Overview

- **Aegean Energy** is the majority shareholder of Kavala oil, the only operator of Oil and Gas production in Greece.
- The company’s upstream oil and gas assets have been in production since 1977 in the area of Kavala in North Eastern Greece - Total Oil production has exceeded 110 million barrels
- The company produces hydrocarbons through a system of three offshore oil platforms, one gas platform and a comprehensive onshore plant with storage, offshore loading, de-sulphurisation and power generation facilities.
- The entire production is sold through an offtake contract to Hellenic Petroleum
- Concession rights to develop two new offshore fields (Prinos North and Epsilon) located in the Gulf of Kavala
- Project Financing of first phase through Standard Chartered Bank through Reserve Based Lending
- Drilling Operations commenced in March 2009 using the Jack Up Energy Exerter
- Strong Shareholders
- Experienced Management Team and Workforce.
Corporate Structure

Workers Union

5.0%  95.0%

Provision of Services & Personnel

100% Concession Rights of:
- Prinos Field
- South Kavala Gas Field
- Prinos North Field
- Epsilon Field
Geographic Location

Map of Greece

Gulf of Kavala
KAVALA: A Strategic Location

Strategically located at the pathways of energy routes developed - and under Development:

a. SOUTHSTREAM, Natural Gas Pipeline
b. BURGAS-ALEXANDROUPOLIS oil pipeline.
c. TURKISH –GREEK – ITALIAN NATURAL gas pipeline
d. Connected with main pipeline of the NATIONAL PUBLIC GAS (DEPA).
Schematic of Existing & New Fields - Installations
3D Visualization of West Prinos Basin
Offshore Infrastructure

- **Two four-leg production platforms, Alpha and Beta**
  - Each 12 wells
  - 8 active production wells, 3 water injection wells and 3 inactive wells.
  - Capacity 25,000 bbls/d
  - Work-over rig on one of the A platform

- **An 8-leg processing platform Delta, covering**
  - Three phase (oil, gas and water) production separation
  - Test separator for measuring the production of each well
  - Crude dehydration
  - Crude oil transfer to shore
  - Sour gas dehydration
  - Treatment of produced water for disposal
  - Sea water injection to the reservoir
  - Injection of sweet natural gas

- **A 4-leg unmanned gas production platform Kappa**
Onshore Infrastructure
SIGMA Site

- 14 km east of Kavala and 18 km north of the Prinos platform. Facilities for the final processing of the oil and gas streams from the offshore facilities into stabilized crude oil, natural gas, natural gas liquid and sulfur.
- The major processing areas are:
  - Crude oil desalination and dehydration
  - Low pressure separation.
  - Crude oil stabilization
  - Crude oil storage and shipping (three floating roof tanks with total storage capacity of 500,000 bbls).
  - Gas treating
  - Natural gas liquid recovery
  - Sulfur Plant and sulfur storage facilities
  - Residue gas compression and recycling offshore for gas lifting
- 260 Employees
### Pipeline Infrastructure

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Length</th>
<th>Product</th>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>6”</td>
<td>12 km</td>
<td>sweet natural gas</td>
<td>Kappa</td>
<td>Delta</td>
</tr>
<tr>
<td>12”</td>
<td>18 km</td>
<td>sour natural gas</td>
<td>Delta</td>
<td>onshore</td>
</tr>
<tr>
<td>8”</td>
<td>18 km</td>
<td>sour crude oil</td>
<td>Delta</td>
<td>onshore</td>
</tr>
<tr>
<td>5”</td>
<td>18 km</td>
<td>sweet natural gas</td>
<td>Sigma</td>
<td>Delta</td>
</tr>
<tr>
<td>6”</td>
<td>7 km</td>
<td>natural gas</td>
<td>network</td>
<td>Onshore facilities</td>
</tr>
<tr>
<td>24”</td>
<td>3 km</td>
<td>stabilized crude oil</td>
<td>storage tanks</td>
<td>tanker compartments</td>
</tr>
<tr>
<td>16”</td>
<td>3 km</td>
<td>ballast</td>
<td>tanker compartments</td>
<td>onshore</td>
</tr>
</tbody>
</table>
Drilling Programme- (March-July 2009)

1. **PNA- H3** Horizontal Well, (Sidetrack of existing well from the Prinos A Platform)

2. **PB-14B**, (Infill Well on Prinos Field)

3. **EA-1** Production well on Epsilon, (Extended Reach from the Prinos Platform).
Jack-Up & WorkOver Rigs
Present and Tentative Future Drilling Program

