



## **AGÊNCIA NACIONAL DO PETRÓLEO - ANP**

### **SPECIAL TENDER COMMITTEE**

#### **FINAL TENDER PROTOCOL BRAZIL ROUND 2**

**NOTICE:** This Final Tender Protocol replaces all previous communications from the ANP on Brazil Round 2 including those in the Initial Tender Protocol and on the Brazil-Round 2 Web-site. All participating companies must follow the norms and procedures of this Protocol. Any representations made by employees, officers, agents or advisors of the ANP regarding the terms of this Final Tender Protocol will not be binding on the ANP.

This Final Tender Protocol is available in both Portuguese and English. However, it should be noted that the English version is being provided only for the orientation of the potential participants. For all other or legal purposes, the Portuguese version is the only official version.

**RIO DE JANEIRO, APRIL 20, 2000**

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**AGÊNCIA NACIONAL DO PETRÓLEO - ANP**  
**SPECIAL LICENSING COMMISSION (“CEL”)- PORTARIA ANP Nº 188,**  
**OF AUGUST 12, 1999**  
**FINAL TENDER PROTOCOL**

The Agência Nacional do Petróleo (“ANP”) in accordance with Law 9.478/97 of August 6, 1997 and *Portaria* ANP Nº 6, of January 12, 1999, is carrying out by public tender the licensing of Blocks for the exploration, development and production of oil and natural gas under the conditions established in this Final Tender Protocol and its related annexes.

## 1. INTRODUCTION

On August 6, 1997, the Brazilian Congress approved Law 9.478/97, known as the “Petroleum Law”, which regulates the determinations established in Constitutional Amendment No. 9 of 1995, and “flexibilizes” the State monopoly for the activities of exploration, development and production of oil and natural gas. This law further establishes the conditions for the exercise of the other economic activities of the monopoly related to the import and export of oil, oil products and natural gas, oil refining, natural gas processing, and the transportation of oil, oil products and natural gas.

The Petroleum Law also instituted the ANP as the responsible body for the regulation, contracting and fiscalization of the economic activities of the petroleum industry, including:

- To implement, within its sphere of influence, a national oil and natural gas policy, based on the national energy policies, and the terms of Chapter I of the Law No. 9.478/97, with emphasis on the guarantee of the supply of oil products throughout the national territory and the protection of the consumer’s interests as far as the price, quality and availability the products;
- To promote studies to delineate Blocks for the purpose of licensing of exploration, development and production activities;
- To regulate the conduct of geological and geophysical services applied to petroleum exploration, in particular the acquisition of data to be commercialized on a non-exclusive basis;
- To carry out and promote tenders for oil and natural gas exploration, development and production licensing, and to enter into and monitor agreements for these activities;
- to authorize the activities of oil refining, natural gas processing, transportation, import and export of oil, oil products, and natural gas in the form established in Law No. 9.478/97 and accompanying regulations;
- to establish criteria for the calculation of transportation tariffs and arbitrate related disputes as provided in Law No. 9.478/97;

- to directly, or through agreements with the States and the Federal District, fiscalize the main activities of the petroleum industry, as well as to apply the administrative sanctions and remedies provided in the Law, regulations, or contracts;
- to initiate “eminent domain” or condemnation activities in areas necessary for oil and natural gas exploration, development and production, or the construction of refineries, pipelines and terminals;
- to facilitate good practice in conservation and the rational use of oil, oil products and natural gas and the preservation of the environment;
- to stimulate the research and the development of new technologies in the exploration, production, transportation, refining and processing sectors;
- to organize and maintain the various information and technical data relating to petroleum industry activities;
- to consolidate annually the information on the national reserves of oil and natural gas provided by the concessionaires, and to be responsible for its proper disclosure and dissemination;
- to fiscalize the adequate operation of the National System of Fuel Stocks and of the completion of the Annual Plan for Strategic Fuel Stocks, mentioned in Article 4 of the Law No. 8.176 of February 8, 1991;
- to coordinate with the other regulatory groups of the energy sector on matters of mutual interest, including technical support to the National Energy Policy Board (CNPE);
- to regulate, authorize and fiscalize activities related to the national supply of fuel, either directly or through coordination with other State, Federal or Municipal bodies;]
- to regulate and fiscalize the activities of distribution and resale of petroleum products and alcohol fuels;
- to communicate to the *Conselho Administrativo de Defesa Econômica* (CADE) any violations to the economic order, observed in the course of the ANP’s activities, so that appropriate preventative or corrective measures can be taken by the pertinent legislature.

In December 1998, the ANP launched the first licensing round, Brazil - Round 1. This Round was concluded on September 24, 1999 when 11 companies signed Concession Agreements for 12 exploration blocks.

In accordance with its responsibilities and the continuation of the process of licensing exploration areas, the ANP launched the second licensing round, Brazil Round 2, for contracting exploration, development and production activities for oil and natural gas.

Brazil - Round 2 offers a large variety of opportunities, including both onshore and offshore areas. Of the 23 blocks being offered, 13 are located in five offshore basins and 10 are located in five onshore basins. These blocks vary in size and are located variously in land, in shallow and deep water and in exploration frontiers and in mature basins and comprise a total area of 59,271 km<sup>2</sup>.

Brazil - Round 2 has the following objectives:

- to increase exploration efforts in Brazil;
- to facilitate the transfer of technology and the use of the petroleum industry's "best practice";
- to allow the entry of the domestic and international private sector into the petroleum industry activities in Brazil;
- to promote free competition;
- to increase the competitiveness of the country in the international market; and
- to continue the process of licensing areas that was initiated with Brazil – Round 1.

In order to accomplish this and complete the Bidding Round, a Special Tender Committee (CEL) was constituted, composed of six (6) members: four (4) from the ANP and two (2) representatives of Brazilian society.

## 2. OBJECTIVE OF THE LICENSING

The objective of this licensing round is the licensing of companies or consortia of companies to carry out exploration, development and production of oil and natural gas in the 23 Blocks in accordance with the terms and conditions of the Concession Agreement attached herewith as Annex II to this Final Tender Protocol. Details on the 23 Blocks to be licensed are contained in Annex I to this Final Tender Protocol.

## 3. LICENSING TIMETABLE

- **September 30, 1999** Launch of Brazil – Round 2 and identification of the blocks
- **December 14, 1999** Publication of Initial Tender Protocol
- **March 15-16, 2000** Technical, Legal and Financial Workshop
- **April 20, 2000** Publication of Final Tender Protocol (Edital)
- **May 5, 2000** Deadline for submission of Qualification Documents (in accordance with Article 6.8) and deadline for the payment of Participation Fees.
- **May 24, 2000** Deadline for notice of Qualification and delivery of bidding materials.
- **May 26, 2000** Deadline for delivery of Bid Bond(s) to the ANP.
- **June 6-7, 2000** Registration of bidding participants
- **June 7, 2000** Bidding
- **September 20, 2000** Deadline for execution of Concession Agreements

## 4. TIME AND PLACE OF BIDDING

Bids for each block will be made in sealed envelopes at the time and place specified in paragraphs 4.1 and 4.2, respectively.

All of the necessary bidding envelopes and forms with respect to each block, accompanied by instructions for their completion, will be sent by May 24, 2000, to each company that has qualified as an Operator and has paid a Participation Fee covering such Block.

#### **4.1 Bidding Schedule**

The Bidding to which this Final Tender Protocol relates will be carried out according to the following program:

##### **Tuesday June 6, 2000**

**1600 to 1800 hours** - Registration available for participants

##### **Wednesday June 7, 2000**

**0730 hours** - Registration available for participants. Registration will remain open until 1700 hours

**0900 hours** - Commence accepting bids for the first block, BM-S-10.

### Sequence of Bidding:

|               |
|---------------|
| BM-S-10 (A)   |
| BM-CAL-4 (B)  |
| BT-REC-3 (C)  |
| BM-SEAL-5 (A) |
| BM-C-7 (B)    |
| BT-SEAL-2 (C) |
| BM-S-8 (A)    |
| BT-PR-4 (B)   |
| BT-POT-4 (C)  |
| BM-C-10 (A)   |
| BM-S-7 (B)    |
| BT-SEAL-1 (C) |
| BM-C-8 (B)    |
| BT-REC-1 (C)  |
| BM-S-9 (A)    |
| BT-AM-1 (B)   |
| BT-POT-3 (C)  |
| BM-SEAL-4 (A) |
| BM-PAMA-1 (B) |
| BT-SEAL-3 (C) |
| BM-S-11 (A)   |
| BM-C-9 (B)    |
| BT-REC-2 (C)  |

#### 4.2 Bidding Location

The bidding process described in this Final Tender Protocol will take place at the following location:

Sheraton Rio  
Av. Niemeyer 121  
22450-220 Rio de Janeiro - RJ  
Telephone: Within Brazil: (021) 274 1122  
Outside Brazil: +55-21 274 1122

## 5. CONDITIONS FOR PARTICIPATING IN THE LICENSING

In order to participate in Brazil Round 2, companies must individually:

- submit an Expression of Interest in conformance with Section 6.1 of this Final Tender Protocol;
- submit a Power of Attorney in accordance with Section 6.1 of this Final Tender Protocol;



- submit a signed Confidentiality Agreement conforming to Section 6.6 of this Final Tender Protocol;
- have received notice from the ANP of their technical, legal and financial qualification in conformance with Sections 6.2, 6.4 and 6.5 of this Final Tender Protocol; and
- have paid the Participation Fee in accordance with Section 6.7 of this Final Tender Protocol.

Companies complying with these requirements will be considered approved to bid, subject to the conditions of this tender and in accordance with the provisions in Section 7 of this Final Tender Protocol.

Companies that submit executed Powers of Attorney and Confidentiality Agreements can, at their sole discretion, pay the Participation Fee before submitting their technical, legal and financial qualification documents and gain access to the relevant Information Packages. In this circumstance, it will be the exclusive responsibility of the company to assure itself that it will be able to meet the technical, legal and financial qualification criteria. The ANP will not reimburse Participation Fees to companies who are later unable to qualify or who receive a different Operator qualification from that which they sought.

Companies that have already submitted their qualification documents to the ANP based on the Initial Tender Protocol may use those documents for the purpose of this Tender. The ANP, however, reserves the right to seek from those companies such additional information as may be deemed necessary to confirm the company's qualification.

## **6. DOCUMENTS REQUIRED FOR PARTICIPATION IN THE LICENSING**

All documents may be presented either in English or in Portuguese, in two sets (original plus one copy). Requirements for notarization, consularization and official translation, where necessary, are indicated herein.

### **6.1 Expression of Interest Document**

The process of qualification begins with the submission of an Expression of Interest, which should include, in addition to all the information indicated below, any other information that may be pertinent:

- the name of the applicant company, and any person holding more than 20% (twenty percent) of the voting equity or otherwise exercising control. The ANP reserves the right to ask for further clarification as to the company's ownership;
- a cover letter, signed by the Legal Representative of the company, certifying that all of the information contained in this Expression of Interest is true and correct. If the Expression of Interest is submitted in two parts, each part should be accompanied by this cover letter.
- the name, title, address, telephone and fax numbers, and e-mail address of the Legal Representative in front of the ANP for the applicant company to whom all correspondence should be sent. This should be accompanied by a notarized Power of Attorney, as laid out in Annex IV of this Final Tender Protocol, duly executed by an officer of the company authorizing the designated Legal Representative or alternates, if listed, to act for the

company. This document can be in Portuguese or in English. If in English, the document should be notarized by a properly accredited Notary Public (or equivalent) and then certified at a Brazilian Consulate in the country concerned and translated by a (registered) sworn legal translator in Brazil. It is recommended that the Legal Representative nominated be an executive who will be available throughout the process to ensure that the information requests and other communications are properly and efficiently handled within the company. It is emphasized that the Concession Agreement does not necessarily have to be executed by the Legal Representative designated in the Expression of Interest.

- a Confidentiality Agreement (see Annex V of this Final Tender Protocol) signed by the Legal Representative of the company. If executed abroad, it should be notarized by a properly accredited Notary Public (or equivalent) and then certified at a Brazilian Consulate in the country concerned, and translated by a sworn legal translator in Brazil;
- indication of the company's interest in participating as an Operator.

The Expression of Interest may be submitted to the address cited in Section 6.8 of this Final Tender Protocol during normal business hours until May 5, 2000.

## **6.2 Technical Qualification**

A company may seek qualification either as:

- a non-Operator, or
- as an Operator

This should be stated clearly on the company's Expression of Interest. Although qualification as an Operator is not required by the ANP in order for a company to participate in Brazil Round 2, such qualification is necessary if the company intends to bid alone. Alternately, the company can participate through a consortium that has as Operator, a company qualified to operate in the relevant block.

Technical qualification will be evaluated on the demonstrated capability of the applicant company's parent (if it is not the parent that applies). Information supplied should include:

- companies that are not in the oil and natural gas exploration and production business, or only desire to be qualified as a non-Operator, should present an overview of their primary business activities, as well as the relationship of the applicant company to their respective parent company or controlling group;
- companies that seek qualification as an Operator should present full information supporting their technical capability. This should include areas in the world where the company currently conducts oil and natural gas exploration and production activities, along with the level of investment, separated by exploration and production, and the production volumes realized in the last five years. This information should separately detail the volumes produced by the company as Operator and as non-Operator. It should also contain specific references on the extent and location of the offshore areas where the company acted as either Operator or non-Operator. The ANP's objective is to evaluate the company's experience and proven competency.

Companies qualified as Operators will be classified in one of three categories:

- Operator “A” - Company qualified to operate in any block offered in Brazil - Round 2;
- Operator “B” - Company qualified to operate in any onshore block and certain offshore blocks, comprising primarily shallow waters;
- Operator “C” - Company qualified to operate only onshore blocks in the Recôncavo, Potiguar and Sergipe-Alagoas Basins.

Companies will be classified as “A”, “B” or “C” Operators taking into account the following criteria:

- level of oil equivalent production: One point being awarded for each 10,000 barrels per day of oil equivalent production, up to a maximum of 40 points. Only operated production will be considered;
- onshore exploration and production operations: 10 (ten) points will be awarded for companies that are involved, as Operator, in onshore exploration and 10 (ten) points will be awarded to companies which have, as Operator, onshore production activities. Companies that are not Operators that can prove their experience in providing technical services to the oil companies will be awarded 5 (five) points for services related to exploration and 5 (five) points for services related to production;
- offshore exploration and production operations: 15 (fifteen) points will be awarded for companies that are involved, as Operator, in offshore exploration and 15 (fifteen) points will be awarded to companies which have, as Operator, offshore production activities. This criteria will be applied to the exploration blocks or producing fields with 50% (fifty percent) or more of its surface area in water depths 0 (zero) to 400 (four hundred) meters. Companies that are not Operators that can prove their experience in providing technical services to the oil companies will be awarded 5 (five) points for services related to offshore exploration and 5 (five) points for services related to offshore production;
- exploration and production operations in deep and ultra-deep waters: 10 (ten) points will be awarded for companies that are involved, as Operator, in deepwater offshore exploration and 10 (ten) points will be awarded to companies which have, as Operator, deepwater offshore production activities. This criteria will be applied to the exploration blocks or producing fields with 50% (fifty percent) or more of its surface area in water depths greater than 400 meters;
- exploration and production operations in adverse (hostile or difficult) environments: 20 (twenty) points will be awarded to companies that can provide evidence of their experience in adverse environments (for example, drilling in high pressure and temperature conditions, activities in remote areas and production of heavy oils will be considered under this criterion);
- care for the environment and experience with operations in environmentally sensitive areas: 10 (ten) points will be awarded to companies that can provide evidence of their experience in environmentally sensitive areas and present a track-record of care for the environment. Point deduction can be considered in this criterion, up to a maximum of -999 points (negative nine hundred-ninety-nine points);
- overall experience in international operations: companies that can provide evidence of their experience operating oil and gas or energy related activities in 3 (three) or more continents will be awarded 20 (twenty) points. Companies that provide evidence of providing services to oil and gas or energy related activities will be awarded ten (10) points. The following are considered separate continents to Latin America – North America, Africa, Europe, Asia and Oceania;
- companies that do not have demonstrable operating experience, but who nevertheless wish to be considered for “B” or “C” operatorship classification, should submit detailed curriculum

vitae for employees with relevant exploration and production operating experience detailing their engagement arrangements with the company. The number of professionals, their experience in oil and gas related activities and the nature of their relationship to the company (service contractor, temporary contract, part-time dedication, exclusive dedication, etc.) will be taken into consideration. 5 (five) levels of points will apply – 30 (thirty), 20 (twenty), 10 (ten), 5 (five) and 0 (zero) based on the quality of the technical group. 30 (thirty) points will be awarded for a professional team considered “excellent”, 20 (twenty) points for a professional team considered “very good”, 10 (ten) points for a professional team considered “good”, 5 (five) points for a professional team considered “average” and 0 (zero) points for a professional team considered “inadequate”.

For the purposes of categorizing each company’s technical qualification, the following criteria will apply:

- From 1 (one) to 29 (twenty-nine) points: “C” Operator
- From 30 (thirty) to 99 (ninety-nine) points: “B” Operator
- 100 (one hundred) points or more: “A” Operator

In the interest of minimizing the required time for the preparation of the documents, and to accelerate the technical qualification process, the ANP suggests that the information be concise, clear and objective, and focused to that which is solicited by the ANP or other factors relevant to evaluation of the technical qualification. The ANP reserves the right to seek such additional information as it deems necessary.

Detailed technical information may be submitted in English or Portuguese without any requirement for notarization, consular certification or translation. However, in order to effect legal validation in Brazil, companies must provide a brief summary (in the order of one to two pages) of the technical submission, warranting clearly that it is a fair and true summary of the technical information submitted. This must be signed by the Legal Representative of the company and properly notarized. If submitted in English, the document must be notarized, certified by the relevant Brazilian consulate, and translated in Brazil by a sworn legal translator.

### **6.3 “C” Block Operators**

Companies or consortia that win “C” Blocks will have a one-year grace period from the signature of the Concession Agreement in which to initiate the Minimum Exploration Program. At the end of this grace period, the company must choose to either terminate the Concession Agreement or continue into the first Exploration Period, in which case they will also be required to post a guarantee for the Minimum Exploration Program. Activities undertaken during the grace period may count against Minimum Exploration Program period obligations. In the event the company chooses to terminate the Concession Agreement, it must submit a detailed technical evaluation of the block and relinquish the entire area to the ANP

### **6.4 Financial Qualification**

Financial qualification for companies interested in participating in Brazil Round 2 will be established based on the following parameters:

- consolidated financial statements for the applicant company (the one that is to provide the guarantees required under the Concession Agreement). These statements should be

audited (by an independent auditor), and complete with accompanying notes for the last three years;

- the applicant company's present and historical (last three years only) credit rating from Standard & Poors Rating Services and/or Moody's Investor Services ratings, if available, or lines of credit, credit agreements, and any other bank reference;
- description of long-term debt, including major lease obligations, and identification of major assets which are the subject of financial security arrangements;
- description of any material contingent liabilities or obligations not reflected on the company's Balance Sheet and accompanying notes which may impact the future activities of the company;
- details of medium-term plans, if these are expected to materially alter the financial status of the company;
- the auditor's opinion letter referencing the financial statements of the company, signed by an independent public accountant, certifying that the documents reflect the real condition of the company and have been prepared in accordance with the relevant accounting and reporting standards;
- any additional information supporting the financial capacity of the applicant.

Companies with less than the equivalent of US\$10,000,000 (ten million United States dollars) of shareholder equity will not be qualified to participate in the bidding for "A" or "B" Blocks. Companies wishing to participate in the bidding for "C" Blocks must have the equivalent of a minimum of US\$3,000,000 (three million United States dollars) of shareholder equity. However, companies with minimum shareholder equity of US\$1,000,000 (one million United States dollars) may be qualified to participate in the bidding for the "C" Blocks provided they bid within a consortium in which the aggregate shareholder equity for the companies within the consortium is greater than US\$3,000,000 (three million United States dollars).

The ANP will be the sole arbiter of what constitutes shareholder equity.

## **6.5 Legal Qualification**

In order to secure legal qualification for this process, the following documents (or equivalent) must be submitted:

- a complete copy of the Articles of Incorporation and By-Laws of the applicant company registered with the Business Registry (or equivalent competent body) in the place of incorporation, the names of any partner or shareholder who, directly or indirectly, holds 20% (twenty percent) or more of the voting shares of the applicant company or otherwise has an interest that could constitute control;
- certificates from the relevant notaries in the company's domicile regarding the company's good standing before the Federal and State Criminal and Civil Justice authorities, as well as

any Claims Court or other body. These certificates may be substituted by a declaration by the company's Legal Representative that there are no pending litigation, legal proceedings or other circumstances which may lead to the failure or bankruptcy of the company.

Participants from other countries should present, along with the documents listed above, the following:

- proof that the company is legally constituted, organized and functions according to the laws of its home country;
- an undertaking that, in the event the company is successful in the bidding, it will constitute a company with its headquarters and management in Brazil according to Brazilian laws.

The documents that must be notarized, consularized, and translated are indicated in Table 1.

**Table 1 Qualification Documentation**

| Type of Document   | Document                                 | Required              | Notarized                         | Non-Brazilian Companies                                       |  |
|--|--|-----------------------|-----------------------------------|---|--|
|  |  |                       |                                   | Certified by the Brazilian Consulate (where notarized abroad) | Translated by a Sworn Translator in Brazil (where not submitted in Portuguese) |
| <b>Formal Documents</b> (Foreign companies should submit in the original language accompanied by the sworn translation.) | Articles of Incorporation                | ✓                     | ✓                                 | ✓   | ✓  |
|  | By-Laws                                  | ✓                     | ✓                                 | ✓   | ✓  |
|  | Opinion Letter of Independent Accountant | ✓                     | ✓                                 | ✓   | ✓  |
| <b>Round 2 – Specific Documents</b> (English or Portuguese only in the form provided by the ANP.)                        | Power of Attorney                        | ✓                     | ✓                                 | ✓   | ✓  |
|  | Confidentiality Agreement                | ✓                     | ✓                                 | ✓   | ✓  |
| <b>“Free-form” Documents</b> (English or Portuguese only)  | Technical Summary (1-2 pages)            | ✓<br>(Operators only) | ✓                                 | ✓   | ✓  |
| <b>Support Documents</b> (English or Portuguese only)  | Technical Information                    | ✓<br>(Operators only) | <b>Formalization not required</b> |   |  |
|  | Financial Information                    | ✓                     |                                   |   |  |

## 6.6 Confidentiality Agreement

Prior to the delivery of the Information Packages, all companies must have executed and delivered to the ANP a Confidentiality Agreement in the form of Annex V of this Final Tender Protocol and paid the Participation Fee described in Section 6.7 of this Final Tender Protocol.

If executed in Brazil, the Confidentiality Agreement should be notarized by a Brazilian Notary Public. If executed abroad, it should be notarized by a properly accredited Notary Public (or equivalent) and then certified at a Brazilian Consulate in the country concerned and translated into Portuguese by a sworn legal translator, such translation being subject to the acceptance of the ANP. Any translation should follow exactly the model contained in Annex V of the Portuguese language version of this Final Tender Protocol. The ANP reserves the right to reject any translation not in conformity with that model.

## 6.7 Participation Fee

Along with the technical, financial, and legal qualifications previously described, companies must pay a Participation Fee in order to take part in Brazil Round 2. The fees vary for each basin where the blocks are located. These may be acquired individually or as a whole. Additionally, a separate Information Package for all "C" Blocks will be made available. Companies may participate in the blocks located in the basins for which they have paid Participation Fees.

For the Sergipe-Alagoas Basin only, payment of the Participation Fee only for the onshore portion will be permitted which gives rights to participate only on blocks located in that part of the basin. After the payment of the Participation Fee, companies may have access to the nine Information Packages (one for each basin), which can be acquired together or separately. If the Information Packages are acquired separately the Participation Fee will correspond to the amounts in Table 2, below.

**Table 2 Participation Fees**

| <b>Basin/Package of Blocks</b>                     | <b>US\$</b> |
|--|-------------|
| ALL BLOCKS   | 375,000     |
| All "C" Blocks                                     | 62,500      |
| Campos   | 187,500     |
| Santos   | 187,500     |
| Sergipe-Alagoas (complete)                         | 62,500      |
| Camamu-Almada                                      | 31,250      |
| Pará-Maranhão                                      | 31,250      |
| Paraná   | 31,250      |
| Amazonas   | 31,250      |
| Potiguar <sup>1</sup>                              | 25,000      |
| Recôncavo <sup>1</sup>                             | 25,000      |
| Sergipe-Alagoas (onshore Blocks only) <sup>1</sup> | 25,000      |

<sup>1</sup> "C" block packages

Before March 31, 2000 the Participation Fees were 20% (twenty percent) less, in accordance with the levels noted in the Initial Tender Protocol. A company that pays the Participation Fee for the Basins on an individual basis may later acquire Information Packages for other Basins. In this case, the cost already incurred, added to the cost of the additional Participation Fee, cannot exceed the value of the Participation Fee for all the Basins together.



No arrangements exist for paying Participation Fees for individual Blocks in each Basin. in each Basin.

Participation Fees may be paid in Reais, converted at the official "sell" exchange rate (*Pta venda*) published by the Central Bank one working day prior to the payment.

Payment of the Participation Fee is required of each company, even if they plan to bid in a consortium.

Instructions for the payment of the Participation Fee are attached as Annex VI of this Final Tender Protocol.

### **6.8 Deadline for Submission of Qualification Documents**

The Qualification Documents can be submitted up until 1600 hours, Brasilia time, on May 5, 2000, at the following address/location:

Segunda Rodada de Licitações  
Agência Nacional do Petróleo  
Superintendência de Promoção de Licitações  
Rua Senador Dantas 105, 11º andar  
20031-201 Rio de Janeiro - RJ, Brasil.

After May 15, 2000, in special circumstances, companies may change their Legal Representative by submitting a new Power of Attorney, and providing the ANP with suitable justification for the revision.

### **6.9 Consortia**

In order to participate in Brazil - Round 2, companies will have to qualify individually. Qualified companies can form consortia for the presentation of offers up until the deadline set for the submittal of offers for each block, mentioned in Sections 4.1 and 7.1 of this Final Tender Protocol, as long as the following requirements are met:

- each consortium should have at least one company qualified as the Operator for the block in question. The Operator should have a minimum participation of 30% (thirty percent) in the consortia;
- each company should have a minimum participation in the consortia of 5% (five percent);
- no company or any of its affiliates (as defined in the Concession Agreement) will be permitted to make more than one offer for the same block, whether individually or in consortium. A company and its affiliates can participate in the same consortia in order to make an offer for a particular block.
- proof of the constitution of the consortium, signed by each member, in the form to be provided by the ANP on the bid envelope. Bids on the blocks will be made in this same envelope.

In the event that a company decides to remove itself from the consortium, the other companies in the consortium may assume the obligations of the removed company. Under no circumstance will new members be accepted into the consortium between the time the bids are submitted and the execution of the Concession Agreement.

Award of the concession to the winning consortium is conditioned on the registration of the consortium's constituent document, in the form provided in the only paragraph of Art. 279 of Law 6,404 of December 15, 1976.

#### **6.10 Companies Qualified in Brazil Round 1**

Companies which were qualified to participate in Brazil Round 1 can follow a simplified qualification process and should present the following documents:

- A formal Expression of Interest;
- An executed Power of Attorney and Confidentiality Agreement; and
- Supplementary information which should contain recent technical information (operated production, investment plans, recent technological developments), updated company accounts and financial statements (if available) accompanied by the opinion letter of an independent auditor, as well as an explicit statement signed by the Legal Representative of the company for Brazil Round 2 to the effect that the documents and information presented for Brazil Round 1 remain valid and have not materially changed since they were submitted to the ANP. Where there has been material change, updated versions of all such documents must be submitted.

#### **6.11 Disclosure of Information**

Companies who have qualified technically and who have paid the Participation Fee may request the ANP to disclose, on the Brazil Round 2 web-site, information about the company and the basins in which they may be interested. The form to effect this disclosure (attached as Annex VII to this Final Tender Protocol), must be signed by the Legal Representative of the company and delivered to the address cited in Section 6.8 of this Final Tender Protocol.

#### **6.12 Information Packages**

A fully digital Information Package has been prepared for each basin and the respective blocks offered in Brazil Round 2. In total, there are nine Information Packages, one for each basin: Amazonas, Camamu-Almada, Campos, Pará-Maranhão, Paraná, Potiguar, Recôncavo, Santos, and Sergipe-Alagoas. The Sergipe-Alagoas Basin has one Information Package for all 5 blocks in the basin as well as an Information Package containing only data for the two onshore Blocks in the Basin.

Each Package is composed of two main data elements:

- regional data for the basins with offshore blocks that include a number of seismic lines across the basin tied to key wells. These regional data are included to aid companies' understanding and insight into the basin's geologic and structural framework; and
- data for the specific block(s), which is comprised of seismic data across the block, as well as data from any wells drilled within the block.

It should be noted that the type, quantity, and quality of the data in the Information Package will vary, not only between basins and blocks, but also between blocks within each basin. However, the generic contents for each Information Package will be along the following lines:

### **General Information**

- geological setting and overview (stratigraphic column, schematic cross-section, sample seismic sections, etc.); and
- technical overview (background, logistics, infrastructure, etc.)

### **Location Maps**

- basin map with Block locations;
- block maps with well locations and seismic coverage;
- generalized regional structure map;
- regional gravimetry and magnetics (most basins have coverage, although not always over the distal/deepest water Blocks);
- infrastructure (onshore and offshore);
- bathymetric map (for offshore basins only);

### **Seismic Data**

- regional seismic across basin and between (linking) Blocks (in standard SEG Y format);
- selected data available on and within approximately 2 kilometers from beyond the Block boundary (in standard SEG Y format);

### **Well Logs**

- composite logs for key wells;
- all available well logs in the data base. These are in LAS format and other logs (from different intervals are attached).

### **Well Files**

- a wide assortment of information not found with the well logs. This includes, where available, geological (paleontological, core analyses, sedimentology, geochemistry, etc.) drilling (program, fluids, casing, cementing, etc.), and production (program, completions, testing, logging, fluid sample analyses, etc.) data and other relevant information.

While much of the information in the Information Package is also provided in English, some data (e.g. well files) will only be available in Portuguese.

The Information Packages may only be retrieved at the ANP in Rio de Janeiro at the address cited in Section 6.8 of this Final Tender Protocol by the Legal Representatives of companies who have paid the appropriate Participation Fee and submitted an executed Power of Attorney and Confidentiality Agreement. The properly credentialed representative must present adequate proof of identification (business cards are not adequate), as well as the fax sent by the ANP confirming receipt of the Participation Fee and authorizing the retrieval of the Information Package.

The Information Packages may be retrieved before May 5, 2000, Monday to Friday between the hours of 1000 and 1200 and between 1400 and 1600, Brasilia time.

### **6.13 Qualification Notification**

Companies will be notified prior to May 26, 2000 as to their qualification to participate in Brazil - Round 2.

### **6.14 Disqualification**

A company may have its qualifications cancelled under the following conditions:

- declaration of bankruptcy, dissolution or sale of the company;
- at the request of the company;
- failure to provide full disclosure or a fraudulent act by the company;
- failure to comply with the conditions of this Final Tender Protocol

### **6.15 Bid Bond**

In order to guarantee the winning bidder's obligation to sign the Concession Agreement for the relevant block, each company or consortium should present a Bid Bond in the amount of US\$500,000 (five hundred thousand United States dollars) for each "A" or "B" Block on which the company presents a bid. For "C" Blocks, the Bid Bond will be in the amount of US\$100,000 (one hundred thousand United States dollars). This Bid Bond, in the form of a Letter of Credit consistent with the models in Annexes IX or X of this Final Tender Protocol, must be delivered to the ANP before May 26, 2000.

In order for a company to present bids for any Block, it is necessary to have previously submitted a Bid Bond to the ANP in the form and within the timeframe herein defined. Similarly, in order for a consortium to present bids, a company belonging to the consortium should have previously presented a Bid Bond. The Bid Envelope should indicate whose Bid Bond will be used by the consortium to guarantee the execution of the Concession Agreement.

Any Bid Bond used to guarantee a winning bid for any Block will not be able to be used to guarantee bids on subsequent Blocks.

Companies or consortia that have the intention of presenting bids for more than one Block should ensure that they have a sufficient number of Bid Bonds, so that they will not be limited in their capacity to present bids.

During the bidding, a company that has already used their Bid Bond to guarantee a winning bid of any particular Block will be able to provide to the ANP additional Bid Bonds to guarantee bids for any other Block in which it intends to compete. This must be done reasonably in advance of the bidding for the block in question so as to allow the ANP to confirm that the Bid Bond tendered is in the form established in Annexes IX or X of this Final Tender Protocol and has been issued by an institution that fulfills the requirements set out in this document. The ANP will not be responsible for any company which is unable to make a bid for a block because the Bid Bond was not submitted in sufficient time to allow its verification.

Bid Bonds will take the form of Letters of Credit issued by banks or financial institution which have a minimum shareholders' equity of R\$1,000,000,000 (one billion Reais), or which are rated "A" or better in the publications of Standard & Poor's Rating Group or of Moody's Investors Service Inc.

The Bid Bonds of the participants that were not winners in the relevant Block will be returned the week following the bidding, along with all other documentation necessary for their cancellation. All other documentation sent to ANP will not be returned.

The ANP may draw on the Bid Bond in the following circumstances:

- the winning company, or any participating company in the winning consortium, or an affiliated company of the company or winning consortium does not sign, in accordance with the procedures described in Section 10 of this Final Tender Protocol, the Concession Agreement attached in Annex II of this document, before September 20, 2000;
- the Letter of Credit for the Minimum Exploration Program, as described in Section 10 of this Final Tender Protocol, is not provided to the ANP before the date for signing the Concession Agreement;
- the Signature Bonus described in Section 8.3 of this Final Tender Protocol is not paid before the date for signing the Concession Agreement; or
- in the case of an affiliate signing the Concession Agreement, if a company does not present a Performance Guarantee for that affiliate in accordance with Section 10 of this Final Tender Protocol.

If none of the foregoing events occur, the ANP will return the Bid Bond to the company that presented it, along with the documentation necessary for its cancellation.

## **7. BIDDING PROCEDURES**

### **7.1 General Procedures**

Bids will be accepted block by block, in the sequence described in Section 4.1 of this Final Tender Protocol.

The winning bidder for each Block will be known before bids are submitted for the next Block. The Bidding Timetable for the Blocks was established to allow the companies or consortia to optimize their bids based on the results of the bidding for the previous Blocks.

Bids for a specific Block will be accepted only when the access to the Bidding Area is open for that Block. Bidding for the first Block will be open at 0900 hours.

Access to the Bidding Area for the first Block of each module will be allowed 5 (five) minutes prior to the time specified for that block. After that time, no access will be allowed to the Bidding Area to make Offers for the Block in question.

The time limit for access to the Bidding Area for all Blocks will be established by the President of the CEL after the winning Offer is announced for the previous Block. Therefore, representatives of the companies or consortia interested in a specific block should be on hand throughout the bidding process.

### **7.2 Bids**

Bids will be made separately for each Block that is offered, in the specified format and submitted in sealed envelopes provided by the ANP. The envelopes will be sent to Operators qualified in accordance to the criteria described in Section 6.2 of this Final Tender Protocol. Forms or envelopes completed in pencil will not be accepted.

If bidding singly, each envelope should clearly identify the company participating in the bid for the block in question. If bidding in consortia, the envelope should clearly identify each participating company, with their respective percentages of participation, and identify the designated Operator.

Envelopes that contain companies that have not qualified (with the exception of affiliated companies as defined in the Concession Agreement and for whose authorized signatories a Power of Attorney, in the form of Annex VIII of this Final Tender Protocol, has been received) or envelopes that do not identify a qualified Operator, or that do not identify the company that will provide the Bid Bond, or that violates any other condition of this Final Tender Protocol, will not be accepted. In such cases, the companies that present envelopes will be notified and may correct the aforementioned errors up until the deadline established for bidding for the block in question.

Bids will consist of:

- a percentage amount, representing a commitment for the acquisition of goods and services in the Exploration Phase. This percentage will represent 3% (three percent) of the points applicable to the bid, according to the criteria in Section 8.1 of this Final Tender Protocol;
- a percentage amount, representing a commitment for the acquisition of goods and services in the Development Stage. This percentage will represent 12% (twelve percent) of the points applicable to the bid, according to the criteria in Section 8.2 of this Final Tender Protocol;
- a Signature Bonus in Reais, payable upon or before the signing of the Concession Agreement. The Signature Bonus will represent 85% (eighty-five percent) of the points applicable to the bid, according to the criteria in Section 8.3 of this Final Tender Protocol.

Each of the Signature Bonus and the commitment percentages for the acquisition of local goods and services should be expressed as positive integer numbers both numerically and in writing. Any bid with decimal numbers will be rounded down to the nearest positive integer. In the event there is a discrepancy between the numeric value and the written value on the Bid Form, the written value will prevail.

The bids must be written in Portuguese. Any erasures or amendments on the Bid Form should be counter-signed by the representative that is submitting the envelope.

The winner of the Block will be the company or consortium whose bid comprises the highest points, according to the criteria defined in Section 8 of this Final Tender Protocol.

In case there are no bids for a specific Block, this Block can be bid upon again, at the discretion of the CEL, at the time and date to be designated by the CEL.

### **7.3 Submission of the Envelopes**

Only envelopes supplied by the ANP and submitted personally by a Legal Representative of the company will be accepted. In the case of consortia, a representative of the Operator should personally submit the bid on behalf of the consortium. This representative will be responsible for all communications between the consortium and the ANP during the bidding.

When an individual company presents an envelope, a Legal Representative of that company will sign the envelope. When a consortium presents the envelope, a Legal Representative of each company within that consortium will sign the envelope.

Each envelope (including its seal) will be analyzed by the CEL to verify compliance with all the requirements in this Final Tender Protocol. After being approved by the CEL, the envelopes will be deposited in a transparent container located in the Bidding Area.

### **7.4 Opening of the Envelopes**

The opening of the envelopes containing the bid will take place in a public and transparent manner.

The opening of the envelopes will be made immediately after the closing of the process of submitting the envelopes.

After the opening of the envelopes, the participants will not be able to withdraw their bid, under penalty of drawing the submitted Bid Bond.

The winning participant will be identified immediately after the opening of all the envelopes and the bids evaluated in accordance with the criteria established in Section 8 of this Final Tender Protocol.

## **8. CRITERIA FOR JUDGING THE BIDS**

The judging of the bids of the qualified participants will be made via attributing points and weights, as indicated below.

### **8.1 Commitment to Acquire Local Goods and Services in the Exploration Phase**

This is the value offered by companies, as a percentage, relative to the commitment to acquire local goods and services during in the Exploration Phase, according to the definitions in the Concession Agreement.

No minimum bid applies to the Commitment to Acquire Local Goods and Services in the Exploration Phase, however, bids above 50% (fifty percent) will be treated as being no more than 50% (fifty percent).

$$\text{Score A} = \left[ \frac{\text{value of the percentage offered}}{\text{value of the highest percentage offered}} \right] \times 3$$

### **8.2 Commitment to Acquire Local Goods and Services in the Development Phase**

This is the value offered by companies, as a percentage, relative to the commitment to acquire local goods and services, provided by companies in the Development Stage, according to the definitions in the Concession Agreement.

No minimum bid applies to the Commitment to Acquire Local Goods and Services in the Development Phase, however, bids above 70% (seventy percent) will be treated as being no more than 70% (seventy percent).

$$\text{Score B} = \left[ \frac{\text{value of the percentage offered}}{\text{value of the highest percentage offered}} \right] \times 12$$

### **8.3 Signature Bonus**

This is the value offered to obtain the Concession, and cannot be less than the value of the established bonus minimum.

For Blocks that require “A” Operators, the minimum bonus value is R\$300,000 (three hundred thousand Reais); for Blocks that require “B” Operators, the minimum bonus value is R\$200,000 (two hundred thousand Reais); and for the Blocks that require “C” Operators, the minimum



bonus value is that of R\$100,000 (one hundred thousand Reais). Any bid less than the minimum values will be disqualified.

$$\text{Score C} = [(\text{value of the bonus offered})/(\text{value of the highest bonus offered})] \times 85$$

#### 8.4 Participant's Final Score

$$\text{Final Score} = \text{Score A} + \text{Score B} + \text{Score C}$$

The score will be calculated to 5 (five) places of decimal, ignoring values after the sixth decimal. The final score will be calculated using the sum of points A, B, and C, rounding the final point to the fourth decimal. When the fifth decimal is equal to or greater than 5 (five), the fourth decimal of the final point will be rounded up.

The bids will be classified in descending order of the score, the winner being declared the participant whose offer obtained the greatest score.

The CEL will rigorously analyze, evaluate and classify the bids conforming to the criteria established in this Final Tender Protocol and in Law No. 9.478/97.

When two or more bidders obtain the same score and Art. 42 of Law No. 9.478/97 does not apply, the bidders will be given a new period of time so that the tied bidders can present new bids. In no case may the new bids for either Signature Bonus or the Commitments to Acquire Local Goods and Services be less than the bids previously made. The schedule for presenting the new bids will be determined by the President of the CEL. In the event the bidders do not present new bids, or tie again, the winner will be determined by random lot in a public forum at the time and place designated by the CEL.

## 9. RATIFICATION OF AWARD

The final results of the bidding for each Block will be part of the Award Report, in which the CEL will award the Block being licensed to the company or consortium declared the winner. The Award Report will also include information concerning the bids that were not winners and those that were disqualified or declared void.

The Award Report will be submitted to the Board of Directors of the ANP for formal ratification.

Once the Award Report is ratified, the CEL will make public the results of the bidding in the *Diário Oficial da União* and in the mass media.

Once the results of the bidding judgement are published, the Board of Directors of the ANP will invite the winning companies or consortia for the signing of the Concession Agreement.

## 10. CONCESSION AGREEMENT

Law No. 9.478/97 establishes that the oil and natural gas exploration, development and production activities will be carried out by means of Concession Agreements, preceded by a licensing round. The rules of this licensing round are contained in this Final Tender Protocol and are integral to the Concession Agreement found in Annex II thereof.

The winning companies or consortia for each block that was licensed will execute a Concession Agreement with the ANP no later than September 20, 2000 to carry out the activities of oil and natural gas exploration, development and production in their respective blocks.

Notwithstanding, winning companies or consortia will be able to delegate the signing of the Concession Agreement to another company or consortium, as follows:

- to an affiliate of the winning company, in which case the qualified winning company must fully guarantee the obligations of the signing company; or
- to a company controlled by the winning company (or its affiliates, according to the definitions in the Concession Agreement) and by the other companies (or affiliates) participating in the winning consortium. In this case, the direct or indirect participation of each controlling company (or its affiliates) should be identical to the participation defined in the envelope used to present the offers, described in Section 7 of this Final Tender Protocol. The obligations of the signing company should be fully guaranteed by each of the qualified companies participating in the consortium.

In the situations mentioned above, each qualified company should still provide the following:

- a guarantee for the performance of the contractual obligations, ("Performance Guarantee"), in the form found in Annex XIII of this Final Tender Protocol.
- a Power of Attorney of the signing company indicating the authorized person or competent person to sign on his behalf, in the form provided by the ANP.

In the event a signing company is an affiliate of the qualified company (as defined in the Concession Agreement), one (1) copy of its statutes or social contract should be provided. A Legal Representative of the signing company should authenticate the original documents.

The signing of the Concession Agreement is predicated upon a review of the company's status with the *Cadastro Informativo de Créditos Não Quitados do Setor Público Federal* ("CADIN"). A company's presence on CADIN's registry of companies in default vis-à-vis the Federal Government will preclude execution of the Concession Agreement unless the company can prove that:

- it has appealed in a court against the finding of its status in default, that such appeal is still pending and that it has provided the court a satisfactory guarantee as provided for in the Law; or
- its default status is solely the result of a condition that has since changed but the company has not yet been removed from the registry.

On or before the signing of the Concession Agreements, the winning bidders should provide the following documents:

- in the event the qualified company opts to sign the Concession Agreement through one of its subsidiaries or other company created specifically for this, it should provide Constituent Articles and any amendments, duly filed in the appropriate places;
- a legal opinion accepted by the ANP containing the information concerning the relationship between the qualified company and the company that will sign the Concession Agreement;
- in the event a winning company or consortium opts to sign the Concession Agreement through one of its affiliates according to the provisions in Section 10 of this Final Tender Protocol, Performance Guarantees should be provided;
- duly authenticated documents proving the qualification of the Legal Representative of the company;
- proof of payment of the Signature Bonus bid;
- a Letter of Credit in the form to be provided by the ANP for the obligations of the Minimum Exploration Program. For the first exploration period, this Letter of Credit must be issued by a bank or financial institution which has a minimum equity capital of R\$1,000,000,000 (one billion Reais), or holds a rating of “A” or above in the publications of Standard and Poor’s Ratings Group or of Moody’s Investors Services, Inc. For the second and third exploration periods, the requirements will be published in due course. In the case of consortia, the obligation to present a Letter of Credit can be satisfied by the presentation of more than one letter, as long as the total value is equal to the specified value for the subject block of the Concession Agreement, according to the specifications of the Minimum Exploration Program.

The winning bidders can submit additional documentation, as needed, up to ten (10) days prior to the date of signing the Concession Agreement. In the event the Concession Agreement is not signed, the Bid Bond will be drawn, as described in Section 6.15 of this Final Tender Protocol.

In case the winner is a consortium and one of its companies does not present the necessary documentation, the other companies within the consortium can, at the discretion of the ANP, assume the responsibilities of the non-conforming company. In this situation, under no circumstance will a new company be allowed to enter into the winning consortium.

If a winning bidder, for whatever reason, does not execute the Concession Agreement before the date given for its signature, the runner-up bidder will be summoned and given the opportunity to sign the Concession Agreement for the block, as long as it meets the values offered by the withdrawing winning bidder, and it also re-submits a Bid Bond.

## 11. FORUM

Questions regarding the execution of this Tender Protocol that could not be decided upon administratively will be processed and judged in the *Foro da Justiça Federal – Seção Judiciária do Estado do Rio de Janeiro*, to the exclusion of all other jurisdictions.

## 12. SUPPLEMENTARY INFORMATION

### 12.1 State Participation

The State Participation is established by the Petroleum Law and regulated by Decree No. 2.705 of August 3, 1998. This is comprised of Signature Bonus, Royalties, Special Participation and Surface Rentals.

#### Signature Bonus

The Signature Bonus will be established by the value of the winning bids. No Signature Bonus bid can be less than the minimum bonus established in Section 8.3 of this Final Tender Protocol.

#### Royalties

Royalties will be paid on a monthly basis starting on the initiation of production for each field at a rate of 10% (ten percent) of the oil and gas production. Based upon issues such as geological risk, production forecasts and other pertinent factors, the ANP may, at the request of the concessionaires, reduce the percentage to a minimum of 5% (five percent).

