

UNITED STATES GOVERNMENT
MEMORANDUM

February 2, 2022

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

Subject: Public Information copy of plan

Control #	-	N-10182
Type	-	Initial Development Operations Coordinations Document
Lease(s)	-	OCS-G36946 Block - 28 West Delta Area
Operator	-	Renaissance Offshore Inc.
Description	-	Subsea Wells; DD001, DD002 and Platform DD
Rig Type	-	

Attached is a copy of the subject plan.

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

Nawaz Khasraw
Plan Coordinator



December 28, 2021

U.S. Department of the Interior
Bureau of Ocean Energy Management
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394

Attention: Mr. Michelle Picou, Plans Unit (GM 235D)

Re: Initial Development Operations Coordination Document (DOCD) for Lease OCS-G 36946, West Delta Block 28, OCS Federal Waters, Gulf of Mexico, Offshore, Louisiana

Dear Ms. Picou,

In accordance with the provision of Title 30 CFR, Parts 250 and 550, Subpart B, and those certain Notice to Lessees (NTL) 2008-G04 and 2009-G27, Renaissance Offshore, LLC (Renaissance) hereby submits for your review and approval an Initial DOCD requesting transfer from Lease OCS-G 34355, West Delta 28 under new Lease OCS-G 36946 with Renaissance as Operator.

Renaissance acquired West Delta 28 under a new Lease OCS-G 36946 effective February 1, 2021. There are no new wells, structures or pipelines proposed in this IDOCD.

Attached is a Proprietary Information copy and a Public Information copy.

Should you have any questions or require additional information, please contact me at (832) 333-7766 or by email at jcole@renaissanceoffshore.com.

Regards,

A handwritten signature in blue ink that reads "Janet P. Cole".

Janet P. Cole
Director of Regulatory Affairs

**PUBLIC
INFORMATION**

INTERIM CZM INFORMATION REQUIREMENTS FOR
CONSISTENCY REVIEW (15 CFR 930.58) FOR LOUISIANA
West Delta Block 28 (OCS-G 36946)

<i>The specific information OCM for State of Louisiana requires for each Plan/ROW PL is:</i>	<i>Reply or page reference:</i>
1) Description of the proposed activity	Pg 1
2) Location Plat (table - latitude/longitude, water depth, and TVD of each proposed well)	Attachment B
3) Bathymetry Map depicting the surface location and water depth of each proposed well and/or production facility or pipeline (if applicable)	Attachment C
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 H
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
11a) Location of primary oil spill response equipment and staging areas	Pg 11
11b) Estimated time of spill response (from spill detection to equipment deployment on site)	Attachment G
11c) Per 30 CFR 254.26(d)(1), estimated time to contain, to the maximum extent practicable, a worst-case discharge	Attachment G
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	Section 9
13) For EPs and DOCDs – facility tanks, facility fuel tanks, and production vessels over 25 bbls	NA
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 E
22) For EPs and DOCDs , projected generated wastes as required in Table specified by NTL 2008-G04	Attachment E
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 28, Lease OCS-G 36946
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 36946, submits for your review and approval an Initial DOCD requesting the transfer of the two (2) wells and Platform 'DD' from relinquished Lease OCS-G 34355 (N-9805), West Delta 28 under new Lease OCS-G 36946 with Renaissance as operator.

Lease OCS-G 36946, West Delta 28 was issued with an effective date of February 1, 2021, with Renaissance as lessee of record.

The lease is produced by Wells DD001 and DD002, both of which are temporarily abandoned, and flow to Structure DD (CID 2537-1).

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 45 feet of water.

(b) Bathymetry Map and Location Plat

Included as **Attachment B** is a Bathymetry Map. Location plats for the existing structure and wells have been submitted with various applications permitted for Lease OCS-G 36946.

(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

There will be no tanks with a capacity of 25 bbls or more of oil as defined at 30 CFR 254.6 located on this facility.

(e) Service Fees

Receipts from Pay.gov can be found in **Attachment C**.

(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) Drilling Fluids

There are no wells being drilled under this DOCD.

(c) Peak Production Rates / Life of Reserves

PROPRIETARY DATA

(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 45 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.

SECTION 3 - GEOLOGICAL AND GEOPHYSICAL INFORMATION

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**

PROPRIETARY DATA

(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**

PROPRIETARY DATA

(d) **Geological Structure Cross-Sections**

PROPRIETARY DATA

(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) **High Resolution Seismic Lines**

PROPRIETARY DATA

(h) **Stratigraphic Column**

PROPRIETARY DATA

(i) **Time Versus Depth Tables**

PROPRIETARY DATA

(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) Contingency Plan

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

(d) Modeling Report

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

SECTION 5 - MINERAL AND RESOURCE CONVERSATION INFORMATION

(a) **Technology and Reservoir Engineering Practices and Procedures**

PROPRIETARY DATA

(b) **Technology and Recovery Practices and Procedures**

PROPRIETARY DATA

(c) **Reservoir Development**

PROPRIETARY DATA

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) Topographic Features Statement

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) Live Bottom (Pinnacle Trend) Map

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) Potentially Sensitive Biological Features

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 D 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) Socioeconomic Information

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 E (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 E (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) Cooling Water Intakes

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

SECTION 8 - AIR EMISSIONS INFORMATION

(a) Screening Checklist

Included in this section, (if applicable) are the Projected Air Emissions Worksheets prepared in accordance with NTLs 2009-G27 and 2008-G04, associated with this development plan.

Please note that the complex total emissions are the same as the plan emissions.

Screening Questions for DOCD's	Yes	No
Is any calculated Complex Total (CT) Emission amount (in tons) associated with your proposed development activities more than 90% of the amounts calculated using the following formulas: $CT = 3400D^{2/3}$ for CO, and $CT = 33.3D$ for other air pollutants (where D = distance to shore in miles)?		X
Do your emission calculations include any emission reduction measures or modified emission factors?		X
Does or will the facility complex associated with your proposed development and production activities process production from eight or more wells?		X
Do you expect to encounter H ₂ S at concentrations greater than 20 parts per million (ppm)?		X
Do you propose to flare or vent natural gas in excess of the criteria set forth under 250.1105(a)(2) and (3)?		X
Do you propose to burn produced hydrocarbon liquids?		X
Are your proposed development and production activities located within 25 miles (40 kilometers) from shore?	X	
Are your proposed development and production activities located within 124 miles (200 kilometers) of the Breton Wilderness Area?	X	

The following information was prepared by:

Jeff Camp
K. Camp & Associates
Phone : 713.898.8708
Email : Jeff.Camp@kcampassociates.com

(b) Summary Table of Plan Emissions

COMPANY		AREA		BLOCK	LEASE		PLATFORM	WELL(s)	
Renaissance Offshore, LLC.		West Delta		28	G36946		Caisson DD	Multiple	
YEAR	FACILITY EMITTED SUBSTANCE								
	TSP	PM10	PM2.5	Sox	NOx	VOC	Pb	CO	NH3
2022-2031	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allowable	233.10			233.10	233.10	233.10		12441.64	

Detailed spreadsheets are included as **Attachment F**.

