

## SUMMARY



PETER BARON

Peter has a 39 year association with the Refining and Oil & Gas industries.

He has worked within the Operating and Contracting / Consulting industries and gained experience in Refining, Oil & Gas Production, Gas Processing and Hydrocarbon Transportation.

He has held positions in Technical and Project Management, Systems Development and Quality Assurance.

Key areas of experience and major responsibilities include:

- **Independent Consultant** in simulation and optimization, technical and operational solutions for refinery operations and energy reduction and in oil and gas field development, conceptual studies and front-end design.
- **Independent Engineer** for design and development reviews, audits, and leadership of development appraisals
- **Client Representative / Advisor** for project development and decision support
- **Project Management & technical direction** of multi-discipline engineering projects for refinery, onshore / offshore oil & gas and pipeline projects.
- **Management** of multi-discipline engineering design office and CAD/Database systems, and **Project Manager** of the development of engineering software systems.
- **Development and Management** of a Corporate Quality Management System to ISO 9001 certification, auditing and assessments.

### **Qualifications & Professional Associations    World Wide Experience**

B.Sc. (Hon.) Chemical Eng,  
Chartered Engineer,  
Fellow; Institute of Chemical  
Engineers,  
Certified Lead Assessor (QA).

Experience has been gained in the UK North Sea, Former Soviet Union, Middle East, North / West / Central & South Africa, Gulf of Mexico and North / South America & Australia.

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**BARONNET**  
**P&JB Consulting Ltd.**

**DETAILED PROFESSIONAL EXPERIENCE**

**INDEPENDENT  
CONSULTANT**  
**Nov 2008 – to date**

**Margham Dubai Establishment – Independent Review / Audit**

The MDE Gas Plant is being expanded with a Booster Compression Project; the review embraces the entire project to audit the strategy & execution of the project, included integrity, lessons learned, and the business processes and oversight methods.

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**PETROFAC ENERGY  
DEVELOPMENTS  
INTERNATIONAL**  
**2006 - 2008**

**Director of Project Development**

Appointed to the UAE office to lead the development of new projects

**Offshore** - Crux, FPSO, Timor Sea – Design Review and Due diligence of proposed FPSO based gas recycling/stripping development.

MEO, Timor Sea – review of concept designs for offshore LNG and Methanol production platforms.

**Refineries** – Development of three refinery basic engineering packages for EPC bid; simple condensate splitter with hydrotreating; complex refinery with thermal/visbreaking cracking complex; full complex hydrocracker based scheme. Support to commercial negotiations.

Development of numerous other schemes for Gas Oil upgrading, residue cracking, and brownfield upgrades.

**Pipelines & Terminals** – Development of the concept design, preliminary engineering and Capex/ Opex of a multi-product pipeline and associated import and distribution terminals; routed from Maputo, Mozambique to Gauteng Province in RSA.

Oil Storage & Blending Terminal, Fujairah – development of schemes, basic engineering through to EPC bid-package, support of commercial negotiations.

**Onshore Oil & Gas** – Saih Rawl, Oman – development of concept and costs.

Kurdistan, Iraq – development of fast-track EPF production facility with concept definition, costs and schedule.

Chergui Gas Tunisa – design review and due diligence with safety review workshops for onshore production and onshore/offshore pipelines.

**Alternate Energy** – development of concept for a concentrated solar power generation scheme

**BARONNET  
P&JB Consulting Ltd.  
2001 - 2005**

**Managing Director**

Responsible for the creation of an Oil & Gas Consultancy for providing an Internet linked network of experienced oil & gas consultants providing services as a virtual team.

**Assignment – Crescent Petroleum International, UAE**

Project Manager for the concept, basic engineering and EPC of a new Gas Treatment plant for Sharjah, UAE. Management of EIA Studies for Offshore facility, pipelines and Gas Plant. Tendering of Client support services (TPI; O&M; EIA) and execution of reviews and support studies during EPC phase. Site Management & Construction / HSE overview and systems acceptance and pre-commissioning.

