

UNITED STATES GOVERNMENT
MEMORANDUM

April 15, 2010

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

Control # - S-07399
Type - Supplemental Exploration Plan
Lease(s) - OCS-G16770 Block - 641 Green Canyon Area
OCS-G20082 Block - 640 Green Canyon Area
Operator - Chevron U.S.A. Inc.
Description - Wells IS001, IS002, IS003, and IS004
Rig Type - DRILLSHIP

Attached is a copy of the subject plan.

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


Karen Dunlap
Plan Coordinator

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
WELL/IS001	G16770/GC/641	2447 FSL, 1924 FEL	G20082/GC/640
WELL/IS002	G20082/GC/640	2447 FSL, 1994 FEL	G20082/GC/640
WELL/IS003	G20082/GC/640	2557 FSL, 1994 FEL	G20082/GC/640
WELL/IS004	G16770/GC/641	2557 FSL, 1924 FEL	G20082/GC/640

NOTED SCHEXNAILDRE

Rec'd Dik
4/19/2010

S-7399

CHEVRON U.S.A. INC.
SUPPLEMENTAL EXPLORATION PLAN
GREEN CANYON BLOCKS 640 and 641
OCS-G 20082 and 16770
OFFSHORE LOUISIANA
"TAHITI" PROJECT



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SECTION A PLAN CONTENTS (30 CFR 250.211 and 250.241)

PLAN CONTENTS

Chevron U.S.A. Inc. (Chevron) proposes to drill up to four (4) wells; IS001, IS002, IS003, and IS004 in Green Canyon Block 640, OCS-G 20082. We expect to commence activities proposed in this plan on approximately August 1, 2010.

(a) PLAN INFORMATION FORM

Included as attachment **A-1** at the end of this section is Form MMS-137 "OCS Plan Information Form" which provides information concerning the proposed activities in this plan.

(b) LOCATION

A Bathymetry map showing the surface locations for the proposed wells is included as attachment **A-2** at the end of this section.

(c) SAFETY and POLLUTION PREVENTION FEATURES

Chevron plans to use a dynamically positioned drillship or similar to drill the wells proposed in this plan. Rig specifications will be provided with the Applications for Permit to Drill. If another rig type is used, any differences regarding air emissions, safety, drilling or pollution control equipment will be addressed in a revised Exploration Plan.

In accordance with 30 CFR 250.406, Chevron will ensure that safety features will include well control, pollution prevention, welding procedure, and blowout prevention equipment and as further clarified by MMS Notices to Lessees and current policy making invoked by the MMS.

The rig will be monitored daily by a Chevron drilling representative and any waste or fuel resulting in pollution of the Gulf waters will be reported to the representative in charge for immediate isolation and correction of the problem. Any spill will be reported to governmental agencies. Chevron will comply with all MMS Regulations during the course of the activities.

The rig is equipped with safety, fire fighting, and lifesaving equipment required to comply with USCG, ABS, SOLAS, and IMO code requirements.

Chevron will comply with all pertinent regulations in 30 CFR 250.203, NTL's, and all federal and state documents to ensure that the proposed activities are safe and that there is minimal impact on the environment. Chevron will maintain compliance with the EPA NPDES Permit and lease agreement during these proposed activities.

(d) STORAGE TANKS and PRODUCTION VESSELS

Information regarding the storage tanks that will be used to conduct the proposed activities in this plan that will store oil, as defined at 30 CFR 254.6, is provided in the table below. Only those tanks with a capacity of 25 barrels or more are included.

Type of Storage Tank	Type of Facility	Tank Capacity (bbls)	Number of Tanks	Total Capacity (bbls)	Fluid Gravity (API)
Main Fuel Oil	Drillship	16572 + 16693	2	33265	No. 2 Diesel
Diesel Settling	Drillship	837	2	1674	No. 2 Diesel
Diesel Day	Drillship	837	2	1674	No. 2 Diesel
Emergency Diesel	Drillship	100	1	100	No. 2 Diesel
Diesel Overflow	Drillship	826	1	826	No. 2 Diesel
Diesel Oil Drain	Drillship	116 + 36	1	152	No. 2 Diesel
Engine Oil Storage	Drillship	180 +4+10	3	194	26.2
Gear Oil P&S	Drillship	63	1	63	27
Gear Oil Fwd	Drillship	173	1	173	27
Hydraulic Oil BOP	Drillship	85 + 87	2	172	31

(f) ADDITIONAL MEASURES

A discussion of the safety, pollution prevention, and early spill detection measures that we would take beyond those required by 30 CFR part 250 is not required for this plan based on the guidelines provided in NTL No. 2006-G14.

ATTACHMENTS TO SECTION A

- A-1 - Form MMS-137 "OCS Plan Information Form" Public Information Copy
- A-2 - Bathymetry Location Plat

OCS PLAN INFORMATION FORM

General Information

Type of OCS Plan:	<input checked="" type="checkbox"/> Exploration Plan (EP)	<input type="checkbox"/> Development Operations Coordination Document (DOCD)
Company Name: Chevron U.S.A. Inc.	MMS Operator Number: 00078	
Address: 1500 Louisiana Street Houston, TX 77002	Contact Person: Phil Von Dullen	
	Phone Number: (832) 854- 3644	
	E-Mail Address: pvondullen@chevrontexaco.com	
Lease(s): G 20082	Area: GREEN CANYON	Block(s) 640
	Project Name (If Applicable): TAHITI	
Objective(s)	<input checked="" type="checkbox"/> Oil	<input checked="" type="checkbox"/> Gas
	<input type="checkbox"/> Sulphur	<input type="checkbox"/> Salt
Onshore Base: LEEVILLE, LA		Distance to closest land (Miles): 118

Description of Proposed Activities (Mark all that Apply)

<input checked="" type="checkbox"/> Exploration Drilling	<input type="checkbox"/> Development Drilling
<input type="checkbox"/> Well completion	<input type="checkbox"/> Installation of production platform
<input type="checkbox"/> Well test flaring (for more than 48 hours)	<input type="checkbox"/> Installation of production facilities
<input type="checkbox"/> Installation of caisson or platform as well protection structure	<input type="checkbox"/> Installation of satellite structure
<input type="checkbox"/> Installation of sub sea wellheads and/or manifolds	<input type="checkbox"/> Commence production
<input type="checkbox"/> Installation of lease term pipelines	<input type="checkbox"/> 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 <input type="checkbox"/>
Do you propose to use new or unusual technology to conduct your activities?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Do you propose any facility that will serve as a host facility for deepwater sub sea development?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Do you propose any activities that may disturb an MMS-designated high-probability archaeological area?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Have all of the surface locations of your proposed activities been previously reviewed and approved by MMS?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Tentative Schedule of Proposed Activities

