIC
INFORMATION
(30 CFR 250.216 & 250.247)

A. High-Density Deepwater Benthic Communities Information:

Activities proposed in this EP could disturb seafloor areas in water depths of 300 meters (984 feet) or greater; therefore, information as outlined in Attachment A of NTL No. 2009-G40, "Deepwater Benthic Communities", is provided below:

MAPS

Submitted under separate cover are maps prepared using high resolution seismic information depicting seafloor and shallow geological features and areas, the surface locations of the proposed wells within a circle of 2000 foot radius around each such location, and a maximum anchor radius around the proposed surface locations (which includes a 1,000 foot buffer zone around the/each maximum anchor radius).

ANALYSIS

Although our seafloor disturbing activities as outlined in this document will take place in water depths 300 meters (984 feet) or greater, there are no seafloor features or high-density deepwater benthic communities located within 2000 feet of either proposed well surface location, seafloor template installation, or pipeline construction. Geophysical data did identify features, within the assessment area, that could support high-density deepwater chemosynthetic and coral communities. Caution will be used so that the placement of anchors, anchor chains, wire ropes, including the setting and retrieval of same, will not disturb any seafloor feature or high-density deepwater benthic communities within 500 feet of any of these seafloor-disturbing areas.

B. Topographic Features Map:

Activities proposed in this EP do not fall within 305 meters (1000 feet) of any designated "no activity zone". Therefore, no map is required.

C. Topographic Features Statement (Shunting)

Activities proposed in this EP do not fall within the 1-mile Zone or the Protective Zone of any identified topographic feature. Therefore, shunting of drill cuttings is not required.

D. Live Bottoms (Pinnacle Trend) Map:

Mississippi Canyon Block 710 is not located within 61 meters (200 feet) of any pinnacle trend feature. Therefore a separate bathymetric map is not required.

E. Live Bottoms (Low Relief) Map:

Mississippi Canyon Block 710 is not located within 100 feet of any pinnacle trend feature with vertical relief equal to or greater than 8 feet. Therefore, live bottom (low relief) maps are not required.

F. Potentially Sensitive Biological Features Map:

Mississippi Canyon Block 710 is not located within 61 meters (200 feet) of potentially sensitive biological features.

G. ROV Monitoring Survey Plan:

BOEMRE has determined that there is enough data gathered in this grid area, therefore, we will not be conducting any further ROV surveys.

H. Threatened and Endangered Species, Critical Habitat, and Marine Mammal Information:

Section 7 of the Endangered Species Act, [16 U.S.C. Section 1536\(a\)\(2\)](#), requires all federal agencies to consult with the National Marine Fisheries Service (NMFS) for marine and anadromus species, or the United States Fish and Wildlife Services (FWS) for fresh-water and wildlife, if they are proposing an "action" that may affect listed species or their designated habitat. *Action* is defined broadly to include funding, permitting and other regulatory actions. Each federal agency is to insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat.

Pursuant to 30 CFR 250, Subpart B, and NTL 2008-G04, lessees are to provide site-specific information on the presence of federally listed, threatened or endangered species and critical habitat designated under the ESA and marine mammals protected under the MMPA in the area of the proposed activities included in this plan. Included as *Exhibit 5* is a list of threatened and endangered species currently under the jurisdiction of NOAA. Although there are not designated critical habitats for the listed species in the Gulf of Mexico, it is possible that one or more of these species could be seen in the area during proposed operations.

I. Archeological Report:

Mississippi Canyon Block 710 has been determined to have a high potential for containing prehistoric archeological properties. In accordance with NTL 2005-G07 and NTL 2006-G07 an archaeological report for MC 710 has been submitted, under separate cover, to the BOEM in conjunction with the shallow hazards report.

EXHIBIT 5

NOAA THREATENED AND ENDANGERED SPECIES LIST



Endangered and Threatened Species and Critical Habitats
under the Jurisdiction of the NOAA Fisheries Service



Gulf of Mexico

Listed Species	Scientific Name	Status	Date Listed
Marine Mammals			
blue whale	<i>Balaenoptera musculus</i>	Endangered	12/02/70
finback whale	<i>Balaenoptera physalus</i>	Endangered	12/02/70
humpback whale	<i>Megaptera novaeangliae</i>	Endangered	12/02/70
sei whale	<i>Balaenoptera borealis</i>	Endangered	12/02/70
sperm whale	<i>Physeter macrocephalus</i>	Endangered	12/02/70
Turtles			
green sea turtle	<i>Chelonia mydas</i>	Threatened ¹	07/28/78
hawksbill sea turtle	<i>Eretmochelys imbricata</i>	Endangered	06/02/70
Kemp's ridley sea turtle	<i>Lepidochelys kempii</i>	Endangered	12/02/70
leatherback sea turtle	<i>Dermochelys coriacea</i>	Endangered	06/02/70
loggerhead sea turtle	<i>Caretta caretta</i>	Threatened	07/28/78
Fish			
Gulf sturgeon	<i>Acipenser oxyrinchus desotoi</i>	Threatened	09/30/91
smalltooth sawfish	<i>Pristis pectinata</i>	Endangered	04/01/03
Invertebrates			
elkhorn coral	<i>Acropora palmata</i>	Threatened	5/9/06
staghorn coral	<i>Acropora cervicornis</i>	Threatened	5/9/06

Designated Critical Habitat

Gulf Sturgeon: A final rule designating Gulf sturgeon critical habitat was published on March 19, 2003 (68 FR 13370) and 14 geographic areas (units) among the Gulf of Mexico rivers and tributaries were identified. Maps and details regarding the final rule can be found at alabama.fws.gov/gs

Elkhorn and Staghorn Corals: All waters in the depths of 98 ft (30 m) and shallower to the mean low water line surrounding the Dry Tortugas, Florida. Within these specific areas, the essential feature consists of natural consolidated hard substrate or dead coral skeleton that are free from fleshy or turf macroalgae cover and sediment cover. Maps and details regarding coral critical habitat can be found at: <http://sero.nmfs.noaa.gov/pr/esa/acropora.htm>

Smalltooth Sawfish: A final rule designating smalltooth sawfish critical habitat was published on September 2, 2009 (74 FR 45353). Critical habitat consists of two coastal habitat units: the Charlotte Harbor Estuary Unit and the Ten Thousand Islands/Everglades Unit. Maps and details regarding the smalltooth sawfish critical habitat rule can be found at: <http://sero.nmfs.noaa.gov/pr/SmalltoothSawfish.htm>

¹ Green turtles are listed as threatened, except for breeding populations of green turtles in Florida and on the Pacific Coast of Mexico, which are listed as endangered.



Gulf of Mexico

Candidate Species ²	Scientific Name
largetooth sawfish	<i>Pristis pristis</i>

Species of Concern ³	Scientific Name
Fish	
Alabama shad	<i>Alosa alabamae</i>
dusky shark	<i>Carcharhinus obscurus</i>
largetooth sawfish	<i>Pristis pristis</i>
night shark	<i>Carcharhinus signatus</i>
saltmarsh topminnow	<i>Fundulus jenkinsi</i>
sand tiger shark	<i>Carcharias taurus</i>
speckled hind	<i>Epinephelus drummondhayi</i>
Warsaw grouper	<i>Epinephelus nigritus</i>
Invertebrates	
ivory bush coral	<i>Oculina varicosa</i>

² The Candidate Species List has been renamed the Species of Concern List. The term "candidate species" is limited to species that are the subject of a petition to list and for which NOAA Fisheries Service has determined that listing may be warranted (69 FR 19975).

³ Species of Concern are not protected under the Endangered Species Act, but concerns about their status indicate that they may warrant listing in the future. Federal agencies and the public are encouraged to consider these species during project planning so that future listings may be avoided.

SECTION 6
WASTE AND DISCHARGE INFORMATION
(30 CFR 250.217 & 250.248)

A. Projected Generated Wastes:

Projected solids and liquid wastes likely to be generated under this EP, and plans for the treating, storing and downhole disposal of these wastes is included as *Exhibit 6*.

B. Projected Ocean Discharges:

Solid and liquid wastes to be discharged overboard are included as *Exhibit 6*.

EXHIBIT 6

WASTE AND DISCHARGE SPREADSHEET

TABLE 1. WASTES YOU WILL GENERATE, TREAT AND DOWNHOLE DISPOSE OR DISCHARGE TO THE GOM

please specify if the amount reported is a total or per well amount

Projected generated waste		Projected ocean discharges		Projected Downhole Disposal	
Type of Waste and Composition	Composition	Projected Amount	Discharge rate	Discharge Method	Answer yes or no
Waste generated while using synthetic based drilling fluid	Cuttings generated while using synthetic based drilling fluid	X bbls/well	X bbls/day	discharge pipe	
Spent drilling fluids	Water based drilling fluid	8,000 bbls/well	1,700 bbl/hr	Discharge at mudline prior to riser installation	NO
Cuttings wetted with water-based fluid	Drill cuttings associated with water-based fluids	2,500 bbls/well	1,000 bbl/hr	Discharge at mudline prior to riser installation	NO
Cuttings wetted with synthetic-based fluid	Cuttings coated with internal olefin based synthetic drilling fluids	2,000 bbls/well	200 bbls/day/well	Treated Cuttings will be discharged overboard	NO
chemical product wastes	Ethylene Glycol	50 bbls/well	2 bbls/day/well	Add to produced water stream	YES
Will humans be there? if yes, expect conventional waste		X liter/person/day	NA	chlorinate and discharge	
EXAMPLE: Sanitary waste water				Solids are reduced to small particles and discharged overboard	NO
Domestic waste (kitchen water, shower water)	Gray Water (laundry & galley)	171 bbls/day	30 gal/person/day	USCG approved MSD w/ chlorination-Discharged overboard	NO
Sanitary waste (toilet water)	Treated human wastes	57 bbls/day	20 gal/person/day		
Is there a deck? if yes, there will be Deck Drainage					
Deck Drainage	Rig washings & rainwater	0-4,000 bbls/day Dependant upon rainfall	15 bbl per hour (maximum separator discharge)	Discharged overboard	NO
Will you conduct well treatment, completion, or workover?					
well treatment fluids	Well treatment fluids	250 bbls/well	200 bbls/well every 4 years	Discharge used fluids overboard, excess returned for credit	NO
well completion fluids	Well completion fluids	300 bbls/well	200 bbls/well every 4 years	Discharge used fluids overboard, excess returned for credit	NO
workover fluids	Workover fluids	300 bbls/well	200 bbls/well every 4 years	Discharge used fluids overboard, excess returned for credit	NO
Miscellaneous discharges. If yes, only fill in those associated with your activity.					
Desalination unit discharge	Sea water	41 bbls/day	N/A	Discharge overboard	NO
Blowout prevent fluid	Biodegradable synthetic oil based fluid	100 bbls/well	N/A	Stored in tanks on rig, discharged at mudline	NO
Ballast water	Uncontaminated sea water	600 bbls/well	100 bbls/hr	Discharged overboard	NO
Blige water	N/A	N/A	N/A	N/A	N/A
Excess cement at seafloor	Cement at seafloor	100 bbls/well	N/A	Discharge at mudline prior to riser installation	NO
Fire water	N/A	N/A	N/A	N/A	N/A
Cooling water	N/A	N/A	N/A	N/A	N/A
Will you produce hydrocarbons? If yes fill in for produced water.					
Produced water	Produced water	1,000 bbls/day/well	1,000 bbls/day/well	Discharge overboard	NO
Will you be covered by an individual or general NPPDES permit?	General: GNG 290157				

NOTE: If you will not have a type of waste, enter NA in the row.

