Tom Macrae - Drilling and Well Control Specialist

Personal Summary

A graduate engineer with over 30 years supervisory drilling experience. Started oilfield career in the North Sea as Trainee Driller back in 1981 working with various drilling contractors before joining BP in 2000 as a Senior Company Man. Started consulting in 2005 and specialize in drilling, well control, risk management, training, coaching and auditing. I have worked on Platforms, Jack-ups, Semis, **Drillships** and Land, drilled wildcat, exploration, appraisal, development, HPHT, ERD and H2S wells and experienced extreme conditions in the Arctic, West of Shetland, Malaysia, **West Africa**, Gulf of Mexico, **Mexico**, India and the Caribbean.

Flying A Well Control & Drilling Services Ltd: from June '14 Director and Lead Drilling Advisor/ Consultant.

Supplying Project Management, Drilling Supervision, Engineering, Well Control Assurance, Auditing, Coaching, Training, Competency and Abandonment and Decommissioning Services. Software development and promotion.

Clients:

July 19 – Apr 21: Petronas - Senior Drilling Supervisor

Rowan Renaissance, 6th Generation Deepwater Dual Activity Drillship, Mexico (Gulf Coast). Yaxchillin Exploration Project. Utilised MPD to successfully complete and test well.

Pacific Santa Ana, 5th Generation Deepwater Dual Activity Drillship, commenced 14 well Plug and Abandonment Program off the coast of Mauritania in Nov '19.

Oct 18 – Jun 19: ONGC - Senior Drilling Supervisor

Vantage Platinum Explorer, 5th Generation Deepwater Drillship and Universal SSV Lousiana, 2nd Generation DP Semi, East Coast of India. Development project drilling and completions

Nov 17 – Sept 18: BW Energy - Senior Drilling Supervisor

Borr Norve, Jack Up, Reactivated rig in Cameroon before taking it to Gabon for a three well subsea exploration and production program. Performed subsea completions and well testing on all wells drilled. Completed project in time and within budget.

Sep 17 – Nov 17: Ithica Energy - Senior Drilling Supervisor

Ensco 122. 'Ultra-Premium Harsh Environment' jack-up Harrier Development Well, Subsea completion. North Sea. Successfully completed on time and within budget.

Sep 15 – Aug 17: Cairn Energy - Senior Drilling Engineer/Senior Drilling Supervisor

Stena DrillMax, 6th Generation Dual Activity Deepwater Drillship. Supervised extended well test upgrades in Las Palmas prior to taking the rig to Senegal for deepwater wildcat exploration program. Major discovery, completions and well testing on all wells drilled. Completed project in time and within budget.

Lead Auditor in conjunction with ADC Ltd and Lloyds Register for deepwater rig selection for upcoming project in Senegal in 2016

Jun 15 – Sept 15: Chrysaor UK - Senior Drilling Supervisor

TOI S714 2nd Generation Semi. Mustard Exploration Well, West of Shetland in June 2015. Successfully completed on time and within budget.

Jun 14 – May 15 : ABEL ENGINEERING - Operations Manager

European marketing tour to promote the ALCS and HPSN Tools in March 2015.

Lead Auditor in conjunction with ADC Ltd for Cairn Energy rig selection for upcoming project in Irish Sea in February 2015

Cajun Express 5th Generation Semi Onboard Well Control Specialist providing Well Control Assurance and Training during critical drilling phase of Cairn's 2014 exploration well in Senegal.

Personal

Nationality: British D.O.B: 30/09/1959 Email: tommacrae@hotmail.com Qualifications: Open University: BSc in Engineering – 1997 Bell College of Technology: HND with Distinction in Engineering – 1980 NVQ D32 / D33 Auditing

Technical Skills

Deepwater Drill Ships / Semis **Dual Activity** HPHT / Sour Gas / ERD Mud Cap Drilling Jackups, Platforms, Land Rigs Well Control Assurance Decom / Abandonments Casing Recovery Pile failure investigation. Corporate Auditing -Drilling Completions / Workovers / TTRD **Dual Completions** Ultra Deepwater Drilling Horizontal Barefoot Completions Arctic Drilling Slot Recovery / Tie Backs **Rig Reactivation** Drilling Engineering

Noble Paul Romano 2nd Generation Semi called out to plan and execute Mud Cap Drilling Contingency on Genel's 2014 exploration well in Morocco. Contingency not required. Provided loss contingency Gunk Pill Plan.

ACE Drilling Services LLC: Sept 2005 – June 2014: Director and Lead Consultant Clients:

BHP Billiton – TOI CR Luigs – Drilling Supervisor. Gulf of Mexico. Development drilling and completions in Shenzi and Neptune fields.