Proposed Activity	Start Date	End Date	No. of Days
Drill and Temporarily Abandon IS002	08-01-2010	11-08-2010	100
Drill and Temporarily Abandon IS001	11-09-2010	02-16-2011	100
Drill and Temporarily Abandon IS003	02-17-2011	05-27-2011	100
Drill and Temporarily Abandon IS004	01-01-2012	04-09-2012	100

Description of Drilling Rig

Description of Production Platform

<input checked="" type="checkbox"/> Jack up	<input checked="" type="checkbox"/> Drill ship	<input type="checkbox"/> Caisson	<input type="checkbox"/> Tension leg platform
<input type="checkbox"/> Gorilla Jack up	<input type="checkbox"/> Platform rig	<input type="checkbox"/> Well protector	<input type="checkbox"/> Compliant tower
<input type="checkbox"/> Semi submersible	<input type="checkbox"/> Submersible	<input type="checkbox"/> Fixed platform	<input type="checkbox"/> Guyed tower
<input type="checkbox"/> DP Semi submersible	<input type="checkbox"/> Other (attach description)	<input type="checkbox"/> Sub sea manifold	<input type="checkbox"/> Floating production system
Drilling Rig Name (If known): Transocean Discoverer Deep Seas		<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)

MMS Form MMS-137 (August 2003 – Supersedes all previous editions of form MMS-137, which may not be used.)

Page 1 of 2

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): IS001					Sub sea Completion
Anchor Radius (if applicable) in feet				Yes	No
Surface Location			Bottom-Hole Location (For Wells)		
Lease No.	OCS-G 20082		Proprietary Information		
Area Name	GREEN CANYON				
Block No.	640				
Block line Departures (in feet)	N / S Departure: 2447	F S L			
	E / W Departure: 1924	F E L			
Lambert X-Y Coordinates	X: 2374076				
	Y: 9918287				
Latitude / Longitude	Latitude: 27° 18' 51.3717" N				
	Longitude: 90° 44' 24.6480" W				
					Water Depth (Feet) 4288
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=	

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): IS002				Sub sea Completion	
Anchor Radius (if applicable) in feet				Yes	No
Surface Location			Bottom-Hole Location (For Wells)		
Lease No.	OCS-G 20082		Proprietary Information		
Area Name	GREEN CANYON				
Block No.	640				
Block line Departures (in feet)	N / S Departure: 2447	F S L			
	E / W Departure: 1994	F E L			
Lambert X-Y Coordinates	X: 2374006				
	Y: 9918287				
Latitude / Longitude	Latitude: 27° 18' 51.3842" N				
	Longitude: 90° 44' 25.4237" W				
				Water Depth (Feet) 4288	

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=	

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): IS003				Sub sea Completion	
Anchor Radius (if applicable) in feet				Yes	X No
Surface Location			Bottom-Hole Location (For Wells)		
Lease No.	OCS-G 20082		Proprietary Information		
Area Name	GREEN CANYON				
Block No.	640				
Block line Departures (in feet)	N / S Departure: 2557	F S L			
	E / W Departure: 1994	F E L			
Lambert X-Y Coordinates	X: 2374006				
	Y: 9918397				
Latitude / Longitude	Latitude: 27° 18' 52.4731" N				
	Longitude: 90° 44' 25.4017" W				
			Water Depth (Feet) 4288		

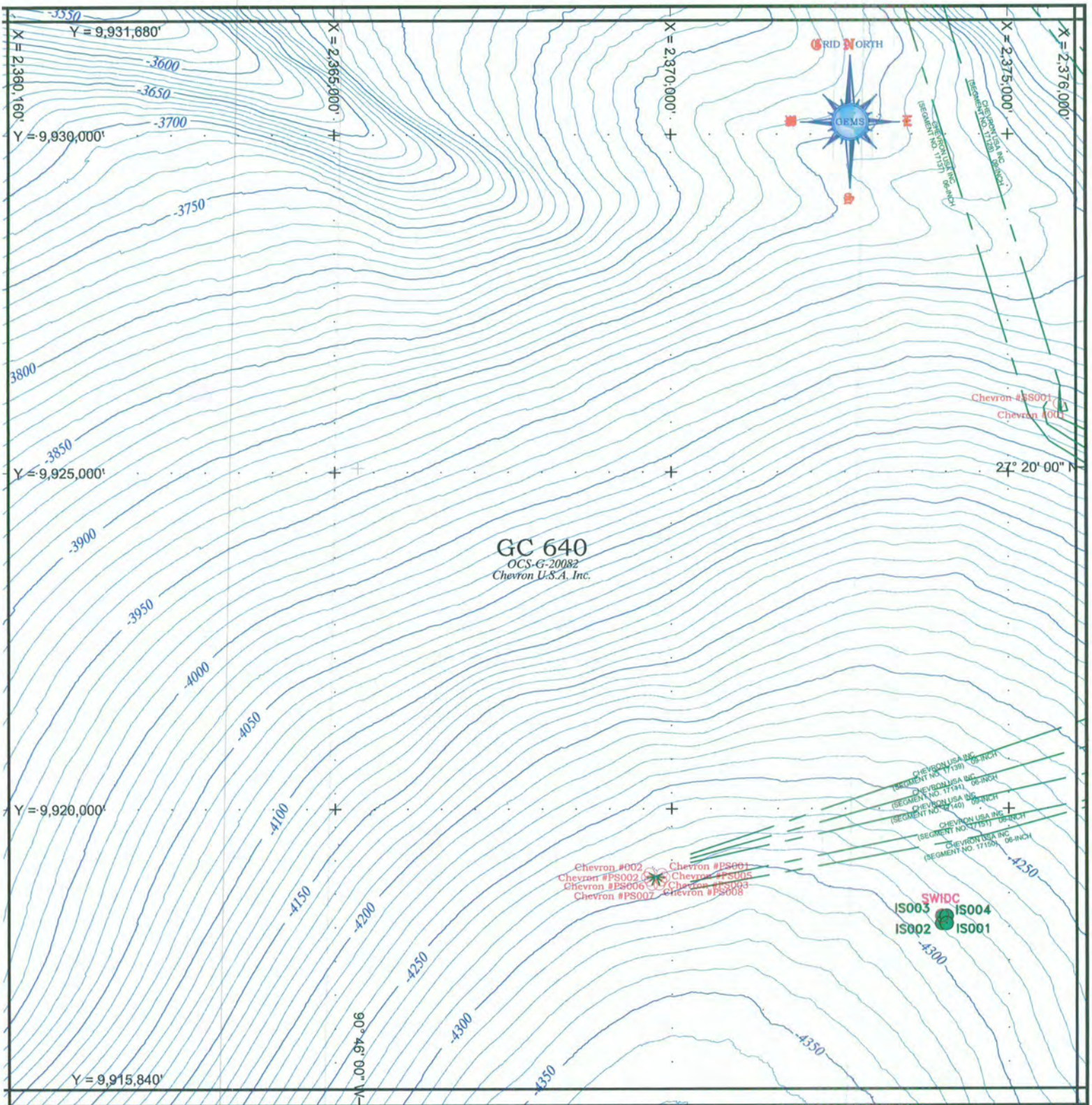
Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)					
Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
			X=	Y=	
			X=	Y=	
			X=	Y=	
			X=	Y=	
			X=	Y=	
			X=	Y=	
			X=	Y=	
			X=	Y=	

