UNITED STATES GOVERNMENT MEMORANDUM

May 13, 2024

To: Public Information

From: Plan Coordinator, OLP, Plans Section (GM 235D)

Subject: Public Information copy of plan

Control # - N-10239

Type - Initial Exploration Plan

Lease(s) - OCS-G 37455 Block - 152 West Delta Area

Operator - Renaissance Offshore, LLC

Description - Transfer of "A" Platform and 5 associated wells from

Terminated lease OCS-G01604 to OCS-G37455

Rig Type - Not Found

Attached is a copy of the subject plan.

It has been deemed submitted and is under review for approval.

Henry Emembolu Plan Coordinator

INTERIM CZM INFORMATION REQUIREMENTS FOR CONSISTENCY REVIEW (15 CFR 930.58) FOR LOUISIANA West Delta Block 152 (OCS-G 37455)

	specific information OCM for State of Louisiana requires for Plan/ROW PL is:	Reply or page reference:
1)	Description of the proposed activity	Pg 1
2)	Location Plat (table - latitude/longitude, water depth, and TVD of each proposed well)	See Plan R-06459
3)	Bathymetry Map depicting the surface location and water depth of each proposed well and/or production facility or pipeline (if applicable)	See Plan N-5211
4)	Type of drilling unit, if applicable	NA
5)	Description of related new or existing offshore production facilities	Pg 17
6)	Operator contact information	Attachment A
7)	Discussion of new or unusual technology proposed to be used. Verify if not applicable.	Pg 3 / NA
8)	Consistency certification	Attachment G
9)	Discussion of safety, pollution prevention, and early spill detection measures	Pgs 1-2
10)	Confirmation that the facility / activity is covered by an approved OSRP; date of OSRP approval	Pg 11
11)	Discussion of WCD scenario / response for OCS Plans and ROW pipeline applications	NA
	Location of primary oil spill response equipment and staging areas	Pg 11
,	Estimated time of spill response (from spill detection to equipment deployment on site)	Attachment F
11c)	Per 30 CFR 254.26(d)(1), estimated time to contain, to the maximum extent practicable, a worst-case discharge	Attachment F
11d)	Discussion of potential impacts from a spill to Louisiana's coastal resources uses, onshore and offshore	Detailed discussion in EIA
12)	Site-specific and Regional WCD scenario comparison	Pg 11
13)	For EPs and DOCDs – facility tanks, facility fuel tanks, and production vessels over 25 bbls	Pg 2
14)	Diesel oil supply vessels	Pg 18
15)	Support vessel fuel tanks	Pg 18
16)	For DOCDs only, produced hydrocarbon transportation vessels and the destination at which the product will be offloaded	Pg 17
17)	Oil & synthetic-based mud, if applicable	NA
18)	Name(s) of the Oil Spill Response Organization(s)	Pg 11
19)	Onshore support base and support vessel(s)	Pg 19
20)	New or expanded onshore facilities, if required	Pg 19
21)	Method of transportation and disposal of trash, waste and discharges in Louisiana's coastal zone and waters, even if no drilling operations are proposed. Discussion of OCS discharges is NOT required. Specific municipal, governmental or other facilities used for disposal of trash, wastes and discharges should be named.	Attachment D
22)	For EPs and DOCDs , projected generated wastes as required in Table specified by NTL 2008-G04	Attachment D
23)	For OCS Plans ONLY, blowout scenario, even if NO drilling is proposed	Pg 3
24)	For ROW PIPELINE projects ONLY, installation and burial method	NA
25)	For ROW PIPELINE projects ONLY, water depths	NA
26)	For ALL OCS Plans and ROW Pipeline Applications = Discussion of any new or unusual technology proposed to be used for spill prevention, control, cleanup, etc., if applicable. Verify if not applicable.	Renaissance will NOT use any new or unusual technology for spill prevention, control, cleanup, etc.

Initial Development Operations Coordination Document (DOCD)

For

RENAISSANCE OFFSHORE, LLC

West Delta 152, Lease OCS-G 37455 Offshore Louisiana

SECTION 1 - CONTENTS OF PLAN

Under this Initial DOCD, Renaissance Offshore, LLC., Company No. 03209 (herein referred to as Renaissance) as designated operator of Lease OCS-G 37455, submits for your review and approval an Initial DOCD requesting the transfer of the 'A' Platform and five (5) associated wells from terminated Lease OCS-G 01604, West Delta 152, under the new Lease OCS-G 37455 with Renaissance as the operator.

Lease OCS-G 37455, West Delta Block 152 was issued with an effective date of July 1, 2023, with Renaissance as lessee of record.

The lease is being held by production, but the five (5) wells being transferred are shut-in and non-economical, on Platform A-Complex (CID 20219).

There will be no drilling operations proposed in this Initial DOCD.

NMFS BiOp NOTE:

- 1. The operations proposed in this Plan do not require pile-driving.
- 2. There are no new pipelines proposed in this plan.
- 3. Vessels with moonpools will not be utilized.
- 4. Vessel routes will not transit the Rice's Whale area.
- 5. Vessels utilized by Renaissance should not use equipment that has potential for entanglement or entrapment risk during these production activities.

All activities being proposed in the DOCD are located West of the 87.5°W longitude.

(a) Plan Information Form

An OCS Plan Information Form (BOEM-137) which provides information concerning the activities under this plan is included as **Attachment A**. The proposed operations are in approximately 373 feet of water.

(b) Bathymetry Map and Location Plat

The Bathymetry Map was included in the previously approved N-5211 plan. Location plats for the existing structure and wells have been submitted with various applications permitted for Lease OCS-G 01604 (New Lease OCS-G 37455).

(c) Safety and Pollution Prevention Features

Safety of personnel and protection of the environment during the proposed operations is of primary concern with Renaissance, and mandates regulatory compliance with the contractors and vendors associated with the proposed operations as follows:

The offices of the Bureau of Ocean Energy Management (BOEM) and Bureau of Safety and Environmental Enforcement (BSEE) mandate the operations in this Plan comply with well control, pollution prevention, construction, welding procedures, safety, and environmental related issue, et al; as described in various Subparts of Titles 30 CFR Parts 250 and 550; and as further clarified by applicable Notices to Lessees (NTL's).

BSEE conducts periodic announced and unannounced onsite inspections of offshore facilities to confirm operators are complying with lease stipulations, operating regulations, approved plans, and other conditions; as well as to assure safety and pollution prevention requirements are being met. The National Potential Incident of Noncompliance (PINC) List serves as the baseline for these inspections.

- U. S. Coast Guard regulations contained in Title 33 CFR mandate the appropriate life rafts, life jackets, ring buoys, etc., be always maintained on the facility.
- U. S. Environmental Protection Agency regulations contained in the NPDES General Permit GMG290000 mandate that supervisory and certain designated personnel onboard the facility be familiar with the effluent limitations and guidelines for overboard discharges into the receiving waters.

Renaissance's activities in this Plan will comply with the existing regulations and NTL's implemented by the above listed agencies.

(d) Storage Tanks and Production Vessels

Tanks with a capacity of 25 Bbls or more of oil that will store oil and be used to support the proposed activities are listed below:

7	Type of Storage Tank	Type of Facility	Tank Capacity (bbls)	Number of Tanks	Total Capacity (bbls)	Fluid Gravity (API)
ĺ	Oil	Platform A	640	1	640	~32°

(e) Service Fees

Receipts from Pay.gov can be found in Attachment B.

(f) Pollution Prevention Measures

Supervisory and certain designated personnel on-board the facility are to be familiar with the effluent limitations and guidelines for overboard discharges into the receiving waters, as outlined in EPA's NPDES General Permit GMG290000.

Some of these pollution prevention measures include installation of curbs, gutters, drip pans, and drains to collect all contaminants and debris to prevent the discharge of oils and greases from drilling rigs or platforms during rainfall and routine operations.

Renaissance will ensure that our employees and contractor personnel engaged in our offshore production operations understand the state and federal regulations.

(g) Additional Measures

Renaissance does not propose any additional safety, pollution prevention, and early spill detection measures beyond those required by 30 CFR Part 250 and 550. These are also addressed above in section (c) and (f).

SECTION 2 - GENERAL INFORMATION

(a) Applications and Permits

There are no Federal / State applications to be submitted for the activities provided in this plan.

(b) <u>Drilling Fluids</u>

There are no wells being drilled under this DOCD.

(c) Peak Production Rates / Life of Reserves

Reserves have been depleted in reference to the wells in this plan. The lease and Platform A is being used as a production facility.

(d) Oil Characteristics

Not applicable for the development activity proposed in this plan.

(e) New or Unusual Technology

Renaissance does not propose the use of any new or unusual technology in the development activities proposed under this plan.

(f) Bonding Information

The bond requirements for the activities and facilities proposed in this Initial DOCD is satisfied by the appropriate bond furnished and maintained according to 30 CFR Part 556.900, Subpart I and applicable NTL's.

(g) Oil Spill Financial Responsibility (OSFR)

Renaissance (BOEM Operator No. 03209) has demonstrated oil spill financial responsibility for the facilities proposed in this Initial DOCD in accordance with 30 CFR Part 553, and NTL No. 2008-N05, "Guidelines for Oil Spill Financial Responsibility for Covered Facilities".

(h) Deepwater Well Control Statement

The water depth at the surface location is approximately 373 feet. A deepwater well control statement is not required for the location of the activities proposed in this plan.

(i) Suspensions of Production (SOP)

A suspension of production is not required for this Plan.

(j) Blowout Scenario and Worst-Case Discharge Calculations

No drilling or completion operations are proposed in this Plan.

<u>SECTION 3 - GEOLOGICAL AND GEOPHYSICAL INFORMATION</u>

In accordance with 43 CFR, Part 2, those items considered proprietary have been omitted from the Public Information copy and have been referenced accordingly.

(a) Geological Description

According to NTL 2008-G04, this section of the Plan is not applicable to the proposed operations.

(b) Structure Contour Maps

According to NTL 2008-G04, this section of the Plan is not applicable to the proposed operations.

(c) Interpreted 2-D or 3-D Seismic Lines

According to NTL 2008-G04, this section of the Plan is not applicable to the proposed operations.

(d) <u>Geological Structure Cross-Sections</u>

According to NTL 2008-G04, this section of the Plan is not applicable to the proposed operations.

(e) Shallow Hazards Report

The activity proposed in this plan occurs from previously approved surface locations. A shallow hazards report is not required at this time.

(f) Site-Specific Shallow Hazards Assessment

The activity proposed in this plan occurs from previously approved surface locations. A site-specific shallow hazards assessment is not required at this time.

(g) <u>High Resolution Seismic Lines</u>

According to NTL 2008-G04, this section of the Plan is not applicable to the proposed operations.

(h) Stratigraphic Column

According to NTL 2008-G04, this section of the Plan is not applicable to the proposed operations.

(i) Time Versus Depth Tables

According to NTL 2008-G04, this section of the Plan is not applicable to the proposed operations.

(j) Geochemical Information

This information is not required for the activities proposed in this plan in the BOEM GOMR.

(k) Future G&G Activities

This information is not required for the activities proposed in this plan in the BOEM GOMR.

SECTION 4 - HYDROGEN SULFIDE INFORMATION

(a) Concentration

Renaissance does not anticipate encountering H₂S while conducting our proposed development activities.

(b) Classification Request

Based on current production records and past drilling records H₂S is not present on this lease.

c) <u>Contingency Plan</u>

An H₂S contingency plan is not required for the activities proposed in this plan.

(d) <u>Modeling Report</u>

A modeling report is not required for the activities proposed in this plan.

<u>SECTION 5 - MINERAL AND RESOURCE CONVERSATION INFORMATION</u>

(a) <u>Technology and Reservoir Engineering Practices and Procedures</u>

Not applicable.

(b) <u>Technology and Recovery Practices and Procedures</u>

Not applicable.

(c) Reservoir Development

Not applicable.

SECTION 6 - BIOLOGICAL, PHYSICAL AND SOCIOECONOMIC INFORMATION

(a) Chemosynthetic Communities Report

The activities proposed in this plan are in water depths less than 300 meters (984 feet); therefore, information as outlined in Attachment A of NTL No. 2009-G40, "Deepwater Benthic Communities," is not required.

(b) Topographic Features Map

The activities proposed in this plan are in water depths less than 305 meters (1000 feet) of a topographic "No Activity Zone"; therefore, no map(s) are required per NTL No. 2009-G39, "Biologically Sensitive Underwater Features and Areas."

(c) <u>Topographic Features Statement</u>

The activities proposed under this plan will be conducted outside all Topographic Feature Protective Zones; therefore, shunting of drill cuttings and drilling fluids is not required per NTL No. 2009-G39, "Biologically Sensitive Underwater Features and Areas."

(d) <u>Live Bottom (Pinnacle Trend) Map</u>

The activities proposed in this plan are not affected by a live bottom (Pinnacle Trend) stipulation.

(e) Live Bottom (Low Relief) Map

The activities proposed in this plan are not affected by a live bottom (low relief) stipulation.

(f) <u>Potentially Sensitive Biological Features</u>

Renaissance does not propose bottom-disturbing activities within 30 meters (100 feet) of potentially sensitive biological features; therefore, the map described in NTL No. 2009-G39 "Biologically Sensitive Underwater Features and Areas" is not required.

