

JACKETS & TOPSIDES

| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|--------------------------|-----------------------------------|--|----------------|---------|
| Shell Brunei (Brunei) | S.E.P.M / Promet (Singapore) | Detail design and engineering of two-storey accommodation module. As the jacket was already finalized the weight of the accommodation module was a critical factor. | September 1985 | |
| O.N.G.C (India) | Sembawang Engineering (Singapore) | Design verification and detail design of jacket for fabrication. | July 1986 | |
| TOTAL (Indonesia) | PT. Purna Bina (Indonesia) | Detail engineering and analysis of three shallow water platforms. Heligurf Wellhead GTS platforms. In-place, fatigue, earthquake conditions were taken into consideration. Special attention was given to installation techniques of the deck for shallow water condition. | August 1986 | |
| Sarawak Shell (Malaysia) | Protek Engineering (Malaysia) | Conceptual design of standardized jackets for multiwater depths. The study was to compile a database for platform configurations for various environmental conditions. The analytical module is to be extracted from the platform database to suit the environmental conditions and to carry out structural analysis with automated re-analysis to produce structural drawings for bidding purposes. | February 1988 | |
| Sarawak Shell (Malaysia) | Protek Engineering (Malaysia) | Re-analysis and design verification of jacket (Tenama) and drilling rig (Boker). Analysis was carried out on revised structural models taking into consideration marine growth, damaged and missing members, etc. Complete in-place and fatigue analysis were carried out. | July 1988 | |
| Q.G.P.C (Qatar) | SIME Sembawang (Malaysia) | Detail design and engineering of living quarter's platform D3. Detail engineering included in-place fatigue and earthquake conditions. Tie-down, transportation and installations engineering was also carried out. The main EPC Contractor was Sembawang Shipyard (Singapore). Fabrication was carried out at SIME Sembawang Shipyard (Malaysia), installation was done by Sembawang Maritime / Brown & Root. | February 1989 | |
| Hudbay Oil (Indonesia) | Ranhill Bersekutu (Malaysia) | Detail engineering and design of MSM Platform and two Tripods. In-place fatigue earthquake and installation conditions were considered. | September 1990 | |

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| JAPEX (Indonesia) | PT. Nisconi (Indonesia) | Detail engineering of shallow water 5 wellhead platforms and gathering platforms for ABS – Phase-1 Project. In this project, conceptual, detail and installation engineering was undertaken. Installation to shallow water was a major problem in this project. | January 1992 | Mr. Matsunaga 7207564 |
| KODECO (Indonesia) | PT. Guna Nusa Utama (Indonesia) | CPP jacket has to be re-analyzed for certification as the grouting was effectively carried out only on one leg. Re-analysis was carried out for in-place, fatigue and earthquake conditions and certification obtained. | April 1992 | Mr. Muliono 5703329 |
| PETRONAS – CARIGALI (Malaysia) | - | Setting up database for 60 existing platforms. In this project, a single program (SACS) based on structural database was implemented. The models were updated to the current status i.e missing and damaged members, Marine Growth etc. The models were validated with previous analysis, which included in-place and fatigue. | May 1992 | |
| ARCO (Indonesia) | PT. NISCONI (Indonesia) | Detail design verification of SCA jacket, for in-place and installation condition. | March 1993 | Mr. Matsunaga 7207564 |
| ARCO (Indonesia) | PT. Wira Matra Guna (Indonesia) | Detail engineering of KNA and BM jackets. The decks were salvaged from existing platforms MXA and MXB. The decks were refurbished and installed on KNA and BM jackets. Analysis included in-place, earthquake, fatigue and installation conditions. | Dec 1994 | Mr. Wiyono Sukarno 8008222 |
| ARCO (Indonesia) | - | Deck extension of platform for NGLB – LIMA Project. To carry out deck extension and carry out structural integrity study for jacket. | March 1995 | Mr. Dwi H. Yuniarto 5219105 |
| ARCO (Qatar) | Mannai Marine (Qatar) | Detail engineering of early production system. This consisted of jack-up, rig with production facilities, SBM and offloading facilities. | March 1996 | Mr. Tony Bromham +974 425755 |

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| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
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| MAXUS (Indonesia) | - | <p>Re-analysis of existing platforms for re-certification. Since commissioning the platforms has been subjected to additional loading in the form of deck extensions, additional risers conductors, sumps etc. Hence these platforms need to be re-analyzed for re-certification.</p> <p>The Scope of Work included carry out elastic analysis for in-place, earthquake and fatigue conditions. For jackets that did not satisfy the elastic analysis, full plastic (Push Over) analysis was undertaken to arrive at the Reserve Strength Ratio (RSR). Remedial engineering was undertaken in case of member and or joint failure. The platform verified were:</p> <ul style="list-style-type: none"> - Widuri-P - Widuri-D - Karmila-A - Farida-B - Zelda-C - Zelda-A - Titi-A - Widuri-B - Intan-B - Indri-A - Zelda-E - Zelda-D - Indri-A - Sundari-A - Cinta-B - Selatan-B - Krishna-10 - Rama-E - Farida-A - Farida-C - Rama-F - Widuri-A - Wanda-A - Yvonne-A - Widuri-E - Gita | Aug 1996 Thru Dec 1999 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | <p>Detail engineering to relocate existing Selatan-C jacket to South Zelda-A (with lower water depth)</p> <p>Engineering was carried out include in-place, earthquake and fatigue for existing and new location. Also included the determination of cut-off points, retrieval of piles and jacket refurbishing, strengthening, new mudmat design and installation engineering. Detail new deck design for South Zelda-A was also included.</p> | June 1997 | Mr. Ramiro De Los Reyes 5159635 |