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): IS004				Sub sea Completion	
Anchor Radius (if applicable) in feet				Yes	No
Surface Location			Bottom-Hole Location (For Wells)		
Lease No.	OCS-G 20082		Proprietary Information		
Area Name	GREEN CANYON				
Block No.	640				
Block line Departures (in feet)	N / S Departure: 2557	F S L			
	E / W Departure: 1924	F E L			
Lambert X-Y Coordinates	X: 2374076				
	Y: 9918397				
Latitude / Longitude	Latitude: 27° 18' 52.4606" N				
	Longitude: 90° 44' 24.6259" W				
				Water Depth (Feet) 4288	

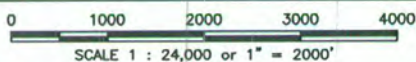
Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)					
Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
			X=	Y=	
			X=	Y=	
			X=	Y=	
			X=	Y=	
			X=	Y=	
			X=	Y=	
			X=	Y=	
			X=	Y=	



CONTOUR INTERVAL: 10 FEET

-  **SWIDC** PROPOSED DRILL CENTER LOCATION.
-  **IS001** PROPOSED WELL LOCATION.
-  **-4350** WATER DEPTH CONTOUR IN FEET.

Well Designation	Cartesian Coordinates UTM Zone 15 (ft)		Geographic Coordinates C1866, NAD 1927 (deg, min, sec)		Block Calls (ft)	
	X	Y	Latitude	Longitude		
IS001	2374076	9918287	27° 18' 51.3717" N	90° 44' 24.6480" W	2447 FSL	1924 FSL
IS002	2374006	9918287	27° 18' 51.3842" N	90° 44' 25.4237" W	2447 FSL	1924 FSL
IS003	2374006	9918397	27° 18' 52.4731" N	90° 44' 25.4017" W	2557 FSL	1924 FSL
IS004	2374076	9918397	27° 18' 52.4606" N	90° 44' 24.6259" W	2557 FSL	1924 FSL



PROJECT NO.: 1109-1724

FILE NAME: 1724_PLAT2.DWG



BATHYMETRY PLAT MAP
BLOCK 640
GREEN CANYON AREA
GULF OF MEXICO



SECTION B GENERAL INFORMATION (30 CFR 250.213 and 250.243)

(a) APPLICATIONS AND PERMITS

In the table below, information is provided on the filing or approval status of the Federal, State, and local application approvals or permits that must be obtained to conduct the proposed activities. Only those individual or site-specific application approvals that must be obtained are listed.

Application/Permit	Issuing Agency	Status
Emergency Evacuation Plan	USCG	To be submitted
Application for Permit to Drill	MMS	To be submitted

(b) DRILLING FLUIDS

Information on the types (including chemical constituents) and amounts of the drilling fluids planned for use in drilling the proposed wells is not required for this plan based on the guidelines provided in NTL No. 2008-G04.

(e) NEW OR UNUSUAL TECHNOLOGY

No new or unusual technology will be used to carry out the activities proposed in this plan.

(f) BONDING STATEMENT

The bond requirements for the activities and facilities proposed in this EP are satisfied by an area-wide bond, furnished and maintained according to 30 CFR part 256, subpart I; NTL No. 2000-G16, "Guidelines for General Lease Surety Bonds;" and a current MMS-approved deferment from providing additional security under 30 CFR 256.53(d) and National NTL No. 2003-N06, "Supplemental Bond Procedures. If, any point, Chevron no longer qualifies for a supplemental bonding deferment, Chevron will either provide the required additional security or a third party guarantee within 60 days after such disqualification.

(g) OIL SPILL FINANCIAL RESPONSIBILITY (OSFR)

Chevron U.S.A. Inc., MMS company number 00078, has demonstrated oil spill financial responsibility for the facilities proposed in this EP according to 30 CFR part 253, and NTL No. 99-N01, "Guidelines for Oil Spill Financial Responsibility for Covered Facilities."

(h) DEEPWATER WELL CONTROL STATEMENT

Chevron U.S.A. Inc., MMS company number 00078, has the financial capability to drill a relief well and conduct other emergency well control operations.

(j) BLOWOUT SCENARIO

A scenario for a potential blowout of the well with the expected highest volume of liquid hydrocarbons proposed in this plan is not required for this plan based on the guidelines provided in NTL No. 2008-G04.

SECTION C' GEOLOGICAL AND GEOPHYSICAL INFORMATION (30 CFR 250.214 and 250.244)

(a) GEOLOGICAL DESCRIPTION

Proprietary Information

(b) STRUCTURE CONTOUR MAPS (Proprietary Information)

A current structure contour map, at a scale of 1"=2000' (depth-based, expressed in feet subsea), drawn on the top of the prospective hydrocarbon sand and showing the entire lease block, the location of the proposed wells, and the locations of geological cross-sections are provided at the end of this section as an attachment.

(c) INTERPRETED 3-D SEISMIC LINES (Proprietary Information)

Migrated and annotated 3-D seismic lines within 152 meters (500 feet) of the surface location of the proposed wells are provided as attachments at the end of this section.

(d) GEOLOGICAL STRUCTURE CROSS-SECTION (Proprietary Information)

Interpreted geological structure cross-sections showing the location and depth of each proposed well with the key horizon and the objective sands labeled using standard biostratigraphic terms are provided at the end of this section as attachments.