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 on March 16, 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

<u>Primary Response Equipment Location</u>	<u>Preplanned Staging Location(s)</u>
Venice, LA Harvey, LA	Houma, 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 miles	Production < 10 miles
Facility Location (area/block)	WD 28	WD 28
Facility Designation ²	Caisson DD	Caisson DD
Distance to Nearest Shoreline (miles)	7	7
Volume ³		
Storage tanks & Flowlines	NA	NA
Lease term pipelines	NA	NA
Uncontrolled blowout	150	150
Total Volume	150 BOPD	150 BOPD
Type of Oil(s) (crude oil, condensate, diesel)	Crude	Crude
API Gravity(s) ⁴	37°	37°

Footnotes:

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

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

3. 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.

Since Renaissance has the capability to respond to the appropriate worst-case spill scenario included in its Regional OSRP approved on March 16, 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.

WCD Calculations Overview

The required data is not applicable as this Plan is submitted to transfer the West Delta Block 28, platform DD and associated wells (relinquished lease OCS-G 34355) to OCS-G 36943 with Renaissance as operator.

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 well blowout during production operations, estimated to be 150 barrels of crude oil with an API gravity of 37°.

There is no drilling proposed under this Plan.

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

(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) Incidental Takes

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.

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 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 28, Lease OCS-G 36946 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. Renaissance 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) Incidental Takes

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.

SECTION 14 - RELATED FACILITIES AND OPERATIONS INFORMATION

(a) Related OCS Facilities and Operations

The producing wells in West Delta 28 are processed, measured, and metered at existing Platform A in West Delta 27. Renaissance does not anticipate the need to install additional processing equipment in this field.

(b) Transportation System

Produced oil/gas from the West Delta 28 'DD' structure is transported via a Renaissance 6-inch BLKO pipeline (SN19263 / ROW OCS-G 29283) to the West Delta 27 A Platform.

Renaissance does not anticipate installation of any new and / or modified onshore facilities to accommodate any additional production under 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.

<u>Type of Vessel</u>	<u>Maximum Fuel Tank Storage Capacity</u>	<u>Maximum No. in Area at Any Time</u>	<u>Trip Frequency or Duration during Production</u>
Supply boat(s)	<500 bbl	1	Once every 14 days
Helicopter	125 gals	1	1 / week

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 D 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) Drilling Fluids Transportation

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 E (Table 2)**.

(e) Vicinity Map

The existing platform in West Delta Area Block 28 is located approximately 7 statute miles from the nearest Louisiana shoreline and approximately 38 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 G**.

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 E (Table 2)**.

SECTION 17 - SULPHUR OPERATIONS INFORMATION

Renaissance is not proposing to conduct Sulphur operations in this plan.

SECTION 18 - COASTAL ZONE MANAGEMENT ACT (CZMA) INFORMATION

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 and can be found in **Attachment H**.

(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.

Environmental Resources	Impact Producing Factors (IPFs) Categories and Examples					
	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		X	X	X	X	
Fisheries		X	X		X	
Marine mammals	(8) X	X			(8) X	
Sea turtles	(8) X	X			(8) X	
Air quality	(9) X					
Shipwreck sites (known or potential)			(7)			
Prehistoric archaeological sites			(7) X			
Vicinity of Offshore Location						
Essential fish habitat		X	X		(6) X	
Marine and pelagic birds	X				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	X	
Wilderness areas				X	X	
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

- 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:
 - 4-mile zone of the Flower Garden Banks, or the 3-mile zone of Stetson Bank,
 - 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;
 - Essential Fish Habitat (EFH) criteria of 500 ft from any no-activity zone; or
 - 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.
- Activities with any bottom disturbance within an OCS lease block protected through the Live Bottom (Pinnacle Trend) Stipulation attached to an OCS lease.
- 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 – West Delta 28, Lease OCS-G 36946

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 in West Delta Area Block 28 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 in West Delta Area Block 28 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 in West Delta Area Block 28 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 45 feet.

5. Water Quality

Effluents, physical disturbances to the seafloor and accidents from the proposed activities in West Delta Area Block 28 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 re-suspension 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.

Drilling mud discharges contain chemicals toxic to marine fishes; however, this is only at concentrations 4 or 5 orders of magnitude higher than those found more than a few meters from the discharge point. Offshore discharges of drilling muds will dilute to background levels within 1000 meters of the discharge point and have a negligible effect on Central Gulf fisheries. 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).

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 action in West Delta Area Block 28. 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.

Air Quality

The proposed development activities are located 7 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 in West Delta Area Block 28 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 in West Delta Area Block 28 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 in West Delta Area Block 28 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 H₂S 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 in West Delta Area Block 28. 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 in West Delta Area Block 28. 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 in West Delta Area Block 28 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.

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.

(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) Mitigation Measures

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)

K. Camp & Associates
Phone: 713.898.8708
Email: Jeff.Camp@kcampassociates.com

(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)

BSEE NTL No. 2015-G03 effective December 17, 2015 for Marine Trash and Debris Awareness and Elimination

BOEM NTL No. 2016-G01 effective January 1, 2012 for Vessel Strike Avoidance and Injured / Dead Protected Species Reporting

BOEM NTL No. 2016-G02 (Implementation of Seismic Survey Mitigation Measures and Protected Species Observer Program)

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-mexico-brydes-whale>
- <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

OCS PLAN INFORMATION FORM

General Information													
Type of OCS Plan:	Exploration Plan (EP)			<input checked="" type="checkbox"/>		Development Operations Coordination Document							
Company Name: Renaissance Offshore, LLC				BOEM Operator Number: 03209									
Address: Two Memorial City Way				Contact Person: Jane Cole									
820 Gessner, Suite 760				Phone Number: 832.333.766									
Houston, TX 77024				Email Address: Jcole@renaissanceoffshore.com									
If a service fee is required under 30 CFR 550.125(a), provide the						Amount paid		\$8,476		Receipt No. 26UALGR7			
Project and Worst Case Discharge (WCD) Information													
Lease(s): OCS-G 36946			Area: WD		Block(s): 28		Project Name (if applicable):						
Objective(s):		<input checked="" type="checkbox"/> Oil	<input checked="" type="checkbox"/> Gas	<input type="checkbox"/> Sulphur		<input type="checkbox"/> Salt		Onshore Support Base(s): Fourchon, LA					
Platform/Well Name: Platform DD			Total Volume of WCD 150 BOPD				API Gravity: 37°						
Distance to Closest Land (Miles): 7				Volume from uncontrolled blowout: NA									
Have you previously provided information to verify the calculations and assumptions for your WCD?								<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No			
If so, provide the Control Number of the EP or DOCD, with which this information was provided.								N-09680					
Do you propose to use new or unusual technology to conduct your activities?								<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No		
Do you propose to use a vessel with anchors to install or modify a structure?								<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No		
Do you propose any facility that will serve as a host facility for deepwater subsea development?								<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No		
Description of Proposed Activities and Tentative Schedule (Mark all that apply)													
Proposed Activity				Start Date		End Date		No. of Days					
Commence Production				04/01/2022				10 Years					
Description of Drilling Rig						Description of Structure							
Jackup				DP Drillship				Caisson				Tension leg platform	
Gorilla Jackup						<input checked="" type="checkbox"/>		Fixed platform				Compliant tower	
Semisubmersible				Submersible				Spar				Guyed tower	
DP Semisubmersible				Other (attach description)				Floating production system				Other (Attach Description)	
Drilling Rig Name (if known):													
Description of Lease Term Pipelines													
From (Facility/Area/Block)			To (Facility/Area/Block)			Diameter (Inches)			Length (Feet)				