Estimated Duration (days)

Phase 1
Phase 2

Minimum Expected Time
Maximum Expected Time

Number of Wells according to Field Develop. Program
Map View of Current & Planned Drilling

Epsilon Field, Extended Reach Well
Approximate Entry Point
X: 285750, Y: 4520190
Estimated Depth of Penetration: 2850m TVDss

Approximate TD Point
X: 285180, Y: 4520445

North Prinos Field Development,
Targeted Drainage Area

PB-14
Prinos Field Infill Well
Target Area
3D Visualization of the PNA-H3 Well Trajectory
PB-14B is between PB-14 and PB-14A and within the same structural block at the Top B layer.
PB-14, PB-14A AND NEW PB-14B TRAJECTORY
# General Well Summary/Service & Supplies

<table>
<thead>
<tr>
<th>Directional Drilling Contractor LWD</th>
<th>INTEQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mud Logging</td>
<td></td>
</tr>
<tr>
<td>Mud Services</td>
<td>DRILLING FLUIDS</td>
</tr>
<tr>
<td>Liner Hangers</td>
<td>GERMAN OIL TOOLS</td>
</tr>
<tr>
<td>Cementing</td>
<td>Schlumberger</td>
</tr>
<tr>
<td>H2S Safety</td>
<td>S.I.S.</td>
</tr>
<tr>
<td>Fishing/ Casing Exit System</td>
<td>Catch Fishing Services</td>
</tr>
<tr>
<td>Downhole Tool Rentals</td>
<td></td>
</tr>
<tr>
<td>Supply Vessel</td>
<td>NAVCRATOR</td>
</tr>
<tr>
<td>Tubular Services</td>
<td>Odfjell Drilling</td>
</tr>
<tr>
<td>Drilling Bits</td>
<td>Reed Hycalog</td>
</tr>
<tr>
<td>Wellbore Cleanup/Shaker Screens</td>
<td>Mi SWACO</td>
</tr>
<tr>
<td>Gyro/ Electric Logging</td>
<td>GEOTECH</td>
</tr>
<tr>
<td>Solids Control</td>
<td>SCS</td>
</tr>
<tr>
<td>Casing Accessories</td>
<td>KazΔuco</td>
</tr>
<tr>
<td>Swell Packers</td>
<td>TAM INTERNATIONAL</td>
</tr>
<tr>
<td>Completion</td>
<td>WESTECH</td>
</tr>
<tr>
<td></td>
<td>HMD</td>
</tr>
</tbody>
</table>
# General Well Summary/Service & Supplies

<table>
<thead>
<tr>
<th>E-line Logging</th>
<th>Consultancy</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="E-line-logging.png" alt="Image" /></td>
<td><img src="consultancy.png" alt="Image" /></td>
</tr>
<tr>
<td>Bridgeplugs &amp; Packers</td>
<td>Tubular Supply</td>
</tr>
<tr>
<td><img src="bridgeplugs-packers.png" alt="Image" /></td>
<td><img src="tubular-supply.png" alt="Image" /></td>
</tr>
<tr>
<td>Wellheads</td>
<td>Drilling Rig</td>
</tr>
<tr>
<td><img src="wellheads.png" alt="Image" /></td>
<td><img src="drilling-rig.png" alt="Image" /></td>
</tr>
<tr>
<td>CTU</td>
<td></td>
</tr>
<tr>
<td><img src="ctu.png" alt="Image" /></td>
<td></td>
</tr>
<tr>
<td>Well Testing</td>
<td></td>
</tr>
<tr>
<td><img src="well-testing.png" alt="Image" /></td>
<td></td>
</tr>
<tr>
<td>Top Drive (wo-rig)</td>
<td></td>
</tr>
<tr>
<td><img src="top-drive.png" alt="Image" /></td>
<td></td>
</tr>
<tr>
<td>Drilling Fluids</td>
<td></td>
</tr>
<tr>
<td><img src="drilling-fluids.png" alt="Image" /></td>
<td></td>
</tr>
</tbody>
</table>
During 1999 production ceased due to company closure
Board of Directors – Key members