(e) SHALLOW HAZARDS REPORT (Proprietary Information)

Shallow Hazard reports based on 3-D seismic data and data recorded during a high resolution AUV survey were prepared by Geoscience Earth & Marine Services, Inc. (GEMS) and submitted to the MMS in previous Chevron EP and DOCD filings. The hazard reports are titled "Geologic and Geohazards Site Assessment, Tahiti Development Project, Blocks 596, 640, and 641, Green Canyon Area, Gulf of Mexico" (GEMS Project No. 0103-609) and "Geologic and Stratigraphic Assessment, Blocks 596, 640, and 641, Green Canyon Area, Gulf of Mexico" (GEMS Project No. 1203-751).

(f) SHALLOW HAZARDS ASSESSMENT

A site specific shallow hazard clearance letter was prepared using guidance from NTL Nos. 2008-G05 and 2000-G20 for proposed surface location "SWIDC" by GEMS in January 2010. The letter, titled "Site Clearance Letter, Proposed Location SWIDC, Block 640 (OCS-G-20082), Green Canyon Area, Gulf of Mexico", is based on findings from the previously submitted GEMS shallow hazard reports. One hard copy and two digital copies of the proprietary site clearance letter are being submitted as an enclosure with this plan.

A non-proprietary summary of the site specific assessment from the GEMS report for the surface location follows below:

GC 640 "SWIDC"

Several exploration and production wells occur within GC 640. The proposed location lies approximately 4,200 ft east of a major subsea drill center in the Tahiti development area consisting of eight wells. Five pipelines occur in close proximity to Proposed Location SWIDC. The Chevron pipelines lie approximately 1,070 ft north of Proposed Location SWIDC, trend west-southwest to east-northeast, and connect the subsea development center in GC 640 to the Tahiti SPAR facility in GC 641. BP Exploration and Production, Inc.'s 2-inch fiber optic cable (Segment No. 17364) trends southwest to northeast, approximately 7.2 miles southeast of the proposed location. A 2-inch, north to south trending branch (Segment No. 17847) of the BP fiber optic cable extends north of the primary cable route, occurring 4.1 miles south of the proposed location in the northeast corner of GC 728. The water depth at the proposed location is about -4,288 ft. The seafloor is generally smooth and dips to the southwest at about 2°. Seafloor sediments at Proposed Location SWIDC are expected to be hemipelagic and pelagic clays. There are no features or areas that could support significant, densely-populated chemosynthetic communities or other deepwater benthic communities within 2,000 ft of the proposed location (Maps SWIDC-2 and SWIDC-3). The Side-Scan Sonar Mosaic shows normal or ambient amplitudes along the seabed at, and near, the proposed location. The proposed location will intersect two faults. Both are buried, inactive faults that will be intersected at approximately 2,158 ft bml and 2,417 ft bml. No amplitude anomalies, which would indicate vertical migration of thermogenic gas, occur at or above the depth of intersection with the proposed location. No shallow gas risk is expected at the proposed location. The closest seafloor fault escarpment occurs 1.8 miles to the northeast. The proposed SWIDC location has a negligible to low risk of encountering shallow gas accumulations from the seafloor to the limit of investigation. There are no apparent subsurface amplitude anomalies directly beneath the proposed location. The potential for water flow at Proposed Location SWIDC is considered negligible to moderate. Drillers should be aware that the lower portion of the sequence between Horizon 900 and Top of Salt (2,868 ft to 7,246 ft bml) presents a moderate potential for shallow water flow. No other hazards or constraints are defined by the 3-D data at the proposed location. The seafloor and near-surface conditions at Proposed Location SWIDC in Green Canyon Area Block 640 appear suitable for drilling operations.

(g) HIGH RESOLUTION SEISMIC LINES (Proprietary Information)

The high resolution seismic lines are being replaced by 3-D seismic survey data.

(h) STRATIGRAPHIC COLUMN (Proprietary Information)

A generalized biostratigraphic/lithostratigraphic column from the seafloor to the total depth of the proposed wells in this plan is included as an attachment at the end of this section.

(i) TIME vs. DEPTH TABLE

Due to adequate well control in the area, Chevron feels that a time vs. depth table is not required.

ATTACHMENTS TO SECTION C (Proprietary Information)

- C-1 and C-2 - Depth Structure Contour Maps
- C-3 - Base Map with Lines of Cross Section
- C-4 through 6- Interpreted 3- D Seismic Lines
- C- 7 through 9- Schematic Cross-Section
- C-10 - Stratigraphic Column

PROPRIETARY ENCLOSURES TO PLAN

- Site Clearance Letter, Proposed Location SWIDC, Block 640 (OCS-G-20082), Green Canyon Area, Gulf of Mexico, Geoscience Earth & Marine Services, Inc., January, 26, 2010. (One Hard Copy and Two Digital Copies)

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

(a) CONCENTRATION

It is not expected that H₂S will be encountered or handled while conducting the activities proposed in this plan.

(b) CLASSIFICATION

Pursuant to 30 CFR 250.490(c), Chevron requests the Regional Supervisor to make a determination of the area's classification of the probability of encountering H₂S during operations. No Hydrogen Sulfide has been produced or encountered in any of the wells previously drilled in the GC 640 area. In the previously approved EP's and DOCD, the MMS has classified the area as H₂S absent. Therefore, Chevron requests that the area be classified as H₂S absent.

(c) H₂S CONTINGENCY PLAN

Should the Regional Supervisor not classify Green Canyon Block 640 as situated in an area designated as "H₂S absent" - an H₂S contingency plan will be proposed and submitted for approval. This proposed contingency plan would accompany the Application for Permit to Drill (APD) for the respective proposed well(s).

(d) MODELING REPORT

H₂S concentrations greater than 500 parts per million (ppm) have not been determined or estimated to be encountered or handled while conducting the activities proposed in this plan, therefore a modeling report is not required for this plan based on the guidelines provided in NTL No. 2008-G04.

SECTION E BIOLOGICAL, PHYSICAL, AND SOCIOECONOMIC INFORMATION (30 CFR 250.216 and 250.247)

(a) CHEMOSYNTHETIC COMMUNITIES REPORT

Since the proposed seafloor disturbing activities are in deepwater, the GEMS Site Clearance Letter included with this plan was prepared using the guidance in Attachment A of NTL No. 2009-G40, "Deepwater Benthic Communities." The report is included as a proprietary enclosure to this plan.

The proposed wells will be drilled with a dynamically positioned rig, so there or no associated anchors, anchor chain or wire ropes.

- High-density deepwater benthic communities are **not** located within 2,000 feet of the proposed mud and cutting discharge location in Green Canyon Block 640.