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| ONGC (India) | MECON (India) | Conceptual engineering was carried out for 3 jackets for shallow waters under the following constraints: <ul style="list-style-type: none"> - Very weak soil - Limited installation equipment - Low budget | Nov 1997 | Mr. R.S. Kanan +91 802211034 |
| QGPC (Qatar) | Mannai Marine (Qatar) | Detail engineering of Flare Design and installation for Rig Muna. | Jan 1998 | Mr. Tony Bromham +974 425755 |
| PETRONAS CARIGALI | SIME Engineering (Malaysia) | Pulai-A Platform structural engineering design review and structural integrity check with four additional conductors. In-place and natural frequency analysis for jacket, MSF and drilling module, deck and jacket modifications, conductor in-place, driveability and installation study. | Dec 1998 – June 1999 | |
| MAXUS (Indonesia) | KODECO (Indonesia) | Re-analysis of existing platforms for re-certification Scope of Work included carry out elastic analysis for in-place, earthquake and fatigue conditions. Platforms as listed below: <ul style="list-style-type: none"> - Kodeco Junction Platforms - Kodeco Satellite Platform | Jan 1999 | Mr. Ramiro De Los Reyes 5159635 |
| KODECO (Indonesia) | - | KE-5 & KE-6 monopods vibration analysis and remedial modifications | April 1999 – July 1999 | |
| KODECO (Indonesia) | - | AW, BW & CCP Platform deck extensions as a part of Poleng Modification Project | Sep – Oct 1999 | Mr. John Hunt 5159049 |
| KODECO (Indonesia) | PT. Titis Sampurna (Indonesia) | Detail engineering of production facilities for Poleng re-activation project. To design subsea facilities such as PLEM, Flexi hose and loading facilities including mooring of SBM and associated tankers. Plus modifying existing platforms for additional loading (extra piles). | Sep – Oct 1999 | Mr. Kadek 7398471 |

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|---------------------------------|------------------|---|--------------------------------|------------------------------------|
| KODECO (Indonesia) | - | AW & BW Platform Structural Integrity Study and feasibility of installing additional decks | Dec 1999 – Feb 2000 | Mr. John Hunt 5159049 |
| MAXUS (Indonesia) | - | Engineering services to work for revised design (Phase #3) of Vita-A retrofit Platforms | July – Dec 2000 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | <ul style="list-style-type: none"> - Engineering services Cinta-A Platform structural integrity analysis with 2 new conductors - Engineering services Widuri-F monopod and modification on Widuri-DC monopod | Dec 2000 Nov – Jan 2001 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Design review and re-analysis for walkway bridge between seafox and Widuri-P according offshore specification | Feb 2001 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Engineering design analysis Rama-D Platform analysis with 3 additional conductors and Structural integrity analysis with 4 additional conductors | April – June 2001 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | <ul style="list-style-type: none"> - Pigging Modification on Yani & Karmila Platform | Sep 2001 – Nov 2001 | |
| MAXUS (Indonesia) | - | WET Platform Design Detailed Engineering <ul style="list-style-type: none"> - Krisna-D Pigging Modification - Widuri-A Pigging Modification - Intan-B Pigging Modification - Widuri-A FWKO Facilities | Nov 2001 – April 2002 | Mr. Ramiro De Los Reyes 5159635 |
| YPF-MAXUS (Indonesia) | PT. Trans Bakrie | The provision of services to carry out design (verification) and fabrication engineering of monopods facilities. <ul style="list-style-type: none"> - For two Monopods Yani-A and Suratmi-A - Update on the electronic copies all modification or change Basic design (As Built) review of the new Monopods structures and facilities | May 2002 | Mr. Ramiro De Los Reyes 5159635 |
| CNOOC (Maxus) (Indonesia) | - | Detailed design structural engineering of jacket for New BPC Platform | June 2002 – Nov 2002 | Mr. Ramiro De Los Reyes 5159635 |

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|---------------------------------|-----------------------------------|--|----------------|------------------------------------|
| CNOOC (Indonesia) | CNOOC (Indonesia) | Detail engineering for Intan BPC water treatment platform. This included structural design of jacket, main deck, cellar deck and sub-cellar deck. In-place analysis for fatigue and earthquake conditions was also undertaken. | January 2003 | Mr. Ramiro De Los Reyes 5159635 |
| PetroChina Jabung International | SembCorp Engineers & Constructors | Conceptual and Detail Design of offshore facilities for BCD Project. - Process Platform - Dolphin - Piling for Mooring Chains - Bridges | 2003 - 2005 | Mr. Subramaniam 5741128 |
| Kondur Petroleum | PT Biro Klasifikasi Indonesia | Re-certification engineering of 4 leg LQ and LP platform | 2006 | Mr. Alim +62 8164823484 |
| ONGC India | PT Sempec Indonesia | Conceptual and detail design of 4 wellhead platform and topside: HI, HJ, HSC & B134 | 2007 - ongoing | Mr. Kamaleshan +62 21 57852581 |

LOAD OUT / SEA FASTENING / INSTALLATION

| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|-------------------------------|---|---|---------------|--------------------------------|
| QGPC (Qatar) | SIME Sembawang Engineering (Malaysia) | Load out, sea fastening, transportation and installation of living-quarters jacket D3. | April 1989 | |
| ARCO (Indonesia) | PT. Satmarindo (Indonesia) | Load out, sea fastening, transportation of BLQ topside. | July 1989 | |
| ARCO (Indonesia) | PT. NISCONI (Indonesia) | Load out, sea fastening, transportation and upending of jackets for EJ/BJ Project. | August 1989 | Mr. Matsunaga 7207564 |
| ARCO (Indonesia) | Shillelagh Ltd. (Indonesia) | Load out, sea fastening, transportation of jacket and top sides for BZZA Project. Also included jacket upending. | August 1990 | Mr. Saut 7395229 |
| ARCO (Indonesia) | PT. NISCONI (Indonesia) | Load out, sea fastening, transportation and installation of BK deck. | May 1991 | Mr. Matsunaga 7207564 |
| JAPEX (Indonesia) | PT. NISCONI (Indonesia) | Load out, sea fastening, transportation and installation of Shallow Water 5 Wellhead platforms and gathering platform for ABS Phase –1. | April 1992 | Mr. Matsunaga 7207564 |
| Sarawak – Shell (Malaysia) | Promet Fabricators (Malaysia) | Fabrication engineering, load out, sea fastening of M3DRA Jacket. The jacket is twelve piles and the weight was 4,800 Tons. | May 1994 | |
| ARCO (Indonesia) | PT. Wira Matra Guna (Indonesia) | Load out, sea fastening, transportation and upending of KNA and BM jackets. Engineering for relocation of decks from MXA and MXB includes retrieval, load out, sea fastening, transportation and installation. | December 1994 | Mr. Wiyono Sukarno 8008222 |
| ARCO (Indonesia) | PT. NISCONI (Indonesia) | Load out, sea fastening, transportation and upending of SCA jacket. | Nov 1995 | Mr. Matsunaga 7207564 |
| Mannai Marine (Qatar) | - | Transportation study for relocation of Rig Muna. | March 1998 | Mr. Tony Bromham +974425755 |