SECTION 7

AIR EMISSIONS INFORMATION

(30 CFR 250.218 & 250.249)

A. Emissions worksheets and screening questions

Screen Procedures for EP's	Yes	No
Is any calculated Complex Total (CT) Emission amount (tons) associated with your proposed exploration activities more than 90% of the amounts calculated using the following formulas: $CT = 3400D^{2/3}$ for CO, and $CT = 33.3D$ for the other air pollutants (where D = distance to shore in miles)?		X
Do your emission calculations include any emission reduction measures or modified emission factors?		X
Are your proposed exploration activities located east of 87.5° W longitude?		X
Do you expect to encounter H ₂ S at concentrations greater than 20 parts per million (ppm)?		X
Do you propose to flare or vent natural gas for more than 48 continuous hours from any proposed well?		X
Do you propose to burn produced hydrocarbon liquids?		X

(2) There are no existing facilities or activities co-located with the currently proposed activities, therefore the Complex Total Emissions are the same as the Plan Emissions and are provided in the table below:

Air Pollutant	Plan Emission Amounts ¹ (tons)	Calculated Exemption Amounts ² (tons)	Calculated Complex Total Emission Amounts ³ (tons)
Carbon Monoxide (CO)	111.07	45527.76	111.07
Particular matter (PM)	14.65	1631.70	14.65
Sulphur dioxide (SO ₂)	68.43	1631.70	68.43
Nitrogen oxides (NO _x)	500.79	1631.70	500.79
Volatile organic compounds (VOC)	15.3	1631.70	15.3

Footnotes:

- 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

Please refer to **Exhibit 7** for one set of emissions worksheets showing the emissions calculations for the Plan Emissions.

This information was calculated by: Erin Rachal
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erachal@atpog.com

EXHIBIT 7

AIR QUALITY EMISSIONS WORKSHEET

EMISSIONS CALCULATIONS 1ST YEAR

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	CONTACT	PHONE	REMARKS	ESTIMATED TONS							
									RATING	MAX. FUEL	ACT. FUEL	HR/D	DAYS	PM	SOx	NOx
OPERATIONS	EQUIPMENT	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	VOC	CO	PM	SOx	NOx	VOC	CO
ATP OIL & GAS CORP	MISSISSIPPI CANYON	710	G-22836	N/A												
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	VOC	CO	PM	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER->600hp diesel	26400	1275.12	30602.88	24	62	18.61	85.36	639.65	15.19	135.56	13.84	63.51	475.90	14.28	103.83
	PRIME MOVER->600hp diesel	3000	144.9	3477.60	10	10	2.11	9.70	72.69	2.18	15.86	0.11	0.49	3.63	0.11	0.79
	PRIME MOVER->600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER->600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP-<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS->600hp diesel(crew)	2065	99.7395	2393.75	6	27	1.46	6.68	50.03	1.50	10.92	0.12	0.54	4.05	0.12	0.88
	VESSELS->600hp diesel(supply)	2065	99.7395	2393.75	10	27	1.46	6.68	50.03	1.50	10.92	0.20	0.50	6.75	0.20	1.47
	VESSELS->600hp diesel(tugs)	4400	212.52	5100.48	18	10	3.10	14.23	106.61	3.20	23.26	0.28	1.28	9.59	0.29	2.09
FACILITY	DERRICK BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	MATERIAL TUG diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS->600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS->600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0			0	0				0.00					0.00	
DRILLING	OIL BURN	250			24	2	4.38	71.15	20.83	0.10	2.19	0.11	1.71	0.50	0.00	0.05
WELL TEST	GAS FLARE		208333.33		24	2		0.12	14.87	12.56	80.94		0.00	0.36	0.30	1.94
	2011 YEAR TOTAL						31.11	193.92	954.72	40.24	283.64	14.65	68.43	500.79	15.30	111.07
EXEMPTION	DISTANCE FROM LAND IN						1631.70	1631.70	1631.70	1631.70	1631.70	1631.70	1631.70	1631.70	1631.70	1631.70
CALCULATION	MILES															
	49.0															

**SECTION 8
OIL SPILLS INFORMATION
(30 CFR 250.219 & 250.250)**

A. Oil Spill Response Planning:

(i) Regional OSRP Information:

All the proposed activities and facilities in this DOCD will be covered by the Regional Oil Spill Response Plan (OSRP) filed by ATP Oil & Gas Corporation (MMS Operator Number 01819) in accordance with 30CFR 254. The OSRP was last approved on December 15, 2009 and most recently modified on August 1, 2011.

By letter dated June 10, 2011 and amended on July 12, 2011, ATP Oil & Gas Corporation submitted an OSRP certification statement, with verification of contracts, certifying ATP's capability to respond to the worst case discharge and requesting approval to operate for a period not to exceed two years while the Regional OSRP is pending.

(ii) Spill Response Sites:

Primary Response Equipment Location	Preplanned Staging Location(s)
Houma, Fourchon, Venice or Amelia, Louisiana	Houma, Venice or Amelia, Louisiana

(iii) OSRO Information:

ATP utilizes Clean Gulf Associates (CGA) as its primary provider for equipment, which is an industry cooperative owning an inventory of oil spill clean-up equipment. CGA is supported by the Marine Spill Response Corporation's (MSRC), which is responsible for storing, inspecting, maintaining and dispatching CGA's equipment. The MSRC STARS network provides for the closest available personnel, as well as an MSRC supervisor to operate the equipment. ATP is also a member of the Helix Well Containment Group which specializes in the prevention of well blowout scenarios.

(iv) Worst-Case Scenario Determination:

Category	Regional OSRP WCD	Exploratory WCD
Type of Activity	Exploration	Exploration
Facility Location (Area/Block)	MC710	MC710
Facility Designation	Well Location A	Well Location A
Distance to Nearest Shoreline (miles)	49	49
Volume:		
Storage Tanks & Piping (total)		
Lease Term Pipeline		
Uncontrolled Blowout (vol./day)	143,374 BOPD	143,374 BOPD
Total Volume	143,374 BOPD	143,374 BOPD
Type of Oil(s) – crude oil, condensate, diesel	Crude	Crude
API Gravity	35.4°	35.4°

On May 5, 2011, ATP submitted a modification to the current Regional OSRP to add MC710 as an exploratory worst case scenario with a discharge volume of 107,291 BOPD. By email dated July 9, 2011 the BOEMRE calculated a worst case discharge for this location is an estimated 143,374 BOPD. ATP has agreed with the volume calculation of the BOEMRE and modified the Regional OSRP on August 1, 2011.

Since ATP has the capability to respond to the appropriate worst-case spill scenario to be included in its regional OSRP, I hereby certify that ATP 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 this EP.

In accordance with NTL 2010-N06, enclosed as **Exhibit 8** are assumptions with supporting calculations, including reservoir and fluid characteristics, PVT characteristics, and analog reservoirs, used to determine the daily discharge volume for the activities proposed in this EP.

B. Oil Spill Response Discussion:

Included as **Exhibit 9** is a discussion of ATP's response to an oil spill resulting from the activities proposed in this EP.

EXHIBIT 8

NTL 2010-N06 WORST CASE DISCHARGE ASSUMPTIONS AND CALCULATIONS

ATP Oil & Gas Corporation
Mississippi Canyon 710, Well No. SS001, OCS-G 22896

NTL 2010-N06 Information

Blowout Scenario

A blowout scenario is required by 30 CFR 250.213(g) and 250.243(h). Provide a scenario for the potential blowout of the proposed well in your plan or document that you expect will have the highest volume of liquid hydrocarbons. Include the estimated flow rate, total volume, and maximum duration of the potential blowout. Discuss the potential for the well to bridge over, the likelihood for surface intervention to stop the blowout, the availability of a rig to drill a relief well, and rig package constraints. Specify as accurately as possible the time it would take to contract for a rig, move it onsite, and drill a relief well, including the possibility of drilling a relief well from a neighboring platform or an onshore location.

Scenario of highest volume of liquid hydrocarbons: The potential blowout scenario which will cause the worst-case discharge (WCD) is when MC 710 well #SS001 has been drilled, the 11-3/4" casing is set, and the 12-1/4" bit has been drilled through the target sands to TD.

Blowout estimated flow rate: The worst-case discharge rate for the scenario has been calculated to be 606 MMCF and 143,374 BO with 0 BW. Anticipated gravity of oil is 35.4 deg. API for a 24 hr period as reported in the enclosed Nodal Analysis –**included as proprietary data.**

Maximum duration of the potential blowout: The maximum duration of an uncontrolled blowout depends on the time it takes for the well to bridge over. History has shown that most open-hole blowouts bridge over within 72 hours. BOEM reports that 49% of all blowout events during 1992 – 2006 stopped flowing in 24 hours or less, 41% lasted seven days or less and the longest blowout lasted eleven days. Please note, this information was gathered prior to the BP Macondo which was a cased-hole blowout and therefore a much more onerous scenario. Over 50% of blowouts were controlled by surface intervention, 36% of the blowouts bridged over and the rest depleted. Two relief wells were initiated but both blowouts were controlled by other means prior to completing their relief wells. Blowout simulations confirm that, due to the typically large induced draw down, open hole blowouts in sandstone reservoirs like the 3750 B/C Sand usually fall below the collapse gradient of the open formations and the formation bridges off.

The objective sand in MC 710 #SS001 is poorly consolidated sandstone reservoir making bridging likely in a blowout event. Well #SS001's objective sand was drilled, logged, sampled, and produced in an offset well. Log analysis shows the target to be of a high porosity, high permeability and low formation strength reservoir. These combined conditions facilitate bridging if a blowout occurred. The MC 710 #SS001 well is being drilled to a known productive reservoir with known rock properties on MC 711 (Gomez Field).

Similar rock properties and analogous seismic amplitudes in formations known to have high porosity, high permeability and poor consolidation support the high potential of wellbore bridging within 72 hours in the event of an open-hole blowout at MC 710 #SS001.