#### Special Participation

The Special Participation will be calculated on a quarterly basis for each field. The rate will depend on the volume of production, the location of the field, whether it is onshore or offshore, the water depth, and the number of years in production. The basis of calculation of the Special Participation is the net income of the oil and natural gas production. In order to comply with §5, Art. 22, of Decree No. 2.705/98, the concession areas for each producing field will be classified according to the majority of the area of the field situated above or below the 400 (four hundred) meters bathymetric line.

#### Surface Rentals

The per-unit payments by the occupant or renter of the area in the first exploration period, are indexed to November 1, 1999 and defined in Table 3 in Annex I of this Final Tender Protocol. In accordance with Decree No 2.705/98, these per-unit rates will be doubled in the second and third exploration periods, and in the development stage of the production phase. During the production phase, the per-unit rates will be 10 (ten) times those in the first exploration period. The per-unit rates for Surface Rentals are subject to escalation by the General Pricing Index – *Índice Geral de Preços -Disponibilidade Interna (IGP-DI)*, published by the *Fundação Getúlio Vargas (FGV)*, from November 1, 1999 to the signature date for the Concession Agreement. After that point these values will be adjusted in accordance with the provisions of Decree 2,705/98.

### 12.2 Import and Export Duties (REPETRO)

Decree 3161 of September 2, 1999, instituted a customs regime for the import and export of goods intended for the exploration and production of oil and gas (REPETRO) which provides special treatment for certain goods and replacement parts which are made locally and are used in these activities. Rule 112/99 of the *Secretaria da Receita Federal* (Federal Revenue Authority) of September 6, 1999, and the Declaratory Act 85/99 of the General Coordinator of the Customs Service of November 17, 1999, lists the goods subject to REPETRO. In addition,

Decree 3161/99 authorizes the importation, prior to December 31, 2005, of equipment in used oil and natural gas exploration and production activity under a temporary admissions regime free of Import Duty (*Imposto de Importação –II*) and the Tax on Industrialized Products (*Imposto sobre Produtos Industrializados –IPI*)

### **12.3 Investments in Research and Development**

Companies which enter into Concession Agreements for each of the blocks offered in Brazil Round 2, and subsequently move on to discover and develop fields that pay Special Participation, will be required to undertake commitments to the funding of Research and Development in the amount of 1% (one percent) of the gross revenues from the relevant fields.

Up to 50% (fifty percent) of this may be used in the company's own Research and Development facilities within Brazil. The remainder of this investment must be invested in collaboration with university and/or national Research and Development institutions registered with the ANP. Investments made in this respect in excess of the minimum in any one year may be credited against obligations in later years.

### **12.4 Landowner Fees**

The concessionaires are also subject, in conformity to Art. 52 of the Petroleum Law, to the payment of 1% (one percent) of the value of production of petroleum and natural gas to the Landowner where the production is located, as defined in *Portaria* ANP No. 143 of September 25, 1998.

### **12.5 Property Damage Payments**

The procedures for payments made for expropriation or acquisition of rights-of-way are provided in the Concession Agreement.

### **12.6 Health, Safety and Environment**

Petroleum and natural gas exploration development and production activities are subject to the Brazilian legislation covering the operational practices, worker's health, the preservation of the environment and public safety.

### **12.7 Applicable Law**

The Concession Agreement will be governed by the laws of the *República Federativa do Brasil*. The venue for the settlement of any disputes, disagreements, or conflicts arising between the parties in the course of the Concession Agreement will be Rio de Janeiro.

## 13. FINAL DISPOSITION

### 13.1 Consultation

The ANP will provide clarification and additional information relative to this Tender Protocol until May 26, 2000. The questions should be sent to ANP in writing, by fax or e-mail, to the following addresses:

- In Writing:  
Agência Nacional do Petróleo  
Superintendência de Promoção de Licitações  
Rua Senador Dantas 105, 11º andar  
20031-201 Rio de Janeiro - RJ, Brazil
- By Fax:  
Within Brazil: (021) 804 0202  
Outside Brazil: +55-21-804 0202
- By E-mail:  
Brazil-Round2@ibm.net

The ANP maintains a Web-Site specifically for Brazil - Round 2 at the following address:

<http://www.Brazil-Round2.com>

All documentation submitted to the ANP should be registered in the Protocol office located at the above address, Monday - Friday, between the hours of 9:00 and 11:45 hours and between 14:00 and 17:00.

Before May 26, 2000, the qualified companies can solicit information or clarification concerning the Information Package for those that have paid the relevant Participation Fee, or concerning details of the Concession Agreement. This information will be provided on a first-come-first-serve basis by the ANP's Superintendência de Promoção de Licitações.

### 13.2 ANP's Rights

The ANP may revoke, in full or in part, at any time, the current offering, provided it is in the public's best interest, or may annul process if its procedures are determined to be illegal.

The ANP can alter the conditions in this Final Tender Protocol, provided there is a commensurate change in the qualification and bidding deadlines.

The ANP can postpone the bidding by publicly announcing a new date.

The CEL, at any phase of the licensing, can take such steps that it considers necessary to clarify or complement the offering process.

The ANP also reserves the right to unilaterally revise the Timetable and related procedures of the Brazil - Round 2, as well as to disqualify any previously qualified company although in this

circumstance the relevant Participation Fee would be refunded unless the decision to disqualify is due to misrepresentation, misconduct or submission of a non-conforming bid or document.

Subjects not covered in this Final Tender Protocol, related to Brazil - Round 2, will be analyzed by the CEL and submitted for the review of ANP's Board of Directors.

### **13.3 Administrative Recourse**

Any decision of the CEL may be challenged no later than five (5) working days from the day of the CEL's decision.

An appeal of an interested bidder, directed to the CEL, must be made in writing and supported by documents that prove the allegations and registered by the ANP's Protocol Office.

Upon the lodging of a challenge, the CEL will make it known to the other bidders to allow them the opportunity to oppose the challenge within the timeframe of five (5) working days, starting with the date of notice.

## 14. ANNEXES

*ANNEX I - DETAIL ON THE BLOCKS IN THE OFFERING*

*ANNEX II - CONCESSION AGREEMENT*

*ANNEX III - MINIMUM EXPLORATION PROGRAM*

*ANNEX IV - POWER OF ATTORNEY FOR LEGAL REPRESENTATIVE*

*ANNEX V - CONFIDENTIALITY AGREEMENT*

*ANNEX VI – PAYMENT OF THE PARTICIPATION FEE*

*ANNEX VII - AUTHORIZATION TO DISCLOSE INFORMATION ABOUT THE COMPANY*

*ANNEX VIII - NOTIFICATION OF BIDDING BY AN AFFILIATE COMPANY*

*ANNEX IX - MODEL OF BID BOND (Portuguese)*

*ANNEX X - MODEL OF BID BOND (English)*

*ANNEX XI - LETTER OF CREDIT FOR MINIMUM EXPLORATION PROGRAM (Portuguese)*

*ANNEX XII - LETTER OF CREDIT FOR MINIMUM EXPLORATION PROGRAM (English)*

*ANNEX XIII - MODEL PERFORMANCE GUARANTEE*

### **COMISSÃO ESPECIAL DE LICITAÇÃO**

**RIO DE JANEIRO, APRIL 20, 2000**

\_\_\_\_\_  
Cesar Antonio Gonçalves  
(President of CEL)

\_\_\_\_\_  
Norival Brisola

\_\_\_\_\_  
José Júlio Gama

\_\_\_\_\_  
Oswaldo Antunes Pedrosa

\_\_\_\_\_  
Jorge Carlos Della Fávera

\_\_\_\_\_  
Cláudio Bettini



## ANNEX I – DETAIL OF THE BLOCKS IN THE OFFERING

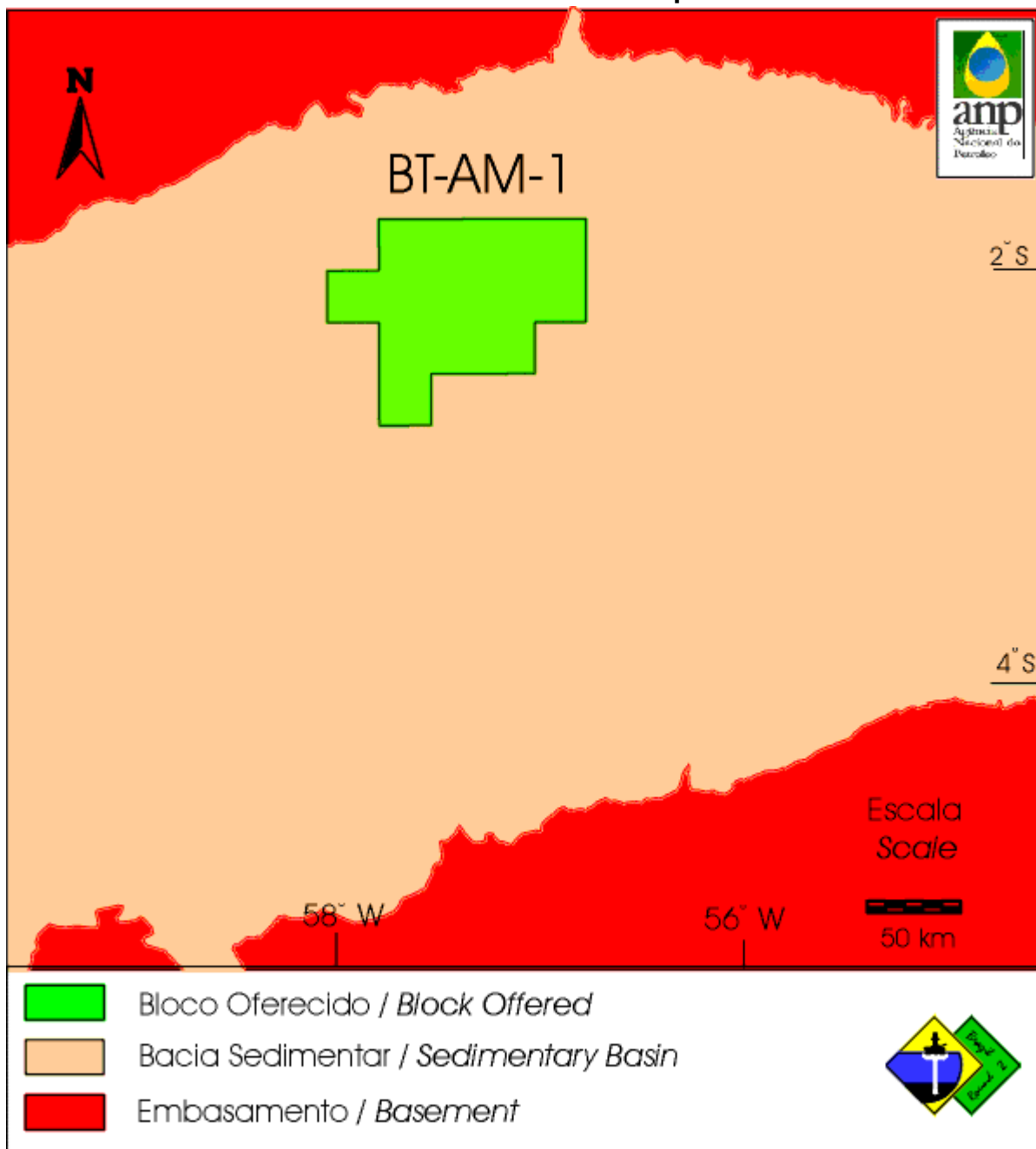
### TABLE 3 - DESCRIPTION OF THE BLOCKS

| Basin                  | Block     | Area (km <sup>2</sup> ) | Exploration Periods (yrs) <sup>1</sup> | Relinquishment Obligation (% of original <sup>2</sup> ) | Rentals <sup>3</sup> (R\$/km <sup>2</sup> /yr) | Required Technical Qualification |
|------------------------|-----------|-------------------------|--|---|--|----------------------------------|
| <b>ONSHORE BLOCKS</b>  |           |                         |  |   |  |                                  |
| Amazonas               | BT-AM-1   | 9,994                   | 4+3+2                                  | 50-25-25  | 50   | B                                |
| Paraná                 | BT-PR-4   | 5,701                   | 4+3+2                                  | 50-25-25  | 50   | B                                |
| Potiguar               | BT-POT-3  | 167                     | 3+2+2                                  | 50-25-25  | 50   | C                                |
|                        | BT-POT-4  | 471                     | 3+2+2                                  | 50-25-25  | 50   | C                                |
| Recôncavo              | BT-REC-1  | 277                     | 3+2+2                                  | 50-25-25  | 50   | C                                |
|                        | BT-REC-2  | 184                     | 3+2+2                                  | 50-25-25  | 50   | C                                |
|                        | BT-REC-3  | 174                     | 3+2+2                                  | 50-25-25  | 50   | C                                |
| Sergipe-Alagoas        | BT-SEAL-1 | 1,292                   | 3+2+2                                  | 50-25-25  | 50   | C                                |
|                        | BT-SEAL-2 | 1,040                   | 3+2+2                                  | 50-25-25  | 50   | C                                |
|                        | BT-SEAL-3 | 1,040                   | 3+2+2                                  | 50-25-25  | 50   | C                                |
| <b>OFFSHORE BLOCKS</b> |           |                         |  |   |  |                                  |
| Camamu-Almada          | BM-CAL-4  | 841                     | 3+2+2                                  | 50-25-25  | 120  | B                                |
| Campos                 | BM-C-7    | 1,919                   | 3+2+2                                  | 50-25-25  | 350  | B                                |
|                        | BM-C-8    | 1,565                   | 3+2+2                                  | 50-25-25  | 350  | B                                |
|                        | BM-C-9    | 1,166                   | 3+2+2                                  | 50-25-25  | 350  | B                                |
|                        | BM-C-10   | 2,364                   | 3+3+2                                  | 50-25-25  | 350  | A                                |
| Pará-Maranhão          | BM-PAMA-1 | 3,590                   | 3+3+2                                  | 50-25-25  | 120  | B                                |
| Santos                 | BM-S-7    | 6,591                   | 3+2+2                                  | 50-25-25  | 350  | B                                |
|                        | BM-S-8    | 4,864                   | 3+3+2                                  | 50-25-25  | 350  | A                                |
|                        | BM-S-9    | 3,763                   | 3+3+2                                  | 50-25-25  | 350  | A                                |
|                        | BM-S-10   | 3,780                   | 3+3+2                                  | 50-25-25  | 350  | A                                |
|                        | BM-S-11   | 5,229                   | 3+3+2                                  | 50-25-25  | 350  | A                                |
| Sergipe-Alagoas        | BM-SEAL-4 | 2,265                   | 3+3+2                                  | 50-25-25  | 120  | A                                |
|                        | BM-SEAL-5 | 1,072                   | 3+3+2                                  | 50-25-25  | 120  | A                                |

**Notes:**

1. The final Exploration Period may be extended at the discretion of the ANP for the completion of a previously approved Evaluation Plan.
2. Relinquishment obligation at the end of each Exploration Phase, expressed as a percentage of the original area. Companies may elect to relinquish a larger portion of the Block without modification to the work obligations in the Minimum Exploration Program. Companies that believe work undertaken in the prior Exploration Period(s) demonstrates that insufficient prospects remain on the Block to justify the Minimum Exploration Program in subsequent periods may request a reduction or modification to the program. The ANP will be under no obligation to agree to any reduction or modification and may condition any agreement on either alternate work undertakings or increased area relinquishment..
3. Rentals, in *Reais* per square kilometer per year, are referenced to November 1, 1999, and are subject to indexation (IGP-DI) from this date. Rentals for the second and third Exploration Periods as well as the Development Stage are double those of the first Period. Rentals for the Production Phase are ten times those of the first Exploration Period.

### Amazonas Basin Map



### Block BT-AM-1 Coordinates

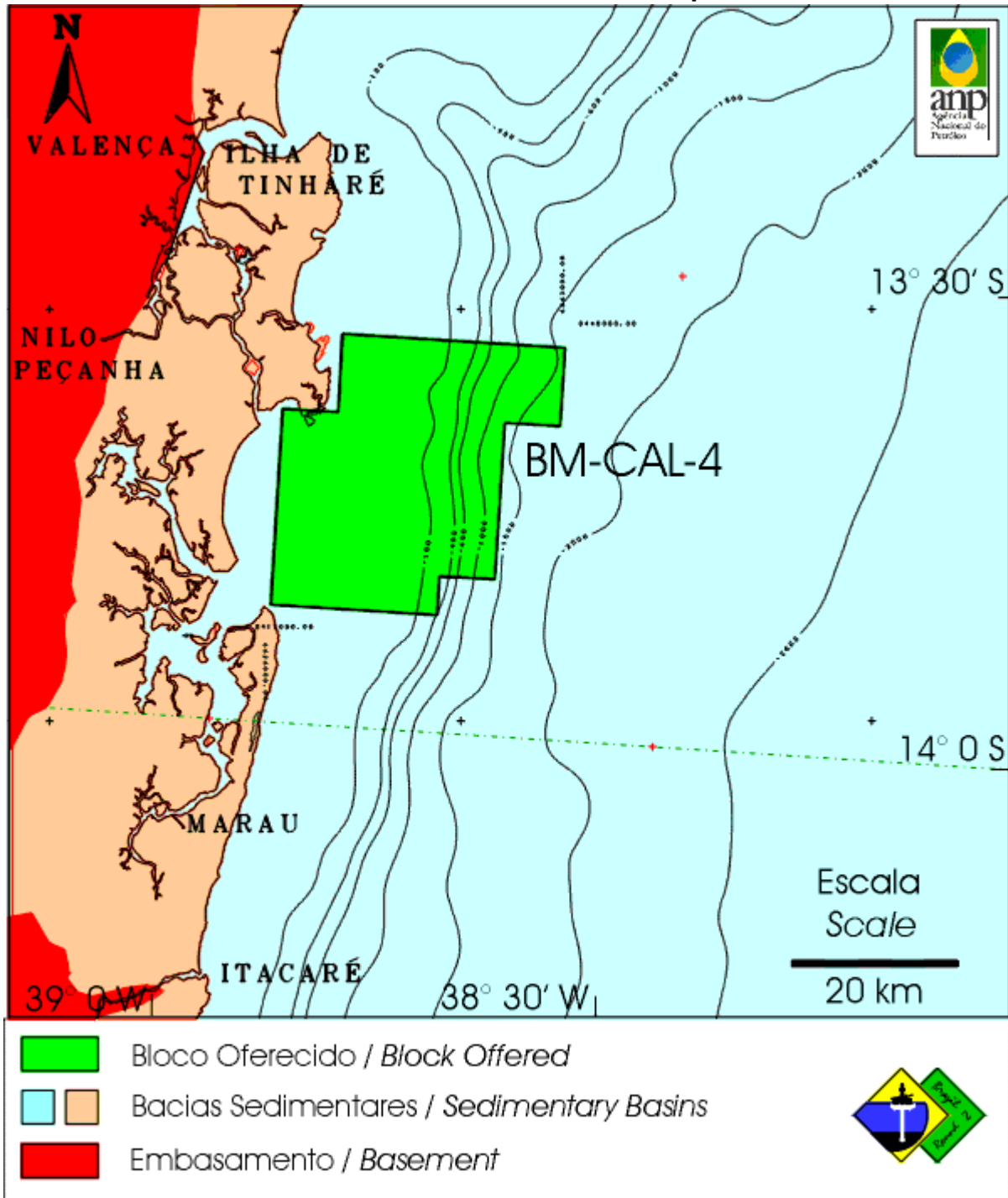
-----  
Projection : POLYCONIC Datum: SAD-69 CENTRAL MERIDIAN: 54.00 W  
False North : 10000000.00 False East : 5000000.00  
-----

+ BT-AM-1

| * Point | Latitude     | Longitude     | North Coordinate | East Coordinate |
|---------|--------------|---------------|------------------|-----------------|
| 1       | 1 45 0.000 S | 57 45 0.000 W | 9806076.75       | 4582744.08      |
| 2       | 2 0 0.000 S  | 57 45 0.000 W | 9778373.31       | 4582803.37      |
| 3       | 2 0 0.000 S  | 58 0 0.000 W  | 9778307.66       | 4554990.31      |
| 4       | 2 15 0.000 S | 58 0 0.000 W  | 9750595.98       | 4555061.99      |
| 5       | 2 15 0.000 S | 57 45 0.000 W | 9750669.82       | 4582870.55      |
| 6       | 2 45 0.000 S | 57 45 0.000 W | 9695262.67       | 4583028.62      |
| 7       | 2 45 0.000 S | 57 30 0.000 W | 9695347.05       | 4610826.63      |
| 8       | 2 30 0.000 S | 57 30 0.000 W | 9723043.01       | 4610749.19      |
| 9       | 2 30 0.000 S | 57 0 0.000 W  | 9723180.59       | 4666356.34      |
| 10      | 2 15 0.000 S | 57 0 0.000 W  | 9750862.75       | 4666296.31      |
| 11      | 2 15 0.000 S | 56 45 0.000 W | 9750917.53       | 4694104.91      |
| 12      | 1 45 0.000 S | 56 45 0.000 W | 9806269.50       | 4694012.23      |
| 13      | 1 45 0.000 S | 57 45 0.000 W | 9806076.75       | 4582744.08      |

\*  
\* Perimeter : 499.657 (km)  
\* Plane Area : 10011.670 (km<sup>2</sup>)  
\* Corrected Area: 9994.038 (km<sup>2</sup>)  
\*  
-----

### Camamu-Almada Basin Map



### Block BM-CAL-4 Coordinates

-----  
Projection : POLYCONIC Datum: SAD-69 CENTRAL MERIDIAN: 54.00 W  
False North : 10000000.00 False East : 5000000.00  
-----

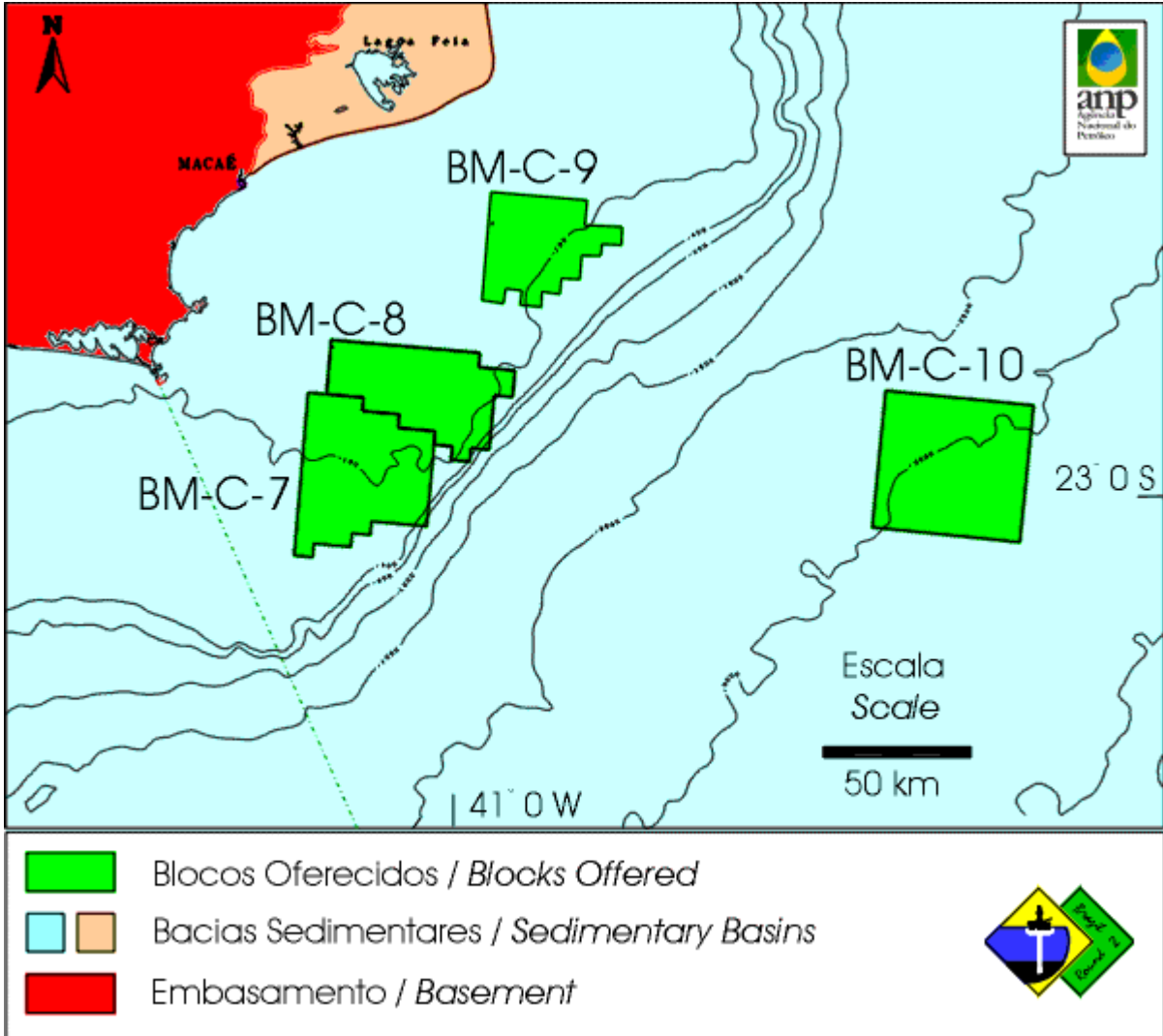
+ BM-CAL-4

| * Point | Latitude       | Longitude      | North Coordinate | East Coordinate |
|---------|----------------|----------------|------------------|-----------------|
| 1       | 13 35 0.000 S  | 38 52 30.000 W | 8447021.09       | 6635872.62      |
| 2       | 13 40 0.000 S  | 38 52 30.000 W | 8437514.16       | 6635287.01      |
| 3       | 13 40 0.000 S  | 38 56 15.000 W | 8437934.76       | 6628538.33      |
| 4       | 13 52 30.000 S | 38 56 15.000 W | 8414174.98       | 6627065.35      |
| 5       | 13 52 30.000 S | 38 45 0.000 W  | 8412890.19       | 6647291.93      |
| 6       | 13 50 0.000 S  | 38 45 0.000 W  | 8417645.51       | 6647592.12      |
| 7       | 13 50 0.000 S  | 38 41 15.000 W | 8417214.92       | 6654335.37      |
| 8       | 13 40 0.000 S  | 38 41 15.000 W | 8436241.93       | 6655532.38      |
| 9       | 13 40 0.000 S  | 38 37 30.000 W | 8435814.37       | 6662280.61      |
| 10      | 13 35 0.000 S  | 38 37 30.000 W | 8445330.86       | 6662876.32      |
| 11      | 13 35 0.000 S  | 38 52 30.000 W | 8447021.09       | 6635872.62      |

\* Perimeter : 134.299 (km)  
\* Plane Area : 869.530 (km<sup>2</sup>)  
\* Corrected Area: 841.352 (km<sup>2</sup>)

\*-----

### Campos Basin Map



### Block BM-C-7 Coordinates

-----  
 Projection: POLYCONIC                      Datum: SAD-69    CENTRAL MERIDIAN: 54.00 W  
 False North : 10000000.00                  False East : 5000000.00  
 -----

+    BM-C-7

\*

| * Point | Latitude       | Longitude      | North Coordinate | East Coordinate |
|---------|----------------|----------------|------------------|-----------------|
| 1       | 23 0 0.000 S   | 41 30 0.000 W  | 7400864.86       | 6279984.83      |
| 2       | 23 30 0.000 S  | 41 30 0.000 W  | 7344579.42       | 6275157.76      |
| 3       | 23 30 0.000 S  | 41 26 15.000 W | 7344023.38       | 6281517.34      |
| 4       | 23 27 30.000 S | 41 26 15.000 W | 7348714.08       | 6281925.40      |
| 5       | 23 27 30.000 S | 41 18 45.000 W | 7347595.23       | 6294647.99      |
| 6       | 23 25 0.000 S  | 41 18 45.000 W | 7352287.54       | 6295059.52      |
| 7       | 23 25 0.000 S  | 41 15 0.000 W  | 7351724.74       | 6301422.52      |
| 8       | 23 22 30.000 S | 41 15 0.000 W  | 7356417.91       | 6301835.45      |
| 9       | 23 22 30.000 S | 41 3 45.000 W  | 7354715.28       | 6320929.21      |
| 10      | 23 5 0.000 S   | 41 3 45.000 W  | 7387586.59       | 6323843.61      |
| 11      | 23 5 0.000 S   | 41 11 15.000 W | 7388713.50       | 6311085.80      |
| 12      | 23 2 30.000 S  | 41 11 15.000 W | 7393408.23       | 6311495.24      |
| 13      | 23 2 30.000 S  | 41 18 45.000 W | 7394522.67       | 6298732.37      |
| 14      | 23 0 0.000 S   | 41 18 45.000 W | 7399215.94       | 6299137.02      |
| 15      | 23 0 0.000 S   | 41 30 0.000 W  | 7400864.86       | 6279984.83      |

\*

\* Perimeter            :            202.600 (km)

\* Plane Area            :            1958.613 (km<sup>2</sup>)

\* Corrected Area:            1918.528 (km<sup>2</sup>)

\*

### Block BM-C-8 Coordinates

-----  
 Projection : POLYCONIC Datum: SAD-69 CENTRAL MERIDIAN: 54.00 W  
 False North : 10000000.00 False East : 5000000.00  
 -----

+ BM-C-8

\*

| * Point | Latitude       | Longitude      | North Coordinate | East Coordinate |
|---------|----------------|----------------|------------------|-----------------|
| 1       | 22 50 0.000 S  | 41 26 15.000 W | 7419085.76       | 6287964.56      |
| 2       | 23 0 0.000 S   | 41 26 15.000 W | 7400317.94       | 6286369.13      |
| 3       | 23 0 0.000 S   | 41 18 45.000 W | 7399215.94       | 6299137.02      |
| 4       | 23 2 30.000 S  | 41 18 45.000 W | 7394522.67       | 6298732.37      |
| 5       | 23 2 30.000 S  | 41 11 15.000 W | 7393408.23       | 6311495.24      |
| 6       | 23 5 0.000 S   | 41 11 15.000 W | 7388713.50       | 6311085.80      |
| 7       | 23 5 0.000 S   | 41 3 45.000 W  | 7387586.59       | 6323843.61      |
| 8       | 23 7 30.000 S  | 41 3 45.000 W  | 7382890.39       | 6323429.37      |
| 9       | 23 7 30.000 S  | 41 0 0.000 W   | 7382322.05       | 6329805.86      |
| 10      | 23 10 0.000 S  | 41 0 0.000 W   | 7377625.16       | 6329388.87      |
| 11      | 23 10 0.000 S  | 40 56 15.000 W | 7377053.30       | 6335763.05      |
| 12      | 23 7 30.000 S  | 40 56 15.000 W | 7381750.98       | 6336182.11      |
| 13      | 23 7 30.000 S  | 40 52 30.000 W | 7381177.18       | 6342558.11      |
| 14      | 22 57 30.000 S | 40 52 30.000 W | 7399972.14       | 6344235.42      |
| 15      | 22 57 30.000 S | 40 48 45.000 W | 7399398.82       | 6350619.37      |
| 16      | 22 52 39.375 S | 40 48 45.000 W | 7408504.79       | 6351431.67      |
| 17      | 22 52 39.375 S | 40 56 5.625 W  | 7409621.93       | 6338921.79      |
| 18      | 22 50 0.000 S  | 40 56 5.625 W  | 7414614.01       | 6339361.86      |
| 19      | 22 50 0.000 S  | 41 26 15.000 W | 7419085.76       | 6287964.56      |

\*

\* Perimeter : 203.626 (km)

\* Plane Area : 1598.853 (km<sup>2</sup>)

\* Corrected Area: 1565.163 (km<sup>2</sup>)

\*

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### Block BM-C-9 Coordinates

-----  
 Projection : POLYCONIC Datum: SAD-69 CENTRAL MERIDIAN: 54.00 W  
 False North : 10000000.00 False East : 5000000.00  
 -----

+ BM-C-9

| * Point | Latitude       | Longitude      | North Coordinate | East Coordinate |
|---------|----------------|----------------|------------------|-----------------|
| 1       | 22 20 0.000 S  | 40 56 5.625 W  | 7471003.06       | 6344276.30      |
| 2       | 22 40 9.375 S  | 40 56 5.625 W  | 7433115.07       | 6340985.72      |
| 3       | 22 40 9.375 S  | 40 52 20.625 W | 7432549.95       | 6347384.00      |
| 4       | 22 37 39.375 S | 40 52 20.625 W | 7437249.69       | 6347796.67      |
| 5       | 22 37 39.375 S | 40 48 35.625 W | 7436682.70       | 6354196.73      |
| 6       | 22 40 9.375 S  | 40 48 35.625 W | 7431982.14       | 6353782.04      |
| 7       | 22 40 9.375 S  | 40 44 50.625 W | 7431411.64       | 6360179.84      |
| 8       | 22 37 39.375 S | 40 44 50.625 W | 7436113.02       | 6360596.55      |
| 9       | 22 37 39.375 S | 40 41 5.625 W  | 7435540.65       | 6366996.13      |
| 10      | 22 35 9.375 S  | 40 41 5.625 W  | 7440242.95       | 6367414.13      |
| 11      | 22 35 9.375 S  | 40 37 20.625 W | 7439668.73       | 6373815.48      |
| 12      | 22 30 9.375 S  | 40 37 20.625 W | 7449075.32       | 6374653.32      |
| 13      | 22 30 9.375 S  | 40 33 35.625 W | 7448500.08       | 6381058.46      |
| 14      | 22 27 39.375 S | 40 33 35.625 W | 7453204.36       | 6381478.29      |
| 15      | 22 27 39.375 S | 40 29 50.625 W | 7452627.29       | 6387885.20      |
| 16      | 22 25 9.375 S  | 40 29 50.625 W | 7457332.53       | 6388306.30      |
| 17      | 22 25 9.375 S  | 40 37 20.625 W | 7458482.33       | 6375488.24      |
| 18      | 22 20 0.000 S  | 40 37 20.625 W | 7468183.75       | 6376346.19      |
| 19      | 22 20 0.000 S  | 40 56 5.625 W  | 7471003.06       | 6344276.30      |

\*

\* Perimeter : 175.589 (km)  
 \* Plane Area : 1193.354 (km<sup>2</sup>)  
 \* Corrected Area: 1166.473 (km<sup>2</sup>)

\*

\*-----

### Block BM-C-10 Coordinates

-----  
Projeção : POLYCONIC Datum: SAD-69 CENTRAL MERIDIAN: 54.00 W  
False North : 10000000.00 False East : 5000000.00  
-----

+ BM-C-10

| * Point | Latitude      | Longitude      | North Coordinate | East Coordinate |
|---------|---------------|----------------|------------------|-----------------|
| 1       | 22 50 0.000S  | 39 33 45.000 W | 7401512.76       | 6479624.99      |
| 2       | 23 15 0.000 S | 39 33 45.000 W | 7354348.70       | 6474999.46      |
| 3       | 23 15 0.000 S | 39 3 45.000 W  | 7349179.95       | 6525904.26      |
| 4       | 22 50 0.000 S | 39 3 45.000 W  | 7396415.70       | 6530695.41      |
| 5       | 22 50 0.000 S | 39 33 45.000 W | 7401512.76       | 6479624.99      |

\*

Perimeter : 197.359 (km)

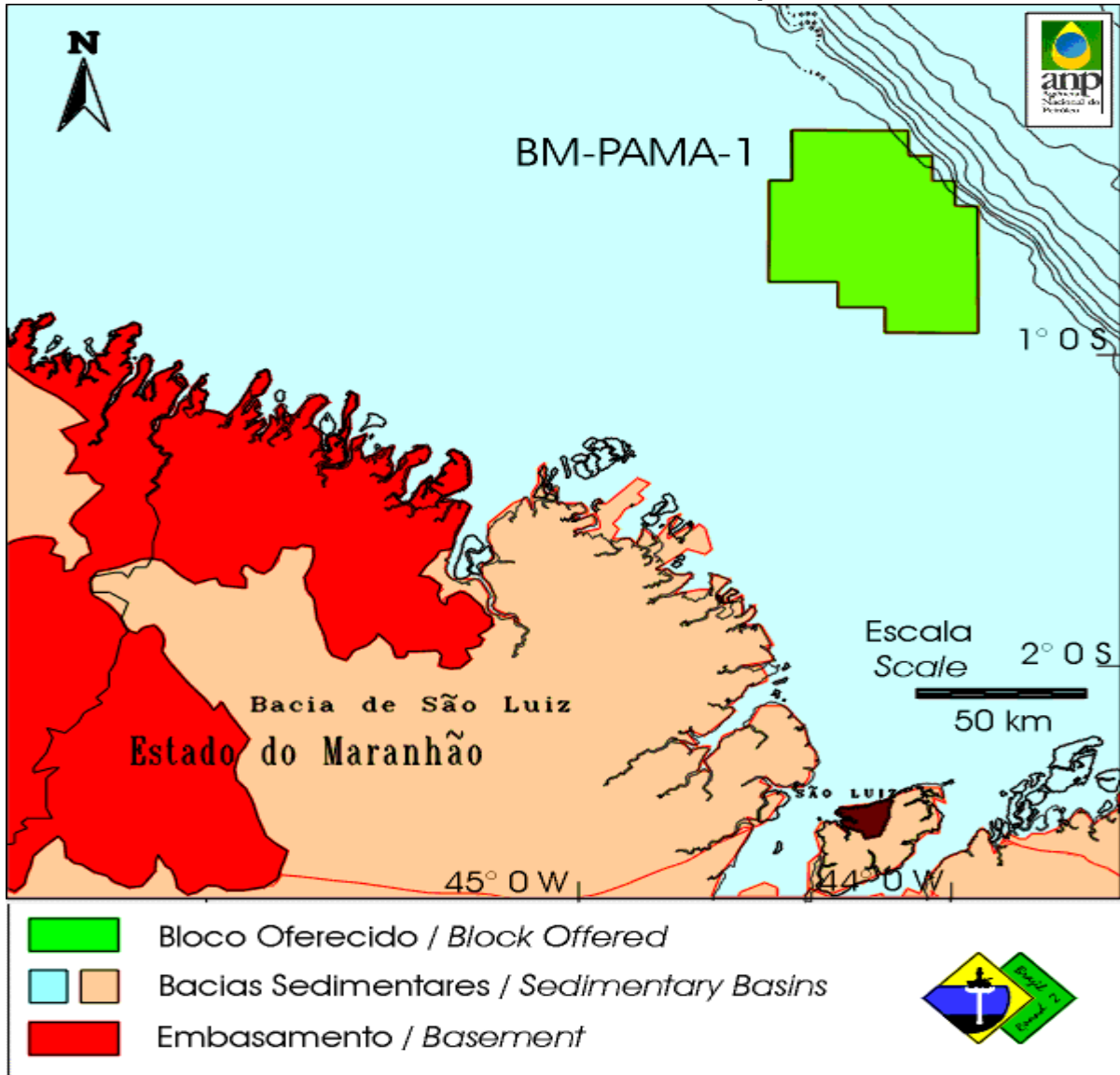
\* Plane Area : 2430.782 (km<sup>2</sup>)

\* Corrected Area: 2364.661 (km<sup>2</sup>)

\*

\*-----

### Pará-Maranhão Basin Map



### Block BM-PAMA-1 Coordinates

```

-----
Projeção   :   POLYCONIC           Datum: SAD-69  CENTRAL MERIDIAN: 54.00 W
False North : 10000000.00         False East  : 5000000.00
-----

```

+ BM-PAMA-1

\*

| * Point | Latitude     | Longitude      | North Coordinate | East Coordinate |
|---------|--------------|----------------|------------------|-----------------|
| 1       | 0 15 0.000 S | 44 26 15.000 W | 9971968.74       | 6064486.31      |
| 2       | 0 25 0.000 S | 44 26 15.000 W | 9953281.25       | 6064468.25      |
| 3       | 0 25 0.000 S | 44 30 0.000 W  | 9953289.66       | 6057510.94      |
| 4       | 0 45 0.000 S | 44 30 0.000 W  | 9915921.45       | 6057448.15      |
| 5       | 0 45 0.000 S | 44 18 45.000 W | 9915875.71       | 6078318.80      |
| 6       | 0 50 0.000 S | 44 18 45.000 W | 9906528.59       | 6078297.07      |
| 7       | 0 50 0.000 S | 44 11 15.000 W | 9906494.15       | 6092210.55      |
| 8       | 0 55 0.000 S | 44 11 15.000 W | 9897143.60       | 6092186.22      |
| 9       | 0 55 0.000 S | 43 56 15.000 W | 9897066.38       | 6120012.54      |
| 10      | 0 30 0.000 S | 43 56 15.000 W | 9943854.32       | 6120113.61      |
| 11      | 0 30 0.000 S | 44 0 0.000 W   | 9943864.95       | 6113156.39      |
| 12      | 0 25 0.000 S | 44 0 0.000 W   | 9953220.79       | 6113169.38      |
| 13      | 0 25 0.000 S | 44 3 45.000 W  | 9953229.59       | 6106212.08      |
| 14      | 0 20 0.000 S | 44 3 45.000 W  | 9962583.67       | 6106222.65      |
| 15      | 0 20 0.000 S | 44 7 30.000 W  | 9962590.66       | 6099265.27      |
| 16      | 0 15 0.000 S | 44 7 30.000 W  | 9971943.00       | 6099273.44      |
| 17      | 0 15 0.000 S | 44 26 15.000 W | 9971968.74       | 6064486.31      |

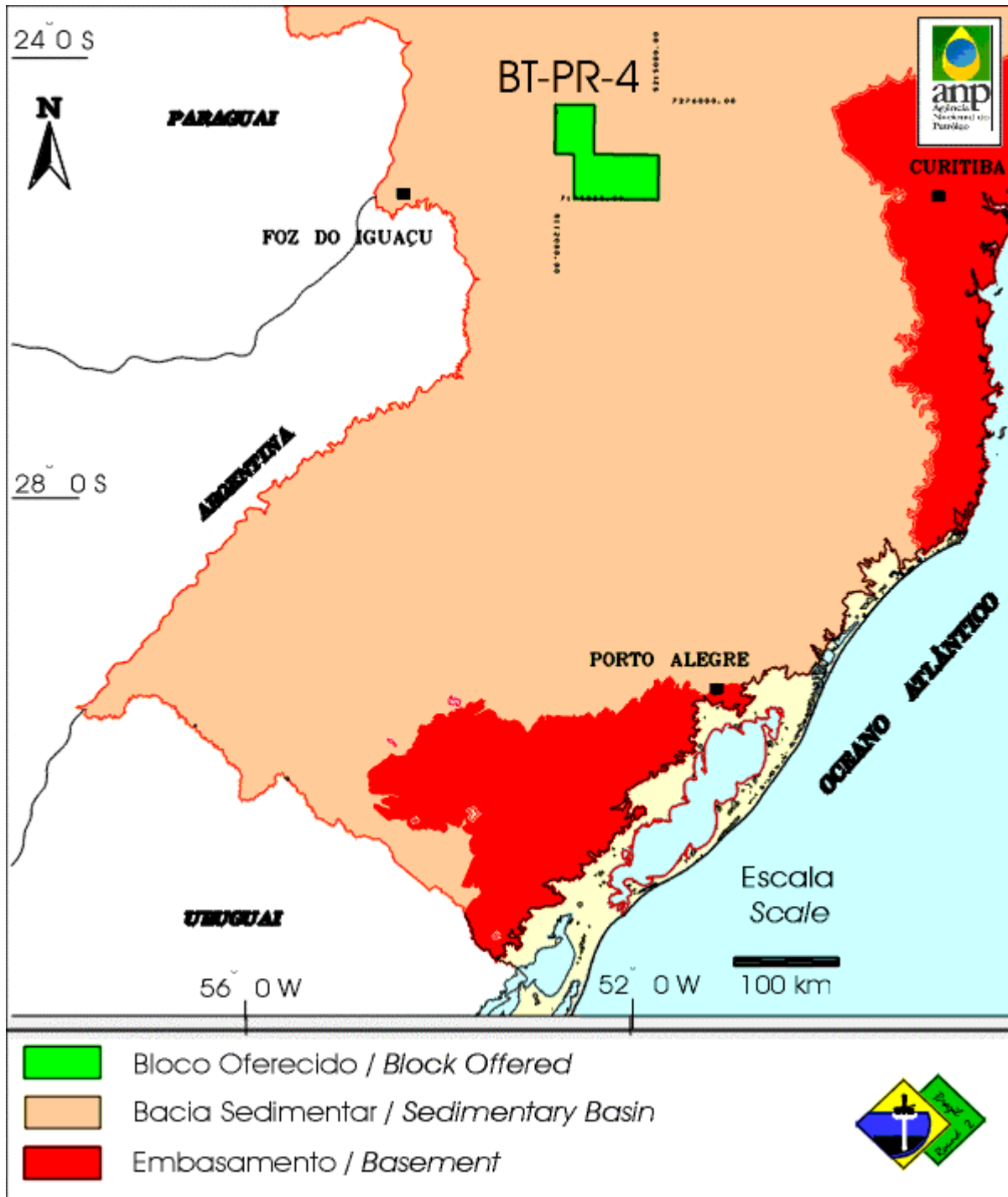
\*

```

* Perimeter      :      274.831 (km)
* Area Plane     :      3642.732 (km²)
* Corrected Area:      3590.058 (km²)

