**Barry Gideon**

**Personal Detail**

*Date of Birth* : 8th November 1970

*Nationality* : Malaysian

**Education & Qualification**

*Education* :

* PhD – RMIT Australia, Thesis Title; *‘Structural Characterisation, Residual Stress Determination and Degree of Sensitisation in Duplex Stainless Steel Welds ’*
* Bachelor of Metallurgical Engineering – RMIT Australia.
* Diploma in Civil Engineering – Bedford College Malaysia.
* Lead QMS Auditor (IRCA) and Advanced EMS Auditor (EARA) – SIRIM Malaysia and COMSYS3 Australia.

**Relevant Experience**

**CORRMET LIMITED.**

**January 2010 to Present**

**Position : Proprietor and Principal Consultant**

*Scope* : Provision of Materials Engineering Consultancy for the following projects;

1. Julimar Development Project Subsea Engineering Support, Apace Energy Limited, Australia.
2. 24” Water Injection Pipeline Project, Maersk Oil, Pre-FEED Materials Selection and Preparation of Project Specifications – Qatar, Penspen Thailand
3. QA/QC and HSE Support; CADLAO Field Development Project – Australia, Blade Petroleum Philippines Limited.
4. ECA for AUT on Pipelines; provision of Training to Punj Lloyd, PTT and Penspen for 4th Transmission Pipeline Project – Thailand, Punj Lloyd
5. Development of Risk Management Plan and Register, PTT Navanarkorn Rangsit Pipeline – Thailand, Italian Thailand Development Limited.
6. Liwan Gas Development Project – China, PT Wood Group, Indonesia.

* Pipeline ductile fracture mechanics and fracture control plan.

1. Iraq Crude Oil Export & Expansion Project Phase 1, Penspen Limited, Thailand.

* Materials assessment for concrete coated linepipe.
* QMS audit of supplier in China.

1. Nabucco Gas Pipeline Project – Turkey, Penspen Limited UK.
   * Review of project specifications for welding, NDT and coating.
2. Alen Development Project - West Africa, Noble Energy Inc. USA.

* Perform corrosion modeling for export and condensate reinjection pipelines.

1. Gorgon HDD Shore Approach, AJ Lucas and ARV-Offshore, Australia.

* Development of NDT and welding philosophy for Phased Array and ECA for residual stress assessment and defect analysis for exclusion of PWHT on welds for test heads.

1. East Udang Development Project, Penspen Limited, Indonesia.

* Perform corrosion analysis.
* Preparation of detailed design specifications and engineering reports.

1. Julimar Development Project FEED Stage 1 and 2, Apace Energy Limited, Australia.

* Review of Material Selection Report, Corrosion Management Plan, Corrosion Control Philosophy, Lined CRA Study, Design Temperature and Pressure Philosophy.
* Development of NDT Philosophy for AUT, Phased Array and TOFD, ECA for pipeline and structural defect analysis.
* Perform erosion and corrosion analysis based on flow assurance documents
* Perform modeling to determine alternative options for line pipe material based on composition of H2S, CO2 and probability of corrosion.

1. Development of subsea gathering pipelines and a floating production unit for four offshore gas fields; Terang, Sirasun East, Sirasun West and Batur, East Java for Kangean Energy Indonesia Ltd., Indonesia.
   * + - Preparation of project specification for pipeline design concept (materials), Subsea Material Selection Report, Wall Thickness Calculation Report, Specification for Manufacture of Pipeline and Induction Bends, Selection of CRA and alloys for oil and gas application, Specifications for Design of Cathodic Protection, Specification for Design and Manufacture of Subsea Fittings (flanges, bends, etcetera).
       - Development of: welding and NDT Philosophy for AUT, Phased Array and TOFD, ECA for pipeline defect analysis.
     + Erosion and corrosion analysis based on flow assurance documents and determine alternative options for line pipe material based on composition of H2S, CO2 and probability of corrosion.
2. Yadana-Yangon Domestic Gas Pipeline Project, 24” API 5L X65 Gas pipeline and Gas Processing Facility for MOGE, Myanmar.
   * + Preparation of project specification for : Materials Selection report, Wall thickness calculation report, Specification for manufacture of pipeline and induction bends, design of cathodic protection, design and manufacture of fittings (flanges, bends, etcetera).
     + Development of: Welding and NDT Philosophy for, Phased Array and TOFD, ECA for pipeline defect analysis.