The ADIOS2 oil weathering model provided by NOAA estimates 95% of the discharge will evaporate and disperse in the water resulting in approximately +/-308,000 bbls left in the water for common cleanup techniques such as chemical dispersion, skimming, or burning. The value was arrived at as follows:

- WCD of 143,374 BOPD for 43 days (duration for relief well) = 6,165,082 bbls
- 6,165,082 bbls x 0.05 = 308,254 bbls of oil left in water

Likelihood of Surface Intervention:

A blowout specialty company/well control team would be mobilized immediately. Well control specialists would conduct a "fly by" with helicopter within 12 hours to assess conditions at the well site. Equipment and well control personnel would be mobilized to the rig site on boat and barge within 24 to 48 hours after a blowout has been reported. After arriving on location, the well control team typically needs 3 to 5 days to analyze the blowout situation, devise an intervention strategy and mobilize additional service company specialists, supplies and equipment. A field support base or command center will be identified, set up and communication established.

Surface intervention would be very likely if the wellbore is intact and above the water. The intervention could include snuffing out the fire, installing specialized BOPE and performing a top kill. Many wells bridge over during this time and subsequently, BOPE equipment is installed to secure the well. If the well does not bridge over and continues to blowout, well control companies estimate an additional 20 to 30 days are typical to contain the flow and kill the well. Therefore, the estimated time to kill the blowout with surface intervention is 25 to 35 days.

Likelihood of Subsea Intervention:

Subsea intervention methods to control a blowout while drilling the MC 710 #SS001 well range from 1) using a Remotely Operated Vehicle (ROV) to close the blind shear rams on the subsea BOP stack to shut off the flow of well fluids into the water column above the mudline or to the surface to 2) having to clear away the remnants of the rig and drilling riser from the location to gain access to the subsea wellhead itself for the installation of a capping BOP stack. The first attempt at subsea intervention will involve the closing of blind-shear rams on the subsea BOP stack using a Remotely Operated Vehicle (ROV) deployed from a term-charter vessel ATP maintains on station with the O. Victory when the rig is drilling or completing wells. Should that fail the likelihood of a subsea intervention shutting off flow from the well will shift to means that require mobilization of specialized vessels capable of removing debris from around the well to gain access. ATP has contracts in place with contractors that own and operate subsea debris removal equipment.

In either a surface or subsea intervention scenario, a team of specialists from a well control/blowout specialty company would be mobilized immediately to a location in the Houston area that had

suitable facilities (communications, conference rooms, real-time internet/data access, etc) to assess the situation and determine the proper course of action needed to control the well. Well control specialists would conduct a “fly-by” of the MC 710 surface location via helicopter and surface vessel to assess conditions at the rig/well site. ATP has Master Service Agreements (MSA’s) in place with Cudd Pressure Control, Wild Well Control and Boots & Coots. All three are specialized well control service companies offering full general contracting services with strong engineering resources.

The above mentioned ROV intervention to close the BOP blind-shear rams would occur during the first day of the well control incident. Initial assessment activities are estimated at no more than five days. During this period the well control team would analyze the blowout situation, devise an intervention strategy and mobilize additional service company specialists, supplies and equipment. A field support base in Fourchon, Louisiana and a secondary command center close to the coast would be identified, set up and communication established simultaneously with assessment of the situation.

ATP has an MSA with Helix that allows access to the Helix Fast-Response System. The *Helix Producer I* and *Q-4000* would be contracted for use as surface processing vessels in a long term containment scenario. In the unlikely event the BOP stack was compromised, a 13-5/8”, 10M Capping BOP stack would be installed on the MC 710 #SS001 well. Well fluids would be routed to the surface for processing by the vessels mentioned above. Estimated time to mobilize these vessels and have them on location is ten days. Mobilization of specialist vessels to clear away damaged surface or subsea equipment to gain access to the BOP’s or subsea wellhead would be concurrent with containment vessel mobilization.

Relief Well Scenario

Concurrent with surface or subsea intervention equipment, subsea containment equipment and spill response equipment mobilization a drilling rig would be mobilized to location to begin relief well operations. There are approximately 25 rig in the GOM which are working or stacked and capable of drilling a relief well in MC 710 open water location with 2,810’ water depth. See **Attachment #1** for a Listing of Capable Rigs. The stacked rigs in the GOM could be “crewed up” in 3 to 7 days depending on contractor. Rig acquisition, transit & load out for relief well operations is estimated at no more than ten days. ATP has alliances with diversified engineering consulting firms which would provide drilling operations, engineering, logistical, materials management, QA/QC and well-site supervision support.

The estimated time to drill a relief well approximately 10,840’ upstream of prevailing wind and currents is 43 days. This includes 10 days to mobilize a rig and 33 days to drill, intersect and kill. There are no available platforms in the area which would provide an advantage for drilling the relief well. A relief well could not be drilled from an onshore location.

Assumption and Calculations

Describe the assumptions and calculation that you used to determine the volume (Daily discharge rate) of your worst case discharge scenario required 30 CFR 250.219(a)(2)(iv) (for

EP's) or 30 CFR 250.250(a)(2)(iv) (for DPP's or DOCD's). Provide all assumptions you made concerning the well design, reservoir characteristics, fluid characteristics, and pressure volume temperature (PVT) characteristics; any analog reservoirs you considered in making those assumptions: an explanation of your reasons for using those analog reservoirs; and the supporting calculation and models you used to determine the daily discharge scenario for both your proposed or approved EP, DPP or DOCD worst-case discharge scenario.

The worst-case discharge calculation for the MC 710 #SS001 well, to be operated by ATP Oil & Gas Corporation, was done using the Prosper nodal analysis software, an industry standard software program created by Petroleum Experts.

In the nodal analysis, the Darcy equation was used to model the inflow performance relationship, which is used to calculate the WCD rate in Prosper. The resulting solution is shown in the nodal analysis solution report included as proprietary data.

The estimated worst-case discharge rate is 143,374 bbls of oil for the first 24 hour flow period, with 606 MMCF of gas per day and 0 bbls of water per day. This is the daily production volume of hydrocarbons from a blowout, as required in NTL 2010-N06. The assumed scenario was one of the drilling well having a blowout from the formations in open hole after drilling to TD of the well.

Prevention Measures

Describe the measures you propose that would enhance your ability to prevent a blowout, to reduce the likelihood of a blowout, and conduct effective and early intervention in the event of a blowout, including your arrangements from drilling relief wells, and any other measures you propose.

Proposed measures to enhance the ability to prevent a blowout and reduce the likelihood of a blowout: Preventing a blowout starts with preventing a well control incident or a kick. In order to prevent a kick, a thorough understanding of the geology, characteristics of the reservoir, and the production history is needed. Offset wells are identified and drilling records of these wells are reviewed in great detail and utilized in well planning. The information is used for lithology correlation, abnormal pressure formation prediction, mud weight, casing design and other possible geological risk identification such as depleted or weak zones, ballooning formations, sloughing shale, gumbo and hole instability. This research reduces the risk of a well control incident.

The MC 710 well #SS001 will be drilled to total depth with offset data from previous wells that are 2,500' to 5,000' away laterally in MC 711. MC 710 #SS001 is drilling to the same producing formation as the offset well. Drilling conditions documented in the offset well and log data from that well and its sidetrack will further reduce risk to the MC 710 #SS001 well.

Hydrostatic control of the well will be maintained by utilizing a drilling fluid which exerts sufficient hydrostatic pressure to prevent a kick. All drilling fluid requirements per 30 CFR 250 Subpart D will be implemented while drilling the production hole section. The production hole section of MC 710 #SS001 well will be drilled using mud weights as per the well plan's mud weight schedule. Mud

weight adjustments will be based on observed drilling parameters including rate of penetration, cuttings quantity and appearance, chloride contamination and gas monitoring. In the event drilling parameters indicate the potential for a kick, the drilling operations will cease and a flow check will be performed. Penetration rate will be controlled while drilling through any hydrocarbon-bearing sand. Two mud engineers will work 12 hr shifts providing 24 hr mud engineering support during drilling operations. Two shaker men working 12 hr shifts will monitor mud weight and returns at the shakers. Electronic PVT equipment will be utilized throughout the drilling operations. Two drilling foremen working 12-hour shifts will ensure constant supervisory attention.

Mud properties including viscosity and gel strengths will be adequately maintained to reduce the possibility of swab and surge during tripping operations. Displacement volumes will be monitored and recorded during all tripping operations. A heavy slug will be pumped when possible before trips so that the pipe can be pulled dry and the hole more accurately monitored. At a minimum, a volume equal to the annular volume will be circulated before pulling out of the hole. Pipe trip speeds will also be adjusted so as not to cause excessive swab or surge pressures.

Adequate mud and chemicals will be kept on board the rig to ensure well control at all times. Seawater will be available and ready to pump down hole if a high volume loss circulation zone is encountered. This will enable immediate stabilization of the well until additional mud can be mixed. If lost circulation occurs and well conditions allow, pipe may be pulled up into the casing shoe.

Short trips and wiper trips will be performed as the hole conditions dictate or periodically during prolonged drilling intervals to monitor and assess any change in hole conditions. These trips also help reduce the risk of swab and surge related problems.

Gas-detecting equipment will monitor all drilling fluid returns. Mud logging services will commence below the 13-5/8" intermediate casing to provide additional monitoring of wellbore conditions. Mud logging service will include monitoring mud weights (in and out), drill gas, background gas, connection gas, trip gas, bottoms up gas and lithology description. This information will be used to assess any relative changes in hole conditions and aid in making mud weight adjustments.

LWD/MWD services will also be utilized below the 13-5/8" intermediate casing. MWD will provide real-time directional surveying, formation evaluation, information and trend information for abnormal pressure detection. Triple combo LWD will provide the drilling team with real-time identification of potential drilling hazards.

All efforts will be made to avoid lost returns. This includes, but is not limited to, identification of depleted zones and faults, high quality casing seats, controlled penetration rates, controlling trip in hole speeds, staging up pumps, utilization of cement placement models, controlling surge pressures while running casing and tripping in the hole and effective solids control.

Cement programs will be designed to prevent gas influx during cement setting. All casing strings will be centralized across hydrocarbon bearing zones. Prior to cement casing, the well will be circulated a minimum of one and a half times its annular volume as long as mud returns are maintained. Additionally, liner top packers will be used on all liners as another mechanical barrier in the liner lap. After cementing casing, the annulus will be monitored while the cement sets.

BOP system requirements per 30 CFR 250 Part D will be in effect while drilling. BOP equipment will be installed and tested while conducting operations below surface pipe. All BOPE will be tested every fourteen days using water. Annular and ram BOP's will be function tested every seven days between pressure tests. BOP's will include at least one set of blind/shear rams capable of shearing the drill pipe under MASP conditions.