```

## Paraná Basin Map



### Block BT-PR-4 Coordinates

```

-----
Projection:  POLYCONIC           Datum:  SAD-69  CENTRAL MERIDIAN:  54.00 W
False North : 10000000.00       False East  : 5000000.00
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```

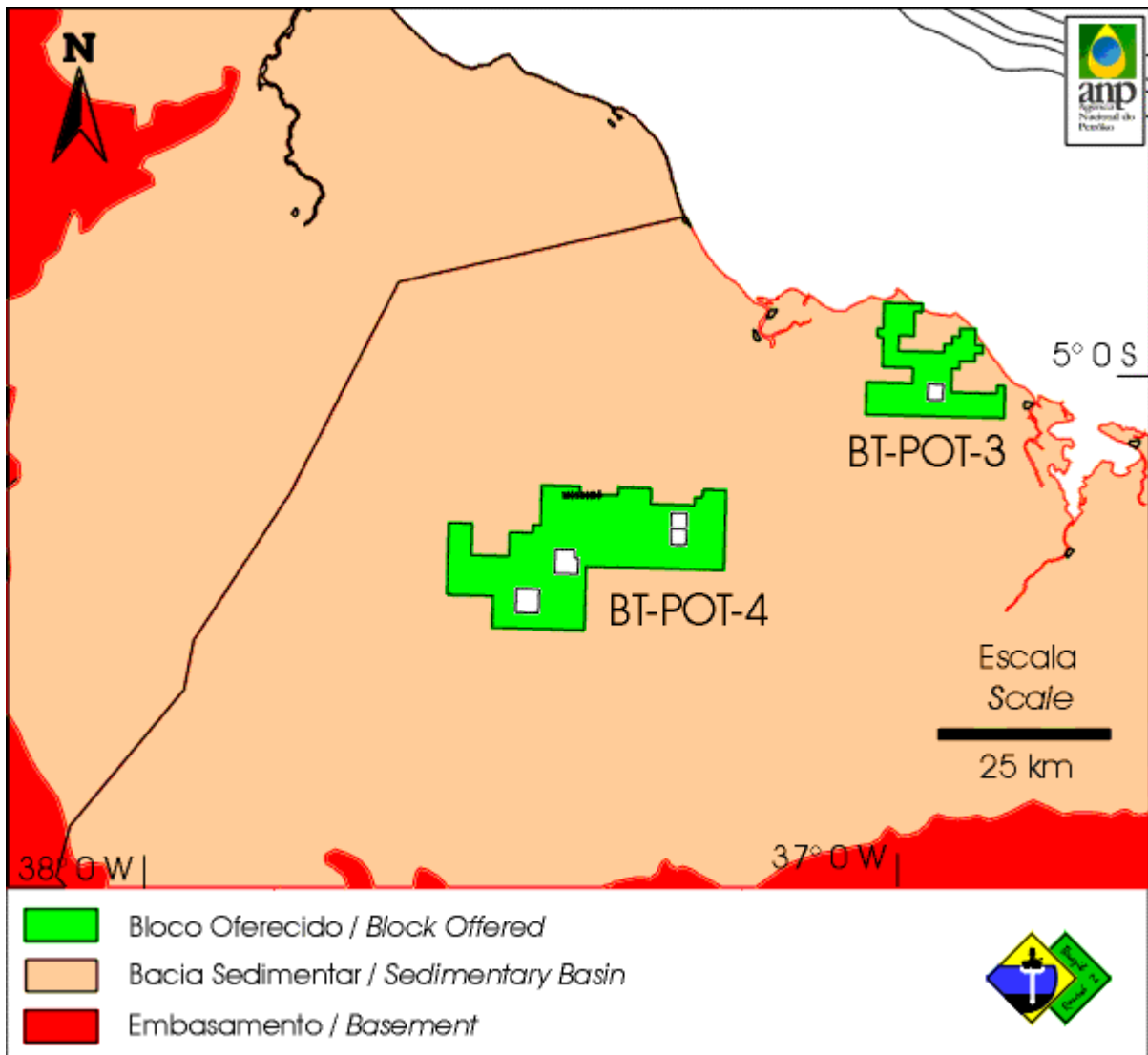
+ BT-PR-4

| Point | Latitude       | Longitude      | North Coordinate | East Coordinate |
|-------|----------------|----------------|------------------|-----------------|
| 1     | 24 37 30.000 S | 52 52 30.000 W | 7275009.22       | 5113910.26      |
| 2     | 25 5 0.000 S   | 52 52 30.000 W | 7224232.76       | 5113491.23      |
| 3     | 25 5 0.000 S   | 52 41 15.000 W | 7224062.19       | 5132405.88      |
| 4     | 25 30 0.000 S  | 52 41 15.000 W | 7177897.09       | 5131954.10      |
| 5     | 25 30 0.000 S  | 51 52 30.000 W | 7176842.18       | 5213634.36      |
| 6     | 25 5 0.000 S   | 51 52 30.000 W | 7223019.83       | 5214365.97      |
| 7     | 25 5 0.000 S   | 52 30 0.000 W  | 7223865.38       | 5151320.28      |
| 8     | 24 37 30.000 S | 52 30 0.000 W  | 7274646.80       | 5151879.03      |
| 9     | 24 37 30.000 S | 52 52 30.000 W | 7275009.22       | 5113910.26      |

\*

- \* Perimeter : 395.538 (km)
- \* Plane Area : 5703.010 (km<sup>2</sup>)
- \* Corrected Area: 5701.061 (km<sup>2</sup>)

# Potiguar Basin Map



### Block BT-POT-3 Coordinates

-----  
 Projection : POLYCONIC Datum: SAD-69 CENTRAL MERIDIAN: 54.00 W  
 False North : 10000000.00 False East : 5000000.00  
 -----

+ BT-POT-3

| * Point | Latitude      | Longitude      | North Coordinate | East Coordinate |
|---------|---------------|----------------|------------------|-----------------|
| 1       | 4 56 15.000 S | 36 58 45.000 W | 9429891.65       | 6887567.35      |
| 2       | 4 58 16.875 S | 36 58 45.000 W | 9425984.16       | 6887468.49      |
| 3       | 4 58 16.875 S | 36 59 13.125 W | 9426006.46       | 6886602.34      |
| 4       | 4 58 54.375 S | 36 59 13.125 W | 9424804.20       | 6886571.80      |
| 5       | 4 58 54.375 S | 36 58 45.000 W | 9424781.86       | 6887437.94      |
| 6       | 5 1 15.000 S  | 36 58 45.000 W | 9420273.27       | 6887322.79      |
| 7       | 5 1 15.000 S  | 36 56 15.000 W | 9420153.00       | 6891941.88      |
| 8       | 5 2 30.000 S  | 36 56 15.000 W | 9417747.94       | 6891879.94      |
| 9       | 5 2 30.000 S  | 37 0 0.000 W   | 9417928.97       | 6884951.55      |
| 10      | 5 5 0.000 S   | 37 0 0.000 W   | 9413120.36       | 6884827.39      |
| 11      | 5 5 0.000 S   | 36 48 45.000 W | 9412570.83       | 6905611.06      |
| 12      | 5 2 30.000 S  | 36 48 45.000 W | 9417383.89       | 6905736.67      |
| 13      | 5 2 30.000 S  | 36 49 22.500 W | 9417414.33       | 6904581.94      |
| 14      | 5 3 7.500 S   | 36 49 22.500 W | 9416211.12       | 6904550.66      |
| 15      | 5 3 7.500 S   | 36 53 7.500 W  | 9416393.74       | 6897622.42      |
| 16      | 5 1 15.000 S  | 36 53 7.500 W  | 9420002.26       | 6897715.72      |
| 17      | 5 1 15.000 S  | 36 52 30.000 W | 9419972.05       | 6898870.49      |
| 18      | 5 0 37.500 S  | 36 52 30.000 W | 9421174.96       | 6898901.48      |
| 19      | 5 0 37.500 S  | 36 51 15.000 W | 9421114.62       | 6901211.06      |
| 20      | 5 0 0.000 S   | 36 51 15.000 W | 9422317.65       | 6901242.02      |
| 21      | 5 0 0.000 S   | 36 50 37.500 W | 9422287.52       | 6902396.83      |
| 22      | 4 59 22.500 S | 36 50 37.500 W | 9423490.61       | 6902427.75      |
| 23      | 4 59 22.500 S | 36 51 15.000 W | 9423520.69       | 6901272.93      |
| 24      | 4 58 7.500 S  | 36 51 15.000 W | 9425926.77       | 6901334.54      |
| 25      | 4 58 7.500 S  | 36 52 30.000 W | 9425986.61       | 6899024.81      |
| 26      | 4 58 45.000 S | 36 52 30.000 W | 9424783.69       | 6898994.07      |
| 27      | 4 58 45.000 S | 36 53 7.500 W  | 9424813.65       | 6897839.23      |
| 28      | 4 59 22.500 S | 36 53 7.500 W  | 9423610.80       | 6897808.45      |
| 29      | 4 59 22.500 S | 36 53 45.000 W | 9423640.80       | 6896653.62      |
| 30      | 5 0 0.000 S   | 36 53 45.000 W | 9422438.01       | 6896622.80      |
| 31      | 5 0 0.000 S   | 36 57 30.000 W | 9422617.99       | 6889693.94      |
| 32      | 4 58 45.000 S | 36 57 30.000 W | 9425022.83       | 6889755.29      |
| 33      | 4 58 45.000 S | 36 56 15.000 W | 9424963.16       | 6892064.99      |
| 34      | 4 56 52.500 S | 36 56 15.000 W | 9428570.80       | 6892156.65      |
| 35      | 4 56 52.500 S | 36 55 37.500 W | 9428541.12       | 6893311.55      |
| 36      | 4 56 15.000 S | 36 55 37.500 W | 9429743.74       | 6893342.00      |
| 37      | 4 56 15.000 S | 36 58 45.000 W | 9429891.65       | 6887567.35      |

\* Perimeter : 112.041 (km)

\* Plane Area : 180.313 (km<sup>2</sup>)

\* Corrected Area: 172.639 (km<sup>2</sup>)

+ Excluded Area 1

\*

\* Point Latitude Longitude North Coordinate East Coordinate



|  |   |   |        |   |    |    |        |   |            |            |
|--|---|---|--------|---|----|----|--------|---|------------|------------|
| 38   | 5 | 2 | 30.000 | S | 36 | 55 | 0.000  | W | 9417687.45 | 6894189.40 |
| 39   | 5 | 3 | 45.000 | S | 36 | 55 | 0.000  | W | 9415282.15 | 6894127.13 |
| 40   | 5 | 3 | 45.000 | S | 36 | 53 | 45.000 | W | 9415221.34 | 6896436.50 |
| 41   | 5 | 2 | 30.000 | S | 36 | 53 | 45.000 | W | 9417626.89 | 6896498.86 |
| 38   | 5 | 2 | 30.000 | S | 36 | 55 | 0.000  | W | 9417687.45 | 6894189.40 |
| *  |   |   |        |   |    |    |        |   |            |            |
| * Perimeter : 9.433 (km)                     |   |   |        |   |    |    |        |   |            |            |
| * Plane Area : 5.559 (km <sup>2</sup> )      |   |   |        |   |    |    |        |   |            |            |
| * Corrected Area: 5.322 (km <sup>2</sup> )   |   |   |        |   |    |    |        |   |            |            |
| *  |   |   |        |   |    |    |        |   |            |            |
| * TOTALS                                     |   |   |        |   |    |    |        |   |            |            |
| *  |   |   |        |   |    |    |        |   |            |            |
| * Plane Area : 174.754 (km <sup>2</sup> )    |   |   |        |   |    |    |        |   |            |            |
| * Corrected Area: 167.317 (km <sup>2</sup> ) |   |   |        |   |    |    |        |   |            |            |
| *-----                                       |   |   |        |   |    |    |        |   |            |            |

### Block BT-POT-4 Coordinates

-----  
 Projection : POLYCONIC Datum: SAD-69 CENTRAL MERIDIAN: 54.00 W  
 False North : 10000000.00 False East : 5000000.00  
 -----

+ BT-POT-4

| * Point | Latitude      | Longitude      | North Coordinate | East Coordinate |
|---------|---------------|----------------|------------------|-----------------|
| 1       | 5 11 15.000 S | 37 26 15.000 W | 9402383.37       | 6836025.24      |
| 2       | 5 14 22.500 S | 37 26 15.000 W | 9396385.58       | 6835869.76      |
| 3       | 5 14 22.500 S | 37 26 52.500 W | 9396416.05       | 6834715.40      |
| 4       | 5 15 0.000 S  | 37 26 52.500 W | 9395216.56       | 6834684.14      |
| 5       | 5 15 0.000 S  | 37 28 45.000 W | 9395308.04       | 6831221.09      |
| 6       | 5 16 52.500 S | 37 28 45.000 W | 9391710.12       | 6831127.13      |
| 7       | 5 16 52.500 S | 37 31 52.500 W | 9391863.09       | 6825355.69      |
| 8       | 5 14 22.500 S | 37 31 52.500 W | 9396659.13       | 6825480.44      |
| 9       | 5 14 22.500 S | 37 33 45.000 W | 9396749.96       | 6822017.33      |
| 10      | 5 20 0.000 S  | 37 33 45.000 W | 9385960.56       | 6821735.82      |
| 11      | 5 20 0.000 S  | 37 30 0.000 W  | 9385775.49       | 6828660.92      |
| 12      | 5 22 30.000 S | 37 30 0.000 W  | 9380978.85       | 6828533.70      |
| 13      | 5 22 30.000 S | 37 22 30.000 W | 9380603.75       | 6842382.83      |
| 14      | 5 17 30.000 S | 37 22 30.000 W | 9390202.83       | 6842638.31      |
| 15      | 5 17 30.000 S | 37 11 15.000 W | 9389643.57       | 6863414.90      |
| 16      | 5 11 15.000 S | 37 11 15.000 W | 9401653.58       | 6863732.38      |
| 17      | 5 11 15.000 S | 37 13 7.500 W  | 9401745.40       | 6860269.00      |
| 18      | 5 11 52.500 S | 37 13 7.500 W  | 9400544.57       | 6860237.60      |
| 19      | 5 11 52.500 S | 37 13 45.000 W | 9400575.20       | 6859083.16      |
| 20      | 5 12 30.000 S | 37 13 45.000 W | 9399374.43       | 6859051.71      |
| 21      | 5 12 30.000 S | 37 17 20.625 W | 9399550.53       | 6852413.80      |
| 22      | 5 11 15.000 S | 37 17 20.625 W | 9401951.37       | 6852476.39      |
| 23      | 5 11 15.000 S | 37 20 0.000 W  | 9402080.62       | 6847569.92      |
| 24      | 5 11 52.500 S | 37 20 0.000 W  | 9400880.45       | 6847538.74      |
| 25      | 5 11 52.500 S | 37 23 7.500 W  | 9401032.37       | 6841766.51      |
| 26      | 5 11 15.000 S | 37 23 7.500 W  | 9402232.23       | 6841797.59      |
| 27      | 5 11 15.000 S | 37 26 15.000 W | 9402383.37       | 6836025.24      |

\*

\* Perimeter : 143.149 (km)

\* Plane Area: 525.987 (km<sup>2</sup>)

\* Corrected Area: 504.776 (km<sup>2</sup>)

\*

+ Excluded Area 1

\*

| * Point | Latitude      | Longitude      | North Coordinate | East Coordinate |
|---------|---------------|----------------|------------------|-----------------|
| 28      | 5 13 7.500 S  | 37 15 37.500 W | 9398265.81       | 6855557.01      |
| 29      | 5 14 22.500 S | 37 15 37.500 W | 9395864.65       | 6855493.93      |
| 30      | 5 14 22.500 S | 37 14 22.500 W | 9395803.00       | 6857802.64      |
| 31      | 5 13 7.500 S  | 37 14 22.500 W | 9398204.40       | 6857865.81      |
| 28      | 5 13 7.500 S  | 37 15 37.500 W | 9398265.81       | 6855557.01      |

\*

\* Perimeter : 9.423 (km)  
\* Plane Area : 5.548 (km<sup>2</sup>)  
\* Corrected Area: 5.321 (km<sup>2</sup>)

\*

+ Excluded Area 2

\*

| * Point | Latitude      | Longitude      | North Coordinate | East Coordinate |
|---------|---------------|----------------|------------------|-----------------|
| 32      | 5 14 22.500 S | 37 15 37.500 W | 9395864.65       | 6855493.93      |
| 33      | 5 15 37.500 S | 37 15 37.500 W | 9393463.50       | 6855430.60      |
| 34      | 5 15 37.500 S | 37 14 22.500 W | 9393401.61       | 6857739.23      |
| 35      | 5 14 22.500 S | 37 14 22.500 W | 9395803.00       | 6857802.64      |
| 32      | 5 14 22.500 S | 37 15 37.500 W | 9395864.65       | 6855493.93      |

\*

\* Perimeter : 9.423 (km)  
\* Plane Area : 5.548 (km<sup>2</sup>)  
\* Corrected Area: 5.321 (km<sup>2</sup>)

\*

+ Excluded Area 3

\*

| * Point | Latitude      | Longitude      | North Coordinate | East Coordinate |
|---------|---------------|----------------|------------------|-----------------|
| 36      | 5 16 15.000 S | 37 25 0.000 W  | 9392725.58       | 6838084.34      |
| 37      | 5 18 7.500 S  | 37 25 0.000 W  | 9389126.60       | 6837989.63      |
| 38      | 5 18 7.500 S  | 37 23 7.500 W  | 9389033.88       | 6841452.35      |
| 39      | 5 16 52.500 S | 37 23 7.500 W  | 9391433.56       | 6841515.68      |
| 40      | 5 16 52.500 S | 37 23 26.250 W | 9391448.96       | 6840938.54      |
| 41      | 5 16 15.000 S | 37 23 26.250 W | 9392648.77       | 6840970.10      |
| 36      | 5 16 15.000 S | 37 25 0.000 W  | 9392725.58       | 6838084.34      |

\*

\* Perimeter : 14.129 (km)  
\* Plane Area : 11.779 (km<sup>2</sup>)  
\* Corrected Area: 11.306 (km<sup>2</sup>)

\*

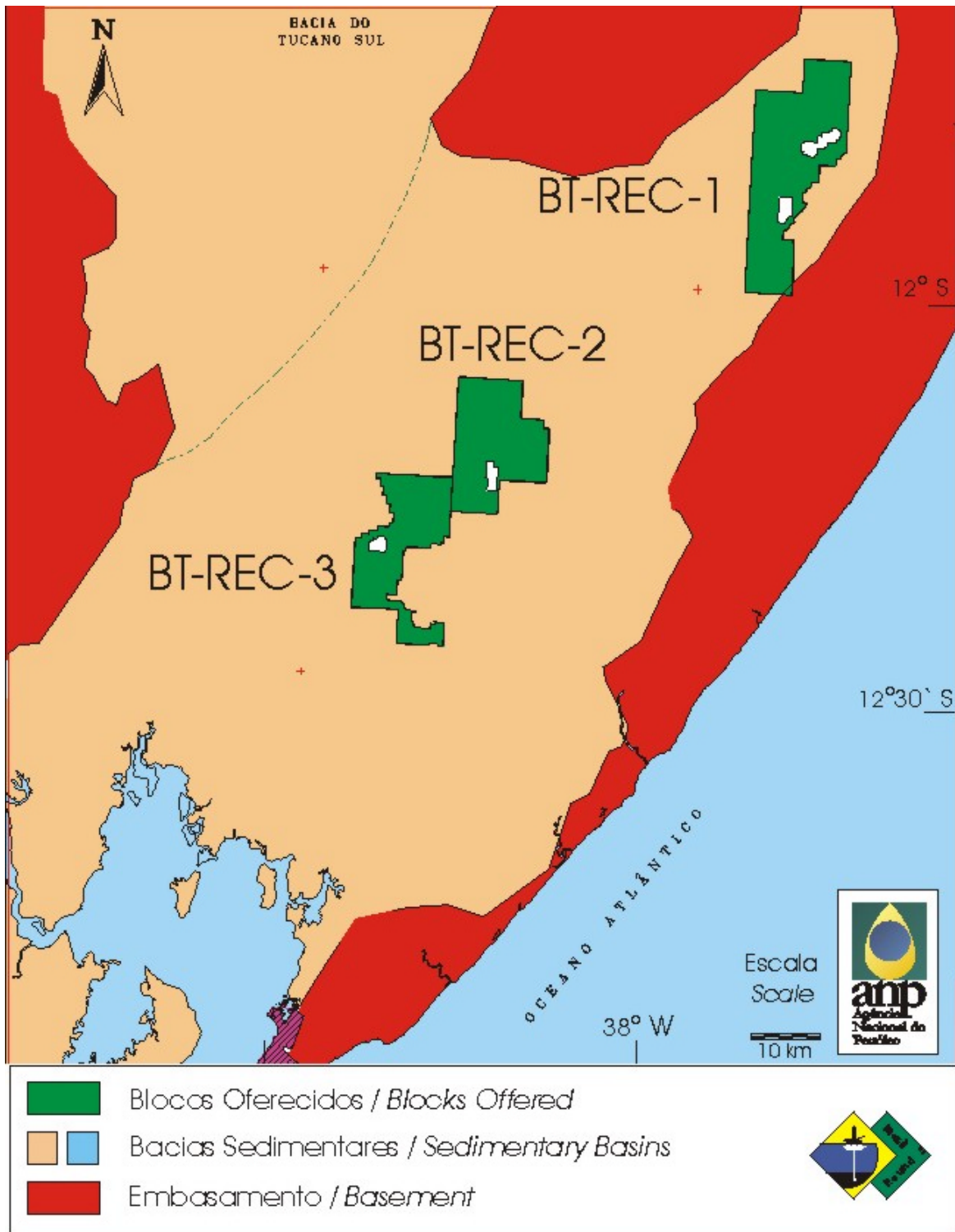
+ Excluded area 4

\*

| * Point | Latitude      | Longitude      | North Coordinate | East Coordinate |
|---------|---------------|----------------|------------------|-----------------|
| 42      | 5 19 22.500 S | 37 28 7.500 W  | 9386882.05       | 6832155.18      |
| 43      | 5 21 15.000 S | 37 28 7.500 W  | 9383284.01       | 6832059.85      |
| 44      | 5 21 15.000 S | 37 26 15.000 W | 9383190.69       | 6835522.27      |
| 45      | 5 19 22.500 S | 37 26 15.000 W | 9386789.26       | 6835617.78      |
| 42      | 5 19 22.500 S | 37 28 7.500 W  | 9386882.05       | 6832155.18      |

\*  
\* Perimeter : 14.127 (km)  
\* Plane Area : 12.468 (km<sup>2</sup>)  
\* Corrected Area: 11.970 (km<sup>2</sup>)  
\*  
\* TOTALS  
\*  
\* Plane Area : 490.645 (km<sup>2</sup>)  
\* Corrected Area: 470.859 (km<sup>2</sup>)  
\*-----

### Recôncavo Basin Map



### Block BT-REC-1 Coordinates

-----  
 Projection : POLYCONIC Datum: SAD-69 CENTRAL MERIDIAN: 54.00 W  
 False North : 10000000.00 False East : 5000000.00  
 -----

+ BT-REC-1

| * Point | Latitude       | Longitude      | North Coordinate | East Coordinate |
|---------|----------------|----------------|------------------|-----------------|
| 1       | 11 42 30.000 S | 37 52 30.000 W | 8654990.39       | 6756971.40      |
| 2       | 11 45 0.000 S  | 37 52 30.000 W | 8650212.76       | 6756701.13      |
| 3       | 11 45 0.000 S  | 37 56 15.000 W | 8650602.24       | 6749899.63      |
| 4       | 12 0 0.000 S   | 37 56 15.000 W | 8621946.24       | 6748264.85      |
| 5       | 12 0 0.000 S   | 37 52 30.000 W | 8621548.97       | 6755059.68      |
| 6       | 11 56 5.625 S  | 37 52 30.000 W | 8629013.17       | 6755490.42      |
| 7       | 11 56 5.625 S  | 37 52 39.375 W | 8629029.67       | 6755207.23      |
| 8       | 11 55 56.250 S | 37 52 39.375 W | 8629328.24       | 6755224.40      |
| 9       | 11 55 56.250 S | 37 53 26.250 W | 8629410.68       | 6753808.44      |
| 10      | 11 55 18.750 S | 37 53 26.250 W | 8630604.89       | 6753877.06      |
| 11      | 11 55 18.750 S | 37 53 16.875 W | 8630588.42       | 6754160.26      |
| 12      | 11 55 9.375 S  | 37 53 16.875 W | 8630886.98       | 6754177.41      |
| 13      | 11 55 9.375 S  | 37 53 7.500 W  | 8630870.51       | 6754460.62      |
| 14      | 11 55 0.000 S  | 37 53 7.500 W  | 8631169.07       | 6754477.77      |
| 15      | 11 55 0.000 S  | 37 52 58.125 W | 8631152.60       | 6754760.98      |
| 16      | 11 54 50.625 S | 37 52 58.125 W | 8631451.17       | 6754778.12      |
| 17      | 11 54 50.625 S | 37 52 48.750 W | 8631434.70       | 6755061.34      |
| 18      | 11 54 41.250 S | 37 52 48.750 W | 8631733.27       | 6755078.48      |
| 19      | 11 54 41.250 S | 37 52 39.375 W | 8631716.81       | 6755361.70      |
| 20      | 11 54 13.125 S | 37 52 39.375 W | 8632612.53       | 6755413.12      |
| 21      | 11 54 13.125 S | 37 52 30.000 W | 8632596.07       | 6755696.35      |
| 22      | 11 54 3.750 S  | 37 52 30.000 W | 8632894.64       | 6755713.49      |
| 23      | 11 54 3.750 S  | 37 52 20.625 W | 8632878.19       | 6755996.71      |
| 24      | 11 53 54.375 S | 37 52 20.625 W | 8633176.77       | 6756013.85      |
| 25      | 11 53 54.375 S | 37 52 11.250 W | 8633160.31       | 6756297.08      |
| 26      | 11 53 45.000 S | 37 52 11.250 W | 8633458.90       | 6756314.21      |
| 27      | 11 53 45.000 S | 37 52 1.875 W  | 8633442.44       | 6756597.45      |
| 28      | 11 53 35.625 S | 37 52 1.875 W  | 8633741.03       | 6756614.58      |
| 29      | 11 53 35.625 S | 37 51 52.500 W | 8633724.57       | 6756897.82      |
| 30      | 11 53 26.250 S | 37 51 52.500 W | 8634023.17       | 6756914.95      |
| 31      | 11 53 26.250 S | 37 51 43.125 W | 8634006.71       | 6757198.19      |
| 32      | 11 53 7.500 S  | 37 51 43.125 W | 8634603.90       | 6757232.45      |
| 33      | 11 53 7.500 S  | 37 52 1.875 W  | 8634636.80       | 6756665.96      |
| 34      | 11 52 20.625 S | 37 52 1.875 W  | 8636129.75       | 6756751.53      |
| 35      | 11 52 20.625 S | 37 51 52.500 W | 8636113.32       | 6757034.79      |
| 36      | 11 52 11.250 S | 37 51 52.500 W | 8636411.92       | 6757051.89      |
| 37      | 11 52 11.250 S | 37 51 43.125 W | 8636395.49       | 6757335.15      |
| 38      | 11 52 1.875 S  | 37 51 43.125 W | 8636694.09       | 6757352.25      |
| 39      | 11 52 1.875 S  | 37 51 33.750 W | 8636677.66       | 6757635.52      |
| 40      | 11 51 52.500 S | 37 51 33.750 W | 8636976.26       | 6757652.62      |
| 41      | 11 51 52.500 S | 37 51 24.375 W | 8636959.84       | 6757935.89      |
| 42      | 11 51 33.750 S | 37 51 24.375 W | 8637557.05       | 6757970.09      |
| 43      | 11 51 33.750 S | 37 50 46.875 W | 8637491.35       | 6759103.18      |
| 44      | 11 50 18.750 S | 37 50 46.875 W | 8639880.33       | 6759239.92      |
| 45      | 11 50 18.750 S | 37 49 31.875 W | 8639749.01       | 6761506.28      |

|    |                |                |            |            |
|----|----------------|----------------|------------|------------|
| 46 | 11 49 41.250 S | 37 49 31.875 W | 8640943.62 | 6761574.65 |
| 47 | 11 49 41.250 S | 37 49 13.125 W | 8640910.79 | 6762141.26 |
| 48 | 11 49 31.875 S | 37 49 13.125 W | 8641209.45 | 6762158.35 |
| 49 | 11 49 31.875 S | 37 49 3.750 W  | 8641193.03 | 6762441.66 |
| 50 | 11 49 22.500 S | 37 49 3.750 W  | 8641491.69 | 6762458.75 |
| 51 | 11 49 22.500 S | 37 48 54.375 W | 8641475.28 | 6762742.06 |
| 52 | 11 49 13.125 S | 37 48 54.375 W | 8641773.95 | 6762759.15 |
| 53 | 11 49 13.125 S | 37 48 45.000 W | 8641757.53 | 6763042.46 |
| 54 | 11 42 30.000 S | 37 48 45.000 W | 8654600.71 | 6763773.92 |
| 1  | 11 42 30.000 S | 37 52 30.000 W | 8654990.39 | 6756971.40 |

\*

\* Perimeter : 98.770 (km)

\* Plane Area : 304.490 (km<sup>2</sup>)

\* Corrected Area: 293.296 (km<sup>2</sup>)

\*

+ Excluded Area 1

\*

| * Point | Latitude       | Longitude      | North Coordinate | East Coordinate |
|---------|----------------|----------------|------------------|-----------------|
| 55      | 11 47 30.000 S | 37 50 0.000 W  | 8645173.87       | 6760963.47      |
| 56      | 11 47 39.375 S | 37 50 0.000 W  | 8644875.22       | 6760946.44      |
| 57      | 11 47 39.375 S | 37 50 9.375 W  | 8644891.58       | 6760663.10      |
| 58      | 11 47 48.750 S | 37 50 9.375 W  | 8644592.93       | 6760646.07      |
| 59      | 11 47 48.750 S | 37 50 46.875 W | 8644658.35       | 6759512.71      |
| 60      | 11 48 7.500 S  | 37 50 46.875 W | 8644061.09       | 6759478.66      |
| 61      | 11 48 7.500 S  | 37 51 5.625 W  | 8644093.80       | 6758911.99      |
| 62      | 11 48 35.625 S | 37 51 5.625 W  | 8643197.94       | 6758860.91      |
| 63      | 11 48 35.625 S | 37 52 11.250 W | 8643312.40       | 6756877.62      |
| 64      | 11 48 45.000 S | 37 52 11.250 W | 8643013.81       | 6756860.61      |
| 65      | 11 48 45.000 S | 37 52 20.625 W | 8643030.15       | 6756577.28      |
| 66      | 11 49 22.500 S | 37 52 20.625 W | 8641835.78       | 6756509.20      |
| 67      | 11 49 22.500 S | 37 52 11.250 W | 8641819.42       | 6756792.51      |
| 68      | 11 49 31.875 S | 37 52 11.250 W | 8641520.83       | 6756775.48      |
| 69      | 11 49 31.875 S | 37 51 52.500 W | 8641488.09       | 6757342.10      |
| 70      | 11 49 41.250 S | 37 51 52.500 W | 8641189.49       | 6757325.06      |
| 71      | 11 49 41.250 S | 37 51 15.000 W | 8641123.98       | 6758458.29      |
| 72      | 11 49 31.875 S | 37 51 15.000 W | 8641422.60       | 6758475.34      |
| 73      | 11 49 31.875 S | 37 51 5.625 W  | 8641406.22       | 6758758.65      |
| 74      | 11 49 3.750 S  | 37 51 5.625 W  | 8642302.08       | 6758809.80      |
| 75      | 11 49 3.750 S  | 37 50 28.125 W | 8642236.57       | 6759943.07      |
| 76      | 11 48 54.375 S | 37 50 28.125 W | 8642535.20       | 6759960.12      |
| 77      | 11 48 54.375 S | 37 50 18.750 W | 8642518.82       | 6760243.44      |
| 78      | 11 48 35.625 S | 37 50 18.750 W | 8643116.10       | 6760277.54      |
| 79      | 11 48 35.625 S | 37 49 31.875 W | 8643034.19       | 6761694.17      |
| 80      | 11 48 16.875 S | 37 49 31.875 W | 8643631.50       | 6761728.29      |
| 81      | 11 48 16.875 S | 37 49 22.500 W | 8643615.12       | 6762011.62      |
| 82      | 11 48 7.500 S  | 37 49 22.500 W | 8643913.78       | 6762028.67      |
| 83      | 11 48 7.500 S  | 37 49 13.125 W | 8643897.40       | 6762312.01      |
| 84      | 11 47 39.375 S | 37 49 13.125 W | 8644793.39       | 6762363.16      |
| 85      | 11 47 39.375 S | 37 49 22.500 W | 8644809.76       | 6762079.81      |
| 86      | 11 47 30.000 S | 37 49 22.500 W | 8645108.42       | 6762096.85      |
| 55      | 11 47 30.000 S | 37 50 0.000 W  | 8645173.87       | 6760963.47      |

