



EL DORADO TECHNICAL SERVICES, S.E.  
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## COMPANY PROFILE



## TECHNICAL SERVICES, S.E.

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EL DORADO TECHNICAL SERVICES, S.E. is a Puerto Rican partnership formed in 1991. The S.E. continued the corporate business of EL DORADO TECHNICAL SERVICES, INC. It is associated with EL DORADO ENGINEERING CORPORATION, which was formed in 1959 and is still registered in several countries in the Caribbean and South America. EL DORADO has been conducting business in Puerto Rico and the Caribbean for 50 years.

EL DORADO has completed projects and provided services in Guyana, Venezuela, Puerto Rico, Colombia, Guatemala, El Salvador, Honduras, Jamaica, the Virgin Islands, the Bahamas, Bermuda, Haiti, Dominican Republic, Antigua, Grand Cayman and Barbados.

EL DORADO TECHNICAL is a general contractor primarily serving the industrial sector. The major portion of our work is civil, mechanical, instrumentation and electrical construction. We offer services for Engineering, Procurement, Construction and Commissioning (EPCC) of all disciplines.

We have completed more than 2000 contracts. The majority of the contracts are repeat orders for established clients.

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## **ENGINEERING SERVICES**

EL DORADO TECHNICAL SERVICES, S.E. can provide engineering from minor Modifications to complete project designs (in association with partnered local or Stateside firms) , that include:

### **Process Design:**

New projects, revamps and additions to existing plant.

### **Environmental:**

Inspection, pre-design, permitting, final design and remedial clean up.

### **Control Systems:**

Development and application of Terminal functional plc control systems that include load rack controls, pump controls, electrical power house controls, SCADA systems, Tank Management System, Terminal Automation System, etc.

### **Material Handling:**

Bulk liquid and package handling for all types of materials.

Large scope engineering projects are conducted jointly with associated U.S. engineering firms. Smaller projects are Engineered in-house. Various types of inspection and consulting services are also offered.

### **CONSTRUCTION SERVICES**

All disciplines, including purchase responsibility. These include site development, environmental studies and remedies, civil and underground, piling, pipelines, pipe fabrication, structural steel, installation of equipment, towers and process units, electrical systems, tank construction, instrumentation, painting and coating systems. Start-up and commissioning assistance can be also be furnished.

### **MAINTENANCE SERVICES**

Contract maintenance for extended period and turnaround repair services are offered. Repairs to piping, equipment, storage facilities, dock repairs, tank farms, electrical facilities, etc.

TYPICAL PROJECTS

Storage Tanks - Design, Inspection, Supply, Erect and Paint

Sizes - 1,000 bbl. - 15' dia. x 18 high to 500,000 bbl,

240' x 67' high, fixed cone roof and floating roof tanks.

- For many clients in the Caribbean Area and Venezuela

Over 50 years - more than 300 storage tanks erected.

Automated Bottom Loading Truck Loading Racks with Vapor Recovery

Turnkey, Engineering, Procurement and Construction

- Caribbean Petroleum Corporation (CAPECO)

- The Shell Company (P.R.) Ltd.

- Esso Standard Oil Company (P.R.)

- Esso Standard Oil Company (V.I.) and various Caribbean Islands

- Peerless Oil & Chemicals Inc.

- Texaco Puerto Rico Inc.

- Texaco Caribbean Inc.

- Phillips Puerto Rico Core

- Commonwealth Oil Company (CORCO)

- Shell Chemical Yabucoa

- Puma Energy Caribe

- Puma Energy Puerto Rico

- Puma Dominicana, SA

- Best Petroleum

Terminal Process Skids

Turnkey, Engineering, Procurement and Construction of Top & Bottom Loading Skids, Off Loading Skids, LPG Loading Skids, Mercaptan Skids, Metering Skids, etc.

- Puma Energy Colombia

- Puma Energy Puerto Rico

- Puma Dominicana, SA

- Total Petroleum

- Coastal Petroleum Dominicana

- Massy Gas Jamaica

- Puma Paraguay

Expansion/Replacement of Aircraft Fuel Systems, Pipelines

Including underground tanks, pumps, filters, gauging system, etc.

- Luis Muñoz Marin International Airport - Purchase, Design and Construction.

- U.S. Coast Guard - Aguadilla, P.R.

- American Airlines - San Juan, P.R.

- Eastern Airlines - San Juan, P. R.

- PR National Guard – Muñoz' Air Base Carolina P.R.