(b) TOPOGRAPHIC FEATURES MAP

The proposed bottom disturbing activity is greater than 305 meters (1,000 feet) from the "No Activity Zone" of an identified topographic feature; therefore the map described in Attachment 2, Section A, Item No. 1 of NTL No. 2004-G05 is not required for this plan based on the guidelines provided in NTL No. 2008-G04.

(c) TOPOGRAPHIC FEATURES STATEMENT (SHUNTING)

We do not propose to drill two wells from the same surface location outside the 1-mile Zone but within the Protective Zone of an identified topographic feature. The statement described in Attachment 2, Section A, Item No.2 of NTL No. 2004-G05 is not required for this plan based on the guidelines provided in NTL No. 2008-G04.

(d) LIVE BOTTOMS (PINNACLE TREND) MAP

The lease in this proposed plan does not have the Live Bottoms (Pinnacle Trend) stipulation.

(e) LIVE BOTTOMS (LOW RELIEF) MAP

The lease in this proposed plan does not have the Live Bottoms (Low Relief) stipulation.

(f) POTENTIALLY SENSITIVE BIOLOGICAL FEATURES

No bottom disturbing activities will be within 30 meters (100 feet) of potentially sensitive biological features. Therefore the map described in Attachment 8, Section A of NTL No. 2004-G05 is not required for this plan based on the guidelines provided in NTL No. 2008-G04.

(g) REMOTELY OPERATED VEHICLE (ROV) MONITORING SURVEY PLAN

The MMS GOMR has determined that sufficient ROV information has been achieved for the grid area that contains the proposed activities in this plan. As per NTL 2008-G04 an ROV survey plan is not required.

(h) THREATENED OR ENDANGERED SPECIES, CRITICAL HABITAT, AND MARINE MAMMAL INFORMATION

Under Section 7 of the Endangered Species Act (ESA) all federal agencies must ensure that any actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of a listed species, or destroy or adversely modify its designated critical habitat.

In accordance with the 30 CFR 250, Subpart B, effective May 14, 2007, and further outlined in Notice to Lessees (NTL) 2008-G04, lessees/operators are required to address 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 Marine Mammal Protection Act (MMPA) in the area of proposed activities under this plan.

NOAA Fisheries currently lists the Sperm Whale, Leatherback Turtle, Green Turtle, Hawksbill Turtle, and the Kemp's Ridley Turtle as endangered and the Loggerhead Turtle and Gulf Sturgeon as threatened. Currently there are no designated critical habitats for the listed species in the Gulf of Mexico Outer Continental Shelf; however, it is possible that one or more of these species could be seen in the area of our operations.

(i) ARCHAEOLOGICAL REPORT

The proposed bottom-disturbing activity area has not been identified as a High Probability Shipwreck block or prehistoric area.

In the event man-made debris were discovered that appears to indicate the presence of a shipwreck (e.g., a sonar image or visual confirmation of an iron, steel, or wooden hull, wooden timbers, anchors, concentrations of man-made objects such as bottles or ceramics, piles of ballast rock) within or adjacent to the lease area during the course of operations, the Regional Supervisor, Leasing and Environment, will be contacted within 48 hours of its discovery. All operations within 305 meters (1000 feet) of the site will cease until instructed by the Regional Supervisor on the steps to take to assess the site's potential historic significance and the steps to take to protect it.

SECTION F WASTE AND DISCHARGE INFORMATION (30 CFR 250.217 and 250.248)

(a) PROJECTED GENERATED WASTES

A table providing information on the projected solid and liquid wastes likely to be generated by the proposed activities is not required for this plan based on the guidelines provided in NTL No. 2008-G04.

(b) PROJECTED OCEAN DISCHARGES

A table providing information on any solid or liquid wastes to be discharged overboard is not required for this plan based on the guidelines provided in NTL No. 2008-G04.

(c) MODELING REPORT

The U.S. Environmental Protection Agency does not require an *individual* NPDES permit for the activities proposed in this plan, therefore a modeling report is not required to be provided.

(d) NPDES PERMITS

The information at 30 CFR 250.217(c) and 250.248(c) regarding NPDES permits is not required to accompany EP's and DOCD's submitted in the MMS GOMR based on NTL No. 2008-G04.

(e) COOLING WATER INTAKES

The information at 30 CFR 250.217(e) and 250.248(e) regarding cooling water intakes is not required to accompany EP's and DOCD's submitted in the MMS GOMR based on NTL No. 2008-G04.

SECTION G AIR EMISSIONS INFORMATION (30 CFR 250.218 and 250.249)

(a) WORKSHEETS AND SCREENING QUESTIONS

The Complex Total Emissions are the same as the Plan Emissions, and therefore only one set of emissions calculations is included. All calculations are based on worst possible situations. Actual emissions are expected to be considerably below those estimated.

SCREENING QUESTIONS FOR EP'S	YES	NO
Is any calculated Complex Total (CT) Emission amount (in tons) associated with your proposed exploration activities more than 90% of the amounts calculated using the following formulas: $CT = 3400D^{2.3}$ for CO, and $CT = 33.3D$ for the other pollutants (where D = distances to shore in miles)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Do your emissions calculations include any emission reduction measures or modified emissions factors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are your proposed exploration activities located east of 87.5° W longitude?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Do you expect to encounter H ₂ S at concentrations greater than 20 parts per million (ppm)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Do you propose to flare or vent natural gas for more than 48 continuous hours from any proposed well?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Do you propose to burn produced hydrocarbon liquids?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL
Chevron U.S.A. Inc.	Green Canyon	640	20082	DP DrillShip "Discoverer Deep Seas"	4-Wells
Year	Emitted Substance				
	PM	SOx	NOx	VOC	CO
2010	73.28	336.17	2519.01	75.57	549.60
2011	70.80	324.82	2433.91	73.02	531.03
2012	47.42	217.55	1630.14	48.90	355.67
Allowable	3929.40	3929.40	3929.40	3929.40	81796.29

CONTACT INFORMATION

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 Houston, Texas 77002
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MODELING REPORT

A Modeling Report is not required for activities proposed in this plan.

SECTION H OIL SPILLS INFORMATION (30 CFR 250.219 and 250.250)

(a) OIL SPILL RESPONSE PLANNING

(i) REGIONAL OSRP INFORMATION

All the proposed activities and facilities in this EP will be covered by the Oil Spill Response Plan (Reference Number 02335), filed by Chevron U.S.A. Inc., MMS company number 00078, in accordance with 30 CFR 254, on February 25th, 2010 and currently pending approval.

(ii) SPILL RESPONSE SITES

In the table below, information is provided on the location of the primary spill response equipment and the location of the planned staging area(s) that would be used should an oil spill occur resulting from activities proposed in this plan.