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

Proposed Well/Structure Location									
Well or Structure Name / Number (if renaming well or structure, reference previous name) Platform DD				Previously reviewed under an approved EP or DOCD?		X	Yes		No
Is this an existing well or structure?		X	Yes		No	If this is an existing well or structure, list the Complex ID or API No.		Complex ID: 2537	
Do you plan to use a subsea BOP or a surface BOP on a floating facility to conduct your proposed activities?							Yes	X	No
WCD info	For wells, volume of uncontrolled blowout (Bbls/day)			For structures, volume of all storage and pipelines (Bbls)		API Gravity of fluid			
	Surface Location			Bottom-Hole Location (For Wells)		Completion (For multiple completions, enter separate lines)			
Lease No.	OCS-G 36946								
Area Name	West Delta								
Block No.	28								
Block Line Departures (in feet)	N/S Departure: 3432' FSL					N/S Departure:		F	L
	E/W Departure: 4322' FEL					E/W Departure:		F	L
Lambert X-Y coordinates	X: 2,565,900'					X:			
	Y: 168,950.40'					Y:			
Latitude / Longitude	Latitude: 29.119222 N					Latitude:			
	Longitude: -89.56113 W					Longitude:			
Water Depth (Feet): 45'				MD (Feet):		TVD (Feet):		MD (Feet):	
Anchor Radius (if applicable) in feet:				NONE				TVD (Feet):	
								MD (Feet):	
								TVD (Feet):	
Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)									
Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor				
			X=	Y=					
			X=	Y=					
			X=	Y=					
			X=	Y=					
			X=	Y=					
			X=	Y=					
			X=	Y=					
			X=	Y=					

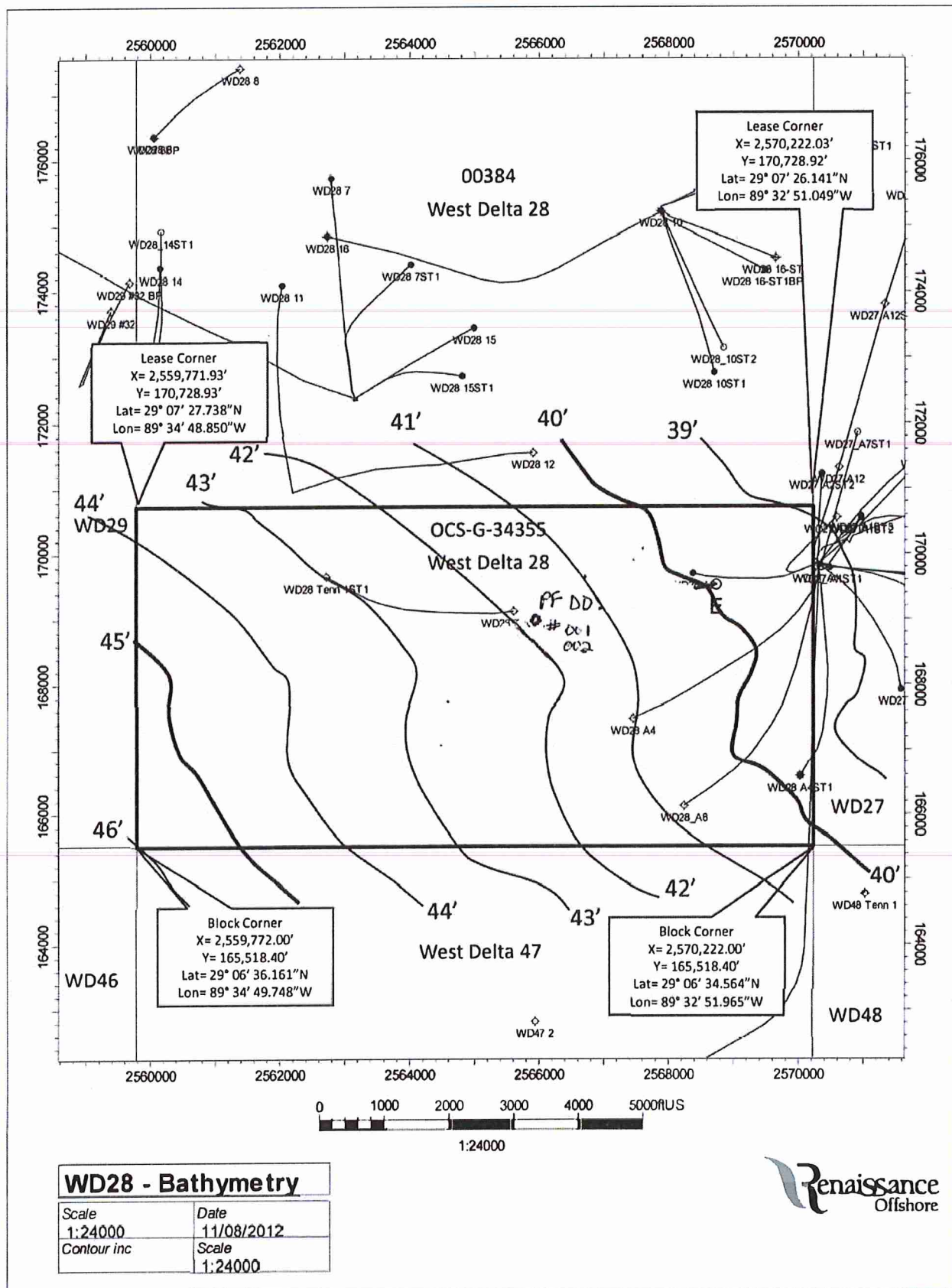
Form BOEM- 0137 (June 2018 - Supersedes all previous editions of this form which may not be used.)

