Falcon Oilfield Services
An Overview
• History
• Team
• Operations
• Track Record
• Services
• Questions & Answers
Team

- Significant blue-chip international experience within management team.
- Experienced local and expat logging engineers across all logging disciplines
- Experienced reservoir engineers and log analysts.
- In house lab engineers and repair team
- Active program for the training of fresh graduates
- 90+ employees
History

Strong organic growth of
- People
- Assets
- Clients
- Revenue
- Services
- Reputation
Operations

- 8 years in operation
- State of art operations base in Nizwa with 7 logging units
- 2 more units to be delivered in 2012
- Explosives bunker in Qarn Alam
- Head office in Muscat
- Over 3000 logging jobs with 6+ clients in Oman
- Reputation built on technology, service and value
- HSE Excellence
Services

• Broad range of services which cover all logging operations with the exception of the open hole
• Perforation, freepoint, backoff & cutters
• Plugs, packers & dump bailers
• Cement evaluation
• Casing, tubing & well integrity evaluations
• Reservoir monitoring including PLT, Pressure Temperature Gauges and permanent monitoring systems.
• Petrophysical services including Slim Induction, Pulsed Neutron and Open Hole (2012)
• Interpretation services for 3rd party data
What We Do:
The Foundation Services
Production Logging Services

• Full range of sensors and accessories to cover all environments
• Can be ran in SRO and Memory modes
• Significant experience operating in high angle and deviated wells using tractors and coiled tubing
• Highly successful in harsh environments including high pressure gas wells, high temperature wells and high H2S
Well Integrity Services

MIT Features & Applications

• Available in 24, 40 or 60-finger versions. (2”- 9 5/8”+)
• Surface Read Out or Memory options.
• 3D data analysis using MITpro or WIVA software.
• Suitable for all well deviations.
• Hi accuracy Internal wear and damage measurements.

MITview Software
What We Do: The Differentiated Services
Advanced Production Logging Services

Array Tools (CAT, SAT and RAT) Features & Applications

• Very experienced in horizontal environment
• Array of up to 12 radial sensors (micro-spinners, resistance & capacitance
• Tool orientation measurable by internal relative bearing sensor.
• Through tubing phase fluid and velocity identification.
• Fully combinable with SRO and memory logging tools.
• Software is available for 3D phase profiling.
• Multiple deployment options (tractor, coil etc)
Advanced Well Integrity Services

MTT Features & Applications

• Electromagnetic Inspection of tubing and casing for internal & external metal loss.
• Casing can be logged after the tool has passed through restrictions.
• Measures absolute wall thickness.
• 3D visualisations provide powerful qualitative images of well condition.
• Detects pitting and gradual wall loss.
Advanced Well Integrity Services

Radial Bond Tool Features & Applications

- Simultaneous cement bond and radial integrity measurements
- Horizontal/deviated hole investigations
- Micro annulars and channelling detection and their orientation.
- 360 Degree coverage
- Ran in combination with PLT and other well integrity sensors. Memory or SRO
- Value added interpretation products
Perforation & Explosive Services

• Industry recognised partners with global reputation including GEODynamics, Owen, DynaEnergetics & ETA
• Exclusive access to state of the art perforation technologies
• Commitment to bring new explosive technologies to the region and offer the most value solutions eg Gasgun
• Plugs, Packers and Patches
• Stuck pipe, freepoint and cutting services

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Perforation History to Date

- Running since 2008
- > 500 Runs
- > 5000 m perforated
- > 75,000 Shots
- > 98% success rate
Thru Tubing Perforation - ShoGun

• 1 11/16 System
• 2 1/8 System

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Pipe Recovery - SplitShot

• Simple / Safe – No chemicals, low explosive content
• Flexible – Small ID.
• Fast
• Superior – very good success rate – EVEN in GRE!!!
What We Do:
The Unique Services
CONNEX – Reactive Liners

• CONNEX® charges are a drop-in substitute for their conventional equivalents.

• No change is required to gun hardware, initiation devices, handling or running procedures.

• HSE risks are unchanged.

• No down-side – will always be at least as good than the leading conventional charge.
CONNEX – Reactive Liners

- Exothermic reaction taking place at tunnel tip and within the crushed zone.
- Heating creates pressure in surrounding pore space and within the tunnel.
- Crushed Zone Around Tunnel
- Plugged Tip
- Overpressure Expels Debris into Wellbore...
- ...and Fractures Tunnel Tip

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Thru Tubing Dual Induction Tool

- Custom built tool – smallest in world
- Rapid development – 9 months
- Directly measure residual $S_w$ in a injection environment
- Thru tubing into barefoot completion
- Depth Investigation
  - Deep : 51 in
  - Medium : 27 in
- Recorded Curves
  - Deep Conductivity
  - Medium Conductivity
  - Deep Resistivity
  - Medium Resistivity
Steam Surveillance Services

• Environment of high oil prices, declining production and increasing demand
• Steam injection is a key EOR (enhance oil recovery) technique going forward
• Vast heavy oil reserves in Oman and Gulf
• Although steam injection/flood has been used for decades in California and Indonesia, the technique has never been used globally and certainly not within the Gulf region until recently
• Falcon has re-engineered existing technologies to create products fit for Gulf conditions and reservoirs
Steam Surveillance Services

- **Logging String**
  - In house designed high temp string
  - Temperature, Spinner and CCL
  - Dual Gamma with Tracers Krypton-85 or Iodine-131
  - Automatic Surface Injection System for tracer work

- **New Generation String (Deployed Feb 2010)**
  - Modular
  - Multiplexed data
  - Pressure
  - Steam interpretation modules in Emmeraude (developed with Kappa)

- **Next Generation String (In field trial)**
  - Fully Digital – Specified in house,
  - Developed with Hunter
  - Quartz Pressure and Scintillation Gamma
Steam Surveillance Services

- Surface Steam Quality Equipment developed and built entirely in Oman with unique features

- Dual cyclonic separators provides accuracy and resolution over a large injection range.

- Flow rates of up to 3000 bbl/day upto 6000 in parallel configuration

- Redundancy of quality measurement incl. orifice plates and total dissolved solid measurement.

- Real time GSM data transmission.
Talent & Technology
Talent

- Home grown talent with Omanisation at close to 90%
- In-house and external training programs
- Client courses
- Real jobs for Omani graduates including field engineering and reservoir engineering
- High retention rates, increase loyalty and great service quality.
New Technology & Partners

Access to other logging tools and deployment equipment including:

- Downhole Tractor - Welltec
- Electric Cutting Tool – Sondex
- Tiltmeter Survey - Pinnacle
- Open Hole – Baker Atlas
- Coiled Tubing Logging Units – BJ, IPC
- Gyro & Directional surveys – Gyrodata
- Leak detection – Archer
- Permanent Gauges – Spartek
- Retrievable ESP – ZieTECS
- Smart Wells/DTS – Tendeka/X3M

Falcon has a OUTSTANDING reputation as a partner for companies wishing to introduce downhole technologies into the region
Thank you for your time
for more information, contact us on:

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