**ARV-OFFSHOREGROUP.**

**February 2007 to January 2010**

**Position : Group QHSE Manager and Metallurgist**

*Scope* : Responsible for Quality Health Safety and Environmental matters for ARV-Offshore group of companies. Primary responsibilities include developing, implementing and monitoring of Management Systems as well as guiding, implementing and review of Management Systems of subsidiary companies. Spearheading the ISO 9001, ISO14001 and OHSAS18001 certification program.

Responsible for material selection, development of testing programs and risk based integrity management on related projects for various clients. Reviewing and approving material specifications for equipment and assemblies being purchased including any welding procedures or other fabrication specifications applicable to Offshore Pipelines, Process Piping and Offshore Facilities. Development and review of NDT Philosophy for Automatic UT for pipelines.

*Projects involved in:*

1. Project Management & Engineering Consultancy to DrillTec Australia for the Execution of Horizontal Directional Drilling work for Devil Creek Development Project, Reindeer Gas Field, Australia.
2. Project Management & Engineering Consultancy for DrillTec GUT GmbH; Field Development in Kazakhstan.
3. Engineering and Feasibility studies for B13 Field, Chevron Exploration and Production Netherlands B.V. and Jasmine Field Development study Phase-3 Pearl Oil Thailand.
4. Project Management Consultancy for Asia Development Services and Field Development of Kambuna Field, Onshore and Offshore Facilities in Indonesia.
5. Installation of 42” ‘Z’ spool from the Arthit PLEM to existing Pipeline for PTT in the Gulf of Thailand.
6. Fabrication and Installation of an Inlet and Export PLEM and Tie-in Spool for the Arthit field in the Gulf or Thailand for PTTEP.
7. Project Management Consultancy for Engineering, Procurement, Installation, Hookup and Commissioning of Wellhead Platform, Sub-sea Pipeline, PLEM and FPSO for Bua Luang Oil Field Development Project for GFI USA, in the Gulf of Thailand.
8. Project Management Consultancy for the relocation of 3 units of SPM’s and installation of Sub-sea pipeline and riser systems in the Port of Ulsan, South Korea.

**NACAP ASIA PACIFIC GROUP**

**May 2000 – February 2007**

**Position : Regional TQM Manager and Metallurgist**

*Scope*: Responsible for Quality Health Safety and Environmental matters for Nacap Asia Pacific group of companies in various locations in Asia Pacific region. Primary responsibilities include developing, implementing and monitoring of Management Systems as well as guiding, implementing and review of Management Systems of subsidiary companies. Spearheading the ISO 9001, ISO14001 and OHSAS18001 certification program for the company in the Asian Pacific region.

Perform Material selection, development of testing programs and risk based integrity management on related projects for various clients. Development and review of NDT Philosophy for Radiography, Automatic UT, Phased Array, TOFD and ECA for pipeline defect analysis. Reviewing and approving

material specifications for equipment and assemblies being purchased including any welding procedures or other fabrication specifications applicable to Pipelines, Process Piping, Gas Separation Plants, Gas Receiving Facilities and Block Valve Stations.

*Projects involved in:*

1. Phu My to Ho Chi Minh Pipeline Project – Engineering Procurement and Construction of 65 kilometers of 36 inch grade API 5L X52 Gas pipeline and Block Valve Stations for Petrovietnam, Vietnam.
2. BP Tangguh Project, Landfall Horizontal Directional Drilling – PT Saipem, Indonesia.
3. Sai Noi Pipeline Project – Engineering, Procurement and Construction of 66.5 kilometers of 30 inch grade API 5L X65 Gas pipeline, Block Valve Stations and Metering & Regulating Station for PTT, Thailand.
4. Third Transmission Pipeline Project – Engineering, Procurement, Construction and Commissioning of 115 kilometers of 42 inch and 36 inch grade API 5L X70 pipelines, Gas Separation Plant and Block Valve Stations for PTT, Thailand.
5. Trans Thailand Malaysia Pipeline Project – Engineering, Procurement, Construction and Commissioning of 144 kilometers of 36 inch grade API 5L X70 and 8 inch grade API 5L X52 pipelines, Gas Receiving Facility (Slug-catcher) and station works for Petronas Malaysia and PTT, Thailand.
6. Panaran-Pemping Batam Island Crossing Project – Horizontal directional drilling, landfall and lagoon crossing, Indonesia.
7. Yong Hu Ning Pipeline Project – Horizontal directional drilling for ZPEB, China.
8. Muthurajawela Tank Farm Project – Horizontal directional drilling, landfall, lagoon crossing and construction of pipelines for Leighton Contractors, Sri Lanka.
9. Sakernan to Kuala Tungkal Pipeline Project – Construction of 71 kilometers of 28 inch grade API 5L X65 pipeline and station work for Perusahaan Gas Negara (PGN), Indonesia.
10. EAC2 Changi North and Tanah Merah - Horizontal directional drilling shore approach for Global Marine, Singapore.
11. Illijan Natural Gas Pipeline Project – construction of 16 kilometers of pipelines for National Power Corp. (NPC), Philippines.
12. Peninsular Gas Utilization Project, Loop 2, Segamat to Meru – Construction of 275 kilometers of 36 inch grade API 5L X70 pipelines and Block Valve Stations for Petronas Gas Malaysia.

