STATUS OF UPSTREAM PETROLEUM ACTIVITY IN THE PHILIPPINES

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LIST OF PETROLEUM SERVICE CONTRACTS

• 6 - GEO PHYSICAL SURVEY & EXPLORATION CONTRACTS
• 9 - SERVICE CONTRACTS
• 7 - APPLICATIONS FOR SERVICE CONTRACTS
SC 37 - Cagayan Basin
(360 km²)

- Operated by PNOC-Exploration Corporation
- San Antonio Gas field is currently producing 1 mmcfpd mainly to generate a 3 MW of power since October 1997
- The field has a total of 4 bcf recoverable reserves and to date it has already produced a total of 2.5 bcf

SC 40 - North Cebu
(4,580 km²)

- Forum is currently conducting a feasibility study on the development of the Libertad gas for power generation. Forum is presently working on the following activities:
  1. Risk analysis of the gas markets
  2. Supply and demand balance studies
  3. Electricity pricing formulation
  4. Resource assessment of the gas reserves
  5. Financial model development
  6. Technical assessment on appropriate technology and plant design.
  7. Gas reserve is 1.13 BCF with 2 MW capacity, could last 5-6 years
SC-43, Ragay Gulf
(11,000 km²)
This is operated by Premier Oil of Singapore which was awarded in January this year.

Their work program during the first phase or contract years 1 & 2 is geological & geophysical studies including seismic reprocessing and field studies with seismic data acquisition of about 250 line-km of offshore seismic.

The total minimum expenditure for these work obligations is about US$600,000.

For the 2nd phase covering year 3, the contractor shall drill 1 exploration well with a minimum expenditure of US$3.0 million for an offshore well and US$1 million for an onshore well.

During the third subphase covering calendar years 4-6 and fourth subphase, covering Cy 7, the contractor shall drill a total of 3 wells.

SC 41 - UNOCAL SULU
(Sulu Sea - 8324 km²)

- Unocal drilled 2 wells
- The Zebra-1 was drilled to the prognosis TD of 6000' TVDSS in 6.5 days with minimal downtime.
- The well encountered 20-100' sands & the gas readings are low and there are no oil shows. The well was therefore abandoned as a dry hole.
- The second well, Rhino-1, was drilled to the prognosis TD of 8,000' TVDSS. The drilling encountered 10-80' thick shelf sands with average porosities of 20 - 23%. Upper sand horizons have some small gas shows. In general, the sands has no gas response and no signs of HC accumulations and the well was P&A as a dry hole.
- Operationally, this program was a huge success. UNOCAL was able to drill 2 deep-water wells for US $14.0MM. Sands were abundant in both wells. The overall lack of HC shows might imply a seal or source problem at these locations.
- UNOCAL will further analyze the drilling results before any conclusions can be made.
The Malampaya Gas Field is the main gas discovery in the country. The field has already produced 67 BCFG & 3.6 MMBC from Oct. 2001 up to end 2003. The field is currently producing 260 MMCFGPD and 13 MBCPD. The gas is used mainly to fuel the Sta. Rita, San Lorenzo & Ilijan Power Plants with a total output of 2,700 MW. We encourage the development of the Malampaya oil leg. As the price of crude is nearing the $50/barrel mark, the development of the 30 MM recoverable reserves of oil leg may now be commercially viable. We may also give additional incentives to the operator such as 100% cost recovery of expenses.

Philodrill was given up to end of August 2004, this month to commit to drill a well. The three main prospects that were mapped are the following:

- **Malajon Oil Prospect**: 725 MMBO of recoverable reserves (water depth = 62 m, recovery factor = 30%)
- **Malajon Gas Prospect**: 1.1 TCF (water depth = 62 m, recovery factor = 70%)
- **Barselisa Turbidite Prospect**: 1,240 MMBO (water depth = 75 - 200 m, recovery factor = 30%)
SC 6B - ALCORN
NW Palawan (567 km²)

- Alcorn is considering restarting the shut-in Cadlao Oilfield.

- The field produced about 11 MMBO between 1981 and 1991 when it was shut-in. At 1,000 BOPD, the project's economics may be viable if there are about 2-4 MMBO are left to recover from the residual reserves and price of crude is already $50 a barrel.

SC 14 - ALCORN
NW Palawan (709 km²)

- SC 14 is the most prolific block in the NW Palawan area.

- As of end 2003, Nido has produced 18 MMBO, Matinloc 11.6 MMBO, West Linapacan 8.5 MMBO & North Matinloc 2.2 MMBO for a total of 40.3 MMBO.