LOAD OUT / SEA FASTENING / INSTALLATION

| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|--|--|---|---------------|------------------------------------|
| Petronas Carigali (Malaysia) | SAIPEM (Malaysia) | P.C.S.B. Ruby fields development in Vietnam. Sea fastening and transportation studies for Deck, Jacket, Pile and Appurtenance. | April 1998 | |
| Mannai Marine (Qatar) | Mansal Offshore (Sharjah-UAE) | Engineering, Procurement & Construction of new 59 x 32 x 4.9 m self propelled jacking offshore unit converted from 85 x 21 x 4.9 m Landing Craft. The estimated light weights is 4,200 Tonne and service sea depth is 54 m. <ul style="list-style-type: none"> - Jacking offshore unit design - Docking block study - Transportation analysis, stability booklet & sounding table - Float out study (the jacking offshore unit is built on self submerge barge). | July 1998 | Mr. Tony Bromham +974425755 |
| Premier Oil Natuna Sea Ltd (Indonesia) | - | New Compressor Module Framing Project. New top side, 451 M-Tons. <ul style="list-style-type: none"> - Loadout & ballasting sequence - Transportation analysis of module board on Jaya 189 | January 2000 | Mr. David Britton 7182001 |
| Total Indonesia (Indonesia) | PT. Citra Panji Manunggal (Indonesia) | Handil air injection pilot project. The barge Total-01 is to be refurbished and used as an air compression barge to support the engine-compressor unit and other utilities under the Handil Air Injection Pilot Project. <ul style="list-style-type: none"> - Total-01 Barge Transportation & Stability Analysis - Barge shimming to pile foundation | February 2000 | Mr. Agus Hartanto 7653723 |
| Maxus SES (Indonesia) | PT. Global Industries Asia Pacific (Indonesia) | Maxus Widuri Field Development. Installation of new platform. PT. Global's Site Representative at PT. Trans Bakrie and PT. Bukaka for the following load out, tie down / seafastening. <ul style="list-style-type: none"> - Widuri DC & Theresia Guardian Sleeve & its shipped loose material at PT. Trans Bakrie – Bojonegara, Cilegon - Widuri DC & Theresia Main / Cellar Deck & its shipped loose material at PT. Bukaka – Bojonegara, Cilegon | | Mr. Ramiro De Los Reyes 5159635 |

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| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|--|---|---|---------------|--------------------------|
| Kodeco Indonesia (Indonesia) | PT. Global Industries Asia Pacific (Indonesia) | <p>Kodeco Poleng Field Development. Perform Naval Architect Engineering work under PT. Global Industries Asia Pacific: Loadout analysis, barge stability & motion, tie down (seafastening) design, barge deck strength including drawing review, supervision and Client communications for the following report.</p> <ul style="list-style-type: none"> - KE 23 Deck, Piles and Conductors Seafastening and Transportation Analysis (On Board POE 2303) - KE 23 Jacket and Conductors Seafastening and Transportation Analysis (On Board Jaya 256) - 889 Joints of 14 Inches Concrete Coated Pipeline Transportation Study (On Board Jaya 223) - AW Platform Top Deck Transportation Study | February 2000 | Mr. John Hunt 5159049 |
| Esso Production Malaysia Inc. (Malaysia) | TL Offshore – McDermott/MalMac Division – KL (Malaysia) | <p>EPMI 2000/2001 Offshore Installation Program SFD Platform & Pipeline Project. Perform Naval Architect Engineering work under TL Offshore McDermott/MalMac Division: Loadout analysis, barge stability & motion, tie down (seafastening) design, barge deck strength including drawing review, supervision and Client communications for the following report.:</p> <ul style="list-style-type: none"> - Larut-A Boatlanding Tiedown Design - Miscellaneous Cargo on Board Intermac 260 - Raya-B Jacket, Piles & Conductors Transportation Study (On Board Eastern Planet). - Raya-B Topside Transportation Study (On Board Eastern Island) - Seligi-H Jacket, Topside, Piles and Conductors Transportation Study (On Board Eastern Galaxy) - Lawang-A Jacket, Topside, Piles and Conductors Transportation Study (On Board eastern Planet) - Serudon-A Jacket, Topside, Piles and Conductors Transportation Study (On Board Eastern Galaxy) - Irong Barat-B Jacket, Topside, Piles and Conductors Transportation Study (On Board Eastern Planet) | February 2001 | |

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| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|---------------------------------------|--------------------------------------|---|------------------------------|---------------------------------------|
| TotalFinaElf (Indonesia) | PT. Istana Karang Laut | TUNU Field Development Project Phase-8 contract TP 8/EPSC 6 for 24" pipelines cross overline STP-STP 3 PLTS. | February 2002 | Mr. Mike Clarke 3146018 |
| CNOOC (Maxus) (Indonesia) | PT. Horizon | Engineering work under PT. Horizon for Intan BPC Platform <ul style="list-style-type: none"> - Krisna-D 12.75" pipeline load out arrangement with sea transportation analysis and sea fastening arrangement on barge POE-1823 - Yani platform load out and sail out on Batam seaport - Pipeline load-out and sail out on the Ciwandan seaport - Pipeline load-out and sail out for Widuri-H to Widuri-C | July 2002 – November 2002 | Mr. Ramiro De Los Reyes 5159635 |
| CNOOC (Maxus) (Indonesia) | PT. Horizon | Maxus Field Development Perform engineering work under PT. Horizon: Krisna-D 12.75", Yani, Widuri-H to Widuri-C pipeline loadout arrangement with sea transportation analysis and seafastening arrangement on barge POE 1823. | Oct 2002 – Nov 2002 | Mr. Nitish 7395229 |
| Petrochina Jabung International | Sembcorp Engineers & Constructors | Betara Complex Development Project Load out, transportation and sea fastening studies for: <ul style="list-style-type: none"> - Process platform, topsides and jacket - 22 Dolphins deck and piles | 2003 | Mr. Subramaniam +62 21 574 1128 |
| EMP Kangean Ltd | PT Dwi Prima Sembada | Load out and Sea fastening of topside PGC-07 | March 2006 | Sonny Susanto +62 21 791 90328 |