A minimum of two offshore supervisors will be on the rig at all times to ensure twenty-four hour supervision of all drilling activities conducted on the MC 710 #SS001 well. These onsite supervisors will witness and review all BOP tests, casing tests and formation integrity tests. Formation integrity test must be approved by the ATP drilling superintendent prior to drilling ahead. ATP also requires the contractor provide two toolpushers to ensure twenty-four hour supervision of the rig crew.

ATP conducts rig safety and well control system audits on every rig contracted. These audits are conducted after the rig arrives on location and commences work. Each rig crew practices well control drills daily. These well control drills include pit drill, kick drill and trip drill. Each drill will emphasize kick recognition, formation, shut-in procedures and personnel assignments.

Effective and early blowout intervention:

In the event of a blowout, ATP'S OSRP will be activated. The first priority will be to quickly organize a focused team of operational and technical professionals included in a blowout specialty company (BSC). The BSC will be immediately mobilized to the blowout site. The BSC will analyze the blowout situation and devise an intervention strategy. See the Blowout Scenario at the beginning of this document.

ATTACHMENT #1

ATP OIL & GAS CORPORATION

Mississippi Canyon Block 710

OCS-G 22896 Well No. SS001

Gomez Prospect - WD: 2,810'

Rig Availability to Drill Relief Well

Rig Name	Water Depth
1 Aban Abraham	6600'
2 Ocean Monarch	8000'
3 Ocean Voyager	3000'
4 Ensco 8500	8500'
5 Ensco 8501	8500'
6 Ensco 8502	8500'
7 Amos Runner	8000'
8 Danny Adkins	12,000'
9 Frontier Driller	5000'
10 Jim Thompson	6000'
11 Paul Romano	6000'
12 Deep Ocean Ascension	12,000'
13 West Sirius	10,000'
14 Amirante	3500'
15 Development Driller I	7500'
16 Development Driller III	7500'
17 Nautilus	8000'
18 Discoverer Americas	12,000'
19 Discoverer Clear Leader	12,000'
20 Discoverer Deep Seas	10,000'
21 Discoverer Enterprise	10,000'
22 Discoverer Inspiration	12,000'
23 C.R. Luigs	10,000'
24 Deepwater Pathfinder	10,000'
25 Discoverer Spirit	10,000'

EXHIBIT 9

OIL SPILL RESPONSE DISCUSSION

SPILL RESPONSE DISCUSSION

For the purpose of NEPA and Coastal Zone Management Act analysis, the largest spill volume originating from the proposed activity would be a well blowout during drilling operations, estimated to be 143,374 barrels of crude oil with an API gravity of 35.4°.

Land Segment and Resource Identification

Trajectories of a spill and the probability of it impacting a land segment have been projected utilizing information in the BOEM Oil Spill Risk Analysis Model (OSRAM) for the Central and Western Gulf of Mexico available on the BOEM website. The results are shown in Figure 1. The BOEM OSRAM identifies an 8% probability of impact to the shorelines of Plaquemines Parish, LA within 30 days. Plaquemines Parish includes Barataria Bay, the Mississippi River Delta, Breton Sound and the affiliated islands and bays. This region is an extremely sensitive habitat and serves as a migratory, breeding, feeding and nursery habitat for numerous species of wildlife. Beaches in this area vary in grain particle size and can be classified as fine sand, shell or perched shell beaches. Sandy and muddy tidal flats are also abundant.

Response

ATP Oil & Gas Corporation will make every effort to respond to the Worst Case Discharge as effectively as practicable. A description of the response equipment available to contain and recover the Worst Case Discharge is shown in Figure 2.

Using the estimated chemical and physical characteristics of crude oil, an ADIOS weathering model was run on a similar product from the ADIOS oil database. The results indicate 21% or 30,109 barrels of crude oil would be evaporated/dispersed within 24 hours, with 113,265 barrels remaining.

Spill Response MC 710	Barrels of Oil
WCD Volume	143,374
Less 21% natural evaporation/dispersion	30,109
Remaining volume	113,265
Oil addressed by aerial dispersants	7,540
Oil addressed by in-situ burning	4,291

Figure 2 outlines equipment, personnel, materials and support vessels as well as temporary storage equipment available to respond to a spill of 143,374 barrels. The list estimates individual times needed for procurement, load out, travel time to the site and deployment. **Figure 2** also indicates how operations will be supported.

If aerial dispersants are utilized, 8 sorties (9,600 gallons) from two of the DC-3 aircrafts and 4 sorties (8,000 gallons) from the Basler aircraft should disperse approximately 7,540 barrels of product. If the conditions are favorable for in-situ burning, the proper approvals have been obtained and the proper planning is in place, in-situ burning of oil may be attempted. Using estimates based on the Deepwater Horizon spill of 2010, up to 5% or 5,663 barrels of the total daily Worst Case Discharge volume could be burned. Slick containment boom would be immediately called out and on-scene as soon as possible. Offshore response strategies may include attempting to skim utilizing the HOSS Barge, nine Fast Response Units, and eight sets of Koseq skimming arms, with a total derated skimming capacity of 219,562 barrels. Temporary storage associated with skimming equipment equals 21,700 barrels. If additional storage is needed, an 80,000 barrel storage barge, 47,000 barrel storage barge, 25 barrel storage barge, three 23,000 barrel storage barges, and one 20,000 barrel storage barge may be mobilized and centrally located to provide temporary storage allowing the skimmers to stay in the area of operations as much as possible. **Safety is first priority. Air monitoring will be accomplished and operations deemed safe prior to any containment/skimming attempts.**

If the spill went unabated, shoreline impact in Plaquemines Parish, Louisiana would depend upon existing environmental conditions. Shoreline protection would include the use of CGA's near shore and shallow water skimmers with a total derated skimming capacity of 33,253 barrels. Temporary storage associated with skimming equipment equals 1,512 barrels. If additional storage is needed, two 20,000 barrel storage barges may be mobilized and centrally located to provide temporary storage allowing the skimmers to stay in the area of operations as much as possible. Onshore response may include the deployment of shoreline boom on beach areas, or protection and sorbent boom on vegetated areas. A Master Service Agreement with AMPOL and a Letter of Intent from Oil Mop will ensure access to 147,000 feet of 18" shoreline protection boom. **Figure 2** outlines individual times needed for procurement, load out, travel time to the site and deployment. Strategies would be based upon surveillance and real time trajectories that depict areas of potential impact given actual sea and weather conditions. The State of Louisiana Initial Oil Spill Response Plan for Plaquemines Parish and Unified Command would be consulted to ensure that environmental and special economic resources would be correctly identified and prioritized to ensure optimal protection. Shoreline protection strategies depict the protection response modes applicable for oil spill clean-up operations. The State of Louisiana Initial Oil Spill Response Plan provides detailed shoreline protection strategies for this area, and it describes necessary action to keep the oil spill from entering Louisiana's coastal wetlands, based on the assumption that removal of the released oil will be much easier and less damaging to fragile coastal ecosystems if done in the open waters of the Gulf of Mexico. Supervisory personnel have the option to modify the deployment and operation of equipment allowing a more effective response to site-specific circumstances. ATP Oil & Gas Corporation's contract Spill Management Team holds a copy of the State of Louisiana Initial Oil Spill Response Plan.

Initial Response Considerations

Actual actions taken during an oil spill response will be based on many factors to include but not be limited to:

- Weather
- Equipment and materials availability
- Ocean currents and tides
- Location of the spill
- Product spilled
- Amount spilled
- Environmental risk assessments
- Trajectory and product analysis
- Well status, i.e., shut in or continual release

ATP Oil & Gas Corporation will take action to provide a safe, aggressive response to contain and recover as much of the spilled oil as quickly as it is safe to do so. In an effort to protect the environment, response actions will be designed to provide an “in-depth” protection strategy meant to recover as much oil as possible as far from environmentally sensitive areas as possible. Safety will take precedence over all other considerations during these operations.

Upon notification of a spill, the following actions will be taken:

- Information will be confirmed
- An assessment will be made and initial objectives set
- OSROs and appropriate agencies will be notified
- ICS 201, Initial Report Form completed
- Initial Safety plan will be written and published
- Unified Command will be established
 - Overall safety plan developed to reflect the operational situation and coordinated objectives
 - Areas of responsibility established for Source Control and each surface operational site
 - On-site command and control established

Offshore Response Actions

Equipment Deployment

Surveillance

- Surveillance Aircraft: within two hours of QI notification, or at first light
- Provide trained observer to provide on site status reports
- Provide command and control platform at the site if needed
- Continual surveillance of oil movement by remote sensing systems, aerial photography and visual confirmation
- Continual monitoring of vessel assets using vessel monitoring systems

Dispersant application assets

- Put ASI on standby
- With the FOSC, conduct analysis to determine appropriateness of dispersant application
- Gain FOSC approval for use of dispersants on the surface
- Deploy aircraft in accordance with a plan developed for the actual situation
- Coordinate movement of dispersants, aircraft, and support equipment and personnel
- Confirm dispersant availability for current and long range operations
- Start ordering dispersant stocks required for expected operations

Containment boom

- Call out early and expedite deployment to be on scene ASAP
- Ensure boom handling and mooring equipment is deployed with boom
- Provide continuing reports to vessels to expedite their arrival at sites that will provide for their most effective containment
- Use Vessels of Opportunity (VOO) to deploy and maintain boom

Dedicated off-shore skimming systems

General

- Deployed to the highest concentration of oil
- Assets deployed at safe distance from aerial dispersant and in-situ burn operations

CGA HOSS Barge

- Use in areas with heaviest oil concentrations
- Consider for use in areas of known debris (seaweed, and other floating materials)

CGA FRUs

- To the area of the thickest oil
- Use as far off-shore as allowed

T&T Koseq Skimming Systems

- To the area of the thickest oil
- Use as far off-shore as allowed
- VOOs with a minimum of 2,000 bbls storage capacity

Storage Vessels

- Establish availability of CGA contracted assets
- Early call out (to allow for tug boat acquisition and deployment speeds)
- Phase mobilization to allow storage vessels to arrive at the same time as skimming systems
- Position as closely as possible to skimming assets to minimize offloading time

Vessels of Opportunity (VOO)

- Use ATP Oil & Gas Corporation's contracted resources as applicable
- Industry vessels are usually best for deployment of Vessel of Opportunity Skimming Systems (VOSS)
- Acquire additional resources as needed
- Consider use of local assets, i.e. fishing and pleasure craft
- Expect mission specific and safety training to be required
- Plan with the US Coast Guard for vessel inspections

In-situ Burn assets

- Determine appropriateness of in-situ burn operation in coordination with the FOSC and affected SOSC
- Determine availability of fire boom and selected ignition systems
- Start ordering fire boom stocks required for expected operations
- Contact boom manufacturer to provide training if required
- Determine assets to perform on water operation
- Build operations into safety plan
- Conduct operations in accordance with an approved plan