**SOLUS OCEANEERING**

### January 2000 - April 2000

**Position : Consultant (Materials Engineering)**

*Scope*:

1. Commissioning of IDAMS (Inspection Data Analysis Management System) and baseline thickness survey for Petronas Carigali Malaysia.
2. Validation of design calculation on corrosion allowances for pressure vessels, heat exchangers, launchers and receivers for Petronas Carigali
3. Design analysis and corrosion analysis for CTOC (Petronas).

**UNITED SURFACE TECHNOLOGIES AUSTRALIA.**

### March 1995 – December 1999

**Position : Consultant (Materials Engineering)**

*Scope*:

1. Collaboration between RMIT University and UST Pty Ltd on welding/hardfacing of Stellite 6 to Duplex and Super Duplex Stainless Steel. Research on phase transformation and susceptibility to Intergranular corrosion (Weld decay and Knifeline attack) on Heat Affected Zones for offshore application.
2. Consultancy work for welding of superalloys for various clients including ExxonMobil, Shell and Santos Australia and
3. Preparation of QA/QC documentation and manufacturers data records.

**SHAPADU ENERGY AND ENGINEERING**

**October 1992 – March 1995**

**Position : Quality Engineer**

*Scope* :

1. Hook up and commissioning of offshore platforms for Guntong, Seligi, Tabu, IRB and Jerneh oilfields for ESSO in the South China Sea.
2. Above ground process piping for polyethylene plant, Petronas Malaysia

**SHELL REFINERY CO. PORT DICKSON, MALAYSIA**

**January 1992 – October 1992**

**Position : QA/QC Inspector**

*Scope* :

1. Construction and maintenance of storage tanks in lube oil blending plant, tank farm.
2. Fabrication and installation of 6-inch diameter firewater line in lube oil blending plant area.
3. Structural work on New Ship Import and Export Facilities.
4. Fabrications of 2 kilometers waste water and effluent pipeline from Shell Refinery to New Ship Import and Export Facilities.

**MECHMAR HARRICK**

**January 1991 – January 1992**

**Position : Quality Control/ Welding Inspector**

*Scope* :

1. Fabrication of pressure vessels for JGC, BTT of France and Shell Middle Distillate Synthesis (SMDS) Sarawak.
2. Fabrication and erection of storage tanks and LPG sphere tanks for Hyundai Engineering and Petronas Penapisan.
3. Fabrication of heavy wall vessels in accordance with ASME U-stamp for Petronas Carigali and Sarawak Shell.

**MITE & SOLUS OCEANEERING**

**November 1988 – January 1991**

**Position : Level II Non-Destructive Testing Technician**

*Scope*  :

1. Terengganu Crude Oil Terminal (TCOT) high pressure fuel line, fire wall and structures for production & compression platforms in the South China Sea for ESSO Production, Malaysia.
2. Fabrication of fuel line and storage tanks in storage depot for Petronas Dagangan, Malaysia.
3. Construction of offshore platforms, jacket legs and production modules for Jerneh, Seligi and Guntong Oil Fields, ESSO Production (M) Inc. fabricated by Sime Sembawang Engineering, Malaysia.
4. Fabrication of production and compression modules for Dulang oil field and ship repair and maintenance work on oil bulk and ore carriers, supply vessels, crude oil carriers and cargo container carriers for Malaysian Shipyard and Engineering.
5. Hook up and commissioning of jacket leg platform for Bach Ho field and 100 kilometer pipeline from the Bach Ho, Ruby and Rang Dong oil fields, Vietnam.
6. Hook up and commissioning of jacket leg platform for Cairn Energy gas development field in the Gulf of Khambat, offshore Western India.

