

WEIR, JAMES W

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OBJECTIVES

I wish to leverage my robust field and project experience with subsea and drilling equipment, direct hands-on approach to problem solving, and limitless curiosity for new challenges as both the leader and manager of an engineering team.

I have a passion for problem solving and doing things differently, it is coded in my DNA.

EDUCATION

2012 – University of Texas, McCombs School of Business

Executive Education - Degree in Technology Commercialization

[Received award for best investment board presentation]

2004 – Lamar University, Beaumont, TX

B.S. Mechanical Engineering, Minor in Mathematics / 3.8 GPA

Member of Pi Tau Sigma - Engineering Honor Society

Mini Baja Competition for 2 years – developed alternative hydraulic transmission

EXPERIENCE

National Oilwell Varco, LP ♦ 6390 Eldridge Parkway, Houston TX
Engineering Manager, Controls July 2014 – Present

Lead a team to develop all new subsea control valves for BOP equipment

Managed entire subsea valve suite (including accumulators and electro-hydraulic)

Managed field support engineering for technical challenges

Discovered field issues and implemented solutions through Product Information Bulletins (PIBs)

Developed system for addressing technical questions.

Worked directly with customers to solve downtime challenges and troubleshoot control systems.

Gained four US patents on subsea technologies.

Developed in-house manufacturing of subsea hydraulic valves.

National Oilwell Varco, LP ♦ 7909 Parkwood Circle Drive, Houston TX
Corporate R&D Engineer Jan 2010 – July 2014

Reporting directly to CTO, advising on technical challenges and merit of acquisitions

Worked with Corporate Business Development to show the technical viability of Dual Gradient Seabed pumping solutions, and proposed a project requiring 15 million USD and 2 years of work

Liaised with sales, customers, and engineering managers daily to identify opportunities for innovation

Developed Concepts into Prototypes, typically small scale

Initiated relationships with outside manufacturing resources and maintained healthy work flow

Lead a team to make a full scale working example of several concepts

Developed a business plan to support the concept and launched a new business group

Acted as lead engineer for cross-divisional projects and testing concepts from Norway group

Evaluated ideas and assisted with portfolio management

Applied for and was granted various patents (listed below)

Worked hands-on to assemble and test several concepts in the field or in lab conditions

Travelled internationally to SPE conferences, customers, and field offices

Wrote several papers and presented at conferences

Managed teams of young engineers and developed their careers and goals

Spent time onsite for hydraulic fracturing, working with customer on datalogging and diagnosing pumps

National Oilwell Varco ♦ 12950 West Little York Road, Houston Texas
Research and Development Engineer Pressure Control Division 2005 – 2010

Developed all new Blow Out Preventers based on specifications and requests from Management

Designed and tested various ram blocks and seals

Found new and unique ways of solving problems

Worked closely with manufacturing and assembly crews to ensure manufacturability

Developed new methods of simulating annular BOPs, using a 3D printer and RTV rubber

Developed new algorithms for full hyperplastic finite element analysis

Worked with leading companies on nonlinear solvers (ABAQUS and MSC) to simulate our rubber deformations, stresses, and failure modes

Developed a new and unique latch for a subsea MUX control system

Implemented the first application of the latch system on a rig

Engineered a prototype Continuous Circulation System into a production unit

Travelled extensively with the system and served as on-site technical lead both offshore and onshore

Spent time in the customer office as technical advisor on the project

Received patents for various solutions to challenges

Varco Shaffer, Inc ♦ 12950 West Little York Road, Houston Texas

Mechanical Engineering Intern Summer – 2004

Analyzed and checked all critical components for compliance with regulations

Investigated the adoption of a fiber optic communication system to replace the existing copper Ethernet

Wrote a design verification report detailing the entire system for approval by DNV

Performed various finite element analysis and calculations of L10 Bearing Life and Fatigue

Varco Shaffer, Inc ♦ 12950 West Little York Road, Houston Texas

Mechanical Engineering Intern Summer – 2003

Worked in the lab helping troubleshoot mechanical, hydraulic, and electrical control system issues

Designed a method of transporting and maintaining the entire system

Went to the field to support the first field trials of the system

SKILLS

10 years of International Travel Experience

Outgoing and Professional

Excellent presentation skills

Energetic and Passionate about Problem Solving

Technical Writing

SPE 151249

E&P Magazine, Oct 2012

Patents

Blow Out Preventer and Connector

US7798466B2 - US8540017B2

US8544538B2 - US9260932B2

US9074450B2 - EP2623708A2

Marine Riser

US9022125B2

Top Drive

US20150027782A1 - US20130126769A1 - US8631822B2

Dual Gradient and Managed Pressure Drilling (MPD)

WO2012006457A1 - WO2015183600A1