```

*
* Perimeter      :          19.727 (km)
* Plane Area     :          10.611 (km2)
* Corrected Area:          10.219 (km2)
*
+ Excluded Area 2
*
* Point          Latitude           Longitude      North Coordinate East Coordinate
*
      87          11 52 48.750 S      37 53 54.375 W      8635431.03      6753301.19
      88          11 54 41.250 S      37 53 54.375 W      8631848.46      6753095.97
      89          11 54 41.250 S      37 53 16.875 W      8631782.65      6754228.84
      90          11 54 22.500 S      37 53 16.875 W      8632379.77      6754263.10
      91          11 54 22.500 S      37 53  7.500 W      8632363.32      6754546.32
      92          11 54 13.125 S      37 53  7.500 W      8632661.89      6754563.45
      93          11 54 13.125 S      37 52 48.750 W      8632628.98      6755129.90
      94          11 52 48.750 S      37 52 48.750 W      8635316.13      6755283.95
      87          11 52 48.750 S      37 53 54.375 W      8635431.03      6753301.19
*
* Perimeter      :          11.149 (km)
* Plane Area     :           6.448 (km2)
* Corrected Area:           6.212 (km2)
*
* TOTALS
*
* Plane Area     :          287.431 (km2)
* Corrected Area:          276.865 (km2)
*-----

```



### Block BT-REC-2 Coordinates

-----  
 Projection : POLYCONIC Datum: SAD-69 CENTRAL MERIDIAN: 54.00 W  
 False North : 10000000.00 False East : 5000000.00  
 -----

+ BT-REC-2

| * Point | Latitude       | Longitude      | North Coordinate | East Coordinate |
|---------|----------------|----------------|------------------|-----------------|
| 1       | 12 7 30.000 S  | 38 18 45.000 W | 8609993.77       | 6706684.15      |
| 2       | 12 17 30.000 S | 38 18 45.000 W | 8590923.41       | 6705591.60      |
| 3       | 12 17 30.000 S | 38 15 0.000 W  | 8590526.54       | 6712379.04      |
| 4       | 12 15 0.000 S  | 38 15 0.000 W  | 8595295.26       | 6712654.70      |
| 5       | 12 15 0.000 S  | 38 11 15.000 W | 8594898.08       | 6719443.19      |
| 6       | 12 10 56.250 S | 38 11 15.000 W | 8602649.49       | 6719891.03      |
| 7       | 12 10 56.250 S | 38 11 43.125 W | 8602698.97       | 6719042.24      |
| 8       | 12 10 18.750 S | 38 11 43.125 W | 8603891.48       | 6719110.88      |
| 9       | 12 10 18.750 S | 38 13 35.625 W | 8604088.98       | 6715715.57      |
| 10      | 12 7 30.000 S  | 38 13 35.625 W | 8609454.62       | 6716023.13      |
| 11      | 12 7 30.000 S  | 38 18 45.000 W | 8609993.77       | 6706684.15      |

\*  
 Perimeter : 65.417 (km)  
 \* Plane Area : 203.547 (km<sup>2</sup>)  
 \* Corrected Area: 196.416 (km<sup>2</sup>)  
 \*

+ Excluded Area

| * Point | Latitude       | Longitude      | North Coordinate | East Coordinate |
|---------|----------------|----------------|------------------|-----------------|
| 12      | 12 13 35.625 S | 38 16 5.625 W  | 8598093.04       | 6710829.17      |
| 13      | 12 14 50.625 S | 38 16 5.625 W  | 8595708.83       | 6710691.88      |
| 14      | 12 14 50.625 S | 38 15 56.250 W | 8595692.33       | 6710974.74      |
| 15      | 12 15 46.875 S | 38 15 56.250 W | 8593904.17       | 6710871.61      |
| 16      | 12 15 46.875 S | 38 15 9.375 W  | 8593821.55       | 6712285.81      |
| 17      | 12 14 3.750 S  | 38 15 9.375 W  | 8597100.04       | 6712474.96      |
| 18      | 12 14 3.750 S  | 38 15 28.125 W | 8597133.03       | 6711909.21      |
| 19      | 12 13 35.625 S | 38 15 28.125 W | 8598027.15       | 6711960.70      |
| 20      | 12 13 35.625 S | 38 16 5.625 W  | 8598093.04       | 6710829.17      |

\*  
 Perimeter : 11.759 (km)  
 \* Plane Area : 6.090 (km<sup>2</sup>)  
 \* Corrected Area: 5.877 (km<sup>2</sup>)  
 \*

\* TOTALS

\* Plane Area : 197.457 (km<sup>2</sup>)  
 \* Corrected Area: 190.539 (km<sup>2</sup>)  
 -----

### Block BT-REC-3 Coordinates

-----  
 Projection: POLYCONIC Datum: SAD-69 CENTRAL MERIDIAN : 54.00 W  
 False North : 10000000.00 False East : 5000000.00  
 -----

+ BT-REC-3

\*

| * Point | Latitude       | Longitude      | North Coordinate | East Coordinate |
|---------|----------------|----------------|------------------|-----------------|
| 1       | 12 15 0.000 S  | 38 24 50.625 W | 8596330.38       | 6694834.47      |
| 2       | 12 15 18.750 S | 38 24 50.625 W | 8595734.69       | 6694800.43      |
| 3       | 12 15 18.750 S | 38 24 31.875 W | 8595701.99       | 6695366.15      |
| 4       | 12 15 56.250 S | 38 24 31.875 W | 8594510.60       | 6695298.02      |
| 5       | 12 15 56.250 S | 38 24 13.125 W | 8594477.86       | 6695863.72      |
| 6       | 12 16 33.750 S | 38 24 13.125 W | 8593286.45       | 6695795.51      |
| 7       | 12 16 33.750 S | 38 23 54.375 W | 8593253.67       | 6696361.18      |
| 8       | 12 17 11.250 S | 38 23 54.375 W | 8592062.24       | 6696292.88      |
| 9       | 12 17 11.250 S | 38 23 35.625 W | 8592029.42       | 6696858.53      |
| 10      | 12 17 48.750 S | 38 23 35.625 W | 8590837.98       | 6696790.16      |
| 11      | 12 17 48.750 S | 38 23 16.875 W | 8590805.12       | 6697355.78      |
| 12      | 12 18 35.625 S | 38 23 16.875 W | 8589315.79       | 6697270.20      |
| 13      | 12 18 35.625 S | 38 23 35.625 W | 8589348.67       | 6696704.61      |
| 14      | 12 18 54.375 S | 38 23 35.625 W | 8588752.96       | 6696670.37      |
| 15      | 12 18 54.375 S | 38 24 31.875 W | 8588851.59       | 6694973.63      |
| 16      | 12 19 13.125 S | 38 24 31.875 W | 8588255.92       | 6694939.40      |
| 17      | 12 19 13.125 S | 38 25 9.375 W  | 8588321.65       | 6693808.26      |
| 18      | 12 19 31.875 S | 38 25 9.375 W  | 8587726.00       | 6693774.05      |
| 19      | 12 19 31.875 S | 38 25 46.875 W | 8587791.71       | 6692642.93      |
| 20      | 12 19 50.625 S | 38 25 46.875 W | 8587196.09       | 6692608.73      |
| 21      | 12 19 50.625 S | 38 26 15.000 W | 8587245.36       | 6691760.40      |
| 22      | 12 25 0.000 S  | 38 26 15.000 W | 8577418.12       | 6691194.32      |
| 23      | 12 25 0.000 S  | 38 22 30.000 W | 8577020.65       | 6697978.49      |
| 24      | 12 27 30.000 S | 38 22 30.000 W | 8572254.82       | 6697701.48      |
| 25      | 12 27 30.000 S | 38 19 50.625 W | 8571971.43       | 6702506.06      |
| 26      | 12 27 20.625 S | 38 19 50.625 W | 8572269.35       | 6702523.45      |
| 27      | 12 27 20.625 S | 38 19 13.125 W | 8572202.56       | 6703653.94      |
| 28      | 12 27 30.000 S | 38 19 13.125 W | 8571904.63       | 6703636.54      |
| 29      | 12 27 30.000 S | 38 18 45.000 W | 8571854.51       | 6704484.40      |
| 30      | 12 25 46.875 S | 38 18 45.000 W | 8575131.87       | 6704675.74      |
| 31      | 12 25 46.875 S | 38 19 31.875 W | 8575215.22       | 6703262.47      |
| 32      | 12 25 56.250 S | 38 19 31.875 W | 8574917.29       | 6703245.11      |
| 33      | 12 25 56.250 S | 38 19 50.625 W | 8574950.62       | 6702679.81      |
| 34      | 12 26 15.000 S | 38 19 50.625 W | 8574354.78       | 6702645.09      |
| 35      | 12 26 15.000 S | 38 21 5.625 W  | 8574488.03       | 6700383.92      |
| 36      | 12 26 5.625 S  | 38 21 5.625 W  | 8574785.92       | 6700401.26      |
| 37      | 12 26 5.625 S  | 38 21 15.000 W | 8574802.56       | 6700118.61      |
| 38      | 12 25 46.875 S | 38 21 15.000 W | 8575398.34       | 6700153.27      |
| 39      | 12 25 46.875 S | 38 21 24.375 W | 8575414.98       | 6699870.62      |
| 40      | 12 25 9.375 S  | 38 21 24.375 W | 8576606.53       | 6699939.88      |
| 41      | 12 25 9.375 S  | 38 21 5.625 W  | 8576573.29       | 6700505.22      |
| 42      | 12 25 0.000 S  | 38 21 5.625 W  | 8576871.19       | 6700522.53      |
| 43      | 12 25 0.000 S  | 38 21 52.500 W | 8576954.25       | 6699109.18      |
| 44      | 12 24 50.625 S | 38 21 52.500 W | 8577252.13       | 6699126.47      |

|   |                |                |            |            |
|---|----------------|----------------|------------|------------|
| 45  | 12 24 50.625 S | 38 22 1.875 W  | 8577268.73 | 6698843.80 |
| 46  | 12 24 31.875 S | 38 22 1.875 W  | 8577864.49 | 6698878.37 |
| 47  | 12 24 31.875 S | 38 22 11.250 W | 8577881.08 | 6698595.69 |
| 48  | 12 24 22.500 S | 38 22 11.250 W | 8578178.96 | 6698612.97 |
| 49  | 12 24 22.500 S | 38 23 26.250 W | 8578311.56 | 6696351.49 |
| 50  | 12 23 54.375 S | 38 23 26.250 W | 8579205.11 | 6696403.24 |
| 51  | 12 23 54.375 S | 38 22 39.375 W | 8579122.30 | 6697816.70 |
| 52  | 12 22 48.750 S | 38 22 39.375 W | 8581207.38 | 6697937.42 |
| 53  | 12 22 48.750 S | 38 22 20.625 W | 8581174.28 | 6698502.84 |
| 54  | 12 20 37.500 S | 38 22 20.625 W | 8585344.58 | 6698743.83 |
| 55  | 12 20 37.500 S | 38 22 11.250 W | 8585328.07 | 6699026.59 |
| 56  | 12 20 18.750 S | 38 22 11.250 W | 8585923.84 | 6699060.96 |
| 57  | 12 20 18.750 S | 38 20 9.375 W  | 8585709.08 | 6702736.85 |
| 58  | 12 20 0.000 S  | 38 20 9.375 W  | 8586304.94 | 6702771.29 |
| 59  | 12 20 0.000 S  | 38 19 22.500 W | 8586222.25 | 6704185.11 |
| 60  | 12 19 50.625 S | 38 19 22.500 W | 8586520.19 | 6704202.34 |
| 61  | 12 19 50.625 S | 38 19 13.125 W | 8586503.65 | 6704485.11 |
| 62  | 12 19 22.500 S | 38 19 13.125 W | 8587397.49 | 6704536.79 |
| 63  | 12 19 22.500 S | 38 18 45.000 W | 8587347.88 | 6705385.12 |
| 64  | 12 15 0.000 S  | 38 18 45.000 W | 8595690.86 | 6705866.11 |
| 65  | 12 15 0.000 S  | 38 24 50.625 W | 8596330.38 | 6694834.47 |
| *   |                |                |            |            |
| * Perimeter : 101.107 (km)                                  |                |                |            |            |
| * Plane Area : 184.404 (km <sup>2</sup> )                   |                |                |            |            |
| * Corrected Area: 178.047 (km <sup>2</sup> )                |                |                |            |            |
| *   |                |                |            |            |
| + Excluded Area 1   |                |                |            |            |
| *   |                |                |            |            |
| * Point Latitude Longitude North Coordinate East Coordinate |                |                |            |            |
| *   |                |                |            |            |
| 66  | 12 19 41.250 S | 38 24 31.875 W | 8587362.40 | 6694888.04 |
| 67  | 12 19 50.625 S | 38 24 31.875 W | 8587064.57 | 6694870.92 |
| 68  | 12 19 50.625 S | 38 24 50.625 W | 8587097.46 | 6694305.37 |
| 69  | 12 20 0.000 S  | 38 24 50.625 W | 8586799.63 | 6694288.25 |
| 70  | 12 20 0.000 S  | 38 25 0.000 W  | 8586816.08 | 6694005.48 |
| 71  | 12 20 9.375 S  | 38 25 0.000 W  | 8586518.25 | 6693988.35 |
| 72  | 12 20 9.375 S  | 38 25 9.375 W  | 8586534.70 | 6693705.58 |
| 73  | 12 20 46.875 S | 38 25 9.375 W  | 8585343.41 | 6693637.06 |
| 74  | 12 20 46.875 S | 38 23 45.000 W | 8585195.16 | 6696181.86 |
| 75  | 12 19 50.625 S | 38 23 45.000 W | 8586982.28 | 6696284.78 |
| 76  | 12 19 50.625 S | 38 23 54.375 W | 8586998.74 | 6696002.01 |
| 77  | 12 19 41.250 S | 38 23 54.375 W | 8587296.59 | 6696019.15 |
| 66  | 12 19 41.250 S | 38 24 31.875 W | 8587362.40 | 6694888.04 |
| *   |                |                |            |            |
| * Perimeter : 9.275 (km)                                    |                |                |            |            |
| * Plane Area : 4.648 (km <sup>2</sup> )                     |                |                |            |            |
| * Corrected Area: 4.488 (km <sup>2</sup> )                  |                |                |            |            |
| *   |                |                |            |            |

\* TOTALS

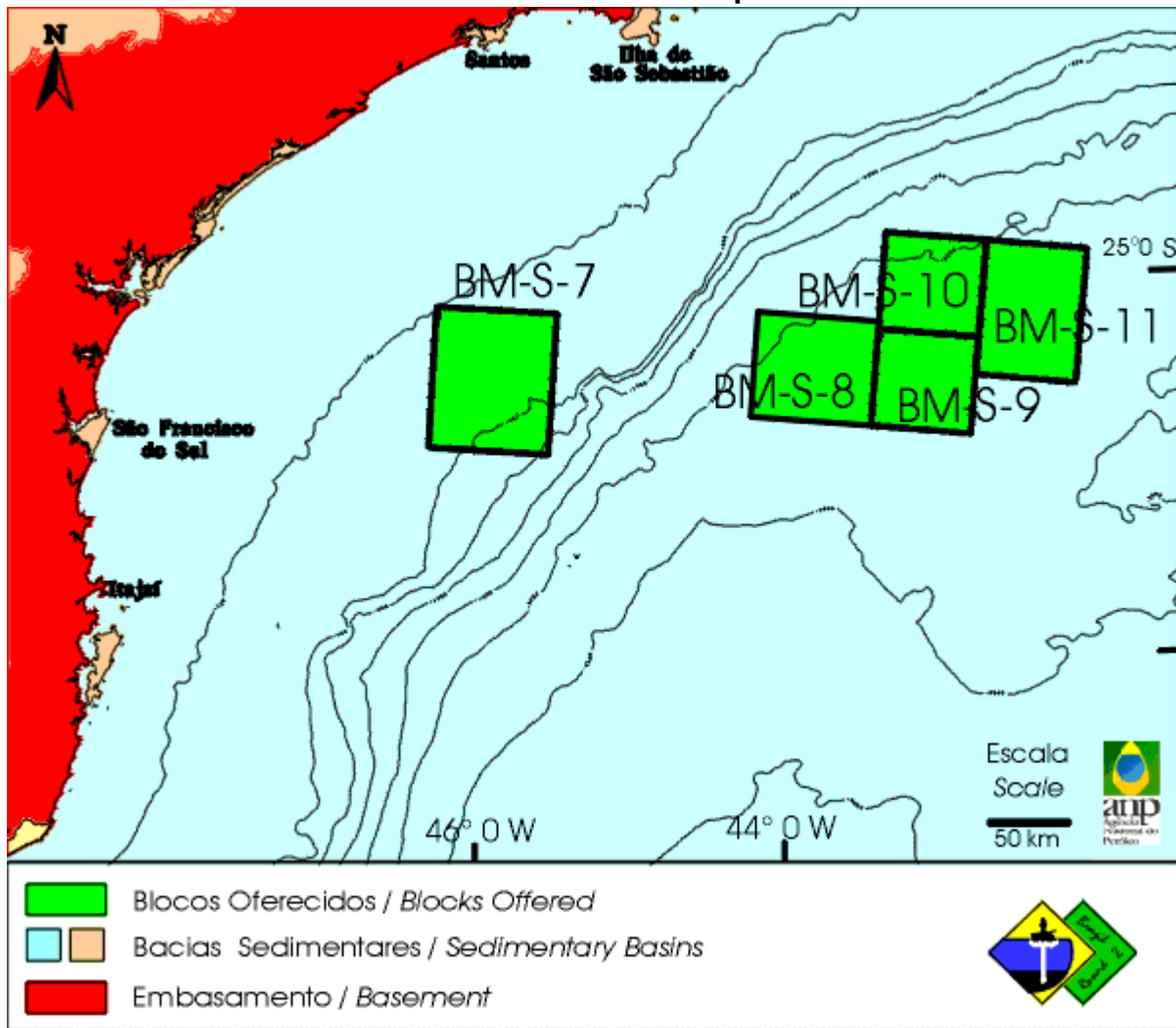
\*

\* Plane Area : 179.757 (km<sup>2</sup>)

\* Corrected Area: 173.559 (km<sup>2</sup>)

---

### Santos Basin Map



### Block BM-S-7 Coordinates

-----  
Projection: POLYCONIC Datum: SAD-69 CENTRAL MERIDIAN: 54.00 W  
False North : 10000000.00 False East : 5000000.00  
-----

+ BM-S-7

\*

| * Point | Latitude       | Longitude     | North Coordinate | East Coordinate |
|---------|----------------|---------------|------------------|-----------------|
| * 1     | 25 30 0.000 S  | 46 30 0.000 W | 7157307.01       | 5753636.62      |
| 2       | 26 17 30.000 S | 46 30 0.000 W | 7069133.19       | 5748602.05      |
| 3       | 26 17 30.000 S | 45 45 0.000 W | 7064575.97       | 5823365.35      |
| 4       | 25 30 0.000 S  | 45 45 0.000 W | 7152847.88       | 5828908.12      |
| 5       | 25 30 0.000 S  | 46 30 0.000 W | 7157307.01       | 5753636.62      |

\*

\* Perimeter : 327.069 (km)  
\* Plane Area : 6642.160 (km<sup>2</sup>)  
\* Corrected Area: 6591.469 (km<sup>2</sup>)

\*

\*-----

### Block BM-S-8 Coordinates

-----  
Projection: POLYCONIC Datum: SAD-69 CENTRAL MERIDIAN: 54.00 W  
False North : 10000000.00 False East : 5000000.00  
-----

+ BM-S-8

\*

| * Point | Latitude      | Longitude     | North Coordinate | East Coordinate |
|---------|---------------|---------------|------------------|-----------------|
| 1       | 25 25 0.000 S | 44 30 0.000 W | 7153785.73       | 5954963.29      |
| 2       | 26 0 0.000 S  | 44 30 0.000 W | 7088604.70       | 5950284.48      |
| 3       | 26 0 0.000 S  | 43 45 0.000 W | 7082936.87       | 6025158.72      |
| 4       | 25 25 0.000 S | 43 45 0.000 W | 7148209.17       | 6030212.35      |
| 5       | 25 25 0.000 S | 44 30 0.000 W | 7153785.73       | 5954963.29      |

\*

\* Perimeter : 281.360 (km)  
\* Plane Area : 4923.394 (km<sup>2</sup>)  
\* Corrected Area: 4864.414 (km<sup>2</sup>)

\*

\*-----

### Block BM-S-9 Coordinates

-----  
Projection : POLYCONIC Datum: SAD-69 CENTRAL MERIDIAN: 54.00 W  
False North : 10000000.00 False East : 5000000.00  
-----

+ BM-S-9

\*

| * Point | Latitude       | Longitude     | North Coordinate | East Coordinate |
|---------|----------------|---------------|------------------|-----------------|
| 1       | 25 27 30.000 S | 43 45 0.000 W | 7143546.49       | 6029854.92      |
| 2       | 26 0 0.000 S   | 43 45 0.000 W | 7082936.87       | 6025158.72      |
| 3       | 26 0 0.000 S   | 43 7 30.000 W | 7077885.55       | 6087528.24      |
| 4       | 25 27 30.000 S | 43 7 30.000 W | 7138570.59       | 6092515.57      |
| 5       | 25 27 30.000 S | 43 45 0.000 W | 7143546.49       | 6029854.92      |

\*

\* Perimeter : 247.113 (km)

\* Plane Area : 3815.661 (km<sup>2</sup>)

\* Corrected Area: 3763.488 (km<sup>2</sup>)

\*

\*-----



### Block BM-S-10 Coordinates

-----  
Projeção : POLYCONIC Datum: SAD-69 CENTRAL MERIDIAN: 54.00 W  
False North : 10000000.00 False East : 5000000.00  
-----

+ BM-S-10

\*

| * Point | Latitude       | Longitude     | North Coordinate | East Coordinate |
|---------|----------------|---------------|------------------|-----------------|
| 1       | 24 55 0.000 S  | 43 45 0.000 W | 7204165.83       | 6034458.98      |
| 2       | 25 27 30.000 S | 43 45 0.000 W | 7143546.49       | 6029854.92      |
| 3       | 25 27 30.000 S | 43 7 30.000 W | 7138570.59       | 6092515.57      |
| 4       | 24 55 0.000 S  | 43 7 30.000 W | 7199267.15       | 6097405.12      |
| 5       | 24 55 0.000 S  | 43 45 0.000 W | 7204165.83       | 6034458.98      |

\*

\* Perimeter : 247.682 (km)

\* Plane Area : 3832.974 (km<sup>2</sup>)

\* Corrected Area: 3780.093 (km<sup>2</sup>)

\*

\*-----

### Block BM-S-11 Coordinates

-----  
Projection: POLYCONIC Datum: SAD-69 CENTRAL MERIDIAN: 54.00 W  
False North : 10000000.00 False East : 5000000.00  
-----

+ BM-S-11

\*

| * Point | Latitude      | Longitude     | North Coordinate | East Coordinate |
|---------|---------------|---------------|------------------|-----------------|
| 1       | 24 55 0.000 S | 43 7 30.000 W | 7199267.15       | 6097405.12      |
| 2       | 25 40 0.000 S | 43 7 30.000 W | 7115228.82       | 6090608.91      |
| 3       | 25 40 0.000 S | 42 30 0.000 W | 7109928.23       | 6153133.91      |
| 4       | 24 55 0.000 S | 42 30 0.000 W | 7194079.25       | 6160328.08      |
| 5       | 24 55 0.000 S | 43 7 30.000 W | 7199267.15       | 6097405.12      |

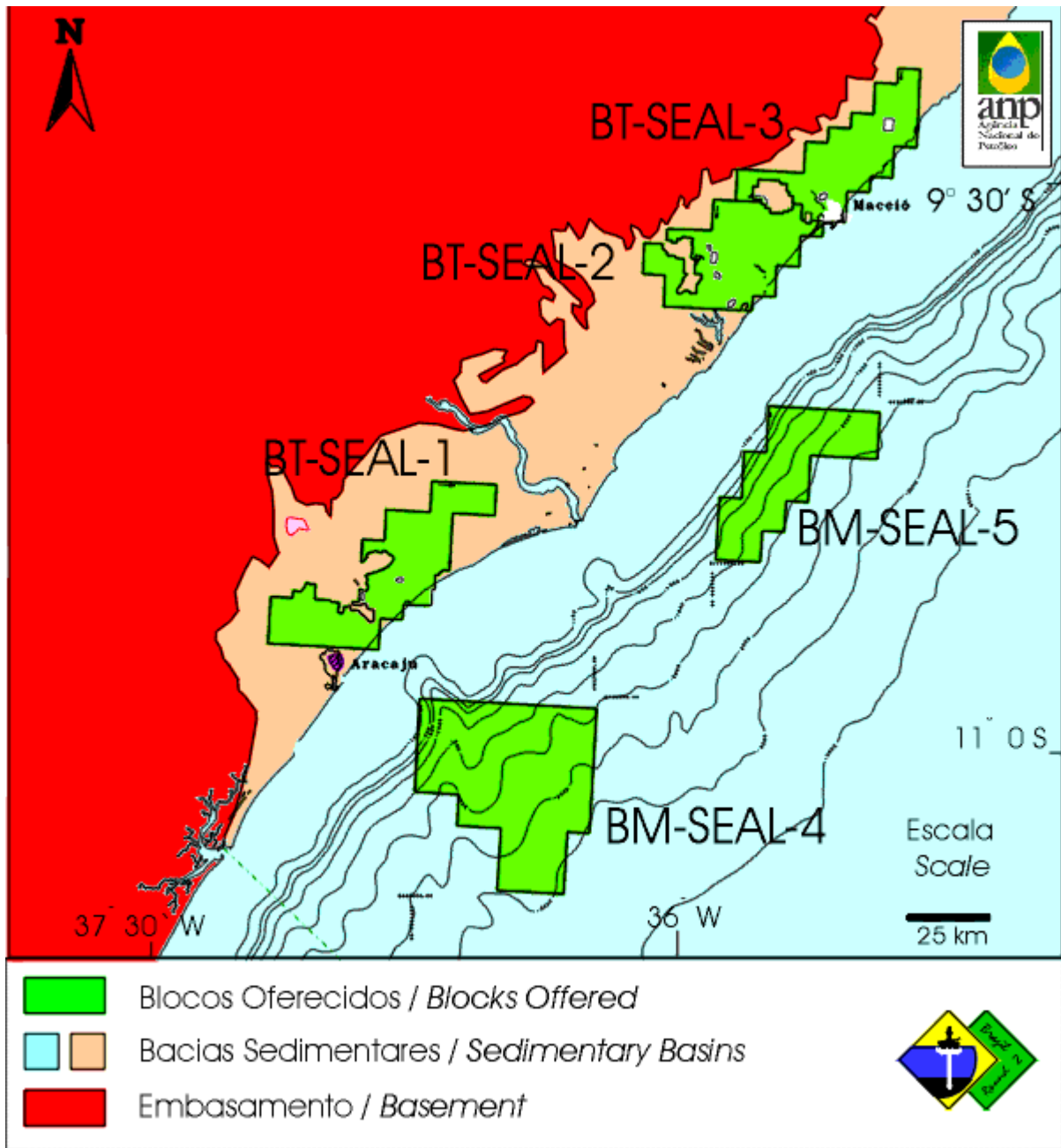
\*

\* Perimeter : 294.657 (km)  
\* Plane Area : 5311.494 (km<sup>2</sup>)  
\* Corrected Area: 5229.569 (km<sup>2</sup>)

\*

\*-----

### Sergipe-Alagoas Basin Map



### Block BM-SEAL-1 Coordinates

-----  
 Projection: POLYCONIC      Datum: SAD-69      CENTRAL MERIDIAN: 54.00 W  
 False North : 10000000.00   False East: 5000000.00  
 -----

+    BT-SEAL-1

| * Point | Latitude       | Longitude      | North Coordinate | East Coordinate |
|---------|----------------|----------------|------------------|-----------------|
| 1       | 10 25 0.000 S  | 36 48 45.000 W | 8797029.35       | 6881060.59      |
| 2       | 10 30 0.000 S  | 36 48 45.000 W | 8787422.03       | 6880544.27      |
| 3       | 10 30 0.000 S  | 36 56 15.000 W | 8788166.97       | 6866881.06      |
| 4       | 10 35 0.000 S  | 36 56 15.000 W | 8778565.68       | 6866364.67      |
| 5       | 10 35 0.000 S  | 37 0 0.000 W   | 8778938.91       | 6859534.95      |
| 6       | 10 38 35.625 S | 37 0 0.000 W   | 8772040.23       | 6859162.76      |
| 7       | 10 38 35.625 S | 36 59 41.250 W | 8772009.01       | 6859731.78      |
| 8       | 10 38 26.250 S | 36 59 41.250 W | 8772308.96       | 6859748.01      |
| 9       | 10 38 26.250 S | 36 59 31.875 W | 8772293.35       | 6860032.53      |
| 10      | 10 38 16.875 S | 36 59 31.875 W | 8772593.30       | 6860048.76      |
| 11      | 10 38 16.875 S | 36 59 22.500 W | 8772577.69       | 6860333.28      |
| 12      | 10 37 58.125 S | 36 59 22.500 W | 8773177.60       | 6860365.73      |
| 13      | 10 37 58.125 S | 36 59 3.750 W  | 8773146.39       | 6860934.77      |
| 14      | 10 37 11.250 S | 36 59 3.750 W  | 8774646.21       | 6861015.86      |
| 15      | 10 37 11.250 S | 36 58 45.000 W | 8774615.02       | 6861584.93      |
| 16      | 10 37 1.875 S  | 36 58 45.000 W | 8774915.00       | 6861601.15      |
| 17      | 10 37 1.875 S  | 36 58 26.250 W | 8774883.81       | 6862170.22      |
| 18      | 10 36 52.500 S | 36 58 26.250 W | 8775183.79       | 6862186.43      |
| 19      | 10 36 52.500 S | 36 57 48.750 W | 8775121.41       | 6863324.60      |
| 20      | 10 36 43.125 S | 36 57 48.750 W | 8775421.40       | 6863340.81      |
| 21      | 10 36 43.125 S | 36 57 11.250 W | 8775359.00       | 6864478.98      |
| 22      | 10 36 52.500 S | 36 57 11.250 W | 8775058.99       | 6864462.75      |
| 23      | 10 36 52.500 S | 36 56 33.750 W | 8774996.53       | 6865600.91      |
| 24      | 10 36 43.125 S | 36 56 33.750 W | 8775296.55       | 6865617.15      |
| 25      | 10 36 43.125 S | 36 56 24.375 W | 8775280.94       | 6865901.69      |
| 26      | 10 36 33.750 S | 36 56 24.375 W | 8775580.97       | 6865917.93      |
| 27      | 10 36 33.750 S | 36 55 56.250 W | 8775534.11       | 6866771.56      |
| 28      | 10 36 43.125 S | 36 55 56.250 W | 8775234.07       | 6866755.32      |
| 29      | 10 36 43.125 S | 36 55 46.875 W | 8775218.45       | 6867039.86      |
| 30      | 10 36 52.500 S | 36 55 46.875 W | 8774918.41       | 6867023.61      |
| 31      | 10 36 52.500 S | 36 55 28.125 W | 8774887.14       | 6867592.68      |
| 32      | 10 37 1.875 S  | 36 55 28.125 W | 8774587.09       | 6867576.42      |
| 33      | 10 37 1.875 S  | 36 55 18.750 W | 8774571.45       | 6867860.95      |
| 34      | 10 37 11.250 S | 36 55 18.750 W | 8774271.40       | 6867844.69      |
| 35      | 10 37 11.250 S | 36 54 50.625 W | 8774224.45       | 6868698.28      |
| 36      | 10 37 20.625 S | 36 54 50.625 W | 8773924.39       | 6868682.00      |
| 37      | 10 37 20.625 S | 36 54 41.250 W | 8773908.73       | 6868966.53      |
| 38      | 10 37 30.000 S | 36 54 41.250 W | 8773608.67       | 6868950.25      |
| 39      | 10 37 30.000 S | 36 54 31.875 W | 8773593.00       | 6869234.77      |
| 40      | 10 38 16.875 S | 36 54 31.875 W | 8772092.66       | 6869153.26      |
| 41      | 10 38 16.875 S | 36 54 50.625 W | 8772124.03       | 6868584.24      |
| 42      | 10 38 35.625 S | 36 54 50.625 W | 8771523.91       | 6868551.62      |
| 43      | 10 38 35.625 S | 36 55 0.000 W  | 8771539.59       | 6868267.11      |
| 44      | 10 38 54.375 S | 36 55 0.000 W  | 8770939.48       | 6868234.48      |

|     |    |    |        |   |    |    |        |   |            |            |
|-----|----|----|--------|---|----|----|--------|---|------------|------------|
| 45  | 10 | 38 | 54.375 | S | 36 | 55 | 18.750 | W | 8770970.86 | 6867665.47 |
| 46  | 10 | 39 | 3.750  | S | 36 | 55 | 18.750 | W | 8770670.81 | 6867649.15 |
| 47  | 10 | 39 | 3.750  | S | 36 | 55 | 37.500 | W | 8770702.19 | 6867080.15 |
| 48  | 10 | 39 | 22.500 | S | 36 | 55 | 37.500 | W | 8770102.11 | 6867047.52 |
| 49  | 10 | 39 | 22.500 | S | 36 | 55 | 56.250 | W | 8770133.49 | 6866478.53 |
| 50  | 10 | 39 | 31.875 | S | 36 | 55 | 56.250 | W | 8769833.46 | 6866462.21 |
| 51  | 10 | 39 | 31.875 | S | 36 | 56 | 5.625  | W | 8769849.15 | 6866177.71 |
| 52  | 10 | 39 | 41.250 | S | 36 | 56 | 5.625  | W | 8769549.12 | 6866161.40 |
| 53  | 10 | 39 | 41.250 | S | 36 | 56 | 33.750 | W | 8769596.18 | 6865307.92 |
| 54  | 10 | 39 | 50.625 | S | 36 | 56 | 33.750 | W | 8769296.17 | 6865291.61 |
| 55  | 10 | 39 | 50.625 | S | 36 | 57 | 1.875  | W | 8769343.22 | 6864438.14 |
| 56  | 10 | 40 | 0.000  | S | 36 | 57 | 1.875  | W | 8769043.22 | 6864421.83 |
| 57  | 10 | 40 | 0.000  | S | 36 | 57 | 20.625 | W | 8769074.58 | 6863852.85 |
| 58  | 10 | 40 | 9.375  | S | 36 | 57 | 20.625 | W | 8768774.59 | 6863836.54 |
| 59  | 10 | 40 | 9.375  | S | 36 | 57 | 48.750 | W | 8768821.63 | 6862983.09 |
| 60  | 10 | 40 | 18.750 | S | 36 | 57 | 48.750 | W | 8768521.64 | 6862966.78 |
| 61  | 10 | 40 | 18.750 | S | 36 | 58 | 16.875 | W | 8768568.67 | 6862113.34 |
| 62  | 10 | 40 | 28.125 | S | 36 | 58 | 16.875 | W | 8768268.70 | 6862097.03 |
| 63  | 10 | 40 | 28.125 | S | 36 | 58 | 35.625 | W | 8768300.05 | 6861528.07 |
| 64  | 10 | 40 | 37.500 | S | 36 | 58 | 35.625 | W | 8768000.08 | 6861511.77 |
| 65  | 10 | 40 | 37.500 | S | 36 | 58 | 54.375 | W | 8768031.43 | 6860942.82 |
| 66  | 10 | 40 | 46.875 | S | 36 | 58 | 54.375 | W | 8767731.47 | 6860926.52 |
| 67  | 10 | 40 | 46.875 | S | 36 | 59 | 3.750  | W | 8767747.14 | 6860642.04 |
| 68  | 10 | 40 | 56.250 | S | 36 | 59 | 3.750  | W | 8767447.19 | 6860625.74 |
| 69  | 10 | 40 | 56.250 | S | 36 | 58 | 54.375 | W | 8767431.51 | 6860910.22 |
| 70  | 10 | 41 | 5.625  | S | 36 | 58 | 54.375 | W | 8767131.55 | 6860893.91 |
| 71  | 10 | 41 | 5.625  | S | 36 | 58 | 45.000 | W | 8767115.87 | 6861178.38 |
| 72  | 10 | 41 | 43.125 | S | 36 | 58 | 45.000 | W | 8765916.03 | 6861113.10 |
| 73  | 10 | 41 | 43.125 | S | 36 | 58 | 54.375 | W | 8765931.72 | 6860828.64 |
| 74  | 10 | 42 | 11.250 | S | 36 | 58 | 54.375 | W | 8765031.86 | 6860779.65 |
| 75  | 10 | 42 | 11.250 | S | 36 | 58 | 45.000 | W | 8765016.15 | 6861064.11 |
| 76  | 10 | 42 | 20.625 | S | 36 | 58 | 45.000 | W | 8764716.19 | 6861047.77 |
| 77  | 10 | 42 | 20.625 | S | 36 | 58 | 35.625 | W | 8764700.48 | 6861332.21 |
| 78  | 10 | 42 | 58.125 | S | 36 | 58 | 35.625 | W | 8763500.63 | 6861266.80 |
| 79  | 10 | 42 | 58.125 | S | 36 | 58 | 45.000 | W | 8763516.36 | 6860982.36 |
| 80  | 10 | 43 | 16.875 | S | 36 | 58 | 45.000 | W | 8762916.45 | 6860949.64 |
| 81  | 10 | 43 | 16.875 | S | 36 | 59 | 31.875 | W | 8762995.09 | 6859527.47 |
| 82  | 10 | 43 | 7.500  | S | 36 | 59 | 31.875 | W | 8763295.03 | 6859543.82 |
| 83  | 10 | 43 | 7.500  | S | 36 | 59 | 50.625 | W | 8763326.46 | 6858974.95 |
| 84  | 10 | 42 | 58.125 | S | 36 | 59 | 50.625 | W | 8763626.40 | 6858991.29 |
| 85  | 10 | 42 | 58.125 | S | 37 | 0  | 0.000  | W | 8763642.11 | 6858706.85 |
| 86  | 10 | 45 | 0.000  | S | 37 | 0  | 0.000  | W | 8759743.08 | 6858494.14 |
| 87  | 10 | 45 | 0.000  | S | 37 | 1  | 5.625  | W | 8759853.31 | 6856503.30 |
| 88  | 10 | 45 | 28.125 | S | 37 | 1  | 5.625  | W | 8758953.62 | 6856454.17 |
| 89  | 10 | 45 | 28.125 | S | 36 | 59 | 31.875 | W | 8758796.00 | 6859298.15 |
| 90  | 10 | 45 | 18.750 | S | 36 | 59 | 31.875 | W | 8759095.93 | 6859314.55 |
| 91  | 10 | 45 | 18.750 | S | 36 | 58 | 45.000 | W | 8759017.05 | 6860736.55 |
| 92  | 10 | 45 | 28.125 | S | 36 | 58 | 45.000 | W | 8758717.10 | 6860720.13 |
| 93  | 10 | 45 | 28.125 | S | 36 | 58 | 35.625 | W | 8758701.31 | 6861004.53 |
| 94  | 10 | 45 | 56.250 | S | 36 | 58 | 35.625 | W | 8757801.45 | 6860955.24 |
| 95  | 10 | 45 | 56.250 | S | 36 | 58 | 16.875 | W | 8757769.85 | 6861524.01 |
| 96  | 10 | 46 | 5.625  | S | 36 | 58 | 16.875 | W | 8757469.88 | 6861507.57 |
| 97  | 10 | 46 | 5.625  | S | 36 | 57 | 20.625 | W | 8757374.99 | 6863213.88 |
| 98  | 10 | 48 | 7.500  | S | 36 | 57 | 20.625 | W | 8753475.26 | 6862999.56 |
| 99  | 10 | 48 | 7.500  | S | 36 | 58 | 7.500  | W | 8753554.58 | 6861577.81 |
| 100 | 10 | 47 | 58.125 | S | 36 | 58 | 7.500  | W | 8753854.54 | 6861594.31 |
| 101 | 10 | 47 | 58.125 | S | 36 | 58 | 16.875 | W | 8753870.39 | 6861309.95 |

|     |                |                |            |            |
|-----|----------------|----------------|------------|------------|
| 102 | 10 47 48.750 S | 36 58 16.875 W | 8754170.35 | 6861326.44 |
| 103 | 10 47 48.750 S | 36 58 26.250 W | 8754186.19 | 6861042.09 |
| 104 | 10 47 39.375 S | 36 58 26.250 W | 8754486.14 | 6861058.57 |
| 105 | 10 47 39.375 S | 36 58 35.625 W | 8754501.99 | 6860774.21 |
| 106 | 10 47 30.000 S | 36 58 35.625 W | 8754801.93 | 6860790.69 |
| 107 | 10 47 30.000 S | 36 58 45.000 W | 8754817.77 | 6860506.33 |
| 108 | 10 47 20.625 S | 36 58 45.000 W | 8755117.72 | 6860522.80 |
| 109 | 10 47 20.625 S | 36 58 54.375 W | 8755133.54 | 6860238.43 |
| 110 | 10 47 11.250 S | 36 58 54.375 W | 8755433.49 | 6860254.90 |
| 111 | 10 47 11.250 S | 36 59 13.125 W | 8755465.13 | 6859686.16 |
| 112 | 10 47 1.875 S  | 36 59 13.125 W | 8755765.06 | 6859702.62 |
| 113 | 10 47 1.875 S  | 36 59 31.875 W | 8755796.69 | 6859133.88 |
| 114 | 10 46 52.500 S | 36 59 31.875 W | 8756096.62 | 6859150.32 |
| 115 | 10 46 52.500 S | 36 59 41.250 W | 8756112.42 | 6858865.95 |
| 116 | 10 46 43.125 S | 36 59 41.250 W | 8756412.35 | 6858882.39 |
| 117 | 10 46 43.125 S | 36 59 50.625 W | 8756428.15 | 6858598.01 |
| 118 | 10 46 24.375 S | 36 59 50.625 W | 8757028.00 | 6858630.87 |
| 119 | 10 46 24.375 S | 37 1 24.375 W  | 8757185.78 | 6855787.05 |
| 120 | 10 45 37.500 S | 37 1 24.375 W  | 8758685.22 | 6855869.00 |
| 121 | 10 45 37.500 S | 37 1 33.750 W  | 8758700.97 | 6855584.60 |
| 122 | 10 45 46.875 S | 37 1 33.750 W  | 8758401.09 | 6855568.23 |
| 123 | 10 45 46.875 S | 37 1 52.500 W  | 8758432.58 | 6854999.44 |
| 124 | 10 45 56.250 S | 37 1 52.500 W  | 8758132.70 | 6854983.06 |
| 125 | 10 45 56.250 S | 37 2 30.000 W  | 8758195.68 | 6853845.50 |
| 126 | 10 46 43.125 S | 37 2 30.000 W  | 8756696.37 | 6853763.60 |
| 127 | 10 46 43.125 S | 37 2 39.375 W  | 8756712.13 | 6853479.22 |
| 128 | 10 47 1.875 S  | 37 2 39.375 W  | 8756112.41 | 6853446.45 |
| 129 | 10 47 1.875 S  | 37 3 26.250 W  | 8756191.19 | 6852024.58 |
| 130 | 10 46 5.625 S  | 37 3 26.250 W  | 8757990.23 | 6852122.79 |
| 131 | 10 46 5.625 S  | 37 3 16.875 W  | 8757974.50 | 6852407.18 |
| 132 | 10 45 18.750 S | 37 3 16.875 W  | 8759473.72 | 6852488.93 |
| 133 | 10 45 18.750 S | 37 4 41.250 W  | 8759615.04 | 6849929.30 |
| 134 | 10 45 9.375 S  | 37 4 41.250 W  | 8759914.85 | 6849945.62 |
| 135 | 10 45 9.375 S  | 37 4 50.625 W  | 8759930.54 | 6849661.21 |
| 136 | 10 45 0.000 S  | 37 4 50.625 W  | 8760230.35 | 6849677.52 |
| 137 | 10 45 0.000 S  | 37 7 30.000 W  | 8760496.58 | 6844842.54 |
| 138 | 10 42 39.375 S | 37 7 30.000 W  | 8764992.86 | 6845086.02 |
| 139 | 10 42 39.375 S | 37 8 35.625 W  | 8765101.90 | 6843094.86 |
| 140 | 10 42 30.000 S | 37 8 35.625 W  | 8765401.63 | 6843111.04 |
| 141 | 10 42 30.000 S | 37 9 13.125 W  | 8765463.87 | 6841973.22 |
| 142 | 10 43 7.500 S  | 37 9 13.125 W  | 8764265.02 | 6841908.51 |
| 143 | 10 43 7.500 S  | 37 9 22.500 W  | 8764280.59 | 6841624.07 |
| 144 | 10 43 16.875 S | 37 9 22.500 W  | 8763980.88 | 6841607.88 |
| 145 | 10 43 16.875 S | 37 9 31.875 W  | 8763996.45 | 6841323.44 |
| 146 | 10 43 35.625 S | 37 9 31.875 W  | 8763397.03 | 6841291.06 |
| 147 | 10 43 35.625 S | 37 9 41.250 W  | 8763412.61 | 6841006.63 |
| 148 | 10 43 45.000 S | 37 9 41.250 W  | 8763112.91 | 6840990.44 |
| 149 | 10 43 45.000 S | 37 9 50.625 W  | 8763128.48 | 6840706.00 |
| 150 | 10 43 54.375 S | 37 9 50.625 W  | 8762828.79 | 6840689.81 |
| 151 | 10 43 54.375 S | 37 10 37.500 W | 8762906.65 | 6839267.65 |
| 152 | 10 43 45.000 S | 37 10 37.500 W | 8763206.33 | 6839283.83 |
| 153 | 10 43 45.000 S | 37 11 15.000 W | 8763268.56 | 6838146.09 |
| 154 | 10 45 0.000 S  | 37 11 15.000 W | 8760871.25 | 6838016.63 |
| 155 | 10 45 0.000 S  | 37 15 0.000 W  | 8761244.53 | 6831190.64 |
| 156 | 10 52 30.000 S | 37 15 0.000 W  | 8746865.27 | 6830411.76 |
| 157 | 10 52 30.000 S | 36 56 15.000 W | 8744964.19 | 6864525.62 |
| 158 | 10 47 30.000 S | 36 56 15.000 W | 8754564.13 | 6865056.10 |

|     |                |                |            |            |
|-----|----------------|----------------|------------|------------|
| 159 | 10 47 30.000 S | 36 52 30.000 W | 8754182.50 | 6871880.68 |
| 160 | 10 45 0.000 S  | 36 52 30.000 W | 8758984.02 | 6872145.43 |
| 161 | 10 45 0.000 S  | 36 47 48.750 W | 8758506.78 | 6880677.33 |
| 162 | 10 42 30.000 S | 36 47 48.750 W | 8763310.16 | 6880942.33 |
| 163 | 10 42 30.000 S | 36 47 20.625 W | 8763262.50 | 6881795.64 |
| 164 | 10 40 0.000 S  | 36 47 20.625 W | 8768066.15 | 6882059.76 |
| 165 | 10 40 0.000 S  | 36 46 43.125 W | 8768002.80 | 6883197.68 |
| 166 | 10 39 31.875 S | 36 46 43.125 W | 8768903.54 | 6883247.12 |
| 167 | 10 39 31.875 S | 36 46 15.000 W | 8768856.03 | 6884100.58 |
| 168 | 10 39 13.125 S | 36 46 15.000 W | 8769456.55 | 6884133.53 |
| 169 | 10 39 13.125 S | 36 45 0.000 W  | 8769329.82 | 6886409.46 |
| 170 | 10 30 0.000 S  | 36 45 0.000 W  | 8787047.52 | 6887375.76 |
| 171 | 10 30 0.000 S  | 36 37 48.750 W | 8786325.92 | 6900469.24 |
| 172 | 10 25 0.000 S  | 36 37 48.750 W | 8795941.55 | 6900991.35 |
| 173 | 10 25 0.000 S  | 36 48 45.000 W | 8797029.35 | 6881060.59 |

\*

\* Perimeter : 315.710 (km)

\* Plane Area : 1319.238 (km<sup>2</sup>)

\* Corrected Area: 1264.743 (km<sup>2</sup>)

\*

\*

+ Excluded Area 1

| * Point | Latitude | Longitude | North Coordinate | East |
|---------|----------|-----------|------------------|------|
|---------|----------|-----------|------------------|------|

Coordinate

|     |                |                |            |            |
|-----|----------------|----------------|------------|------------|
| 174 | 10 40 46.875 S | 36 53 35.625 W | 8767197.15 | 6870598.61 |
| 175 | 10 40 56.250 S | 36 53 35.625 W | 8766897.07 | 6870582.21 |
| 176 | 10 40 56.250 S | 36 53 45.000 W | 8766912.83 | 6870297.75 |
| 177 | 10 41 5.625 S  | 36 53 45.000 W | 8766612.75 | 6870281.35 |
| 178 | 10 41 5.625 S  | 36 53 54.375 W | 8766628.51 | 6869996.89 |
| 179 | 10 41 24.375 S | 36 53 54.375 W | 8766028.36 | 6869964.09 |
| 180 | 10 41 24.375 S | 36 52 48.750 W | 8765917.94 | 6871955.31 |
| 181 | 10 40 46.875 S | 36 52 48.750 W | 8767118.34 | 6872020.96 |
| 174 | 10 40 46.875 S | 36 53 35.625 W | 8767197.15 | 6870598.61 |

\*

\* Perimeter : 6.393 (km)

\* Plane Area : 2.141 (km<sup>2</sup>)

\* Corrected Area: 2.052 (km<sup>2</sup>)

\*

+ Excluded Area 2

\*

| * Point | Latitude       | Longitude      | North Coordinate | East       | Coordinate |
|---------|----------------|----------------|------------------|------------|------------|
| 182     | 10 43 35.625 S | 36 59 50.625 W | 8762426.67       | 6858925.90 |            |
| 183     | 10 44 22.500 S | 36 59 50.625 W | 8760927.03       | 6858844.08 |            |
| 184     | 10 44 22.500 S | 36 59 41.250 W | 8760911.28       | 6859128.49 |            |
| 185     | 10 44 41.250 S | 36 59 41.250 W | 8760311.42       | 6859095.73 |            |

|     |                 |                |                             |            |
|-----|-----------------|----------------|-----------------------------|------------|
| 186 | 10 44 41.250 S  | 36 59 13.125 W | 8760264.15                  | 6859948.96 |
| 187 | 10 43 35.625 S  | 36 59 13.125 W | 8762363.75                  | 6860063.62 |
| 182 | 10 43 35.625 S  | 36 59 50.625 W | 8762426.67                  | 6858925.90 |
| *   |                 |                |                             |            |
| *   | Perimeter       | :              | 6.484 (km)                  |            |
| *   | Plane Area      | :              | 2.225 (km <sup>2</sup> )    |            |
| *   | Corrected Area: |                | 2.133 (km <sup>2</sup> )    |            |
| *   |                 |                |                             |            |
| *   | TOTALS          |                |                             |            |
| *   | * Plane Area    | :              | 1314.872 (km <sup>2</sup> ) |            |
| *   | Corrected Area  | :              | 1260.558 (km <sup>2</sup> ) |            |
| *   | -----           |                |                             |            |



### Block BM-SEAL-2 Coordinates

Projection: POLYCONIC Datum: SAD-69 CENTRAL MERIDIAN: 54.00 W

False North : 10000000.00 False East : 5000000.00

+ BT-SEAL-2

| * Point | Latitude      | Longitude      | North Coordinate | East Coordinate |
|---------|---------------|----------------|------------------|-----------------|
| 1       | 9 37 30.000 S | 36 3 45.000 W  | 8884100.58       | 6967977.22      |
| 2       | 9 42 30.000 S | 36 3 45.000 W  | 8874454.62       | 6967477.42      |
| 3       | 9 42 30.000 S | 36 11 15.000 W | 8875175.94       | 6953779.38      |
| 4       | 9 44 22.500 S | 36 11 15.000 W | 8871561.04       | 6953592.26      |
| 5       | 9 44 22.500 S | 36 10 18.750 W | 8871470.87       | 6955304.35      |
| 6       | 9 44 41.250 S | 36 10 18.750 W | 8870868.34       | 6955273.08      |
| 7       | 9 44 41.250 S | 36 9 31.875 W  | 8870793.11       | 6956699.79      |
| 8       | 9 44 3.750 S  | 36 9 31.875 W  | 8871998.23       | 6956762.38      |
| 9       | 9 44 3.750 S  | 36 8 45.000 W  | 8871923.02       | 6958189.14      |
| 10      | 9 43 45.000 S | 36 8 45.000 W  | 8872525.62       | 6958220.43      |
| 11      | 9 43 45.000 S | 36 7 1.875 W   | 8872360.04       | 6961359.35      |
| 12      | 9 45 0.000 S  | 36 7 1.875 W   | 8869949.29       | 6961233.88      |
| 13      | 9 45 0.000 S  | 36 6 52.500 W  | 8869934.19       | 6961519.22      |
| 14      | 9 46 33.750 S | 36 6 52.500 W  | 8866920.75       | 6961361.98      |
| 15      | 9 46 33.750 S | 36 7 1.875 W   | 8866935.89       | 6961076.67      |
| 16      | 9 47 1.875 S  | 36 7 1.875 W   | 8866031.87       | 6961029.42      |
| 17      | 9 47 1.875 S  | 36 6 43.125 W  | 8866001.58       | 6961600.03      |
| 18      | 9 47 11.250 S | 36 6 43.125 W  | 8865700.23       | 6961584.27      |
| 19      | 9 47 11.250 S | 36 5 56.250 W  | 8865624.43       | 6963010.78      |
| 20      | 9 47 58.125 S | 36 5 56.250 W  | 8864117.61       | 6962931.85      |
| 21      | 9 47 58.125 S | 36 6 15.000 W  | 8864147.98       | 6962361.27      |
| 22      | 9 49 31.875 S | 36 6 15.000 W  | 8861134.46       | 6962203.15      |
| 23      | 9 49 31.875 S | 36 5 0.000 W   | 8861012.63       | 6964485.27      |
| 24      | 9 50 18.750 S | 36 5 0.000 W   | 8859505.73       | 6964405.95      |
| 25      | 9 50 18.750 S | 36 5 9.375 W   | 8859520.98       | 6964120.70      |
| 26      | 9 50 37.500 S | 36 5 9.375 W   | 8858918.23       | 6964088.95      |
| 27      | 9 50 37.500 S | 36 5 28.125 W  | 8858948.75       | 6963518.45      |
| 28      | 9 51 5.625 S  | 36 5 28.125 W  | 8858044.65       | 6963470.81      |
| 29      | 9 51 5.625 S  | 36 5 46.875 W  | 8858075.19       | 6962900.33      |
| 30      | 9 52 39.375 S | 36 5 46.875 W  | 8855061.62       | 6962741.30      |
| 31      | 9 52 39.375 S | 36 6 52.500 W  | 8855168.69       | 6960744.79      |
| 32      | 9 52 20.625 S | 36 6 52.500 W  | 8855771.35       | 6960776.59      |
| 33      | 9 52 20.625 S | 36 7 11.250 W  | 8855801.90       | 6960206.15      |
| 34      | 9 52 11.250 S | 36 7 11.250 W  | 8856103.22       | 6960222.04      |
| 35      | 9 52 11.250 S | 36 7 30.000 W  | 8856133.76       | 6959651.59      |
| 36      | 9 52 20.625 S | 36 7 30.000 W  | 8855832.45       | 6959635.70      |
| 37      | 9 52 20.625 S | 36 7 48.750 W  | 8855862.99       | 6959065.26      |
| 38      | 9 52 30.000 S | 36 7 48.750 W  | 8855561.68       | 6959049.37      |
| 39      | 9 52 30.000 S | 36 8 7.500 W   | 8855592.22       | 6958478.93      |
| 40      | 9 52 39.375 S | 36 8 7.500 W   | 8855290.92       | 6958463.05      |
| 41      | 9 52 39.375 S | 36 8 16.875 W  | 8855306.19       | 6958177.83      |
| 42      | 9 52 48.750 S | 36 8 16.875 W  | 8855004.90       | 6958161.94      |
| 43      | 9 52 48.750 S | 36 9 3.750 W   | 8855081.23       | 6956735.86      |

### Block BT-SEAL-2 Coordinates

|    |               |                |            |            |
|----|---------------|----------------|------------|------------|
| 44 | 9 52 1.875 S  | 36 9 3.750 W   | 8856587.60 | 6956815.19 |
| 45 | 9 52 1.875 S  | 36 8 54.375 W  | 8856572.36 | 6957100.42 |
| 46 | 9 51 52.500 S | 36 8 54.375 W  | 8856873.64 | 6957116.28 |
| 47 | 9 51 52.500 S | 36 8 45.000 W  | 8856858.39 | 6957401.51 |
| 48 | 9 51 43.125 S | 36 8 45.000 W  | 8857159.68 | 6957417.36 |
| 49 | 9 51 43.125 S | 36 8 35.625 W  | 8857144.44 | 6957702.59 |
| 50 | 9 51 24.375 S | 36 8 35.625 W  | 8857747.01 | 6957734.29 |
| 51 | 9 51 24.375 S | 36 8 26.250 W  | 8857731.78 | 6958019.53 |
| 52 | 9 51 5.625 S  | 36 8 26.250 W  | 8858334.36 | 6958051.22 |
| 53 | 9 51 5.625 S  | 36 8 16.875 W  | 8858319.14 | 6958336.46 |
| 54 | 9 50 46.875 S | 36 8 16.875 W  | 8858921.73 | 6958368.14 |
| 55 | 9 50 46.875 S | 36 8 7.500 W   | 8858906.51 | 6958653.39 |
| 56 | 9 50 9.375 S  | 36 8 7.500 W   | 8860111.71 | 6958716.70 |
| 57 | 9 50 9.375 S  | 36 7 58.125 W  | 8860096.50 | 6959001.96 |
| 58 | 9 50 0.000 S  | 36 7 58.125 W  | 8860397.81 | 6959017.78 |
| 59 | 9 50 0.000 S  | 36 7 48.750 W  | 8860382.60 | 6959303.04 |
| 60 | 9 49 50.625 S | 36 7 48.750 W  | 8860683.91 | 6959318.86 |
| 61 | 9 49 50.625 S | 36 7 39.375 W  | 8860668.71 | 6959604.12 |
| 62 | 9 49 31.875 S | 36 7 39.375 W  | 8861271.34 | 6959635.75 |
| 63 | 9 49 31.875 S | 36 8 7.500 W   | 8861316.93 | 6958779.95 |
| 64 | 9 47 30.000 S | 36 8 7.500 W   | 8865233.91 | 6958985.05 |
| 65 | 9 47 30.000 S | 36 8 16.875 W  | 8865249.05 | 6958699.75 |
| 66 | 9 47 11.250 S | 36 8 16.875 W  | 8865851.67 | 6958731.24 |
| 67 | 9 47 11.250 S | 36 9 41.250 W  | 8865987.77 | 6956163.50 |
| 68 | 9 46 52.500 S | 36 9 41.250 W  | 8866590.31 | 6956194.93 |
| 69 | 9 46 52.500 S | 36 11 5.625 W  | 8866726.17 | 6953627.14 |
| 70 | 9 46 15.000 S | 36 11 5.625 W  | 8867931.12 | 6953689.85 |
| 71 | 9 46 15.000 S | 36 11 24.375 W | 8867961.25 | 6953119.21 |
| 72 | 9 45 56.250 S | 36 11 24.375 W | 8868563.72 | 6953150.54 |
| 73 | 9 45 56.250 S | 36 11 52.500 W | 8868608.88 | 6952294.56 |
| 74 | 9 45 0.000 S  | 36 11 52.500 W | 8870416.21 | 6952388.39 |
| 75 | 9 45 0.000 S  | 36 15 0.000 W  | 8870716.33 | 6946681.56 |
| 76 | 9 50 0.000 S  | 36 15 0.000 W  | 8861079.86 | 6946180.99 |
| 77 | 9 50 0.000 S  | 36 11 15.000 W | 8860716.66 | 6953027.31 |
| 78 | 9 55 0.000 S  | 36 11 15.000 W | 8851077.63 | 6952520.64 |
| 79 | 9 55 0.000 S  | 35 57 58.125 W | 8849770.50 | 6976760.80 |
| 80 | 9 54 13.125 S | 35 57 58.125 W | 8851278.22 | 6976841.29 |
| 81 | 9 54 13.125 S | 35 57 48.750 W | 8851262.76 | 6977126.48 |
| 82 | 9 53 54.375 S | 35 57 48.750 W | 8851865.86 | 6977158.65 |
| 83 | 9 53 54.375 S | 35 57 39.375 W | 8851850.41 | 6977443.84 |
| 84 | 9 53 45.000 S | 35 57 39.375 W | 8852151.96 | 6977459.92 |
| 85 | 9 53 45.000 S | 35 57 1.875 W  | 8852090.16 | 6978600.69 |
| 86 | 9 54 31.875 S | 35 57 1.875 W  | 8850582.32 | 6978520.19 |
| 87 | 9 54 31.875 S | 35 57 11.250 W | 8850597.79 | 6978235.01 |
| 88 | 9 54 41.250 S | 35 57 11.250 W | 8850296.23 | 6978218.90 |
| 89 | 9 54 41.250 S | 35 57 20.625 W | 8850311.71 | 6977933.72 |
| 90 | 9 54 50.625 S | 35 57 20.625 W | 8850010.15 | 6977917.61 |
| 91 | 9 54 50.625 S | 35 57 30.000 W | 8850025.62 | 6977632.43 |
| 92 | 9 55 0.000 S  | 35 57 30.000 W | 8849724.07 | 6977616.32 |
| 93 | 9 55 0.000 S  | 35 56 15.000 W | 8849600.16 | 6979897.70 |
| 94 | 9 52 30.000 S | 35 56 15.000 W | 8854425.58 | 6980155.34 |
| 95 | 9 52 30.000 S | 35 52 30.000 W | 8854054.50 | 6987000.37 |
| 96 | 9 47 30.000 S | 35 52 30.000 W | 8863708.64 | 6987514.33 |
| 97 | 9 47 30.000 S | 35 48 45.000 W | 8863339.30 | 6994361.18 |

|     |               |                |            |            |
|-----|---------------|----------------|------------|------------|
| 98  | 9 42 30.000 S | 35 48 45.000 W | 8872996.88 | 6994872.69 |
| 99  | 9 42 30.000 S | 35 45 0.000 W  | 8872629.29 | 7001721.34 |
| 100 | 9 40 0.000 S  | 35 45 0.000 W  | 8877459.75 | 7001976.41 |
| 101 | 9 40 0.000 S  | 35 47 1.875 W  | 8877658.19 | 6998266.23 |
| 102 | 9 40 28.125 S | 35 47 1.875 W  | 8876752.63 | 6998218.58 |
| 103 | 9 40 28.125 S | 35 48 7.500 W  | 8876859.41 | 6996220.83 |
| 104 | 9 40 0.000 S  | 35 48 7.500 W  | 8877764.89 | 6996268.43 |
| 105 | 9 40 0.000 S  | 35 48 45.000 W | 8877825.82 | 6995126.83 |
| 106 | 9 37 30.000 S | 35 48 45.000 W | 8882654.86 | 6995379.89 |
| 107 | 9 37 30.000 S | 35 50 18.750 W | 8882806.39 | 6992525.49 |
| 108 | 9 38 26.250 S | 35 50 18.750 W | 8880995.73 | 6992430.87 |
| 109 | 9 38 26.250 S | 35 50 56.250 W | 8881056.37 | 6991289.16 |
| 110 | 9 38 45.000 S | 35 50 56.250 W | 8880452.85 | 6991257.61 |
| 111 | 9 38 45.000 S | 35 51 52.500 W | 8880543.80 | 6989545.08 |
| 112 | 9 39 3.750 S  | 35 51 52.500 W | 8879940.33 | 6989513.53 |
| 113 | 9 39 3.750 S  | 35 54 3.750 W  | 8880152.35 | 6985517.68 |
| 114 | 9 38 26.250 S | 35 54 3.750 W  | 8881359.08 | 6985580.62 |
| 115 | 9 38 26.250 S | 35 55 0.000 W  | 8881449.72 | 6983868.04 |
| 116 | 9 37 48.750 S | 35 55 0.000 W  | 8882656.36 | 6983930.86 |
| 117 | 9 37 48.750 S | 35 55 37.500 W | 8882716.68 | 6982789.10 |
| 118 | 9 37 30.000 S | 35 55 37.500 W | 8883319.97 | 6982820.46 |
| 119 | 9 37 30.000 S | 36 3 45.000 W  | 8884100.58 | 6967977.22 |

\* Perimeter : 257.066 (km)  
 \* Plane Area : 1103.613 (km<sup>2</sup>)  
 \* Corrected Area: 1052.826 (km<sup>2</sup>)

\*

+ Excluded Area 1

\*

\* Point Latitude Longitude North Coordinate East  
 Coordinate

|     |               |               |            |            |
|-----|---------------|---------------|------------|------------|
| 120 | 9 44 50.625 S | 36 4 22.500 W | 8869993.75 | 6966100.33 |
| 121 | 9 45 0.000 S  | 36 4 22.500 W | 8869692.34 | 6966084.59 |
| 122 | 9 45 0.000 S  | 36 4 13.125 W | 8869677.21 | 6966369.92 |
| 123 | 9 45 37.500 S | 36 4 13.125 W | 8868471.56 | 6966306.91 |
| 124 | 9 45 37.500 S | 36 3 45.000 W | 8868426.10 | 6967162.89 |
| 125 | 9 44 50.625 S | 36 3 45.000 W | 8869933.22 | 6967241.68 |
| 120 | 9 44 50.625 S | 36 4 22.500 W | 8869993.75 | 6966100.33 |

\*

\* Perimeter : 5.304 (km)  
 \* Plane Area : 1.380 (km<sup>2</sup>)  
 \* Corrected Area: 1.317 (km<sup>2</sup>)

+ Excluded Area 2

\*

\* Point Latitude Longitude North Coordinate East Coordinate

|     |               |               |            |            |
|-----|---------------|---------------|------------|------------|
| 126 | 9 45 56.250 S | 36 3 35.625 W | 8867808.09 | 6967416.66 |
| 127 | 9 47 39.375 S | 36 3 35.625 W | 8864492.43 | 6967242.84 |
| 128 | 9 47 39.375 S | 36 2 48.750 W | 8864416.36 | 6968669.30 |
| 129 | 9 47 11.250 S | 36 2 48.750 W | 8865320.68 | 6968716.79 |

|     |               |               |            |            |
|-----|---------------|---------------|------------|------------|
| 130 | 9 47 11.250 S | 36 2 39.375 W | 8865305.47 | 6969002.09 |
| 131 | 9 45 56.250 S | 36 2 39.375 W | 8867717.04 | 6969128.58 |
| 126 | 9 45 56.250 S | 36 3 35.625 W | 8867808.09 | 6967416.66 |

\*  
\* Perimeter : 10.069 (km)  
\* Plane Area : 5.433 (km<sup>2</sup>)  
\* Corrected Area: 5.185 (km<sup>2</sup>)  
\*  
+ Excluded Area 3  
\*  
\* Point Latitude Longitude North Coordinate East Coordinate

|     |               |               |            |            |
|-----|---------------|---------------|------------|------------|
| 132 | 9 49 3.750 S  | 36 2 48.750 W | 8861703.41 | 6968526.60 |
| 133 | 9 50 0.000 S  | 36 2 48.750 W | 8859894.79 | 6968431.28 |
| 134 | 9 50 0.000 S  | 36 1 52.500 W | 8859803.07 | 6970142.81 |
| 135 | 9 49 31.875 S | 36 1 52.500 W | 8860707.45 | 6970190.53 |
| 136 | 9 49 31.875 S | 36 2 1.875 W  | 8860722.73 | 6969905.27 |
| 137 | 9 49 22.500 S | 36 2 1.875 W  | 8861024.19 | 6969921.17 |
| 138 | 9 49 22.500 S | 36 2 11.250 W | 8861039.46 | 6969635.90 |
| 139 | 9 49 13.125 S | 36 2 11.250 W | 8861340.91 | 6969651.79 |
| 140 | 9 49 13.125 S | 36 2 20.625 W | 8861356.18 | 6969366.53 |
| 141 | 9 49 3.750 S  | 36 2 20.625 W | 8861657.63 | 6969382.41 |
| 132 | 9 49 3.750 S  | 36 2 48.750 W | 8861703.41 | 6968526.60 |

\*  
\* Perimeter : 7.050 (km)  
\* Plane Area : 2.587 (km<sup>2</sup>)  
\* Corrected Area: 2.469 (km<sup>2</sup>)  
\*  
+ Excluded Area 4  
\*  
\* Point Latitude Longitude North Coordinate East Coordinate

|     |               |                |            |            |
|-----|---------------|----------------|------------|------------|
| 142 | 9 53 16.875 S | 35 59 41.250 W | 8853257.09 | 6973800.53 |
| 143 | 9 53 26.250 S | 35 59 41.250 W | 8852955.58 | 6973784.49 |
| 144 | 9 53 26.250 S | 35 59 50.625 W | 8852970.99 | 6973499.30 |
| 145 | 9 53 35.625 S | 35 59 50.625 W | 8852669.49 | 6973483.26 |
| 146 | 9 53 35.625 S | 36 0 9.375 W   | 8852700.31 | 6972912.86 |
| 147 | 9 53 45.000 S | 36 0 9.375 W   | 8852398.82 | 6972896.82 |
| 148 | 9 53 45.000 S | 36 0 18.750 W  | 8852414.23 | 6972611.63 |
| 149 | 9 54 31.875 S | 36 0 18.750 W  | 8850906.80 | 6972531.38 |
| 150 | 9 54 31.875 S | 35 59 41.250 W | 8850845.07 | 6973672.11 |
| 151 | 9 54 22.500 S | 35 59 41.250 W | 8851146.57 | 6973688.18 |
| 152 | 9 54 22.500 S | 35 59 31.875 W | 8851131.13 | 6973973.36 |
| 153 | 9 54 13.125 S | 35 59 31.875 W | 8851432.64 | 6973989.43 |
| 154 | 9 54 13.125 S | 35 59 22.500 W | 8851417.21 | 6974274.62 |
| 155 | 9 53 54.375 S | 35 59 22.500 W | 8852020.23 | 6974306.74 |
| 156 | 9 53 54.375 S | 35 59 13.125 W | 8852004.80 | 6974591.93 |

|     |               |                |            |            |
|-----|---------------|----------------|------------|------------|
| 157 | 9 53 16.875 S | 35 59 13.125 W | 8853210.86 | 6974656.14 |
| 142 | 9 53 16.875 S | 35 59 41.250 W | 8853257.09 | 6973800.53 |

\*  
\* Perimeter : 8.829 (km)  
\* Plane Area : 3.536 (km<sup>2</sup>)  
\* Corrected Area: 3.373 (km<sup>2</sup>)  
\*  
\* TOTALS  
\*  
\* Plane Area : 1090.677 (km<sup>2</sup>)  
\* Corrected Area: 1040.484 (km<sup>2</sup>)  
\* -----

### Block BM-SEAL-3 Coordinates

-----  
 Projection: POLYCONIC Datum: SAD-69 CENTRAL MERIDIAN: 54.00 W  
 False North : 10000000.00 False East : 5000000.00  
 -----

+ BT-SEAL-3

\*

| * Point | Latitude      | Longitude      | North Coordinate | East Coordinate |
|---------|---------------|----------------|------------------|-----------------|
| 1       | 9 15 0.000 S  | 35 33 45.000 W | 8924710.11       | 7025042.98      |
| 2       | 9 17 30.000 S | 35 33 45.000 W | 8919874.04       | 7024796.09      |
| 3       | 9 17 30.000 S | 35 37 30.000 W | 8920230.05       | 7017938.52      |
| 4       | 9 22 30.000 S | 35 37 30.000 W | 8910561.29       | 7017443.25      |
| 5       | 9 22 30.000 S | 35 41 15.000 W | 8910919.16       | 7010587.41      |
| 6       | 9 25 0.000 S  | 35 41 15.000 W | 8906086.47       | 7010339.03      |
| 7       | 9 25 0.000 S  | 35 45 0.000 W  | 8906444.65       | 7003484.03      |
| 8       | 9 27 30.000 S | 35 45 0.000 W  | 8901613.58       | 7003235.47      |
| 9       | 9 27 30.000 S | 35 48 45.000 W | 8901972.06       | 6996381.31      |
| 10      | 9 32 30.000 S | 35 48 45.000 W | 8892313.26       | 6995882.76      |
| 11      | 9 32 30.000 S | 36 0 0.000 W   | 8893390.38       | 6975325.35      |
| 12      | 9 37 30.000 S | 36 0 0.000 W   | 8883741.03       | 6974827.98      |
| 13      | 9 37 30.000 S | 35 55 37.500 W | 8883319.97       | 6982820.46      |
| 14      | 9 37 1.875 S  | 35 55 37.500 W | 8884224.91       | 6982867.47      |
| 15      | 9 37 1.875 S  | 35 57 11.250 W | 8884375.36       | 6980012.95      |
| 16      | 9 35 0.000 S  | 35 57 11.250 W | 8888296.29       | 6980215.92      |
| 17      | 9 35 0.000 S  | 35 56 24.375 W | 8888221.35       | 6981643.34      |
| 18      | 9 33 54.375 S | 35 56 24.375 W | 8890332.78       | 6981752.42      |
| 19      | 9 33 54.375 S | 35 52 39.375 W | 8889972.94       | 6988604.38      |
| 20      | 9 34 22.500 S | 35 52 39.375 W | 8889067.76       | 6988557.48      |
| 21      | 9 34 22.500 S | 35 51 24.375 W | 8888947.44       | 6990841.40      |
| 22      | 9 35 37.500 S | 35 51 24.375 W | 8886533.38       | 6990716.00      |
| 23      | 9 35 37.500 S | 35 50 56.250 W | 8886488.13       | 6991572.41      |
| 24      | 9 36 15.000 S | 35 50 56.250 W | 8885281.06       | 6991509.59      |
| 25      | 9 36 15.000 S | 35 50 18.750 W | 8885220.64       | 6992651.42      |
| 26      | 9 37 30.000 S | 35 50 18.750 W | 8882806.39       | 6992525.49      |
| 27      | 9 37 30.000 S | 35 48 45.000 W | 8882654.86       | 6995379.89      |
| 28      | 9 40 0.000 S  | 35 48 45.000 W | 8877825.82       | 6995126.83      |
| 29      | 9 40 0.000 S  | 35 48 7.500 W  | 8877764.89       | 6996268.43      |
| 30      | 9 38 45.000 S | 35 48 7.500 W  | 8880179.53       | 6996395.17      |
| 31      | 9 38 45.000 S | 35 47 1.875 W  | 8880073.05       | 6998393.11      |
| 32      | 9 40 0.000 S  | 35 47 1.875 W  | 8877658.19       | 6998266.23      |
| 33      | 9 40 0.000 S  | 35 41 15.000 W | 8877092.42       | 7008825.92      |
| 34      | 9 35 0.000 S  | 35 41 15.000 W | 8886756.69       | 7009334.65      |
| 35      | 9 35 0.000 S  | 35 37 30.000 W | 8886391.17       | 7016185.94      |
| 36      | 9 32 30.000 S | 35 37 30.000 W | 8891224.99       | 7016439.59      |
| 37      | 9 32 30.000 S | 35 33 45.000 W | 8890859.75       | 7023291.73      |
| 38      | 9 27 30.000 S | 35 33 45.000 W | 8900530.77       | 7023797.57      |
| 39      | 9 27 30.000 S | 35 30 0.000 W  | 8900167.38       | 7030651.47      |
| 40      | 9 15 0.000 S  | 35 30 0.000 W  | 8924354.43       | 7031901.38      |
| 41      | 9 15 0.000 S  | 35 33 45.000 W | 8924710.11       | 7025042.98      |

\*

\* Perimeter : 231.042 (km)  