**Technical Contribution and Publications**

1. B Gideon, Phase Transformation in Hardfacing of Stellite 6 (Co-Cr-W) to Duplex and Super Duplex Stainless Steel and its susceptibility to Intergranular Corrosion (knifeline attack), RMIT University and UST, Melbourne, Australia, (1999).
2. B Gideon, Technical report on the IIW Asian Pacific International Congress In conjunction with 12th international federation of heat treatment and surface engineering congress and incorporating the New Zealand Institute of Welding 2000 annual conference and the WTIA 48th annual conference.(Internal Review on welding and testing of X80 material) Melbourne, Australia, (2000).
3. B Gideon Technical report on International conference on pipeline repairs, WTIA Technical 7 & SMART pipeline group. (Internal Review on repair welding on pipelines) Kuala Lumpur, Malaysia, (2001).
4. B Gideon, L Ward and G Biddle, Testing and Characterization of Duplex Stainless Steel Welds and their Susceptibility to Intergranular Corrosion, Proc. European Corrosion Federation (EUROCORR 2006) Conference, Maastricht, Netherlands, pp. 24-28, (2006).
5. L Ward, D Carr, B Gideon, Australian Institute of Nuclear Science and Engineering (AINSE) research grant on Determination of Residual Stress Levels in Welded Duplex Stainless Steel Gas Pipelines using Neutron Scattering, Grant no. 2681, and Testing conducted at Australian Nuclear Science and Engineering Organization (ANSTO) Hi-FAR Reactor, (2006).
6. B Gideon, L Ward and D G Carr, Strain Measurements by Neutron Diffraction and Characterization of Duplex Stainless Steel Welds, Proc. Duplex 2007 Int. Conf. and Expo., Grado, Italy, 18- 20 June 2007, Paper #49, (2007).
7. L Ward, D Carr, B Gideon, Research grant "20071037", titled "Measurement of residual macro- and micro- (interphase, intergranular) stresses in two duplex stainless steel pipeline-welds with different susceptibilities to Intergranular Corrosion (IGC) and Stress Corrosion Cracking (SCC)." for time on "SMARTS" at Los Alamos USA, (2007).
8. B Gideon, L Ward and G Biddle, Duplex Stainless Steel Welds and their Susceptibility to Intergranular Corrosion, Journal of Minerals & Materials Characterization & Engineering, Vol. 7, No.3, pp. 247-263, (2008).
9. B Gideon, L Ward, D G Carr and O Muransky, Duplex Stainless Steel Welds: Residual Stress Determination, Magnetic Force Microscopy and Susceptibility to Intergranular Corrosion, Proc. 6th European Stainless Steels Conference, Helsinki, Finland, 10-13 June 2008, Paper F-2P pp. 629-636, (2008).
10. B Gideon, L Ward, D G Carr and O Muransky, Duplex Stainless Steel Welds: Residual Stress Determination, Magnetic Force Microscopy and Susceptibility to Intergranular Corrosion, European Corrosion Conference, Helsinki, Finland, poster F2-P, (2008).
11. B Gideon, L Ward and K Short, Characterization of the Weld Regions within Duplex Stainless Steels using Magnetic Force Microscopy, Journal of Minerals & Materials Characterization & Engineering, Vol. 7, No.2, pp. 115-126, (2008).
12. B Gideon and L P Ward, Intergranular Corrosion and Residual Stress Determination of Duplex Stainless Steel Pipeline Girth Weld, Proc. Corrosion and Prevention Conf. (CAP08), Wellington, New Zealand, 16-19 November, 2008, Paper #110, pp. 1-12, (2008).
13. M Bassiouni, L P Ward, R K Singh Raman, A P O’mullane, B Gideon, S Bhargava: Studies On The Degree Of Sensitization Of Welded 2507 Super Duplex Stainless Steel Using A Modified DL-EPR Test Procedure, Corrosion and Prevention Conf. (CAP10), Adelaide, Australia, Paper #38, (2010).
14. M Bassiouni, L P Ward, R K Singh Raman, A P O’Mullane and B Gideon: Study on the Microstructural Changes and Impact on the Pitting Corrosion Behaviour of 2507 Duplex Stainless Steel Weld Regions, Corrosion and Prevention Conf. (CAP10), Adelaide, Australia, Paper #39, (2010).

**Membership and Affiliations**

* American Welding Society (1993)
* Nickel Development Institute (1998)
* National Association of Corrosion Engineers (2003)
* American Society for Testing of Materials (2004)
* (Panel Member for Committee A01, E04, E08, E28, G01)
* American Society of Materials (2004)
* Society of Petroleum Engineers (2007)

**Reference**

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