- To date, Matinloc is still producing at a rate of 600 BOPD while Nido field was shut in due to the closing of the Caltex Refinery, the main buyer of the Nido Crude.
SC 44, GAS to GRID
Central Cebu (1,000 km²)

- Gas to Grid has been awarded SC 44 over Central Cebu in 28 January 2004.
- During the first phase (CY 1 & 2), the contractor shall carry out Geological & Geophysical Studies and drill 1 well with a minimum expenditure of US$3.0 MM.
- During the 2nd phase (CY 3 & 4), the contractor shall drill 2 exploration wells and acquire 100 line-km of seismic.
- On the 3rd phase (CY 5 to 7), the contractor shall drill another 2 wells & acquire 100 line-km of seismic.

GSEC 93- ALCORN RESOURCES
Visayan Basin (14,560 km² reduced to 4,040 km²)

- Alcorn has relinquished a substantial portion of their GSEC from 14,560 to 4,040 km².
- The operator is currently conducting a detailed 400 x 500 m grid of gravity survey in onshore NW Leyte.
- As regards the offshore retention area, Alcorn is committed to reprocess and interpret 500 ln-km of existing seismic data.
**GSEC 102 - TAÑON STRAIT**  
(3,280 km²)

- Japex has opted to convert GSEC 102 into a Service Contract.
- They will commit to shoot a minimum of 750 line km. On the first 18 months and drill 1 well on the succeeding 12 months. These two work programs has a total minimum expenditures of US$ 3.5 mm.
- On their 7-year exploration period, Japex is expected to drill a total of four wells.
- On the September 7, 2004, Japex will negotiate with doe and will finalize their service contract. We hope to sign the contract in end of September or early October this year.

**GSEC 100, - Offshore Mindoro**  
(14,667 km²)

- PNOC-EC has opted to convert GSEC 100 into a Service Contract after PETRONAS Carigali farmed-in.
- For years 1 & 2, the consortium shall drill one well with an option to drill another well or acquire new seismic.
- The Service Contract was scheduled to be signed in March 2004 but due to their concern of the potential impact of the Supreme Court Ruling declaring as unconstitutional some provisions of Philippine Mining Act of 1995.
- The signing was indefinitely deferred. PNOC will seek and secure the opinion of the Department of Justice on the validity of the Mindoro Service Contract Application while PETRONAS will get the opinion of an independent Philippine legal counsel regarding the same.
**GSEC 99, SOUTH CHINA**  
*(13,320 km²)*

- South China has opted to convert GSEC 99 into a Service Contract.
- On the first exploration phase or 20 months, the consortium will acquire and process 450 km² of 3D seismic and 1,000 line-km of 2D seismic data and then undertake an evaluation of the block.
- The operator shall then drill an exploration or appraisal well on the succeeding phases. We expect to receive the draft Service Contract in early September 2004.

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**GSEC 101 - Reed Bank**  
*(10,360 km²)*

- Sterling has completed its feasibility study of the GTL options for Reed Bank and the gas to chemical grade methanol is the commercially viable conversion product.
- The floating production & off-loading (FPSO) vessel is the preferred development option because of lower capital cost based on 600 BCF of recoverable reserves. A production rate of 100 MMCFGPD, the methanol production would be 3,000 tons/day that would last for 17 years.
- The FPSO methanol plant cost is about $548 MM capital expenses that excludes Christmas trees & subsurface costs and an operating expenses of $30.6 MM/year.
- The contractor has committed to conduct a 200 km² of 3D seismic to complete the sensitivity analysis on the economics of gas conversion to methanol will be undertaken.
GSEC 94 - NW PALAWAN
(5,400 km²)

- Operated by Trans-Asia
- They procured & processed 1000 line-km of seismic data and 2600 line-km of new marine magnetic data.
- A satellite seep mapping survey was conducted over the areas in 2001.
- The operator has converted the GSEC into a service contract with the farming of south sea petroleum holding, a Hong Kong based petroleum exploration company.
- One (1) well will be committed upon the entry of this company.

SC APPLICATIONS

- SOUTH SEAS - Agusan Davao Basin, The contract is now at the Office of the President for review and approval.
- LAXMI - Onshore Mindoro, awaiting the draft of the contract
- FORUM- Manila Bay, awaiting their FS
- TRANS-ASIA - W. Palawan (GSEC 94) awaiting the draft of the contract
- SOUTH CHINA - NE Palawan (GSEC 99) awaiting the draft of the contract
- PETRONAS - Onshore Mindoro (GSEC 100), awaiting the final draft of the contract
- JAPEX - Tanon Strait (GSEC 102), JAPEX’s negotiations will arrived on 7 September 2004 to finalize the contract.
MARAMING SALAMAT