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

Proposed Well/Structure Location									
Well or Structure Name/Number (If renaming well or structure, reference previous name): DD001 ST00BP00				Previously reviewed under an approved EP or DOCD?		<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
Is this an existing well or structure?		<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	If this is an existing well or structure, list the Complex ID or API No.		17-719-40865-00	
Do you plan to use a subsea BOP or a surface BOP on a floating facility to conduct your proposed activities?						<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
WCD info	For wells, volume of uncontrolled blowout (Bbls/day):			For structures, volume of all storage and pipelines (Bbls):			API Gravity of fluid		N/A
	Surface Location			Bottom-Hole Location (For Wells)			Completion (For multiple completions, enter separate lines)		
Lease No.	OCS G 36946			OCS			OCS OCS		
Area Name	West Delta								
Block No.	28								
Blockline Departures (in feet)	N/S Departure: F <u>s</u> L			N/S Departure: F <u> </u> L			N/S Departure: F <u> </u> L		
	3437						N/S Departure: F <u> </u> L		
	E/W Departure: F <u>E</u> L			E/W Departure: F <u> </u> L			E/W Departure: F <u> </u> L		
	4330						E/W Departure: F <u> </u> L		
Lambert X-Y coordinates	X: 2,565,891.755			X:			X: X: X:		
	Y: 168,955.653			Y:			Y: Y: Y:		
Latitude/ Longitude	Latitude 29.119237			Latitude			Latitude Latitude Latitude		
	Longitude -89.561159			Longitude			Longitude Longitude Longitude		
Water Depth (Feet): 40				MD (Feet):		TVD (Feet):		MD (Feet): MD (Feet): MD (Feet):	
Anchor Radius (if applicable) in feet:								TVD (Feet): TVD (Feet): TVD (Feet):	
Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)									
Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor				
			X =	Y =					
			X =	Y =					
			X =	Y =					
			X =	Y =					
			X =	Y =					
			X =	Y =					
			X =	Y =					
			X =	Y =					

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

Proposed Well/Structure Location									
Well or Structure Name/Number (If renaming well or structure, reference previous name): DD002 ST00BP00				Previously reviewed under an approved EP or DOCD?		<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
Is this an existing well or structure?		<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	If this is an existing well or structure, list the Complex ID or API No.		17-719-40866-00	
Do you plan to use a subsea BOP or a surface BOP on a floating facility to conduct your proposed activities?						<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
WCD info	For wells, volume of uncontrolled blowout (Bbls/day):			For structures, volume of all storage and pipelines (Bbls):			API Gravity of fluid N/A		
	Surface Location			Bottom-Hole Location (For Wells)			Completion (For multiple completions, enter separate lines)		
Lease No.	OCS G 36946			OCS			OCS OCS		
Area Name	West Delta								
Block No.	28								
Blockline Departures (in feet)	N/S Departure: F <u>s</u> L			N/S Departure: F <u> </u> L			N/S Departure: F <u> </u> L		
	3442						N/S Departure: F <u> </u> L		
	E/W Departure: F <u>e</u> L			E/W Departure: F <u> </u> L			N/S Departure: F <u> </u> L		
	4325						E/W Departure: F <u> </u> L		
Lambert X-Y coordinates	X: 2,565,897.104			X:			X: X: X:		
	Y: 168,960.827			Y:			Y: Y: Y:		
Latitude/ Longitude	Latitude 29.119251			Latitude			Latitude Latitude Latitude		
	Longitude -89.561142			Longitude			Longitude Longitude Longitude		
Water Depth (Feet): 45				MD (Feet):		TVD (Feet):		MD (Feet): MD (Feet): MD (Feet):	
Anchor Radius (if applicable) in feet:								TVD (Feet): TVD (Feet): TVD (Feet):	
Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)									
Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate		Length of Anchor Chain on Seafloor			
			X =	Y =					
			X =	Y =					
			X =	Y =					
			X =	Y =					
			X =	Y =					
			X =	Y =					
			X =	Y =					
			X =	Y =					



Janet Cole

From: notification@pay.gov
Sent: Tuesday, December 14, 2021 12:15 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 Pay.gov and the details are below. If you have any questions please contact Brenda Dickerson at (703) 787-1617 or BseeFinanceAccountsReceivable@bsee.gov

Application Name: BOEM Development/DOCD Plan - BD
Pay.gov Tracking ID: 26UALGR7
Agency Tracking ID: 76179769393
Transaction Type: Sale
Transaction Date: 12/14/2021 01:14:37 PM EST
Account Holder Name: Brian Romere
Transaction Amount: \$8,476.00
Card Type: MasterCard
Card Number: *****8078

Region: Gulf of Mexico
Contact: Janet Cole 8323337766
Company Name/No: Renaissance Offshore, LLC, 03209
Lease Number(s): 36946, , , ,
Area-Block: West Delta WD, 28: , , , , ,
Type-Wells: Initial Plan, 2

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

Listed Species	Scientific Name	Status	Critical Habitat Designated in Gulf of Mexico	Potential Presence	
				Lease/ Projected Area	Coastal
Marine Mammals					
Blue whale	<i>Balaenoptera musculus</i>	E	None	X ²	-
Fin whale	<i>Balaenoptera physalus</i>	E	None	X ²	-
Humpback whale	<i>Megaptera novaeangliae</i>	E	None	X ²	-
Sei whale	<i>Balaenoptera borealis</i>	E	None	X ²	-
Sperm whale	<i>Physeter macrocephalus</i>	E	None	X	-
West Indian manatee ¹	<i>Trichechus manatus</i>	E	Florida (peninsular)	-	X
North Atlantic Right whale	<i>Eubalaena glacialis</i>	E	None	X ²	-
Bryde's whale ³	<i>Balaenoptera edeni</i>	E	None	X	-
Rice's whale ³	<i>Balaenoptera ricei</i>	E	None	X	-
Terrestrial Mammals					
Beach Mice (Alabama, Choctawhatchee, Perdido Key, St. Andrew)	<i>Peromyscus polionotus</i>	E	Alabama and Florida (Panhandle) Beaches	-	X
Sea Turtles					
Green sea turtle	<i>Chelonia mydas</i>	T	None	X	X
Hawksbill sea turtle	<i>Eretmochelys imbricata</i>	E	None	X	X
Kemp's ridley sea turtle	<i>Lepidochelys kempii</i>	E	None	X	X
Leatherback sea turtle	<i>Dermochelys coriacea</i>	E	None	X	X
Loggerhead sea turtle	<i>Caretta caretta</i>	T	Nesting beaches and nearshore reproductive habitat in Mississippi, Alabama, and Florida (Panhandle); Sargassum habitat including most of the central & western Gulf of Mexico.	X	X
Fish					
Gulf Sturgeon	<i>Acipenser oxyrinchus desotoi</i>	T	Coastal Louisiana, Mississippi, Alabama, and Florida (Panhandle)	X	X
Giant manta ray	<i>Manta birostris</i>	E	None	X	-
Oceanic whitetip shark	<i>Carcharhinus longimanus</i>	T	None	X	-
Smalltooth sawfish	<i>Pristis pectinate</i>	E	Southwest Florida	-	X
Nassau grouper	<i>Epinephelus striatus</i>	T	None	-	X

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

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.