SUBSEA PIPELINES

| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|------------------------------|----------------------------------|--|---------------|---------------------------------|
| Jardine Offshore (Singapore) | - | Pipeline study in Shallow Waters (Hong King Harbour Project). The study included pipeline stability, layability and protection. | May 1985 | |
| IPCO Marine (Singapore) | PT. Satmarindo (Indonesia) | Pipeline installation engineering. The project included the installation of risers at shore, start-up and conventional lay and tie-in for Labuan water pipeline project. The study also included the repair of damaged pipeline to be lifted above the water level. The lifting operation was very critical as the pipeline was thin walled and the steel grade was Grade B. | June 1986 | Mr. Sant S.R. 7800396 |
| ESSO (Malaysia) | Protex Engineers (Malaysia) | Conceptual study of 20" dia. pipeline from shore to loading jetty at Port Dickson. The study included shore pull, on surface tow and lay down, including tie-in to riser at jetty. | March 1988 | Mr. Phil _____ |
| KODECO (Indonesia) | PT. Tripatra (Indonesia) | Conceptual study of pipelay operations including conventional start-up lay, termination and tie-in. | April 1988 | Mr. Budi Lubis 7500701 |
| CONOCO (Indonesia) | Sembawang – Maritime (Singapore) | Conceptual study of gas pipeline from Batam Island to Pulau Seraya, Singapore. The study involved line sizing, stability, routing, lay-methods protection at sea channels. Logistics estimated costs, etc. | March 1988 | Mr. _____ |
| ARCO (Indonesia) | PT. Satmarindo (Indonesia) | Pipeline installation engineering for EJ/BJ Project. Project included routing, start-up, lay, termination, contingency, riser installation and tie-down. | January 1989 | Mr. Sant S.R. 7800396 |
| TOTAL (Indonesia) | COMEX (Singapore) | Pipelay study for river crossings including pipe pull from barge to shore, tie-in etc. A significant problem in this project was the strong cross currents. | October 1989 | |
| ARCO (Indonesia) | Shillelagh Limited (Indonesia) | Detail pipeline installation engineering for three lines, BZZA Project. | May 1990 | Mr. Ramiro De Los Reyes 5159635 |

SUBSEA PIPELINES

| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|------------------------------|---|---|----------------|---------------------------------|
| MAXUS (Indonesia) | Shillelagh Limited (Indonesia) | Detail pipeline installation engineering for RAMA-E/NE Project. | August 1990 | |
| ADMA-OPCO (Abu-Dhabi) | Protek Engineers (Malaysia) | Conceptual study of flow lines from 6 jackets and main gas line to Das Island. Routing was a major consideration in this project due to the congestion of subsea lines in the field. | September 1990 | Mr. Tony Bromham +974425755 |
| Carbon – Black (Malaysia) | Sembawang – Maritime Comprimo (Singapore) | Detail engineering for the installation of subsea pipeline from shore to SBM at Port Dickson. The line was 20” inch diameter. The on-bottom tow methods was used to install the pipeline. | April 1991 | Mr. Philip Reed |
| Shell (Malaysia) | Sembawang – Maritime Comprimo (Singapore) | Detail engineering for the installation of 20” inch pipeline from loading jetty to SBM at Port Dickson. For this project, the off-bottom tow method was used. The pile make-up and launch was from barge. The study also involved the barge conversion and stinger design. | June 1991 | Mr. Philip Reed |
| PLN (Indonesia) | PT. Satmarindo (Indonesia) | Detail in-place engineering and installation engineering of 20” inch pipeline for 20-inch line from jetty to SBM. | September 1991 | Mr. Sant S.R. 7800396 |
| JAPEX (Indonesia) | PT. NISCONI (Indonesia) | ABS Project Phase-1. Detail engineering of flow lines and transportation line from 5 wellhead platforms and gathering platform to shore process station. The pipelines were to be installed in shallow water. Shore pull and surface tow methods were used. | January 1992 | Mr. Matsunaga 7207564 |
| JAPEX (Indonesia) | PT. NISCONI (Indonesia) | Conversion of Derrick barge into pipelay mode. | January 1992 | Mr. Matsunaga 7207564 |
| ARCO (Indonesia) | PT. NISCONI (Indonesia) | Detail in-place engineering and installation engineering of pipelines for EC and EWW Project. | March 1992 | Mr. Matsunaga 7207564 |
| C.P.C (Taiwan) | IPCO Marine (Singapore) PT. Satmarindo (Indonesia) | Detail engineering for two 32-inch line from Talinpu Jetty to SPM 4 apart from traditional pipelay engineering, procedure was compiled for Typhon conditions. | April 1992 | Mr. Alberto Rostrata 7800396 |