(g) ROV Monitoring Survey Plan

This information is no longer required.

(h) Threatened and Endangered Species Information

Congress passed the Endangered Species Act (ESA) on December 28, 1973, recognizing that the natural heritage of the United States was of "esthetic, ecological, educational, recreational, and scientific value to our Nation and its people." It was understood that, without protection, many of our nation's living resources would become extinct. The purpose of the ESA is to conserve threatened and endangered species and their ecosystems. There are more than 1,900 species listed under the ESA. A species is considered endangered if it is in danger of extinction throughout all or a significant portion of its range. A species is considered threatened if it is likely to become endangered in the future. The Interior Department's U.S. Fish and Wildlife Service (USFWS) and the Commerce Department's National Marine Fisheries Service (NMFS) share responsibility for implementing the ESA. The USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are for marine species.

The Marine Mammal Protection Act (MMPA) of 1972 was written to maintain the health and stability of the marine ecosystem. Marine mammals were in danger of diminishing, some to the point of extinction, as a result of human activities. The MMPA protects all marine mammals within the waters of the United States.

Attachment C is a list of endangered and threatened species common to the Gulf of Mexico, as per Appendix A to the Biological Opinion on the Federally Regulated Oil and Gas Program in the Gulf of Mexico, March 13, 2020.

Renaissance is aware of the above referenced federal acts and will ensure that all offshore personnel, including contractors and other support services-related personnel understand the need to conserve marine mammals and the conservation of their ecosystems. Several NTLs were issued to address conservation measures to be taken by offshore operators and contractors.

All vessels related to the proposed operations do not transit the Rice's Whale area.

(i) Archaeological Report

The activity proposed in this plan occurs from previously approved surface locations. An archaeological report is not required at this time.

(j) Air and Water Quality Information

According to NTL 2008-G04, air and water quality information is not required as the proposed activities provided for in this Plan do not impact the State of Florida.

(k) <u>Socioeconomic Information</u>

According to NTL 2008-G04, socioeconomic information is not required as the proposed activities provided for in this Plan do not impact the State of Florida.

SECTION 7 - WASTE AND DISCHARGE INFORMATION

(a) **Projected Generated Wastes**

All projected solid and liquid wastes likely to be generated by our development activities are included in **Attachment D** (**Table 1**). This table includes both operational wastes permitted by the appropriate NPDES permit and any other identified wastes.

(b) **Projected Ocean Discharges**

All projected solid and liquid wastes likely to be discharged overboard during our development activities are included in **Attachment D (Table 1)**. This table includes both operational wastes permitted by the appropriate NPDES permit and any other identified wastes.

(c) Modeling Report

Not required by EPA under the OCS General Permit.

(d) NPDES Permits

According to NTL 2008-G04 information regarding NPDES permits is not required to accompany EP's or DOCD's in the Gulf of Mexico.

(e) <u>Cooling Water Intakes</u>

This information is not required for the activities proposed in this plan in the BOEM GOMR.

SECTION 9 - OIL SPILL INFORMATION

(a) Oil Spill Response Planning

Renaissance Offshore, LLC. (Company No. 03209) has a Regional Oil Spill Response Plan on file at BSEE (O-689) deemed in-compliance October 16, 2023.

The proposed activities in this Plan will be covered by the above referenced Oil Spill Response Plan.

The calculated WCD for this Initial DOCD does not supersed the >10-mile production in the approved OSRP.

Spill Response Sites

Primary Response Equipment Location	Preplanned Staging Location(s)		
Venice, LA	Houma, LA		
Harvey, LA	Harvey, LA		
	Port Fourchon, LA		

OSRO Information

Renaissance's primary equipment provider is Clean Gulf Associates (CGA). The CGA will provide closest available personnel, as well as a CGAS supervisor to operate the equipment.

Worst Case Scenario Determination

Category	Regional OSRP WCD	Initial DOCD WCD
Type of Activity		
	Production >10	Production >10
Facility Location (area/block)	SS 198	WD 152
Facility Designation ²	H-PRD	Α
Distance to Nearest Shoreline (miles)	47	28
Volume ³		
Storage tanks & Flowlines	900	640
Lease term pipelines		0
Uncontrolled blowout	2433	0
Total Volume	3333	640
Type of Oil(s) (crude oil, condensate, diesel)	OIL	OIL
API Gravity(s) ⁴	31.5°	~32°

Footnotes:

Since Renaissance has the capability to respond to the appropriate worst-case spill scenario included in its Regional OSRP deemed in-compliance October 16, 2023, and the worst-case scenario determined for this plan does not replace the appropriate worst-case scenario in our Regional OSRP, I hereby certify that Renaissance has the capability to respond, to the maximum extent practicable, to a WCD, or a substantial threat of such a discharge, resulting from the production activities proposed in our Initial DOCD.

^{1.} Types of activities include pipeline, platform, caisson, subsea completion or manifold, and mobile drilling rig.

^{2.} E.g., Well No. 2, Platform JA, Pipeline Segment No. 6373.

^{3.} Take your regional OSRP worst-case scenario volume from the appropriate section of your regional OSRP. For EP's, the worst-case scenario volume is the daily volume possible from an uncontrolled blowout. Determine this volume using the provisions of 30 CFR 254.47(b). For DOCDs, determine the volume of your worst-case scenario using the provisions of 30 CFR 254.47(a) or (b), as appropriate.

^{4.} Provide API gravity of all oils given under "Type of Oil(s)" above. Estimate for EPs.

SECTION 9 - OIL SPILL INFORMATION

(a) Oil Spill Response Planning

Renaissance Offshore, LLC. (Company No. 03209) has a Regional Oil Spill Response Plan on file at BSEE (O-689) most recently approved in March 2018 and most recent issued a letter of "In-compliance" February 12, 2020.

The proposed activities in this Plan will be covered by the above referenced Oil Spill Response Plan.

The calculated WCD for this Initial DOCD does not supersede the >10-mile production in the approved OSRP.

Spill Response Sites

Primary Response Equipment Location	Preplanned Staging Location(s)		
Venice, LA	Houma, LA		
Harvey, LA	Harvey, LA		
	Port Fourchon, LA		

OSRO Information

Renaissance's primary equipment provider is Clean Gulf Associates (CGA). The CGA will provide closest available personnel, as well as a CGAS supervisor to operate the equipment.

Worst Case Scenario Determination

Category	Regional OSRP WCD	Initial DOCD WCD
Type of Activity		
	Production >10	Production >10
Facility Location (area/block)	SS 198	WD 152
Facility Designation ²	H-PRD	A
Distance to Nearest Shoreline (miles)	47	28
Volume ³		
Storage tanks & Flowlines	900	640
Lease term pipelines		0
Uncontrolled blowout	2433	0
Total Volume	3333	640
Type of Oil(s) (crude oil, condensate, diesel)	OIL	OIL
API Gravity(s) ⁴	31.5°	~32°

Footnotes:

Since Renaissance has the capability to respond to the appropriate worst-case spill scenario included in its Regional OSRP approved In March 2018, and the worst-case scenario determined for this plan does not replace the appropriate worst-case scenario in our Regional OSRP, I hereby certify that Renaissance has the capability to respond, to the maximum extent practicable, to a WCD, or a substantial threat of such a discharge, resulting from the production activities proposed in our Initial DOCD.

^{1.} Types of activities include pipeline, platform, caisson, subsea completion or manifold, and mobile drilling rig.

^{2.} E.g., Well No. 2, Platform JA, Pipeline Segment No. 6373.

^{3.} Take your regional OSRP worst-case scenario volume from the appropriate section of your regional OSRP. For EP's, the worst-case scenario volume is the daily volume possible from an uncontrolled blowout. Determine this volume using the provisions of 30 CFR 254.47(b). For DOCDs, determine the volume of your worst-case scenario using the provisions of 30 CFR 254.47(a) or (b), as appropriate.

^{4.} Provide API gravity of all oils given under "Type of Oil(s)" above. Estimate for EPs.

WCD Calculations Overview

The required data is not applicable as this Plan is submitted to transfer the West Delta A platform and five (5) wells under OCS-G 37455 with Renaissance as operator of all of Block 152, West Delta Area.

There is no drilling proposed under this Plan.

(b) Oil Spill Response Discussion / NEPA Analysis

For the purpose of NEPA and Coastal Zone Management Act analysis, the largest spill volume originating from the proposed activity would be a storage tank release during production operations, estimated to be 640 barrels of crude oil with an API gravity of ~32°.

There is no drilling proposed under this Plan.

Renaissance's spill response discussion for production operations is included as Attachment F.

(c) Modeling Report

According to NTL 2008-G04, this section of the Plan is not applicable to the proposed development operations.

SECTION 10 - ENVIRONMENTAL MONITORING INFORMATION

(a) Monitoring Systems

This information is not required for the activities proposed in this plan in the BOEM GOMR. The proposed activities in this plan will not affect marine life.

(b) <u>Incidental Takes</u>

Renaissance does not believe that any protected species may be incidentally taken during the activities proposed in this plan.

(c) Flower Garden Banks National Marine Sanctuary

Activity under this Plan is not located within the Protective Zones of the Flower Garden Banks or Stetson Bank and therefore is not required to monitor the impacts of an oil spill.

<u>Addendum - National Marine Fisheries Service (NMFS)</u>

Renaissance is aware of the NMFS 2020 Biological Opinion (BiOp) on BOEM's Gulf of Mexico Oil and Gas Program and the protocols being implemented by BOEM and BSEE in complying with the ESA and the requirements found in Appendices **A, B, C and J.**

Renaissance and its personnel and subcontractors, while undertaking activities authorized under this lease, must implement and comply with the most current measures, including but not limited to new or updated versions of the NTLs identified below, to protect any species listed in the Endangered Species Act (ESA):

Appendices A, B, C and J to the NMFS 2020 Biological Opinion on the Federally Regulated Oil and Gas Program
Activities in the Gulf of Mexico issued on March 13, 2020.

Vessels utilized by Renaissance should not use equipment that has potential for entanglement or entrapment risk during these proposed activities. Vessels with moonpools will not be utilized.

SECTION 11 - LEASE STIPULATIONS INFORMATION

The Federal Endangered Species Act (ESA; 16 U.S.C. 1531-1544) and the Marine Mammal Protection Act (MMPA; 16 U.S.C. 1361-1423h) are designed to protect threatened and endangered species and marine mammals and apply to activities on the Outer Continental Shelf (OCS). The Outer Continental Shelf Lands Act (OCSLA; 43 U.S.C. 1331-1356a) provides that the OCS should be made available for expeditious and orderly development and that operations on the OCS should be conducted in a manner that prevents or minimizes damage to the environment (see 43 U.S.C. 1332). The Bureau of Ocean Energy Management (BOEM) and Bureau of Safety and Environmental Enforcement (BSEE) comply with these laws on the OCS. Oil and gas exploration and development activities on the OCS are subject to stipulations developed before the lease sale and would be attached to the lease instrument, as necessary, in the form of mitigating measures. The BOEM/BSEE is responsible for ensuring full compliance with stipulations.

West Delta Area, Block 152, Lease OCS-G 37455 (Lease Sale #259) is subject to the following lease stipulation(s):

Stipulation No. 4 - Protected Species

The BOEM revised regulations in Title 30 CFR Part 550, Subpart B to require lessees/operators to provide for monitoring systems if the activities provided for in this Plan have the potential to result in an incidental take of any federally listed species and/or marine mammals. Arena does not anticipate the incidental taking of any species as a result of the proposed activities based on the implementation of, and adherence to the BOEM Notice to Lessees NTL 2016-G02 "Implementation of Seismic Mitigation Measures and Protected Species Observer Program", BOEM Notice to Lessees NTL 2016-G01 "Vessel Strike Avoidance and Injured/Dead Protected Species Reporting"; and BSEE's Notice to Lessees NTL 2015-G03 "Marine Trash and Debris Awareness and Elimination".

SECTION 12 - ENVIRONMENTAL MITIGATION MEASURES INFORMATION

(a) Impacts to Marine and Coastal Environments and Habitats, Biota, and Threatened and Endangered Species

The State of Florida is not an affected State for the activities proposed in this plan; therefore, this information is not required.

(b) <u>Incidental Takes</u>

Renaissance does not believe that any of the endangered species or marine mammals as listed in the ESA will be taken during the production activities proposed in this plan.

Renaissance understands that the use of explosives or seismic devices may affect marine life in the vicinity. There are no operations proposed in this plan that will be using explosives or seismic instruments.

Addendum - National Marine Fisheries Service (NMFS)

Renaissance is aware of the NMFS 2020 Biological Opinion (BiOp) on BOEM's Gulf of Mexico Oil and Gas Program and the protocols being implemented by BOEM and BSEE in complying with the ESA and the requirements found in Appendices **A, B, C and J**.

Renaissance and its personnel and subcontractors, while undertaking activities authorized under this lease, must implement and comply with the most current measures, including but not limited to new or updated versions of the NTLs identified below, to protect any species listed in the Endangered Species Act (ESA):

• Appendices A, B, C and J to the NMFS 2020 Biological Opinion on the Federally Regulated Oil and Gas Program Activities in the Gulf of Mexico issued on March 13, 2020.