Rice's Whale Area Map

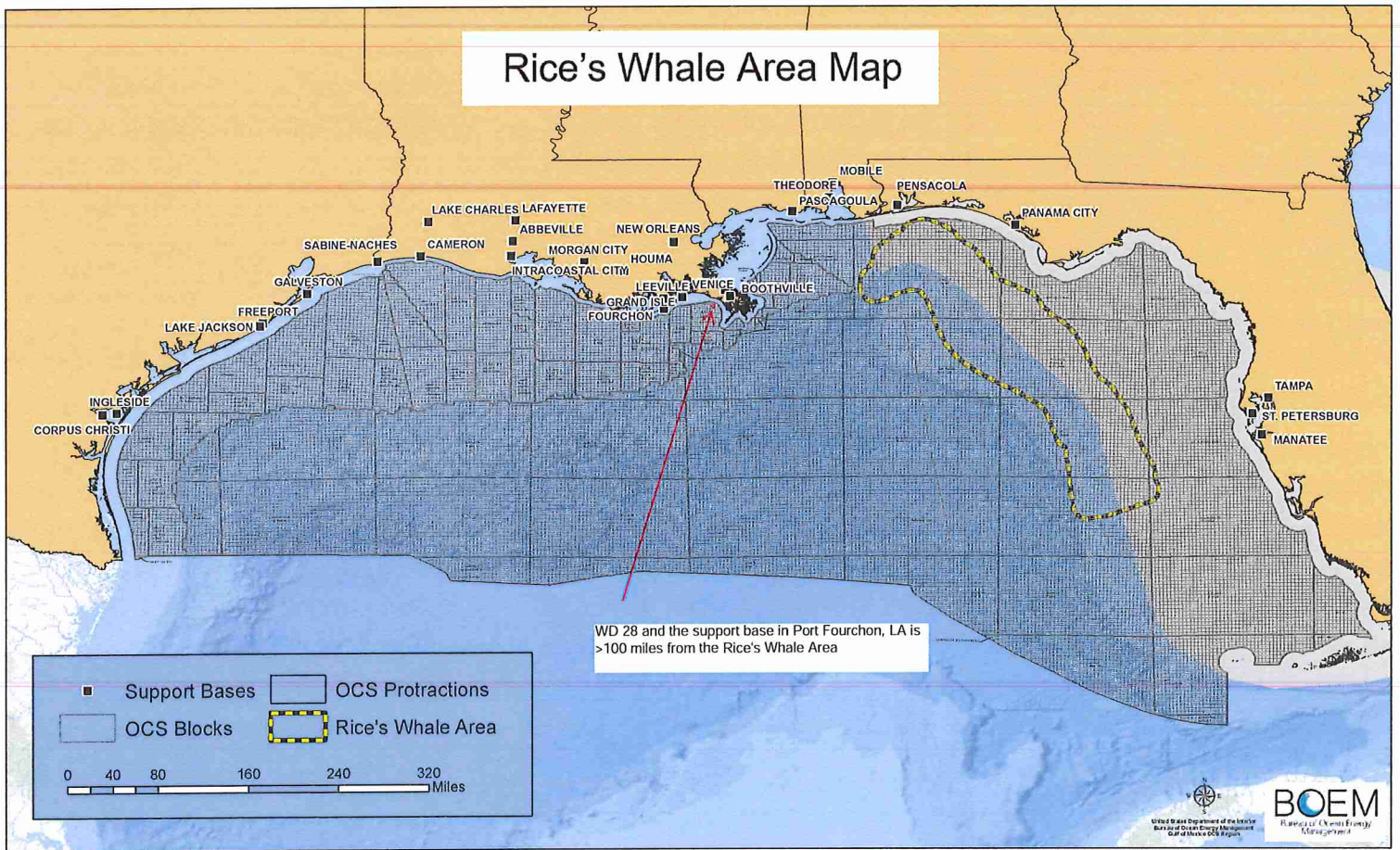


TABLE 1. WASTES YOU WILL GENERATE, TREAT AND DOWNHOLE DISPOSE OR DISCHARGE TO THE GOM

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

No Drilling Operations Proposed			Projected ocean discharges		Projected Downhole Disposal
Projected generated waste for Platform DD Installation					
Type of Waste	Composition	Projected Amount	Discharge rate	Discharge Method	Answer yes or no
Will drilling occur? If yes, you should list muds and cuttings					
Water-based drilling fluid	NA	NA	NA	NA	NA
Synthetic-based drilling fluid	NA	NA	NA	NA	NA
Cuttings wetted with water-based fluid	NA	NA	NA	NA	NA
Cuttings wetted with synthetic-based fluid	NA	NA	NA	NA	NA
Will humans be there? If yes, expect conventional waste					
Domestic waste	Kitchen waste	12,950 bbls	350 bbl/day	remove floating solids and discharge	No
Sanitary waste	Sanitary waste	3,700 bbls	100 bbl/day	chlorinate and discharge	No
Is there a deck? If yes, there will be Deck Drainage					
Deck Drainage	Rainfall & potable water	6,660 bbls	180 bbl/day	filter oil and grease and discharge	No
Will you conduct well treatment, completion, or workover?					
Well treatment fluids	NA	NA	NA	NA	No
Well completion fluids	NA	NA	NA	NA	No
Workover fluids	NA	NA	NA	NA	No
Miscellaneous discharges, if yes, only fill in those associated with your activity.					
Desalinization unit discharge	NA	NA	NA	NA	No
Flowout prevent fluid	NA	NA	NA	NA	No
Ballast water	NA	NA	NA	NA	No
Bilge water	NA	NA	NA	NA	No
Excess cement at seafloor	NA	NA	NA	NA	No
Fire water	NA	NA	NA	NA	No
Cooling water	NA	NA	NA	NA	No
Will you produce hydrocarbons? If yes fill in for produced water.					
Produced water	NA	NA	NA	NA	No
Will you be covered by an individual or general NPDES permit?			GENERAL		
NOTE: If you will not have a type of waste, enter NA in the row.					