Technical responsibility for offshore and onshore h.p sour gas pipelines.

**Development Consultancy, UAE**

Technical Advisor to a financing group of new field developments in an onshore East African location.

**Project Director - Petrofac International; UAE**

FEED for QP, Qatar to upgrade NGL 1,2,3,&4 facilities for increased throughput and new feed stocks; including two new gas pipelines; slug catcher and Propane Refrigeration System. Facility upgrade included column re-trays; new and replacement reboilers, condensers & rundown coolers; additional pumps, air coolers and extensive hydraulic debottlenecking of lines and valves. Supporting works included Risk and Environmental; Control Systems extensions and extensive site works & surveys.

**Proposal Director - Petrofac International; UAE**

EPIC tender for new grassroots Refinery at Sohar in Oman; responsible for complete tender, cost & schedule and representation at JV co-ordination.

Lead design improvement studies and basic engineering for non-licensed units.

**Development Consultancy**, prepared overview analysis of issues facing a new field development in onshore Africa.

**Independent Engineer** reviewing process facilities of the Shell Sakhalin Development – offshore production; onshore receiving and processing terminal; pipelines; pumping & compression stations; LNG production facility; export terminal – LNG and Oil

**Independent Engineer** for PEER review of new heavy oil concept development in East Africa

**Independent Consultant – Technical Advisor / Arbiter** to the Contract Close-out Team of the subsea and topsides facilities of the Moss gas development, offshore Mossel Bay, South Africa

**STONE & WEBSTER  
CONSULTANTS, INC.  
1999 – 2001**

**Executive Consultant, Oil  
& Gas**

Responsible for the creation and management of the Oil & Gas practice

**Manager, Independent Technical Review** of the subsea and topsides facilities of the Moss gas Bredasthorp development, offshore Mossel Bay, South Africa

**Technical review** of new LNG technology, process, energy efficiency and cold box technology.

**Study Manager** and technical assistance to conceptual design definition of the Burlington MLN and Satellites field development and export facilities, Algeria

**Pipeline Assistance** in the technical analysis of operational / commissioning difficulties of a gas pipeline/ power project in S. America. Project Support to the audit of the BTC pipeline (Turkey).

**Development assistance** to various confidential projects; Gas / Condensate field development and transport pipelines (gas and NGL – South America); offshore and onshore gas pipeline (Alaska / Canada); oil & gas field expansion (UAE), water injection (North Africa), oil basin infrastructure development (North Africa).

Provided technical support to JV office, Sharjah, UAE on EPC bids

**GRANHERNE INT.  
1989 - 99**

**GRANHERNE INC.  
1997 - 99**

**General Manager**

Responsible for the set-up and management of the Granherne office in Halliburton, USA

**Technical Design Review** of the design / engineering of the Shell Malampaya GBS offshore development, Far East

**Asset Development planning** for Chevron / Halliburton JV West Cameron 17 field in the GOM.

Associated with reviews, proposals and technical assistance to work in Offshore Brazil, Angola & Gabon and Subsea GOM.

**Technical Engineering  
Manager  
KBC Joint Venture**

Seconded to KBC Joint Venture, **responsible for all technical and engineering activities** on the Esso Chad Development and Export Pipeline project. The project was a green field 250,000 bpsd heavy oil development, including totally new infrastructure, 500 km of inter-field lines, 120mw power generation, 10,000 bpd crude topping units with 30" x 1100 km heated export pipeline, with 3 pump stations and FSO export facility.