- Puerto Rico Ports Authority - San Juan, and Ponce, P.R.

- Caribbean Airport Facilities - San Juan, P. R.

- QB Construction, SE – San Juan, P.R.

- Air BP – San Juan, P.R.
- Total Petroleum – San Juan, P.R.
- Puma Aviation – San Juan, P.R.

EPCC complete New Fuel Terminals

Including loading rack, tank farm, offices, warehouse, offshore unloading, etc.

- Esso Standard Oil Company - St. Thomas, U.S. Virgin Islands

New Pier Construction and repairs - Port of San Juan - All phases

- Joint owners - Esso Standard Oil, Texaco, Shell Oil Ltd.
- Placco Asphalt – San Juan, P.R.
- Tropigas LPG – San Juan, P.R.
- Caribbean Petroleum Company – Guaynabo, P.R.

Overhead Gantry Crane Systems

Refurbishing and Replacement

Projects up to 90 ton capacity - six contracts

- Puerto Rico Electric Power Authority - Various Power Plants in Puerto Rico

Environmental Projects

Including Superfund and consent decree remediation projects, cleanup of Refinery equalization ponds and off spec. product ponds, contaminated soil removal projects, redesign of sewage treatment plants, etc.

Mothballing Fueling System at US Naval Station, Roosevelt Roads, P.R.

Remediation of hydrocarbon contaminated sites – Various throughout Puerto Rico

Desalinization Plants

- Government of the VI/Westinghouse - St. Croix and St. Thomas, USVI
- Puerto Rico Electric Power Authority - Palo Seco, P. R.

Cooling Tower Repairs

- Upjohn Pharmaceuticals - Manatí, P. R.
- Puerto Rico Electric Power Authority – Aguirre Steam Plant, Palo Seco Steam Plant.

Modifications to Refinery Effluent Treating System - Turnkey.

Design, procurement and installation.

- Caribbean Gulf Refining - Cataño, P.R.
- Puma Energy Caribe

Purchase and Installation of Cooling Water Intake Filter System for 1500 MW. Generating Units

Puerto Rico Electric Power Authority - South Coast Plant

Tank Farm and Storage Tank Modifications and upgrades including ATG, overfill, piping, pumps, etc.

- The Shell Company (P.R.) Ltd.
- Shell Chemical Yabucoa, Inc.
- Caribbean Petroleum Corporation (Gulf)
- Texaco Puerto Rico Inc.
- Total Petroleum Inc
- Chevron
- Esso Standard Oil Co.
- Puerto Rico Electric Power Authority
- Commonwealth Oil Refining Corporation
- Puerto Rico Sun Oil
- Phillips P.R. Core
- Tropigas de Puerto Rico
- Ferrero & Co.
- Abbott Healthcare Worldwide
- Peerless Chemical & Oils
- The Placco Co.
- Union Carbide Caribe
- Puma Energy Puerto Rico
- Puma Energy Caribe
- Puma Dominicana, SA
- Best Petroleum
- Buckeye – Yabucoa PR
- Various oil companies – Venezuela

Water and WasteWater Treating Plant Projects - Purchase and Installation

- R.J. Reynolds Tobacco Corporation - Yabucoa, P. R.
- US Navy Treatment Plant - Ceiba, P.R.
- Puerto Rico Electric Power Authority - Various sites
- Puerto Rico Aqueduct & Sewer Authority - Various sites
- Pepsi Bottling Co. - Vega Baja, P. R.
- Bard Cardiovascular - Las Piedras, P. R.
- Compañía De Aguas de Puerto Rico - various sites
- Barceloneta Waste water Treatment Corporation - Barceloneta, PR
- pH Neutralization Plant - Amgen, Juncos, PR
- New clarifier – Caribbean Petroleum Corporation

Dock Repair - Refurbish structure and cathodic system, piping systems purchase and installation

- Puerto Rico Electric Power Authority - San Juan, P.R.
- Caribbean Petroleum Corporation - San Juan, P.R.
- Esso Standard Oil Company - San Juan, P.R.
- Commonwealth Oil Refining Company - Guayanilla, P.R.
- Peerless Oil And Chemical – Guayanilla, P.R.



Erect Structural Building Steel and Siding

- U.S. Naval Exchange - Roosevelt Roads, P.R.
- P.R. Electric Power Authority - various plant sites
- Caribbean Petroleum Corporation (Gulf)
- U.S. Coast Guard - Ramey, P.R.
- Commonwealth Oil Refining Company - Ponce, P.R.
- Esso Standard Oil Company - St. Thomas, USVI
- Total Petroleum – Guaynabo P.R.

