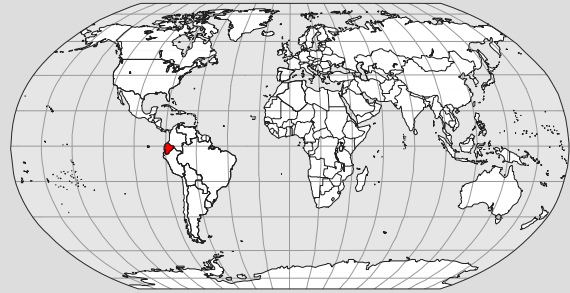


## OIL PRODUCTION FACILITIES EXPANSION – BLOCK 16 Orellana, Ecuador – Repsol YPF



### Main Facts

- **Heavy Crude Oil Production:**  
12.000 m<sup>3</sup>/d (75.000 bpd).
- **Water Injection Capacity:**  
160.000 m<sup>3</sup>/d (1.000.000 bpd).
- **Schedule:**  
January 2002 – September 2003  
(21 months)

### Scope

- Conceptual Engineering
- Basic Engineering
- Detailed Engineering Assistance
- Commissioning & Start Up Assistance

### Facilities

- Flowlines & Crude Oil Export Pipelines
- Crude Oil & Water Treatment
- Water Injection
- Tank Vapors Recovery Unit
- Utilities (fire fighting system, etc.)
- Electrical Energy Generation Distribution

### Highlights

- Conceptual engineering provided a master plan for the development of Block 16 along 10 years, considering the construction of facilities, electrical energy provision and associated investment, logistics and contracting strategy
- Export system (pipelines, pump stations) handles heavy crude oil (15°API)
- Basic and detailed engineering dealt with the revamping of existing crude oil & water treatment facilities at SPF (South Production Facilities)



## OIL PRODUCTION FACILITIES EXPANSION – BLOCK 16 – ORELLANA – ECUADOR – REPSOL YPF

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