Vessels utilized by Renaissance should not use equipment that has potential for entanglement or entrapment risk during these proposed activities. Vessels with moonpools will not be utilized.

SECTION 13 - DECOMMISSIONING INFORMATION						
This information is not required for plans submitted in the BOEM GOMR.						

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SECTION 14 - RELATED FACILITIES AND OPERATIONS INFORMATION

(a) Related OCS Facilities and Operations

Not applicable for the activities proposed in this plan.

(b) <u>Transportation System</u>

Not applicable for the activities proposed in this plan.

(c) Produced Liquid Hydrocarbons Transportation Vessels

Not applicable for the activities proposed in this plan.

SECTION 15 - SUPPORT VESSELS AND AIRCRAFT INFORMATION

(a) General

The following list provides information regarding the vessels and aircraft Renaissance will use to support our proposed activities.

Type of Vessel Maximum Fuel Tank Storage Capacity		Maximum No. in Area at Any Time	Trip Frequency or Duration during Production		
Supply boat(s)	<500 bbl	1	1x / Day		
Helicopter	125 gals	1	As needed		

Renaissance's proposed operations are in the Gulf of Mexico west of 87.5° W longitude and will not utilize any rigs, vessels, supply boats, etc. that would transit the Rice's Whale area (see Attachment C for Rice's BiOp vicinity map).

Vessels utilized by Renaissance should not use equipment that has potential for entanglement or entrapment risk during these production activities. Renaissance will not use any vessels with moonpools for operations proposed in this Plan.

(b) Diesel Oil Supply Vessels

No diesel oil supply vessels will be required for the development operations proposed in the plan.

(c) <u>Drilling Fluids Transportation</u>

There are no proposed drilling activities proposed in this plan; therefore, information on the projected drilling fluids transportation is not required at this time.

(d) Solid and Liquid Wastes Transportation

All projected solid and liquid wastes likely to be transported during our proposed activities are included in **Attachment D** (**Table 2**).

(e) Vicinity Map

The existing 'A' Platform in West Delta Area Block 152 is located approximately 28 statute miles from the nearest Louisiana shoreline and approximately 44 statute miles from the onshore support base located in Fourchon, Louisiana.

A Vicinity Plat showing the location of the proposed development activities relative to the shoreline and the primary route (transit lines) of the vessels for traveling from Fourchon, Louisiana (onshore support base) to the offshore production facility and aircraft utilized from Galiano, Louisiana is included as **Attachment C**.

SECTION 16 - ONSHORE SUPPORT FACILITIES INFORMATION

(a) General

Renaissance proposes to utilize the following existing onshore base for vessel and helicopter support:

Name	Location	Existing, New or Modified		
Martin Energy Services	Fourchon, LA	Existing		

(1) Support Base Construction or Expansion

The proposed operations do not mandate any immediate measures for land acquisition or expansion of the existing onshore base facilities.

(2) Support Base Construction or Expansion Timetable

The proposed operations do not mandate any immediate measures for land acquisition or expansion of the existing onshore base facilities; therefore, a timetable is not required.

(b) Air Emissions

Information regarding air emissions generated by onshore support facilities is not required to accompany plans submitted in the BOEM GOMR.

(c) Unusual Solid and Liquid Wastes

Information regarding unusual solid and liquid wastes generated by onshore support facilities is not required to accompany plans submitted in the BOEM GOMR.

(d) Waste Disposal

All projected solid and liquid wastes likely to be disposed of during and after our proposed activities are included in **Attachment D (Table 2)**.

SECTION 17 - SULPHUR OPERATIONS INFORMATION			
Renaissance is not proposing to conduct Sulphur operations in this plan.			

<u>SECTION 18 - COASTAL ZONE MANAGEMENT ACT (CZMA) INFORMATION</u>

The States of Texas, Louisiana, Mississippi, Alabama and Florida have federally approved coastal zone management programs (CZMP). Applicants for an OCS plan submitted to the BOEM must provide a certification with necessary data and information for the affected State to determine that the proposed activity(s) complies with the enforceable policies of each States' approved program, and that such activity will be conducted in a manner consistent with the program.

(a) Consistency Certification

The Coastal Zone Management Consistency Certification from the State of Louisiana is required for the Initial development activities proposed in this plan. See **Attachment G.**

(b) Other Information

State of Louisiana:

The enforceable policies of the State of Louisiana have been considered and will be complied with.

SECTION 19 - ENVIRONMENTAL IMPACT ANALYSIS (EIA)

(a) and (b) Impact Producing Factors (IPFs) from the Proposed Activities

Renaissance has placed an "X" in each IPF category that we believe (by using good engineering judgment) would be impacted by the activity proposed in this plan.

	Impact Producing Factors (IPFs) Categories and Examples					
Environmental Resources	Emissions (air, subsurface noise, light, etc.)	Effluents (muds, cuttings, other discharges to the water column or seafloor)	Physical disturbances to the seafloor (rig or anchor emplacements, etc.)	Wastes sent to shore for treatment or disposal	Accidents (e.g., oil spills, chemical spills, H ₂ S releases)	Other IPFs you identify
Site-specific at Offshore Location						
Designated topographic features		(1)	(1)		(1)	
Pinnacle Trend area live bottoms		(2)	(2)		(2)	
Eastern Gulf live bottoms		(3)	(3)		(3)	
Chemosynthetic communities		` '	(4)		` /	
Water quality		Х	X	Х	Х	
Fisheries		Х	Х		Х	
Marine mammals	(8) X	Х			(8) X	
Sea turtles	(8) X	Х			(8) X	
Air quality	(9) X				(4)	
Shipwreck sites (known or potential)	(6) 71		(7)			
Prehistoric archaeological sites			(7) X			
Vicinity of Offshore Location						
Essential fish habitat		Х	X		(6) X	
Marine and pelagic birds	X	7.			X	
Public health and safety					(5)	
Coastal and Onshore						
Beaches					(6) X	
Wetlands					(6) X	
Shore birds and coastal nesting birds				X	(6) X	
Coastal wildlife refuges				X	Χ	
Wilderness areas				Х	Х	
Other Resources You Identify						
Rice's Whale						
Gulf Sturgeon						
Giant Manta Ray						
Oceanic Whitetip Shark						
Smalltooth Sawfish						
Nassau Grouper						

Footnotes for Environmental Impact Analysis Matrix

- 1. Activities that may affect a marine sanctuary or topographic feature. Specifically, if the well or platform site or any anchors will be on the seafloor within the:
 - (a) 4-mile zone of the Flower Garden Banks, or the 3-mile zone of Stetson Bank,
 - (b) 1000-m, 1-mile or 3-mile zone of any topographic feature (submarine bank) protected by the Topographic Features Stipulation attached to an OCS lease;
 - (c) Essential Fish Habitat (EFH) criteria of 500 ft from any no-activity zone; or
 - (d) Proximity of any submarine bank (500 ft buffer zone) with relief greater than 2 meters that is not protected by the Topographic Features Stipulation attached to an OCS lease.
- 2. Activities with any bottom disturbance within 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 400 meters or greater.
- 5. Exploration or production activities where H₂S concentrations greater than 500 ppm might be encountered.
- 6. All activities that could result in an accidental spill of produced liquid hydrocarbons or diesel fuel that you judge would impact these environmental resources. If the proposed action is located a sufficient distance from a resource that no impact would occur, the EIA can note that in a sentence or two.
- 7. All activities that involve seafloor disturbances, including anchor emplacements, in any OCS block designated by the 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 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.

(c) ANALYSIS

Site-specific Offshore Location – WD 152, Lease OCS-G 37455

1. Designated Topographic Features

The topographic features of the Central Gulf provide habitat for coral reef community organisms. Since 1973 stipulations have been made a part of leases on or near these biotic communities so that impacts from nearby oil and gas activities were mitigated to the greatest extent possible. This stipulation does not prevent the recovery of oil and gas resources but serves to protect valuable and sensitive biological resources.

There are no IPFs (including effluents, physical disturbances to the seafloor, and accidents) from the proposed activities that could cause impacts to topographic features.

The activities proposed in this plan will be covered by our Regional OSRP.

2. Pinnacle Trend Area Live Bottoms

A small portion of the Central Planning Area and the Eastern Gulf of Mexico OCS planning areas include portions of approximately 70 lease blocks that have been classified as being within the "pinnacle trend" area. The Department of the Interior, Bureau of Ocean Energy Management is the agency with jurisdiction over these leases.

The term "live bottom" is used to refer to the biological assemblages attached to hard substrates found interspersed between sand and mud bottoms of the continental shelf. These assemblages often consist of colorful sponges, corals, sea whips and sea fans rising from the benthic environment. Some of these features have extensive vertical relief rising far into the water column and serving as a reefal habitat for numerous commercially and recreationally important fish species.

A special "Live Bottom (Pinnacle Trend) Stipulation" is assigned to leases in those blocks intended to protect the pinnacle trend and associated hard-bottom communities from damage and, at the same time, provide for recovery of potential oil and gas resources. This stipulation was not invoked with the issuance of these leases.

The activities proposed in this plan will be covered by our Regional OSRP.

3. Eastern Gulf Live Bottoms

A small portion of the Central Planning Area and the Eastern Gulf of Mexico OCS planning areas include portions of approximately 70 lease blocks that have been classified as being within the "pinnacle trend" area. The Department of the Interior, Bureau of Ocean Energy Management is the agency with jurisdiction over these leases.

The term "live bottom" is used to refer to the biological assemblages attached to hard substrates found interspersed between sand and mud bottoms of the continental shelf. These assemblages often consist of colorful sponges, corals, sea whips and sea fans rising from the benthic environment. Some of these features have extensive vertical relief rising far into the water column and serving as a reefal habitat for numerous commercially and recreationally important fish species.

A special "Live Bottom (Pinnacle Trend) Stipulation" is assigned to leases in those blocks intended to protect the pinnacle trend and associated hard-bottom communities from damage and, at the same time, provide for recovery of potential oil and gas resources. This stipulation was not invoked with the issuance of these leases.

There are no IPFs from the proposed activities that could cause impacts to Eastern Gulf live bottoms. The site-specific offshore location of the proposed activity is over 100 miles from the eastern gulf live bottoms.

The activities proposed in this plan will be covered by our Regional OSRP.

4. Benthic Communities

There are no IPFs from the proposed activities that could cause impacts to Benthic Communities.

Chemosynthetic biologic communities that lie in water depths in excess of 300 meters (984 feet) are of concern for environmental protection measures. The water depth at the proposed location is approximately 373 feet.

5. Water Quality

Effluents, physical disturbances to the seafloor and accidents from the proposed activities could potentially cause impacts to water quality. Routine impact-producing factors that could result in water quality degradation from offshore OCS oil and gas operations include rig / anchor emplacement, platform and pipeline installation and removal, and the discharge of operational wastes.

The major discharges from offshore oil and gas exploration and production activities include produced water, drilling fluids and cuttings, ballast water, and uncontaminated seawater. Minor discharges from the offshore oil and gas industry include drilling-waste chemicals, fracturing and acidifying fluids, and well completion and workover fluids; and from production operations, deck drainage, and miscellaneous well fluids (cement, BOP fluid); and other sanitary and domestic wastes, gas and oil processing wastes, and miscellaneous discharges. Since all discharges will be made in accordance with a general National Pollutant Discharge Elimination System (NPDES) permit issued by U.S. Environmental Protection Agency (USEPA), operational discharges are not expected to cause significant adverse impacts to water quality. Additionally, an analysis of the best available information from the National Marine Fisheries Service Endangered Species Act (ESA) Section 7 Biological Opinion on the Federally Regulated Oil and Gas Program Activities in the Gulf of Mexico (NMFS, 2020) concludes that exposures to toxicants in discharges from oil and gas activities are not likely to adversely affect ESA-listed species (i.e. to include ESA-listed fish, Giant manta rays, Gulf sturgeon, Oceanic whitetip shark).

Offshore accidents, such as blowouts and spills could also occur and have the potential to alter offshore water quality. Sediment disturbance is expected to result in minor, localized, temporary increases in water-column turbidity in offshore waters. Given the low frequency of blowouts, minimum impacts on water quality due to resuspension of sediments are expected.

Oil spills related to the proposed action are assumed to be mostly very small events (and for spills greater than 50 bbl) to occur very infrequently. It is unlikely that an accidental oil spill would occur from the proposed activities. If a spill were to occur, the dissolved components and small oil droplets would temporarily affect the water quality of marine waters. Dispersion by currents and microbial degradation would remove the oil from the water column or dilute the constituents to background levels.

The activities proposed in this plan will be covered by our Regional OSRP.

6. Fisheries

Effects on commercial fisheries from activities associated with this plan could come from emplacement of production platform(s), underwater OCS obstructions, oil spills, subsurface blowouts, pipeline installation and offshore discharges of drilling mud and produced waters (See Section 5, Water Quality above).

An accidental oil spill that may occur as a result of the proposed action has the potential to cause some detrimental effects to fisheries. However, it is unlikely that an accidental surface or subsurface oil spill would occur from the proposed activities. If a spill were to occur in open waters of the OCS proximate to mobile adult finfish or shellfish, the effects would likely be sublethal and the extent of damage would be reduced to the capability of adult fish and shellfish to avoid a spill, to metabolize Hydrocarbons, and to excrete both metabolites and parent compounds. The effect of oil spills on fisheries is expected to cause less than 1 percent decrease in commercial populations or in commercial fishing. At the expected level of effect, the resultant influence on Central Gulf fisheries is negligible and will be indistinguishable from natural population variations.