Power Plant Expansion - Foundation, structural, turbine/generator and mechanical.

- Creole Petroleum -Punta Gorda, Venezuela
- Puerto Rico Electric Power Authority - Various sites

Refinery Construction

Turnkey Installation of Gas Concentration Compressor

Engineering, purchase and installation.

- Caribbean Petroleum Corporation - 2 contracts (repeat orders)

Drip line Stripper Unit - Purchase and Construction

Civil, erect, electrical, instrumentation, insulation, paint, etc.

- P.R. Olefins - Guayanilla, P.R.

Four Units - Unifier, Platformer, Sulfur Recovery and HS Extraction Plant Turnkey

- Joint Venture (Litwin)
- Hess Oil Virgin Island - St Croix

Expansion of Crude Handling Facility

Design, procurement, construction

(pile driving, two pump stations - 30" pipelines, manifold, electrical, instruments, etc.) fully automated.

- Commonwealth Oil Refining Company, P.R.

Grass Root Alkyl Aromatic Plant - 30 million pound/yr.

site preparation, civil, tankage, piping, electrical, etc.

- Quimica Venoca - Valencia, Venezuela

Purchase and Installation of Fish Oils Pilot Plant

- Easton Chemical Caribbean, Inc. - Cataño, P.R.

Refurbish Raw Water Pump Station

-AFI (Compañía de Aguas) Carraízo Dam. Furnish and replace

6 - 15,500 GPM pumps, Asynchronous motors, new substation, all feeders and controls

**PAST AND PRESENT CLIENTS**

**PUERTO RICO**

Abbott Pharmaceuticals, Inc.  
AGVIQ  
Amgen Puerto Rico  
Autoridad Financiera Infraestructura (AFI)  
Air BP (subsidiary of BP-Amoco)  
American Airlines  
Bacardi Corporation  
Bard Cardiopulmonary, Inc.  
Best Petroleum  
Bristol Myers Squibb Co. of Puerto Rico  
Buckeye – Yabucoa PR  
Caribbean Petroleum Corporation (Gulf)  
Caribbean Airport Facilities  
CH2MHill  
Chevron Puerto Rico  
Coastal Petroleum Dominicana  
Commonwealth Oil Refining Company  
Compañía de Aguas de Puerto Rico  
Crown Bay Marina  
Domino Oil  
Eastern Airlines  
Esso Standard Oil Company  
Fluor-Daniels Corporation  
Janssen-Ortho Pharmaceutical  
LG Scott and Associates  
Ogden Aviation, Inc.  
Peerless Oil & Chemicals  
Pfizer Pharmaceuticals, Inc.  
Phillips Petroleum Company  
Placco Company of P.R. Inc.  
P.R. Aqueduct & Sewer Authority (PRASA)  
PPG Industries, Inc.  
Petrox Dominicana, SA  
Puerto Rico Olefins Company  
Puerto Rico Electric Power Authority (PREPA)  
Puma Aviation  
Puma Energy Caribe  
Puma Energy Puerto Rico  
P.R. Ports Authority  
Puerto Rico Sun Oil Company  
R.J. Reynolds Tobacco Company

Shell Chemical Yabucoa, Inc.  
Skanska  
Texaco Caribbean Inc.  
Texaco Puerto Rico, Inc.  
The Fibers Group  
The Air National Guard (Base Muñiz)  
The Shell Company (P. R.) Ltd  
Shell Chemical, P.R.  
Total Petroleum Inc.  
Trafigura LLC  
Travenol Laboratories, Inc.  
Tropigas  
Union Carbide Caribe, Inc.  
United States Navy  
United States Coast Guard  
Upjohn Pharmaceutical Co.

VENEZUELA

Chevron Oil  
Cía. Shell de Venezuela  
Corporación Venezuela de Petróleo  
Creole Petroleum  
C.A. Venoco  
C.A. Energía Eléctrica  
Phillips Petroleum  
Lago Ven  
Mara Ven  
Mene Grande Oil Company

VIRGIN ISLANDS

Crown Bay Marina  
Domino Oil  
Esso Virgin Islands  
Hess Oil, V.I. (HOVENSA)  
Martin Marietta Aluminum  
Placco  
Texaco Caribbean Inc.  
The Shell Company VI Ltd  
Virgin Islands Water & Power Authority (VIWAPA)  
Westinghouse Electric  
USVI Fuels Inc. (Puma)

DOMINICAN REPUBLIC

Coastal Fuels (LPG Terminal)  
Refidomsa (Japan Gasoline Co.)  
Shell Oil Dominicana  
Puma Dominicana, SA  
Petrox Dominicana, SA

GUYANA

Placco  
Shell Oil  
Esso Standard Oil, S.A. Ltd.