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

PUBLIC INFORMATION COPY

DOCD/DPP - AIR QUALITY

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

COMPANY	Renaissance Offshore, LLC
AREA	West Delta
BLOCK	28
LEASE	G36946
FACILITY	Platform DD
WELL	Multiple
COMPANY CONTACT	Janet Cole
TELEPHONE NO.	(832) 333-7766
REMARKS	Update Air Emissions / Transfer Lease #

LEASE TERM PIPELINE CONSTRUCTION INFORMATION:		
YEAR	NUMBER OF PIPELINES	TOTAL NUMBER OF CONSTRUCTION DAYS
2022		
2023		
2024		
2025		
2026		
2027		
2028		
2029		
2030		
2031		

AN EMISSIONS COMPUTATION FACTORS

Fuel Usage Conversion Factors		Natural Gas Turbines		Natural Gas Engines		Diesel Recip. Engines		Diesel Turbines		REF.	DATE	Reference Links
		SCF/gp-hr	9.524	SCF/gp-hr	7.143	Gal/gp-hr	0.0514	Gal/gp-hr	0.0514			
Equipment/Emission Factors	units	TSP	PM10	PM2.5	SOx	NOx	VOC	Ph	CO	NH3		
Natural Gas Turbine	g/hp-hr		0.0005	0.0005	0.0026	1.4515	0.0095	N/A	0.3719	N/A	APD 3.11.3.1.2a	450
RECIP. 2 Cycle Lean Natural Gas	g/hp-hr		0.1293	0.1293	0.0020	6.5993	0.4082	N/A	1.2009	N/A	APD 3.2.1	760
RECIP. 4 Cycle Lean Natural Gas	g/hp-hr		0.0002	0.0002	0.0020	2.8814	0.4014	N/A	1.8549	N/A	APD 3.2.2	760
RECIP. 4 Cycle Rich Natural Gas	g/hp-hr		0.0033	0.0033	0.0020	7.7224	0.1021	N/A	1.5108	N/A	APD 3.2.3	760
Diesel Recip. < 600 hp	g/hp-hr	1	1	1	0.0279	14.1	1.04	N/A	3.03	N/A	APD 3.3.1	1095
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	APD 3.4.1 & 3.4.2	1095
Diesel Boiler	lb/MMBtu	0.0840	0.0420	0.0105	0.0089	1.0050	0.0084	5.14E-05	0.2100	0.0336	APD 3.5.6, Ph and NH3, World RE (06/2016)	858 and 919
Diesel Turbine	g/hp-hr	0.0381	0.0137	0.0137	0.0048	2.7941	0.0033	4.45E-05	0.0105	N/A	APD 3.1.1 & 3.1.2a	450
Dual Fuel Turbine	g/hp-hr	0.0381	0.0137	0.0137	0.0048	2.7941	0.0033	4.45E-05	0.0105	0.0300	APD 3.1.1 & 3.1.2a; APD 3.1.1 & 3.1.2b	450
Vessels - 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. > 600hp reference	319
Vessels - Drilling 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 NEI TSP refer to Diesel Recip. > 600hp reference	319
Vessels - Diesel Boiler	g/hp-hr	0.0466	0.1491	0.1417	0.4400	1.4914	0.0020	3.73E-05	0.1491	0.0003	USEPA 2017 NEI TSP for its converted refer to Diesel Boiler Reference	319
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. > 600hp reference	319
Natural Gas Heater/Boiler/Burner	lb/MMBtu	7.60	1.50	1.50	0.60	190.00	5.50	5.00E-04	84.00	3.2	APD 3.4.1 & 3.4.2, Ph and NH3, World RE (06/2016)	759 and 819
Combustion Flare (no smoke)	lb/MMBtu	0.00	0.00	0.00	0.57	71.40	35.93	N/A	325.5	N/A	APD 15.1.1.13.2	218
Combustion Flare (light smoke)	lb/MMBtu	2.10	2.10	2.10	0.57	71.40	35.93	N/A	325.5	N/A	APD 15.1.1.13.2	218
Combustion Flare (medium smoke)	lb/MMBtu	10.50	10.50	10.50	0.57	71.40	35.93	N/A	325.5	N/A	APD 15.1.1.13.2	218
Combustion Flare (heavy smoke)	lb/MMBtu	21.00	21.00	21.00	0.57	71.40	35.93	N/A	325.5	N/A	APD 15.1.1.13.2	218
Liquid Flaring	lb/MMBtu	0.42	0.0965	0.0551	5.964	0.81	0.01428	5.14E-05	0.21	0.0336	APD 3.3.1 except 1.3.3 and 1.3.5	516
Storage Tank	lb/MMBtu						4.300				2014 Gulfstate Inventory, Argonne's Upper bound of 95% CH ₄	2017
Fugitars	lb/MMBtu						0.0005				API Study	10301
Cylindrical Dehydrator	lb/MMBtu						19.240				2011 Gulfstate Inventory, Argonne's Upper bound of 95% CH ₄	2014
Cold Vent	lb/MMBtu						44.747				2014 Gulfstate Inventory, Argonne's Upper bound of 95% CH ₄	2017
Waste Incinerator	lb/MMBtu		15.0	15.0	2.5	2.0	N/A	N/A	20.0	N/A	AP 42 2.1-2	1095
On-line - Loader	lb/gal	0.043	0.043	0.043	0.040	0.604	0.049	N/A	0.130	0.003	USEPA MOV6/02/2008 model, TSP for its converted refer to Diesel Recip. > 600hp reference	2009
On-line - Other Construction Equipment	lb/gal	0.043	0.043	0.043	0.040	0.604	0.049	N/A	0.130	0.003	USEPA MOV6/02/2008 model, TSP for its converted refer to Diesel Recip. > 600hp reference	2009
On-line - Other Survey Equipment	lb/gal	0.043	0.043	0.043	0.040	0.604	0.049	N/A	0.130	0.003	USEPA MOV6/02/2008 model, TSP for its converted refer to Diesel Recip. > 600hp reference	2009
On-line - Tractor	lb/gal	0.043	0.043	0.043	0.040	0.604	0.049	N/A	0.130	0.003	USEPA MOV6/02/2008 model, TSP for its converted refer to Diesel Recip. > 600hp reference	2009
On-line - Truck (for gravel island)	lb/gal	0.043	0.043	0.043	0.040	0.604	0.049	N/A	0.130	0.003	USEPA MOV6/02/2008 model, TSP for its converted refer to Diesel Recip. > 600hp reference	2009
On-line - Truck (for survey)	lb/gal	0.043	0.043	0.043	0.040	0.604	0.049	N/A	0.130	0.003	USEPA MOV6/02/2008 model, TSP for its converted refer to Diesel Recip. > 600hp reference	2009
Man Camp - Operation (max people/day)	lb/MMBtu	0.0004	0.0004	0.0004	0.0006	0.001	N/A	0.001	N/A		BOEH 2014-1001	2014
Vessels - Ice Management Diesel	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. > 600hp reference	319
Vessels - Heavyweight Diesel	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. > 600hp reference	319

Sulfur Content Source	Value	Units
Fuel Gas	3.33	ppm
Diesel Fuel	0.0015	% weight
Produced Gas (Flare)	3.33	ppm
Produced Oil (Liquid Flare)	1	% weight

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

Heat Value of Natural Gas	Value	Units
Heat Value	1,050	MMBtu/MMBtu

Natural Gas Flare Parameters	Value	Units
VOC Content of Flare Gas	0.6316	lb VOC/lb mol gas
Natural Gas Flare Efficiency	90	%

ATTACHMENT F

[illegible]

ATTACHMENT F

AIR EMISSIONS CALCULATIONS

COMPANY	AREA	BLOCK	LEASE	RIG	WELL				
Renaissance Offshore, LLC	West Delta	28	G36946	Platform DD	Multiple				
Year	Facility Emitted Substance								
	TSP	PM10	PM2.5	SOx	NOx	VOC	Pb	CO	NH3
2022-2031	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allowable	233.10			233.10	233.10	233.10		12441.64	

ATTACHMENT F

SPILL RESPONSE DISCUSSION

For the purpose of NEPA and Coastal Zone Management Act analysis, the largest spill volume originating from the proposed activity would be a well blowout during production operations, estimated to be 150 barrels of crude oil with an API gravity of 37°.