Primary Response Equipment Location	Preplanned Staging Location(s)
Leeville, LA ; Houma, LA; Venice, LA	Leeville, LA; Houma, LA; Venice, LA

(iii) OIL SPILL REMOVAL ORGANIZATION (OSRO) INFORMATION

Clean Gulf Associates (CGA) and Marine Spill Response Corporation (MSRC) cooperatives are the primary equipment providers for Chevron in the Gulf of Mexico Region, and maintain a dedicated fleet of vessels and other equipment permanently located at designated ports. CGA & MSRC have the capability to plan the mobilization and rapid deployment of spill response resources on a 24 hour, 7 days a week basis. The CGA & MSRC equipment is strategically positioned across the Gulf of Mexico from Brownsville, TX to Key West, FL and is available on a 24 hour, 7 days a week basis. Marine Spill Response Corporation (MSRC) provides support to CGA by assisting with various equipment activities. Trained Oil Spill Removal Organizations (OSROs) operate all CGA equipment.

(iv) WORST CASE SCENARIO DETERMINATION

The table below provides a comparison of the worst-case scenario from Chevron’s approved regional OSRP with the worst-case scenario from the proposed activities in this plan

Category	Regional OSRP “Mobile Rig Exploration Drilling Ops.” Worst-Case Discharge Scenario	EP
Type of Activity (<i>Types of activities include pipeline, platform, caisson, subsea completion or manifold, and mobile drilling rig</i>)	Exploratory Drilling	Exploratory Drilling
Spill Location (area/block)	Green Canyon Block 952	Green Canyon Block 640
Facility Designation (<i>e.g., Well No. 2, Platform JA, Pipeline Segment No. 6373</i>)	Mobile Rig	Dynamically Positioned Drillship
Distance to Nearest Shoreline	139 miles	118 miles
Volume		
Storage Tanks (total)	43,642 barrels	38,293 barrels
Flowlines (on facility)		N/A
Lease term pipelines		N/A
Uncontrolled blowout (volume per day)	234,923 barrels	50,000 barrels
Total Volume (minus loss of oil to natural evaporation based on ADIOS model)	236,780 barrels	88,293 barrels
Type of Oil(s) - (<i>crude oil, condensate, diesel</i>)	Crude Oil	Crude Oil, Diesel
Gravity(s) □ API - (<i>Provide API gravity of all oils given under “Type of Oil(s)” above. Estimate for EP’s</i>)	28°, 36°	28°, 36°

Model Assumptions:

- 11-3/4 in. casing set @ 23,000 ft
- 12-1/4 in. open hole to 28,550 ft
- Flow through drill pipe and drill pipe-casing annulus against water column (4288 ft)
- Expected flow from a distribution of reservoir parameters
- 1 day of flow

Since Chevron has the capability to respond to the worst-case spill scenario included in its Regional OSRP, and since the worst-case scenario determined for our Plan does not replace the worst-case scenario in our Regional OSRP; I hereby certify that Chevron 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 Plan.

SECTION I ENVIRONMENTAL MONITORING INFORMATION (30 CFR 250.221 and 250.252)

(a) MONITORING SYSTEMS

Provide a description of any existing and planned monitoring systems that are measuring, or will measure, environmental conditions and/or will provide project-specific data or information on the impacts of your proposed activities.

The *Discoverer Deep Seas* is installed with surface current monitoring equipment. This equipment is a 75 kHz Acoustic Doppler Current Profile (ADCP) unit. This unit monitors current to a depth of 603 meters / 1,978'. The data from this meter is reported to the MMS via the NDBC website. The depth range of this meter is less than that required by NTL No. 2005-G05 however as Chevron owns six of these meters and a waiver request is submitted with the APD for the use of this type of meter. To date the use of this depth range of meter has been approved.

A seabed mounted ADCP current meter per the requirements of NTL No. 2005-G05 will be installed at the well location.

(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 GREEN CANYON NATIONAL MARINE SANCTUARY

The proposed activities are not located within the Protective Zones of the Flower Green Canyon and Stetson Bank. Therefore, a discussion of the provisions for monitoring the impacts of an oil spill on these environmentally sensitive resources is not necessary.

SECTION J LEASE STIPULATIONS INFORMATION (30 CFR 250.222 and 250.253)

Green Canyon Block 640 is located within Military Warning Area A-92. Prior to commencing activities within the military warning area, Chevron will enter into agreements with the naval air station in New Orleans, Louisiana.

SECTION K ENVIRONMENTAL MITIGATION MEASURES INFORMATION (30 CFR 250.223 and 250.254)

(b) INCIDENTAL TAKES

Chevron 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 L SUPPORT VESSELS AND AIRCRAFT INFORMATION (30 CFR 250.224 and 250.257)

(a) GENERAL

In the table below, information is provided regarding the vessels (e.g., tug boats, anchor-handling vessels, construction barges, lay barges, supply boats, crew boats) and aircraft you will use to support your proposed activities. If specific vessels have not yet been determined, use the maximum capacities, numbers, and trip frequencies for the types of vessels you will use.

Type	Maximum Fuel Tank Storage Capacity	Maximum No. in Area at Any Time	Trip Frequency or Duration
Crew Boat	47,382 gals.	One	Once per week
Supply Boat	303,093 gals.	Two	Every 2 to 3 days
Helicopter	2,800 lbs. / 430 gals.	One	7 trips per week

(b) DIESEL OIL SUPPLY VESSELS

Information on the vessels used to supply diesel oil is not required in this plan based on the guidelines provided in NTL No. 2008-G04.