THE BAHAMAS

Esso Standard Oil, S.A. Ltd.  
Chevron Texaco Ltd

BERMUDA

Exxon - Esso Standard Oil, S.A. Ltd

GRAND CAYMAN

Exxon - Esso Standard Oil, S.A. Ltd  
ChevronTexaco

ANTIGUA

West Indies Refining

BARBADOS

Chevron Texaco  
Esso Standard Oil, S.A. Ltd.

JAMAICA

PetroJam Ltd.  
Cool Petroleum Ltd.  
Massy Gas Jamaica

COLOMBIA

Puma Colombia

PARAGUAY

Pura Paraguay

References upon request

**PARTIAL LIST OF COMPANY OWNED EQUIPMENT**

|    |   |
|----|---|
| 10 | Cranes - to capacity of 35 tons   |
| 2  | Boom Trucks 15 to 17 Ton  |
| 12 | Compressors - primarily 185 CFM, 375 CFM, 600 CFM, 750 CFM                    |
| 32 | Welding machines - primarily 300-600 amp diesel driven. Also Electric welders |
| 1  | Oil field winch truck   |
| 28 | Pickups - cars, flatbed trucks  |
| 8  | Backhoe/loaders   |
| 1  | Excavator w/ 1 CY bucket  |
| 1  | Backhoe outfitted with hydraulic hammer and hydraulic tamper                  |
| 4  | Generators - diesel driven (10 KV. To 250 KV)                                 |
| 3  | Hydraulic manlifts up to 60 feet  |
| 3  | Recyclable Vacuum shot blaster for tank bottoms, shells and roofs             |
| 2  | Automatic Tank girth Tank welders   |
| 2  | Manual Hot Tap Machine for ½” to 4” taps                                      |
| 1  | Pneumatic Hot Tap Machine for 4” to 12” Hot taps                              |
| 1  | Office Trailers – 40 foot   |
| 1  | Teleboom Lift Lull  |
| 2  | Skid Steer Loader - Bobcat  |

**PERSONNEL**

**LEE HUMBERT - BSCE, P.E.**

Partner, Designer, President

Equipment control and maintenance, purchasing and sales, Safety Coordinator

33 years mechanical and electrical engineering

CAD experience, Equipment Control, Safety Coordinator

32 years with El Dorado

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Designer and Senior Project Manager

31 years electrical engineering experience

In charge of electrical division

Estimating, project management, CAD experience

31 years with El Dorado

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including 2 years pharmaceutical industry

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26 years with El Dorado

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8 Years of experience in general construction

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2 Years of experience in general construction

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Designer/draft person and purchasing - 36 years CAD experience

28 years with El Dorado

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OMAYRA VELEZ

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Bachelor Degree in Finance with concentration in accounting

27 years in the accounting profession

12 years with El Dorado

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5 FIELD SUPERINTENDENTS

Average time with El Dorado: over 15 years (2-40 years)