SUBSEA PIPELINES

| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|----------------------|------------------------------------|---|---------------|------------------------------------|
| ARCO (Indonesia) | PT. Gema-Sembrown (Indonesia) | Detail in-place and installation engineering for BK Project. The project included the installation of seven pipelines. | July 1992 | Mr. Deepesh Kaushis 7802959 |
| MAXUS (Indonesia) | Shillelagh Limited (Indonesia) | Detail in-place and installation engineering of 12 inch pipeline from Farida-A to Zelda-C. | April 1993 | Mr. Ramiro De Los Reyes 5159635 |
| ARCO (Indonesia) | PT. Wira Matra Guna (Indonesia) | Detail engineering and project management of the installation of pipeline bundle (6 inch + 4 inch, 2 km long) for LL4A to LLB Project. Here for the first time in Indonesia, the Rentis (surface tow) method was used. The bundle was made up on shore and towed 55 miles offshore for installation. | May 1994 | Mr. Wiyono Sukarno 8008222 |
| MAXUS (Indonesia) | PT. Wira Matra Guna (Indonesia) | Detail in-place and installation engineering of 20 inch pipeline form Intan-B to Widuri-P. Here a 0.5% Cr line pipe had to be used for Interval – corrosion. The design temperature of the pipeline was 200 ^o F hence the thermal elongation was a major problem. Due to the Cr content of the line pipe, special welding procedure had to be adopted. | July 1994 | Mr. Timothy 5159605 |
| ARCO (Indonesia) | PT. Wira Matra Guna (Indonesia) | Detail in-place design and installation engineering of 4 pipelines KNA – BM Project. Project management and supervision was also undertaken. | January 1995 | Mr. Wiyono Sukarno 8008222 |
| ARCO (Indonesia) | PT. NISCONI (Indonesia) | Detail in-place and installation engineering of 3 pipelines for ONWJ GAS 2 Project. | March 1995 | Mr. Matsunaga 7207564 |
| ARCO (Indonesia) | - | Feasibility study of using spirally welded line pipe for 24-inch gas line 30 km. Length from NGL-B to Lima-C. In this project, a detail metallurgical study was also undertaken. Subsequently detail installation engineering and installation supervision was also carried out. | April 1995 | Mr. Dwi H. Yuniarto 5219105 |

SUBSEA PIPELINES

| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|----------------------------|--------------------------------|--|---------------|------------------------------------|
| RANA/MANNAI Marine (Qatar) | QGPC | Bull Hanine and Mydan Mahzan Field Development Installation Engineering including analysis and procedures of eleven (11) subsea pipelines, four (4) umbilical and flat packs, jacket and associated bridge. Includes initial analysis for jacket launching proposal. | May 1996 | Mr. Tony Bromham +974425755 |
| ARCO (Indonesia) | - | Detail in-place engineering of 4 pipelines for EQSA-EC-EB-EP-BC Project. Detail in-place engineering of 4 pipelines for LLD-MMC, LLD-LLB, LLD-LLE and LLD-LLF Project. Detail in-place engineering of pipeline for ESTA Project. | April 1997 | Mr. Dwi Yunianto |
| MAXUS (Indonesia) | - | Feasibility Study of location for launch of Rentis pipelines. | April 1997 | Mr. Ramiro De Los Reyes 5159635 |
| KONDUR (Indonesia) | - | Conceptual engineering of pipeline from shore to island. Detail study for stability and installation methods. | June 1997 | Mr. Wiyono Sukarno 8008222 |
| KODECO (Indonesia) | PT. Titis Sampurna (Indonesia) | Detail engineering of Poleng offshore production facilities re-activation. - Pipelines - Platform modification - PLEM - FSO + Tanker mooring | January 1998 | Mr. Kadek 7246029 |
| MAXUS (Indonesia) | - | In-place design report for marginal field pipelines Vita "A" – Widuri "P", Kartini – Subsea tie-in, South Zelda "A" – Zelda "A", 10" flowlines, 8" flowlines. | January 1998 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | In-place design report for marginal field pipelines 6" ATTI-SZA, 6/8" Retno-Gita "A", 6" E-Rama – Rama "F" and replacement of 12" NE Intan – Intan "B". | March 1999 | Mr. Ramiro De Los Reyes 5159635 |
| TOTAL (Indonesia) | - | Detailed engineering to develop pipeline specific emergency repair procedures for swamp and shallow water lines in Tunu Field, East Kalimantan; includes procedures, equipment and manpower specification, design of installation aides, design/selection of repair devices and risk assessment. | October 1999 | Mr. F. Lemarchand 054222214 |
| APACHE Energy (Australia) | CLOUGH Offshore (Australia) | In-place design of 8" and 10" pipeline bundle from subsea wellheads at Gypsy to the Harriet-A platform this included the bundle design, riser design and additional braces for the Harriet-A jacket. | October 2000 | Mr. Lindsay Long +61892819481 |

SUBSEA PIPELINES

| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|---------------------------------|-----------------------------------|--|---------------|----------------------------------|
| APACHE Energy (Australia) | CLOUGH Offshore (Australia) | In-place design of 2 nos. 8" and one 3" pipeline bundle from two freestanding conductor at Simpson to Varanus Island ORF. This included bundle, riser and shore approach design. A major factor in the design was the shallow water depth combined with cyclonic wave regimes. | December 2000 | Mr. Lindsay Long +61892819481 |
| Murphy Sarawak Oil Co. | Pegasus | Tow of bundled pipeline 2 x 6 inch diameter. Length : 1.5 km Field : West Patricia Service : Crude and Water Injection (Installed by Surface Tow Method) | 2002 | Dr. Mashoud |
| Murphy Sarawak Oil Co. | Pegasus | Tow of Single 8" pipeline Length : 2.0 km | 2002 | Dr. Mashoud |
| CONOCO (Indonesia) | | The overall objectives of the Block B Subsea Development (BBSD). Projects are to install facilities for the economic production of gas reserves from a number of reservoirs/fields. This marginal field will be developed during 2003, 2004 and 2005 in an optimized and efficient manner. | August 2003 | Mr. Alan Pennie 5210100 |
| PetroChina Jabung International | SembCorp Engineers & Constructors | Inplace design and installation engineering, specifications, vendor selections and certification for 10" ϕ Condensate, 8" ϕ Propane and 6" ϕ Butane pipeline – Betara Complex Development Project. | 2003 | Mr. Subramaniam 5741128 |
| UNOCAL | Dwisatu Mustika Bumi | Pipeline installation engineering service for Sepinggan "V" Project | 2003 - 2004 | Mr. Dedy Sarwono 8319801 |
| PERTAMINA | Dwisatu Mustika Bumi | Pipeline design and installation engineering service for Serang 10" ϕ pipeline project. | 2004 | Mr. Dedy Sarwono 8319801 |
| JOB PPEJ | Depriwangga | FEED Engineering work for Relocation of Tuban Marine Terminal. Project involved the inplace design of 10" – 2.5 km pipeline and layability analysis. | 2005 | Mr. Dedy Suherman 7209304 |

