Gas-Condensate Field
Exploration and Development in the Pattani Basin

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Outline

Day 1

1. Petroleum Concessions
2. Petroleum Geology
3. Exploration Strategies
4. Reserves Determination

Day 2

1. Production Profile
2. Development Plan
3. Cash Flow Analysis
Concession Principles

- Exclusive right to explore and develop petroleum
- Concessionaires own petroleum found in concession blocks
- Investment and risk taking solely by concessionaires
- Government gets profit through royalty and income tax
Petroleum Act

**Land Regime**
- Area
- Work Period
- Work Obligation

**Fiscal Regime**
- Petroleum prices
- Royalty

Petroleum Income Tax Act

- Revenue
- Expenses
- Net Profits
- Tax
Thailand Petroleum Concessions

Total Concessions 22
Exploration Period 6
Production Period 16
Onshore Concession

Total 6 Blocks
Offshore Concession

Total 32 Blocks
E&P Activities in the Gulf of Thailand
Natural Gas Production in the Gulf of Thailand

As of May 2003

Unit: MMscfd

- **Chevron**: 238
- **Unocal 1**: 265
- **Unocal 2,3**: 556
- **Unocal 4**: 415
- **PTTEP**: 513
- **Total**: 1,987
- **Arthit**: 300 (Mid ’06)

Additional Notes:
- **NANG NUAN (P)**, **PLADANG**, **PAKARANG**, **DARA**, **TANTAWAN**, **KAPHONG (P)**, **PLATONG (P)**, **TRAT**, **SATUN (P)**, **JAKRAWAN (P)**, **FUNAN (P)**, **GOMIN**, **MORAKOT**, **BONGKOT (P)**, **SONGKHLA**, **BUA BAN**, **JDA**, **PAILIN**, **UBON**, **SURAT (P)**, **PLATONG (P)**, **TRAT**, **SATUN (P)**, **JAKRAWAN (P)**, **FUNAN (P)**, **GOMIN**, **MORAKOT**, **BONGKOT (P)**, **SONGKHLA**
### Thailand Petroleum Production

<table>
<thead>
<tr>
<th></th>
<th>Natural Gas (MMscfd)</th>
<th>Condensate BBLd</th>
<th>Crude Oil BBLd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onshore</td>
<td>110</td>
<td>-</td>
<td>22,189</td>
</tr>
<tr>
<td>Offshore</td>
<td>1,987</td>
<td>62,780</td>
<td>76,612</td>
</tr>
<tr>
<td><strong>รวม</strong></td>
<td><strong>2,097</strong></td>
<td><strong>62,780</strong></td>
<td><strong>98,801</strong></td>
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</table>

As of May 2003
## Petroleum Reserves in the Pattani Basin

<table>
<thead>
<tr>
<th></th>
<th>Natural Gas (TCF)</th>
<th>Condensate (MMBBL)</th>
<th>Crude Oil (MMBBL)</th>
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</thead>
<tbody>
<tr>
<td><strong>Proved</strong></td>
<td>5.60</td>
<td>134.65</td>
<td>271.76</td>
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<tr>
<td><strong>Probable</strong></td>
<td>4.71</td>
<td>160.75</td>
<td>61.48</td>
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<tr>
<td><strong>Possible</strong></td>
<td>2.73</td>
<td>57.40</td>
<td>167.41</td>
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As of Dec, 31 2002