## REPRESENTATION/DISTRIBUTOR AGREEMENTS

- |  |   |
|--|---|
| 1. BAKER-ALTECH                          | <ul style="list-style-type: none"> <li>- Arp, Texas</li> <li>- Manufacturers of Aluminum floating decks inside of petroleum stored cone roof tanks</li> <li>- Manufacturers of Aluminum geodesic domes for open top tanks in petroleum and wastewater service</li> <li>- Manufacturer of replacement seals for petroleum tanks</li> </ul> |
| 2. ROSEMOUNT TANK GAUGING-               | <ul style="list-style-type: none"> <li>- Gothenburg, Sweden</li> <li>- Manufacturers of Automatic Tank Gauging (ATG) and liquid measurement equipment for API tanks and LPG/Butane bullets and spheres</li> </ul>   |
| 3. MESA INDUSTRIES                       | <ul style="list-style-type: none"> <li>- Houston, Texas</li> <li>- Manufacturers of replacement seals for internal and external floating roof in petroleum service</li> <li>- Manufacturers of roof drain systems for external floating roof tanks</li> </ul>   |
| 4. DANIEL INDUSTRIES                     | <ul style="list-style-type: none"> <li>- Houston, Texas</li> <li>- Manufacturers of automated equipment for truck loading racks in refineries and gasoline bulk terminals including meters, valves, electronic equipment, etc.</li> </ul>   |
| 5. TUFSEAM PANEL SYSTEMS                 | <ul style="list-style-type: none"> <li>- Laporte, Texas</li> <li>- Manufacturers of tank and sphere insulation panel systems</li> </ul>   |
| 6. HONEYWELL-ENRAF<br>(Former Gate City) | <ul style="list-style-type: none"> <li>- Norcross, Georgia</li> <li>- Manufacturers of additive &amp; chemical injection equipment, Master Meter Provers, Inline product blenders, pump system skids, overflow protection equipment, loading arms, etc.</li> </ul>  |
| 7. CIVACON (A Dover Corp)                | <ul style="list-style-type: none"> <li>- Kansas City, MO</li> <li>- Manufacturers of Tank Truck overfill protection, fittings, etc.</li> </ul>  |
| 8. OPW Engineered Systems                | <ul style="list-style-type: none"> <li>- Lebanon, Ohio</li> <li>- Manufacturers of Bottom loading Arms, swivel joints, flow Indicators and more</li> </ul>  |



9. Pasadena Tank Company
- Pasadena, Texas
  - Fabricators of carbon steel above ground API 650 steel storage tanks for petroleum service
  - Repair and construction of large API 650, 620 and AWWA D100 storage tanks.
10. Emerson Terminal Management Solutions
- Houston, Texas
  - Developers of Terminal Automation Solutions

**A REPRESENTATION OF COMPLETED PROJECTS BY DISCIPLINE****CIVIL:**Infrastructure Financing Authority (AFI)

Rehabilitation of the Regional Aguadilla Water Treatment Plant - Aguadilla, PR

Upgrade capacity from 14 MGD to 20 MGD

Raw Water Pump Station - Hatillo, P.R.

Raw Water Pump Station - Aguas Buenas, P.R.

Puerto Rico Sun Oil

Install piling and concrete foundations, concrete ring wall and two 90' dia. storage tanks- Yabucoa, PR

Caribbean Refining Corporation

Install foundation for new skid desulfurization plant

Install tower foundation for 3 vessels

Install various foundations for blowers, pumps, compressors, etc.

Storage Tank foundations

Process Water Clarifier Project

Puerto Rico Electric Power Authority

Install various foundations for demineralizer pits, make up water systems, desalinization plants, etc.

Install piling and concrete foundations for structural crane way extension

Puerto Rico Aqueduct & Sewer Authority

Rehabilitation of Vega Baja Water Filtration Plant - Vega Baja, PR

Expansion of Luquillo Water Filtration Plant - Concrete water tanks, filters, flocculators, etc.

Construction of sludge treatment facilities at Cayey Regional Treatment Plant - Cayey, PR

US Navy

Rehabilitation of Capehart Sewage Treatment Plant

Rehabilitation of all three sewage treatment facilities - Ceiba, P. R.

Upgrade grit removal system

Barceloneta Waste Treatment Corporation (BWTC)

Rehabilitation of Primary and Secondary clarifiers at Regional Plant

Provide odor control system to existing clarifiers at Barceloneta Regional Waste Treatment Plant

Amgen (Fluor Daniels) Juncos, P. R.

Complete waste water treatment facility. Civil, stainless steel tanks, piping, electrical, instrumentation

Puma Energy Caribe.

Complete earth movement for tank patios and Dike walls

Ring foundations for API Storage Tanks

Tank Dike concrete liners

**PIPING:**

PREPA

- Dock unloading system - 20" and 14" piping  
San Juan - Turnkey  
Design - Installation

Esso Standard Oil P.R.

- Tanker oil product unloading facility at the Joint Facilities Dock  
All structural, piping and electrical systems

Total Petroleum P.R.

- Tanker oil product unloading facility at the Joint Facilities Dock  
All structural, piping and electrical systems

PREPA

- Emergency Repair of Penstock 34" dia. Originally built in the 30's  
Material and equipment by helicopter to site - El Yunque, P. R.
- Rehabilitation to their 20" fuel oil transfer line including internal inspection smart pig.

Caribbean Refinery (Gulf):

- Installation of skid fabricated desulfurization plant  
Performed factory inspection  
\$7 Million plant  
Final pipe and structural modification  
Set and pipe, 3 towers, etc.