The activities proposed in this plan will be covered by our Regional OSRP.

There are no other IPFs (including emissions and wastes sent to shore for disposal) from the proposed activities which could cause impacts to fisheries.

7. Marine Mammals

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

The net result of any disturbance would depend on the size and percentage of the population affected, ecological importance of the disturbed area, environmental and biological parameters that influence an animal's sensitivity to disturbance and stress, and the accommodation time in response to prolonged disturbance (Geraci and St. Aubin, 1980). Collisions between cetaceans and ships could cause serious injury or death (Laist et al., 2001). Sperm whales are one of 11 whale species that are hit commonly by ships (Laist et al., 2001). Collisions between OCS vessels and cetaceans within the project area are expected to be unusual events.

The activities proposed in this plan will be covered by our Regional OSRP.

Renaissance and its personnel and subcontractors, while undertaking activities authorized under these leases, must implement and comply with the most current measures set forth in the following documents, to protect or minimize any of the species listed in the Endangered Species Act (ESA):

• Appendices A, B, C and J to the NMFS 2020 Biological Opinion on the Federally Regulated Oil and Gas Program Activities in the Gulf of Mexico issued on March 13, 2020.

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

8. Sea Turtles

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

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

The activities proposed in this plan will be covered by our Regional OSRP.

Renaissance and its personnel and subcontractors, while undertaking activities authorized under these leases, must implement and comply with the most current measures set forth in the following documents, to protect or minimize any of the species listed in the Endangered Species Act (ESA):

 Appendices A, B, C and J to the NMFS 2020 Biological Opinion on the Federally Regulated Oil and Gas Program Activities in the Gulf of Mexico issued on March 13, 2020.

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

9. Air Quality

The proposed development activities are located 28 miles from the nearest Louisiana shoreline.

Emissions of pollutants into the atmosphere from the development operations proposed are not expected to have significant impacts on onshore air quality because of the prevailing atmospheric conditions, emission heights, emission rates, and the distance of these emissions from the coastline.

The Projected Air Quality Emissions Report indicates that the BOEM exemption level will not be exceeded during the development operations proposed in the plan.

10. Shipwreck Sites (Known or Potential)

IPFs that could cause impacts to known or potential shipwreck sites from the proposed activities include physical disturbances to the seafloor such as rig emplacement.

The activity proposed in this plan occurs from previously approved surface locations. A shallow hazards report is not required at this time.

However, in the event items of significant cultural resource potential are discovered during the proposed operations, Renaissance will immediately halt all operations and notify the appropriate department at the BOEM for further evaluation and assistance.

11. Prehistoric Archaeological Sites

IPFs that could cause impacts to known or potential prehistoric archaeological sites from the proposed activities include physical disturbances to the seafloor such as rig emplacement.

The activity proposed in this plan occurs from previously approved surface locations. A shallow hazards report is not required at this time.

However, in the event items of significant cultural resource potential are discovered during the proposed operations, Renaissance will immediately halt all operations and notify the appropriate department at the BOEM for further evaluation and assistance.

Vicinity of Offshore Location:

1. Essential Fish Habitat

IPFs that could impact essential fish habitats as a result of the proposed operations include emissions, effluents and accidents. The major effluent discharges from offshore oil and gas exploration and production activities include produced water, drilling fluids and cuttings, ballast water, and uncontaminated seawater (see Section 5, Water Quality, above). Minor discharges from the offshore oil and gas industry include drilling-waste chemicals, fracturing and acidifying fluids, and well completion and workover fluids; and from production operations, deck drainage, and miscellaneous well fluids (cement, BOP fluid); and other sanitary and domestic wastes, gas and oil processing wastes, and miscellaneous discharges.

Produced water will not be discharged during this operation.

The activities proposed in this plan will be covered by our Regional OSRP.

There are no other IPFs (including physical disturbances or wastes sent to shore) from the proposed activities which could cause impacts to essential fish habitat.

2. Marine and Pelagic Birds

IPFs that could impact marine and pelagic birds as a result of the proposed operations include emissions, accidents and discarded trash and debris. Emissions of pollutant into the atmosphere from the activities associated with the proposed operations in this plan are not projected to have significant impacts on air quality that could harm marine and pelagic birds because of the prevailing atmospheric conditions, emission heights, emission rates and pollutant concentrations.

An accidental oil spill that may occur as a result of the proposed action has the potential to cause some detrimental effects on marine and pelagic birds. Some physical oiling could occur during dives, as well as secondary toxic effects through the uptake of prey. However, it is unlikely that an accidental surface or subsurface oil spill would occur from the proposed activities.

Renaissance and its personnel and subcontractors, while undertaking activities authorized under these leases, must implement, and comply with the most current measures set forth in the following documents:

Appendix B to the NMFS 2020 Biological Opinion on the Federally Regulated Oil and Gas Program
Activities in the Gulf of Mexico issued on March 13, 2020.

The activities proposed in this plan will be covered by our Regional OSRP.

There are no other IPFs (including effluents and physical disturbances to the seafloor) from the proposed activities which could cause impacts to marine and pelagic birds.

3. Public Health and Safety Due to Accidents

There are no IPFs (including an accidental H₂S releases) from the proposed activities that could cause impacts to public health and safety.

Further, in accordance with 30 CFR 250.490(c) and NTL's 2009-G27 and 2008-G04 we have submitted sufficient information to justify our request that the area of our proposed activities be classified by BOEM as H_2S absent.

Coastal and Onshore:

1. Beaches

Primary IPFs associated with offshore oil and gas exploration and development, and most widely recognized as major threats to the enjoyment and use of recreational beaches, are oil spills (accidents) and marine trash and debris. The operations proposed in this plan are not projected to have significant impacts on coastal beaches.

An accidental oil spill that may occur as a result of the proposed action has the potential to cause some detrimental effects to beaches, however, it is unlikely that an accidental surface or subsurface oil spill would occur from the proposed development activities. The level of response to a spill will be based on volume, weather, and the characteristics of the product spilled. Renaissance's objectives for spill response are to ensure the safety of citizens and response personnel; control the source of the spill, have a coordinated response effort; maximize the protection of environmental sensitive areas; contain, recover, and remove as much of the spill product as possible; recover and rehabilitate injured wildlife; minimize economic impacts; and keep the general public informed of the response activities.

The activities proposed in this plan will be covered by our Regional OSRP.

Renaissance and its personnel and subcontractors, while undertaking activities authorized under these leases, must implement, and comply with the most current measures set forth in the following documents:

Appendix B to the NMFS 2020 Biological Opinion on the Federally Regulated Oil and Gas Program
Activities in the Gulf of Mexico issued on March 13, 2020.

The activities proposed in this plan will be covered by our Regional OSRP.

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

2. Wetlands

According to the U.S. Department of the Interior ((Dahl, 1990); Henfer et al., 1994), during the mid-1980's, 4.4 percent of Texas (3,083,860 ha) (Henfer et al., 1994), 28 percent of Louisiana (3,557,520 ha), 14 percent of Mississippi (17,678,730 ha) and 8 percent of Alabama (1,073,655 ha) were considered wetlands. More recent information indicates recent land change as a result of Hurricanes Katrina and Rita. The most notable was the 217-mi² of Louisiana's coastal lands that were transformed to water after Hurricanes Katrina and Rita (Barras, 2006).

The primary IPF associated with offshore oil and gas exploration and development, and most widely recognized as major threats to the wetlands are oil spills (accidents) and marine trash and debris. The operations proposed in this plan are not projected to have significant impacts on wetlands.

Renaissance and its personnel and subcontractors, while undertaking activities authorized under these leases, must implement, and comply with the most current measures set forth in the following documents:

• Appendix B to the NMFS 2020 Biological Opinion on the Federally Regulated Oil and Gas Program Activities in the Gulf of Mexico issued on March 13, 2020.

There are no other IPFs (including emissions, effluents, and physical disturbances to the seafloor) from the proposed activities which could cause impacts to wetlands.

The activities proposed in this plan will be covered by our Regional OSRP.

3. Shore Birds and Coastal Nesting Birds

The primary IPF associated with offshore oil and gas exploration and development, and most widely recognized as a major threat to the shore birds and coastal nesting birds is oil spills (accidents) and marine trash and debris. The operations proposed in this plan are not projected to have significant impacts on shore birds and coastal nesting birds.

An accidental oil spill that may occur as a result of the proposed action has the potential to cause some detrimental effects to shore birds and coastal nesting birds, however, it is unlikely that an accidental surface or subsurface oil spill would occur from the proposed activities. The level of response to a spill will be based on volume, weather, and the characteristics of the product spilled. Renaissance's objectives for spill response are to ensure the safety of citizens and response personnel; control the source of the spill, have a coordinated response effort; maximize the protection of environmental sensitive areas; contain, recover, and remove as much of the spill product as possible; recover and rehabilitate injured wildlife; minimize economic impacts; and keep the general public informed of the response activities.

Renaissance and its personnel and subcontractors, while undertaking activities authorized under these leases, must implement, and comply with the most current measures set forth in the following documents:

Appendix B to the NMFS 2020 Biological Opinion on the Federally Regulated Oil and Gas Program
Activities in the Gulf of Mexico issued on March 13, 2020.

The activities proposed in this plan will be covered by our Regional OSRP.

There are no other IPFs (including emissions, effluents, and physical disturbances to the seafloor) from the proposed activities which could cause impacts to wetlands.

4. Coastal Wildlife Refuges

The primary IPF associated with offshore oil and gas exploration and development, and most widely recognized as a major threat to the coastal wildlife refuges is oil spills (accidents) and marine trash and debris. The operations proposed are not projected to have significant impacts on coastal wildlife refuges.

Renaissance and its personnel and subcontractors, while undertaking activities authorized under these leases, must implement, and comply with the most current measures set forth in the following documents:

Appendix B to the NMFS 2020 Biological Opinion on the Federally Regulated Oil and Gas Program
Activities in the Gulf of Mexico issued on March 13, 2020.

The activities proposed in this plan will be covered by our Regional OSRP.

There are no other IPFs (including emissions, effluents, and physical disturbances to the seafloor) from the proposed activities which could cause impacts to coastal wildlife refuges.

5. Wilderness Areas

The primary IPF associated with offshore oil and gas exploration and development, and most widely recognized as a major threat to wilderness areas is oil spills (accidents) and marine trash and debris. The operations proposed in this plan are not projected to have significant impacts on wilderness areas.

Renaissance and its personnel and subcontractors, while undertaking activities authorized under these leases, must implement, and comply with the most current measures set forth in the following documents:

Appendix B to the NMFS 2020 Biological Opinion on the Federally Regulated Oil and Gas Program
Activities in the Gulf of Mexico issued on March 13, 2020.

Other guidance documents utilized and issued by the BOEM include:

BSEE NTL No. 2015-G03 (Marine Trash and Debris Awareness and Elimination)

The activities proposed in this plan will be covered by our Regional OSRP.

There are no other IPFs (including emissions, effluents, and physical disturbances to the seafloor) from the proposed activities which could cause impacts to wilderness areas.

Other Environmental Resources Identified:

1. Rice's Whale

Gulf of Mexico Rice's whales are members of the baleen whale family and a subspecies of the Rice's whale. With likely less than 100 individuals remaining, Gulf of Mexico Rice's whales are one of the most endangered whales in the world. Recovery of the species is dependent upon the protection of each remaining whale. The Gulf of Mexico Rice's whale has been consistently located in the northeastern Gulf of Mexico, along the continental shelf break between 100- and 400-meters depth. They are the only resident baleen whale in the Gulf of Mexico and are distinct from Rice's whales worldwide.

The most significant threats facing Gulf of Mexico Rice's whales are energy exploration and development, oil spills and responses, vessel strikes, ocean noise, and entanglement in fishing gear. The Gulf of Mexico Rice's whale's small population size and limited distribution increase their vulnerability.

All Rice's whales are protected under the <u>Marine Mammal Protection Act</u>, including the Gulf of Mexico subspecies. In 2019, NOAA listed the Gulf of Mexico Rice's whale as endangered under the Endangered Species Act.

Based on the location of the proposed activities in this Plan, there are no other IPFs (including emissions, effluents, physical disturbances to the seafloor, and wastes sent to shore) from the proposed activities which could cause impacts to the Rice's whales.

2. Gulf Sturgeon

The Gulf sturgeon is a sub-species of the Atlantic sturgeon that can be found from Lake Pontchartrain and the Pearl River system in Louisiana and Mississippi to the Suwannee River in Florida. Hatched in the freshwater of rivers, Gulf sturgeon head out to sea as juveniles, and return to the rivers of their birth to spawn (lay eggs) when they reach adulthood. In the fall, movement from rivers into estuaries and associated bays begins in September and continues through November. Most subadult and adult Gulf sturgeon spend the cool winter months (October/November to March/ April) in bays, estuaries, and the nearshore Gulf of Mexico. Tagged fish have been found in well-oxygenated shallow water areas that support burrowing macro invertebrates. These areas may include shallow shoals (5 to 7 feet), deep holes near passes, unvegetated sand habitats such as sandbars, and intertidal and subtidal energy zones. Pollution and contamination from industrial, agricultural, and municipal activities is believed to cause a variety of physical, behavioral, and physiological impacts to sturgeon worldwide.

