



CIVIL ENGINEERING  
 PROGRAM/PROJECT MANAGEMENT  
 CONSTRUCTION/CONSTRUCTION MANAGEMENT  
 COASTAL ENGINEERING  
 ENVIRONMENTAL SERVICES  
**OIL & GAS SERVICES**

## OIL & GAS SERVICES

Royal's services integrate technical expertise and practical tools with cutting-edge science and technology.

Royal has the capability to provide a broad range of services for the oil and gas energy sector, including well siting, permitting, environmental assessment/investigation, regulatory compliance, field services, and remediation. Royal has the capability to provide assistance with necessary engineering, project management, and construction management services for shallow, and inland coastal water rig decommissioning and removal projects. Royal's staff of engineers, geologists, biologists, project managers, and construction managers has experience in planning and executing complicated projects and can service clients with varying needs. Royal's services integrate technical expertise and practical tools with cutting-edge science and technology. Royal's experts help companies



protect human health and the environment through sustainable, technical, and economic decision-making, thereby enhancing compliance, reducing long-term costs and risks, and improving community relations. This approach starts internally with the implementation of our own in-house health and safety program.

### Our Oil & Gas Services and Experience includes:

#### ⊗ Engineering Services

- ⊗ Engineering of Pipeline Transmission Systems for Liquid Hydrocarbons & Natural Gas
- ⊗ Horizontal Directional Drilling (HDD) Engineering
- ⊗ Pipeline Cleaning & Pigging Specifications
- ⊗ Well Site Layouts, Grading, & Drainage
- ⊗ Erosion Control
- ⊗ Retention & Detention Pond Engineering

#### ⊗ Decommissioning Service

- ⊗ Structural Engineering & Design
- ⊗ Construction Sequencing
- ⊗ Pipeline Engineering & Decommissioning

#### ⊗ Regulatory Services & Compliance

- ⊗ Drilling and Coastal Use Permits (CUP)
- ⊗ Pollution Prevention Plans (SPCC, SWP3, BMP)
- ⊗ Wetlands Assessment and Mitigation
- ⊗ Field Services (siting, layout, sampling)
- ⊗ Laboratory Analytical testing

### CORPORATE HEADQUARTERS

601 Elysian Fields Avenue  
 New Orleans, Louisiana 70117  
 Phone: 504.309.4129  
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### ADDITIONAL LOCATIONS

- ⊗ New Orleans, Louisiana
- ⊗ Cameron, Louisiana
- ⊗ St. Bernard Parish, Louisiana
- ⊗ Lafayette, Louisiana
- ⊗ Houston, Texas
- ⊗ Mobile, Alabama

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ROYAL DIVISIONS

## Rooster Rig Decommissioning- Vermillion Block 175A- East Cameron Block

**Client:** Cajun Maritime, LLC

**Location:** Gulf of Mexico

**Project Type:** Drafting, Rig Decommissioning, On-Site Inspections



Royal provided professional AutoCAD drafting services for decommissioning of oil and gas platforms in the Gulf of Mexico. Royal created 2 dimensional conventional scaled drawings showing the dimension details of the crane lift radius, positions of barges, rigging, cables, hooks, and sections of structures to be removed for Rooster Petroleum platforms located in offshore blocks East Cameron 129 A and Vermillion block 175 A. More specifically, drawings included but were not limited to a plan view of the lifting spread showing dimensions and positions of barges, crane lifting radius, rigging & hook positions, and structure outlines, an elevation view of the lifting spread, and plan and elevation views of key platform structure modules as needed for identification and removal. Royal also offers structural evaluations of existing platforms to determine the safest and most efficient decommissioning process.

## Oil & Gas Consulting Services – SARPY WELL SITE NO. 9

**Client:** Extex Operating Company

**Location:** St. Charles Parish, Louisiana

**Project Type:** Geological Review, Wetland impacts, Coastal Permitting



Royal performed oil and gas consulting services for Extex Operating Company for the construction of a drill site in St. Charles Parish, Louisiana. Prior to Extex commencing work on the project Royal assisted in conducting a Geological Review, assess environment impacts, explore mitigation options, and acquired necessary coastal permits. Information required for the Geological Review included location of the well, accurate detailed location plats, dimensions of any dredging or filling and any other wetland permits in the area. Royal also assessed the environment impacts to the bottom land hard wood swamp that would be disturbed by the project and made restoration recommendations to mitigate the wetland impacts. Royal obtained approvals from state and federal agencies as required by law. These approvals included, coastal use permits from Coastal Management Division, U.S. Army Corps of Engineers, and water quality certifications from Department of Environmental Quality.

## West Cameron Tank Battery #45 Pipeline Removal and Replacement

**Client:** Nippon Oil Exploration USA

**Location:** Cameron Parish, Louisiana

**Project Type:** Pipeline Engineering, Environmental Compliance, Construction Oversight, Hazardous Materials Testing & Disposal, Pressure Testing



Royal performed engineering analyses and design on the repair of hurricane damaged offshore gas and oil transmission pipelines for Nippon Oil Exploration USA. The project consisted of removing approximately 2433' of 4 existing pipelines and replacing the segments removed from two of the in-service pipelines. Replacement pipeline segments consisted of installing one (1) new 1330' long 6" diameter oil transmission pipeline and one (1) new 1330' long 8" diameter gas pipeline. In accordance with this design the two new pipelines were installed via Horizontal Directional Drilling (HDD) to an overall pre-determined depth of 42' below natural ground. All pipeline engineering analyses and design work was performed in accordance with ASME Codes for Pressure Piping; API Standard 1104 for Welding of Pipelines, and DOT regulations for oil & gas pipelines. Royal also coordinated pre- and post- Hydrostatic Pressure Testing and Non-Destructive X-Ray Inspection of the new pipelines.