Near Shore Response Actions

Timing

- Put near shore assets on standby and deployment in accordance with planning based on the actual situation, actual trajectories and oil budgets
- VOO identification and training in advance of spill nearing shoreline if possible
- Outfitting of VOOs for specific missions
- Deployment of assets based on actual movement of oil

Considerations

- Water depth, vessel draft
- Shoreline gradient
- State of the oil
- Use of VOOs
- Distance of surf zone from shoreline

Equipment Deployment

Surveillance

- Provide trained observer to direct skimming operations
- Continual surveillance of oil movement by remote sensing systems, aerial photography and visual confirmation
- Continual monitoring of vessel assets

Dispersant Use

- Generally will not be approved within 3 miles of shore or with less than 10 meters of water depth
- Approval would be at Regional Response Team level (Region 6)

Vessel Deployment

Dedicated Near Shore skimming systems

- FRVs
- Egmpol and Marco SWS
- Operate with aerial spotter directing systems to observed oil slicks

VOO

- Use ATP Oil & Gas Corporation's contracted resources as applicable
- Industry vessel are usually best for deployment of Vessel of Opportunity Skimming Systems (VOSS)
- Acquire additional resources as needed
- Consider use of local assets, i.e. fishing and pleasure craft
- Expect mission specific and safety training to be required
- Plan with the US Coast Guard for vessel inspections
- Operate with aerial spotter directing systems to oil patches

Shoreline Protection Operations

Response Planning Considerations

- Environmental risk assessments (ERA) to determine priorities for area protection
- Time to acquire personnel and equipment and their availability
- **Previous contingency planning contained in the appropriate Area Contingency Plan, and currently (Feb 2011) for Louisiana, The State of Louisiana Initial Oil Spill Response Plan, Deep Water Horizon, dated 2 May 2010 (La. OSRP)**

Actions

Placement of boom

- Position boom in accordance with the ERA based on the actual situation or the appropriate ACP
- Assess timing of booming operations to ensure it is where it needs to be at time of impact. Consider:
 - Trajectories
 - Weather forecast
 - Oil Impact forecast
 - Verified spill movement
 - Boom, manpower and vessel (shallow draft) availability
 - Near shore boom and support material, (stakes, anchors, line)

Beach Preparation

Considerations and Actions

- Use of a 10 mile go/no go line to determine timing of beach cleaning
- Shoreline Cleanup and Assessment Team Reports and recommendations
- Determination of Archeological sites and gaining authority to enter
- Monitoring of tide tables and weather to determine extent of high tides
- Pre cleaning of beaches by moving waste above high tide lines to minimize waste
- Staging of equipment and housing of response personnel as close to the job site as possible to maximize on-site work time
- Boom tending, repair, replacement and security (use of local assets may be advantageous)
- Constant awareness of weather and oil movement for resource redeployment as necessary
- In-situ burn may be considered when marshes have been impacted
- Passive clean up of marshes should be considered and appropriate stocks of sorbent boom and/or sweep obtained
- Earthen berms and shoreline protection boom may be considered to protect sensitive inland areas

Decanting Strategy

Recovered oil and water mixtures will typically separate into distinct phases when left in a quiescent state. When separation occurs, the relatively clean water phase can be siphoned or decanted back to the recovery point with minimal, if any, impact. Decanting therefore increases the effective on-site oil storage capacity and equipment operating time. FOSC/SOSC approval will be requested prior to decanting operations. This practice is routinely used for oil spill recovery.

CGA Equipment Limitations

The capability for any spill response equipment, whether a dedicated or portable system, to operate in differing weather conditions will be directly in relation to the capabilities of the vessel the system is placed on. Most importantly, however, the decision to operate will be based on the judgment of the Unified Command and/or the Captain of the vessel, who will ultimately have the final say in terminating operations. Skimming equipment listed below may have operational limits which exceed those safety thresholds. As was seen in the Deepwater Horizon (DWH) oil spill response, vessel skimming operations ceased when seas reached 5-6 feet and vessels were often recalled to port when those conditions were exceeded. Systems below are some of the most up-to-date systems available and were employed during the DWH spill.

Boom	3 foot seas, 20 knot winds
Dispersants	Winds more than 25 knots Visibility less than 3 nautical miles Ceiling less than 1,000 feet.
FRU	8 foot seas
HOSS Barge/OSRB	8 foot seas
Koseq Arms	8 foot seas
OSRV	4 foot seas

Environmental Conditions in the GOM

Louisiana is situated between the easterly and westerly wind belts, and therefore, experiences westerly winds during the winter and easterly winds in the summer. Average wind speed is generally 14-15 mph along the coast. Wave heights average 4 and 5 feet. However, during hurricane season, Louisiana has recorded wave heights ranging from 40 to 50 feet high and winds reaching speeds of 100 mph. Because much of southern Louisiana lies below sea level, flooding is prominent.

Surface water temperature ranges between 70 and 80 °F during the summer months. During the winter, the average temperature will range from 50 and 60 °F.

The Atlantic and Gulf of Mexico hurricane season is officially from 1 June to 30 November. 97% of all tropical activity occurs within this window. The Atlantic basin shows a very peaked season from August through October, with 78% of the tropical storm days, 87% of the minor (Saffir-Simpson Scale categories 1 and 2) hurricane days, and 96% of the major (Saffir-Simpson categories 3, 4 and 5) hurricane days occurring then. Maximum activity is in early to mid September. Once in a few years there may be a hurricane occurring "out of season" - primarily in May or December. Globally, September is the most active month and May is the least active month.

**FIGURE 1
TRAJECTORY BY LAND SEGMENT**

<p>Trajectory of a spill and the probability of it impacting a land segment have been projected utilizing ATP Oil & Gas Corporation's WCD and information in the BOEM Oil Spill Risk Analysis Model (OSRAM) for the Central and Western Gulf of Mexico available on the BOEM website using 30 day impact. The results are tabulated below.</p>				
Area/Block	OCS-G	Launch Area	Land Segment and/or Resource	Conditional Probability (%) within 30 days
<p>Drill, complete, test and install tree for Well Locations A & B</p> <p>Mississippi Canyon 710, Well Location A</p> <p><i>49 miles from shore</i></p>	G22896	C58	Galveston County, TX	1
			Jefferson County, TX	1
			Cameron Parish, LA	3
			Vermilion Parish, LA	2
			Iberia Parish, LA	1
			Terrebonne Parish, LA	3
			Lafourche Parish, LA	3
			Jefferson Parish, LA	1
			Plaquemines Parish, LA	8
			St. Bernard Parish, LA	1
			Okaloosa County, FL	1

WCD Scenario— BASED ON WELL BLOWOUT DURING DRILLING OPERATIONS (49 miles from shore)
 143,374 bbls of crude oil
 API Gravity 35.4°

FIGURE 2 – Equipment Response Time to MC 710, Well Location A

Dispersants/Surveillance

Dispersant/Surveillance	EDRC	Storage Capacity	VOO	Persons Required	From	Hrs to Procure	Hrs to Loadout	Travel to site	Total Hrs
Basler 67T		2000	NA	2	Houma	1	1	0.6	2.6
DC 3		1200	NA	2	Houma	1	1	0.7	2.7
DC 3		1200	NA	2	Houma	1	1	0.7	2.7
Aero Commander		NA	NA	2	Houma	1	1	0.6	2.6

Offshore Response

Offshore Equipment No Staging	EDRC	Storage Capacity	VOO	Persons Required	From	Hrs to Procure	Hrs to Loadout	Hrs to GOM	Travel to Spill Site	Hrs to Deploy	Total Hrs
HOSS Barge	43000	4000	3 Tugs	8	Houma	4	0	5	10.0	1	20.0
Koseq Skimming Arms (3)	53487	6000	3 Utility	18	Leeville	4	12	1	5.8	2	24.8
Koseq Skimming Arms (1)	17829	2000	1 Utility	6	Fourchon	4	12	1	5.8	2	24.8
Koseq Skimming Arms (2)	35658	4000	2 Utility	12	Venice	4	12	2	4.2	2	24.2
Koseq Skimming Arms (2)	35658	4000	2 Utility	12	Galveston	4	12	1	26.3	2	45.3
CGA											
T&T Marine (available through contract with CGA)											
Pacific 996165	NA	80000	1 Tug	6	Venice	4	12	2	6.25	1	25.25
K-Sea Operating (available through contract with CGA)											
Enterprise Marine Services LLC (available through contract with CGA)											
CTCo 2603	NA	25000	1 Tug	6	Amelia	4	12	4	16.25	1	37.25
CTCo 2604	NA	20000	1 Tug	6	Amelia	4	12	4	16.25	1	37.25
CTCo 2607	NA	23000	1 Tug	6	Amelia	4	12	4	16.25	1	37.25
CTCo 2608	NA	23000	1 Tug	6	Amelia	4	12	4	16.25	1	37.25
CTCo 2609	NA	23000	1 Tug	6	Amelia	4	12	4	16.25	1	37.25
CTCo 5001	NA	47000	1 Tug	6	Amelia	4	12	4	16.25	1	37.25

Staging Area: Venice

Offshore Equipment With Staging	EDRC	Storage Capacity	VOO	Persons Req.	From	Hrs to Procure	Hrs to Load Out	Travel to Staging	Travel to Site	Hrs to Deploy	Total Hrs
CGA											
FRU (1) + 100 bbl Tank (2)	3770	200	1 Utility	6	Belle Chasse	1	2	2	4.2	1	10.2
FRU (1) + 100 bbl Tank (2)	3770	200	1 Utility	6	Galveston	1	2	8	4.2	1	16.2
FRU (3) + 100 bbl Tank (5)	11310	500	1 Utility	6	Houma	1	2	3	4.2	1	11.2
FRU (1) + 100 bbl Tank (2)	3770	200	1 Utility	6	Ingleside	1	2	11	4.2	1	19.2
FRU (1) + 100 bbl Tank (2)	3770	200	1 Utility	6	Lake Charles	1	2	5.5	4.2	1	13.7
FRU (2) + 100 bbl Tank (4)	7540	400	1 Utility	6	Venice	1	2	0	4.2	1	8.2

Offshore Equipment With Staging	EDRC	Storage Capacity	VOO	Persons Req.	From	Hrs to Procure	Hrs to Loadout	Travel to Staging	Travel to Site	Hrs to Deploy	Total Hrs
CGA											
42" Auto Boom (5000')	NA	NA	10 Crew	20	Belle Chasse	1	2	2	4.2	1	10.2
42" Auto Boom (5000')	NA	NA	10 Crew	20	Galveston	1	2	8	4.2	1	16.2
42" Auto Boom (5000')	NA	NA	10 Crew	20	Houma	1	2	3	4.2	1	11.2
42" Auto Boom (2500')	NA	NA	6 Crew	12	Ingleside	1	2	11	4.2	1	19.2
42" Auto Boom (5000')	NA	NA	10 Crew	20	Lake Charles	1	2	5.5	4.2	1	13.7
42" Auto Boom (2500')	NA	NA	6 Crew	12	Pascagoula	1	2	4	4.2	1	12.2
1000' Hydro-Fire Boom	NA	NA	8 Utility	20	Harvey	1	4	2	4.2	6	17.2