**Mathios Rigas, Chairman and Managing Director**

Mr. Rigas has 18 years of investment banking and private equity experience and is a founding shareholder of Aegean Energy. Mr. Rigas is also the President and Managing Director of Capital Connect Venture Managers, a Private Equity fund in Greece investing in innovative Small Medium Enterprises with investments in IT, Healthcare, Waste Management, and Food Industries. Mr. Rigas is the Chairman of the Board of Tyres Herco S.A. a tire recycling company and MAVIN S.A. a company recycling agricultural and brewery by-products in Greece. From 1999 until 2001 Mr. Rigas was in charge of Piraeus Bank's Shipping division. Prior to that (1993-1999) he was Vice President of Shipping, Energy & Project Finance at Chase Manhattan Bank in London where he arranged financing in excess of $5 billion, mainly in the oil & Gas sector. His career started at Arthur Andersen in 1991 as a consultant in the energy sector. Mr. Rigas holds a Degree in Mining and Metallurgical Engineering from the National Technical University of Athens and a MSc / DIC Degree in Petroleum Engineering from the Imperial College.

**Stathis Topouzoglou, Director**

Stathis Topouzoglou is the co-founder, and Managing Director of Prime Marine Corporation. Prime Marine Corporation is an International Shipping Company that focuses on Product Tankers, as well as on the LPG sector via its new building program. Its fleet of Product Tankers has a combined capacity of over 1.1 million dwt and transports refined petroleum products, light chemicals and vegetable oils along global shipping routes. Prime Marine Corporation is one of the leading Product Tanker companies worldwide. Prime Marine currently owns 14 Double-Hull Product Tankers. Prime Marine's new building program involves four 35,000-cbm Fully-Ref LPG/NH3 carriers, four 74,000-dwt LR1 Product Tankers and two 75,000-dwt Ice-Class LR1 Product Tankers. Mr. Topouzoglou has more than 30 years of experience in the shipping industry. Mr. Topouzoglou holds a B.A. in Business Administration and Economics from the University of Athens, Greece.

**Michael Chalkias, Director**

Michael Chalkias is a co-founder of Prime Marine Corporation and is the Finance Director of the Group. Mr. Chalkias has 15 years of experience in the shipping industry, during which he has had extensive experience negotiating debt and equity instruments. Prior to joining Prime Marine Corporation in 1999, he was employed by Tufton Oceanic Limited, a specialized shipping finance and investment firm in London. Mr. Chalkias holds an MSc with honors in Shipping, Trade and Finance from the City University of London and a BSc with honors in Maritime Business and Law from the University of Plymouth.
Key Management CV’s

Ioannis Abatzis, G&G Manager
Mr. Ioannis Abatzis has 30 years of professional experience in 2D/3D Interactive Seismic Interpretation and Mapping while for more than 24 years he has provided Geophysical Consultancy to national and international oil companies around the world. His extensive International experience has been gained by working for or with companies like Amoco (Denmark & USA), Danop – Danerco – DONG – Mærsk Oil & Gas – DUC (Denmark), STATOIL (Denmark & Norway), Norsk Hydro, Hellenic Petroleum, KAVALA OIL, PetroVietnam, Vietnam Petroleum Institute, Petronas, Lemigas, CNOOC, Sinopec and others. Mr. Abatzis comes from a position as Chief Geo-scientific Adviser in the Danish Ministry of Energy & Climate. Since 1997 Mr. Ioannis Abatzis has supervised numerous integrated geoscientific studies within the West Prinos Basin in the northern Aegean Sea. He has carried out the detail interpretation of the available 3D seismic data and has constructed the structural maps of the Prinos, North Prinos and Epsilon Fields on the basis of which several exploration, delineation and infill wells have been drilled successfully in the area. Mr. Abatzis holds a BSc in Geology and Geophysics from University of Athens, Greece and he had Post-Graduate studies at the Institute of Geophysics in Copenhagen, Denmark (Scholarship).

Leslie Dean Kristianson, Drilling Superintendent
Mr. Kristianson has an extensive international experience in the oil industry, over 45 years he has been involved in drilling projects with companies like NAPC, Petrovietnam, CNPC, First Calgary Petroleums, Shell, Qatar Petroleum, Candecca Resourses, KCA Drilling, Poole International, Brown Oil Tools, Geoprosco International, etc. Responsible for well services, completion operations, also for writing well remedial sidetrack drilling and re-completions programs, arranging equipments and personnel for completing multizone gas/condensate/light oil wells. He has held Drilling Supervisor positions and Drilling Completions Superintendent in Kavala Greece, Algeria, Gabon, England, Turkey, Lybia, Venezuela, Singapore, Indonesia, Canada, Abu Dhabi.