SUBSEA PIPELINES

| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|---|----------------------------|--|---------------|---|
| ADHI KARYA | EMP Kangean | Installation engineering service for 2 nos. 10" ϕ pipeline: total length was 5.5 km. | 2005 | Mr. Sony Susanto 52902260 |
| Petrochina Jabung International Indonesia | PT Depriwangga (Indonesia) | Relocation of Tuban Marine Terminal Pipeline 10" dia, PLEM and flexi for SPM | 2005 | Mr. Dedy Suherman +62 8161974937 |
| EMP Kangean Ltd. | PT Jaya Wijaya Raya | Design & installation engineering for Pagerungan Besar / Kecil island 10" dia | 2006 | Mr. Sonny Hermawanto +62 21 52902260 |
| PetroChina Jabung International | - | FEED Study for relocation of Tuban Marine Terminal - Pipeline - SBM - PLEM - FSO + Tanker Mooring study was undertaken. | 2005 | Mr. Adityawan 52963220 |
| PetroChina Jabung International | - | BCD Project, LPG Terminal Modification Conceptual and Detail Engineering for the berthing of LPG Compressed Tankers. | 2006 | Mr. R.S.K. Mohan 52963220 |
| ONGC - India | PT Sempec Indonesia | Heera Redevelopment Project Detail design of 8 subsea pipeline dia 8" – 14" Design of 3 flexilines Installation engineering for the above lines | 2007-ongoing | Mr. Kamaleshan +62 21 57852581 |

PROCESS / MECHANICAL / PIPING / E & I

| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|-----------------------------|---|--|----------------------|----------------------------|
| EPMI (Malaysia) | AGNP (Philippines) | Seligi Project, Topside piping layout and flexibility design. | Sept 1986 | |
| AMOCO (USA) | - | F.P.S.O System. Design of deck piping flexibility analysis including exhaust and super heated steam system. | April 1987 | |
| ESSO (Singapore) | Sembawang Engineering (Singapore) | Piping layout and flexibility analysis for Refinery. | May 1987 | |
| Carbon Black (Indonesia) | Sembawang Engineering (Singapore) | Full piping design for a reactor plant, including flexibility analysis of piping and support design. | January 1988 | |
| Indo Rayon (Indonesia) | - | Medan paper pulp factory. Complete design of piping system. | Oct 1988 | |
| MAXUS (Indonesia) | - | Zelda-A deck modification, installation of crude oil transfer pump and related deck modification. Work undertaken included: Preparation of PFD & P&IDs. Performing a Process Simulation and preparation of the Simulation Report, preparation of Block diagrams, revision of inlet manifold, modification of V-300 (3 phase horizontal test separator). Preparation of Piping plan / elevation drawings. Preparation of MTO/BOM and modifications to the deck to support the new pumps. | January 1995 | Mr. Waren White 5159613 |
| MAXUS (Indonesia) | - | Widuri-P Platform. Design / engineering of modifications to the oil processing system. Work undertaken include the following: Process Simulation, Mechanical/Pigging Design, E&I Design, Proceduring Safe Chart, MTO/BOM/Data Sheet. Design of control panel to synchronize it with the new system. Design of skimmer pile. Compilation of piping layouts for existing and the modified / enhanced system. | May 1995 | Mr. Waren White 5159613 |

PROCESS / MECHANICAL / PIPING / E & I

| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|-----------------------|-----------------------------------|---|---------------|------------------------------------|
| EPMI (Malaysia) | Malaysian Shipyard (Malaysia) | Mechanical design of Dulong-B Platform topside, including layout, flexibility design of topside piping and supports. | June 1995 | |
| MAXUS (Indonesia) | - | Design of topside facilities of monopods for marginal field development. Complete designing including: Process Simulation, Piping Design, E&I Design, Structural Design, Mechanical/Equipment design verification, MTO/BOM/Data Sheets. | February 1996 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Modification of Yvonne-B platform for an additional gas compressor. | July 1996 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Intan-B, Widuri-D platforms fire fighting system, complete redesign including piping/mechanical/equipment/E&I etc. | Sept 1996 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Provide design services for mobilization of ex Intan-A temporary deck for South Zelda-A platform. | March 1997 | Mr. Ramiro De Los Reyes 5159635 |
| KODECO (Indonesia) | PT. Titis Sampurna (Indonesia) | Deck modification for an additional pipeline and riser. Facilities modified included CPP, AW & BW platforms, SBM and FPSO. In this project, complete engineering including process, mechanical, piping, E&I work. | April 1997 | Mr. John Hunt 5159049 |
| MAXUS (Indonesia) | - | Provide design services for the installation of new crude oil transfer pumps and surge. The scope includes mechanical, piping and instrumentation disciplines. | July 1997 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Provide design services for the installation of rig receivers on Cinta-D, Wanda-A and Zelda-E platforms and hook-up. The scope includes process (P&ID preparation), mechanical, piping and instrumentation disciplines. | July 1997 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Design of hook-up for 6" Lita – Cinta "D", 6" SW Wanda "A" – Wanda "A", 12" South Zelda "A" – Zelda "A". | August 1997 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Design of monopod topsides (piping, equipment, electrical, instrumentation, pipelines) for North Wanda "B", Kartini, South Zelda "A" platforms. | November 1997 | Mr. Ramiro De Los Reyes 5159635 |