Nearshore Response

Nearshore Equipment No Staging	EDRC	Storage Capacity (bbl)	VOO	Persons Required	From	Hrs to Procure	Hrs to Loadout	Hrs to GOM	Travel to Spill Site	Hrs to Deploy	Total Hrs
CGA											
46' FRV	5000	65	NA	4	Galveston	1	0	0	13.6	0	14.6
46' FRV	5000	65	NA	4	Houma	1	0	2	2.8	0	5.8
46' FRV	5000	65	NA	4	Lake Charles	1	0	1	10	0	12
46' FRV	5000	65	NA	4	Venice	1	0	1	2	0	4
Enterprise Marine Services LLC (available through contract with CGA)											
CTCo 2605	NA	20000	1 Tug	6	Amelia	4	12	4	15	1	36
CTCo 2606	NA	20000	1 Tug	6	Amelia	4	12	4	15	1	36

Staging Area: Venice

Nearshore Equipment With Staging	EDRC	Storage Capacity	VOO	Persons Req.	From	Hrs to Procure	Hrs to Load Out	Travel to Staging	Travel to Deployment Site	Hrs to Deploy	Total Hrs
CGA											
SWS Egmopol	3000	100	NA	3	Galveston	1	2	8	2	0	13
SWS Egmopol	3000	100	NA	3	Houma (Egmopol)	1	2	3	2	0	8
SWS Marco	3588	34	NA	3	Houma (Marco)	1	2	3	2	0	8
SWS Marco	3588	20	NA	3	Lake Charles	1	2	5.5	2	0	10.5
Rope Mop	77	2	0	3	Belle Chasse	1	2	2	2	0	7
RO Storage Barge	NA	249	Towed	0	Galveston	1	2	8	2	0	13
RO Storage Barge	NA	249	Towed	0	Houma	1	2	3	2	0	8
RO Storage Barge	NA	249	Towed	0	Lake Charles	1	2	5.5	2	0	10.5
RO Storage Barge	NA	249	Towed	0	Venice	1	2	0	2	0	5

Shoreline Protection

Staging Area: Venice

Shoreline Protection Boom	VOO	Persons Req.	Storage/Warehouse Location	Hrs to Procure	Hrs to Loadout	Travel to Staging	Travel to Deployment Site	Hrs to Deploy	Total Hrs
AMPOL (available through MSA)									
42,000' 18" Boom	16 Crew	40	New Iberia, LA	2	2	4	2	12	22
20,000' 18" Boom	8 Crew	20	New Orleans, LA	2	2	2	2	6	14
Oil Mop (available through Letter of Intent)									
10,000' 18" Boom	4 Crew	10	New Iberia, LA	1	1	4	2	3	11
10,000' 18" Boom	4 Crew	10	Houston, TX	1	1	7.5	2	3	14.5
10,000' 18" Boom	4 Crew	10	Port Arthur, TX	1	1	6.25	2	3	13.25
20,000' 18" Boom	8 Crew	20	Belle Chasse, LA	1	1	1.75	2	6	11.75
10,000' 18" Boom	4 Crew	10	Port Allen, LA	1	1	3.5	2	3	10.5
10,000' 18" Boom	4 Crew	10	Houma, LA	1	1	3.5	2	3	10.5
15,000' 18" Boom	6 Crew	14	Gretna, LA (Warehouse)	2	2	2	2	4	12

Beach Boom	EDRC	Storage Capacity	VOO	Persons Req.	From	Hrs to Procure	Hrs to Loadout	Travel to Staging	Travel to Deployment	Hrs to Deploy	Total Hrs
CGA											
Beach Boom (2000')	NA	NA	NA	6	Galveston	1	2	8	1	2	14
Beach Boom (1000')	NA	NA	NA	4	Ingleside	1	2	11	1	2	17
Beach Boom (2000')	NA	NA	NA	6	Pascagoula	1	2	4	1	2	10

Staging Area: Venice

Wildlife Response	EDRC	Storage Capacity	VOO	Persons Req.	From	Hrs to Procure	Hrs to Loadout	Travel to Staging	Travel to Deployment	Hrs to Deploy	Total Hrs
Wildlife Support Trailer	NA	NA	NA	2	Houma	1	2	3	1	2	9
Bird Scare Guns (24)	NA	NA	NA	2	Belle Chasse	1	2	2	1	2	8
Bird Scare Guns (12)	NA	NA	NA	2	Galveston	1	2	8	1	2	14
Bird Scare Guns (24)	NA	NA	NA	2	Houma	1	2	3	1	2	9
Bird Scare Guns (12)	NA	NA	NA	2	Ingleside	1	2	11	1	2	17
Bird Scare Guns (24)	NA	NA	NA	2	Lake Charles	1	2	5.5	1	2	11.5
Bird Scare Guns (24)	NA	NA	NA	2	Pascagoula	1	2	4	1	2	10

CGA

Response Asset	Total
Offshore EDRC	219,562
Offshore Recovered Oil Storage	262,700
Nearshore / Shallow Water EDRC	33,253
Nearshore / Shallow Water Recovered Oil Storage	41,512

SECTION 9
ENVIRONMENTAL MONITORING INFORMATION
(30 CFR 250.221 & 250.252)

A. Monitoring Systems:

There are no current environmental monitoring systems planned or in place for the proposed operations.

B. Incidental Takes:

There is no reason to believe that any of the endangered species or marine mammals as listed in the ESA will be “taken” as a result of the operations proposed under this plan.

C. Flower Garden Banks National Marine Sanctuary:

Mississippi Canyon Block 710 is not located in the Flower Garden Banks National Marine Sanctuary. Therefore, the requested information is not required in this EP.

SECTION 10
LEASE STIPULATIONS INFORMATION
(30 CFR 250.222 & 250.253)

The BOEMRE did not invoke lease stipulations for Lease(s) OCS-G 22896, Mississippi Canyon Block 710.

SECTION 11
ENVIRONMENTAL MITIGATION MEASURES
INFORMATION
(30 CFR 250.223 & 250.254)

B. Incidental Takes

ATP Oil & Gas Corporation will adhere to the requirements as set forth in the following documents, as applicable, to avoid or minimize impacts to any of the species listed in the ESA as a result of the operations conducted herein:

- NTL 2007-G04, "Vessel Strike Avoidance and Injured/Dead Protected Species Reporting
- NTL 2007-G03, "Marine Trash and Debris Awareness and Elimination"
- NTL 2007-G02, "Implementation of Seismic Survey Mitigation Measures and Protected Species Observer Program"

SECTION 12
SUPPORT VESSELS & AIRCRAFT INFORMATION
(30 CFR 250.224 & 250.257)

A. General:

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

Type	Maximum Fuel Tank Capacity	Maximum Number in Area at Any Time	Trip Frequency or Duration
Tug Boats	3000 bbls	2	10 days
Anchor Handling Boat	1500 bbls	1	10 days
Crew Boat	500 bbls	1	3 trips/week
Supply Boat	500 bbls	1	3 trips/week
Aircraft	285 gal	1	As needed

B. Diesel Oil Supply Vessels:

<i>Size of Fuel Supply Vessel</i>	<i>Capacity of Fuel Supply Vessel</i>	<i>Frequency of Fuel Transfers</i>	<i>Route Fuel Supply Vessel Will Take</i>
320 feet	360,000 gal	As Required	Most Direct

D. Solid and Liquid Wastes Transportation:

Solid and liquid waste transportation from the site of the proposed activities to offshore and/or onshore facilities for storage and/or disposal is included as ***Exhibit 10***.

E. Vicinity Map:

Please refer to ***Exhibit 11*** for a vicinity map showing the location of the activities proposed herein relative to the shoreline with the distance of the proposed activities from the shoreline and the primary route(s) of the support vessels and aircraft that will be used when traveling between the onshore support facilities and the drilling unit.

EXHIBIT 10

SOLID AND LIQUID WASTE TRANSPORTATION AND WASTE DISPOSAL

TABLE 2. WASTES YOU WILL TRANSPORT AND /OR DISPOSE OF ONSHORE

please specify whether the amount reported is a total or per well

Type of Waste	Projected generated waste		Solid and Liquid Wastes transportation		Waste Disposal	
	Composition	Transport Method	Name/Location of Facility	Amount	Disposal Method	
Will drilling occur? If yes, fill in the muds and cuttings.						
<i>EXAMPLE: Oil-based drilling fluid or mud</i>	N/A	N/A				
Oil-based drilling fluid or mud	N/A	N/A				
Synthetic-based drilling fluid or mud	synthetic drilling fluids	Cutting boxes on supply boat	MI-SWACO-Fourchon, LA	2,000 bbls/well	Reused	
Cuttings wetted with Water-based fluid	N/A	N/A	N/A	N/A	N/A	
Cuttings wetted with Synthetic-based fluid	N/A	N/A	N/A	N/A	N/A	
Cuttings wetted with oil-based fluids	N/A	N/A	N/A	N/A	N/A	
Will you produce hydrocarbons? If yes fill in for produced sand.						
Produced sand	N/A	N/A	N/A	N/A	N/A	
Will you have additional wastes that are not permitted for discharge? If yes, fill in the appropriate rows.						
<i>EXAMPLE: trash and debris</i>	cardboard, aluminum, refuse generated during operations: paper, cardboard, aluminum	shored in a storage bin	shorebase	z tons total	recycle	
trash and debris	cardboard, aluminum	Storage bins on crew boat	Municipal landfill Fourchon, LA	1,000 ft ³	Landfill	
used oil	N/A	N/A	N/A	N/A	N/A	
wash water	N/A	N/A	N/A	N/A	N/A	
chemical product wastes	Ethylene glycol	Stored in approved tanks, spent chemical sent to port for disposal	Newpark Fourchon, LA	50 bbls/month	Recycle	
NOTE: If you will not have a type of waste, enter NA in the row.						