Caribbean Refinery

- Purchase, install, paint, cross country pipelines, refinery to tanker unloading facility. 4.5 miles of supports and 10 lines. Sizes 8" dia. to 24" dia.

US Navy Roosevelt Roads

- Mothballing 16 above and below ground fuel storage Tanks,  
empty, clean and purge over 5 miles of underground fuel piping

Puma Energy Caribe

- Design and built pipelines from 6" up to 24".
- Design and built fire protection system for API Tanks – 4" and 6" lines.

**FUELING SYSTEMS:**

Puma Energy Caribe, LLC

Design and build Load Rack skids for Gasoline, Diesel, Jet, Fuel Oil and LPG  
Consisted of five (5) Bottom loading skids, one (1) top load skid and two (2) LPG skids

Puma Energy Puerto Rico

Introduced to ethanol blending into the Puerto Rico market and consisted of converting tanks into Ethanol service, pumps, VFD's, piping, ethanol blend skids, start-up and commissioning services.

U.S. Coast Guard - Aguadilla, PR

Computerized loading facility for supplying aircraft with JP-4 fuel.  
Piping instrumentation, environmental and tankage

Caribbean Petroleum Corporation

Bottom Loading Trucks  
Additive systems, computerized operation and accounting  
Vapor disposal  
Turnkey - Design, purchase and installation

Peerless Oil & Chemicals, Inc.

Bottom Loading Trucks  
Additive systems, computerized operation and accounting  
Vapor Incineration  
Turnkey - Design, purchase and installation

The Shell Company (P.R.) Inc.

Bottom Loading Trucks  
Additive systems, computerized operation and accounting  
Vapor recovery system  
Turnkey - Design, purchase and installation

Shell Chemical Yabucoa, Inc.

Bottom Loading Racks for Trucks  
Additive systems, computerized operation and accounting  
Vapor recovery system, LPG loading systems  
Turnkey - Design, purchase and Start-up

Phillips Core - P. R.

Bottom Loading Trucks  
Additive systems, computerized operation and accounting  
Vapor recovery system  
Turnkey - Design, purchase and installation

Esso Standard Oil Company (P.R.)

Two Terminals - Cataño and St. Thomas  
Complete design purchase and installation  
Civil, structural, piping, electrical, etc.  
Complete design purchase and installation

Puerto Rico Electric Power Authority

Rehabilitate Fuel off loading Terminal,  
5 miles of 20" pipeline system, pumping station, etc.

Texaco P.R. Inc.

Two Terminals - Cataño and St. Thomas  
Civil, structural, piping, electrical, etc.  
Rehabilitate Fuel off loading Terminal,

San Juan International Airport:

Expansion and/or replacement of aircraft fueling systems  
Fueling systems - design, purchase and installation - Various contracts - 14 years  
American Airlines  
Eastern Airlines  
Caribbean Airport Facilities  
P.R. Ports Authority  
Air BP

PRANG

Replace filtering system including all Stainless Steel Piping

Total Petroleum

Complement design and build a butanization plant at their Facilities in Guaynabo, including but not limited to new foundations, shelters, Carbon and Stainless Steel Piping, Electrical Distribution.

**ELECTRICAL:**

Puma Energy Caribe

EPCC contract to build new Medium and Low Voltage Buildings  
Included tilt-up concrete buildings, HVAC, Med Voltage VFD's  
Cable tray system, Buss Bars, Low Voltage VFD's, PLC controls,  
Lighting, Network architecture, SCADA system, etc.

AFI - Carraízo Dam

Replacement of primary transformers, substation  
upgrade, replacement of feeders and control system for six 15,000 GPM pumps

Caribbean Petroleum Corporation

Complete plant audit and survey to insure compliance with  
Section 500 of the NEC - up to 4160 V systems  
Electrical substation upgrade, monitoring and modification - 38 KV / 4160 V

Puerto Rico Electric Power Authority

South Coast Plant - Units 5 & 6  
U.P.S. room for instrumentation systems, battery charging, etc.  
Partial design and full installation  
Civil and Electrical  
New feeders for the Bunker C oil pumps - 480 V

Puerto Rico Electric Power Authority

Water Induction System - Mechanical and electrical  
-Aguirre Steam Plant  
-South Coast Steam Plant

Puerto Rico Electric Power Authority

San Juan Steam Plant - monitoring and gauging system for the main and storage tanks (10 total)

Caribbean Petroleum Corporation

Off-site/On-site electrical system for new desulfurization plant  
Turnkey: design, supply and installation

Puerto Rico Electric Power Authority

Install new generator (diesel unit), transformer and switchgear - Culebra, PR

Caribbean Airport Facilities

Luis Muñoz Marin Airport - Carolina, PR  
Complete electrical system (38 KV to 110VAC) for new 115,000 SF cargo building

## COMPANY PROFILE

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### US Navy

Redesign and implement new power & control systems using PLC logic systems for all three sewage treatment plants - Ceiba, P. R.