 \* Plane Area : 1019.307 (km<sup>2</sup>)  
 \* Corrected Area: 971.065 (km<sup>2</sup>)

\*

+ Excluded Area 1

\*

| * Point | Latitude     | Longitude      | North Coordinate | East Coordinate |
|---------|--------------|----------------|------------------|-----------------|
| 42      | 9 23 7.500 S | 35 35 37.500 W | 8909173.14       | 7020808.82      |
| 43      | 9 25 0.000 S | 35 35 37.500 W | 8905546.90       | 7020621.42      |
| 44      | 9 25 0.000 S | 35 34 3.750 W  | 8905396.53       | 7023477.61      |
| 45      | 9 23 7.500 S | 35 34 3.750 W  | 8909023.25       | 7023665.29      |
| 42      | 9 23 7.500 S | 35 35 37.500 W | 8909173.14       | 7020808.82      |

\*

\* Perimeter : 12.983 (km)  
 \* Plane Area : 10.387 (km<sup>2</sup>)  
 \* Corrected Area: 9.886 (km<sup>2</sup>)

\*

+ Excluded Area 2

\*

| * Point | Latitude      | Longitude      | North Coordinate | East Coordinate |
|---------|---------------|----------------|------------------|-----------------|
| 46      | 9 35 28.125 S | 35 45 18.750 W | 8886245.54       | 7001865.02      |
| 47      | 9 35 37.500 S | 35 45 18.750 W | 8885943.63       | 7001849.24      |
| 48      | 9 35 37.500 S | 35 45 28.125 W | 8885958.79       | 7001563.77      |
| 49      | 9 35 46.875 S | 35 45 28.125 W | 8885656.89       | 7001547.99      |
| 50      | 9 35 46.875 S | 35 45 46.875 W | 8885687.22       | 7000977.06      |
| 51      | 9 36 5.625 S  | 35 45 46.875 W | 8885083.42       | 7000945.49      |
| 52      | 9 36 5.625 S  | 35 45 56.250 W | 8885098.59       | 7000660.03      |
| 53      | 9 36 33.750 S | 35 45 56.250 W | 8884192.91       | 7000612.65      |
| 54      | 9 36 33.750 S | 35 45 46.875 W | 8884177.73       | 7000898.10      |
| 55      | 9 36 43.125 S | 35 45 46.875 W | 8883875.84       | 7000882.30      |
| 56      | 9 36 43.125 S | 35 45 18.750 W | 8883830.27       | 7001738.64      |
| 57      | 9 36 33.750 S | 35 45 18.750 W | 8884132.18       | 7001754.45      |
| 58      | 9 36 33.750 S | 35 45 9.375 W  | 8884116.99       | 7002039.90      |
| 59      | 9 36 24.375 S | 35 45 9.375 W  | 8884418.90       | 7002055.71      |
| 60      | 9 36 24.375 S | 35 44 41.250 W | 8884373.33       | 7002912.07      |
| 61      | 9 35 37.500 S | 35 44 41.250 W | 8885882.96       | 7002991.10      |
| 62      | 9 35 37.500 S | 35 44 50.625 W | 8885898.13       | 7002705.63      |
| 63      | 9 35 28.125 S | 35 44 50.625 W | 8886200.05       | 7002721.42      |
| 46      | 9 35 28.125 S | 35 45 18.750 W | 8886245.54       | 7001865.02      |

\*

\* Perimeter : 9.411 (km)  
 \* Plane Area : 3.975 (km<sup>2</sup>)  
 \* Corrected Area: 3.788 (km<sup>2</sup>)

\*

\* TOTALS

\*

\* Plane Area : 1004.945 (km<sup>2</sup>)

\* Corrected Area: 957.391 (km<sup>2</sup>)

\* -----



### Block BM-SEAL-4 Coordinates

-----  
 Projection: POLYCONIC Datum: SAD-69 CENTRAL MERIDIAN: 54.00 W  
 False North : 10000000.00 False East : 5000000.00  
 -----

+ BM-SEAL-4

\*

| * Point | Latitude      | Longitude      | North Coordinate | East Coordinate |
|---------|---------------|----------------|------------------|-----------------|
| 1       | 11 0 0.000 S  | 36 48 45.000 W | 8729786.36       | 6877361.16      |
| 2       | 11 15 0.000 S | 36 48 45.000 W | 8700973.98       | 6875714.91      |
| 3       | 11 15 0.000 S | 36 41 15.000 W | 8700172.74       | 6889340.72      |
| 4       | 11 20 0.000 S | 36 41 15.000 W | 8690563.82       | 6888779.60      |
| 5       | 11 20 0.000 S | 36 33 45.000 W | 8689751.12       | 6902400.79      |
| 6       | 11 30 0.000 S | 36 33 45.000 W | 8670523.27       | 6901257.67      |
| 7       | 11 30 0.000 S | 36 22 30.000 W | 8669276.17       | 6921675.80      |
| 8       | 11 20 0.000 S | 36 22 30.000 W | 8688521.12       | 6922831.92      |
| 9       | 11 20 0.000 S | 36 18 45.000 W | 8688108.20       | 6929642.13      |
| 10      | 11 0 0.000 S  | 36 18 45.000 W | 8726614.91       | 6931913.02      |
| 11      | 11 0 0.000 S  | 36 48 45.000 W | 8729786.36       | 6877361.16      |

\*

Perimeter : 224.817 (km)

\* Plane Area : 2367.018 (km<sup>2</sup>)

\* Corrected Area: 2265.376 (km<sup>2</sup>)

\*

\*-----

### Block BM-SEAL-5 Coordinates

-----  
 Projection: POLYCONIC Datum: SAD-69 CENTRAL MERIDIAN: 54.00 W  
 False North : 10000000.00 False East : 5000000.00  
 -----

+ BM-SEAL-5

\*

| * Point | Latitude       | Longitude      | North Coordinate | East Coordinate |
|---------|----------------|----------------|------------------|-----------------|
| 1       | 10 10 0.000 S  | 35 52 30.000 W | 8820268.26       | 6985167.67      |
| 2       | 10 17 30.000 S | 35 52 30.000 W | 8805790.03       | 6984366.11      |
| 3       | 10 17 30.000 S | 35 56 15.000 W | 8806176.09       | 6977530.72      |
| 4       | 10 25 0.000 S  | 35 56 15.000 W | 8791703.31       | 6976722.46      |
| 5       | 10 25 0.000 S  | 36 0 0.000 W   | 8792092.50       | 6969889.96      |
| 6       | 10 35 0.000 S  | 36 0 0.000 W   | 8772802.92       | 6968801.32      |
| 7       | 10 35 0.000 S  | 35 52 30.000 W | 8772011.29       | 6982458.22      |
| 8       | 10 30 0.000 S  | 35 52 30.000 W | 8781661.81       | 6983008.69      |
| 9       | 10 30 0.000 S  | 35 48 45.000 W | 8781266.94       | 6989839.04      |
| 10      | 10 25 0.000 S  | 35 48 45.000 W | 8790920.89       | 6990387.23      |
| 11      | 10 25 0.000 S  | 35 45 0.000 W  | 8790527.65       | 6997219.49      |
| 12      | 10 17 30.000 S | 35 45 0.000 W  | 8805013.92       | 6998036.67      |
| 13      | 10 17 30.000 S | 35 33 45.000 W | 8803839.75       | 7018541.93      |
| 14      | 10 10 0.000 S  | 35 33 45.000 W | 8818340.63       | 7019358.20      |
| 15      | 10 10 0.000 S  | 35 52 30.000 W | 8820268.26       | 6985167.67      |

\*

Perimeter : 192.524 (km)

\* Plane Area : 1125.276 (km<sup>2</sup>)

\* Corrected Area: 1072.485 (km<sup>2</sup>)

\*

-----

**ANNEX II - CONCESSION AGREEMENT**

FEDERAL REPUBLIC OF BRAZIL  
MINISTRY OF MINES AND ENERGY



CONCESSION AGREEMENT FOR THE EXPLORATION,  
DEVELOPMENT AND PRODUCTION OF OIL AND NATURAL GAS

Nº \_\_\_\_\_

BY AND BETWEEN  
AGÊNCIA NACIONAL DO PETRÓLEO  
And

---

BRAZIL  
2000

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CONCESSION AGREEMENT FOR EXPLORATION, DEVELOPMENT AND PRODUCTION OF OIL AND NATURAL GAS

by and between

The AGÊNCIA NACIONAL DO PETRÓLEO, a special autarchy created by Law 9.478, of August 6, 1997 (hereinafter called the "Petroleum Law"), part of the Indirect Federal Administration, linked to the Ministry of Mines and Energy, with headquarters and jurisdiction at SGAN Quadra 603, Módulo I, 3º andar, Brasília, DF (hereinafter called "the ANP"), herein represented by its Director General, David Zylbersztajn,

and

....., a company organized and existing under the laws of Brazil, with headquarters at ....., enrolled with the Taxpayers' Registry (CGC/MF) under number \_\_\_\_\_, herein represented by \_\_\_\_\_

**WHEREAS**

pursuant to Art. 177, item I, of the Brazilian Federal Constitution (hereinafter called "Federal Constitution") and Art. 4 of the Petroleum Law, the exploration for and production of oil and natural gas pools and other liquid hydrocarbons existing in the Brazilian national territory is a Federal Government monopoly;

according to Art. 176, main paragraph, of the Federal Constitution, and Art. 3 of the Petroleum Law, the reserves of oil, natural gas and other liquid hydrocarbons existing in the Brazilian national territory, which includes the inland, territorial sea, continental shelf and exclusive economic zone, belong to the Federal Government;

pursuant to Art. 176, paragraph 1, of the Federal Constitution, the exploration for and production of mineral resources may be undertaken only with the authorization or concession by the Federal Government, considering the national interest;

pursuant to the referenced Art. 177 of the Federal Constitution and Arts. 5 and 23 of the Petroleum Law, the Federal Government may allow public and private companies, incorporated under the Brazilian Law and with headquarters and management in Brazil, to perform activities of exploration and production of oil and natural gas, through concession agreements preceded by a bidding process;

pursuant to Arts. 8 and 21 of the Petroleum Law, all rights to the exploration and production of oil and natural gas within the national territory, which includes the inland, territorial sea, continental shelf, and exclusive economic zone, belong to the Federal Government and the ANP is in charge of their management;

the ANP is responsible for, in the name of the Federal Government, signing with the Concessionaire concession agreements for the performance of activities for exploration, development and production of oil and natural gas in blocks which observe the provisions of Arts. 23 and 24 of the Petroleum Law, and is also in charge of the complete and permanent

supervision of such activities with the purpose of caring for the Federal Government assets, in accordance with the national interest;

according to Arts. 25 and 26 of the Petroleum Law and having met the conditions set forth in Section I of the above-mentioned Law, the ANP and the Concessionaire are authorized to sign this concession agreement which will respect the general rules of Section I and the provisions of Section VI, both in Chapter V of the referred law,

according to Art. 46 of the Petroleum Law. The Concessionaire has effected payment to the ANP in the amount of R\$\_\_\_\_\_ (amount in words), referred to herein as the signature bonus.

NOW THEREFORE, the ANP and the Concessionaire sign this Concession Agreement for the Exploration, Development and Production of Oil and Natural Gas in the Block identified in Annex I (Concession Area), according to the following clauses and conditions:

## CHAPTER I - BASIC PROVISIONS

### Clause One

#### Definitions

##### Legal Definitions

- 1.1 The definitions contained in Art. 6 of the Petroleum Law and in Art. 3 of Decree No. 2.705, of August 3, 1998 (hereinafter called "Participation Fees") are hereby incorporated to this Agreement and, as a result of this, will be valid for all means and effects of this Agreement whenever the following words and expressions are used herein, whether in the singular or plural:

|                              |  |
|------------------------------|--|
| Sedimentary Basin            | Prospecting or Exploration             |
| Block                        | Oil                                    |
| Oil or Natural Gas Field     | Production Metering Point              |
| Standard Metering Condition  | Reference price                        |
| Production Start-Up Date     | Prospect                               |
| Basic By-Products            | Production Gross Revenue               |
| Oil By-Products              | Production Net Revenue                 |
| Commercial Discovery         | Refining or Refinement                 |
| Development                  | Reservoir or Deposit                   |
| Distribution                 | Resale                                 |
| Pipeline Distribution of Gas | Transfer                               |
| Stockpiling of Natural Gas   | Transportation                         |
| Natural Gas or Gas           | Treatment or Processing of Natural Gas |
| Oil Industry                 | Oil Equivalent Volume                  |
| Pool                         | Supervised Production Volume           |
| Production                   | Total Production Volume                |
| Participation Fees           |  |

##### Contractual Definitions

- 1.2 Also for purposes and effects of this Agreement, the definitions set forth in this Clause 1.2 will be additionally valid whenever the following words and expressions are used herein, whether in the singular or plural:

1.2.1 "Affiliate" means, with respect to any Party, any Person that, directly or indirectly, controls or is controlled by such party, or that is under common control, directly or indirectly, with such Party.

1.2.2 "Concession Area" means the Block defined in Annex I (Concession Area) or the parts of this Block which remain under this Agreement after the relinquishments provided herein are done. Accordingly, references to the Concession Area shall include all Development Areas and Fields established and retained by the Concessionaire pursuant to this Agreement.

- 1.2.3 “Development Area” means any part of the Concession Area which is set aside for Development pursuant to paragraph 9.2.
- 1.2.4 “Evaluation” means the group of Operations which, as part of the Exploration, have the purpose of verifying the commercial viability of an Oil or Natural Gas Discovery in the Concession Area.
- 1.2.5 “National Goods” means all machinery or equipment, including the respective, replacement parts, items and components utilized in operations, that reach a minimum index of national value of 60% (sixty per cent) calculated according to the norms published by the ANP.
- 1.2.6 “Assignment” shall mean any sale, assignment, transfer or any other disposition by any means of all or any part of the rights and obligations of the Concessionaire under this Agreement.
- 1.2.7 “Concessionaire” means, individually and jointly, each of \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_, together with their respective successors and assigns pursuant to Clause Twenty-Eight, all of them mutually responsible and liable pursuant to this Agreement, without prejudice to the right or obligation of the Concessionaire or of each of such assignees to individually perform the acts they are obliged or have the right to under the law or this Agreement.
- 1.2.8 “Agreement” means this agreement, as well as its Annexes I, II, III, IV, V, which are hereby incorporated hereto.
- 1.2.9 “Consortium Agreement” means the consortium agreement referred to in paragraph 28.3 (c).
- 1.2.10 “Effective Date” means the date of signature of this Agreement, pursuant to paragraph 4.1.
- 1.2.11 “Declaration of Commerciality” means the written notice from the Concessionaire to the ANP declaring a Pool as a Commercial Discovery in the Concession Area, pursuant to paragraph 7.1.
- 1.2.12 “Discovery” means any occurrence of Oil and Natural Gas, other hydrocarbons, minerals, and, in general, any other natural resources in the Concession Area, independent from quantity, quality or commercial viability, verified by at least two detection or evaluation methods.
- 1.2.13 “Qualified Research and Development Expenditures” shall mean the expenditures for the research and development activities and for technology services related to the discovery, testing or use of new products, processes or application of existing technology to new applications in the petroleum sector, in accordance with paragraph 24.1.
- 1.2.14 “Development Stage” means, with respect to any Field, the period beginning with the date of submission to the ANP the Declaration of Commerciality for such Development Area, and ending with the earlier of (i) the completion of the work and activities comprising Development, as described in such Development Plan

or (ii) the abandonment of Development in such Field in accordance with paragraph 9.5, whichever occurs first.

- 1.2.15 "Exploration Phase" means the period of time defined for Exploration in paragraph 5.1.
- 1.2.16 "Production Phase" means, for each Field, the period of time defined for Production in paragraph 8.1.
- 1.2.17 "Brazilian Supplier" means (i) with respect to any seller or supplier of assets, goods or services, a Person that is organized and registered as a Brazilian legal entity, whose sold or supplied goods have been produced in Brazil or whose services are performed in Brazilian national territory, and (ii) with respect to any employees, any individual who is a Brazilian citizen.
- 1.2.18 "Associated Gas" means the Natural Gas produced in a Pool where it is found in solution in the Oil or in contact with underlying gas-saturated oil.
- 1.2.19 "Non-Associated Gas" means the Natural Gas which is produced from a dry Gas Pool or a Gas Condensate Pool.
- 1.2.20 "Oil Industry Best Practices" means such practices and procedures employed in the petroleum industry worldwide by prudent and diligent Operators under conditions and circumstances similar to those experienced in connection with the relevant aspect or aspects of the Operations, principally aimed at: a) conservation of petroleum and gas resources, which implies the utilization of adequate methods and processes to maximize the recovery of hydrocarbons in a technically and economically sustainable manner, with a corresponding control of reserves decline, and to minimize losses at the surface b) operational safety, which entails the use of methods and processes that promote occupational security and the prevention of accidents; c) environmental protection, that calls for the adoption of methods and processes which minimize the impact of the Operations on the environment.
- 1.2.21 "Operations" means all and any activities or operations, whether Exploration, Appraisal, Development and Production, performed by the Concessionaire, under and for the purposes of this Agreement.
- 1.2.22 "Operator" means the Operator designated in paragraph 13.2, together with any replacement or successor Operator.
- 1.2.23 "Annual Budget" means a detailed statement of expenses and investments to be made by the Concessionaire in the performance of the relevant Annual Work Program, within any one calendar year, pursuant to Clause Sixteen.
- 1.2.24 "Party" means the ANP or the Concessionaire and "Parties" means the ANP and the Concessionaire.
- 1.2.25 "Exploration Period" has the meaning provided in paragraph 5.1.
- 1.2.26 "Person" shall mean any individual, corporation, *sociedade anonima*, association,

joint venture, partnership, trust, limited liability company, joint-stock company, unincorporated organization or any government agency, or subdivision thereof.

- 1.2.27 "Evaluation Plan" means the document prepared by the Concessionaire containing the work and relevant investment program necessary for the Evaluation of an Oil or Natural Gas Discovery in the Concession Area, pursuant to Clause Six.
- 1.2.28 "Development Plan" means the document prepared by the Concessionaire containing the work and relevant investment program necessary for the Development of an Oil or Natural Gas Discovery in the Concession Area, pursuant to Clause Nine.
- 1.2.29 "Local Investment Percentage in the Development Stage" means, as of the end of the Development Stage with respect to any Development Area, the ratio expressed as a percentage of (i) the total cumulative amounts paid by the Concessionaire through such date to Brazilian Suppliers for assets, goods, services or labor used in or in connection with Development Operations with respect to such Development Area; and (ii) the total cumulative amounts paid by the Concessionaire through such date to all suppliers for all assets, goods, services or labor used in or in connection with Development Operations with respect to such Development Area, calculated at the end of the Development Stage, as provided in paragraph 20.1.1(b).
- 1.2.30 "Local Investment Percentage in the Exploration Phase" means, as of the end of the Exploration Phase (as it may be extended), the ratio expressed as a percentage of (i) the total cumulative amounts paid by the Concessionaire through such date to Brazilian Suppliers for assets, goods, services or labor used in or in connection with Exploration in the Concession Area; and (ii) the total cumulative amounts paid by the Concessionaire through such date to all suppliers for all assets, goods, services or labor used in or in connection with such Exploration in the Concession Area, calculated at the end of the Exploration Phase, as provided in paragraph 20.1.1(a).
- 1.2.31 "Production" means the group of activities for the extraction of Oil and Natural Gas, as defined in the Petroleum Law, or the volume of Oil and Natural Gas, as may be inferred from the context in each case.
- 1.2.32 "Annual Work Program" means the group of activities to be performed by the Concessionaire within any one calendar year, pursuant to Clause Sixteen.
- 1.2.33 "Production Program" means the program in which the provisions for the Production and movement of petroleum, natural gas, water and residues originating from the production process for each Field, are specified pursuant to Clause Ten.
- 1.2.34 "Minimum Exploration Program" means the work program provided in Annex II (Work and Investment Program) to be mandatorily accomplished by the Concessionaire during the Exploration Phase, pursuant to paragraph 5.2.
- 1.2.35 "Installations Deactivation Program" has the meaning provided in paragraphs

8.6.1 and 9.5.

1.2.36 "ICC Rules" means the Rules of Conciliation and Arbitration of the International Chamber of Commerce that are in force.

1.2.37 "Long Term Test" means well tests conducted during the Exploration Phase with the exclusive goal of obtaining data and information to understand the reservoirs, with a total flow time greater than 72 (seventy-two) hours.

1.2.38 "Field" has the same meaning as "Oil or Natural Gas Field", as defined in the Petroleum Law.

## **Clause Two**

### **Objective**

#### **Operations**

2.1 The objective of this Agreement is the performance, by the Concessionaire, of the Operations specified in Annex II (Work and Investment Program) and any other additional activities of Exploration that the Concessionaire may decide to undertake within the Concession Area specified in this Agreement, with the objective of producing Oil and Natural Gas under economic conditions in the referred Concession Area, and if any Discovery is made, the Evaluation, Development and Production of the Hydrocarbons concerned, all on the terms defined herein.

#### **At the Responsibility and Risk of the Concessionaire**

2.2 The Concessionaire shall always exclusively assume all costs and risks related to the performance of the Operations and its consequences, and shall receive in return, only and exclusively, the ownership of the Oil and Natural Gas that will be effectively produced and received by it at the Metering Point, pursuant to this Agreement, being subject to the taxes, charges and Government and third-party Participations, in accordance with this Agreement and applicable Brazilian legislation.

2.2.1 Based on the principle established in paragraph 2.2, and without limiting its applicability, it is expressly understood that the Concessionaire shall bear all losses it may incur, without the right to any payment, reimbursement or indemnification, in the event there is no Commercial Discovery in the Concession Area or in the event the Oil and Natural Gas that is received at the Production Metering Point is insufficient to recover the investments made and reimburse expenses, whether incurred directly or through third parties. In addition to its express obligations under this Agreement, the Concessionaire will be solely liable to the ANP under civil law for its own actions and those of its agents and subcontractors, as well as for the remedy of any and all damages caused as a result of the Operations and the performance thereof, regardless of the existence of fault, and shall duly reimburse the ANP and the Federal Government for any costs that they may have to bear as consequence of possible future claims prompted by acts for which the Concessionaire is responsible.

### **Ownership of Oil and Natural Gas**

- 2.3 Oil and Natural Gas Deposits which exist in the Brazilian national territory belong to the Federal Government, in accordance with Art. 3 of the Petroleum Law. The Concessionaire shall only own the Oil and Natural Gas which are actually produced and received by it at the Production Metering Point, pursuant to paragraph 2.2.

### **No Rights Over Other Natural Resources**

- 2.4 This Agreement exclusively refers to the Exploration, Development and Production of Oil and Natural Gas and it shall not extend to any other natural resources which may exist in the Concession Area. Therefore, the Concessionaire is prohibited from using, making good use of or disposing, in any way and under any title, totally or partially, of such resources, except when duly authorized in accordance with applicable Brazilian legislation, respecting always paragraphs 6.1 and 6.2.

### **Acquisition of Data on a Non-Exclusive Basis**

- 2.5 The ANP may, at its exclusive discretion and whenever it deems convenient, authorize third parties to perform, within the Concession Area, geological and geophysical services aiming towards the gathering of technical data for the purpose of commercialization on a non-exclusive basis, under the terms of Art. 8, item III, of the Petroleum Law. It is expressly understood that the Concessionaire shall have no responsibility with respect to such services and their performance, which in no way may affect the normal course of the Operations.

## **Clause Three Concession Area**

### **Identification**

- 3.1 The Operations shall be performed in the Concession Area, which is described, detailed and delineated in Annex I (Concession Area).

### **Surface Rental Fees**

- 3.2 The Concessionaire shall make annual payments specified in Annex V (Government and Third Party Participation) for the occupation or retention of the Concession Area.

### **Relinquishment**



- 3.3 The Concessionaire shall make, as defined in paragraphs 3.5 and 3.6, the mandatory relinquishment of the Concession Area established in paragraphs 5.3 and 5.3.2, as applicable, and can, at any time during the Exploration Phase, make partial voluntary relinquishment through written notice to the ANP, without prejudice to any obligation to perform the mandatory activities and investments contemplated in this Agreement. Once the Exploration Phase is completed, and as long as this Agreement is still in force, the Concessionaire may only keep as the Concession Area the Development Area or Areas which had been established pursuant to paragraphs 5.3.1, 7.1.2 and 9.2, consistent with that defined in paragraphs 7.2, 8.6 and 9.2.2.

#### **Relinquishment at the Termination of Agreement**

- 3.4 The termination of this Agreement, for any reason or motive, shall oblige the Concessionaire to immediately relinquish to the ANP all the Concession Areas which it still holds, according to the conditions of paragraphs 3.6 and 3.7.

#### **Delineation of Relinquished Areas**

- 3.5 The Concessionaire shall not be able to select, for any partial voluntary relinquishment pursuant to paragraph 3.3, more than 2 (two) non-contiguous parts, each of which shall be circumscribed by one sole line drawn according to minimum units of 3'45" (three minutes and forty-five seconds) of longitude by 2'30" (two minutes and thirty seconds) of latitude.

#### **Conditions for Relinquishment**

- 3.6 All and any relinquishment, partial or total, of the Concession Area, as well as the resulting reversion of assets referred to in paragraph 18.7, shall be definitive and done by the Concessionaire without burden of any nature whatsoever to the Federal Government or to the ANP, pursuant to Art. 28, paragraphs 1 and 2 of the Petroleum Law. The Concessionaire shall be obligated to rigorously comply with the provisions regarding this matter contained in paragraphs 18.5 through 18.8, in Clause Twenty-One hereof and in accordance with applicable Brazilian legislation.

#### **Disposition of the Relinquished Areas by ANP**

- 3.7 The Concessionaire shall not have any rights regarding the relinquished areas, pursuant to this Clause Three, and the ANP may, from the date of the relinquishment, dispose of such areas at its sole discretion, including for the purpose of new bidding processes.

### **Clause Four Effectiveness and Term**

#### **Effective Date**

- 4.1 This Agreement, which shall become effective as of the date of its signature ("Effective Date"), will be divided into two phases, as follows:

4.1.1 Exploration Phase, for all the Concession Area, whose term is defined in paragraph 5.1; and

4.1.2 Production Phase, for each Field, whose term is defined in paragraph 8.1.

**Term**

4.2 The total term of this Agreement for each part of the Concession Area which becomes a Field in the terms provided herein, shall be equal to the sum of the period starting at the Effective Date until the relevant Declaration of Commerciality, plus the period of 27 (twenty-seven) years defined in paragraph 8.1. The extension periods authorized pursuant to paragraph 7.1.2, in this case exclusively with respect to the Development Area referred thereto, and paragraphs 8.2 and 8.3, in these two cases exclusively with respect to the Field referred thereto, shall automatically be added to that total term.

## CHAPTER II - EXPLORATION AND EVALUATION

### Clause Five Exploration Phase

#### Duration

- 5.1 The Exploration Phase will begin at the Effective Date of this Agreement and will have the maximum duration specified in Annex II (Work and Investment Program). The Exploration Phase will be divided into the number of periods (each, an "Exploration Period") indicated in Annex II (Work and Investment Program), each having the duration indicated in Annex II (Work and Investment Program). Each Exploration Period following the first will begin at the conclusion of the immediately preceding Exploration Period. The last Exploration Period (and, hence, the Exploration Phase) may be extended as provided in paragraphs 6.2 and 7.1.2.
- 5.1.1 At the end of each Exploration Period, the Concessionaire shall relinquish to the ANP at least the percentage of original Concession Area indicated in Annex II (Work and Investment Program). The Concessionaire may relinquish more than the required minimum surface area at the end of an Exploration Period, but such voluntary relinquishment will not affect or reduce the Minimum Exploration Program for any subsequent Exploration Period. If the Concessionaire relinquishes more than the required minimum percentage surface area at the end of an Exploration Period, the Concessionaire may count the excess toward the required relinquishment at the end of a subsequent Exploration Period or Periods.
- 5.1.2 At the end of the Exploration Phase, the Concessionaire may only keep the Development Areas approved by the ANP and shall relinquish all remaining areas, except as follows:
- (a) If the Concessionaire has submitted one or more Development Plans under the terms of paragraph 9.1 which have not yet been approved by the ANP under the terms of paragraph 9.3, the Concessionaire may retain the areas covered by such Development Plans, pending a final decision on such Plans, but may not do any work or conduct any Operations in such areas without the prior approval of the ANP.
  - (b) If the Concessionaire has submitted a Declaration of Commerciality under the terms of paragraph 7.1 but has not yet submitted a Development Plan with respect to the Discovery concerned, the Concessionaire may retain the relevant area approved by the ANP, and covered by the Evaluation Plan, for the balance of the time provided by paragraph 9.1 for submission of the Development Plan and for the additional time required under the terms of paragraph 9.3 for review of such Development Plan, but may not do any work or conduct any Operations in the area concerned without the prior approval of the ANP.

- (c) If the Concessionaire has made and notified a Discovery so close to the end of the Exploration Phase that it is not reasonably possible in the exercise of normal diligence and Oil Industry Best Practice to complete Evaluation of the Discovery and to make a reasonable judgment as to the issuance of a Declaration of Commerciality before the end of the Exploration Phase, the Exploration Phase for the area concerned may be extended with the prior approval of the ANP of an Evaluation Plan. The Evaluation Plan shall be completed within the extension approved by the ANP. If the Evaluation leads to a Declaration of Commerciality, the Concessionaire will be able to retain the approved area, in the terms defined in sub-item (b) above.
- 5.1.3 If a Concessionaire makes and provides notice of a Discovery near the end of an Exploration Period such that it is not possible to complete, in accordance with Oil Industry Best Practice, an Evaluation of the Discovery prior to the termination of this same Exploration Period, the Exploration Period can be extended with the prior approval of an Evaluation Plan by the ANP which plan, in any event, must be completed within the timeframe approved by the ANP.
- (a) The period of extension provided under paragraph 5.1.3 will be subtracted from the term of the subsequent Exploration Period
  - (b) In the case of the final Exploration Period, the provisions of 5.1.2 (c) will apply.
- 5.1.4 As a condition of continuing the Exploration Phase from one Exploration Period to the next, the Concessionaire shall be obligated to provide the ANP, prior to the end of the Exploration Period underway, a stand-by letter of credit satisfying the requirements of Clause Fifteen with respect to the Minimum Exploration Program for the next succeeding Exploration Period. If the Concessionaire fails to provide a stand-by letter of credit by the end of the Exploration Period underway, the Exploration Phase will be automatically terminated and the Concessionaire will relinquish all the original Concession Area as per the terms in paragraph 5.1.2.
- 5.1.5 The Concessionaire may voluntarily terminate the Exploration Phase at any time by written notice to the ANP; provided that such termination will not relieve the Concessionaire from fully completing the Minimum Exploration Program with respect to the Exploration Period underway.

### **Minimum Exploration Program**

- 5.2 During the Exploration Phase, the Concessionaire shall, in each Exploration Period, complete in its entirety the Minimum Exploration Program for such Exploration Period as contained in Annex II (Work and Investment Program) and for this purpose shall expend the necessary amounts.
- 5.2.1 The Non-compliance with the provisions of paragraph 5.2 shall entitle the ANP to draw on the stand-by letter of credit as provided in Clause Fifteen, without prejudice to other legal and contractual remedies.

5.2.2 The Concessionaire may at its discretion perform additional exploration work and activities beyond those included in the Minimum Exploration Program for the Exploration Period underway, providing the ANP with the program of additional exploration work and activities prior to initiating such work. The ANP, at its sole discretion, may credit or not, in whole or in part, these additional exploration activities against obligations in the subsequent Exploration Period. Notwithstanding, each Exploration Period will always contain a Minimum Exploration Program to be completed by the Concessionaire.

### **Options after Completion of Minimum Exploration Program**

5.3 After having totally complied with the work obligations established by the Minimum Exploration Program for any Exploration Period, according to paragraph 5.2, the Concessionaire may, at its discretion and through written notice to the ANP, up to the date of termination of such Exploration Period:

(a) Consider the Exploration Phase finished, only retaining the eventual Development Areas established pursuant to paragraphs 5.1.2, 5.3.1, 7.1.2 and 9.2, in which case all other parts of the Concession Area shall be immediately relinquished by the Concessionaire to the ANP, as defined in paragraphs 3.6 and 3.7; or

(b) Notify the ANP that no Discoveries have been made which, at the discretion of the Concessionaire, justifies investments in Development. Such notice will cause the termination of this Agreement at the date of receipt of the relevant notification and the immediate relinquishment of the entire Concession Area, as defined in paragraphs 3.6 and 3.7.

5.3.1 If, at the end of the Exploration Phase, the deadline to present the Development Plan as stated in paragraph 9.1 has not been reached, the Concessionaire will be obligated, for the purposes of paragraph 5.3 (a) and for the approval of the ANP, to anticipate, in the relevant notice, the delineation of the Development Area to be retained, according to paragraph 9.2.

5.3.2 In the event the Concessionaire fails to present the notice referred to in paragraph 5.3, this Agreement will duly terminate at the end of the Exploration Phase, with the Concessionaire being obligated to immediately relinquish the entire Concession Area, in accordance with paragraphs 3.6 and 3.7.

## **Clause Six**

### **Discovery and Evaluation**

#### **Notice of Discovery**

- 6.1 Any Discovery of Oil, Natural Gas, other hydrocarbons, minerals and, in general, any natural resources, within the Concession Area, shall be notified, exclusively and in writing, by the Concessionaire to the ANP within a maximum of 72 (seventy-two) hours. The notice shall be accompanied by all relevant available data and information.

#### **Other Natural Resources**

- 6.2 In the case of Discovery of any natural resources other than Oil or Natural Gas, over which the Concessionaire will have no right, under the terms of paragraph 2.4, the Concessionaire will be obliged to comply with the instructions and allow the performance of the relevant measures as determined by the ANP or other competent authorities. While waiting for such instructions, the Concessionaire shall refrain from taking any measures which could put at risk or in any way impair the discovered resources. The Concessionaire shall not be obliged to interrupt his activities, except in cases in which they put at risk the discovered natural resources. Any interruption of activities, due exclusively to the discovery of other natural resources, will have its term computed and recognized by the ANP for purposes of the extension referred to in paragraph 5.1.

#### **Evaluation**

- 6.3 The Concessionaire may, at its discretion, evaluate an Oil or Natural Gas Discovery according to paragraph 6.1, at any time during the Exploration Phase. The Evaluation of the Discovery shall be necessarily and fully done during the Exploration Phase, which, in no case, can be extended, except as provided for in paragraphs 5.1 or 7.1.2.

6.3.1 In the event the Concessionaire decides to evaluate a Discovery, the Concessionaire shall so notify the ANP and deliver to the ANP the respective Evaluation Plan prior to the proposed beginning of any Evaluation activities. The Concessionaire is authorized to execute the Evaluation Plan immediately after its presentation to the ANP. Where justifiably requested by the ANP, Evaluation activities already initiated shall be interrupted.

6.3.2 In the event the Evaluation Plan contemplates the execution of Long-Term Tests, the Concessionaire may not initiate any such tests without the prior authorization from ANP.

#### **Contents of Evaluation Plan**

- 6.4 The Evaluation Plan shall contain a detailed description of the work that the Concessionaire proposes to perform in connection with the Evaluation of the Discovery, as well as all essential data and information available, including but not limited to a timetable of activities, geological and geophysical studies, drilling and testing of wells and similar activities, specification of complementary studies, analysis and the indication of necessary investments, all in accordance with Oil Industry Best Practices.

## **Modifications to Evaluation Plan**

- 6.5 The ANP will have up to 60 (sixty) days, from the receipt of the Evaluation Plan, to approve of the Plan or to request justifiable modifications from the Concessionaire. In the event the ANP does not request any modification during this period the Evaluation Plan shall be deemed to have been approved by the ANP. In the event the ANP requests such modifications in the Evaluation Plan, the Concessionaire shall present the additional information within 30 (thirty) days from the relevant request, repeating the procedure described in this paragraph 6.5. Any amendments to the Evaluation Plan, which are suggested by the Concessionaire, are subject to the prior written communication to the ANP, applying to such amendments the procedure contemplated in this paragraph 6.5.

## **Clause Seven**

### **Declaration of Commerciality**

#### **At Option of Concessionaire**

- 7.1 Prior to the end of the Exploration Phase, the Concessionaire, by means of notifying the ANP, may or may not issue a Declaration of Commerciality for the evaluated Discovery, in accordance with paragraph 7.1.1, or delay such Declaration of Commerciality in accordance with paragraphs 5.1.2 (c), or 7.1.2, if applicable. The Concessionaire shall attach to its notice a detailed report with the results of the Evaluation, as well as all relevant technical data and information that justify the proposal for the area that will be retained for the Discovery, including its justifications for seeking the application of paragraphs 5.1.2 (c) or 7.1.2, if applicable.
- 7.1.1 The decision to issue or not a Declaration of Commerciality for the evaluated Discovery shall be decided by the Concessionaire, at its sole discretion, using for this the notification referred to in paragraph 7.1.
- 7.1.2 The Concessionaire may justify, before the ANP and in accordance with paragraph 7.1, that the quantity and the quality of the discovered and evaluated Non-Associated Natural Gas are such that (i) its commercial viability exclusively depends on the creation of the market or the installation of Transportation infrastructure to handle simultaneously the Concessionaire's and other Concessionaires' Production and, also that (ii) the creation of such market or installation of such infrastructure will be possible within a period of as much as 5 (five) years. In this case, the Concessionaire will have the right to request the ANP, and the latter, at its sole discretion, may concede, a maximum period of 5 (five) years, from the notice made by the Concessionaire pursuant to paragraph 7.1, to issue or not the relevant Declaration of Commerciality. In the event such Declaration is issued, the Concessionaire is obligated to present, attached to the Declaration of Commerciality, a supported proposal for the use of the Non-Associated Natural Gas, accompanied by the relevant Development Plan. When presenting the request contemplated in this paragraph 7.1.2, the Concessionaire shall simultaneously submit for the ANP's approval the delineation of the Development Area to be retained, in accordance with the provisions of paragraph

9.2. The extension of the Exploration Phase of this Agreement for the period of 5 (five) years contemplated herein will be applicable exclusively to such Development Area, and for all other parts of the Concession Area the terms and conditions applicable in accordance with the other clauses of this Agreement shall prevail. At the ANP's exclusive option, and technically justified for each specific case, the referred 5 (five) year period may be extended to up to 10 (ten) years.

### **Relinquishment of Area of Discovery**

- 7.2 In the case the Concessionaire elects not to issue the Declaration of Commerciality for the evaluated Discovery, pursuant to this Clause Seven, or if, having issued the Declaration of Commerciality, fails to deliver to the ANP, within the proper period of time, the Development Plan required pursuant to paragraphs 7.1.2 and 9.1, then the area concerned shall be subject to relinquishment as provided in this Agreement.

### **Continuation of Exploration and/or Evaluation**

- 7.3 The fact that the Concessionaire has released one or more Declarations of Commerciality, pursuant to this Clause Seven, shall not cause the reduction or amendment of the Concessionaire's rights or obligations regarding Exploration, which will continue in full force and effect in accordance with the term, periods and conditions defined in this Agreement.



## CHAPTER III - DEVELOPMENT AND PRODUCTION

### Clause Eight Production Phase

#### Duration

- 8.1 The Production Phase, with regard to each Field, will start at the date of delivery, by the Concessionaire to the ANP, of the Declaration of Commerciality related to such Field, pursuant to Clause Seven, and shall last for a 27 (twenty-seven) year term, which can be reduced or extended, according to the provisions of paragraphs 8.2, 8.3 and 8.5.
- 8.1.1 Considering that the Production Phase applies, separately, to each Field, pursuant to paragraph 8.1, it is expressly understood that all references to extension or termination of this Agreement contained in paragraphs 8.2 through 8.6 mean the extension or termination of this Agreement exclusively with respect to each Field separately.

#### Extension by Concessionaire

- 8.2 The Concessionaire may request the extension of the term established in paragraph 8.1. In order to do so, the Concessionaire shall send, at least 12 (twelve) months prior to the end of this term, a written request to the ANP duly accompanied by a Development Plan, prepared in accordance with applicable legislation or, in the event the ANP does not request additional investments in the Field for which the term extension is requested pursuant to paragraph 8.2.1, a Production Program which is in accordance with the Development Plan already in effect.
- 8.2.1 The ANP, within a maximum period of 3 (three) months from the receipt of the request from the Concessionaire, will inform the latter of its decision, it being understood that the ANP shall not unjustly reject the Concessionaire's proposal, being able to refuse it *in totum* or request amendments, including additional investments in the Field subject to extension. At the same time, the Concessionaire will not unjustifiably refuse requests by the ANP for additional investments in the Field subject to extension.
- 8.2.2 The lack of response from the ANP, within the 3 (three) month period referred above, will cause the implicit approval of the Concessionaire's proposal, extending this Agreement on the terms contemplated therein.

#### Extension by ANP

- 8.3 By written notice made within at least 8 (eight) months before the end of the term established in paragraph 8.1, the ANP may request the Concessionaire to continue operating in a Field for an additional time which the ANP may consider convenient, with the consequent extension of this Agreement. The ANP's request shall not be refused by the Concessionaire without justification, it being understood that the latter shall not be obliged to continue with the operation under conditions that, by its own criterion, might be un-economic.

8.3.1 The lack of response by the Concessionaire, within the 3 (three) month period following the ANP's proposal, shall be considered as an acceptance by the Concessionaire of the ANP's proposal.

### **Consequence of Extension**

8.4 During the occurrence of the extension of the Production Phase, pursuant to paragraphs 8.2 and 8.3, the Parties will remain bound under the exact terms and conditions of this Agreement, with the exclusive exception of the amendments agreed due to and for the purposes of such extension. At the end of such extension, the referred paragraphs 8.2 and 8.3 will be applied, *mutatis mutandis*, for purposes of any new extension.

### **Early Termination**

8.5 At any time during the Production Phase, the Concessionaire can terminate this Agreement with respect to any Field (or all Fields) through a written notice to the ANP of at least 6 (six) months during which period the Concessionaire shall not interrupt or suspend Production at the Field(s) concerned. Concurrently with the notice contemplated in this paragraph, the Concessionaire must submit to the ANP an Installations Deactivation Program in accordance with paragraph 8.6.1.

### **Relinquishment of Fields**

8.6 Once the Production Phase is finished, or this Agreement is terminated pursuant to paragraph 8.5, the Field shall be relinquished to the ANP, which may, if it deems convenient, adopt the applicable measures to proceed with its operation. In this case, the Concessionaire shall use all of its efforts and adopt all measures in order to, during the last 6 (six) months of the Production Phase, or the 6 (six) month period of paragraph 8.5, properly transfer the operations to the new operator, in order not to impair the administration and production of the Field. In any circumstance, however, the Concessionaire will be obligated to comply with the provisions of paragraphs 3.6 and 3.7.

8.6.1 At least one year before the end of the Production Phase, the Concessionaire must submit an Installations Deactivation Program to the ANP, describing in detail the proposal for the plugging and abandonment of the wells, the deactivation and removal of plant, equipment and all other relevant assets from the Concession Area. The Installation Deactivation Program must comply strictly with applicable Brazilian legislation, be in accordance with Oil Industry Best Practice and be consistent with the provisions in Clause 21 of this Agreement.

## **Clause Nine**

### **Development Plan**

#### **Contents**

9.1 Within 180 (one hundred and eighty) days from the date of delivery of the Declaration of Commerciality pursuant to paragraph 7.1 and except as provided for in paragraph 12.1, or on the date of the Declaration of Commerciality, in the case of paragraph 7.1.2, the

Concessionaire shall deliver to the ANP the relevant Development Plan, prepared in accordance with applicable Brazilian legislation and Oil Industry Best Practice.

### **Development Area**

9.2 The Development Area will be circumscribed by a sole line drawn according to applicable legislation, including a Gutter Zone of a maximum of 1 (one) kilometer, around the whole Pool or Pools to be produced, determined based on the data and information obtained during the execution of Exploration and Evaluation activities, and in accordance with Oil Industry Best Practice.

9.2.1 If, throughout the Development, it is proved that the Pool or Pools contained in the Development Area defined pursuant to paragraph 9.2. extend further this area, the Concessionaire may request its amendment to the ANP, in order to incorporate in such area other portions of the original Concession Area, provided that such portions have not yet been relinquished in compliance with the provisions of this Agreement.