EXHIBIT 11

VICINITY MAP

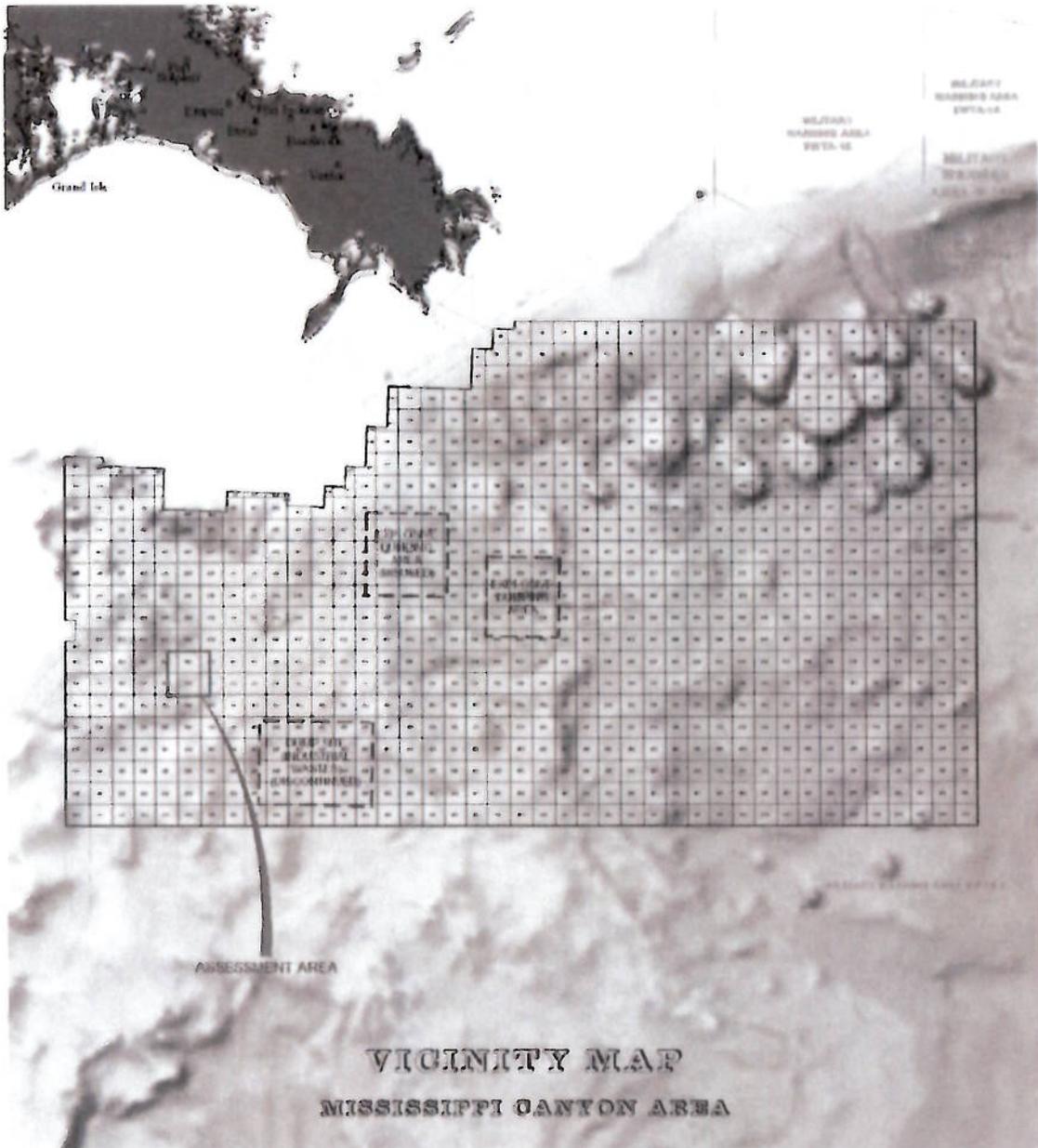


Illustration 1-2. Vicinity Map showing the location of the survey area

SECTION 13
ONSHORE SUPPORT FACILITIES INFORMATION
(30 CFR 250.225 & 250.258)

A. General:

Name	Location	Existing/New/Modified
HOS Port	Port Fourchon, LA	Existing

B. Support Base Construction or Expansion:

There will be no new construction of an onshore support base, nor will we expand the existing shorebase as a result of the operations proposed in this Exploration Plan.

D. Waste Disposal:

Please refer to *Exhibit 10* for information on the onshore facilities that will be used to store and/or dispose of the solid and liquid wastes generated by the activities proposed in this EP.

SECTION 14
COASTAL ZONE MANAGEMENT ACT (CZMA)
INFORMATION
(30 CFR 250.226 & 250.60)

Under direction of the Coastal Zone Management Act (CZMA), the States of Alabama, Florida, Louisiana, Mississippi, and Texas developed Coastal Zone Management Programs (CZMP) to allow for the supervision of significant land and water use activities that take place within or that could significantly impact their respective coastal zones.

A. Consistency Certification

The activities proposed herein have potential impact on the shores of Louisiana. A certificate of Coastal Zone Management Consistency for the State of Louisiana is enclosed as *Exhibit 12*.

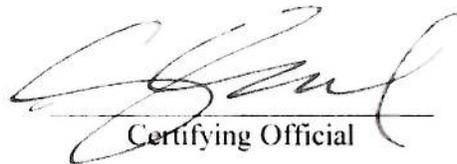
EXHIBIT 12

**COASTAL ZONE MANAGEMENT CONSISTENCY
CERTIFICATION**

**COASTAL ZONE MANAGEMENT
CONSISTENCY CERTIFICATION
INITIAL EXPLORATION PLAN
MISSISSIPPI CANYON BLOCK 710
OCS-G 22896**

The proposed activities described in detail in this OCS Plan comply with Louisiana's approved Coastal Management Program(s) and will be conducted in a manner consistent with such Program(s)

ATP Oil & Gas Corporation
Lessee or Operator


Certifying Official

5.16.11
Date

SECTION 15
ENVIRONMENTAL IMPACT ANALYSIS (EIA)
(30 CFR 250.227 & 250.61)

Enclosed as ***Exhibit 13*** is a project-specific environmental impact analysis (EIA) which assesses the potential direct and indirect environmental impacts to offshore and onshore resources that could be affected by the activities proposed in this EP.

EXHIBIT 13

ENVIRONMENTAL IMPACT ANALYSIS

ATP Oil & Gas Corporation (ATP)

Initial Exploration Plan Mississippi Canyon Block 710 OCS-G 22896

(A) Impact Producing Factors

ENVIRONMENTAL IMPACT ANALYSIS WORKSHEET

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

Footnotes for Environmental Impact Analysis Matrix

- 1) Activities that may affect a marine sanctuary or topographic feature. Specifically, if the well or platform site or any anchors will be on the seafloor within the:
 - o 4-mile zone of the Flower Garden Banks, or the 3-mile zone of Stetson Bank;
 - o 1000-m, 1-mile or 3-mile zone of any topographic feature (submarine bank) protected by the Topographic Features Stipulation attached to an OCS lease;
 - o Essential Fish Habitat (EFH) criteria of 500 ft. from any no-activity zone; or
 - o Proximity of any submarine bank (500 ft. buffer zone) with relief greater than 2 meters that is not protected by the Topographic Features Stipulation attached to an OCS lease.
- 2) Activities with any bottom disturbance within an OCS lease block protected through the Live Bottom (Pinnacle Trend) Stipulation attached to an OCS lease.
- 3) Activities within any Eastern Gulf OCS block where seafloor habitats are protected by the Live Bottom (Low-Relief) Stipulation attached to an OCS lease.
- 4) Activities on blocks designated by the BOEM as being in water depths 300 meters or greater.
- 5) Exploration or production activities where H₂S concentrations greater than 500 ppm might be encountered.
- 6) All activities that could result in an accidental spill of produced liquid hydrocarbons or diesel fuel that you determine would impact these environmental resources. If the proposed action is located a sufficient distance from a resource that no impact would occur, the EIA can note that in a sentence or two.
- 7) All activities that involve seafloor disturbances, including anchor emplacements, in any OCS block designated by the BOEM as having high-probability for the occurrence of shipwrecks or prehistoric sites, including such blocks that will be affected that are adjacent to the lease block in which your planned activity will occur. If the proposed activities are located a sufficient distance from a shipwreck or a prehistoric site that no impact would occur, the EIA can note that in a sentence or two.
- 8) All activities that you determine might have an adverse effect on endangered or threatened marine mammals or sea turtles or their critical habitats.
- 9) Production activities that involve transportation of produced fluids to shore using shuttle tankers or barges.

(B) Analysis

Site-Specific at Mississippi Canyon Block 710

Proposed operations consist of the drilling, completion and installation of subsea wellheads over locations "A" and "B".

Operations will be conducted with a Semi-Submersible rig.

1. Designated Topographic Features

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

Physical disturbances to the seafloor: Mississippi Canyon Block 710 is 27 miles from the closest designated Topographic Features Stipulation Block (Sackett Bank); therefore, no adverse impacts are expected.

Effluents: Mississippi Canyon Block 710 is 27 miles from the closest designated Topographic Features Stipulation Block (Sackett Bank); therefore, no adverse impacts are expected.

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

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

2. Pinnacle Trend Area Live Bottoms

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

Physical disturbances to the seafloor: Mississippi Canyon Block 710 is 98 miles from the closest live bottom (pinnacle trend) area; therefore, no adverse impacts are expected.

Effluents: Mississippi Canyon Block 710 is 98 miles from the closest live bottom (pinnacle trend) area; therefore, no adverse impacts are expected.

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

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

3. Eastern Gulf Live Bottoms

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

Physical disturbances to the seafloor: Mississippi Canyon Block 710 is not located in an area characterized by the existence of live bottoms, and this lease does not contain a Live-Bottom Stipulation requiring a photo documentation survey and survey report.

Effluents: Mississippi Canyon Block 710 is not located in an area characterized by the existence of live bottoms; therefore, no adverse impacts are expected.

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

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

4. Benthic Communities

Mississippi Canyon Block 710 is located in water depths 984 feet (300 meters) or greater. IPFs that could result in impacts to benthic communities from the proposed activities include physical disturbances to the seafloor.

Physical disturbances to the seafloor: Mississippi Canyon Block 710 is approximately 21 miles from a known benthic community site (Benthic Mississippi Canyon Block 969), listed in NTL 2009-G40. This Initial Exploration Plan submittal includes the required maps, analyses, and statement(s). The proposed activities will be conducted in accordance with NTL 2009-G40, which will ensure that features or areas that could support high-density benthic communities will not be impacted.

There are no other IPFs (including emissions, effluents, wastes sent to shore for disposal, or accidents) from the proposed activities which could impact benthic communities.

5. Water Quality

IPFs that could result in water quality degradation from the proposed operations in Mississippi Canyon Block 710 include disturbances to the seafloor, effluents and accidents.

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

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

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

of oil are insoluble in water and therefore float. The activities proposed in this plan will be covered by ATP's Regional Oil Spill Response Plan (refer to information submitted in **Appendix H**).