Development studies for new refinery (3 -5,000bpd)

**GRANHERNE LTD.  
1996-1997**

**Head Consultant**

Responsible for Sales and Marketing activities and coordination with parent group for international sales and tenders; including technical authorship of proposals. Study Manager and Process Consultancy

Led **Onshore Oil & Gas project studies** in UK, North Africa, Near & Far East; typically :-

- Algeria; Block 208 development; HBNS production and export pipeline cost audit & verification
- South America, Camisea gas field and gas / condensate export pipeline and terminal design studies
- South America, Dacion Heavy oil field, Venezuela
- Pakistan; Gas field development, layout, pipeline export vs. power generation option studies
- Abu Dhabi; Das Island flare rationalization studies, Bu Hasa water handling concept studies
- Sakhalin Island II – technical audit and verification for World Bank with NSAI.
- UK – provide partner peer review and audit on FPSO operator / main contractor.

Led onshore heavy oil business development initiative for Dresser-Kellogg group of companies

**Manager, Middle East  
Operations  
1995 -96**

Responsible for **management and business development of company operations** in the Middle East and Sponsor for work executed in the UAE. e.g. Crescent Petroleum – offshore platform troubleshooting and re-design work, Das Island flare studies, Gas Supply Study for interchange of gas between Oman and UAE.

**GRANHERNE - Muscat  
Branch  
1994-1995**

**Senior Project Engineer**

Managed the creation of Granherne LLC, the first Omani / Foreign JV Oil & Gas Consultancy

Seconded to the Electrowatt/Granherne JV - **responsible for multi-discipline engineering projects** under the Local Design Service Contract for Petroleum Development Oman LLC, managing conceptual, front end design and detailed engineering for the development of oil and gas production facilities and pipelines in the Sultanate of Oman. Various studies / engineering packages for Oman Refinery

Responsible for all design engineering on the Nimr heavy oil field. Managed some 200,000 man-hours of design/engineering projects and provided strategic review to Client development plans, including regional development studies for gas and power distribution, main oil line optimization. Typical projects included water disposal via high pressure pipeline to deep injection wells – 1million bbl/d at 150 bar; gas and LPG / NGL studies; oil facility integrity reviews (incl. QRA studies)

Provided technical assistance to the Abu Dhabi office on various studies for ADCO & ADMA Opco.

**GRANHERNE LTD.  
1989-1994  
Project Manager/  
Consultant/ Corporate QA  
Manager**

**Corporate QA Manager** responsible for the implementation of the Company QA policy, development and operation of the Company ISO 9001 certified Quality Management System. Project QA set up and audit as company Lead Assessor on in - house projects and assessments/audits of sub-contractors.

Providing guidance and assistance to other corporate offices on the implementation of QA policy and training. Typically as performed for the Granherne/Electrowatt Joint Venture in Oman.

**Project Manager** - offshore gas (high pressure 42" line) pipeline feasibility and design study, (Middle East) landfall and routing studies, free span, buckling and lay analyses, stability and installation review, responsible for the overall schedule / budget.

**Project Manager** for Oil and Gas Production studies for various onshore & offshore studies, facility debottlenecking limitations, capacity increase, operations improvement, main oil pipeline and export terminal system debottlenecking.

**Managing a multi-discipline** team of engineers and support services for progressing selected concepts through to front end design and detail design stage.

**Project Manager and Head Consultant**, Lisichansk Refinery, Ukraine, Crude Distillation Unit process / energy improvement study and revamp design, including column retrays.

**Study Manager** for crude condensate distillation expansion and alternate feedstock processing

**Project Manager**; - studies for development petroleum industry in Calabar, Cross River region, East Nigeria including refinery, river import / export terminal

**Project Manager** responsible for the development and direction of the companies engineering systems and software developments

**BP INTERNATIONAL,  
UK,  
1987-1989  
Senior Consultant**

**Team Leader** of the Engineering Systems development group incorporating the project management of the analysis, specification and implementation of a corporate engineering software system for design studies of oil and gas production systems. Business Analysis for the specification of corporate software systems

**GLOBAL  
ENGINEERING, UK  
1983-1987  
Manager, Computer Aided  
Engineering  
1986-1987**

**Responsible for all company CAD and Database** activities. Supervision of the developments, coordination of all engineering computing requirements and management of the Corporate Engineering Database and CAD contributions to the company Oil and Gas projects.