(d) SOLID AND LIQUID WASTES TRANSPORTATION

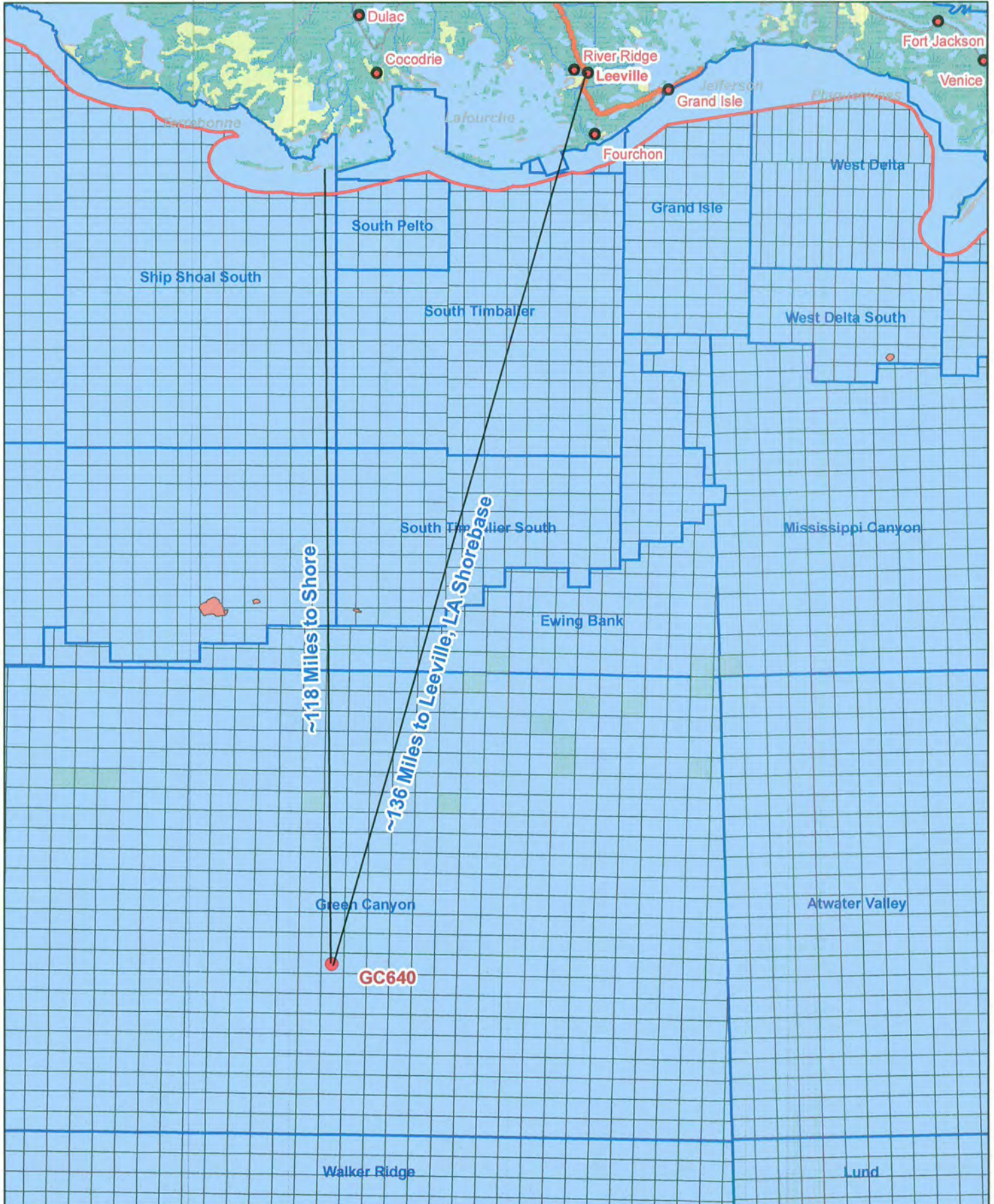
Information regarding the transport any solid and liquid wastes from the site of the proposed activities to other offshore structures or to temporary or permanent onshore facilities for storage or disposal, is not required in this plan based on the guidelines provided in NTL No. 2008-G04.

(e) VICINITY MAP

A map showing the location of the proposed activities relative to the shoreline, the distance of the proposed activities from the shoreline, and the primary route(s) of the support vessels and aircraft you will use when traveling between the onshore support facilities and the drilling unit is provided as attachment L-1 at the end of this section.

ATTACHMENTS TO SECTION L

- L-1 – Vicinity Map



SECTION M ONSHORE SUPPORT FACILITIES INFORMATION (30 CFR 250.225 and 250.258)

(a) GENERAL

The table below provides a listing of the onshore facilities that will be used to provide supply and service support for the proposed activities.

Name	Location	Existing/New/Modified
Chevron USA Leeville Shore Base	Leeville, Louisiana	Existing
C-Port Shorebase- Port Fourchon	Fourchon, Louisiana	Existing

(b) SUPPORT BASE CONSTRUCTION OR EXPANSION

Chevron will use its existing onshore base facility located in Leeville, Louisiana. The base has adequate facilities for marine and air transportation to accommodate the activities proposed in this plan. The proposed operations do not require expansion or modifications to the base.

(d) WASTE DISPOSAL

The table below provides information on the onshore facilities that will be used to store and dispose of any solid and liquid wastes generated by the proposed activities.

Name/Location of Facility	Type of Waste	Amount	Rate	Disposal Method
Newpark Environmental Services/Venice, LA	Spent water-based drilling fluids and cuttings	~1,000 bbls/well	500 bbl/day	Transport by boat in cutting bins to shorebase; truck to disposal facility
Newpark Environmental Services, Venice, LA	Spent synthetic oil-based drilling fluids and cuttings	~2,500 bbls/well	200 bbl/day	Transport by boat in cutting bins to shorebase; truck to disposal facility
Newpark Environmental Services, Venice, LA	Wash Water	~425 bbls/well	2 bbl/day	Transport by boat in tanks to shorebase; truck to disposal facility
Solid Waste Disposal Inc, Riverbirch Landfill, Avondale, LA	Trash and debris	~210,317 lb.	1753 lb/day	Transport by boat in storage bins to shorebase

SECTION N COASTAL ZONE MANAGEMENT ACT (CZMA) INFORMATION (30 CFR 250.226 and 250.260)

Consistency certification is not required in a Supplemental EP where Louisiana is the affected state.

SECTION O ENVIRONMENTAL IMPACT ANALYSIS (EIA) (30 CFR 250.227 and 250.261)

Pursuant to NTL No. 2008-G04, included with this Exploration Plan is an Environmental Impact Analysis (EIA) which addresses the proposed activities. The project-specific EIA is attached following the sections on this page.

SECTION P ADMINISTRATIVE INFORMATION (30 CFR 250.228 and 250.262)

(a) EXEMPTED INFORMATION DESCRIPTION (public information copy only)

Proprietary information included in the proprietary copy of this EP.

- BHL, TVD, and MD information on form MMS-137 (OCS Plan Information Form)
- All items and enclosures under Geological and Geophysical Information except for the non-proprietary summary of the site specific assessment for the SWIDC location.