PROCESS / MECHANICAL / PIPING / E & I

| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|-----------------------|-----------------------------------|--|---------------|------------------------------------|
| MAXUS (Indonesia) | - | Topside modifications. Design of process, mechanical / piping, E&I for Vita-A and Widuri-P platforms. | November 1997 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Design of test separator for monopods and hook-up at monopods viz. Lita "A", Wanda "A", SW Wanda "A". | January 1998 | Mr. Ramiro De Los Reyes 5159635 |
| KODECO (Indonesia) | PT. Titis Sampurna (Indonesia) | Detail engineering of 12" onshore pipeline from Poleng offshore production facilities to process plant in onshore. | January 1998 | Mr. Kadek 7246029 |
| MAXUS (Indonesia) | - | Detailed engineering for the installation of by pass cooler and KO drum on the gas conditioning unit. The scope included piping, mechanical and instrumentation disciplines. | March 1998 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Marginal Field Development. Detailed engineering services for hook-up of test separators on Lita-A, Wanda-A and SW Wanda-A monopod platforms. | March 1998 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | North Wanda-B Monopod. Complete detailed engineering services for preparation of piping and instrumentation (process) drawings, mechanical, piping, instrumentation and electrical disciplines. | April 1998 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Design of bypass cooler, KO drums and associated modifications for supply of gas for turbines at MAXUS Widuri FSO. | May 1998 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Kartini-A Monopod. Complete detailed engineering services for preparation of piping and instrumentation (process) drawings, mechanical, piping, instrumentation and electrical disciplines. | July 1998 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Topside modifications for Zelda-A surge facilities and Widuri-E, free water and hydrocyclone systems. | October 1998 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Topside modifications Intan-A and Indri-A, fire water KO and hydrocyclone facilities. | March 1999 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Design new hydrocyclone system – Widuri-D and associated piping modification. | May 1999 | Mr. Ramiro De Los Reyes 5159635 |

PROCESS / MECHANICAL / PIPING / E & I

| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|---------------------------------------|-----------|--|-------------------|------------------------------------|
| MAXUS (Indonesia) | - | Design of Yani monopod facilities and tie-in to Karmila-A platform. | June 1999 | Mr. Ramiro De Los Reyes 5159635 |
| KODECO Energy Co. Ltd. (Indonesia) | - | Re-design of topside facilities at Poleng field AW, BW platforms. | July 1999 | Mr. John Hunt 5159049 |
| MAXUS (Indonesia) | - | Windri-A retrofit platform detailed engineering. | August 1999 | Mr. Ramiro De Los Reyes 5159635 |
| KODECO Energy Co. Ltd. (Indonesia) | - | Revamp of existing loading / storage and additional separation facilities at onshore receiving station, Gresik-South Java. | September 1999 | Mr. John Hunt 5159049 |
| MAXUS (Indonesia) | - | Zelda-A Phase 1 to 4 modifications. (The scope includes additional separators, hydrocyclone skids crude transfer pumps and jet pump). | September 1999 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Widuri-E FWKO and Hydrocyclone modifications. | September 1999 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Free Water Handling Project (Horizontal free water KO vessel and 2 nos. of hydraulic) North East Intan-A. | November 2000 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Design of Widuri-C water injection project. | September 1999 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Marginal field development North Gita-A platform detailed engineering. | December 1999 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Free Water Handling Project detailed engineering – Intan-A (2 nos of free water knock out skids, one hydraulic cyclone skid and one reject tank skid). | December 1999 | Mr. Ramiro De Los Reyes 5159635 |
| KODECO Energy Co. Ltd. (Indonesia) | - | Topsides modifications at Poleng & KE5/6 fields AW, BW and CPP platforms including process/pipeline studies/cost evaluations, additional well flow lines/manifold/production facilities/platform extensions. | December 1999 | Mr. Ramiro De Los Reyes 5159635 |

PROCESS / MECHANICAL / PIPING / E & I

| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|-----------------------|---------------------------|---|----------------------|------------------------------------|
| MAXUS (Indonesia) | - | Water Flood Project Widuri-D (free water KO vessel and water injection pumps). | January 2000 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Water Flood Project Widuri-C (Hydraulic cyclones and flow lines detailed engineering). | January 2000 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Vita-A retrofit well platform and Widuri-P modifications detailed engineering. | January 2000 | Mr. Ramiro De Los Reyes 5159635 |
| CONOCO (Indonesia) | ALTRA Consultants Ltd. | As-Built documentation and Process Hazard Analysis on Production Barge San Jacinto, Sembilang Field. | November 2000 | Mr. Alan Pennie 5120100 |
| CONOCO (Indonesia) | ALTRA Consultants Ltd. | Quantitative Risk Analysis of riser protection philosophy and engineering on Belida WHP-B in the Natuna Sea. | December 2000 | Mr. Alan Pennie 5120100 |
| MAXUS (Indonesia) | - | Marginal Field Development, Dani-A, Widuri-F platform detailed engineering | December 2000 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Marginal Field Development, Widuri-D well platform detailed engineering. | December 2000 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Pipeline related topside modifications, Widuri-E, D & P Modification. | January 2001 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | Pipeline related topside modifications, Widuri-B, C & P, Intan-A & B Modification. | January 2001 | Mr. Ramiro De Los Reyes 5159635 |
| MAXUS (Indonesia) | - | SBU (South Business Unit) Phase 2 Critical Drawing As-Built SBU Project (Phase 2 P&ID As-Built Project) Platform involved: Rama-A, C, D, G & I and Cinta-D, E, Kiti-A, Lita-A and Selatan-A. (Maxus) Widuri-A, Widuri-E, Vita-A, Aida-A Free Water Knock Out (FWKO) Facilities. | February 2001 | Mr. Ramiro De Los Reyes 5159635 |

PROCESS / MECHANICAL / PIPING / E & I

| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|------------------------------------|---|--|-------------------------|--------------------------------------|
| MAXUS (Indonesia) | - | Maxus Pabelokan As-Built Project – SBU (South Business Unit) Phase 2 Critical Drawing Upgrade. <ul style="list-style-type: none"> - Instrumentation design service, Intan-B FWKO facilities revamping - Intan-BPE structural analysis for platform and bridge - Monopods, wellhead and process platform-NBU. The PFD's shall cover the oil, gas and water system. - Yani-A, EWT additional 6" OD Rise Engineering analysis. | Mar 2001 – June 2002 | Mr. Ramiro De Los Reyes 5159635 |
| PT. SEMPEC (Indonesia) | - | Detailed engineering for metering skid-piping modification. | June 2002 | |
| CNOOC (Indonesia) | CNOOC (Indonesia) | Detail engineering for Intan BPC Water Treatment Platform. Engineering work included the piping system design, instrumentation design and electrical design for the whole platform. | January 2003 | Mr. Ramiro De Los Reyes 5159635 |
| PetroChina Jabung International | SembCorp Engineers & Constructors | FEED and Detail Design of topside facilities for BCD Project. <ul style="list-style-type: none"> - Process platform - FSO loading facilities - Onshore pipelines Services include complete installation engineering also. | 2003-2005 | Mr. Subramaniam +62 21 5741128 |
| Santos (Sampang) Pty. Ltd. | PT Pulau Kencana Raya | Detail design for topside of FPSO Seagood 101 for oil and gas processing | 2005-2006 | Mr. Laurence Shepherd |
| Amerada Hess Indonesia | PT Sempec Indonesia | Pre-bid engineering for Jambi Merang gas processing station | 2006 | Mr. PP George +62 21 574 1126 |
| ONGC India | PT Sempec Indonesia | Topside design of 4 new wellhead platform for Heera Redevelopment Project | 2007 – ongoing | Mr. C. Kamaleshan +62 21 57852581 |