In 1991, Gulf sturgeon were listed as threatened under the <u>Endangered Species Act</u> after their population was greatly reduced or eliminated throughout much of their range because of overfishing, dam construction, and habitat degradation. NOAA Fisheries and the U.S. Fish and Wildlife Service jointly manage and protect Gulf sturgeon.

Based on the location of the proposed activities in this Plan, there are no other IPFs (including emissions, effluents, physical disturbances to the seafloor, and wastes sent to shore) from the proposed activities which could cause impacts to the Gulf sturgeon.

3. Giant Manta Ray

The giant manta ray is found worldwide in tropical, subtropical, and temperate bodies of water and is commonly found offshore, in oceanic waters, and near productive coastlines. As such, giant manta rays can be found in cool water, as low as 19°C, although temperature preference appears to vary by region. For example, off the U.S. East Coast, giant manta rays are commonly found in waters from 19 to 22°C, whereas those off the Yucatan peninsula and Indonesia are commonly found in waters between 25 to 30°C. The species has also been observed in estuarine waters near oceanic inlets, with use of these waters as potential nursery grounds.

Based on the location of the proposed activities in this Plan, there are no other IPFs (including emissions, effluents, physical disturbances to the seafloor, and wastes sent to shore) from the proposed activities which could cause impacts to the giant manta ray.

4. Oceanic Whitetip Shark

The oceanic whitetip shark is found throughout the world in tropical and sub-tropical waters. It is a pelagic species, generally remaining offshore in the open ocean, on the outer continental shelf, or around oceanic islands in water depths greater than 600 feet. They live from the surface of the water to at least 498 feet deep. Oceanic whitetip sharks have a strong preference for the surface mixed layer in warm waters above 20°C and are therefore a surface-dwelling shark. The primary threat to the oceanic whitetip shark is incidental bycatch in commercial fisheries. Because of their preferred distribution in warm, tropical waters, and their tendency to remain at the surface, oceanic whitetip sharks have high encounter and mortality rates in fisheries throughout their range

Based on the location of the proposed activities in this Plan, there are no other IPFs (including emissions, effluents, physical disturbances to the seafloor, and wastes sent to shore) from the proposed activities which could cause impacts to the oceanic whitetip shark.

5. Smalltooth Sawfish

Smalltooth sawfish live in tropical seas and estuaries (semi-enclosed areas where rivers meet the sea) of the Atlantic Ocean. They are most at home in shallow, coastal waters, and sometimes enter the lower reaches of freshwater river systems. There are few data about historical Smalltooth sawfish numbers. Smalltooth sawfish were once found in the Gulf of Mexico from Texas to Florida and along the East Coast from Florida to North Carolina. Their distribution has decreased greatly in U.S. waters over the past century, and today, the species is only found off the coast of Florida.

Based on the location of the proposed activities in this Plan, there are no other IPFs (including emissions, effluents, physical disturbances to the seafloor, and wastes sent to shore) from the proposed activities which could cause impacts to the oceanic Smalltooth sawfish.

6. Nassau Grouper

The Nassau grouper is a reef fish. These large fish are associated with hard structure such as reefs (both natural and artificial), rocks, and ledges. They are late-maturing, long-lived, top-level predators found in southern coastal Florida, the Florida Keys, Bermuda, the Yucatan, and the Caribbean Sea. As juveniles they are found in nearshore shallow waters in macroalgal and seagrass habitats. They shift deeper as they grow, to predominantly reef habitat (forereef and reef crest).

Nassau grouper are mostly absent from the continental United States—except Florida, where larger juveniles and adults have been recorded. No larval Nassau grouper or juveniles smaller than 20 inches in length have been collected or observed in Florida waters. However, sampling along shoreline habitats of the Florida Keys—where smaller juveniles might be expected—has been limited to date.

Based on the location of the proposed activities in this Plan, there are no other IPFs (including emissions, effluents, physical disturbances to the seafloor, and wastes sent to shore) from the proposed activities which could cause impacts to the Nassau grouper.

(d) Environmental Hazards

The site-specific environmental conditions have been taken into account for the proposed activities under this plan. Being located in the Gulf of Mexico, all oil and gas exploratory and development operations may at some time experience hurricane force winds, tropical storm activity and unusual surge and sea currents.

In accordance with requirements set forth in Title 33 CFR 146.140, an Emergency Evacuation Plan (EEP) is prepared and submitted to the appropriate USCG Marine Safety Office or Unit for review and ultimate approval. This plan provides descriptions to help define the type of storm based on the winds associated with it (i.e., major gulf storm, squall, tropical depression, tropical storm, gale warning, storm warning, hurricane, etc). Major hurricanes (storm having wind speeds in excess of 74 mph) in the Gulf normally form in the southern Gulf or Caribbean Sea. Tropical disturbances (storms having wind speeds greater than 40 mph but less than 74 mph) that originate near the facility do not provide much warning, but usually pass the rig or facility prior to attaining hurricane status.

Each tropical disturbance will be evaluated on its own merit and the operations modified accordingly. No impacts are expected on the proposed activities from site-specific environmental conditions.

(e) Alternatives

There are no alternatives other than those required by regulation to be considered to reduce the environmental impacts of the activities proposed in this plan.

(f) <u>Mitigation Measures</u>

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

(g) Consultation

There were no outside agencies or persons consulted regarding the potential environmental impacts associated with the activities proposed under this Initial DOCD.

(h) Preparer(s)

Jeff Camp K. Camp & Associates

Email: <u>Jeff.camp@kcampassociates.com</u>

(i) References

Federal Register, Vol. 84, No. 94, May 15, 2019, Final Rule for Oil and Gas and Sulfur Operations in the Outer Continental Shelf – Blowout Preventer Systems and Well Control Revisions

Federal Register, Vol. 77, No. 163, August 22, 2012, Final Rule for Increased Safety Measures for Energy Development on the Outer Continental Shelf

Federal Register, Vol. 75, No. 198, October 14, 2010, Final Rule for Increased Safety Measures for Energy Development on the Outer Continental Shelf

National Marine Fisheries Service (NMFS) Endangered Species Act (ESA) Section 7 Biological Opinion on the Federally Regulated Oil and Gas Program Activities in the Gulf of Mexico (NMFS, 2020)

BOEM NTL 2015-N01 effective January 14, 2015 for Information Requirements for Exploration Plans, Development and Production Plans, and Development Operations Coordination Documents on the OCS for Worst Case Discharge and Blowout Scenarios

NTL 2009-G40 effective January 27, 2010 for Deepwater Benthic Communities

NTL 2009-G39 effective January 27, 2010 for Biologically Sensitive Underwater Features and Areas

NTL 2009-G27 effective September 9, 2009 for Submitting Exploration Plans and Development Operations Coordination Documents

NTL 2008-G04 effective May 1, 2008 for Information Requirements for Exploration Plans and Development Operations Coordination Documents

Final NOS, Central Planning Area Lease Sale 256 Information

Marine Mammal Protection Act of 1972 (MMPA)

Endangered Species Act of 1973 (ESA)

Gulf of Mexico's Fisheries NOAA Website: https://www.fisheries.noaa.gov/topic/endangered-species-conservation

NOAA Fisheries – Biological Opinion on the Federally Regulated Oil and Gas Program Activities in the Gulf of Mexico Website - https://www.fisheries.noaa.gov/resource/document/biological-opinion-federally-regulated-oil-and-gas-program-activities-gulf-mexico

NOAA Fisheries Species Directory

- https://www.fisheries.noaa.gov/species/gulf-sturgeon
- https://www.fisheries.noaa.gov/species/giant-manta-ray
- https://www.fisheries.noaa.gov/species/smalltooth-sawfish
- https://www.fisheries.noaa.gov/species/nassau-grouper

SECTION 20 - ADMINISTRATIVE INFORMATION

(a) Exempted Information Description (Public Information Copies Only)

In accordance with 43 CFR Part 2, the following information is exempt from disclosure and has been omitted from the Public Information copy of this plan:

- The geologic objectives, BHL, TVD, and MD information on form BOEM-137 (OCS Plan Information Form) in Attachment A
- All items under Geological and Geophysical Information, except for the non-proprietary version of shallow hazards assessment
- Correlative well information used to justify H₂S classification request under Hydrogen Sulfide Information
- Worst Case Discharge Calculations
- Mineral Resource Conservation

(b) Bibliography

None

OMB Control Number: 1010-0151 OMB Approval Expires: 6/30/2021

OCS PLAN INFORMATION FORM

				Genera	al Infor	matio	n				
Type of OCS Plan:	Ехр	loration Plan (EP)	Dev				dination Docum	ent (DOCD)		X
Company Name: Rena	issance Offs	hore, LLC					r: 03209				
Address:					t Person:			шшшш			
820 Ge	ssner Road,	Suite 760		Phone 1	Number:	832-33	33-7766				
Hou	ston, Texas 7	7024		E-Mail	Address:	jcole@	grenaissanceo	ffshore.cor	n		
If a service fee is requi	red under 30 C	FR 550.125(a), pro	ovide t		Amount		NA	Receipt N		N	Α
		Project and	Wors	st Case	Dischar	rge (V	CD) Inform	ation	K 1152		Maje 2 19 - 17 - 18 1
Lease(s): G37455		Area: WD	Block				pplicable): NA		1		
Objective(s) X Oil		Sulphur	Salt	Onsho	re Suppor	t Base(s): Fourchon, L	.A	100		
Platform/Well Name:	Wells	Total Volume of	f WCD	:801				API Gravity	:36.8		
Distance to Closest La	nd (Miles): 25		Volu	me from 1	uncontroll	ed blov	vout:	-016			
Have you previously p	rovided inform	ation to verify the	calcula	ations and	d assumpti	ions for	your WCD?	7 7 70	Yes	Х	No
If so, provide the Cont	rol Number of	the EP or DOCD w	vith wh	ich this i	nformatio	n was p	rovided				
Do you propose to use	new or unusua	l technology to cor	nduct y	our activ	rities?	g Tu			Yes	X	No
Do you propose to use	a vessel with a	nchors to install or	modif	fy a struct	ture?				Yes	X	No
Do you propose any fa	cility that will	serve as a host faci	lity for	r deepwat	ter subsea	develo	pment?		Yes	X	No
	Description	n of Proposed	Activ	ities an	d Tenta	tive S	chedule (Ma	rk all tha	t apply)	
P	roposed Activ	ity		St	art Date		End Da	ite	Land V	N	o. of Days
Exploration drilling											
Development drilling				1135							
Well completion							4.1.5	1_		1 1	
Well test flaring (for m	ore than 48 ho	urs)				Tv					
Installation or modifica	tion of structu	re									
Installation of producti	on facilities										
Installation of subsea v	ellheads and/o	r manifolds								Tell of	
Installation of lease ter	m pipelines					- 1	7 T				
Commence production				•		7					
Other (Specify and atta	ch description										
De	scription of	Drilling Rig				Wight.	Desc	ription of	Struct	ure	
Jackup		Drillship				Caiss	on		Tension	leg pla	tform
Gorilla Jackup		Platform rig			Х	Fixed	platform		Complia	nt tow	er
Semisubmersib	e	Submersible	Ta Ji			Spar			Guyed to	wer	
DP Semisubme	rsible	Other (Attac	h Desc	ription)			ing production		Other (A	ttach I	Description)
Drilling Rig Name (If I	(nown):					syste	m	-			
		De	scrip	tion of	Lease T	erm l	Pipelines	MULISAN			
From (Facility/Area	/Block)	To (Facility/A	rea/Bl	lock)		Dia	meter (Inches)			Len	gth (Feet)
				7.5							

Proposed Well/Structure Location														
Well or Structure, refer	ence previou					viously reviev CD?	ved under an ap	proved EP o	X	Yes	BU	No		
Is this an exist or structure?			es X		Complex	ID or API No				20-20	001	14-00)	
Do you plan to	use a subsea	a BOP or a	surface	BOP on a f	loating fa	cility to cond	uct your propos	ed activities	?	Yes		Х	No	
WCD info	For wells, v blowout (B	bls/day):	uncontro	lled	pipeline	es (Bbls):	e of all storage		API G fluid	ravity o N/A	f			
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Lease No.	OCS G 37455				ocs				OCS OCS					
Area Name		West	Delta											
Block No.			52											
Blockline Departures (in feet)	N/S Departs	ure:		F <u>s</u> L	N/S	Departure:		F <u>s</u> L	N/S I	Departu Departur Departur	e:		FL FL FL	
	E/W Depart 7306	ture:		F _E L	E/W	Departure:		F <u>e</u> L						
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			X =											

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Area Name		West	Delta							_ H							
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Area Name		West	Delta						D.								
Block No.		15	52														
Blockline	N/S Depart	ure:		Fs L	,	N/S I	Departure:		F_1	L							
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Janet Cole

From:

notification@pay.gov

Sent:

Wednesday, April 3, 2024 2:04 PM

To:

Janet Cole

Subject:

Pay.gov Payment Confirmation: BOEM Development/DOCD Plan - BD



An official email of the United States government

Pay.gov[®]

Your payment has been submitted to the designated government agency through Pay.gov and the details are below. Please note that this is just a confirmation of transaction submission. To confirm that the payment processed as expected, you may refer to your bank statement on the scheduled payment date. If you have any questions or wish to cancel this payment, you will need to contact the agency you paid at your earliest convenience.