Land Segment and Resource Identification

Trajectories of a spill and the probability of it impacting a land segment have been projected utilizing information in the BOEM Oil Spill Risk Analysis Model (OSRAM) for the Central and Western Gulf of Mexico available on the BOEM website. The results are shown in **Figure 1**. The BOEM OSRAM identifies a 23% probability of impact to the shorelines of Plaquemines Parish, Louisiana within 30 days. Plaquemines Parish includes Barataria Bay, the Mississippi River Delta, Breton Sound and the affiliated islands and bays. This region is an extremely sensitive habitat and serves as a migratory, breeding, feeding and nursery habitat for numerous species of wildlife. Beaches in this area vary in grain particle size and can be classified as fine sand, shell or perched shell beaches. Sandy and muddy tidal flats are also abundant.

Response

Renaissance Offshore, LLC will make every effort to respond to the Worst Case Discharge as effectively as practicable. A description of the response equipment under contract to contain and recover the Worst Case Discharge is shown in **Figure 2**.

Using the estimated chemical and physical characteristics of crude oil, an ADIOS weathering model was run on a similar product from the ADIOS oil database. The results indicate 50% or approximately 75 barrels of crude oil would be evaporated/dispersed within 24 hours, with approximately 75 barrels remaining.

Spill Response WD 28, Platform DD	Barrels of Oil
WCD Volume	150
Less 50% natural evaporation/dispersion	75
Remaining volume	75

Figure 2 outlines equipment, personnel, materials and support vessels as well as temporary storage equipment available to respond to the worst case discharge. The volume accounts for the amount remaining after evaporation/dispersion at 24 hours. The list estimates individual times needed for procurement, load out, travel time to the site and deployment. **Figure 2** also indicates how operations will be supported.

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. **Figure 2** outlines individual times needed for procurement, load out, travel time to the site and deployment. Strategies would be based upon surveillance and real time trajectories that depict areas of potential impact given actual sea and weather conditions. The State of Louisiana Initial Oil Spill Response Plan for Plaquemines Parish and Unified Command would be consulted to ensure that environmental and special economic resources would be correctly identified and prioritized to ensure optimal protection. Shoreline protection strategies depict the protection response modes applicable for oil spill clean-up operations. The State of Louisiana Initial Oil Spill Response Plan provides detailed shoreline protection strategies for this area, and it describes necessary action to keep the oil spill from entering Louisiana's coastal wetlands, based on the assumption that removal of the released oil will be much easier and less damaging to fragile coastal ecosystems if done in the open waters of the Gulf of Mexico. Supervisory personnel have the option to modify the deployment and operation of equipment allowing a more effective response to site-specific circumstances. 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
 - 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.

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)
- Egmpol 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

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:
 - Trajectories
 - Weather forecast
 - Oil Impact forecast
 - Verified spill movement
 - Boom, manpower and vessel (shallow draft) availability
 - Near shore boom and support material, (stakes, anchors, line)

Beach Preparation

Considerations and Actions

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

Decanting Strategy

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

CGA Equipment Limitations

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

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

Environmental Conditions in the GOM

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

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

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

FIGURE 1
TRAJECTORY BY LAND SEGMENT

<p>Trajectory of a spill and the probability of it impacting a land segment have been projected utilizing 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.</p>				
Area/Block	OCS-G	Launch Area	Land Segment and/or Resource	Conditional Probability (%) within 30 days
WD 28, Platform DD <i>7 miles from shore</i>	G34355	C51	Matagorda, TX	1
			Galveston, TX	1
			Jefferson, TX	1
			Cameron, LA	3
			Vermilion, LA	2
			Iberia, LA	1
			Terrebonne, LA	6
			Lafourche, LA	14
			Jefferson, LA	7
			Plaquemines, LA	23

WCD Scenario– BASED ON WELL BLOWOUT DURING PRODUCTION OPERATIONS (7 miles from shore)

75 bbls of crude oil (Volume considering natural weathering)

API Gravity 37°

FIGURE 2 – Equipment Response Time to WD 28, Platform DD*Dispersants/Surveillance*

Dispersant/Surveillance	Dispersant Capacity (gal)	Storage Capacity	Persons Req.	From	Hrs to Procure	Hrs to Loadout	Travel to site	Total Hrs
ASI								
Basler 67T	2000	NA	2	Houma	1	1	0.4	2.4
DC 3	1200	NA	2	Houma	1	1	0.5	2.5
DC 3	1200	NA	2	Houma	1	1	0.5	2.5
Aero Commander	NA	NA	2	Houma	1	1	0.4	2.4

Offshore Response

Offshore Equipment No Staging	EDRC	Storage Capacity	VOO	Persons Required	From	Hrs to Procure	Hrs to Loadout	Hrs to GOM	Travel to Spill Site	Hrs to Deploy	Total Hrs
CGA											
HOSS Barge	43000	4000	3 Tugs	5	Harvey	7	0	5	1.9	1	14.9
46' FRV	5000	65	NA	4	Venice	1	0	1	0.6	0	2.6
Boom Barge (CGA-300) 42" Auto Boom (25000')	NA	NA	1 Tug 50 Crew	4 (Barge) 2 (Per Crew)	Leeville	4	0	6	5.7	1.5	17.2
Recovered Oil Storage No Staging	EDRC	Storage Capacity	VOO	Persons Required	From	Hrs to Procure	Hrs to Loadout	Hrs to GOM	Travel to Spill Site	Hrs to Deploy	Total Hrs
Enterprise Marine Services LLC (available through contract with CGA)											
CTCo 2603	NA	25000	1 Tug	6	Amelia	4	12	4	13.75	1	34.75
CTCo 2604	NA	20000	1 Tug	6	Amelia	4	12	4	13.75	1	34.75

Staging Area: Venice

Offshore Equipment With Staging	EDRC	Storage Capacity	VOO	Persons Req.	From	Hrs to Procure	Hrs to Loadout	Travel to Staging	Travel to Site	Hrs to Deploy	Total Hrs
CGA											
Hydro-Fire Boom	NA	NA	8 Utility	40	Harvey	1	4	2.1	1.3	6	14.4

Nearshore Response

Nearshore Equipment No Staging	EDRC	Storage Capacity	VOO	Persons Required	From	Hrs to Procure	Hrs to Loadout	Hrs to GOM	Travel to Spill Site	Hrs to Deploy	Total Hrs
Enterprise Marine Services LLC (available through contract with CGA)											
CTCo 2605	NA	20000	1 Tug	6	Amelia	4	12	4	15	1	36