TOI KG2 – Drilling Supervisor. Malaysia. Exploration drilling Cairn Energy – OR Corcovado / Stena Forth / Stena Don. Senior Drilling Supervisor. Greenland. Wildcat drilling over two summer seasons. Office DE during winters. Energean Energy – ENSCO 85 / Energy Exertor / Prinos Platform. DS / SDSV - Greece Slot recovery, dual completion, high level H2S, ERD, workovers.

Utilised 5kpsi rated, 1,000HP skid mounted DC/SCR drive twin derrick rig and drilling package with a 9,000ft range for workover and sidetrack operations from the deck of Prinos-A Platform in Kavala.

ATP UK Ltd – ENSCO 72. Ensco 70. Senior Drilling Supervisor. Southern North Sea. Unmanned platform development wells. Office prep work prior to drilling. Dong Energy – ENSCO 70 – Senior Drilling Supervisor. Danish North Sea. Exploration and development wells. Some **HPHT. Challenging Zechstein Salt formations.** Office work when required.

BP: Nov 2000 – Sept 2005: Senior Drilling Supervisor – Staff Projects:

Transocean Rather / PBLJ. West of Shetland. Deepwater development drilling. Corporate Audit Team. Drilling Specialist. Ensco 76. Trinidad

Bolder B92. Wytch Farm. Land Drilling. Performed initial acceptance audit of Rig92 (commissioned by BP especially for ERD work) – 5,000psi rated, 1,200HP, 30,000ft, 44kftlbs continuous torque triple derrick rig. Stayed on and helped supervise first two wells drilled with new rig, F22W and F22X.

Rowan Gorilla VII. Norway. Valhall WIP pile remedial project.

Liev Eiriksson. Angola. Ultra deepwater exploration.

North West Hutton Abandonment – planned and executed conductor recovery of 40 platform wells.

Bruce Platform. North Sea. Horizontal barefoot completions, TTRD, Workovers, Snubbing, Infill drilling.

Drilling Contractors: July 1981 – Nov 2000

Drilling Trainee to Senior Toolpusher / Integrated Services Superintendent Companies:

KCA Deutag, Deutag, Noble Drilling, Global Marine, Bawden, Neddrill & Santa Fe. Toolpusher. Worked on platforms, Jackups and Semis in North Sea and West Africa. Development, exploration and wildcat drilling. HPHT and Sour Gas wells. Completions. Workovers. Rig Re-activation. Developed NVQ Drilling Competency System when at KCAD. Spent 18 months working with Boots and Coots (directly under Boots Hansen) on Norwegian blowout in 1989.

Anadrill: Jan 1997 – Nov 1997: Directional Driller

Sedco 714, Sedco Explorer, Scarabo 6 and Tiffany Platform. West of Shetland. Performed DD duties including PDM servicing and rebuild, BHA design and well profile engineering and planning. Completed several open hole sidetracks during short period of time as DD.

Languages

Primary: English Basic: French & Spanish

Soft Skills

Presentations MS Office Applications Performance Coaching Custom Training Courses Competency Assessment Rig and Crew Auditing Incident Investigation / Reporting Man Management

Courses

IWCF Level 4 Dec 2020 BOSIET / HUET inc EBS 2019 Skyscape 2019 DECC Level 1 UKOOA Offshore Medical 2018 HPHT / H2S / ERD Stuck Pipe Casing and Cementing Advanced Safety Leadership Reservoir Geomechanics Shell Round 1

Professional Affiliation

Gerson Lehrman Group Inc. Council member since 2005. Member of SPE.

Special Award

James Smith Memorial Prize 1980. Top HND Engineering Student in UK.

US Company (2014-2016)

Set up and promoted Flying-A Well Control LLC in 2014 to promote two new well control products. Suspended trading in 2016 due to oil industry downturn.

US Company (2019-Present)

Set up Flying A Services LLC in California to provide training and services to the energy industry.

2018 US National Academy of Science, Engineering and Medicine Workshop – Houston

Invited panelist for The Human Factors of Process Safety and Worker Empowerment in the Offshore Oil Industry

Publication:

Wrote article promoting Abel Lower Marine Riser Capping System and had published in Offshore Magazine's November 2014 Edition.

Linkedin Profile

https://www.linkedin.com/in/tom-macrae-90411b9?trk=nav_responsive_tab_profile

References

Gordon Mutch. BWE Drilling Manager: gordon.mutch@bwoffshore.com

Ramsay Crowe. LR-Senergy Projects Manager: ramsay.crowe@lr.org

David Park. Former Cairn Energy Well Engineering Team Leader: <u>sedpk1@yahoo.co.uk</u>

John Boyle: Cairn Drilling Manager Retired: johneboyle@hotmail.com

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