Application Name: BOEM Development/DOCD Plan - BD

Pay.gov Tracking ID: 27DA31F8 Agency Tracking ID: 76682462697

Account Holder Name: Janet Cole Transaction Type: ACH Debit Transaction Amount: \$25,085.00 Payment Date: 04/04/2024

Account Type: Business Checking Routing Number: 111923607 Account Number: *********4714

Transaction Date: 04/03/2024 03:04:24 PM EDT

Total Payments Scheduled: 1

Frequency: OneTime

Region: Gulf of Mexico

Contact: Janet Cole (832) 333-7766

Company Name/No: Renaissance Offshore, LLC, 03209

Lease Number(s): 37455

Area-Block: West Delta WD, 152

Type-Wells: Initial Plan, 5

THIS IS AN AUTOMATED MESSAGE. PLEASE DO NOT REPLY.



Pay.gov is a program of the U.S. Department of the Treasury, Bureau of the Fiscal Service

				Potential Presence		
Listed Species	Scientific Name	Status	Critical Habitat Designated in Gulf of Mexico	Lease/ Projected Area	Coastal	
			Marine Mammals			
Blue whale	Balaenoptera musculus	E	None	X²	-	
Fin whale	Balaenoptera physalus	E	None	X²	-	
Humpback whale	Megaptera novaeangliae	Е	None	X²	-	
Sei whale	Balaenoptera borealis	Е	None	X²	-	
Sperm whale	Physeter macrocephalus	Е	None	Х	-	
West Indian manatee¹	Trichechus manatus	Е	Florida (peninsular)	-	Х	
North Atlantic Right whale	Eubalaena glacialis	E	None	X²	-	
Bryde's whale³	Balaenoptera edeni	E	None	Х	-	
Rice's whale³	Balaenoptera ricei	E	None	X	-	
		Te	errestrial Mammals			
Beach Mice (Alabama, Choctawhatchee, Perdido Key, St. Andrew)	Peromyscus polionotus	E	Alabama and Florida (Panhandle) Beaches	-	X	
			Sea Turtles			
Green sea turtle	Chelonia mydas	Т	None	Х	Х	
Hawksbill sea turtle	Eretmochelys imbricata	E	None	Х	Х	
Kemp's ridley sea turtle	Lepidochelys kempii	E	None	Х	х	
Leatherback sea turtle	Dermochelys coriacea	E	None	Х	Х	
Loggerhead sea turtle	Caretta caretta	Т	Nesting beaches and nearshore reproductive habitat in Mississippi, Alabama, and Florida (Panhandle); Sargassum habitat including most of the central & western Gulf of Mexico.	Х	х	
			Fish			
Gulf Sturgeon	Acipenser oxyrinchus desotoi	Т	Coastal Louisiana, Mississippi, Alabama, and Florida (Panhandle)	х	Х	
Giant manta ray	Manta birostris	Е	None	Х	-	
Oceanic whitetip shark	Carcharhinus Iongimanus	Т	None	Х	-	
Smalltooth sawfish	Pristis pectinate	E	Southwest Florida	-	Х	
Nassau grouper	Epinephelus striatus	Т	None	-	Х	

				Potential F	Presence	
Listed Species	Scientific Name	Status	Critical Habitat Designated in Gulf of Mexico	Lease/ Projected Area	Coastal	
			Birds			
Piping Plover	Charadrius melodus	Т	Coastal Texas, Louisiana, Mississippi, Alabama, and Florida (Panhandle)	-	Х	
Whooping Crane	Grus americana	E	Coastal Texas, Louisiana, Mississippi, Alabama, and Florida (Panhandle)	-	Х	
Mississippi sandhill crane	Grus canadensis pulla	E	Wherever found	-	Х	
Yellow-shouldered blackbird	Agelaius xanthomus	E	Wherever found	-	Х	
Wood Stork	Mycteria americana	Т	AL, FL, GA, MS, NC, SC	-	Х	
			Invertebrates			
Elkhorn coral	Acropora palmata	Т	Florida Keys and the Dry Tortugas	-	Х	
Staghorn coral	Acropora cervicornis	Т	Florida Keys and the Dry Tortugas	-	Х	
Pillar coral	Dendrogyra cylindrus	Т	None	-	Х	
Rough cactus coral	Mycerophyllia ferox	Т	None	-	Х	
Lobed star coral	Orbicella annularis	Т	None	-	Х	
Mountainous star coral	Orbicella faveolata	Т	None	-	Х	
Boulder star coral	Orbicella franksi	Т	None	-	Х	

Abbreviations: E = Endangered; T = Threatened; X = Potential Presence

¹ There are two subspecies of West Indian manatee: the Florida manatee (T. m. latirostris), which ranges from the northern Gulf of Mexico to Virginia, and the Antillean manatee (T. m. manatus), which ranges from northern Mexico to eastern Brazil. Only the Florida manatee subspecies is likely to be found in the northern Gulf of Mexico. On 30 March 2017, the USFWS announced the West Indian manatee, including the Florida manatee subspecies, was reclassified as Threatened.

² The Blue, Fin, Humpback, Sei, and North Atlantic Right whales are uncommon in the Gulf of Mexico and are unlikely to be present in the projected area.

³ The Bryde's whale, also known as the Bryde's whale complex, is a collection of baleen whales that are still being researched to determine if they are the same species or if they are individual species of whales. In 2021, the Rice's whale, formerly known as the Gulf of Mexico Bryde's whale, was determined to be a separate species. There are less than 100 Rice's whales living in the Gulf of Mexico year-round. These whales retain all the protections of the Gulf of Mexico Bryde's whale under the Endangered Species Act. Other Bryde's whales are migratory and may enter the Gulf of Mexico; however, the migratory Bryde's whales are rare or extralimital in the Gulf of Mexico and are unlikely to be present in the lease area.