Martin Whitehead, Senior Drilling Engineer
Mr. Whitehead has over 40 years of experience in Drilling Projects, Petroleum Engineering, oil well production, testing and process engineering projects, Reservoir Engineering, electric log interpretation and workover operations in International companies like NAPC, Zeta Petroleum, Crescent Petroleum, Regal Petroleum, Troy Petroleum Management, Occidental Petroleum, Qatar General Petroleum, Amerada Hess Corp, Deminex and BP he has held positions as Drilling and Production Manager, Development Manager and Senior Drilling Engineer. Mr. Whitehead holds a BSc in Mining Engineering, a BSc in Mechanical Engineering and a Well Intervention Certificate from Rig Train in Aberdeen.
Key Management CV’s

- **Kostas Papakonstantinou, Managing Director of Kavala Oil**
  Mr. Papakonstantinou is the Managing Director of KAVALA OIL S.A. since September 2005. Graduate from the Geological Department of Aristotelian University of Thessaloniki and from the Department of Petroleum Mechanics of the Polytechnical School of Mines of New Mexico, USA. He worked for a five-year period in TEXACO USA, in California, in the field of exploration and production of hydrocarbon reservoirs. From 1985 until 1998 he worked in the Department of Petroleum Engineering of North Aegean Petroleum Company (NAPC) in Kavala, in the area of exploration and development of the fields in the Prinos basin.

- **Kostas Ioannidis, Plant Manager**
  Kostas Ioannidis is the Plant Manager of KAVALA OIL S.A. since November 1999. In 1984 was employed by North Aegean Petroleum Company (N.A.P.C.) as Process Engineer, became Senior Process Engineer in 1987, Head of Technical Services in 1992 and Chief Engineer in 1997 until May 1999 when the company terminated its operations and the facilities came to the position of the Greek State. During the period of maintenance and security of the facilities from May to November 1999 he was the Project Manager with EUROTECH SERVICES S.A. who were assigned the project by the Greek State. Holder of B.A.Sc. and M.A.Sc. Diploma Certificate in Chemical Engineering from the University of Waterloo, Canada and author of the thesis "Modeling of Axial Dispersion Tubular Flow Reactors" (1978), he started his career in March 1979 at ESSO CANADA in Sarnia Ontario Canada as Process Engineer, continued as Operations Engineer from July 1981 until November 1982, at which time he left ESSO and Canada and returned to Greece. From February 1983 until June 1984 he worked as Operations Engineer at ETHYL HELLAS in Thessaloniki.
Other Updates

1. Other Drilling Projects

2. Seismic/ Geochemistry

3. Crude Oil Storage Tanks.


5. Optimization of Production in Prinos and South Kavala Gas Field with Chemical Management System.
West Prinos Basin Fields, Discoveries & Prospects

- Ammodis
- East Prospect
- West Prospect
- North Prinos Oil Field & N. P. East Block Prospect
- Deep Prinos Prospect
- Epsilon Field
- Prinos Oil Field
- Athos Discovery
- South Kavala Gas Field
- Re-mapping of South Kavala
2D Data Acquisition and Processing

- 2D Seismic Campaign completed in March 2009
- In Co-operation with ELKETHE (Hellenic Center of Marine Research) and the University of AARHUS
- Approximately 2000 Km of seismic data acquired
KAVALA OIL’s Intervention on South Kavala Gas Field

KAVALA OIL’s latest intervention on SK-4 resulted in Kappa production increase

- SK-4 well was partially plugged mainly with salts deposits.

- SK-4 well was then a subject of coiled tubing clean up operations while nitrogen was pumped through a multijet tool.

- Wells SK-4 and SK-3B were put back on production together on May 15th with increased flow rates and well head pressures compared to the time before the intervention.

- Total field's production was increased from 22,000m3/day on average to around 38,000m3/day, or 75% production increase.

- Total oil production was increased at Delta since more gas was available for gas lift.
Underground Gas Storage in South Kavala Gas Field

- The South Kavala Gas Field is suitable for an UGS, there’s an effective top seal and no faulting has been observed/reported.
- Working volume 400-500 MM m³
- Initial GIP 958 MM m³
- Effective GIP 70%
- Initial Reservoir Pressure 182 bar
- Max Reservoir Pressure 227 bar
- Permeability-Thickness 7.5 D.ft
- Leakage risk is minimal.
- Distance to the Infrastructure:
  The main gas pipeline runs only 2Km from the Sigma site onshore facilities.
Crude Oil Storage Tanks

- 500,000 bbls crude oil storage capacity
- Exploring options to rent excess capacity to 3rd parties.