**Project management** of as-build projects using CAD for Onshore, Offshore and Refinery processing plant and for the implementation of CAD within an International Oil Refining Company.

**Engineering & General  
Manager (Oman)  
1984-1985**

**General and Engineering Manager** responsible for the activities of the Oman design and engineering office (up to 150,000 man hrs/yr.) providing services for the onshore oil and gas field, drilling, production, main oil line and export terminal, and refining facilities, including gas and LPG recovery plant.

Involved in projects throughout Oman involving topics such as: water injection, gas recovery, rapid deployment production facilities, flare systems, pipelines & additional pumping stations, effluent treatment. Debottlenecking of the steam driven Marmul heavy oil development. Adnoc (UAE); designed / presented training course for Senior Operational staff in Refinery Improvement.

**Chief Refinery Engineer  
1983-1984**

**Responsible for all Refinery Group** Activities including: Lead Engineer on refinery studies; Project Engineer on Offshore UK Platform conversion/revamp to pipeline export; Pipeline Conceptual design studies; block flow optimization study for addition of refinery conversion process (FCC, HCC & RCC)

**Project Manager** for Heavy Crude Dehydration studies; Failure analysis and redesign of a collapsed crude oil wash tank system; followed by supervision of re-build Engineering Contractor and on-site commissioning support.

**REFINERY SYSTEMS,  
UK  
1981-1983  
Consultant & Owner of  
Company**

**Independent Consultant** providing refinery technical support, energy studies, simulation services, process design, process improvement and troubleshooting studies. Business studies, training seminars. Computer based technical support to sales and operating companies in the Refinery and Chemical industries. Registered UK Government Energy Consultant

Provided consultancy in CDU, FCC, GCU, HDS, VDU and other refinery process systems. Provided environmental troubleshooting with refinery revamp designs.

**CHEMSHARE PROCESS  
SYSTEMS LIMITED  
1979-1981  
Manager, Refining  
Technology**

**Consultancy services** in optimization, process improvement and energy conservation to the oil industry, plus Project Management of the basic engineering designs for refinery improvement. Fractionation and Heat integration studies on Refinery Process Units to optimize economics, increase throughput or improve separation / product slate.

**Chief Process Engineer**

Development of the control strategy, systems logic and software flow sheets for a Crude Unit process control computer.

**LINDSEY OIL  
REFINERY**

**1972-1979**

**Senior Process Engineer**

**Responsible to refinery operations manager** for all process engineering and technical service work throughout 2 x 100,000 bpsd refinery units - including day-to-day troubleshooting, plant debottlenecking, optimization and improvements, computer services, detailed design briefs and specifications for new equipment and plant revamps, selection of catalysts and chemicals.

**Project Engineer** on FCC expansion projects, tank farm and import / export terminal expansion projects including 3 x 1 mmbbl tanks, jetty extensions and pumping stations

Studies and designs for revamps for product improvement, energy recovery and process optimization on CDUs, reformers, power station and individual equipment upgrades of furnaces, columns, compressors, catalysts and utility systems.

Production of specifications for major process engineering projects; e.g. crude unit, HDS, reformer, sour water and utility systems debottlenecking and revamps.

**BURMAH/CASTROL  
REFINERY**

**1969-1972**

**Chemical Engineer**

**Technical support** on the construction, and start-up of the new fuels and lubes refinery. Training to Operator Standard, guarantee tests, commissioning and troubleshooting, followed by process development and chemical plant design.

**PUBLICATIONS AND  
PRESENTATIONS**

Some **eight major presentations** at public conferences with a similar number of publications on a variety of oil industry topics including; energy conservation, revamp engineering, CAD, computing and Quality.