9.2.2 Once the Development is concluded, the Concessionaire will retain, from the Development Area, only the area of the Field which results from the Development, immediately relinquishing all other parts to the ANP, in accordance with paragraphs 3.6 and 3.7.

9.2.3 The Area of each Field referred to in paragraph 9.2.2 shall be circumscribed by a sole closed polygon, drawn in accordance with applicable legislation.

### **Approval and Execution of Development Plan**

9.3 The ANP shall have up to 60 (sixty) days, from the receipt of the Development Plan, to approve it or request the Concessionaire to make any amendments the ANP deems advisable. In the event the ANP does not respond within such period, the Development Plan will be considered approved. If the ANP request modifications, the Concessionaire shall have 60 (sixty) days, counted from the date of receipt of the notification, to discuss them with the ANP.

9.3.1 Once the Development Plan is approved, the Concessionaire shall conduct all operations with respect to the Development Area concerned in accordance with such Development Plan, of which amendments should be in accordance with that which is outlined in paragraph 9.4.

### **Revisions and Amendments**

9.4 In the event of a change in the technical conditions or economics used in the formulation of the Development Plan, the Concessionaire may submit revisions or amendments to the ANP, accompanied by supporting reasons, and in accordance with applicable Brazilian legislation and with Oil Industry Best Practice. If the Development Plan at any time ceases to comply with applicable Brazilian laws and regulations or with Oil Industry Best Practice, the Concessionaire shall be obligated to amend it so that it so complies. Amendments shall be subject to the ANP's review and approval applying, *mutatis mutandis*, the provisions in paragraph 9.3. If the ANP believes that a Development Plan

has ceased to comply with applicable Brazilian legislation and Oil Industry Best Practice, it may request the Concessionaire to make appropriate amendments.

### **Early Termination of Development**

- 9.5 At any time during the Production Phase, the Concessionaire may, upon at least 6 (six) months prior notice, terminate this Agreement with regard to the relevant Development Area, submitting, at the same time, a program for the deactivation of the relevant installations (“Installations Deactivation Program”) describing in detail the proposed plugging and abandoning of wells, the deactivation, decommissioning and removal of relevant facilities, equipment and other assets and all other relevant considerations. The Installations Deactivation Program shall be in strict compliance with applicable Brazilian laws and be in accordance with Oil Industry Best Practice, including Clause Twenty-One.
- 9.5.1 The ANP will have 30 (thirty) days, counting from the receipt of the Installations Deactivation Program, to approve it or request the Concessionaire to modify it as the ANP may deem appropriate. In the case the ANP does not respond within such period, the Installations Deactivation Program is deemed approved. If the ANP suggests modifications, the Concessionaire shall have 60 (sixty) days, counting from the date of receipt of the notification, to present them to the ANP. The ANP will not unreasonably reject an Installations Deactivation Program for a Development Area if it complies with applicable Brazilian laws and is consistent with Oil Industry Best Practice. The ANP may request that the Concessionaire not plug and abandon wells and/or not deactivate or remove certain facilities, making the ANP responsible for such wells and facilities following the Concessionaire’s withdrawal.
- 9.5.2 The early termination of the Development or Production activities, as provided for in paragraph 9.5 with regard to the relevant Development Area, shall be effective immediately after the fulfillment of the Installation Deactivation Program, with the immediate relinquishment of such Development Area, respecting the provisions of paragraphs 3.6 and 3.7 and the Concessionaire shall not be entitled to any indemnification for the investments it may have made.

### **Construction, Installation and Equipment**

- 9.6 All construction, installation and the supply of equipment for extraction, treatment, lifting, storage, metering and Production Transfer, under the terms of this Agreement, shall be at the sole responsibility, cost and risk of the Concessionaire. Regarding the Treatment or Processing of Natural Gas, Storage of Natural Gas and Transportation, Arts. 53, 54, 56 through 59 of the Petroleum Law shall apply, it being expressly understood that the resolution of such matters by the Concessionaire, including the investment of necessary resources, will be mandatory in order to establish the commercial viability and to develop a Discovery.

## **Clause Ten**

### **Production Start-Up Date and Production Programs**

#### **Production Start-Up Date**

- 10.1 The Concessionaire shall keep the ANP informed about the forecasts regarding the Production Start-Up Date of each Field, and is bound to confirm it to the ANP, in writing, no later than 24 (twenty-four) hours from its occurrence.

#### **Production Program**

- 10.2 No later than October 31 of each calendar year, the Concessionaire shall deliver to the ANP the Production Program for each Field in accordance with the Development Plan for the Field, observing applicable Brazilian legislation, as well as Oil Industry Best Practice. The Production Program shall also have the appropriate explanations, whenever the total annual Production indicated therein suffers a variation equal to or higher than 10% (ten percent), when compared to the relevant total annual Production expected in the Development Plan in force and applicable to the Field.

10.2.1 The Production Program regarding the calendar year in which the Production has begun will be delivered by the Concessionaire to the ANP at least 60 (sixty) days prior to the expected Production Start-Up Date.

10.2.2 Once the Production Program is delivered, and notwithstanding the provisions of paragraph 8.5, the Concessionaire shall be obligated to comply with it and any amendments to it shall be subject to paragraphs 10.3 and 10.4, as well as the provisions of paragraph 10.5.

#### **Modifications by ANP**

- 10.3 The ANP shall have 30 (thirty) days from the receipt of the Production Program to request that the Concessionaire make any amendments the ANP deems advisable, whenever the Production Program does not comply with the provisions of paragraph 10.2. In the event the ANP requests such amendments, the Concessionaire shall have 30 (thirty) days, counting from the date of receipt of the notification, to discuss them with the ANP and present ANP with an agreed modified Production Program. In accordance with paragraph 8.5, the Concessionaire shall be obligated to comply with the Production Program submitted to the ANP, with such modifications determined by the ANP, according to the provisions herein, applying to such amendments the procedure contemplated in this paragraph 10.3, as well as in paragraph 10.5.

10.3.1 If, at the beginning of the period to which the Production Program refers, the Parties are in disagreement due to the application of paragraph 10.3, the lower Production level between the one proposed by the Concessionaire and the ANP shall be used, in any month and until this disagreement is resolved.

### **Amendments**

- 10.4 The parties may agree, at any time, upon the revision of the Production Plan in place, provided that such revision satisfies the standards set forth in paragraph 10.2. When a proposed revision is at the ANP's initiative, duly justified and in accordance with Oil Industry Best Practice, the Concessionaire shall have 30 (thirty) days, counting from the date of receipt of the notification, to discuss it with the ANP and to present a revised Production Program to the ANP. All revisions shall apply, *mutatis mutandis*, to the provisions outlined in paragraph 10.3.

### **Authorized Variances**

- 10.5 The volume effectively produced in each Field, each month, cannot vary more than 15% (fifteen percent) in relation to the Production level expected for that month in the Production Plan in place, except when this variation is for technical reasons, fortuitous reasons or force majeure, justification for which is to be presented to the ANP before the fifteenth day of the following month.

### **Temporary Interruption of Production**

- 10.6 In accordance with Oil Industry Best Practice, the Concessionaire can provide notice to the ANP indicating the interruption of Production in a field, for a maximum period of one year. The ANP has a period of 60 (sixty) days to approve the application or seek additional clarification from the Concessionaire, in which case the ANP has a new period of 60 (sixty) days from the date of the first delivery of clarification by the Concessionaire, to respond. Except for prior and express authorization by the ANP, the Concessionaire must not interrupt Production before the definitive declaration on the part of the ANP. In the event of emergency or force majeure conditions, the Concessionaire can, by prior notice to the ANP, interrupt production without the need for prior approval contemplated in this paragraph.

## **Clause Eleven**

### **Measurement, Delivery and Disposition of Production**

#### **Measurement**

- 11.1 As from the Production Start-Up Date of each Field, the volume and quality of the Oil and Natural Gas produced will be determined periodically and regularly at the Production Metering Point, at the responsibility and cost of the Concessionaire, with the use of the metering methods, equipment and instruments contemplated in the respective Development Plan and conforming to applicable legislation.

#### **Transfer of Ownership**

- 11.2 The Concessionaire shall receive and assume, at the Production Metering Point, the ownership of the volumes of Oil and Natural Gas metered in accordance with this Clause Eleven, consistent with paragraphs 2.2, 2.2.1 and 2.3. The quantification of such volumes will be subject, at any time, to appropriate corrections in accordance with paragraph 11.1.

#### **Monthly Bulletins**

- 11.3 Before the 15th (fifteenth) day of each month, and as from the month following that in which the Production Start-Up Date occurs in each Field, the Concessionaire will deliver to the ANP a monthly Production bulletin for that Field, conforming to applicable legislation.

#### **Free Disposal**

- 11.4 Subject to the condition in paragraph 11.5, the Concessionaire will be assured of the free disposition of the volumes of Oil and Natural Gas received by it in accordance with paragraph 11.2.

#### **Supply to National Market**

- 11.5 If, in the event of a national emergency declared by the President of the Republic, it is necessary to limit exports of Oil or Natural Gas, the ANP may, through 30 (thirty) day advance written notice, determine that the Concessionaire meet the necessities of the local market or of the Country's strategic oil and gas reserves, with Oil and Natural Gas that it has produced and received pursuant to this Agreement. The Concessionaire's participation referred herein will be made, each month, in proportion to its participation in the national production of Oil and Natural Gas in the preceding month.

#### **Consumed in Operations**

- 11.6 The Concessionaire may use Oil and Natural Gas produced in the Concession Area as fuel in the performance of the Operations, as long as it is in reasonable quantities and consistent with Oil Industry Best Practice. The Concessionaire will inform the ANP about such quantities and its use through detailed and specified notifications, as required, of the Production Start-Up Date of each Field, including such information in the monthly Production bulletins contemplated in paragraph 11.3, it being also understood

that all these quantities will be calculated for purposes of payment of Royalties and Government and Third-Party Participation Fees, provided for in Clause Twenty-Three.

### **Test Production**

- 11.7 The results of any formation or production tests made by the Concessionaire during the execution of Operations laid out in this Agreement, including the produced volumes of oil, natural gas and water, shall be advised to the ANP immediately after their conclusion, or, in the case of tests with a long duration, in accordance with the period laid out in the approved Evaluation Plans. The Oil and Natural Gas volumes obtained during these tests will belong to the Concessionaire and be computed for the purposes of payment of Government and Third-Party Participation Fees, provided for in Clause Twenty-Three.

### **Associated Natural Gas**

- 11.8 The volumes of Associated Natural Gas produced under this Agreement may be used by the Concessionaire according to paragraph 11.6, subject to the prior written approval of the ANP, which shall not be unreasonably refused, within the exception of, in any event, the provision of Art. 47, paragraph 3, of the Petroleum Law.

### **Losses**

- 11.9 Any loss of Oil or Natural Gas that occurs under the responsibility of the Concessionaire will be included in the total Production volume to be calculated for purposes of payment of Royalties and Third-Parties interests, provided for in Clause Twenty-Three, pursuant to Art. 47, paragraph 3 of the Petroleum Law, without prejudice to the application of the provisions of Clauses Twenty-Nine and Thirty.

## **Clause Twelve**

### **Unitized Production**

#### **Agreement for Unitization of Production**

- 12.1 In the case of a Discovery under this Agreement, in which the relevant Pool may extend outside the Concession Area, the Concessionaire will officially inform this fact to the ANP at the time the Concessionaire becomes aware of such extension.
- 12.1.1 If another Concessionaire has rights to the adjacent area to which the relevant Pool extends, the ANP, will notify such Concessionaire with the purpose of having all interested parties get together and execute an agreement which results in common development and the unitization of Production.
- 12.1.2 If there is no Concessionaire with rights to such adjacent area, but the ANP in its sole discretion believes that a sufficient Evaluation of the Pool or Pools concerned has been done in order to permit the ANP to form a reasonable judgment regarding unitization, the ANP itself may act as if it were the Concessionaire of such area for purposes of negotiating and executing the



agreement for unitization of Production contemplated in paragraph 12.1. However, at any time prior, during or after such negotiation and execution of the agreement, the ANP may offer for bidding the referred Block or Blocks, in which case, once the relevant Concessionaire(s) is selected, these will assume their responsibilities pursuant to this Clause Twelve and be obligated to fulfil the unitization agreement signed by the ANP.

### **Rights and Obligations of Interested Concessionaires**

12.2 The agreement referred to in paragraphs 12.1.1 or 12.1.2 will equitably contemplate the rights and obligations of the interested Concessionaires, defining the unitized area, its Operator, the participation of each one in the Exploration, Evaluation, Development and Production of the Pool, the relevant Development Plan and the time period for its presentation to the ANP, the payment of Government and Third-Parties participations, respecting, for each involved Concessionaire, the amounts specified in the relevant Concession Agreement, and, in general, all other aspects usually covered in this kind of agreement according to Oil Industry Best Practice and to the terms of the relevant Brazilian legislation and Concession Agreements related to the Blocks in which the unitized area is located.

12.1.1 If so requested, the ANP may act as mediator in the negotiations of the agreements for unitization of Production, seeking to reconcile the interests of the interested Concessionaires in order for them to reach a consensus.

12.1.2 If there is no Concessionaire for adjacent areas and/or the Evaluation of the Pool is insufficient to permit meaningful discussions regarding unitization, the Concessionaire may nonetheless proceed with the Declaration of Commerciality, as provided in this Agreement. If the Concessionaire believes that Development of those parts of the Pool lying inside the Concession Area can be done in accordance with applicable Brazilian laws and Oil Industry Best Practice, it may submit a Development Plan, conforming to that which is defined in Clause Nine.

### **Modifications to Agreement by ANP**

12.3 If the Concessionaire enters into an agreement for unitization of Production, the ANP shall have 60 (sixty) days from the receipt of the agreement duly signed by all involved Concessionaires, to request any amendments the ANP deems advisable. In the event the ANP does not report within such period, the referred agreement will be considered final and definitive. In the event the ANP requests amendments, the Concessionaire and the other interested parties shall have 60 (sixty) days from the date the request was made to discuss them with the ANP. Once the agreement for unitization of Production becomes final and definitive, the interested Concessionaires will be obligated to fully comply with it and any amendments to it are subject to the prior written approval of the ANP, such amendments being subject to the procedure contemplated in this paragraph 12.2.

### **Suspension of Operations**

12.4 Should the agreement for the unitization of Production contemplated herein not be approved by the ANP, pursuant to paragraph 12.2, the Development and Production of the relevant Pool will be suspended, unless otherwise approved by the ANP, at its sole

discretion, until the unanimous and express agreement is obtained from all parties involved for this purpose.

## CHAPTER IV - PERFORMANCE OF OPERATIONS

### Clause Thirteen

#### Performance by Concessionaire

##### Exclusive Rights and Responsibility of Concessionaire

- 13.1 During the effective period of this Agreement and as long as its terms and conditions are complied with, the Concessionaire shall have, except as contemplated in paragraph 2.5, the exclusive right to perform the Operations in the Concession Area, for this purpose being obligated to, at its own account and risk, make all investments and bear all necessary expenses, supply all necessary equipment, machinery, personnel, service and proper technology and, as and to the extent required by applicable law, assume and respond for losses and damages caused, directly or indirectly, by the Operations and their performance, independently of pre-existing fault, before third parties, the ANP and the Federal Government, according to paragraphs 2.2, 2.2.1 and other applicable provisions of this Agreement.

##### Operator

- 13.2 The Concessionaire hereby designates the Operator to carry out and execute all Operations and activities under this Agreement on behalf of the Concessionaire and to submit all plans, programs, proposals and other communications to the ANP, and to receive all responses, requests, solicitations, proposals and other communications from the ANP, on behalf of the Concessionaire. The Operator shall be responsible for the full and timely performance of all obligations of the Concessionaire under this Agreement with respect to any aspect of Operations for which it is the Operator, except the obligations set forth in Clauses Twenty-Eight and Thirty-Three.
- 13.4.1 The initial Operator is \_\_\_\_\_ which has executed this Agreement in its capacity as Operator on the Effective Date. A replacement Operator or additional Operators for specific activities may be designated as provided herein.
- 13.4.2 The Operator will at all times hold at least a 30% participation interest in each Exploration area or Field for which it is acting as Operator. Any failure by the Operator to hold such percentage interest will constitute a material breach of this Agreement except in the case where unitization of production is necessary in which event the Operator must hold a minimum participation of 15% in each Field in which it is acting as Operator. If, as a result of a prospective transfer or otherwise, it is anticipated that an Operator would at any time hold less than such 30% interest, the Concessionaires will arrange for a new Operator to be designated and to be submitted for approval to the ANP prior to the removal of the former Operator.
- 13.4.3 The Concessionaires may nominate a Person other than the original Operator to act as Operator with respect to any Exploration or Development or Field activity; provided that such Person can demonstrate adequate experience, qualifications

and financial capacity. The Person so nominated must hold the minimum percentage interest provided above. Such nomination is subject to prior approval by the ANP.

- 13.4.4 The Operator may resign as Operator at any time by so notifying the other Parties at least ninety (90) days prior to the effective date of such resignation.
- 13.4.5 The Operator may be removed by the ANP if the Operator has committed a material breach of this Agreement and has failed to cure that breach within ninety (90) days of receipt of a notice from the ANP detailing the alleged breach.
- 13.4.6 Following the resignation or removal of an Operator as provided above, the Concessionaires shall meet as soon as possible to nominate a replacement Operator that meets the requirements of this paragraph 13.2, and shall present such nomination to the ANP for approval.
- 13.4.7 No resignation of an Operator may become effective, nor may any replacement Operator begin performing Operations following the resignation or removal of the previous Operator, until such time as the replacement Operator has been nominated by the Concessionaires and approved by the ANP. Upon such approval and the execution by the successor Operator of a counterpart of this Agreement, the successor Operator shall succeed to all duties, rights and authority prescribed in this Agreement for the Operator, and the former Operator shall transfer to the replacement Operator custody of all property used in the Operations, books of account, records and other documents maintained by the Operator pertaining to those parts of the Concession Area and to those Operations concerned.
- 13.4.8 Upon delivery of the above-described property and data by the former Operator, whether in the event of resignation or removal, the former Operator shall be released and discharged from all obligations and liabilities as Operator arising or accruing after such date, but shall not be released from obligations and liabilities arising or accruing prior to such date or for any acts, occurrences or circumstances taking place or existing prior to such date.
- 13.4.9 The Concessionaires acknowledge that the ANP may, as a condition to granting approval of the appointment of a new Operator, require, among other things, that the new Operator and the original Operator agree to take all the necessary measures for the complete transfer of all information and all other administrative matters relating to this Agreement, and that an audit or inventory can be conducted as of approximately the time operations are transferred to the new Operator. The costs of such audit or inventory shall be paid by the Concessionaires.

### **Diligence in Conduct of Operations**

- 13.5 The Concessionaire shall plan, prepare, perform and control the Operations in a diligent, efficient and appropriate manner, in accordance with applicable legislation and Oil Industry Best Practice, always respecting all provisions of this Agreement, and not

performing any act which would or could constitute a violation of the economic order. Based upon such principle, and without limiting its application, the Concessionaire shall be obligated to adopt, in all Operations, the necessary measures for the conservation of the producing resources and other natural resources, the safety of people and property, and the protection of the environment, in accordance with Clause Twenty-One, and to obey the relevant technical, scientific and safety rules and procedures, including those related to the recovery of fluids, the prudent management of Production and the control of the depletion of the reserves.

13.5.1 The Concessionaire hereby commits to use its most advanced technical experience and technology, as long as they are appropriate and economically justified, for the performance of the Operations, including those which could better enhance the economic returns and the Production of the discovered Pools.

### **Licenses, Authorizations and Permits**

13.6 It will be the Concessionaire's responsibility to, at its own account and risk, obtain all licenses, authorizations, permits and rights required by law, the competent authorities or by reason of third party rights, whether expressly referred to or not in this Agreement, and which are necessary for the performance of the Operations, including, *inter alia*, the free entrance, import, export, customs clearance, moving, construction, installation, possession, use or consumption whether in respect to the Country or the Concession Area, of any persons, services, procedures, technologies, equipment, machinery, materials and goods in general, as well as for the use of natural resources, installation or operation of communication and data transmission media, and the transportation by land, river, lake, sea or air.

13.6.1 In the case the licenses, authorizations, permits and rights referred in paragraph 13.4 depend upon the agreement with third parties, such as land owners, urban, country or native communities, local governments or other entities or persons with legal rights, the negotiation and execution of such agreement will be the exclusive responsibility of the Concessionaire, on its own account and risk; provided that the ANP will be responsible for the assistance described in paragraph 14.3.

13.7 The Concessionaire shall be liable for the violation of rights over the use of materials and performance procedures protected by trademark, intellectual property or other rights, bearing the payment of any burdens, fees, indemnifications or other expenses resulting from the referred violation, including judicial ones.

### **Free Access to Concession Area**

13.8 While this Agreement is in full force and effect, and respecting the provisions of paragraphs 13.4 and 13.4.1, the Concessionaire shall have free access to the Concession Area and the installations located therein.

### **Drilling and Abandonment of Wells**

13.9 The Concessionaire shall provide the ANP with prior written notice concerning the commencement of drilling of any well in the Concession Area, attaching in this event, a

work program with detailed information about the expected drilling operations, as well as about the equipment and materials to be used.

13.9.1 The Concessionaire may interrupt the drilling of a well and abandon it before reaching the expected geological goal, in accordance with applicable Brazilian laws and Oil Industry Best Practice. If the well concerned represents part of the Minimum Exploration Program and it does not reach the target horizon, it will not count in satisfaction of the Minimum Exploration Program unless the ANP, at its sole discretion, determines otherwise.

### **Additional Work Programs**

13.10 At any time, the Concessionaire may propose the performance of additional work in the Concession Area, beyond those included in any plans or programs already approved under the terms of this Agreement. The relevant program, specifying the proposed additional works and the necessary investments will be submitted to the ANP, consistent with paragraphs 6.3, 6.5, 9.3, 9.4, 10.3, 10.4, 16.2 and 16.3.

## **Clause Fourteen**

### **Control of Operations and Assistance by ANP**

#### **ANP Oversight**

14.1 The ANP, directly or through agreements with the States or Federal District entities, will follow-up and oversee the Operations performed in the Concession Area with the purpose of assuring that the Concessionaire is fully and rigorously complying with its obligations under the terms of this Agreement and applicable Brazilian legislation.

14.1.1 The act or omission in the follow-up or supervision referred to in paragraph 14.1 shall, in no way, exclude or reduce the liabilities of the Concessionaire regarding the performance of its obligations assumed herein.

#### **Access and Control**

14.2 At any time, the ANP shall have free access to the Concession Area and the Operations, as well as to all available technical records and data, in order to follow-up and oversee as referred in paragraph 14.1, as well as to inspect the installations and equipment, including, but not limited to, those cases expressly referred to in other paragraphs of this Agreement. The ANP shall provide the Concessionaire with reasonable advance notice of such inspections and shall take care that such inspections shall not interfere with the regular performance of the Operations.

14.2.1 For purposes of the follow-up and supervision referred to in paragraph 14.1, the Concessionaire shall provide transportation, food, housing and other services at the relevant locations to the ANP's representatives under the same conditions it provides to its own personnel.

14.2.2 In addition, whenever provided for in the applicable Brazilian legislation, the Concessionaire shall provide the authorities which have responsibility for any of its activities with the relevant information and allow their free access.

#### **Assistance to Concessionaire**

14.3 Whenever required, and always within strict legal limits of its competence and attributions, the ANP can provide assistance to the Concessionaire in obtaining the licenses, authorizations, permits and rights referred to in paragraph 13.4. In addition, the ANP shall, if requested, instruct the process of expropriation and easement referred to in paragraph 18.3.1.

#### **ANP Not Responsible for Concessionaire Performance**

14.4 Under no circumstances shall the ANP assume any responsibility for the performance or not of any activity to which its assistance has been required pursuant to paragraph 14.3. Such responsibility shall remain with the Concessionaire, at its own account and risk.

### **Clause Fifteen**

#### **Guarantee of Minimum Exploration Program**

##### **Financial Guarantee [“C” Blocks]**

15.1 One year from the execution of this Agreement, the Concessionaire shall, at its own cost and expense, provide the ANP with one or more irrevocable stand-by letters of credit from financial institutions acceptable to the ANP in the form of Annex III (Form of Letter of Credit for Minimum Exploration Program) hereto, in an aggregate amount equivalent to US\$\_\_\_\_\_ with respect to the Minimum Exploration Program for the first Exploration Period.

15.1.1 If the stand-by letter(s) of credit referred in paragraph 15.1 are not delivered by the day provided, this Agreement will immediately terminate without prejudice to recourse to other measures which may be available.

##### **Financial Guarantee [“A” and “B” Blocks]**

15.1 Concurrently with the execution of this Agreement, the Concessionaire shall, at its own cost and expense, provide the ANP with one or more irrevocable stand-by letters of credit from financial institutions acceptable to the ANP in the form of Annex III (Form of Letter of Credit for Minimum Exploration Program) hereto, in an aggregate amount equivalent to US\$\_\_\_\_\_ with respect to the Minimum Exploration Program for the first Exploration Period.

##### **Estimates for Guaranteed Activities**

15.2 At least 90 (ninety) days prior to the beginning of each subsequent Exploration Period, the Concessionaire shall notify the ANP of the estimated fair market cost of the work comprising the Minimum Exploration Program for such subsequent Exploration Period based on the current market prices for such work, providing the basis for such estimate and allocating the cost for the different items of the Minimum Exploration Program. The

ANP will have 30 (thirty) days to justifiably object to the Concessionaire's cost estimate or allocations and to notify a different estimate or allocation to the Concessionaire. If the ANP fails to object in such 30 (thirty) days, it will be deemed to have accepted the Concessionaire's estimate. Prior to the beginning of the subsequent Exploration Period concerned, the Concessionaire shall, at its own cost and expense, provide the ANP with one or more irrevocable stand-by letters of credit from financial institutions acceptable to the ANP in the form of Annex III (Form of Letter of Credit for Minimum Exploration Program) hereto and in the amount of the estimated fair market cost for the activities of the Minimum Exploration Program for such subsequent Exploration Period determined as provided above.

### **Gradual Reduction of Guarantee Amount**

- 15.3 During each Exploration Period, the value of the stand-by letter of credit for such Period shall be reduced at the request of the Concessionaire every 3 (three) months, commencing 3 (three) months after the Effective Date of this Agreement, by the amount allocable to the work actually performed by the Concessionaire up to the date of initiating such request (or a pro rata share of such amount, based on the participation of the Concessionaire that provided the letter of credit in a Consortium, if more than one letter of credit is provided by the Concessionaires), upon certification by the ANP that such work has been properly performed. The amount allocable to each item of work is indicated in Annex II (Work and Investment Program) with respect to the First Exploration Period and will be determined as provided in paragraph 15.2 with respect to each subsequent Exploration Period. Reductions in respect of amounts allocable to drilling costs will be made only when a well actually reaches the prescribed minimum target horizon and is complete. Reductions for amounts allocable to seismic costs will be made progressively as seismic data is acquired, processed and delivered to the ANP. This reduction shall be made in proportions of the total seismic obligation in the Minimum Exploration Program with minimal increments of 250-line (two hundred and fifty) kilometers for 2D seismic and 20 (twenty) square kilometers for 3D seismic, as the case may be. Any such letter of credit shall be returned upon certification by the ANP that all of the required Minimum Exploration Program for the Exploration Period concerned has been performed. Absent disagreement regarding completion of the work, the ANP will issue the aforementioned certifications within 30 (thirty) days following the presentation by the Concessionaire of documentation reflecting evidence of such completion.

### **Drawing the Guarantee**

- 15.4 Failure by the Concessionaire to fulfill the Minimum Exploration Program as specified in Clause Five shall entitle the ANP to demand payment of the amount of such letters of credit as compensation for such failure, without prejudice to the Concessionaire's other obligations to fulfill this and all other duties under this Agreement or to the ANP's right to pursue all other available remedies.

### **Sanctions**

- 15.5 The execution of the guarantee referred to in this Clause Fifteen, in the terms defined herein, shall not prejudice the application of the provisions of Clauses Twenty-Nine and Thirty.



**Clause Sixteen**  
**Annual Programs and Budgets**

**Presentation to ANP**

16.1 Before October 31<sup>st</sup> of each year, the Concessionaire shall present to the ANP the Annual Work Program and its relevant Annual Budget, conforming to applicable legislation. The Annual Work Programs and their relevant Annual Budgets shall be in strict conformity with the work and investment plans and programs required and approved under the terms of this Agreement.

16.1.1 The first Annual Work Program and its relevant Annual Budget, covering the rest of the current year, will be presented by the Concessionaire within 60 (sixty) days from the Effective Date of this Agreement. In the case the end of the year is less than 90 (ninety) days ahead, the first Annual Work Program and its relevant Annual Budget shall also separately contemplate the immediate following year.

**Revisions and Amendments**

16.2 The Concessionaire may periodically amend the Annual Work Program and its relevant Annual Budget in place, through prior justified notice to ANP, with the purpose of adapting them to the eventual start of a subsequent phase or the inclusion of amendments or Operations contemplated in relevant plans, programs and amendments adopted pursuant to this Agreement.

**Without Prejudice to Obligations Undertaken**

16.3 The presentation of the Annual Work Programs and their relevant Annual Budgets, as well as their revisions and amendments, in accordance with Clause Sixteen, shall in no way impair, invalidate or diminish the obligations assumed by the Concessionaire pursuant to this Agreement.

**Clause Seventeen**  
**Data and Information**

**Provided by Concessionaire to ANP**

17.1 The Concessionaire shall keep the ANP constantly informed about the progress and results of the Operations, in accordance with Oil Industry Best Practice including regarding timing and format (disks, cassettes, hard copies, etc.). Based on such principles and without limiting its application, the Concessionaire shall always have ready for the ANP's disposal, in addition to other documents required in other clauses of this Agreement, copies of maps, sections and profiles, geological and geophysical data and information, including interpretations, data, wells records and tests, as well as reports or other documents defined in specific regulations, which contain the necessary information for the characterization of the work process, obtained as a result of the Operations and this Agreement.

17.1.1 The quality of the copies and other reproduction of data and information referred to in paragraph 17.1 shall have total accuracy and be of a standard equivalent to its original, including with regard to color, size, legibility, clarity and consistency with any other relevant characteristics.

### **Processing or Analysis Abroad**

17.2 Subject to the provisions of Clause Thirty-Three, the Concessionaire may send abroad, for the exclusive purpose of analysis or processing work, and later returning them to Brazil, rock samples, magnetic tapes and other technical data, while being obliged to keep a copy of the equivalent information or data or equivalent sample in the national territory and to give the ANP the results of the processing or analysis done, immediately after receiving them.

## **Clause Eighteen Goods and Services**

### **Provided by Concessionaire**

18.1 The Concessionaire shall provide directly and buy, rent, lease or, by any means, obtain, at its own account and risk, all assets, real estate or not, including but not limited to the installations, constructions, equipment, machinery, materials and supplies, which are necessary for the Operations and their performance, being able to do it in Brazil or abroad, consistent with the provisions of applicable Brazilian legislation and those defined in paragraphs 19.2.1 and 19.2.2.

18.1.1 The Concessionaire shall keep the inventory and records of all Assets and Products referred to in paragraph 18.1, in accordance with applicable legislation, and shall submit to the ANP, at the end of each financial year, a report of assets and products, listing the goods and products acquired through the end of the year, indicating the relevant values and sources.

### **Licenses, Authorizations and Permits**

18.2 Pursuant to paragraphs 13.4 and 13.4.1, all necessary licenses, authorizations, permits and rights regarding the assets referred to in paragraph 18.1, including their import, customs clearance, nationalization and export, observing applicable Brazilian legislation, shall be obtained at the cost, risk and full responsibility of the Concessionaire.

### **Expropriations and Easements**

18.3 In accordance with paragraph 18.2 and without limiting its application, it is expressly understood that the Concessionaire shall be responsible, at its own account and risk, for promoting the expropriation and creating the easement of the real estate properties necessary for the performance of this Agreement, as well as for performing the payment of all and any resulting indemnification, cost or expense.

18.3.1 Through the written request from the Concessionaire, including the necessary justification, the ANP will instruct the process in order to declare public use for

purposes of expropriation and creation of public easement with respect to the real estate properties referred to in paragraph 18.3.

### **Installations and Equipment Outside Concession Area**

18.4 As long as within the limits of its attributions and competence, the ANP may, upon the receipt of a written request from the Concessionaire, pursuant to paragraph 18.3.1, authorize the location or construction of installations or equipment outside the Concession Area, in order to complement or optimize the logistics or infrastructure related to the Operations.

18.4.1 The request referred to in paragraph 18.3.1 must include the relevant technical and economic justification, as well as the location of the construction or project.

18.4.2 In the event that the ANP authorizes the location or the construction referred to herein, paragraphs 18.1 through 18.3 shall apply.

### **Relinquishment of Areas and Reversion of Assets**

18.5 When performing all and any relinquishment, whether partial or total, of the Concession Area, the Concessionaire shall rigorously comply, not only with the provisions of paragraphs 3.6, 18.6 through 18.8 and Clause Twenty-One, but also with all other legal provisions and the ANP's instructions, all in accordance with Oil Industry Best Practice, regarding the relinquishment and abandonment of areas and removal and reversion of assets.

18.5.1 In accordance with applicable legislation, nothing contained herein shall exempt the Concessionaire, in respect of the fulfillment of all obligations pending at the time of relinquishment, nor for any liabilities, irregularities or infractions occurring theretofore.

### **Abandonment**

18.6 The planning and performance of any abandonment operations, including with regard to the areas, wells, structures, Fields, Transfer lines, parts or units of surface and sub-surface installations, in land and in the sea, shall be done in accordance with applicable Brazilian legislation and Oil Industry Best Practice, as well as in observance of the provisions of Clause Twenty-One. When it refers to a Field, the abandonment plan for such Field and the mechanisms to make the necessary funds available will be addressed in the relevant Development Plan, in accordance with paragraph 9.1, and periodically revised, throughout the Production Phase. These revisions will be subject to the provisions of paragraph 9.3.

### **Assets to be Reverted**

18.7 As a consequence of and by applying Art. 28, paragraphs 1 and 2, and Art. 43, item VI of the Petroleum Law, all and any assets, real estate or not, main or accessory, existing in any part of the Concession Area, whose acquisition costs are deductible in accordance with the applicable rules for calculating the Special Participation and which, at the sole discretion of the ANP, are necessary to allow the continuity of the Operations or are in the public interest, shall revert to the possession and ownership of the Federal

Government, and to the ANP management, by the time of the redelivery of such part or by the termination of this Agreement, whichever occurs first. If the Concessionaire is sharing assets for the operation of one or more Fields in the same Concession Area, it shall have the right to retain such assets until all such operations are completed. To fulfil the obligations established in this and in paragraph 18.8, the Concessionaire is obligated to observe applicable legislation, as well as adopting and executing, on its own account and risk, all legal, operational and administrative measures which may be necessary, also observing that which is defined in paragraphs 3.6, 18.5 and 18.6 and Clause Twenty-One.

### **Removal of Assets**

- 18.8 The assets which shall not be reverted, under paragraph 18.7, including useless assets, shall be removed and disposed of by the Concessionaire, at its own cost and risk, in accordance with the provisions of this Agreement and applicable Brazilian legislation.

## **Clause Nineteen**

### **Personnel, Services and Subcontractors**

#### **Personnel**

- 19.1 The Concessionaire, directly or by any other means, shall recruit and hire, at its own cost and risk, being, for all purposes, the only and exclusive Employer responsible for arranging all the labor force necessary for the performance of the Operations, being able to do it in Brazil or abroad, and according to its exclusive recruiting discretion, respecting, however, the provisions of Brazilian legislation in effect, including with regard to maximum and minimum percentages of Brazilian and foreign labor used. In any event, the Concessionaire shall be exclusively and entirely responsible, in Brazil and abroad, for all arrangements regarding the entry, exit and residence of its foreign personnel in the Country.
- 19.1.1 Regarding the hiring, maintenance and dismissal of personnel, labor accidents and industrial safety, the Concessionaire shall comply with the provisions of Brazilian labor and social security laws, being exclusively and fully responsible for the withholding and payment of social security and labor contributions, as well as other relevant charges and fees by any means due pursuant to the law.
- 19.1.2 The Concessionaire shall assure proper sustenance and housing conditions to its personnel when in service, specifically with respect to quantity, quality, hygienic conditions, safety and health assistance in the Concession Area, observing applicable Brazilian legislation.
- 19.1.3 The Concessionaire shall promote, without any burden to the ANP, the removal and replacement of any of its technicians or staff member who, at any time, is required by the ANP due to an improper action, technical deficiency or bad health conditions.

## **Services**

- 19.2 The Concessionaire shall directly perform and contract, or in another way obtain, at its own cost and risk, all services necessary for the performance of this Agreement, being able to do it in Brazil or abroad, always respecting the provisions of the Brazilian legislation in place.
- 19.2.1 The Concessionaire will enforce, before all of its subcontracts, the provisions of this Agreement and the Brazilian Laws applicable to their activities in the Concession Area and in the Country in general, specially, but not limited to those related to personnel, protection of consumers and the environment. In any event, the Concessionaire will entirely and objectively be responsible, as and to the extent provided by law, to the ANP or the Federal Government, for the damages and loss that result, directly or indirectly, from the activities of its subcontractors.
- 19.2.2 In the event the Concessionaire wants to contract with its Affiliates the supply of goods and services, the prices, periods, quality and other agreed terms must consistent with those available in the market.
- 19.2.3 The Concessionaire shall keep the inventory and the register of all services referred to in paragraph 19.2, in accordance with applicable legislation, and shall send to the ANP, by the end of each financial year, a Report of Acquisition of Services in relation to the services performed in the year then ended, indicating the respective subjects, values and origins.

## **Clause Twenty**

### **Brazilian Suppliers of Goods and Services and Minimum Local Content**

#### **Brazilian Suppliers of Goods and Services and Minimum Local Content**

- 20.1 The Concessionaire undertakes to provide Brazilian Suppliers with the opportunity to present proposals for the supply of goods and services in connection with Operations herein contemplated, with the objective of maximizing the Brazilian content of purchasing such goods and services in the Country subject to similar availability and condition in price, period and quality, in order to ensure, as a minimum, the level of acquisition of goods and services in Brazil contained in paragraph 20.1.1. As such, the Concessionaire undertakes to:
- (a) Include Brazilian Suppliers in its list of suppliers of goods and services that have the capacity to supply such goods and services within adequate quality parameters;
  - (b) Prepare specifications that are appropriate to the intended use, in Portuguese or English, in accordance with Oil Industry Best Practice and in such ways that the participation of Brazilian Suppliers is not restricted, inhibited, or impeded;

- (c) Ensure all suppliers are equally treated concerning the access to information, and the access to revisions of specifications and time periods; and
- (d) Establish periods for proposal quotes and for the supply of goods and services that are compatible with the usual necessities of quotes and supplies in accordance with Oil Industry Best Practice, and so as not to exclude potential Brazilian Suppliers from the competition.

20.1.1 In addition to the requirements of paragraph 20.1, the Concessionaires shall:

- (a) During the Exploration Phase, purchase from Brazilian Suppliers an amount of goods and services such that the Percentage of Local Investment Percentage in the Exploration Phase is equal to or above \_\_\_\_\_%( \_\_\_\_\_ percent); and
- (b) During the Development Stage of the Production Phase for each Development Area, if any, purchase from Brazilian Suppliers an amount of goods and services such that the Percentage of Local Investment Percentage in the Development Stage of the Production Phase is equal to or above \_\_\_\_\_ %(\_\_\_\_\_percent).

20.1.2 For the determination of the Percentage of Local Investment Percentage in the Exploration Phase and in the Development Stage of the Production Phase, the value amounts corresponding to the acquisitions of goods and services together with Brazilian suppliers, that were performed in the various years, will be updated for the last year, by using the *Índice Geral de Preços de Mercado (IGP-M) da Fundação Getúlio Vargas*.