(b) BIBLIOGRAPHY

Any previously submitted EP, DPP, or DOCD; study report; survey report; or other material referenced in this EP or its accompanying information, is listed below:

- Chevron's Regional Oil Spill Response Plan
- Initial Exploration Plan, N-7157, Approved by MMS July 30, 2001
- Initial Exploration Plan, N-7408, Approved by MMS March 21, 2002
- Supplemental EP, S-5973, Approved by MMS July 12, 2002
- Initial DOCD, N-8406, Approved by MMS November 17, 2005
- GEMS, 2003, Geologic and Geohazards Site Assessment, Blocks 596, 640, and 641, Green Canyon Area, Gulf of Mexico, Geoscience Earth & Marine Services, Inc., Project No. 0103-609.
- GEMS, 2004, Geologic and Stratigraphic Assessment, Blocks 596, 597, 640, and 641, Green Canyon Area, Gulf of Mexico, Geoscience Earth and Marine Services, Inc., Project No. 1203-751.

ENVIRONMENTAL IMPACT ANALYSIS

Supplemental Exploration Plan

Green Canyon Block 640

Lease OCS-G 20082

Prepared by:

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March 2010

Section O

Chevron U.S.A. Inc. (Chevron)

Supplemental Exploration Plan Green Canyon Block 640 OCS-G 20082

(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			X(4)			
Water quality		X	X		X	
Fisheries		X	X		X	
Marine Mammals	X(8)	X			X(8)	X
Sea Turtles	X(8)	X			X(8)	X
Air quality	X(9)					
Shipwreck sites (known or potential)			(7)			
Prehistoric archaeological sites			(7)			
Vicinity of Offshore Location						
Essential fish habitat		X	X		X(6)	
Marine and pelagic birds	X				X	X
Public health and safety					(5)	
Coastal and Onshore						
Beaches					X(6)	X
Wetlands					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 MMS 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 MMS as having high-probability for the occurrence of shipwrecks or prehistoric sites, including such blocks that will be affected that are adjacent to the lease block in which your planned activity will occur. If the proposed activities are located a sufficient distance from a shipwreck or a prehistoric site that no impact would occur, the EIA can note that in a sentence or two.
- 8) All activities that you determine might have an adverse effect on endangered or threatened marine mammals or sea turtles or their critical habitats.
- 9) Production activities that involve transportation of produced fluids to shore using shuttle tankers or barges.

(B) Analysis

Site-Specific at Green Canyon Block 640

Proposed operations consist of the drilling of four well locations. Operations will be conducted with a dynamically positioned drillship.

1. Designated Topographic Features

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

Physical disturbances to the seafloor: Green Canyon Block 640 is 51 miles from the closest designated Topographic Features Stipulation Block (Diaphus Bank); therefore, no adverse impacts are expected.

Effluents: Green Canyon Block 640 is 51 miles from the closest designated Topographic Features Stipulation Block (Diaphus 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 Chevron'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: Green Canyon Block 640 is 190 miles from the closest live bottom (pinnacle trend) area; therefore, no adverse impacts are expected.

Effluents: Green Canyon Block 640 is 190 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 Chevron'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: Green Canyon Block 640 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: Green Canyon Block 640 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 Chevron'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

Green Canyon Block 640 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: Green Canyon Block 640 is approximately 22 miles from a known benthic community site (Benthic Green Canyon Block 287), listed in NTL 2009-G40. This Supplemental 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 Green Canyon Block 640 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 Chevron'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 Green Canyon Block 640 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 Chevron'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 Green Canyon Block 640 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).

Chevron 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 Chevron 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 MMS must be notified within 24 hours of the strike by email to protectedspecies@mms.gov. If the vessel is the responsible party, it is required to remain available to assist the respective salvage and stranding network as needed.

Oil spills have the potential to cause sublethal oil-related injuries and spill-related deaths to marine mammals. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). Oil spill response activities may increase vessel traffic in the area, which could add to changes in cetacean behavior and/or distribution, thereby causing additional stress to the animals. The effect of oil dispersants on cetaceans is not known. The acute toxicity of oil dispersant chemicals included in Chevron'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 Chevron'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). Chevron 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 Chevron 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 MMS must be notified within 24 hours of the strike by email to protectedspecies@mms.gov. If the vessel is the responsible party, it is required to remain available to assist the respective salvage and stranding network as needed.

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

The projected air emissions identified in Appendix G are not expected to affect the OCS air quality primarily due to distance to the shore or to any Prevention of Significant Deterioration Class I air quality area such as the Breton Wilderness Area. Green Canyon Block 640 is beyond the 200 kilometer (124 mile) buffer for the Breton Wilderness Area and is 118 miles from the coastline. Therefore, no special mitigation, monitoring, or reporting requirements apply with respect to air emissions.

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 Green Canyon Block 640 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 could impact air quality.

10. Shipwreck Sites (known or potential)

IPFs that could impact known or unknown shipwreck sites as a result of the proposed operations in Green Canyon Block 640 include disturbances to the seafloor. Green Canyon Block 640 is not located in or adjacent to an OCS block designated by MMS as having a high probability for occurrence of shipwrecks. Chevron will report to MMS the discovery of any evidence of a shipwreck and make every reasonable effort to preserve and protect that cultural resource. There are no other IPFs (including emissions, effluents, wastes sent to shore for treatment or disposal, or accidents) from the proposed activities which could impact shipwreck sites.

11. Prehistoric Archaeological Sites

IPFs which could impact prehistoric archaeological sites as a result of the proposed operations in Green Canyon Block 640 include disturbances to the seafloor (structure emplacement) and accidents (oil spill). Green Canyon Block 640 is located outside the Archaeological Prehistoric high probability line. Chevron will report to MMS the discovery of any object of prehistoric archaeological significance and make every reasonable effort to preserve and protect that cultural resource.

Accidents: An accidental oil spill has the potential to cause some detrimental effects to prehistoric archaeological sites if the release were to occur subsea. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). The activities proposed in this plan will be covered by Chevron'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 which could impact prehistoric archaeological sites.

Vicinity of Offshore Location

1. Essential Fish Habitat (EFH)

IPFs that could cause impacts to EFH as a result of the proposed operations in Green Canyon Block 640 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 Chevron'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 Chevron'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). Chevron 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 Chevron 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 MMS as H₂S absent.

Coastal and Onshore

1. Beaches

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

Accidents: Oil spills contacting beaches would have impacts on the use of recreational beaches and associated resources. Due to the distance from shore (118 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 Chevron'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). Chevron 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 Chevron 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.

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 (118 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by Chevron'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 (118 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by Chevron'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). Chevron 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 Chevron 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 (118 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this

plan will be covered by Chevron'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 (200 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 Chevron'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, Green Canyon Block 640 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 locations
 - b. Secure dynamically positioned drillship
 - c. Evacuate personnel

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

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

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