Staging Area: Venice

Nearshore and Inland Skimmers With Staging	EDRC	Storage Capacity	VOO	Persons Req.	From	Hrs to Procure	● Hrs to Loadout	Travel to Staging	Travel to Deployment	Hrs to Deploy	Total Hrs
SWS Marco	3588	34	NA	3	Venice	1	2	0	2	0	5

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Shoreline Protection

Staging Area: Venice

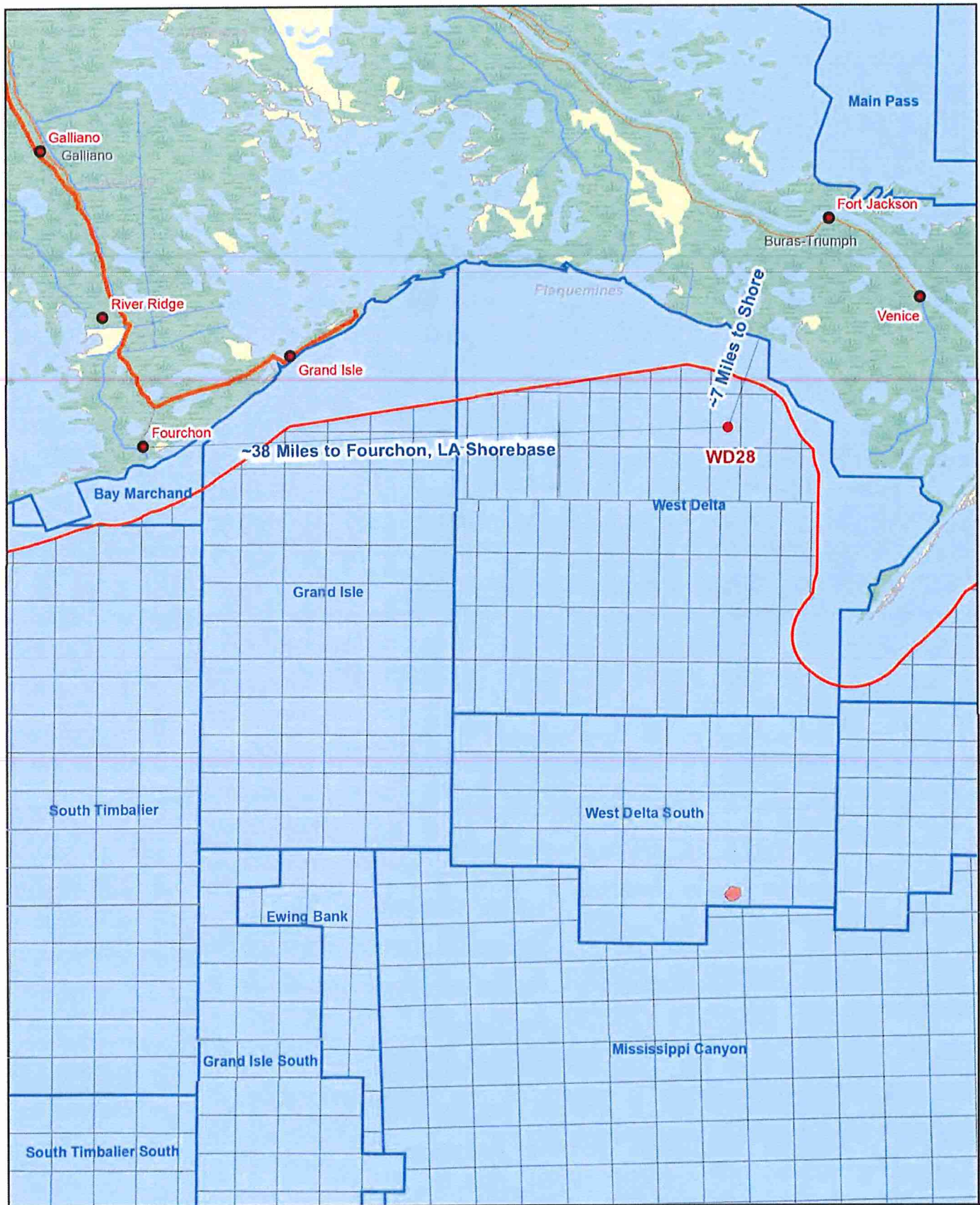
Shoreline Protection Boom	VOO	Persons Req.	Storage/Warehouse Location	Hrs to Procure	Hrs to Loadout	Travel to Staging	Travel to Deployment Site	Hrs to Deploy	Total Hrs
AMPOL (available through Letter of Intent)									
42,000' 18" Boom	16 Crew	40	New Iberia, LA	2	2	6	2	12	24
20,000' 18" Boom	8 Crew	20	New Orleans, LA	2	2	2.2	2	6	14.2
OMI Environmental (available through Letter of Intent)									
10,000' 18" Boom	4 Crew	10	New Iberia, LA	1	1	6	2	3	13
10,000' 18" Boom	4 Crew	10	Houston, TX	1	1	12.1	2	3	19.1
10,000' 18" Boom	4 Crew	10	Port Arthur, TX	1	1	9.7	2	3	16.7
20,000' 18" Boom	8 Crew	20	Belle Chasse, LA	1	1	1.9	2	6	11.9
10,000' 18" Boom	4 Crew	10	Port Allen, LA	1	1	4.5	2	3	11.5
10,000' 18" Boom	4 Crew	10	Houma, LA	1	1	3.8	2	3	10.8
15,000' 18" Boom	6 Crew	14	Gretna, LA (Warehouse)	2	2	2.1	2	4	12.1

Wildlife Response	EDRC	Storage Capacity	VOO	Persons Req.	From	Hrs to Procure	Hrs to Loadout	Travel to Staging	Travel to Deployment	Hrs to Deploy	Total Hrs
Wildlife Support Trailer	NA	NA	NA	2	Harvey	1	2	2.1	1	2	8.1
Bird Scare Guns (48)	NA	NA	NA	2	Harvey	1	2	2.1	1	2	8.1
Bird Scare Guns (12)	NA	NA	NA	2	Galveston	1	2	12.7	1	2	18.7
Bird Scare Guns (12)	NA	NA	NA	2	Aransas Pass	1	2	17.7	1	2	23.7
Bird Scare Guns (24)	NA	NA	NA	2	Lake Charles	1	2	8	1	2	14
Bird Scare Guns (24)	NA	NA	NA	2	Leeville	1	2	4.4	1	2	10.4

Response Asset	Total
Offshore EDRC	48,000
Offshore Recovered Oil Storage	49,065
Nearshore / Shallow Water EDRC	3,588
Nearshore / Shallow Water Recovered Oil Storage	20,034

Renaissance Offshore LLC

Vicinity Map
West Delta 28



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ATTACHMENT G

COASTAL ZONE MANAGEMENT

CONSISTENCY CERTIFICATION

INITIAL DOCD

West Delta 28

LEASE OCS-G 36946

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

December 20, 2021

Date