### Fibers Group

Design, permit & install new 500 KVA substation

### PRANG

Replace the MCC and upgrade their electrical distribution System.

**COATINGS:**

Puerto Rico Electric Power Authority

Aguirre Plant

- Sandblast and Paint two 230' dia x 48' high cone roof tanks

Palo Seco Plant

- Sandblast and paint interior and exterior of 150' dia. x 40' high tank

San Juan Steam Plant

- Sandblast, Vacuumblast and paint various tanks.

South Coast Steam Plant

- Sandblast, Vacuumblast and paint various tanks including three (3) 219' dia x 48' high Cone roof tank interior and exterior

Mayaguez Plant

- Internal coating for one 95' dia. x 40 high cone roof tank

Puerto Rico Sun Oil

Sandblast and coating for three 90' dia. tanks - Yabucoa, PR

Caribbean Petroleum Corporation

Vacuum Shot blast and coat (2) 100' x 40' CR tanks

Exterior/Interior coatings to numerous tanks for over 35 years

Ogden Aviation

Concrete line and install flexible elastomeric membrane secondary containment to Airport tank farm 60,000 SF

Interior line 3 jet fuel tanks

Puma Energy Puerto Rico

Exterior coating to 10 tanks

Interior lining including sand blast to 10 tanks

Puma Energy Caribe

Exterior coating to 6 tanks

Interior lining including sand blast to 6 tanks

Miscellaneous Internal Tank Linings

The Shell Company - Over 10 Tanks

Esso Standard Oil - various tanks in both Cataño and St. Thomas

Texaco Puerto Rico Inc. - Various tanks

Peerless Oil and Chemicals - Various interior and exterior tanks

Janssen- Ortho - Interior/Exterior of fire water tank

PR National Guard – Muñiz Air Base, Carolina PR



**STRUCTURAL/EQUIPMENT INSTALLATIONS:**

Infrastructure Financing Authority (AFI)

Supply and install six (6) 15,500 G.P.M. Pumps (111.50 MGD) with 1200 Horse Power synchronous brush less motors at the Carraizo Dam

Puerto Rico Electric Power Authority

South coast Plant

Installation of 90/25 Ton x 120' long Gantry crane;  
Supply and install 120' crane structure extension

Puerto Rico Electric Power Authority

Aguirre Plant

Install 75/15 Ton x 120' Gantry crane

Puerto Rico Electric Power Authority

Various Plants

Structural modifications to gantry cranes and support structures

Mechanical rebuilding of crane components

Sandblasting and painting of structures and cranes

Caribbean Petroleum Corporation

Replacement/Installation of motors, exchangers, blowers and stacks on a continuous basis

Caribbean Petroleum Corporation

Installation of double barge dock loading facilities

Including piping, structures, hose handling, electrical and fire protection systems

Storage Tanks

New tanks - 1000 bbl. to 500,000 bbl.

Repairs, new bottoms, new roofs, shell replacements, new seals, etc.

Internal floating roofs - steel and aluminum

Puerto Rico Electric Power Authority

Relocation of equipment for Balanced Draft Projects

Palo Seco Steam Plant

San Juan Steam Plant

American Engineering Services

All phases of installation for Desalinization Plant 1.5 million GPD

PREPA - Palo Seco Plant

Puerto Rico Sun Oil

Supply and erect three 90' dia. storage tanks

PRANG

Design and build Canopies for their fueling Stations

**ENVIRONMENTAL:**

Bristol Myers Squibb

Remediate area of ground contaminated with Kerosene - Humacao, PR

Caribbean Petroleum Corporation

Preliminary Clean-up of Equalization Pond

Remove 6000 cy contaminated soil from former waste pond

Chevron/AWPI/OHMEDA/Phillips Core (The Fibers Group)

Fibers Public Well Supply - Superfund Site

Phase I - Ground level remediation activities

Phase II - Subground water contamination clean-up. Included Value Engineering and construction of an 11 well system with a filter/tower system as well as effluent discharge

Phillips Core

Remedial Cleanup of off spec pond.