20.1.3 For the sole purpose of calculating the Percentage of Local Investment Percentage in the Exploration Phase and in the Development Stage of the Production Phase, the corresponding expenditures made to Brazilian Suppliers for engineering or engineering design services related to the following projects, systems or constructions will count for 3 (three) times the actual cost thereof (in both the numerator and the denominator of the relevant ratio):

a) Offshore Fields:

- i) subsurface lifting systems: reservoir and well engineering;
- ii) undersea production systems (wet Christmas trees, subsea manifolds, flexible lines, risers and others);
- iii) production units: fixed platforms, semi-submersible units, stationary production units and conversion of ships into FPSOs and FSOs;
- iv) support facilities: plans for fluid processing systems for treatment and discharge of effluents, plans for utilities and other facilities; and
- v) system for production transfer (oil and natural gas transfer pipelines, buoys and others).

b) Onshore Fields:

- i) subsurface delivery systems: reservoir and well engineering;
- ii) production gathering systems;
- iii) production gathering stations;
- iv) units for fluid treatment to recover petroleum; and
- v) systems for transportation of production.

20.1.4 For the sole purpose of calculating the Percentages of Local Investments in the Exploration Phase and in the Development Stage of the Production Phase, the expenditures made to Brazilian Suppliers for laboratory analytical services on rocks and fluids and in processing services on geological and geophysical data related to the Operations will count for 2 (two) times the actual costs thereof (in both the numerator and denominator).

20.1.5 For the sole purpose of calculating the Percentages of Local Investments in the Development Stage of the Production Phase, expenditures made to Brazilian Suppliers for marine production and storage units will count for 1.3 (one point three) times the actual cost thereof (in both the numerator and the denominator).

20.1.6 Expenditures incurred in hiring or leasing of mercantile marine, petroleum production and storage units, produced in Brazil [the same as in hiring or leasing transacted to companies based abroad] can be computed to calculate the Percentages of Local Investments in the Development Stage of the Production Phase which expenditures shall be multiplied by a factor of 1.3 (one point three).

20.1.7 If, at the conclusion of the Exploration Phase or any Development Stage of the Production Phase, the Concessionaire's purchases of goods and services from Brazilian Suppliers during such Phase or Stage fail to achieve the relevant percentage provided above, the Concessionaire shall pay the ANP within 15 (fifteen) days of a request by the ANP, as liquidated damages for such failure, an amount equal to 2 (two) times the value of the purchases from Brazilian Suppliers that would have been required to achieve the required Percentage.

## **Clause Twenty-One**

### **Environment**

#### **Environmental Control**

21.1 The Concessionaire shall adopt, at its own cost and risk, all the necessary measures for the conservation of reservoirs and other natural resources and for the protection of the air, soil and water in the surface or in the subsurface, subject to the Brazilian legislation and rules about environment and, in their absence or lack, adopting Oil Industry Best Practice with this regard. Within this principle, and without limiting its application, the Concessionaire is obligated to, as a general rule, and with respect to the execution of the Operations, as well as the relinquishment and abandonment of areas and removal and reversion of assets, to preserve the environment and protect the harmony of the ecosystem in the Concession Area, to avoid the occurrence of damages to the fauna,

flora and the natural resources, to attend to the safety of persons and animals, to respect the historic and cultural values, and to repair or indemnify the damages resulting from the Concessionaire's activities and to perform the environmental remediation acts determined by the competent agencies, all as required by applicable law and Oil Industry Best Practice.

21.1.1 The Concessionaire shall also take care that the Operations do not cause any damages or losses which affect other economic or cultural activities in the Concession Area, such as agriculture, cattle breeding, forest industry, exploration of renewable natural resources, mining, archeological, biological and oceanographic research, and tourism, or which disturb the well-being of native communities and rural and urban settlements.

### **Liability for Damages and Losses**

21.2 Without prejudice to and applying the provision of paragraph 21.1, the Concessionaire shall assume full liability, as and to the extent provided by applicable law, for all damages and losses to the environment and third parties which result, directly or indirectly, from the Operations and their execution, as well as from their relinquishment and the removal and reversion of assets pursuant to paragraphs 18.5 through 18.8, being obliged to repair them and to indemnify the Federal Government and the ANP, pursuant to paragraphs 2.2 and 2.2.1., for all and any action, appeal, lawsuits or court injunctions, arbitration, auditing, inspection, investigation or controversy of any kind whatsoever, as well as any indemnifications, compensations, punishments, fines or penalties of any nature whatsoever, related to or resulting from such damages or losses.

21.2.1 The Concessionaire shall immediately inform the ANP and the competent state and municipal authorities about the occurrence of any Oil or Natural Gas spill or loss, as well as the measures taken to address the problem.

## **Clause Twenty-Two**

### **Insurance**

#### **Insurance**

22.1 The Concessionaire shall provide and maintain in effect, during the whole term of this Agreement, and without causing a limitation to the Concessionaire's liability, insurance coverage executed with a competent company, for all cases requested by the applicable legislation, as well as to comply with the determination by any competent authority or the ANP regarding assets and personnel relating to the Operations and its performance, protection of the environment, relinquishment and abandonment of areas, removal and reversion of assets.

22.1.1 The Concessionaire shall obtain from its insurance companies the inclusion, in all of its policies, of a clause by which they expressly waive the exercise of any rights, implicit or explicit, of subrogation in eventual rights against the ANP or the Federal Government. In addition, the Concessionaire shall include the ANP as beneficiary, it being, however, expressly understood that the receipt by the ANP of any indemnification as a result of the coverage previewed herein shall not



prejudice, in any way, the ANP's right to full recoupment of losses and damages which exceed the value of the received indemnification.

22.1.2 The Concessionaire shall deliver to the ANP copies of the policies and agreement regarding the insurances referred to in paragraph 22.1, as well as all and any of their amendments, endorsements or extensions, and of all and any related occurrence, claims or notices of damages.

22.1.3 Self-Insurance or insurance through controlled companies, Affiliates or wholly owned subsidiaries shall only be admitted when previously approved in writing by the ANP, at its sole discretion. However, the Concessionaire will be able to use, for the purposes of this Clause Twenty-Two, its policies and global insurance programs, with previous written approval from the ANP.

## **CHAPTER V - FINANCIAL AND ACCOUNTING ASPECTS**

### **Clause Twenty-Three Government and Third-Party Participation**

#### **Government and Third-Party Participation**

- 23.1 Each Concessionaire shall pay Federal Government and Third-Party (i) Royalties, (ii) Special Participation, (iii) Surface Rental, and (iv) Landowner Use, as indicated in Annex V (Government and Third Party Participation). All such participations shall be calculated in accordance with applicable Brazilian legislation.

### **Clause Twenty-Four Investment in Research and Development**

#### **Investment in Research and Development**

- 24.1 In the event the Special Participation is actually payable with respect to a Field in any given calendar quarter as provided above, the Concessionaire shall be obligated to spend on Qualified Research and Development Expenditures an amount equal to 1% (one percent) of the Production Gross Revenue for such Field for such quarter.
- 24.1.1 Such Qualified Research and Development Expenditures shall be made no later than June 30 of the year following the calendar year in which the quarter or quarters concerned fall. No later than September 30 of such following year, the Concessionaire shall provide the ANP with a full report regarding the Qualified Research and Development Expenditures made, including a description of the technical aspects and supporting documentation, in accordance with applicable legislation.
- 24.1.2 Qualified Research and Development Expenditures that are made by the Concessionaire after the Effective Date either when it has no obligation to make such Expenditures as provided in paragraph 24.1 or in excess of such obligation may be carried forward and applied as a credit against such obligation in respect of a future quarter; provided that such carry-forwards may not be used to satisfy more than 25% (twenty-five percent) of the total obligation (i.e., 0.25% of the Production Gross Revenue) for any given Field for any given quarter.
- 24.1.3 Up to 50% (fifty percent) of the Qualified Research and Development Expenditures must be made in connection with development activities in the Concessionaire's own installations or its Affiliates located in Brazil, or contracted with local employees, regardless of whether those activities involve or relate to the Operations under this Agreement. The remainder must be used for contracting these activities with universities or research institutions and to develop national technology that has been certified for this purpose by the ANP, regardless of whether such activities involve or relate to the Operations under this Agreement.

24.1.4 When expenditures are made on the Concessionaire's own or Affiliates' installations, as specified in paragraph 24.1.3, only those expenditures related to the acquisition of equipment, instruments, materials used in experimentation and construction of prototypes or pilot installations shall be considered, as well as the gross salary of personnel that take part in the activities outlined in this paragraph, but specifically excluding shared costs in administration, infrastructure, and costs related to routine tests, technical assistance and services and solutions of operational problems, services and taxes of licenses and patents or any others not directly linked to those activities.

24.1.5 For purposes of granting the certification referred to in paragraph 24.1.3 above, the ANP will take into account the areas of interest and relevant subjects for the sectors of petroleum, its derivatives, natural gas, environment and energy.

## **Clause Twenty-Five**

### **Taxes**

#### **Tax Regime**

25.1 The Concessionaire shall be subject to the tax regime in force in the federal, state and municipal levels, being obligated to comply with their terms, timing and conditions defined thereby.

#### **Certificates and Proof of Compliance**

25.2 The Concessionaire shall show to the ANP the originals or provide the ANP with copies of any amendments to its charter, by-laws or articles of association, documents regarding the appointment of its managers or proof of the managers in office, as well as all certificates, registries, authorization, proofs of enrollment in the taxpayers' list, tax regularity, regular compliance with social taxes created by law, enrollment with professional entities or associations, and any other similar documents or certificates which, at any time, may be requested by the ANP.

## **Clause Twenty-Six**

### **Currency and Exchange**

#### **Currency**

26.1 For all the purposes and effects of this Agreement, the currency shall be the Real.

#### **Funds Flow**

26.2 The flow of funds (investments and dividends) shall comply with Brazilian laws, including with the rules issued by the Country's monetary authorities.

**Clause Twenty-Seven**  
**Accounting and Audit**

**Accounting**

27.1 The Concessionaire shall keep all documents, books, papers, registers and other elements which support its accounting, make all relevant charges and present the financial statements in accordance with applicable Brazilian legislation and, complementarily, in accordance with the fundamental principles of accounting.

27.1.1 The financial statements referred to in paragraph 27.1. shall indicate, in a segregated basis, the expenses for Exploration, Development and Production, discriminating, for each of these activities, the expenses related to the respective work plans and programs contemplated in this Agreement.

**Audit**

27.2 In addition to the provisions of paragraphs 14.1 and 14.2, the ANP may, whenever it deems necessary, conduct an accounting and financial audit of the Agreement, pursuant to Art. 43, item VII, of the Petroleum Law, acting directly or through any Third-Party it may freely appoint. For this purpose, the ANP shall notify the Concessionaire at least 30 (thirty) days in advance, it being understood that the audit shall not interfere with the efficient conduct of the Operations in progress.

27.2.1 In order to perform the audit provided herein, the ANP will have full access to the documents, books, papers, registers and other elements referred to in paragraph 27.1, including agreements and contracts signed by the Concessionaire and related to the acquisition of goods and services for the Operations, pertaining to the last 5 (five) complete calendar years.

27.2.2 The act or omission of the audit referred to in paragraph 27.2, shall in no way eliminate or reduce the Concessionaire's responsibility for the compliance with the obligations assumed herein.

## CHAPTER VI - GENERAL PROVISIONS

### Clause Twenty-Eight Assignment

#### Pursuant to this Clause

- 28.1 This Agreement may be Assigned, in whole or in part, according to the provisions of this Clause Twenty-Eight, which defines the conditions to be observed by the assignor and its assignees.

#### Indivisible Participation

- 28.2 Unless otherwise agreed by the ANP, the Assignment allowed hereby will always be of an indivisible participation of any of the Concessionaire's members in rights and obligations under this Agreement, strictly respecting the principle of joint liability required by law.

#### Necessary Documents

- 28.3 The assignor shall request the prior and express authorization of the ANP for the assignment, attaching to the request:
- (a) Documents which prove the compliance, by each of the Assignees, with the technical, legal and economic requirements established by the ANP, in order to comply with the provisions of articles 5, 25 and 29 of the Petroleum Law;
  - (b) The assignment agreement between assignor and assignees, which shall contain, expressly, the agreement by all assignees to rigorously respect and comply with the terms and conditions of this Agreement, as well as be responsible for all obligations and liabilities resulting herefrom, including those incurred after the date of the assignment;
  - (c) The Consortium Agreement signed between assignor and assignees, or between all assignees (in the case of the total assignment). This Consortium Agreement shall mandatorily contain the appointment of the Operator and the joint liability of its participants before the ANP and the Federal Government or, if a Consortium Agreement already exists as a result of a prior assignment, the agreement for amendment to such Consortium Agreement, in order to include the new assignees. ;
  - (d) If the ANP determines, in its discretion, that the prospective assignee would not satisfy the provisions of paragraph 28.3 (a) without a guarantee of its performance by an appropriate Affiliate, the ANP may require as a condition of the Assignment the execution and delivery of such a guarantee in the form of Annex IV (Form of Concessionaire Guarantee), which shall be kept in force throughout the term of this Agreement or until the effective date of an assignment of all interests acquired hereby, if this occurs first, and may not be replaced in the case of any amendments to the composition of referred

assignee's control, except if the ANP expressly agrees with such replacement.

- (e) Notwithstanding the foregoing, (i) any Concessionaire whose obligations are guaranteed in accordance with Clause Fifteen may effect an Assignment to any Affiliate of the guarantor, upon confirmation by the guarantor in form and substance satisfactory to the ANP that the applicable guarantee remains in effect as to the obligations of the transferee, and (ii) any other Concessionaire may effect an Assignment to any Affiliate of such Concessionaire, upon execution by the Concessionaire of a guarantee substantially in the form of Annex IV (Form of Concessionaire Guarantee) hereto with respect to the obligations of such Affiliate.
- (f) For purposes of Clause Twenty-Eight, if any Concessionaire's obligations are guaranteed in accordance with Clause Fifteen any alteration to the entity that, if consummated, would result in the guarantor ceasing to be an Affiliate of such Concessionaire, such alteration shall be considered an Assignment, subject to the ANP's right of consent pursuant to Clause Twenty-Eight.
- (g) Any Assignment by a Concessionaire that does not comply with this Clause Twenty-Eight shall be null and void and shall vest no rights in the purported assignee.

28.3.1 The documents referred to in paragraph 28.3 (a) shall not be necessary when the assignee is already part of the Consortium Agreement, or when it is an Affiliate of the assignor.

#### **Approval by ANP**

28.4 The ANP has 60 (sixty) days, from the date of receipt of the request and documents referred to in paragraph 28.3 (a), to approve or not the assignment, as well as to request additional documents which the ANP deems necessary, respecting the provisions of this Agreement and the law. In the case the ANP does not respond within this period, the assignment will be considered approved, and shall proceed on signature of the addition to the contract, as specified in paragraph 28.5. In the case the ANP requests modifications or additional documents, such requirements shall be complied with and the assignment request re-submitted within, at most, 30 (thirty) days from the referred request, repeating in full the procedure described in this paragraph 28.4. Within 30 (thirty) days from the approval of the assignment, the Concessionaire shall deliver to the ANP copies of the duly executed assignment agreement, and the Consortium Agreement or the amended Consortium Agreement, all duly signed, as well as a copy of the publication of the revised Consortium registration certificate with the competent Board of Trade.

#### **Amendment to Concession Agreement**

28.5 Any assignment executed pursuant to this Clause Twenty-Eight shall become effective on the date of its formal approval by the ANP. Within 30 (thirty) days of the approval of

the assignment, the Parties must sign the respective amendment in order to constitute the new composition of the Concessionaire and indicate the Operator.

## **Clause Twenty-Nine**

### **Breach and Penalties**

#### **Administrative Sanctions, Civil and Criminal Penalties**

- 29.1 In the event that any Concessionaire breaches its obligations under this Agreement, the ANP may, at its own discretion, on the terms outlined in paragraph 30.3 and based on Art. 8, item VII, of the Petroleum Law, apply administrative sanctions and capital fines, all in accordance with applicable Brazilian legislation, where they are defined, including among other things, in cases of warning and fines, the procedure for its application through legal proceedings related to contract breach, the period for correcting the faults and paying the fines, moral interest and other consequences of non-payment of sums and requests for appeal assuring a hearing and opportunity to defend.

## **Clause Thirty**

### **Breach, Rescission and Termination of the Agreement**

#### **Cure**

- 30.1 Notwithstanding paragraph 30.3, this Agreement can be terminated in the event that any Concessionaire breaches its obligations under this Agreement, and such breach is not corrected within a period determined and advised by the ANP which will not be less than ninety (90) days except in cases of extreme urgency. This termination will not apply where the Concessionaire has cured the breach within the period stipulated or where the ANP, in its sole discretion, determines that the Concessionaire is diligently pursuing a remedy for the breach. In the event that any, but not all, of the Concessionaires, gives rise to a termination right in the part of the ANP in accordance with this Clause, such termination right will only apply to the defaulting Concessionaire(s). Upon a termination with respect to a defaulting Concessionaire, such Concessionaire's rights and obligations under this Agreement can be transferred to the non-defaulting Concessionaires, in accordance with the relevant Consortium Agreement.
- 30.1.1 Termination of this contract will also occur in the event the Concessionaire or any of its members are declared bankrupt, insolvent or in receivership. In these cases, the Concessionaire or the individual members of the Concessionaire, will have 90 (ninety) days as of the date of such an event, to transfer its indivisible participation in the rights and obligations of this Agreement, pursuant to Clause Twenty-Eight. In the event that such Concessionaire does not effect such a transfer or provide such a guarantee within such time period, the ANP may terminate such Concessionaire's

rights and interests under this Agreement without prejudice, in this case, to the rights and demands of the Concessionaire.

### **Consequences of Rescission**

- 30.2 Once this Agreement is rescinded by the ANP, pursuant to paragraph 30.1, the Concessionaire shall be liable for losses and damages resulting from its default and the rescission, bearing all applicable indemnifications and compensations, in the form of the law and this Agreement, also respecting the provisions of paragraphs 3.4 and 3.6 with regard to the return of the Concession Area.

### **Sanctions at Option of ANP**

- 30.3 Notwithstanding that which is defined in paragraph 30.1, the ANP may, in its sole discretion, choose to apply the sanctions contemplated in Clause Twenty-Nine, when failure by the Concessionaire to comply with this Agreement is not of serious character or if such non-compliance by the Concessionaire does not constitute a repeated breach thereof by the Concessionaire or demonstrate ineptitude, imprudence or negligence, regardless of the seriousness.



## **Clause Thirty-One**

### **Legal Regime**

#### **Applicable Law**

- 31.1 This Agreement will be executed, governed and construed by in accordance with the Brazilian laws, which shall rigorously be complied with by the Concessionaire in the exercise of its rights and performance of its obligations contemplated herein.

#### **Venue**

- 31.2 The courts of the City of Rio de Janeiro shall be chosen to resolve any doubt, controversy, conflicts or disputes arising from the performance of participating Parties or of the interpretation of this Agreement,

#### **Conciliation**

- 31.3 The Parties shall use their best efforts to amicably resolve, between themselves, all and any dispute or controversy arising from this Agreement or related hereto. The Parties may also, as long as there is a unanimously signed written agreement, resort to an international expert in order to obtain an established opinion to resolve the dispute or controversy.

- 31.3.1 Having signed an agreement for intervention by an international expert, under the terms of paragraph 31.3, recourse to arbitration, as provided in paragraph 31.4, shall only be performed after this expert has presented its basic opinion.

#### **Arbitration**

- 31.4. If at any moment any Party considers that conditions do not exist for the amicable resolution of a dispute or controversy as referred to in paragraph 31.3, then these parties shall be able to submit this dispute or controversy to arbitration, initiating the relevant process, according to the following principles:
- (a) Any arbitration shall be settled exclusively and finally by arbitration in accordance with the ICC Rules, or such other rules as may be agreed by all of the Parties involved;
  - (b) There shall be three arbitrators, one chosen by each Party (with all Concessionaires acting as a single Party) and the third, who shall act as president, shall be appointed in accordance with the ICC Rules or other rules chosen in accordance with paragraph 31.4(a);
  - (c) The place of the arbitration shall be the City of Rio de Janeiro, State of Rio de Janeiro, Brazil;
  - (d) The language to be used in the arbitration procedure shall be Portuguese, provided that parties will be allowed to submit testimonies or documents in English (or another language if the arbitrators so decide), with no need for an official translation;

- (e) Regarding the merits, the arbitrators shall decide based on substantive Brazilian laws;
- (f) The arbitration award shall be final and binding on the Parties, being able to be executed before any competent court or jurisdiction.

#### **Justification**

- 31.5 The ANP shall be committed, whenever it exercises its discretionary power, to act justifiably, while observing applicable legislation, as well as Oil Industry Best Practices.

#### **Suspension of Activities**

- 31.6 Once there is a dispute or controversy, the ANP shall decide about the suspension or not of the activities for which the dispute or controversy refers to, until its solution, using as criterion for this decision the need to avoid risk to personnel or property of any nature whatsoever, especially regarding the Operations.

#### **Continuing Application**

- 31.7 The provisions of this Clause Thirty-One shall remain in full force and effect and shall survive the termination or rescission of this Agreement, for any reason whatsoever.

## **Clause Thirty-Two**

### **Force Majeure**

#### **Total or Partial Exoneration**

- 32.1 The Parties shall only stop responding to the compliance with the obligations assumed in this Agreement in the case of fortuity or force majeure, in the form of article 1058 of the Brazilian Civil Code. The obligor's exoneration described herein shall exclusively occur with regard to the affected portion of the obligation, not being able to be argued for its whole exoneration.

#### **Notice of Occurrence**

- 32.2 Once circumstances which justify the invocation of the existence of fortuity or force majeure occur, the affected Party shall immediately notify, in writing, the other Party, specifying such circumstances, its causes and consequences. The affected Party shall also immediately notify the end of the fortuity or force majeure situation.

#### **Amendment or Termination of the Agreement**

- 32.3 Once the fortuity or force majeure is overcome, the debtor shall comply with the affected obligations, considering, for such compliance, that the term period of this Agreement is extended, for the duration of the fortuity or force majeure. However, depending on the extension and seriousness of the effects of the fortuity or force majeure, the Parties may agree to amend this Agreement or terminate it, resulting in the termination of the concession and the full relinquishment of the Concession Area.

#### **Losses**

- 32.4 The Concessionaire shall individually and exclusively assume all of its losses resulting from the force majeure situation.

## **Clause Thirty-Three**

### **Confidentiality**

#### **Obligation of Concessionaire**

- 33.1 All and any data and information produced, developed or obtained, by any means whatsoever, as a result of the Operations and this Agreement, shall be considered strictly confidential and, therefore, shall never be disclosed by the Concessionaire without the prior written consent from the ANP, except when the data and information are already in the public domain or have become public through third parties authorized to disclose them, or when such disclosure is imposed by law or court order, or is made in accordance with the rules and limits determined by stock exchanges in which the Concessionaire's or its Affiliate's securities are traded, or made to companies controlled by its Affiliates or consultants, agents, possible assignees in good faith and financial institutions, which the Concessionaire has turned to, always and in all these cases

through previous written confidentiality agreement in which such third parties are expressly obligated to comply with the provisions of this paragraph 33.1, without, however, the benefit to the exceptions contemplated herein regarding the disclosure without previous consent.

33.1.1 The provisions of paragraph 33.1 shall remain in full force and effect and shall survive the termination or rescission of this Agreement, for any reason whatsoever.

### **Undertaking of ANP**

33.2 The ANP undertakes not to disclose any data and information obtained as a result of the Operations and which regards the part(s) of the Concession Area retained by the Concessionaire, except when such disclosure is necessary for the compliance with legal provisions which are applicable to the ANP or with the purposes for which the ANP was created.

## **Clause Thirty-Four**

### **Notices**

#### **Validity and Effectiveness**

34.1 All notices described in this Agreement shall always be made in written form and personally delivered or sent by mail or courier, with proof of receipt, being considered valid and effective on the date on which they were effectively received.

#### **Addresses**

34.2 For the purposes of this Clause Thirty-Four, the addresses of the Parties' representatives are the following:

#### **Agência Nacional do Petróleo - ANP**

Rua Senador Dantas, Nº 105 - 12º andar Centro  
Rio de Janeiro, RJ

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34.2.1 Any of the Parties may modify its above mentioned address specifying through a written notice to the other party, made at least 30 (thirty) days before the move occurs.

## Clause Thirty-Five

### Final Provisions

#### Renewal

- 35.1 The omission or allowances by any of the Parties regarding the rigorous compliance requirements with respect to the provisions of this Agreement, as well as the acceptance of a performance different from the one required by these provisions, shall not implicate in renewal or limit the rights of such Party to, in future occasions, impose the rigorous compliance of such provisions or request a compliance in strict accordance with them. Therefore, it shall not be considered that a Party has waived, surrendered or modified any of its rights under this Agreement, unless such Party has, expressly, manifested such waiver, surrender or modification, in a written document executed and signed by such Party, observing, if applicable, the relevant legal provisions.

#### Amendments and Supplements

- 35.2 Any amendments or supplements to this Agreement shall be done in strict compliance with the relevant legislation and shall only be valid if done in written form and executed by the Parties' representatives.

#### Headings

- 35.3 The headings for paragraphs, clauses and chapters used in this Agreement are for purposes of identification and reference only, being, therefore, disregarded for purposes of interpretation of the rights and obligations of the Parties.

#### Public Notice

- 35.4 The ANP shall publish the full text or summary of the terms of this Agreement in the *Diario Oficial* of the Federal Government for purposes of its validity *erga omnes*.

IN WITNESS WHEREOF, the parties have executed this Agreement in three (3) counterparts of equal content and form and for one sole purpose, before the witnesses indicated below.

Rio de Janeiro, \_\_\_\_\_, 2000

#### Agência Nacional do Petróleo - ANP

\_\_\_\_\_  
DAVID ZYLBERSZTAJN  
Director General

[CONCESSIONAIRE]

\_\_\_\_\_  
[OPERATOR]

**Witnesses:**

\_\_\_\_\_  
Name:  
Taxpayer's List (CPF):

\_\_\_\_\_  
Name:  
Taxpayer's List (CPF):

**ANNEX I**

**CONCESSION AREA**

Insert information for the relevant Block from Annex I of the Final Tender Protocol.

## ANNEX II

### WORK AND INVESTMENT PROGRAM

Insert here the information for the relevant Block from Table 4 of Annex III of the Final Tender Protocol

|   |  |
|---|--|
| <b>Block:<br/>BX-X-X</b>                                      |  |
| <b>First Period (km 2D seismic)<sup>1</sup></b>               |  |
| <b>Second Period (number of wells)</b>                        |  |
| <b>Third Period (number of wells)</b>                         |  |
| <b>Minimum Objective (age)<sup>2</sup></b>                    |  |
| <b>Amount of Financial Guarantee<sup>3</sup><br/>(US\$MM)</b> |  |

|   | First Period | Second Period | Third Period |
|---|--------------|---------------|--------------|
| <b>Duration (years)</b>                                   |              |               |              |
| <b>Relinquishment Obligation<br/>(% of original area)</b> |              |               |              |

1. Concessionaires may substitute 1 km<sup>2</sup> of 3D seismic for 5 line-km of 2D seismic.
2. All wells must be drilled at least to the minimum target specified in the above table.
3. The amount indicated represents the value of the Financial Guarantees for the Minimum Exploration Program for the first Exploration Period. The guarantee amounts for the second and third exploration periods will be established closer to the beginning of those periods based on then-prevailing costs.



**ANNEX III**

**FORM OF LETTER OF CREDIT FOR MINIMUM EXPLORATION PROGRAM**

Insert here the Letter of Credit for the Minimum Exploration Program provided in Annex IX or X of the Final Tender Protocol

**ANNEX IV**

**FORM OF CONCESSIONAIRE GUARANTEE**

Insert here the Model Performance Guarantee provided in Annex XIII of the Final Tender Protocol.

## ANNEX V

### GOVERNMENT AND THIRD PARTY PARTICIPATION

Under the terms of Clause 23 of this Agreement, the Concessionaire will pay the following Government and Third Party Participation:

- a) Royalties in the amount of 10% (ten percent) of Oil and Natural Gas produced in each Field in the Concession Area from the respective Production Start-up Date; and
- b) Special Participation in the amount defined in the Decree on Participation; and
- c) Surface Rental Fees for the Concession Area<sup>1</sup>: i) During the Exploration Phase in the amount of R\$\_\_\_\_\_ (\_\_\_\_\_ *Reais*) for each square kilometer or fraction thereof in the Concession Area, with increases as contemplated in the Decree on Participation in the event of extension; ii) during the Development Phase in the amount R\$ \_\_\_\_\_ (xxx *Reais*); and iii) during the Production Phase in the amount of R\$ \_\_\_\_\_ (xxx *Reais*); and
- d) Payment to the landowners in an amount equivalent to 1% (one percent) of the Oil and Natural gas Production, in accordance with applicable legislation.

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<sup>1</sup> Insert the amounts in Table 3 of Annex I from the Final Tender Protocol for this Agreement.

## ANNEX III – MINIMUM EXPLORATION PROGRAM

### TABLE 4 - MINIMUM EXPLORATION PROGRAM

| Basin                  | Block Name & Number | First Period Seismic (kms) <sup>1</sup> | Guarantee Amount <sup>3</sup> (US\$MM) | Second Period <sup>2</sup> (wells) | Third Period <sup>2</sup> (wells) | Indicative Minimum Well Targets for Second and Third Exploration Periods <sup>4</sup> |
|------------------------|---------------------|---|--|------------------------------------|-----------------------------------|---|
| <b>ONSHORE BLOCKS</b>  |                     |   |  |                                    |                                   |   |
| Amazonas               | BT-AM-1             | 600                                     | 5                                      | 2                                  | 2                                 | Top of Monte Alegre Fm.   |
| Paraná                 | BT-PR-4             | 750                                     | 5                                      | 2                                  | 2                                 | Top of Rio Bonito Fm.   |
| Potiguar               | BT-POT-3            | 100                                     | 1                                      | 2                                  | 2                                 | Açu Fm.   |
|                        | BT-POT-4            | 100                                     | 1                                      | 2                                  | 2                                 | Açu Fm.   |
| Recôncavo              | BT-REC-1            | 100                                     | 1                                      | 2                                  | 2                                 | Top of Tauá member, Candeias Fm.  |
|                        | BT-REC-2            | 100                                     | 1                                      | 2                                  | 2                                 | Pitanga-Caruauçu member, Marancagalha Fm.   |
|                        | BT-REC-3            | 100                                     | 1                                      | 2                                  | 2                                 | Top of Sergi Fm.  |
| Sergipe-Alagoas        | BT-SEAL-1           | 200                                     | 2                                      | 2                                  | 2                                 | Top of Carmópolis member  |
|                        | BT-SEAL-2           | 200                                     | 2                                      | 2                                  | 2                                 | Top of Penedo Fm.   |
|                        | BT-SEAL-3           | 200                                     | 2                                      | 2                                  | 2                                 | Maceió Fm.  |
| <b>OFFSHORE BLOCKS</b> |                     |   |  |                                    |                                   |   |
| Camamu-Almada          | BM-CAL-4            | 2,000                                   | 2                                      | 2                                  | 3                                 | Morro de Barro Fm.  |
| Campos                 | BM-C-7              | 3,000                                   | 3                                      | 2                                  | 3                                 | Top of Tamoios member, Ubatuba Fm.  |
|                        | BM-C-8              | 3,000                                   | 3                                      | 2                                  | 3                                 | Top of Tamoios member, Ubatuba Fm.  |
|                        | BM-C-9              | 2,000                                   | 2                                      | 2                                  | 3                                 | Top of Tamoios member, Ubatuba Fm.  |
|                        | BM-C-10             | 3,000                                   | 3                                      | 2                                  | 3                                 | Top of Tamoios member, Ubatuba Fm.  |
| Pará-Maranhão          | BM-PAMA-1           | 3,000                                   | 3                                      | 2                                  | 3                                 | Canárias Group  |
| Santos                 | BM-S-7              | 5,000                                   | 5                                      | 2                                  | 3                                 | Top of Itajai-Açu Fm  |
|                        | BM-S-8              | 5,000                                   | 5                                      | 2                                  | 3                                 | Top of Itajai-Açu Fm  |
|                        | BM-S-9              | 5,000                                   | 5                                      | 2                                  | 3                                 | Top of Itajai-Açu Fm  |
|                        | BM-S-10             | 5,000                                   | 5                                      | 2                                  | 3                                 | Top of Itajai-Açu Fm  |
|                        | BM-S-11             | 5,000                                   | 5                                      | 2                                  | 3                                 | Top of Itajai-Açu Fm  |
| Sergipe-Alagoas        | BM-SEAL-4           | 3,000                                   | 3                                      | 2                                  | 3                                 | Calumbi Fm.   |
|                        | BM-SEAL-5           | 2,000                                   | 2                                      |                                    | 3                                 | Calumbi Fm.   |

**Notes:**

1. Concessionaires may substitute 1 square-kilometer of 3D exploration seismic for 5 line-kilometers of 2D exploration seismic. Non-exclusive surveys authorized by the ANP for 2D onshore or 3D onshore or offshore seismic will count towards the fulfillment of the Minimum Exploration Program.
2. The value set out here represents the amount of the Guarantee for the Minimum Exploration Program for the first Exploration Period. Guarantee amounts for the second and third Exploration Periods will be set closer to the beginning of those Periods, based on then-prevailing costs.
3. Appraisal wells will not be counted towards Minimum Exploration Program commitments.
4. These geological horizons are the indicative minimum depth for the Minimum Exploration Program wells in the second and third Exploration Periods. Companies are free to propose alternate (shallower) targets which the ANP may, at its sole discretion, accept as satisfying the Minimum Exploration Program commitment.

**ANNEX IV - POWER OF ATTORNEY FOR NOMINATION OF THE ACCREDITED  
REPRESENTATIVE**

By the present mandate instrument, \_\_\_\_\_, constituted and existing in accordance with the laws of \_\_\_\_\_, registered in \_\_\_\_\_, through its legal representative, \_\_\_\_\_, in this act nominates \_\_\_\_\_ [who will be the Legal Representative of the company for the purpose of Brazil Round 2], as its adequate Attorney empowered to represent us before the Agência Nacional do Petróleo (ANP), especially for the Second Bidding Round of blocks destined for the exploration of oil and natural gas ("Brazil Round 2"), and with specific power for the practice of the acts and assume responsibility relative to negotiate and to propose that which is being presented, able to, in this regard, receive, submit and sign documents, pay fees/taxes, propose, resort to/obtain, agree, and also able to practice other acts necessary for the faithful compliance of this mandate.

IN WITNESS WHEREOF, this certificate has been executed on and as of \_\_\_\_\_, 1999.

Name:  
Title:

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The undersigned, \_\_\_\_\_ of the company, hereby certifies that the person whose signature appears immediately above is the duly elected \_\_\_\_\_ of the company and that the signature set forth above is that of such person.

Name: \_\_\_\_\_  
Title: \_\_\_\_\_

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## ANNEX V – CONFIDENTIALITY AGREEMENT

The undersigned hereby acknowledges its interest in Brazil's second oil and gas licensing round ("Brazil Round 2") and the procedures for qualification and bidding for rights to enter into a Concession Agreement with the **Agência Nacional do Petróleo** (the "ANP") to explore for and, if successful, develop and produce hydrocarbon reserves in certain specific Blocks located in Brazil. Capitalized terms used herein and not defined have the meanings set forth in the Initial Tender Protocol and Edital, which documents will also lay out and update, respectively, the Brazil Round 2 procedures.

In connection with Brazil Round 2, the undersigned may receive additional materials, data and information, including without limitation the Information Package, the Edital and the form of Concession Agreement. All such materials, data and information provided to the undersigned or any party acting on behalf of the undersigned by the ANP, or any party acting on their behalf, including any copies of such materials, data and information and any studies, reports, analyses or other materials based on such materials, data and information, in connection with Brazil Round 2 are referred to as "Confidential Information".

The undersigned agrees to treat all Confidential Information as confidential, and shall not disclose any Confidential Information to a third party unless the ANP has given its prior written consent to such disclosure.

Notwithstanding the foregoing, the undersigned may disclose Confidential Information to any of its officers, directors, employees, affiliate companies and their employees, agents and advisors who (i) has a need to know the same in connection with carrying out work relating to Brazil Round 2, and (ii) has been advised of, and agrees to comply with, the restrictions upon such Confidential Information set forth in this Agreement as if it were the undersigned. In addition, the undersigned may disclose Confidential Information to a third party without the ANP's prior written consent to the extent such information:

- a) is already known to the undersigned as of the date of disclosure (with the exception of that information that was disclosed to the undersigned as Confidential Information related to Brazil Round 1);
- b) is already in possession of the public or becomes available to the public other than through an act or omission of the undersigned;
- c) is developed independently by the undersigned without the use of any Confidential Information; or
- d) is acquired independently from a third party, which is under no legal obligation known to the undersigned prohibiting such disclosure.

In the event that the undersigned is required by applicable law, decree, regulation, rule or order of any competent authority to disclose any Confidential Information, the undersigned shall promptly notify the ANP in writing so that the ANP may seek an appropriate protective order and/or waive the undersigned's compliance with the confidentiality requirement. In the event that such protective order or other remedy is not obtained, then the undersigned shall furnish only that portion of such Confidential Information that is legally required to be disclosed.

Upon the written instruction of the ANP the undersigned shall destroy or return all Confidential Information following the conclusion of its participation in Brazil Round 2.

This Confidentiality Agreement shall be governed by, and construed in accordance with, the laws of the Republic of Brazil.

Executed on the ..... day of the month of ....., 2000.

By: ..... (Authorized Signatory)

Name: .....

Title: .....

Company: .....

## ANNEX VI - Payment of Participation Fees

**To:** Brazil Round 2 Office  
**Fax:** +55 21 804 0202

**From:** ..... (Company)

..... (Legal Representative)

**Date:** .....

We wish to submit a Participation Fee in respect of the following basins. In this regard, we have instructed that the sum of US\$/R\$ ..... be transferred to your bank<sup>1</sup>.

We note that Participation Fees may only be paid by basin or for all 23 Blocks. The amount of the Fees are specified in Section 6.7 of the Final Tender Protocol (Table 2). We have placed an "X" against those basins for which we have paid the Participation Fee (please leave other basins blank):

|                                |                |          |               |
|--------------------------------|----------------|----------|---------------|
| Campos                         | Amazonas       | Potiguar |               |
| Sergipe-Alagoas                | Paraná         |          | Pará-Maranhão |
| Potiguar                       | Santos         |          | Recôncavo     |
| Sergipe-Alagoas (onshore only) | All "C" Blocks |          | ALL BASINS    |

We understand that payment of the Participation Fee entitles us to receive an Information Package in respect of each basin for which we have paid and, subject to qualification, to make a bid for the relevant Blocks. It does not obligate us to bid on any Block, but we may only submit a bid on a Block that is covered by a Participation Fee that we have paid. We understand we may add to the Blocks on which we may participate by tendering the appropriate Participation Fee at any time prior to the cut-off date which will in no event be earlier than ten days after publication of the Edital. Finally, we understand that the rules governing the conduct of this round and bidding are as laid out in the Initial Tender Protocol, which we have received, and which will be superceded in due course by the Edital.

We further acknowledge the necessary qualification requirements for Brazil Round 2. To the extent that we have not yet received confirmation of our qualification from the ANP, either in respect of Operator status or in respect of our legal and financial standing, we understand that the ANP will not entertain any claim for a refund of Participation Fees should we subsequently fail to qualify or obtain our desired qualification status.

The person authorized to collect the Information Packages for us is:

