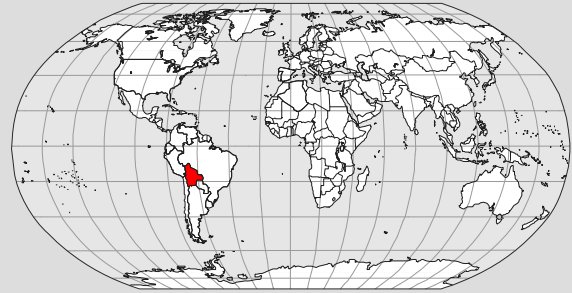


CONTAMINANTS REMOVAL UNIT – SÁBALO GAS PLANT San Antonio Field, Bolivia – PETROBRAS BOLIVIA



Main Facts

- **Gas Processing Capacity:**
13.5 MMSCMD (477 MMSCFD).
- **Inlet-Outlet Hg Levels:**
40 to 2 ppb (parts per billion)
- **Schedule:** July 2002 – April 2003
(10 months)

Scope

- Basic & Detailed Engineering
- Procurement
- Fabrication
- Construction
- Commissioning
- Start Up & Test Run

Facilities

- Gas Superheater – 2 (one per train)
- Mercury Removal Reactors – 2 (one per train)
- Particle Filters – 2 (one per train)
- Tie-Ins with Existing Units and Utilities (Hot Oil, Drain, Flare Systems, etc.)

Highlights

- Restricted accessibility to site (reactor dimensions limited to maximum values derived from an access road study)
- Large reactor dimensions and wall thickness (fabrication performed in Brazil due to limitations of argentinean steel mills & workshops)
- Mercury removal through adsorption on non-regenerable solid catalyst
- Construction performed on one train at a time, while the remaining train was processing gas (high risk task)



CONTAMINANTS REMOVAL UNIT – SÁBALO GAS PLANT - SAN ANTONIO FIELD, BOLIVIA – PETROBRAS BOLIVIA

 **ARGENTINA**

Encarnación Ezcurra 365
C1107CLA Buenos Aires
Ph.: +54 (11) 4347 0300

 **BOLIVIA**

Torres CAINCO
Av. Las Américas 7 - Piso 10
Santa Cruz de la Sierra
Ph.: +591 (3) 336 2263

 **BRAZIL**

Rio Office Park - Av. Victor Civita 77
Bloco 1, Edif. 6.2, 6° andar
22775-044 Barra da Tijuca
Rio de Janeiro (RJ)
Ph.: +55 (21) 3535-9855
Fax: +55 (21) 3535-9887

 **COLOMBIA**

Calle 99 No. 9A - 45 Oficina 303 A
Barrio Chicó, Bogotá DC
Ph.: +57 (1) 745 8069
Fax: +57 (1) 745 8077

 **ECUADOR**

Av. República de El Salvador 780
Edificio Twin Towers - Piso 6 - Quito
Ph.: +593 (2) 292 3943

 **MEXICO**

Paseo de la Reforma 373 - Piso 14
Col. Cuauhtemoc, México D.F
Ph.: +52 (555) 207 2625

 **PERU**

Av. Canaval y Moreyra N° 452,
Oficina 1401, San Isidro, Lima 27
Ph: +(511) 705 3070

 **SAUDI ARABIA**

P.O.Box 3865
Al Falak Towers, 5th.Floor
King Abdulaziz Road
Al Khobar 31952- KSA
Ph.: +966 (3) 887 5339

 **SPAIN**

Av. del General Perón 38,
Edificio MASTER's 1 - Planta 13
28020, Madrid
Ph.: +34 (91) 556 6359 / 6751

 **USA**

2500 City West Boulevard,
Suite 300
Houston, Texas
Ph.: +1 (713) 405 1836

 **VENEZUELA**

Quinta Zamira, Sede EPSA,
Urbanización Chuao, Municipio Baruta,
Caracas, Venezuela
Ph.: +58 (212) 993 2215 / 3588