MARINE RELATED

| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|--------------------------------|---|---|---------------|------------------------------------|
| Vietsor Petro (U.S.S.R) | Phoenix Offshore (Singapore) | Detail engineering and design of stringer for pipelay barge 547. | January 1988 | |
| Carbon – Black (Malaysia) | Sembawang-Maritime Comprimo (Singapore) | Detail engineering for the installation of 20" onshore/subsea pipeline from shore to SBM at Port Dickson. Conversion of flattop barge including stinger for pipelay mode. | April 1991 | |
| Shell (Malaysia) | Sembawang Maritime (Singapore) | Flattop barge conversion and stinger design for pipelay mode to lay 20" pipe at Port Dickson Shore to SBM. | June 1991 | Mr. Philip Reed |
| JAPEX (Indonesia) | PT. Nisconi (Indonesia) | Conversion of Derrick barge into pipelay mode. | January 1992 | Mr. Matsunaga 7207564 |
| Rockwater Offshore (Singapore) | - | Detail design and stress analysis of post trench plough. Here detail finite element analysis was undertaken. | March 1992 | Mr. G. Van De Velde +65 2680232 |
| PT. KOMARITIM (Indonesia) | - | Detail engineering for hull and hitch repair for Barge Annette. | April 1992 | Mr. Mashudi 7193740 |
| RANA/MANNAI Marine (Qatar) | QGPC | Bull Hanine and Maydan Mahzan Field Development. Complete design of lay barge PDS Marriner for installation of large diameter pipelines. Work undertaken included stringer design, mooring at gravity, anchor design for load seabed, barge structural check etc. | May 1996 | Mr. Tony Bromham +974425755 |
| JAPEX (Indonesia) | PT. PMM (Indonesia) | ABS Phase 2 Subsea pipeline installation. Conversion of flat top barge for pipelay model in low water condition. Design includes firing line configuration, stringer design, spuds design for stability and other related items and facilities for laying 2 and 4 inch diameter pipelines simultaneously. | December 1996 | Mr. Paul Hynes 7210303 |

MARINE RELATED

| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|---|---|--|---------------|-------------------------------------|
| TOTAL (Indonesia) | PT. SKJ | GTS-A to TMP Subsea pipeline installation. Design of flat top barge for pipelay in shallow water and swamp conditions. Complete design of the barge was undertaken which included firing line, stringer, barge structural checks, stability, mooring system and dynamics. | June 1997 | Mr. Mike Clarke 3146018 |
| KODECO (Indonesia) | - | Poleng Re-activation Project. This included platform modification, installing pipeline, SPM, FPSO and related facilities. | October 1997 | Mr. John Hunt 5159049 |
| Hyundai Heavy Industries (Korea) | R.J. Brown (Singapore)- | Detail engineering of stringer for pipelay barge. Stringer design specifications including dynamics and wave response criteria. | June 1998 | |
| BP Qatar | Manai Marine (Qatar) | Design of early production system <ul style="list-style-type: none"> - Jack up rig modification including new helideck - Pipeline and flexies - SBM and FSO mooring design | 1999 | Tony Bromham +971506312082 |
| MAXUS (Indonesia) | - | Design of monopods for locations at ATTI, Retno, East Rama, NE Intan. | March 1999 | Mr. Ramiro De Los Reyes 5159635 |
| Mannai Marine / Mansal Offshore (Qatar) | - | Self propelled Rig (Leen) conversion project management and design engineering of a 4000 dwt self propelled rig converted from a landing craft. Scope including submission for approved all documentations / analysis report to BV for certification. | August 1999 | Mr. Tony Bromham +974425755 |
| Petrochina Jabung International (Indonesia) | Sembcorp Engineers & Constructors (Singapore) | Betara Complex Development <ul style="list-style-type: none"> - 2 Marine terminals (LPG & Condensate) including - 3 Submarine pipelines - Process platform - Dolphines - FSO mooring design - Tanker mooring design | 2003-2005 | Mr. R.S.K. Mohan +62 811 840 478 |

MARINE RELATED

| CLIENT | ASSOCIATE | DESCRIPTION | CONTRACT DATE | CONTACT |
|---|----------------------------------|--|---------------|-------------------------------------|
| Petrochina Jabung International (Indonesia) | PT Depriwangga (Indonesia) | FEED Study for Relocation of Tuban Marine Terminal <ul style="list-style-type: none"> - Pipeline - PLEM - Mooring of SPM + FSO + Tanker | 2005 | Mr. Adityawan +62 81651181015 |
| EMP Kangean Ltd. | PT Dwi Prima Sembada (Indonesia) | Modification of DLB POE1 for pipelay in 100m water depth | 2006 | Mr. Arioto Kusumah +62 811947299 |
| ConocoPhillips (Indonesia) | - | Detail design of span buoyancy | April 2006 | |
| PetroChina Jabung International (Indonesia) | | Modification to the existing facilities at the LPG terminal for the berthing of compressed LPG tanker. | June 2006 | Mr. R.S.K. Mohan +62 811840478 |
| Punj Lloyd India | PT Sempec Indonesia | Stability and feasibility analysis for SIVA 1 for 16" pipelaying suitability at 70 m water depth | Dec 2006 | Mr. C. Y Ng. +62 21 574 1126 |