



**72 SAIPEM DO BRASIL LTDA**

**GASODUTO ROTA CABIUNAS 1 –**  
**TRENCHO DE 24" -CABIUNAS**  
**(BRAZIL)**

## 72 SAIPEM BRASIL- GASODUTO ROTA CABIUNAS 1 – TRENCHO DE 24”- CABIUNAS- BRAZIL

### 1 General project Overview and Reference

PETROBRAS - Petróleo Brasileiro SA - contracted Saipem to perform engineering design, supply of subsea equipment and materials (partial), construction, installation and pre-commissioning of the gas export pipeline 24 " connecting the Cernambi field, Pre-Salt pole of the Santos Basin to the valves Area of Lagomar beach of Cabiúnas Terminal in Macaé, RJ.



### 2 Scope of work

SEA S.r.l. was sub-contracted by SAIPEM DO BRASIL Servicos de Petroleo Ltda to perform the post-trenching operations along the 24" gas pipeline route.

In the nearshore area of the Rota-1 Gas pipeline - Cabiunas, between KP 377.050 and KP 371.640, SEA was required to carry out trenching remedial works on the following sections:

<b>GASODUTO ROTA CABIÚNAS 1 – TRECHO DE 24'</b>			
<b>REMEDIAL WORK SECTIONS</b>			
<b>Prj. Zone</b>	<b>Starting KP</b>	<b>Ending KP</b>	<b>trenched metres</b>
1	377,050	376,094	956
2	376,094	375,772	322
3	374,307	374,172	135
5	373,497	373,320	177
5	373,192	373,140	52
5	372,662	372,630	32
6	372,223	372,107	116
6	371,878	371,647	231
	<i>TOTAL metres</i>		<b>2.022</b>

**SEA's EQUIPMENT utilized for the project:**

*NAVAL MEANS:*

- DP-2 Vessel Iskatel-2 (supplied by SEA SRL)

*POST TRENCHING MACHINE:*

- LEO PTM

**3 Encountered Soil condition**

- Coarse sand with fragments of quartz and rocky masses of various nature.
- Plastic grey clay.
- Very Hard Clayey Silt and Plastic Clay

**4 Photos at worksite**



LEO PTM onboard of DP-2 Iskatel-2



LEO PTM.

## 5 Reference



**SAIPEM DO BRASIL**  
SERVIÇOS DE PETROLEO LTDA

<b>Contractor:</b>	<b>SAIPEM DO BRASIL SERVIÇOS DE PETROLEO LTDA</b> CNPJ:05.101.651/0006-
<b>Sub-Contractor:</b>	<b>SEA BRASIL SERVIÇOS SUBMARINOS LTDA</b> ART n°.OL00267028 ART n°.OL00371357 CNPJ n°.06.181.439/0001-44

**COMPLETION CERTIFICATE**

SAIPEM contracted SEA for the post-trenching remedial works (nearshore post-trenching) in the nearshore area close to the Cabiunas beach, between KP 377.050 and KP 371.640, where SEA was requested to carry out the post-trenching of some gas pipeline sections for a total length of approximately 2.022m, in compliance with the technical specifications agreed in the Contract, which object also included:

- a) Supply of naval means and equipment to carry out the trenching services (nearshore post-trenching), and of all auxiliary naval means required to fulfill the CHARTER of the naval means and the execution of the SERVICE;
- b) Logistic supply to support the operations;
- c) Elaboration of procedure and other documentation necessary, as well as the supply of the services, equipment, materials, naval means and consumables;

**CONTRACT DATA**

<b>SAP identification Nr.</b>	n° 1077696 signed on 16/09/2015
<b>Place of execution:</b>	Cabiúnas - Macaê,RJ.
<b>Period:</b>	16/09/2015 – 16/09/2016 (considering that the completion of the Contract is assigned for 07/04/2016)

Rio de Janeiro, 11 of April 2016

Signature:		Signature:	
Name:	<b>Roberto Mendes</b>	Name:	<b>Daniele Bazilio</b>
Position:	<b>Saipem</b>	Position:	<b>Procurement Manager</b>

*Free translation of completion certificate from Portuguese to English*



**SAIPEM DO BRASIL**  
**SERVIÇOS DE PETROLEO LTDA**

<b>Contratante:</b>	<b>SAIPEM DO BRASIL SERVIÇOS DE PETROLEO LTDA</b> CNPJ: 05.101.651/0006-04
<b>Contratada:</b>	<b>SEA BRASIL SERVIÇOS SUBMARINOS LTDA</b> ART n°.OL00267028 ART n°.OL00371357 CNPJ n°. 06.181.439/0001-44

**ATESTADO DE CAPACIDADE TÉCNICA**

A SAIPEM contratou a SEA para a realização dos serviços de escavação (*near shore post-trenching*) nas regiões rasas entre os KPs 377.050 e 371.640 próximo à costa da praia de Cabiúnas, tendo sido realizado a escavação (*near shore post-trenching*) de aproximadamente 2.022 m do gasoduto de acordo com as especificações técnicas previstas no contrato, cujo objeto compreendeu:

- a) Fornecimento de embarcação e equipamento para a execução dos serviços de escavação (*near shore post-trenching*), e também de todas as embarcações auxiliares para desenvolvimento do AFRETAMENTO e dos SERVIÇOS;
- b) Fornecimento logístico para o suporte das operações;
- c) Elaboração de procedimentos e/ou outros documentos necessários, bem como fornecimento de serviços, equipamentos, materiais, embarcações e consumíveis necessários;

**DADOS DO CONTRATO**

<b>Identificador SAP</b>	n° 1077696 assinado em 16/09/2015
<b>Local da execução</b>	Cabiúnas – Macaé, RJ.
<b>Período</b>	16/09/2015 - 16/09/2016 (sendo que o termo de encerramento deste Contrato foi assinado em 07/04/2016)

Rio de Janeiro, 11 de abril de 2016

Assinatura

Nome:

Cargo:

  
**Roberto Mendes**  
Saipem

Assinatura

Nome:

Cargo:

  
**Daniele Bazilio**  
Saipem do Brasil  
Procurement Manager