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

6. Fisheries

IPFs that could cause impacts to fisheries as a result of the proposed operations in Mississippi Canyon Block 710 include physical disturbances to the seafloor, effluents and accidents.

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

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

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

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

7. Marine Mammals

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

occurred most frequently along the upper slope in areas outside of anticyclones. IPFs that could cause impacts to marine mammals as a result of the proposed operations in Mississippi Canyon Block 710 include emissions, effluents, discarded trash and debris, and accidents.

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

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

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

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

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (previously "All Washed Up: The Beach Litter Problem"). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from ATP management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2007-G03.

Accidents: Collisions between support vessels and cetaceans would be unusual events, however should one occur, death or injury to marine mammals is possible. Contract vessel operators can

avoid marine mammals and reduce potential deaths by maintaining a vigilant watch for marine mammals and maintaining a safe distance when they are sighted. Vessel crews should use a reference guide to help identify the twenty-eight species of whales and dolphins, and the single species of manatee that may be encountered in the Gulf of Mexico OCS. Vessel crews must report sightings of any injured or dead protected marine mammal species immediately, regardless of whether the injury or death is caused by their vessel, to the Marine Mammal and Sea Turtle Stranding Hotline at (888) 404-3922, the NMFS Southeast Regional Office at (727) 824-5312, or the Marine Mammal Stranding Network at (305) 862-2850. In addition, if the injury or death was caused by a collision with a contract vessel, the BOEM must be notified within 24 hours of the strike by email to protectedspecies@boemre.gov. If the vessel is the responsible party, it is required to remain available to assist the respective salvage and stranding network as needed.

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

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

8. Sea Turtles

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

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

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

Discarded trash and debris: Both entanglement in, and ingestion of, debris have caused the death or serious injury of sea turtles (Balazs, 1985). The limited amount of marine debris, if any, resulting from the proposed activities is not expected to substantially harm sea turtles. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). ATP will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (*previously "All Washed Up: The Beach Litter Problem"*). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from ATP management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2007-G03.

Accidents: Collisions between support vessels and sea turtles would be unusual events, however should one occur, death or injury to sea turtles is possible. Contract vessel operators can avoid sea turtles and reduce potential deaths by maintaining a vigilant watch for sea turtles and maintaining a safe distance when they are sighted. Vessel crews should use a reference guide to help identify the five species of sea turtles that may be encountered in the Gulf of Mexico OCS. Vessel crews must report sightings of any injured or dead protected sea turtle species immediately, regardless of whether the injury or death is caused by their vessel, to the Marine Mammal and Sea Turtle Stranding Hotline at (888) 404-3922, the NMFS Southeast Regional Office at (727) 824-5312, or the Marine Mammal Stranding Network at (305) 862-2850. In addition, if the injury or death was caused by a collision with a contract vessel, the BOEM must be notified within 24 hours of the strike by email to protectedspecies@boemre.gov. If the vessel is the responsible party, it is required to remain available to assist the respective salvage and stranding network as needed.

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

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

9. Air Quality

Mississippi Canyon Block 710 is located 88 miles from the Breton Wilderness Area and 49 miles from shore. Applicable emissions data is included in Appendix G of the Plan.

There would be a limited degree of air quality degradation in the immediate vicinity of the proposed activities. Plan Emissions for the proposed activities do not exceed the annual exemption levels as set forth by BOEM. Accidents and blowouts can release hydrocarbons or chemicals, which could cause the emission of air pollutants. However, these releases would not impact onshore air quality because of the prevailing atmospheric conditions, emission height, emission rates, and the distance of Mississippi Canyon Block 710 from the coastline. There are no other IPFs (including effluents, physical disturbances to the seafloor, wastes sent to shore for treatment or disposal) from the proposed activities which would impact air quality.

10. Shipwreck Sites (known or potential)

IPFs that could impact known or unknown shipwreck sites as a result of the proposed operations in Mississippi Canyon Block 710 include disturbances to the seafloor. Mississippi Canyon Block 710 is not located in or adjacent to an OCS block designated by BOEM as having a high probability for occurrence of shipwrecks. ATP will report to BOEM the discovery of any evidence of a shipwreck and make every reasonable effort to preserve and protect that cultural resource. There are no other IPFs (including emissions, effluents, wastes sent to shore for treatment or disposal, or accidents) from the proposed activities which could impact shipwreck sites.

11. Prehistoric Archaeological Sites

IPFs that could cause impacts to prehistoric archaeological sites as a result of the proposed operations in Mississippi Canyon Block 710 are physical disturbances to the seafloor and accidents (oil spills).

Physical Disturbances to the seafloor: Mississippi Canyon Block 710 is located inside the Archaeological Prehistoric high probability lines. ATP will report to BOEM the discovery of any object of prehistoric archaeological significance and make every reasonable effort to preserve and protect that cultural resource.

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

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

Vicinity of Offshore Location

1. Essential Fish Habitat (EFH)

IPFs that could cause impacts to EFH as a result of the proposed operations in Mississippi Canyon Block 710 include physical disturbances to the seafloor, effluents and accidents. EFH includes all estuarine and marine waters and substrates in the Gulf of Mexico.

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

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

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

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

2. Marine and Pelagic Birds

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

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

Accidents: An oil spill would cause localized, low-level petroleum hydrocarbon contamination. However, it is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5, Water Quality**). Marine and pelagic birds feeding at the spill location may experience chronic, nonfatal, physiological stress. It is expected that few, if any, coastal and marine birds would actually be affected to that extent. The activities proposed in this plan will be covered by ATP's Regional OSRP (refer to information submitted in **Appendix H**).

Discarded trash and debris: Marine and pelagic birds could become entangled and snared in discarded trash and debris, or ingest small plastic debris, which can cause permanent injuries and death. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). ATP will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass. Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (*previously "All Washed Up: The Beach Litter Problem"*). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from ATP management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2007-G03. Debris, if any, from these proposed activities will seldom interact with marine and pelagic birds; therefore, the effects will be negligible.

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

3. Public Health and Safety Due to Accidents.

There are no IPFs (emissions, effluents, physical disturbances to the seafloor, wastes sent to shore for treatment or disposal or accidents, including an accidental H₂S releases) from the proposed activities which could cause impacts to public health and safety. In accordance with NTL No.'s 2008-G04, 2009-G27, and 2009-G31, sufficient information is included in **Appendix C** to justify our request that our proposed activities be classified by BOEM as H₂S absent.

2. Wetlands

Accidents: Oil spills could cause impacts to wetlands, however, it is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5, Water Quality**). Due to the distance from shore (49 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by ATP's Regional OSRP (refer to information submitted in **Appendix H**).

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

3. Shore Birds and Coastal Nesting Birds

Accidents: Oil spills could cause impacts to shore birds and coastal nesting birds. However, it is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5, Water Quality**). Given the distance from shore (49 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by ATP's Regional OSRP (refer to information submitted in **Appendix H**).

Discarded trash and debris: Coastal and marine birds are highly susceptible to entanglement in floating, submerged, and beached marine debris: specifically plastics. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). ATP will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on vessels and every facility that has sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (previously "All Washed Up: The Beach Litter Problem"). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from ATP management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2007-G03.

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities that could cause impacts to shore birds and coastal nesting birds.

4. Coastal Wildlife Refuges

Accidents: An accidental oil spill from the proposed activities could cause impacts to coastal wildlife refuges. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). Due to the distance from shore (49 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by ATP's Regional OSRP (refer to information submitted in **Appendix H**).

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities that could cause impacts to coastal wildlife refuges.

5. Wilderness Areas

An accidental oil spill from the proposed activities could cause impacts to wilderness areas. However, it is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5, Water Quality**). Due to the distance from the nearest designated Wilderness Area (88 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. The activities proposed in this plan will be covered by ATP's Regional OSRP (refer to information submitted in **Appendix H**).

6. Other Environmental Resources Identified

(C) Impacts on your proposed activities.

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

(D) Environmental Hazards

During the hurricane season, June through November, the Gulf of Mexico is impacted by an average of ten tropical storms (39-73 mph winds), of which six become hurricanes (> 74 mph winds). Due to its location in the gulf, Mississippi Canyon Block 710 may experience hurricane and tropical storm force winds, and related sea currents. These factors can adversely impact the integrity of the operations covered by this plan. A significant storm may present physical hazards to operators and vessels, damage exploration or production equipment, or result in the release of hazardous materials (including hydrocarbons). Additionally, the displacement of equipment may disrupt the local benthic habitat and pose a threat to local species.

The following preventative measures included in this plan may be implemented to mitigate these impacts:

1. Drilling & completion
 - a. Secure well

- b. Secure rig / platform
- c. Evacuate personnel

Drilling activities will be conducted in accordance with NTL No.'s 2008-G09, 2009-G10, and 2010-N10 .

2. Caisson Installation

Operator will not conduct caisson installation operations during Tropical Storm or Hurricane threat.

(E) Alternatives

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

(F) Mitigation Measures

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

(G) 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.

(H) Preparer(s)

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(I) References

Authors:

American Petroleum Institute (API). 1989. Effects of offshore petroleum operations on cold water marine mammals: a literature review. Washington, DC: American Petroleum Institute. 385 pp.

Balazs, G.H. 1985. Impact of ocean debris on marine turtles: entanglement and ingestion. In: Shomura, R.S. and H.O. Yoshida, eds. Proceedings, Workshop on the Fate and Impact of Marine Debris, 26-29 November 1984, Honolulu, HI. U.S. Dept. of Commerce. NOAA Tech. Memo. NOAA-TM-NMFS-SWFC-54. Pp 387-429.

Coastal and Onshore

1. Beaches

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

Accidents: Oil spills contacting beaches would have impacts on the use of recreational beaches and associated resources. Due to the distance from shore (49 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. The activities proposed in this plan will be covered by ATP's Regional OSRP (refer to information submitted in Appendix H).

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

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (previously "All Washed Up: The Beach Litter Problem"). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from ATP management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2007-G03.

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

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- Vauk, G., E. Hartwig, B. Reineking, and E. Vauk-Hentzelt. 1989. Losses of seabirds by oil pollution at the German North Sea coast. *Topics in Marine Biology*. Ros, J.D. ed. *Scient. Mar.* 53 (2-3): 749-754
- Vermeer, K. and R. Vermeer, 1975. Oil threat to birds on the Canadian west coast. *The Canadian Field-Naturalist*. 89:278-298.

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

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

SECTION 16
ADMINISTRATIVE INFORMATION
(30 CFR 250.228 & 250.68)

A. Exempted Information Description (public information copies only):

Discussions of target objectives, geological and geophysical data, and the proposed bottom-hole locations of the planned wells have been removed from the public information copy of this EP.

B. Bibliography:

C&C Technologies Survey Services, "Autonomous Underwater Vehicle Deepwater Benthic Community and Archaeological Assessment," November 2010.