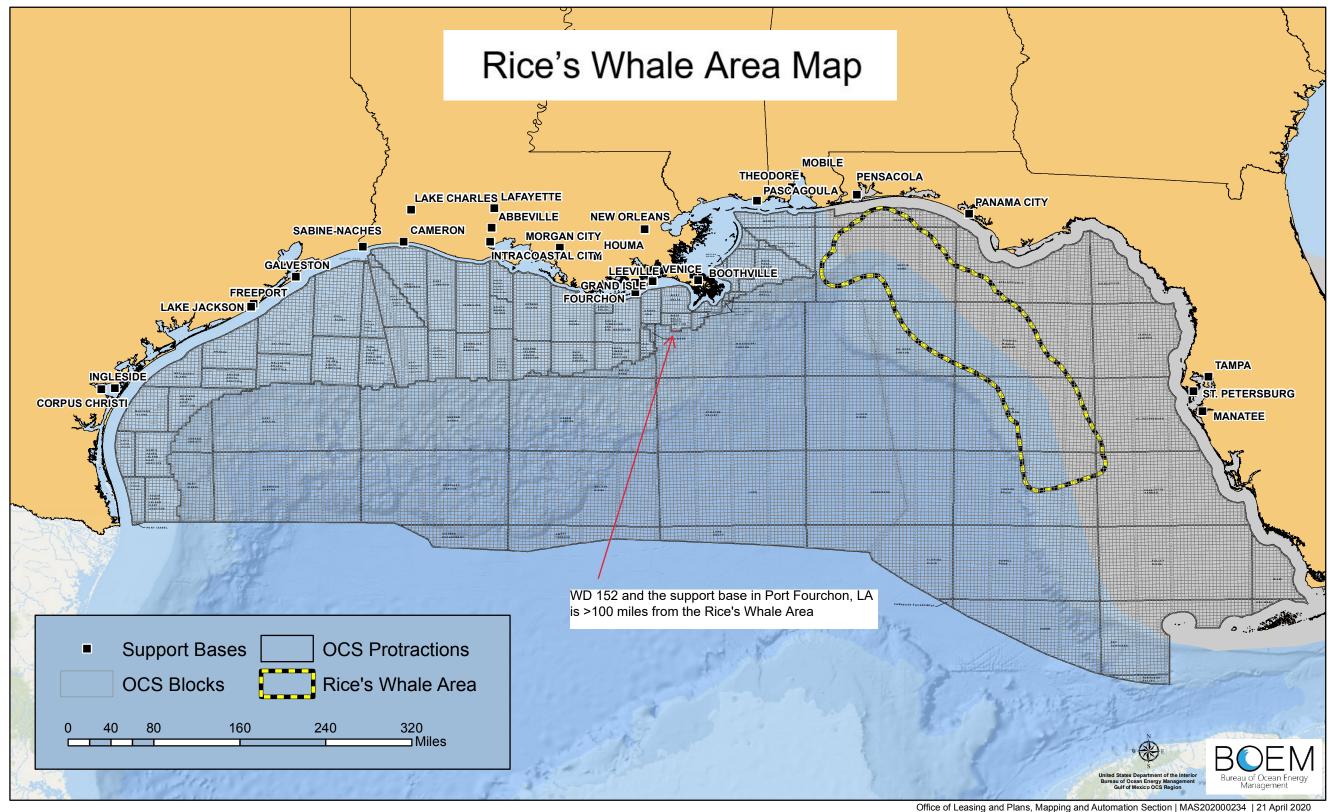


TABLE 1. WASTES YOU WILL GENERATE, TREAT AND DOWNHOLE DISPOSE OR DISCHARGE TO THE GOM

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

Domestic waste Trash/Debris .4 cubic meters/day Sanitary waste Sanitary Waste 120 gal/day 12 Is there a deck? If yes, there will be Deck Drainage Deck Drainage Rainfall 35 bbls/well 1 bl Will you conduct well treatment, completion, or workover? Well treatment fluids N/A N/A Well completion fluids CaCl ₂ 500 bbls/well 100 l Workover fluids Brine 300 bbls/well 100 l	N/A N/A N/A N/A N/A Transj 0 gal/day Ov	N/A	A A A
Will drilling occur ? If yes, you should list muds and cuttings Water-based drilling fluid Cuttings wetted with water-based fluid N/A Synthetic-based drilling fluid N/A N/A N/A Cuttings wetted with synthetic-based fluid N/A Cuttings wetted with synthetic-based fluid N/A Will humans be there? If yes, expect conventional waste Domestic waste Sanitary waste Sanitary waste Sanitary waste Sanitary Waste 120 gal/day 12 Is there a deck? If yes, there will be Deck Drainage Deck Drainage Rainfall S5 bbls/well 1 bi Will you conduct well treatment, completion, or workover? Well treatment fluids N/A Well completion fluids CaCl ₂ 500 bbls/well Workover fluids Brine 300 bbls/well 100 l Miscellaneous discharges. If yes, only fill in those associated with your activity. Desalinization unit discharge N/A N/A N/A Blowout prevent fluid N/A	N/A N/A N/A N/A N/A N/A Transj 0 gal/day Ov	N/A	A A A
Water-based drilling fluid Cuttings wetted with water-based fluid N/A N/A N/A N/A N/A N/A Cuttings wetted with synthetic-based fluid N/A Cuttings wetted with synthetic-based fluid N/A N/A Will humans be there? If yes, expect conventional waste Domestic waste Sanitary waste Sanitary waste Deck Drainage Deck Drainage Rainfall Will you conduct well treatment, completion, or workover? Well treatment fluids Workover fluids N/A Will completion fluids CaCl ₂ Soo bbis/well N/A Will completion fluids Brine Miscellaneous discharges. If yes, only fill in those associated with your activity. Desalinization unit discharge N/A N/A N/A N/A N/A N/A N/A N/	N/A N/A N/A N/A N/A Trans 0 gal/day Ov	N/A	A A A
Cuttings wetted with water-based fluid Synthetic-based drilling fluid Cuttings wetted with synthetic-based fluid N/A N/A N/A N/A Will humans be there? If yes, expect conventional waste Domestic waste Sanitary waste Deck Drainage Deck Drainage Rainfall Will you conduct well treatment, completion, or workover? Well treatment fluids Well completion fluids CaCl ₂ Sono bbls/well Workover fluids Brine Desalinization unit discharge Blowout prevent fluid Ballast water N/A N/A N/A N/A N/A N/A N/A N/	N/A N/A N/A Trans 0 gal/day Ov	N/A	A
Synthetic-based drilling fluid Cuttings wetted with synthetic-based fluid N/A N/A N/A Will humans be there? If yes, expect conventional waste Domestic waste Sanitary waste Trash/Debris At cubic meters/day Sanitary Waste 120 gal/day 12 Is there a deck? If yes, there will be Deck Drainage Deck Drainage Rainfall State a deck? If yes, there will be Deck Drainage Will you conduct well treatment, completion, or workover? Well treatment fluids N/A Well completion fluids CaCl ₂ Solo bbls/well 100 il Workover fluids Brine Solo bbls/well N/A N/A Miscellaneous discharges. If yes, only fill in those associated with your activity. Desalinization unit discharge Blowout prevent fluid N/A N/A N/A N/A N/A N/A N/A N/	N/A Trans 0 gal/day Ov	N/A N/. sport To Dock Noverboard No	A 0
Will humans be there? If yes, expect conventional waste Domestic waste	N/A Trans 0 gal/day Ov	sport To Dock verboard No)
Domestic waste Sanitary Waste Sanita	0 gal/day Ov	verboard	
Sanitary waste Sanitary Waste 120 gal/day 12	0 gal/day Ov	verboard	
Is there a deck? If yes, there will be Deck Drainage Deck Drainage Rainfall Will you conduct well treatment, completion, or workover? Well treatment fluids Well completion fluids Workover fluids Rrine N/A Miscellaneous discharges. If yes, only fill in those associated with your activity. Desalinization unit discharge Blowout prevent fluid N/A N/A N/A N/A N/A N/A N/A			
Deck Drainage Rainfall 35 bbls/well 1 bl Will you conduct well treatment, completion, or workover? Well treatment fluids N/A N/A Well completion fluids CaCl ₂ 500 bbls/well 100 l Workover fluids Brine 300 bbls/well 100 l Miscellaneous discharges. If yes, only fill in those associated with your activity. Desalinization unit discharge N/A N/A N/A Blowout prevent fluid N/A N/A N/A Ballast water N/A N/A	bl/day/well Treated	d - Overboard N	
Deck Drainage Rainfall 35 bbls/well 1 bl Will you conduct well treatment, completion, or workover? Well treatment fluids N/A N/A Well completion fluids CaCl ₂ 500 bbls/well 100 l Workover fluids Brine 300 bbls/well 100 l Miscellaneous discharges. If yes, only fill in those associated with your activity. Desalinization unit discharge N/A N/A N/A Blowout prevent fluid N/A N/A N/A Ballast water N/A N/A	bl/day/well Treated	d - Overboard N	
Well treatment fluids Well completion fluids Workover fluids Brine Miscellaneous discharges. If yes, only fill in those associated with your activity. Desalinization unit discharge Blowout prevent fluid Ballast water N/A N/A N/A N/A N/A)
Well treatment fluids Well completion fluids Workover fluids Brine Miscellaneous discharges. If yes, only fill in those associated with your activity. Desalinization unit discharge Blowout prevent fluid N/A Ballast water N/A N/A N/A N/A			
Workover fluids Brine 300 bbls/well 100 l Miscellaneous discharges. If yes, only fill in those associated with your activity. Desalinization unit discharge Blowout prevent fluid N/A Ballast water N/A N/A	N/A	N/A N/	4
Miscellaneous discharges. If yes, only fill in those associated with your activity. Desalinization unit discharge N/A Blowout prevent fluid N/A Ballast water N/A N/A	obls/hr/well Ov	verboard	
Desalinization unit discharge N/A N/A Blowout prevent fluid N/A N/A Ballast water N/A N/A	obls/hr/well Ov	verboard)
Desalinization unit discharge N/A N/A Blowout prevent fluid N/A N/A Ballast water N/A N/A			
Ballast water N/A N/A	N/A	N/A N/.	4
	N/A	N/A N/.	4
Bilge water N/A N/A	N/A	N/A N/.	4
	N/A	N/A N/.	4
Excess cement at seafloor N/A N/A	N/A	N/A N/.	4
Fire water N/A N/A	N/A	N/A N/.	A
Cooling water N/A N/A	N/A	N/A N/A	A
Will you produce hydrocarbons? If yes fill in for produced water.			
Comparison of the content of the c			
Will you be covered by an individual or general NPDES permit ? General	0 bbl/day Process	sed - Overboard No	

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

TABLE 2. WASTES YOU WILL TRANSPORT AND /OR DISPOSE OF ONSHORE please specify whether the amount reported is a total or per well **Solid and Liquid Wastes Projected** generated waste transportation **Waste Disposal** Name/Location of Type of Waste Composition Transport Method Facility Amount Disposal Method Will drilling occur? If yes, fill in the muds and cuttings. Oil-based drilling fluid or mud N/A N/A N/A N/A N/A Synthetic-based drilling fluid or mud N/A N/A N/A N/A N/A 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 Will you have additional wastes that are not permitted for discharge? If yes, fill in the appropriate rows. **EPS Logistics, Port** 1.5 cu yds / Trash & Debris Storage Bins on Crewboat Fourchon Landfill Trash and debris dav Haz waste, oil filters, rags L&L Oilfield Services, Used oil etc. **Drums on Crewboat** Fourchon, LA 4 bbls/day Recycled N/A N/A N/A Wash water N/A N/A **Chemical Product Waste Drums on Crewboat** Chemical product wastes Newpark - ICY 50 lbs/well **Treatment / Recycled**

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

OMB Control No. 1010-0151 OMB Approval Expires: 08/31/2023

COMPANY	Renaissance Offshore, LLC
AREA	West Delta
BLOCK	152
LEASE	G37455
FACILITY	Platform A
WELL	Multiple
COMPANY CONTACT	Janet Cole
TELEPHONE NO.	(832) 333-7766
REMARKS	Update Air Emissions / Transfer Wells & PF 'A' to new Lease #

LEASE TERM	M PIPELINE CO	DNSTRUCTION INFORMATION:
YEAR	NUMBER OF	TOTAL NUMBER OF CONSTRUCTION DAYS
	PIPELINES	
2024		
2025		
2026		
2027		
2028		
2029		
2030		
2031		
2032		
2033		

AIR EMISSIONS COMPUTATION FACTORS

Fuel Usage Conversion Factors	Natural Ga	s Turbines			Natural G	as Engines	Diesel Re	cip. Engine	Diesel *	Turbines			
	SCF/hp-hr	9.524			SCF/hp-hr	7.143	GAL/hp-hr	0.0514	GAL/hp-hr	0.0514			
Equipment/Emission Factors	units	TSP	PM10	PM2.5	SOx	NOx	voc	Pb	co	NH3	REF.	DATE	Reference Links
Natural Gas Turbine	g/hp-hr		0.0086	0.0086	0.0026	1.4515	0.0095	N/A	0.3719	N/A	AP42.3.1-18.3.1-2a	4/00	https://www3.epa.gov/ttnchie1/ap42/ch03/final/c03s01.pdf
RECIP. 2 Cycle Lean Natural Gas	g/hp-hr		0.1293	0.1293	0.0020	6.5998	0.4082	N/A	1.2009	N/A	AP42 3.2-1	7/00	https://www3.epa.gov/ttn/chief/ap42/ch03/final/c03s01.pdf
RECIP. 4 Cycle Lean Natural Gas	g/hp-hr		0.0002	0.0002	0.0020	2.8814	0.4014	N/A	1.8949	N/A	AP42 3.2-2	7/00	https://www3.epa.gov/ttr/chief/ap42/ch03/final/c03s02.pdf
RECIP. 4 Cycle Rich Natural Gas	g/hp-hr		0.0323	0.0323	0.0020	7.7224	0.1021	N/A	11.9408	N/A	AP42 3.2-3	7/00	https://www3.epa.gov/ttn/chief/ap42/ch03/final/c03s02.pdf
Diesel Recip. < 600 hp	g/hp-hr	1	1	1	0.0279	14.1	1.04	N/A	3.03	N/A	AP42 3.3-1	10/96	https://www3.epa.gov/ttnchie1/ap42/ch03/final/c03s03.pdf
Diesel Recip. > 600 hp	g/hp-hr	0.32	0.182	0.178	0.0055	10.9	0.29	N/A	2.5	N/A	AP42 3.4-1 & 3.4-2	10/96	https://www3.ena.gov/ttn/chief/ap42/ch03/final/c03s04.pdf
Diesel Boiler	lbs/bbl	0.0840	0.0420	0.0105	0.0089	1.0080	0.0084	5.14E-05	0.2100	0.0336	AP42 1.3-6; Pb and NH3: WebFIRE (08/2018)	9/98 and 5/10	https://cfpub.epa.gov/webfire/
Diesel Turbine	g/hp-hr	0.0381	0.0137	0.0137	0.0048	2.7941	0.0013	4.45F-05	0.0105	N/A	AP42 3.1-1 & 3.1-2a	4/00	https://www3.epa.gov/ttnchie1/ap42/ch03/final/c03s01.pdf
Dual Fuel Turbine	g/hp-hr	0.0381	0.0137	0.0137	0.0048	2.7941	0.0095	4.45E-05	0.3719	0.0000	AP42 3.1-1& 3.1-2a; AP42 3.1-1 & 3.1-2a	4/00	https://cfpub.epa.gov/webfire/
/essels – Propulsion	g/hp-hr	0.320	0.1931	0.1873	0.0047	7.6669	0.2204	2.24E-05	1.2025	0.0022	USEPA 2017 NEI;TSP refer to Diesel Recip. > 600 hp reference	3/19	
Vessels – Prilling Prime Engine, Auxiliary	g/hp-hr	0.320	0.1931	0.1873	0.0047	7.6669	0.2204	2.24E-05	1.2025	0.0022	USEPA 2017 NELTSP refer to Diesel Recip. > 600 hp reference	3/19	https://www.epa.gov/air-emissions-inventories/2017-national-emissions-
		0.0466	0.1931	0.1417	0.4400	1.4914	0.2204	3.73E-05	0.1491	0.0022	USEPA 2017 NEI; TSP feler to Diesel Recip. > 600 hp felerence USEPA 2017 NEI; TSP (units converted) refer to Diesel Boiler Reference	3/19	inventory-nei-data
Vessels – Diesel Boiler	g/hp-hr										, , , , , , , , , , , , , , , , , , , ,		
Vessels – Well Stimulation	g/hp-hr	0.320	0.1931	0.1873	0.0047	7.6669	0.2204	2.24E-05	1.2025	0.0022	USEPA 2017 NEI;TSP refer to Diesel Recip. > 600 hp reference	3/19	https://www3.epa.gov/ttnchie1/ap42/chU1/final/cU1sU4.pdf
Natural Gas Heater/Boiler/Burner	lbs/MMscf	7.60	1.90	1.90	0.60	190.00	5.50	5.00E-04	84.00	3.2	AP42 1.4-1 & 1.4-2; Pb and NH3: WebFIRE (08/2018)	7/98 and 8/18	https://cfpub.epa.gov/webfire/
Combustion Flare (no smoke)	lbs/MMscf	0.00	0.00	0.00	0.57	71.40	35.93	N/A	325.5	N/A	AP42 13.5-1, 13.5-2	2/18	
Combustion Flare (light smoke)	lbs/MMscf	2.10	2.10	2.10	0.57	71.40	35.93	N/A	325.5	N/A	AP42 13.5-1, 13.5-2	2/18	https://www3.epa.gov/ttn/chief/ap42/ch13/final/C13S05_02-05-18.pdf
Combustion Flare (medium smoke)	lbs/MMscf	10.50	10.50	10.50	0.57	71.40	35.93	N/A	325.5	N/A	AP42 13.5-1, 13.5-2	2/18 2/18	
Combustion Flare (heavy smoke)	lbs/MMscf	21.00	21.00	21.00	0.57	71.40	35.93	N/A	325.5	N/A	AP42 13.5-1, 13.5-2	2/18	
iquid Flaring	lbs/bbl	0.42	0.0966	0.0651	5.964	0.84	0.01428	5.14E-05	0.21	0.0336	AP42 1.3-1 through 1.3-3 and 1.3-5	5/10	https://www3.epa.gov/ttnchie1/ap42/ch01/final/c01s03.pdf
Storage Tank	tons/yr/tank						4.300				2014 Gulfwide Inventory, Avg emiss (upper bound of 95% CI)	2017	https://www.boem.gov/environment/environmental-studies/2014-gulfwid emission-inventory
E. reditions	lbs/hr/component						0.0005				API Study	12/93	https://www.apiwebstore.org/publications/item.cgi?9879d38a-8bc0-4abe
Fugitives	ibs/fii/component						0.0005				API Study	12/93	bb5c-9b623870125d
Glycol Dehydrator	tons/yr/dehydrator											2014	https://www.boem.gov/environment/environmental-studies/2011-gulfwid
-, ,	7. ,						19.240				2011 Gulfwide Inventory; Avg emiss (upper bound of 95% CI)		emission-inventory https://www.boem.gov/environment/environmental-studies/2014-gulfwid
Cold Vent	tons/yr/vent						44.747				2014 Gulfwide Inventory; Avg emiss (upper bound of 95% CI)	2017	emission-inventory
Waste Incinerator	lb/ton		15.0	15.0	2.5	2.0	N/A	N/A	20.0	N/A	AP 42 2.1-12	10/96	https://www3.epa.gov/ttnchie1/ap42/ch02/final/c02s01.pdf
	lbs/gal	0.043	0.043	0.043	0.040	0.604	0.049		0.130	0.003	USEPA NONROAD2008 model; TSP (units converted) refer to Diesel Recip. <600	2009	https://www.gepa.gov/ttricile/r/ap42/CH02/HHdl/C02801.pdf
On-Ice – Loader	ibs/gai	0.043	0.043	0.043	0.040	0.604	0.049	N/A	0.130	0.003	reference	2009	
On-lce - Other Construction Equipment	lbs/gal	0.043	0.043	0.043	0.040	0.604	0.049	N/A	0.130	0.003	USEPA NONROAD2008 model; TSP (units converted) refer to Diesel Recip. <600 reference	2009	
On-Ice – Other Survey Equipment	lbs/gal	0.043	0.043	0.043	0.040	0.604	0.049	N/A	0.130	0.003	USEPA NONROAD2008 model; TSP (units converted) refer to Diesel Recip. <600	2009	
On-lce – Tractor	lbs/gal	0.043	0.043	0.043	0.040	0.604	0.049	N/A	0.130	0.003	USEPA NONROAD2008 model; TSP (units converted) refer to Diesel Recip. <600	2009	https://www.epa.gov/moves/nonroad2008a-installation-and-updates
-		0.043	0.043					N/A			reference USEPA NONROAD2008 model; TSP (units converted) refer to Diesel Recip. <600		
On-lce – Truck (for gravel island)	lbs/gal			0.043	0.040	0.604	0.049		0.130	0.003	reference	2009	
		0.043	0.043	0.043	0.040	0.604	0.049	N/A	0.130	0.003	USEPA NONROAD2008 model; TSP (units converted) refer to Diesel Recip. <600 reference	2009	
On-Ice – Truck (for surveys)	lbs/gal	0.043	0.010										
On-lce – Truck (for surveys) Man Camp - Operation (max people/day)	lbs/gal tons/person/day	0.043	0.0004	0.0004	0.0004	0.006	0.001	N/A	0.001	N/A		2014	https://www.boem.gov/sites/default/files/uploadedFiles/BOEM/BOEM_N
		0.043		0.0004	0.0004	0.006 7.6669	0.001	N/A 2.24E-05	0.001	N/A 0.0022	BOEM 2014-1001 USEPA 2017 NELTSP refer to Diesel Recip. > 600 hp reference	2014	https://www.boem.gov/sites/default/files/uploadedFiles/BOEM/BOEM/Nwsroom/Library/Publications/2014-1001.pdf https://www.epa.gov/air-emissions-inventories/2017-national-emissions-