Jointly with I.T. Corporation

U.S. Navy - Roosevelt Roads, P.R.

Rehabilitate Sewage Treatment Plants (several projects)

Mothball fueling facilities entire site.

Phillips P.R. Core, Inc.

Assisted in installation of Ground Water Interceptor Project.

Jointly performed with Retec Corporation

Puerto Rico Electric Power Authority

Removal of lead paint from cranes, structures and tanks.

Bard Cardiopulmonary, Inc.

Construction of effluent equalization system. - Las Piedras, PR

Puerto Rico Electric Power Authority

Performing Consent Decree work throughout all generating plants in Puerto Rico

Amgen (Fluor Daniel)

Build a complete pH Neutralization plant (All phases)

Sol Petroleum

Remediate area of ground contaminated with Kerosene - Bayamon, PR

**MECHANICAL:**

Puerto Rico Electric Power Authority

Aguirre - Palo Seco - Southcoast- San Juan Plants

Installation of (1) 90/15 Ton, (2) 15 Ton, (1) 75/15 ton overhead gantry cranes & extend elevated railways

U.S. Coast Guard

Aguadilla

Install computerized loading facility for aircraft

Project included piping, electrical, instrumentation, environmental, and tankage

Puerto Rico Electric Power Authority

Naguabo Dam

Emergency repairs to 34" dia. pipeline

(Remote location required daily mobilization by helicopter.)

Puerto Rico Electric Power Authority:

Fueling Pier - San Juan Bay

Redesign and replace 20" and 12" fuel system and truck grating

Puerto Rico Electric Power Authority

Mayaguez

Turnkey piping and tankage project

Internal coating system

Refinery Turnarounds

All phases of piping, insulation, fin fan coolers, civil, etc.

- Caribbean Refining Corporation

Esso P.R.

- Tanker Oil product unloading facility

- All structural, piping and electrical systems, hose handling systems, and fire protection

Caribbean Refinery

- Installation of skid fabricated desulfurization plant

- Performed factory inspection

- Final pipe and structural modification

- Set and pipe 3 towers

Sun Co. Inc.

All phases of rehabilitation to Airport Fuel Terminal. - L.M.M International Airport

Puerto Rico Aqueducts & Sewer Authority

Installation of Pump No. 5 at Carraizo Dam

**PROGRAMMABLE LOGIC COMPUTER (PLC) PROJECTS:**

Puma Energy Caribe LLC

Design and implementation of the complete SCADA and terminal control system for the entire 6,000,000 barrel terminal using Allen Bradley and Rockwell equipment, PLC's and protocols.

Sun Oil Company, Inc.

Design of pump control system at LMM International Airport Terminal  
Included 1 – Processor, Allen Bradley, DH+ protocol

US Navy

Design of monitoring and plant control for three (3) Wastewater Treatment Plants – US Naval Station, Ceiba, Puerto Rico  
Included 21 PLC's and five (5) HMI's PanelView, all Allen-Bradley using DH+ protocol

Puerto Rico Aqueduct and Sewer Authority (PRASA)

Design and installation of complete sewage plant monitoring and control system – Aguadilla, Puerto Rico  
Included 7 Processors on DH+ protocol, HMI PanelViews and chart recorders, all Allen-Bradley

Puma Dominicana, SA

Design and installation of complete SCADA system for Bulk Fuels Terminal – San Pedro de Macoris, Dominican Republic. Design was to handle ship receipts, pump control, tank control, etc  
Included two (2) main processors, one HMI PanelView and one workstation all using ControlNet – all Allen-Bradley

Puerto Rico Aqueduct and Sewer Authority (PRASA)

Design and installation of control and monitoring system for water filtration plant – Ciales, Puerto Rico  
Included 2 Processors on DH+ protocol, HMI PanelViews and chart recorders, all Allen-Bradley using Ethernet

Puerto Rico Aqueduct and Sewer Authority (PRASA)

Design and installation of control and monitoring system for water filtration plant – Luquillo, Puerto Rico  
Included 2 Processors on DH+ protocol, HMI PanelViews and chart recorders, all Allen-Bradley using DH486

Miscellaneous Systems for Shell Chemical, Esso Standard Oil, Puma Energy, etc.

Design and installation of pump control systems for Fuel Truck Loading Racks – Various locations  
All using Allen-Bradley PLC's of different models using different protocols such as DH485, DH+, Ethernet and ControlNet