**Name:** .....

**Title:** .....

**Company:** .....

We understand that you will contact us immediately upon receipt of the Participation Fee, and that our authorized representative, above, will then be able to collect<sup>2</sup> the relevant Information Package(s) from the ANP on or after January 3, 2000 between the hours of 9:00 am and 11:45am, and 2:00 pm and 5:00 pm.

**Signed:** .....(Legal Representative)

**Notes:** \_\_\_\_\_

*The Participation Fee should be wired to:*

|                                |                 |           |
|--------------------------------|-----------------|-----------|
| Banco do Brasil                | Account Name:   | ANP       |
| Rua Professor Lelio Gama, 105  | Account Number: | 333008- 7 |
| Rio de Janeiro - R.J 20031-201 | Agency Number:  | 1755-8    |

In order to facilitate tracking of your payment, you are requested to fax us a copy of the funds transfer instructions. In particular we need the tracking number generated by the remitting bank.

**Collection Instructions:**

- (i) The authorized representative should carry suitable photographic identity (not just a business card), and carry a completed copy of THIS FAX and the ANP's FAX confirming receipt of funds. If a duly executed Confidentiality Agreement has not been submitted, this should also be brought.
- (ii) That person should present himself to ANP security, who will direct him to the Round 2 Office.
- (iii) While an appointment time is not strictly necessary, it is recommended to call ahead and confirm in order to avoid delays at busy times. If point (i) above is not adhered to STRICTLY, for security reasons it will not be possible to release the materials. If you have any further queries, please do not hesitate to contact the **Round 2 Office**.



**ANNEX VII - AUTHORIZATION TO DISCLOSE INFORMATION ABOUT THE COMPANY**

From: .....(Company)  
.....(Legal Representative)

Date: .....

We request the ANP to publish on the Brazil Round 2 web-site, the information below in respect of the subject company. We are aware that the ANP does not warrant the authenticity of this information and does not take any responsibility for any error that may occur in the transcription of this information to the web-site. Any contacts that we might make and any agreements which we enter as a result of the publication of this information will be our sole responsibility and the ANP will bear no responsibility in any way for any consequences, costs or damages resulting therefrom.

In the event we wish to modify any information provided by completing a new form, we acknowledge that the ANP has no commitment with respect to the timetable to publish such updated information. We also aware that the ANP may not publish any information or comments which, in its sole discretion, are incorrect or inappropriate.

We are also aware that we cannot publish any Confidential Information except within the conditions of the Confidentiality Agreement and that before discussing any Confidential Information with potential partners we take full responsibility for verifying that such companies have paid the applicable Participation Fee and signed the Confidentiality Agreement.

The information we wish to be disclosed is the following:

- Company
- Contact Person
- Title
- Telephone
- Fax
- E-Mail Address
- Operator Classification ("A", "B", "C", Non-Operator)
- Basins of Interest

Comments  
Signed.....(Legal Representative)

**ANNEX VIII FORM OF NOTIFICATION OF BIDDING BY AN AFFILIATE**

[LETTERHEAD OF QUALIFIED COMPANY]

The undersigned, ..... of ..... (the "Qualified Company"), pursuant to the terms and conditions of the Final Tender Protocol for Brazil Round 2 conducted by the Agência Nacional do Petróleo (the "ANP"), hereby certified that [name of Affiliate] is an Affiliate of the Qualified Company and has been authorized to bid for one or more Blocks on behalf of the Company in connection with Brazil Round 2.

In the event [name of Affiliate] (the "Signing Company") is successful in any bid for a Block, the Company hereby agrees:

- to cause the Signing Company (or its Legal Representative, as defined in the Final Tender Protocol) to sign the Concession Agreement for the related Block by September 20, 2000;
- in the event the Signing Company (or its Legal Representative, as defined in the Final Tender Protocol) signs the Concession Agreement by September 20, 2000, to provide the ANP, prior to or concurrently therewith, with a duly executed guarantee by the Company of the obligations of the Signing Company (or of such delegatee) under the Concession Agreement in the form set forth as Annex XIII of the Final Tender Protocol.

All terms defined in the Final Tender Protocol and used but not defined herein have the meanings given to them in the Final Tender Protocol.

IN WITNESS WHEREOF, this certificate has been executed on and as of ..... 2000.

\_\_\_\_\_  
Name:

Title:

## ANNEX IX – BID BOND (Portuguese language version)

### CARTA DE CRÉDITO EM GARANTIA DE CARÁTER IRREVOGÁVEL

#### EMITIDO POR [ NOME DO BANCO]

Data:

Número:

Valor Nominal: [R\$\_\_\_\_\_]( valor equivalente a US\$ 500.000)

Agência Nacional do Petróleo

Superintendência de Promoção de Licitações

Rua Senador Dantas 105, 11º andar

20031-201 Rio de Janeiro - RJ, Brasil

Prezados Senhores:

1. [Nome do Banco], constituído de acordo com as leis de \_\_\_\_\_ [o “Emitente”], vem, por meio desta, emitir em favor da ANP, autarquia integrante da Administração Federal Indireta do Governo da República Federativa do Brasil, Carta de Crédito em Garantia de Caráter Irrevogável de n.º \_\_\_\_\_ (a “Carta de Crédito”), através da qual o Emitente autoriza a ANP a sacar, em saque único, o valor de R\$ \_\_\_\_\_ (equivalente a US\$ 500.000) (o “Valor Nominal”), mediante a apresentação de uma Ordem de Pagamento e um Comprovante definidos abaixo, no estabelecimento do Emitente mencionado na Cláusula 3 desta Carta de Crédito.
2. O Valor Nominal desta Carta de Crédito poderá ser sacado pela ANP na forma estabelecida na Cláusula 3 abaixo, entre 10:00 e 16:00, horário do Rio de Janeiro, em qualquer dia bancário, em ou após [data] e antes do vencimento desta Carta de Crédito. Entende-se por “Dia Bancário” qualquer dia, à exceção de sábado, domingo ou outro dia em que os bancos comerciais da cidade do Rio de Janeiro estejam autorizados ou obrigados por lei, norma reguladora ou decreto, a fechar.
3. Um saque somente poderá ser efetuado com base neste instrumento, mediante a apresentação pela ANP ao Emitente de um saque à vista, conforme instrumento anexo como Documento 1 (a “Ordem de Pagamento”), juntamente com um comprovante apresentado pela ANP, consoante o modelo aqui anexado como Documento 2 (o “Comprovante de Saque”). A apresentação da Ordem de Pagamento e do Comprovante de Saque deverá ser feita no estabelecimento do Emitente, no Rio de Janeiro, situado em \_\_\_\_\_, ou em qualquer outro endereço no Rio de Janeiro, designado pelo Emitente à ANP, através de notificação efetuada consoante o disposto na Cláusula 8 desta Carta de Crédito.
4. Após receber da ANP a Ordem de Pagamento e Comprovante de Saque em seu estabelecimento, designado segundo o disposto na Cláusula 3 desta Carta de Crédito, o Emitente efetuará o pagamento do Valor Nominal, através de transferência eletrônica de fundos imediatamente disponíveis para a conta que a ANP tiver em instituição financeira

no Rio de Janeiro, designada no Comprovante de Saque. Se a apresentação do pedido se der após as 11:00, horário do Rio de Janeiro, em qualquer Dia Bancário, o Emitente deverá efetuar o pagamento até as 13:00, horário do Rio de Janeiro, no Dia Bancário imediatamente posterior.

5. Esta Carta de Crédito expirará na data em que ocorrer o primeiro dos seguintes eventos: (i) apresentação ao Emitente de exoneração, no modelo aqui anexado como Documento 3 (o "Comprovante de Exoneração"), (ii) pagamento irrevogável feito pelo Emitente à ANP, na forma estabelecida na Cláusula 4 desta Carta de Crédito, no Valor Nominal, mediante saque efetuado nos termos aqui estabelecidos, ou (iii) às 16:00, horário do Rio de Janeiro, do dia 31 de dezembro 2000. Não obstante o anteriormente disposto, qualquer saque efetuado segundo o aqui determinado, antes do vencimento desta Carta de Crédito, será honrado pelo Emitente. Caso o estabelecimento do Emitente designado na Cláusula 3 desta Carta de Crédito esteja fechado na data mencionada em (iii) desta cláusula 5, a data de vencimento desta Carta de Crédito será prorrogada para o dia bancário subsequente, em que o referido estabelecimento estiver aberto.
6. Somente a ANP poderá sacar esta Carta de Crédito, bem como exercer quaisquer outros direitos aqui definidos.
7. Todas as notificações, exigências, instruções, desistências ou outras informações a serem prestadas relativamente a esta Carta de Crédito, devem ser redigidas em português e entregues por um mensageiro pessoal ou por courier, correio especial ou fax e encaminhadas para o endereço abaixo:

Se para o Emitente: (incluir endereço do Emitente)

Se para a ANP:

Agência Nacional do Petróleo  
Superintendência de Promoção de Licitações  
Rua Senador Dantas 105, 11º andar  
20031-201 Rio de Janeiro - RJ, Brasil

Fax (021) 804-0202

Os endereços e números de fax para encaminhamento de informações referentes a esta Carta de Crédito, poderão ser alterados pelo Emitente ou pela ANP, mediante notificação feita à outra parte pelo menos 15 dias bancários anteriores à data da mudança.

8. A presente Carta de Crédito estabelece em termos plenos a obrigação do Emitente e tal obrigação não será de modo algum alterada ou aditada com base em qualquer documento, instrumento ou acordo aqui mencionado, salvo a Ordem de Pagamento, o Comprovante de Saque e qualquer Comprovante de Exoneração.
9. Esta Carta de Crédito, nos termos e condições aqui apresentados e para o fim que se destina, é um documento válido, legal e executável na praça de sua cobrança e o Emitente não poderá opor à ANP alegação de qualquer natureza que impeça a sua plena e total execução.

Atenciosamente,

[Nome do Banco]

por:

Nome:

Cargo:

**Documento 1**

**Modelo de Saque**

Carta de Crédito n.º \_\_\_\_\_  
[Rio de Janeiro-RJ]  
[Data do Saque]

À Vista

Pague-se à ordem da Agência Nacional do Petróleo o valor nominal de [R\$ \_\_\_\_\_, equivalente a US\$ 500.000]. Saque contra a Carta de Crédito n.º \_\_\_\_\_ emitida por [nome do Emitente].

p/ Agência Nacional do Petróleo - ANP

\_\_\_\_\_

Nome

Cargo

À [Nome do Emitente]

[Endereço do Emitente]

## Documento 2

### Modelo de Comprovante de Saque

O presente refere-se à Carta de Crédito (a “Carta de Crédito”), n.º \_\_\_\_\_ datada de \_\_\_\_\_, emitida por \_\_\_\_\_ em favor da Agência Nacional do Petróleo. As palavras redigidas em letras maiúsculas e aqui não definidas têm seus respectivos significados estabelecidos ou entendidos, por referência, na Carta de Crédito.

O abaixo-assinado, devidamente autorizado a firmar este comprovante em nome da ANP, certifica que, em decorrência da Segunda Rodada de Licitações ocorrida em Junho de 2000, [inserir nome de licitante único ou membros de consórcio licitante, onde apropriado] (designados, individualmente, como "Concessionário Classificado" e, coletivamente, como os "Concessionários Classificados") (5) foram qualificados para assinar Contrato de Concessão com a ANP, e que:

1. Um dos Concessionários Classificados (ou alguma Afiliada do referido Concessionário Classificado) deixou de assinar o Contrato de Concessão (e fornecer as garantias pertinentes) em 20 de setembro de 2000; ou
2. Alguma das Cartas de Crédito necessárias para garantir o Programa Exploratório Mínimo não foi entregue à ANP até a assinatura do Contrato de Concessão; ou
3. O Bônus de Assinatura não foi pago até a assinatura do Contrato de Concessão, como ali determinado.

O pagamento do Valor Nominal constante da Carta de Crédito deverá ser feito pelo Emitente na seguinte conta:

[A ANP fornecerá os detalhes da sua conta bancária]

Este documento foi firmado pelo abaixo-assinado em \_\_\_\_\_.

Nome:

Cargo:

### **Documento 3**

#### **Modelo de Comprovante de Exoneração**

O presente refere-se à Carta de Crédito em Garantia de Caráter Irrevogável (a “Carta de Crédito”), nº \_\_\_\_\_ datada de \_\_\_\_\_, emitida por \_\_\_\_\_ em favor da ANP.

As palavras redigidas em letra maiúscula e aqui não definidas têm seus respectivos significados estabelecidos ou entendidos, por referência, na Carta de Crédito.

O abaixo-assinado, estando devidamente autorizado a firmar este comprovante em nome da ANP, certifica pelo presente que, tendo ocorrido um dos eventos que autorizam a exoneração da Carta de Crédito, a data de exoneração passa a ser a data de emissão deste Comprovante.

Este Comprovante foi firmado pelo abaixo-assinado em \_\_\_\_\_.



## ANNEX X – BID BOND (English language version)

### IRREVOCABLE STAND-BY LETTER OF CREDIT

Issued by [Name of Bank]

Date: \_\_\_\_\_

No.: \_\_\_\_\_

Face Amount: [U.S. \$500,000]

Agência Nacional do Petróleo  
Superintendência de Promoção de Licitações  
Rua Senador Dantas 105, 11º andar  
20031-201 Rio de Janeiro - RJ, Brazil

Dear Sirs:

1. [Name of Bank], a \_\_\_\_\_ organized under the laws of \_\_\_\_\_ (the "Issuer"), hereby establishes in favor of Agência Nacional do Petróleo ("ANP"), an agency of the Government of the Federal Republic of Brazil, its irrevocable stand-by Letter of Credit No. \_\_\_\_\_ (this "Letter of Credit"), whereby the Issuer authorizes ANP to draw hereunder, in a single drawing, the sum of U.S. \$ 500,000 [(the "Face Amount") by presentation of a Draft and a Drawing Certificate (each as defined below) at the Issuer's office specified in Clause 3 of this Letter of Credit.

2. The Face Amount of this Letter of Credit may be drawn by ANP in the manner specified in Clause 3 of this Letter of Credit between 9:00 a.m. and 5:00 p.m., New York City time, on any Banking Day, on or after [date] and prior to the expiration of this Letter of Credit. A "Banking Day" is any day other than a Saturday, a Sunday or a day on which commercial banks in New York City are authorized or required by law, regulation or executive order to close.

3. A drawing may be made hereunder only by the presentation by ANP to the Issuer of a sight draft of ANP drawn on the Issuer in the form attached hereto as Exhibit 1 (a "Draft") and a certificate executed by ANP in the form attached hereto as Exhibit 2 (a "Drawing Certificate"). Presentation of a Draft and Drawing Certificate must be made at the Issuer's office in New York City located at \_\_\_\_\_, or at such other address in New York City as the Issuer may designate to ANP by notice given in accordance with Clause 8 of this Letter of Credit.

4. Upon the presentation by ANP to the Issuer of the Draft and Drawing Certificate at the office of the Issuer designated pursuant to Clause 3 of this Letter of Credit, the Issuer shall pay the Face Amount by wire transfer of immediately available funds to ANP's account with a financial institution in New York City designated in the Drawing Certificate. If presentation is duly made at or prior to 11:00 a.m., New York City time, on any Banking Day, payment shall be made by the Issuer at or prior to 5:00 p.m., New York City time, on the same Banking Day. If presentation is duly made after 11:00 a.m., New York City time, on any Banking Day, payment shall be made by the Issuer at or prior to 1:00 p.m., New York City time, on the immediately following Banking Day.

5. This Letter of Credit shall expire upon the earliest of (i) the date on which a certificate executed by ANP, in the form attached hereto as Exhibit 3 (an "Expiration Certificate"), is presented to the Issuer, (ii) the indefeasible payment by the Issuer to ANP in the manner set forth in Clause 4 of this Letter of Credit of the Face Amount upon a drawing properly made hereunder, and (iii) 5:00 p.m., New York City time, on December 31, 2000. Notwithstanding the foregoing, any drawing properly made hereunder prior to the expiration of this Letter of Credit shall be honored by the Issuer. Notwithstanding anything contained in Article 17 of the Uniform Customs (defined below) or herein, in the event that the Issuer's office designated in Clause 3 of this Letter of Credit is closed on the date set forth in (iii) of this Clause 5, the expiration date of this Letter of Credit shall be extended to the next Banking Day on which such office is open.

6. This Letter of Credit may only be drawn by, and other rights hereunder may only be exercised by, ANP.

7. This Letter of Credit is subject to the Uniform Customs and Practice for Documentary Credits (1993 Revision), International Chamber of Commerce Publication No. 500 (the "Uniform Customs"). As to matters not covered by the Uniform Customs, this Letter of Credit shall be governed by, and construed in accordance with, the laws of the State of New York, including without limitation Article 5 of the Uniform Commercial Code as in effect in the State of New York.

8. All notices, demands, instructions, waivers or other communications to be provided pursuant to this Letter of Credit shall be in writing in English, shall be effective upon receipt, and shall be sent by personal delivery, courier, first class mail or fax, to the following addresses:

1 If to the Issuer, to:

1.2 If to ANP, to:

Agência Nacional do Petróleo  
Superintendência de Promoção de Licitações  
Rua Senador Dantas 105, 11º andar  
20031-201 Rio de Janeiro - RJ, Brazil

Fax: 55(21) 804 0202

The addresses and fax numbers for notices given pursuant to this Letter of Credit may be changed by the Issuer or ANP by means of a written notice given to the other at least 15 Banking Days prior to the effective date of such change.

9. This Letter of Credit sets forth in full the Issuer's undertaking, and such undertaking shall not in any way be modified or amended by reference to any document, instrument or agreement referred to herein, except the Draft, the Drawing Certificate and any Expiration Certificate.

Very truly yours,

[NAME OF BANK]

By:  
Name:  
Title:

---

**[FORM OF DRAFT]**

Letter of Credit No. \_\_\_\_\_  
[New York, New York]  
[Date of Draft]

At sight

PAY TO THE ORDER OF AGÊNCIA NACIONAL DO PETRÓLEO the sum of [U.S. \$ 500,000 (Five Hundred Thousand U.S. Dollars)] [R\$ \_\_\_\_\_ (\_\_\_\_\_ Brazilian Reais)], FOR VALUE RECEIVED. DRAWN UNDER [NAME OF ISSUER] LETTER OF CREDIT NO. \_\_\_\_\_.

AGÊNCIA NACIONAL DO PETRÓLEO

By: \_\_\_\_\_

Name:

Title:

To: [Name of Issuer]  
[Address of Issuer]

**[FORM OF DRAWING CERTIFICATE]**

Reference is made to the Letter of Credit (the "Letter of Credit"), No. \_\_\_\_\_, dated \_\_\_\_\_, issued by \_\_\_\_\_ in favor of Agência Nacional do Petróleo. Capitalized terms used herein and not defined have the respective meanings set forth in the Letter of Credit or the *Edital* (Final Tender Protocol) dated April 20, 2000.

The undersigned, being duly authorized to execute this certificate on behalf of ANP, hereby certifies that pursuant to a bidding round held in June, 2000 [insert name of single bidder or members of bidding consortium, as applicable] (each a "Selected Concessionaire" and collectively, the "Selected Concessionaires") were selected to enter into a Concession Agreement with ANP, and that either:

- (i) Any Selected Concessionaire (or any duly designated Jointly Held Company or Affiliate of such Selected Concessionaire) did not sign the Concession Agreement (and provide the related guarantees) by [\_\_\_\_\_,] 2000; or
- (ii) Any required Letter of Credit for the Minimum Work Obligation was not delivered to ANP simultaneously with or prior to execution of the Concession Agreement; or
- (iii) The Signature Bonus was not paid in full concurrently with execution of the Concession Agreement, as provided therein.

Payment of the Face Amount of the Letter of Credit is to be made by the Issuer to the following account: (to be communicated by the ANP in due course)

This certificate has been duly executed by the undersigned as of the \_\_\_\_\_ day of \_\_\_\_\_, 2000.

AGÊNCIA NACIONAL DO PETRÓLEO

By: \_\_\_\_\_  
 Name:  
 Title:

**[FORM OF EXPIRATION CERTIFICATE]**

Reference is made to the Letter of Credit (the "Letter of Credit") No. \_\_\_\_\_, dated \_\_\_\_\_, issued by \_\_\_\_\_ in favor of Agência Nacional do Petróleo. Capitalized terms used herein and not defined have the respective meanings set forth in the Letter of Credit.

The undersigned, being duly authorized to execute this certificate on behalf of ANP, hereby certifies that conditions permitting the expiration of the Letter of Credit have occurred, and that accordingly the Letter of Credit shall expire as of the date of this Certificate.

This certificate has been duly executed by the undersigned as of the \_\_\_\_\_ day of \_\_\_\_\_, 200\_.

AGÊNCIA NACIONAL DO PETRÓLEO

By: \_\_\_\_\_  
Name:  
Title:

**ANNEX XI – MODEL LETTER OF CREDIT TO GUARANTEE THE MINIMUM EXPLORATION  
PROGRAM (Portuguese language version)**

Carta de Crédito em Garantia de Caráter Irrevogável  
Emitida por [Nome do Banco]

Data: \_\_\_\_\_

Nº: \_\_\_\_\_

Valor Nominal Inicial: US\$ \_\_\_\_\_

Agência Nacional do Petróleo  
Superintendência de Promoção de Licitações  
Rua Senador Dantas 105, 11º andar  
20031-201 Rio de Janeiro - RJ, Brazil

Prezados Senhores:

1. [Nome do Banco], constituído de acordo com as leis de \_\_\_\_\_ [o “Emitente”], vem por meio desta, emitir em favor da Agência Nacional do Petróleo (ANP), uma Autarquia integrante da Administração Federal Indireta do Governo da República Federativa do Brasil, Carta de Crédito em Garantia de Caráter Irrevogável Nº. \_\_\_\_\_ (a “Carta de Crédito”), através da qual o Emitente autoriza a ANP a sacar, em saque único, o Valor Nominal, em Reais, convertido pela taxa de câmbio oficial do dia anterior ao saque (BACEN - Ptax / venda), equivalente a US\$ \_\_\_\_\_ (“o Valor Nominal”), mediante a apresentação de uma Ordem de Pagamento e um Comprovante de Saque (definidos abaixo) no estabelecimento do Emitente mencionado na Cláusula 5 desta Carta de Crédito, durante o Período de Saque (conforme definido no item 4).

2. Esta Carta de Crédito foi elaborada de acordo com o Contrato de Concessão (o Contrato), celebrado em \_\_\_\_\_ de 2000, entre a ANP, [o Concessionário 1], \_\_\_\_\_ constituído segundo as leis da República Federativa do Brasil e [o Concessionário 2], \_\_\_\_\_ constituído segundo as leis da República Federativa do Brasil. Os termos grafados com maiúsculas (incluindo os documentos em anexo) e aqui não definidos, terão os respectivos significados definidos no Contrato.

3. O Valor Nominal da Carta de Crédito será inicialmente de US\$ \_\_\_\_\_.<sup>1</sup> O Valor Nominal poderá ser reduzido mediante apresentação pela ANP, ao Emitente, de um Comprovante (Comprovante de Redução), na forma definida no Documento 1, especificando um novo Valor Nominal, mais baixo. Um Comprovante de Redução pode ser apresentado ao Emitente, sendo o Valor Nominal reduzido, não mais que uma vez a cada três meses, iniciando-se tal redução três meses a contar da data da Carta de Crédito.

4. O Valor Nominal da Carta de Crédito pode ser sacado pela ANP segundo o disposto na Cláusula 5 desta Carta de Crédito, em qualquer Dia Bancário durante o Período de Saque com início às 10:00, horário do Rio de Janeiro, do dia \_\_\_\_\_<sup>2</sup>, e término às 16:00 h, horário do Rio de Janeiro, do dia \_\_\_\_\_

<sup>1</sup> Inserir o valor nominal para o Primeiro Período que consta no Edital de Licitação.

<sup>2</sup> Inserir a Data Efetiva do Contrato de Concessão para a Carta de Crédito referente ao Primeiro Período

\_\_\_\_\_ <sup>3</sup> (o "Período de Saque"). Entende-se por "Dia Bancário" qualquer dia que não seja sábado, domingo ou dia em que os bancos comerciais no Rio de Janeiro estejam autorizados ou obrigados por lei, norma reguladora ou decreto, a fechar.

5. Um saque só poderá ser realizado mediante apresentação, pela ANP ao Emitente, de Ordem de Pagamento como apresentado no *Documento 2* (Ordem de Pagamento), e de um Comprovante de Saque, executado pela ANP, como apresentado no *Documento 3* (Comprovante de Saque). A apresentação da Ordem de Pagamento e do Comprovante de Saque deverão ser feitos no estabelecimento do Emitente na cidade do Rio de Janeiro, localizado à \_\_\_\_\_, ou em outro endereço na cidade do Rio de Janeiro designado pelo emitente à ANP em comunicação feita consoante a Cláusula 9 desta Carta de Crédito.

6. Mediante a apresentação pela ANP, durante o Período de Saque, da Ordem de Pagamento e do Comprovante de Saque no estabelecimento designado pelo Emitente na Cláusula 5 desta Carta de Crédito, o Emitente deverá pagar, em Reais, o Valor Nominal relativo à data da apresentação, por transferência eletrônica de fundos imediatamente disponíveis para a conta da ANP em instituição financeira na cidade do Rio de Janeiro, conforme designado no Comprovante de Saque. Se a apresentação for efetivada até às 11:00h., horário do Rio de Janeiro, em qualquer Dia Bancário, o pagamento deve ser concretizado pelo Emitente até às 16:00 h, horário do Rio de Janeiro, no mesmo Dia Bancário. Se a apresentação for efetivada depois das 11:00 h, horário do Rio de Janeiro, em qualquer Dia Bancário, o pagamento deverá ser concretizado pelo Emitente até às 13:00, horário do Rio de Janeiro, no primeiro Dia Bancário imediatamente a seguir.

7. Esta Carta de Crédito expirará na ocorrência do primeiro dos seguintes eventos: (i) em \_\_\_\_\_ <sup>4</sup>, (ii) a redução do Valor Nominal desta Carta de Crédito a zero, (iii) a data em que a ANP apresentar ao Emitente um Comprovante executado pela ANP consoante o *Documento 4* (Comprovante de Conclusão), e (iv) o pagamento irrevogável pelo Emitente à ANP conforme definido na Cláusula 6 desta Carta de Crédito do Valor Nominal através de um saque adequado. Entretanto, qualquer saque corretamente realizado antes de expirada esta Carta de Crédito será honrado pelo Emitente. Caso o estabelecimento designado pelo Emitente na Cláusula 5 desta Carta de Crédito esteja fechado na data definida em (i) desta Cláusula 7, a data de vencimento desta Carta de Crédito e do Período de Saque se estenderá até o próximo Dia Bancário em que o referido estabelecimento estiver aberto.

8. Somente a ANP poderá sacar esta Carta de Crédito, bem como exercer quaisquer outros direitos aqui definidos.

9. Todas as notificações, exigências, instruções, desistências ou outras informações a serem prestadas relativamente a esta Carta de Crédito, devem ser redigidas em português e entregues por um mensageiro pessoal ou por *courier*, correspondência registrada ou fax e encaminhadas para os seguintes endereços:

(i) Se para o Emitente: (incluir endereço do Emitente)

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de Exploração. Para os Períodos de Exploração subsequentes, incluir a data do primeiro dia do Período de Exploração em questão.

<sup>3</sup> Para cada Período de Exploração, inserir a data encontrada 180 dias após o último dia do Período de Exploração em questão.

<sup>4</sup> Inserir data de vencimento do Período de Saque.



(ii) Se para a ANP:

Agência Nacional do Petróleo  
Superintendência de Promoção de Licitações  
Rua Senador Dantas 105, 11º andar  
20031-201 Rio de Janeiro - RJ,  
Brazil  
Fax (021) 804 0202

Os endereços e números de fax para encaminhamento de informações referentes a esta Carta de Crédito, poderão ser alterados pelo Emitente ou pela ANP, mediante notificação feita à outra parte pelo menos 15 dias bancários anteriores à data da mudança.

10. A presente Carta de Crédito estabelece, em termos plenos e incondicionais, a obrigação do Emitente e tal obrigação não será de modo algum alterada ou aditada com base em qualquer documento, instrumento ou acordo aqui mencionado, salvo a Ordem de Pagamento, o Comprovante de Saque e qualquer Comprovante de Conclusão.

Atenciosamente,  
[ Nome do Banco ]  
por:

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Nome:  
Cargo:

### COMPROVANTE DE REDUÇÃO

Em referência à Carta de Crédito em Garantia de Caráter Irrevogável (Carta de Crédito), Nº \_\_\_\_\_, datada de \_\_\_\_\_, emitida por \_\_\_\_\_ em favor da ANP. Os termos grafados com maiúsculas a partir deste ponto e não definidos neste, têm os respectivos significados definidos na Carta de Crédito.

Os abaixo-assinados, devidamente autorizados a assinar este Comprovante em nome da ANP, certificam pelo presente que:

- (i) A quantia em Dólares Americanos, especificada abaixo (a), corresponde à quantia alocável no Valor Nominal da Carta de Crédito aos trabalhos realizados pelos concessionários relativamente ao Programa Exploratório Mínimo até a data deste Comprovante; e
- (ii) O Valor Nominal da Carta de Crédito será reduzido para um valor igual ao Valor Nominal Remanescente, especificado abaixo (b), efetivo a partir da data deste Comprovante.

**(a) Quantia em Dólares Americanos alocável para trabalhos no Programa Exploratório Mínimo**

**US\$ \_\_\_\_\_**

**(b) Valor Nominal Remanescente**

**US\$ \_\_\_\_\_**

Este Comprovante foi efetivamente firmado pelo abaixo-assinado no dia \_\_\_\_\_.

AGÊNCIA NACIONAL DO PETRÓLEO

Por: \_\_\_\_\_

Nome:

Título:

ORDEM DE PAGAMENTO

Carta de Crédito N<sup>o</sup>. \_\_\_\_\_  
Rio de Janeiro -RJ  
(data do ordem de pagamento)

À vista

PAGAR À AGÊNCIA NACIONAL DO PETRÓLEO o valor nominal de R\$ \_\_\_\_\_  
(\_\_\_\_\_ Reais), valor equivalente nesta data a US\$ \_\_\_\_\_ (\_\_\_\_\_ dólares norte-americanos), segundo conversão efetuada pela taxa oficial de câmbio do dia anterior à apresentação desta ordem de pagamento (BACEN - Ptax / venda).  
SAQUE CONFORME CARTA DE CRÉDITO EM GARANTIA DE CARÁTER IRREVOGÁVEL N<sup>o</sup>. \_\_\_\_\_ emitida por [Nome do Banco].

AGÊNCIA NACIONAL DO PETRÓLEO

Por: \_\_\_\_\_  
Nome:  
Título:

Para: [Nome do Emitente]  
[endereço do Emitente]

### COMPROVANTE DE SAQUE

Refere-se o presente à Carta de Crédito em Garantia de Caráter Irrevogável (Carta de Crédito) N° \_\_\_\_\_, datada de \_\_\_\_\_, emitida por \_\_\_\_\_ em favor da Agência Nacional do Petróleo (a ANP). Os termos grafados com maiúsculas e aqui não definidos terão os respectivos significados definidos na Carta de Crédito.

Os abaixo-assinados, devidamente autorizados a assinar este Comprovante em nome da ANP, certificam pelo presente que (i) a Concessão terminou sem o cumprimento do Programa Exploratório Mínimo ou (ii) o Programa Exploratório Mínimo não foi cumprido pelos Concessionários a partir de \_\_\_\_\_<sup>5</sup>.

O Pagamento do Valor Nominal atualizado em Reais, nesta data, da Carta de Crédito n° \_\_\_\_\_ deve ser efetuado, pelo Emitente, na seguinte conta:

[inserir detalhes da conta da ANP no Rio de Janeiro]

Este Comprovante foi efetivamente firmado pelo abaixo-assinado em \_\_\_\_\_.

AGÊNCIA NACIONAL DO PETRÓLEO

Por: \_\_\_\_\_

Nome:

Título:

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<sup>5</sup> Inserir o Último dia do Período de Exploração para o qual a Carta de Crédito foi emitida.

### COMPROVANTE DE CONCLUSÃO

Refere-se o presente à Carta de Crédito Irrevogável em Garantia (Carta de Crédito) No. \_\_\_\_\_, datada de \_\_\_\_\_, emitida por \_\_\_\_\_ em favor da Agência Nacional do Petróleo (a "ANP"). Os termos grafados com maiúsculas aqui não definidos terão os respectivos significados definidos na Carta de Crédito.

Os abaixo assinados, devidamente autorizados a assinar este Comprovante em nome da ANP, certificam pelo presente que:

- (i) O Programa Exploratório Mínimo foi concluído pelos Concessionários; e
- (ii) A Carta de Crédito expira na data deste Comprovante.

Este Comprovante foi efetivamente executado pelo abaixo-assinado em \_\_\_\_\_.

AGÊNCIA NACIONAL DO PETRÓLEO

Por: \_\_\_\_\_

Nome:

Título:

**ANNEX XII – MODEL LETTER OF CREDIT TO GUARANTEE THE MINIMUM EXPLORATION PROGRAM (English language version)**

**IRREVOCABLE STAND-BY LETTER OF CREDIT**

**Issued by [Name of Bank]**

Date: \_\_\_\_\_

No.: \_\_\_\_\_

Initial Face Amount: [U.S. \$ \_\_\_\_\_]<sup>6</sup>

Agência Nacional do Petróleo  
Superintendência de Promoção de Licitações  
Rua Senador Dantas 105, 11º andar  
20031-201 Rio de Janeiro - RJ, Brazil

Dear Sirs:

1. [Name of Bank], a \_\_\_\_\_ organized under the laws of \_\_\_\_\_ (the "Issuer"), hereby establishes in favor of Agência Nacional do Petróleo ("ANP"), an agency of the Government of the Federal Republic of Brazil, its Irrevocable Standby Letter of Credit No. \_\_\_\_\_ (this "Letter of Credit"), whereby the Issuer authorizes the ANP to draw hereunder, in a single drawing, the Face Amount of this Letter of Credit as of the date of drawing (determined in the manner set forth in Clause 3 of this Letter of Credit) by presentation of a Draft and a Drawing Certificate (each as defined below) at the Issuer's office specified in Clause 5 of this Letter of Credit, during the Drawing Period (as defined below).

2. This Letter of Credit is being established in accordance with the Concession Agreement (the "Agreement"), dated \_\_\_\_\_, 1999, between the ANP, [Concessionaire #1], a \_\_\_\_\_ organized under the laws of \_\_\_\_\_, and [Concessionaire #2], a \_\_\_\_\_ organized under the laws of \_\_\_\_\_.<sup>7</sup> Capitalized terms used herein (including in the Exhibits hereto) and not defined have the respective meanings set forth in the Agreement.

3. The Face Amount of this Letter of Credit shall initially be U.S.\$\_\_\_\_\_.<sup>8</sup> The Face Amount shall be reduced upon presentation by the ANP to the Issuer of a certificate (a Reduction Certificate"), in the form set forth in Exhibit 1 hereto, specifying a new, lower Face Amount. A Reduction Certificate may be presented to the Issuer, and the Face Amount may be reduced, no more frequently than once every three months, beginning three months after the date of this Letter of Credit.

4. The Face Amount of this Letter of Credit may be drawn by the ANP in the manner specified in Clause 5 of this Letter of Credit on any Banking Day during the period (the

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<sup>6</sup> Insert the amount for the first Exploration Period from the Final Tender Protocol.

<sup>7</sup> Add or delete spaces as appropriate to reflect the number of Concessionaires.

<sup>8</sup> Insert the amount for the first Exploration Period from the Final Tender Protocol.

“Drawing Period”) beginning at 9:00 a.m., New York City time, on \_\_\_\_\_, \_\_\_\_\_,<sup>9</sup> and ending at 5:00 p.m., New York City time, on \_\_\_\_\_, \_\_\_\_\_.<sup>10</sup> A “Banking Day” is any day other than a Saturday, a Sunday or day on which commercial banks in New York City<sup>11</sup> are authorized or required by law, regulation or executive order to close.

5. A drawing may be made hereunder only by the presentation by the ANP to the Issuer of a sight draft of the ANP drawn on the Issuer in the form attached hereto as Exhibit 2 (a “Draft”), and a certificate executed by the ANP in the form attached hereto as Exhibit 3 (a “Drawing Certificate”). Presentation of a Draft and Drawing Certificate must be made at the Issuer’s office in New York City located at \_\_\_\_\_, or at such other address in New York City as the Issuer may designate to the ANP by notice given in accordance with Clause 10 of this Letter of Credit.

6. Upon the presentation by the ANP to the Issuer during the Drawing Period of the Draft and Drawing Certificate at the office of the Issuer designated pursuant to Clause 5 of this Letter of Credit, the Issuer shall pay the Face Amount as of the date of presentation, by wire transfer of immediately available funds to the ANP’s account with a financial institution in New York City designated in the Drawing Certificate. If presentation is duly made at or prior to 11:00 a.m., New York City time, on any Banking Day, payment shall be made by the Issuer at or prior to 5:00 p.m., New York City time, on the same Banking Day. If presentation is duly made after 11:00 a.m., New York City time, on any Banking Day, payment shall be made by the Issuer at or prior to 1:00 p.m., New York City time, on the immediately following Banking Day.

7. This Letter of Credit shall expire upon the earliest of (i) \_\_\_\_\_,<sup>12</sup> (ii) the reduction of the Face Amount of this Letter of Credit to zero, (iii) the date on which the ANP presents to the Issuer a certificate executed by the ANP in the form attached hereto as Exhibit 4 (a “Completion Certificate”), and (iv) the indefeasible payment by the Issuer to the ANP in the manner set forth in Clause 6 of this Letter of Credit of the Face Amount upon a drawing properly made hereunder. Notwithstanding the foregoing, any drawing properly made hereunder prior to the expiration of this Letter of Credit shall be honored by the Issuer. Notwithstanding anything contained in Article 17 of the Uniform Customs (defined below) or herein, in the event that the Issuer’s office designated in Clause 5 of this Letter of Credit is closed on the date set forth in (i) of this Clause 7, the expiration date of this Letter of Credit and the Drawing Period shall be extended to the next Banking Day on which such office is open.

8. This Letter of Credit may only be drawn by, and other rights hereunder may only be exercised by, the ANP.

9. This Letter of Credit is subject to the Uniform Customs and Practice for Documentary Credits (1993 Revision), International Chamber of Commerce Publication No. 500 (the “Uniform Customs”). As to matters not covered by the Uniform Customs, this Letter of Credit shall be governed by, and construed in accordance with, the laws of [the State of New

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<sup>9</sup> Insert the date of the Effective Date of the Concession Agreement for the Letter of Credit for the first Exploration Period. For subsequent Exploration Periods, insert the first date of the Exploration Period concerned.

<sup>10</sup> For each Exploration Period, insert the date that is six months after the last day of the Exploration Period concerned.

<sup>11</sup> If the Issuer is a Brazilian bank or financial institution, the references to New York City throughout this Letter of Credit should be changed to Rio de Janeiro, except where otherwise noted.

<sup>12</sup> Insert the date of the expiration of the Drawing Period.

York, including without limitation Article 5 of the Uniform Commercial Code as in effect in the State of New York].<sup>13</sup>

10. All notices, demands, instructions, waivers or other communications to be provided pursuant to this Letter of Credit shall be in writing in English,<sup>14</sup> shall be effective upon receipt, and shall be sent by personal delivery, courier, first class mail, or fax, to the following addresses:

i) If to the Issuer, to:

ii) If to the ANP, to:

Agência Nacional do Petróleo  
Superintendência de Promoção de Licitações  
Rua Senador Dantas 105, 11<sup>o</sup> andar  
20031-201 Rio de Janeiro - RJ,  
Brazil  
Fax (021) 804 0202

The addresses and fax numbers for notices given pursuant to this Letter of Credit may be changed by the Issuer or the ANP by means of a written notice given to the other at least 15 Banking Days prior to the effective date of such change.

10. This Letter of Credit sets forth in full the Issuer's undertaking, and such undertaking shall not in any way be modified or amended by reference to any document, instrument or agreement referred to herein, except the Draft, the Drawing Certificate, any Completion Certificate and any Reduction Certificate.

Very truly yours,

[NAME OF BANK]

By: \_\_\_\_\_

Name:

Title:

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<sup>13</sup> Change to Brazilian law if the Issuer is a Brazilian bank.

<sup>14</sup> Change to Portuguese if the Issuer is a Brazilian bank.



EXHIBIT 1

[FORM OF REDUCTION CERTIFICATE]

Reference is made to the Irrevocable Standby Letter of Credit (the "Letter of Credit"), No. \_\_\_\_\_, dated \_\_\_\_\_, issued by \_\_\_\_\_ in favor of the ANP. Capitalized terms used herein and not defined have the respective meanings set forth or incorporated by reference in the Letter of Credit.

The undersigned, being duly authorized to execute this certificate on behalf of the ANP, hereby certifies that:

- (i) The amount in U.S. dollars specified in (a) below is the amount allocable to the Face Amount of the Letter of Credit of the work that has been performed by the Concessionaires on the Minimum Work Obligation through the date of this certificate; and
- (ii) The Face Amount of the Letter of Credit is to be reduced to an amount equal to the Remaining Face Amount specified in (b) below, effective as of the date of this certificate set forth below.

(a) Dollar Amount Allocable to Work on \$ \_\_\_\_\_  
Minimum Work Obligation

(b) Remaining Face Amount \$ \_\_\_\_\_

This certificate has been duly executed by the undersigned as of the \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_.

[NAME OF ANP]

By: \_\_\_\_\_  
Name:  
Title:

EXHIBIT 2

[FORM OF DRAFT]

Letter of Credit No. \_\_\_\_\_  
[New York, New York]  
[Date of Draft]

At sight

PAY TO THE ORDER OF AGÊNCIA NACIONAL DO PETRÓLEO the sum of  
U.S.\$ \_\_\_\_\_ ( \_\_\_\_\_ U.S. Dollars), FOR VALUE RECEIVED. DRAWN  
UNDER AGÊNCIA NACIONAL DO PETRÓLEO IRREVOCABLE STANDBY LETTER OF  
CREDIT NO. \_\_\_\_\_.

AGÊNCIA NACIONAL DO PETRÓLEO

By: \_\_\_\_\_  
Name:  
Title:

To: [Name of Issuer]  
[Address of Issuer]

EXHIBIT 3

[FORM OF DRAWING CERTIFICATE]

Reference is made to the Irrevocable Standby Letter of Credit (the "Letter of Credit"), No. \_\_\_\_\_, dated \_\_\_\_\_, issued by \_\_\_\_\_ in favor of Agência Nacional do Petróleo ("ANP"). Capitalized terms used herein and not defined have the respective meanings set forth or incorporated by reference in the Letter of Credit.

The undersigned, being duly authorized to execute this certificate on behalf of the ANP, hereby certifies that either (i) the Agreement has terminated without completion of the Minimum Work Obligation or (ii) the Minimum Work Obligation has not been completed by the Concessionaires as of \_\_\_\_\_<sup>15</sup>, \_\_\_\_\_.

Payment of the current Face Amount of the Letter of Credit is to be made by the Issuer to the following account:

[insert details for account in New York City]

This certificate has been duly executed by the undersigned as of the \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

AGÊNCIA NACIONAL DO PETRÓLEO

By: \_\_\_\_\_

Name:

Title:

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<sup>15</sup> Insert the last day of the Exploration Period for which the Letter of Credit has been issued.

EXHIBIT 4

[FORM OF COMPLETION CERTIFICATE]

Reference is made to the Irrevocable Standby Letter of Credit (the "Letter of Credit"), No. \_\_\_\_\_, dated \_\_\_\_\_, issued by \_\_\_\_\_ in favor of Agência Nacional do Petróleo. Capitalized terms used herein and not defined have the respective meanings set forth or incorporated by reference in the Letter of Credit.

The undersigned, being duly authorized to execute this certificate on behalf of the ANP, hereby certifies that:

- (i) The Minimum Work Obligation has been completed by the Concessionaires; and
- (ii) The Letter of Credit shall expire as of the date of this Certificate.

This certificate has been duly executed by the undersigned as of the \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

AGÊNCIA NACIONAL DO PETRÓLEO

By: \_\_\_\_\_  
Name:  
Title:

## ANNEX XIII FORM OF CONCESSIONAIRE GUARANTEE

### GUARANTEE OF PROPER PERFORMANCE

Reference is made to the Concession Agreement (the "Agreement") of even date herewith among Agência Nacional do Petróleo ("ANP"), an agency of the Government of the Federal Republic of Brazil, \_\_\_\_\_ (the "Guaranteed Entity"), a \_\_\_\_\_ organized under the laws of Brazil, and \_\_\_\_\_, a \_\_\_\_\_ organized under the laws of Brazil.

With regard to the obligations assumed by the Guaranteed Entity under the Agreement or that may be imposed upon the Guaranteed Entity under or in connection with the Agreement, \_\_\_\_\_ (the "Guarantor"), a \_\_\_\_\_ organized under the laws of \_\_\_\_\_, an ANP of the Guaranteed Entity, agrees as follows:

1. Capitalized terms used herein and not otherwise defined shall have the meanings set forth in the Agreement.
2. The Guarantor hereby expressly represents and warrants to the ANP that: (i) it is duly organized, validly existing and in good standing under the laws of its jurisdiction of organization, (ii) it has all requisite corporate power and authority to execute, deliver and perform this Guarantee, (iii) the execution, delivery and performance of this Guarantee have been duly authorized by all necessary corporate action, (iv) this Guarantee constitutes the legal, valid and binding obligation of the Guarantor, enforceable against the Guarantor in accordance with its terms, (v) no governmental approvals are required in connection with the execution, delivery and performance of this Guarantee, except as have been obtained and are in force, and (vi) the execution, delivery and performance of this Guarantee by the Guarantor will not violate any provision of any existing law or regulation to which the Guarantor is subject or any provision of the Guarantor's constitutive documents or of any material agreements to which it may be a party.
3. The Guarantor hereby unconditionally and irrevocably guarantees to the ANP, as a primary obligor, the due and punctual performance of all of the obligations of the Guaranteed Entity under or in connection with the Agreement. If the Guaranteed Entity fails to perform any such obligation in the manner and at the time required, the Guarantor shall perform or procure the performance of such obligation upon demand by the ANP.
4. This Guarantee is irrevocable and unconditional and shall remain in full force and effect until all obligations of the Guaranteed Entity under or in connection with the Agreement are fully and irrevocably satisfied and discharged, notwithstanding (a) any amendment or termination of the Agreement, (b) any extension of time or other indulgence or concession granted by the ANP, or (c) any delay or failure by the ANP in pursuing any remedies available against the Guaranteed Entity. Notwithstanding the foregoing, this Guarantee shall terminate with respect to liabilities arising from improper abandonment of wells or facilities in any area subject to the referenced Agreement in accordance with applicable legislation.
5. The ANP shall have no obligation to pursue any remedy or take any action against or in respect of the Guaranteed Entity prior to enforcing its rights under this Guarantee directly against the Guarantor. In addition, the Guarantor may not claim that the ANP could have

avoided or mitigated, in any manner or through any action, the damages resulting from a default of the Guaranteed Entity under the Agreement or resort to any other guarantee held at any time in its favor, before proceeding against the Guarantor in connection with its obligations under this Guarantee. The Guarantor's obligations under this Guarantee shall be independent and absolute, and the Guarantor shall have no right of set-off or counterclaim with respect to any other claims it may have against the ANP or any other Person.

6. All of the obligations of the Guarantor set forth herein shall bind the Guarantor and its successors. The Guarantor may not assign or delegate its duties or obligations hereunder without the prior written consent of the ANP, and any purported assignment or delegation without such consent shall be null and void. The Guarantor confirms that this Guarantee shall remain in effect with respect to any assignee of the Guaranteed Entity under the Agreement that is an Affiliate of the Guaranteed Entity. Upon any such assignment the assignee shall be considered the Guaranteed Entity for all purposes hereunder to the extent of the assigned obligations. The Guarantor additionally confirms that any assignee of the ANP under the Agreement permitted in accordance with the Agreement may exercise all rights and remedies of the ANP under this Guarantee. No other person or entity shall be a beneficiary of this Guarantee or have or acquire any rights by reason of this Guarantee.
7. This Guarantee shall be governed by and construed in accordance with the laws of the Republic of Brazil.
8. Any failure or delay by the ANP to exercise any right, in whole or in part, hereunder shall not be construed as a waiver of the right to exercise the same or any other right.
9. No amendment or modification of this Guarantee shall be effective unless in writing and signed by the Guarantor and the ANP.
10. Any dispute concerning the legal interpretation or construction of this Guarantee shall be settled exclusively and finally by arbitration conducted in accordance with the ICC Rules.
11. The Guarantor shall pay upon demand and presentation of invoices all reasonable and actual costs and expenses incurred by the ANP in connection with the successful enforcement of this Guarantee, including, without limitation, reasonable fees and expenses of counsel.
12. All notices, demands, instructions, waivers or other communications to be provided pursuant to this Guarantee, and any consents contemplated in this Guarantee, shall be in writing in Portuguese or English, shall be effective upon receipt, and shall be sent by personal delivery, courier, first class mail or fax to the following addresses:

If to the Guarantor, to:

If to the ANP, to:

Agência Nacional do Petróleo  
Superintendência de Promoção de Licitações  
Rua Senador Dantas 105, 11º andar  
20031-201 Rio de Janeiro - RJ, Brazil  
Fax (021)804 0202

The addresses and fax numbers of either party for notices given pursuant to this Guarantee may be changed by means of a written notice given to the other party at least 15 Business Days prior to the effective date of such change.

13. This Guarantee may be executed in any number of counterparts, each of which shall be deemed to be an original.

This Guarantee has been duly executed by the Guarantor and the ANP by their respective officers thereunto duly authorized as of the \_\_\_\_ day of \_\_\_\_\_, 2000.

[NAME OF GUARANTOR]

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

ACKNOWLEDGED AND ACCEPTED:

AGÊNCIA NACIONAL DO PETRÓLEO

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_