Sulfur Content Source	Value	Units
Fuel Gas	3.38	ppm
Diesel Fuel	0.0015	% weight
Produced Gas (Flare)	3.38	ppm
Produced Oil (Liquid Flaring)	1	% weight

Natural Gas Flare Parameters	Value	Units
VOC Content of Flare Gas	0.6816	lb VOC/lb-mol gas
Natural Gas Flare Efficiency	98	%

Density and Heat Value of Diesel									
Fuel									
Density	7.05	lbs/gal							
Heat Value	19,300	Btu/lb							

Heat Value of Natural Gas								
Heat Value	1.050	MMRtu/MMscf						

AIR EMISSIONS CALCULATIONS - 1ST YEAR

COMPANY	AREA		BLOCK	LEASE	FACILITY	WELL					CONTACT		PHONE		REMARKS										
Renaissance Offshore, LLC	West Delta		152	G37455	Platform A	Multiple					Janet Cole		(832) 333-7766		Update Air Emis	ssions / Transfer \	Vells & PF 'A' to	new Lease #							
OPERATIONS	EQUIPMENT	EQUIPMENT ID	RATING	MAX. FUEL	ACT. FUEL	RUN	TIME				MAXIMU	M POUNDS PE	ER HOUR							ES'	TIMATED TO	NS			
	Diesel Engines		HP	GAL/HR																					
	Nat. Gas Engines		HP	SCF/HR	SCF/D																				
	Burners		MMBTU/HR	SCF/HR	SCF/D	HR/D	D/YR	TSP	PM10	PM2.5	SOx	NOx	VOC	Pb	CO	NH3	TSP	PM10	PM2.5	SOx	NOx	VOC	Pb	co	NH3
PRODUCTION	RECIP.<600hp Diesel		100	5.1446	123.47	2	365	0.22	0.22	0.22	0.01	3.11	0.23		0.67	-	0.08	0.08	0.08	0.00	1.13	0.08	-	0.24	
	RECIP.<600hp Diesel Generator		160	8.23136	197.55	1	100	0.11	0.06	0.06	0.00	3.84	0.10		0.88		0.01	0.00	0.00	0.00	0.19	0.01		0.04	-
	VESSELS - Shuttle Tankers		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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS - Well Stimulation		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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Natural Gas Turbine		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	0.00		0.00	
	Diesel Turbine		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	0.00	0.00	0.00	0.00	0.00	0.00	
	Dual Fuel Turbine		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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	RECIP. 2 Cycle Lean Natural Gas		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	0.00		0.00	
	RECIP. 4 Cycle Lean Natural Gas - Compressor #1		1680	12000	288000.00	12	365	-	0.00	0.00	0.01	10.67	1.49		7.02			0.00	0.00	0.02	23.37	3.26		15.37	-
	RECIP. 4 Cycle Rich Natural Gas - Generator #1		750	5357.1429	128571.43	12	365	-	0.05	0.05	0.00	12.77	0.17		3.13			0.12	0.12	0.01	27.96	0.37		6.86	
	RECIP. 4 Cycle Rich Natural Gas - Generator #2		750	5357.1429	128571.43	12	365	-	0.05	0.05	0.00	12.77	0.17		19.74			0.12	0.12	0.01	27.96	0.37		43.24	
	RECIP. 4 Cycle Rich Natural Gas - Compressor #1		750	5357.1429	128571.43	12	365	-	0.05	0.05	0.00	12.77	0.17		0.00			0.12	0.12	0.01	27.96	0.37		0.00	-
	RECIP. 4 Cycle Rich Natural Gas - Compressor #2		750	5357.1429	128571.43	12	365	-	0.05	0.05	0.00	12.77	0.17		5.01			0.12	0.12	0.01	27.96	0.37		10.97	
	Glycol Reboiler Burner							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Oil Treater Burner							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Diesel Electric - Generator			0	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Diesel Electric - Generator			0	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Natural Gas Burner - P/L Pump			0	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Natural Gas Burner - P/L Pump			0	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.		BPD	SCF/HR	COUNT																				
	STORAGE TANK				2	24	365	-				-	1.96									8.60			-
	COMBUSTION FLARE - no smoke			0		0	0	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00		0.00	
	COMBUSTION FLARE - light smoke			0		0	0	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00		0.00	-
	COMBUSTION FLARE - medium smoke			0		0	0	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00		0.00	-
	COMBUSTION FLARE - heavy smoke			0		0	0	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00		0.00	4 - /
	COLD VENT				1	24	365	-				-	10.22									44.75		-	4 - /
	FUGITIVES				1	24	365	-				-	0.00									0.00		-	4 - 7
	GLYCOL DEHYDRATOR				0	0	0	-				-	#DIV/0!									0.00	-		4 - 7
	WASTE INCINERATOR		0			0	0		0.00	0.00	0.00	0.00	-		0.00			0.00	0.00	0.00	0.00			0.00	4 - 7
	3 Facility Total Emissions							0.33	0.50	0.50	0.03	68.70	#DIV/0!	0.00	36.45	0.00	0.09	0.55	0.55	0.05	136.55	58.17	0.00	76.73	0.00
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES																965.70			965.70	965.70	965.70		32,093.04	
57.25527.1.514	29.0				1						1 1				1	1				5555				-=,000.04	†
PRODUCTION	VESSELS - Support Diesel		2500	128.615	3086.76	2	365	1.76	1.06	1.03	0.03	42.26	1.21	0.00	6.63	0.01	0.64	0.39	0.38	0.01	15.42	0.44	0.00	2.42	0.00
	3 Non-Facility Total Emissions				1	_	1 /	1.76	1.06	1.03	0.03	42.26	1.21	0.00	6.63	0.01	0.64	0.39	0.38	0.01	15.42	0.44	0.00	2.42	0.00

AIR EMISSIONS CALCULATIONS

COMPANY		AREA	BLOCK	LEASE	RIG	WELL			
Renaissance (Offshore, LLC	West Delta	152	G37455	Platform A	Multiple			
Year				Facilit	y Emitted S	ubstance			
	TSP	PM10	PM2.5	SOx	NOx	voc	Pb	co	NH3
2024-2033	0.09	0.55	0.55	0.05	136.55	58.17	0.00	76.73	0.00
Allowable	965.70	ii —	7	965.70	965.70	965.70		32093.04	

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 storage tank release during production operations, estimated to be 640 barrels of crude oil with an API gravity of ~32°.

<u>Response</u>: Renaissance Offshore, LLC will make every effort to respond to the Worst Case Discharge as effectively as practicable.

Renaissance Offshore, LLC's Oil Spill Response Plan includes alternative response technologies such as dispersants and in-situ burn. Strategies will be decided by Unified Command based on the size of the spill, weather and potential impacts. 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 would provide a daily dispersant capability of 7,540 barrels. 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. Slick containment boom would be immediately called out and on-scene as soon as possible. Offshore response strategies may include attempting to skim utilizing CGA spill response equipment, with a total derated skimming capacity of 48,000 barrels. Temporary storage associated with skimming equipment equals 4,065 barrels. If additional storage is needed, a 25,000 barrel storage barge and a 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 totaled derated skimming capacity of 3,588 barrels. Temporary storage associated with skimming equipment equals 34 barrels. If additional storage is needed, a 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. Onshore response may include the deployment of shoreline boom on beach areas, or protection and sorbent boom on vegetated areas. Letters of Intent from AMPOL and OMI Environmental will ensure access to 147,000 feet of 18" shoreline protection boom. 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. Renaissance Offshore, LLC's contract Spill Management Team holds a copy of the State of Louisiana Initial Oil Spill Response Plan.

Based on the anticipated worst case discharge scenario, Renaissance Offshore, LLC can be onsite with contracted oil spill recovery equipment with adequate response capacity to contain and recover surface hydrocarbons, and prevent land impact, to the maximum extent practicable, within an estimated 35 hours (based on the equipment's Effective Daily Recovery Capacity (EDRC)).

Initial Response Considerations

Actual actions taken during an oil spill response will be based on many factors which include but are not 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

Renaissance Offshore, LLC 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.

Coordination of response assets will be supervised by the designation of a SIMOPS group as necessary for close quarter vessel response activities. Most often, this group will be used during source control events that require a significant number of large vessels operating independently, but in coordination to complete a common objective, in a small area and in close coordination and support of each other. This group must also monitor the subsurface activities of each vessel (ROV, dispersant application, well control support, etc.). The SIMOPS group leader reports to the Source Control Section Chief.

In addition, these activities will be monitored by the spill management team (SMT) and Unified Command via a structured Common Operating Picture (COP) established to track resource and slick movement in real time.

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 will be 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
 - o On-site command and control established

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.

Offshore Response Actions

Equipment Deployment

Surveillance

- Surveillance Aircraft will be deployed within two hours of Qualified Individual (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 Airborne Support Inc. (ASI) on standby
- With the Federal On-Scene Coordinator (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
- VOOs 140' 180' in length
- VOOs with minimum of 18' x 38' or 23' x 50' of optimum deck space
- VOOs in shallow water should have a draft of <10 feet when fully loaded

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 Renaissance Offshore, LLC'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 State On-Scene Coordinator (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

Adverse Weather Operations:

In adverse weather, when seas are ≥ 3 feet, the use of larger recovery and storage vessels, oleophilic skimmers, and large offshore boom will be maximized. Safety will be the overriding factor in all operations and will cease at the order of the Unified Command, vessel captain, or in an emergency, "stop work" may be directed by any crew member.

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Near Shore Response Actions

Timing

- Place near shore assets on standby and deploy 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

- Fast Response Vessels (FRV)
- Egmopol and Marco Shallow Water Skimmer (SWS)
- Operate with aerial spotter directing systems to observed oil slicks

VOO

- Use Renaissance Offshore, LLC'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
- Operate with aerial spotter directing systems to oil patches

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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 for Louisiana, The State of Louisiana Initial Oil Spill Response Plan, Deep Water Horizon, dated 2 May 2010

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:
 - o Trajectories
 - Weather forecast
 - Oil Impact forecast
 - Verified spill movement
 - o 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 in 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.

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FIGURE 1 TRAJECTORY BY LAND SEGMENT

Trajectory of a spill and the probability of it impacting a land segment have been projected utilizing Renaissance Offshore, LLC'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.

Area/Block	OCS-G	Launch Area	Land Segment and/or Resource	Conditional Probability (%) within 30 days
WD 28, Platform DD 7 miles from shore	G34355	C51	Matagorda, TX Galveston, TX Jefferson, TX Cameron, LA Vermilion, LA Iberia, LA Terrebonne, LA Lafourche, LA Jefferson, LA Plaquemines, LA	1 1 3 2 1 6 14 7 23

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COASTAL ZONE MANAGEMENT

CONSISTENCY CERTIFICATION

INITIAL DOCD

West Delta 152

LEASE OCS-G 37455

The proposed activities described in detail in this OCS Plan comply with Louisiana's approved Coastal Zone Management Program and will be conducted in a manner consistent with such Program. Relevant enforceable policies were considered in this certification and will be complied with.

Renaissance Offshore, LLC Lessee or Operator	
Janet Cole	
Janet Cole Certifying Official	
October 13, 2023 Date	