

Gerard Reijnststraat 21
2593EA 's-Gravenhage
Netherlands
Tel (work) +45 3363 1789
Mob +45 2979 3161
e-mail: jeremy_henderson@hotmail.com

Jeremy Robert Henderson

Summary

- Energetic and self-motivated geoscientist with over 20 years professional experience, including over 15 years oil industry experience ranging from the North Sea to W Africa to the Gulf of Mexico; 7 years experience in geophysical research.
- Knowledge of latest advances in geoscience including seismic inversion techniques, permeability estimation from seismic and 4D seismic monitoring.
- PhD and MSc in Geophysics; MBA
- Proven ability to translate technical excellence into bottom-line results.

Industry experience

2009 – present Mærsk Olie og Gas AS, Copenhagen

Senior Geophysicist

- Member of corporate Quantitative Interpretation team, providing support to exploration and production operations across the Company, focusing on 4D studies, rock physics analysis and microseismic monitoring.

2009-2009 Shell International E&P, Rijswijk, Holland

Senior Reservoir Geophysicist

- Member of “Integrated Quantitative Interpretation” team, with responsibility for reservoir surveillance implementation, 4D seismic as well as support and advice for seismic projects across the Company. Recent activities include exploration interpretation and analysis in W. Africa and in unitisation team in Australia, and using proprietary and public software tools (Jason, Petrel).

2005 - 2008 Shell International E&P, Rijswijk, Holland

Senior Carbonate Geophysicist

- Member of global carbonate “Centre of Expertise” responsible for quantitative interpretation of carbonate reservoirs worldwide, especially Middle East and Far East. Work includes probabilistic inversion techniques (“K From Seismic” project), structural analysis of fractured reservoirs

2003 - 2005 Total SA, Paris

Senior Geophysicist

- Worked in “Reservoir Evaluation Group” as member of multidisciplinary team working on major operated development deep water West Africa. Responsible for structural and sedimentological interpretation, QC, analysis and facies and lithoseismic interpretation of elastic inversion, co-ordination of feasibility and operational studies for 4D monitoring. Used “traditional” (GeoFrame) and “volume” (VoxelGeo, GeoProbe) software.

1998 - 2003 TotalFinaElf Exploration UK PLC, Aberdeen

Senior Geophysicist

- Undertook geophysical interpretation to optimise well locations in development projects, as well as appraisal and exploration projects. Performed quantitative

fault seal analysis to optimise development programme. Also built 3D geo-models and contributed to static/dynamic calculations. Undertook geostatistical simulation of volumetrics in Bruce field, convincing operator to revise view of drilling targets. Participated in OBC seismic acquisition. Participated in successful Nelson field equity process and 4D/AVO seismic analysis. Used various software including Landmark, Stratimagic, gOcad, IRAP, Petrel.

1985 - 1988

Elf Aquitaine Petroleum, Houston, USA

Special Projects Geophysicist

- Supervised targeted processing of seismic data for shallow Gulf of Mexico prospects leading to successful drilling. Performed structural and stratigraphic modelling and inversion. Undertook special processing projects. Evaluated prospects and made recommendations on farm-in/farm-out proposals to improve portfolio.

1983 - 1985

Exxon Company USA, Houston, USA

Senior Geophysicist

- Undertook modelling and inversion of seismic data for prospects in onshore Texas area resulting in discoveries. Planned and supervised acquisition of well-seismic data (“checkshot” surveys and VSP). Developed and applied “quick-look” processing stream for VSP data leading to drilling cost reduction. Undertook modelling and interpretation of VSPs. Evaluated in-house prospects.

1982 - 1983

Gulf Oil Exploration and Production Co., Houston, USA

Geophysicist

- Interpreted and integrated geophysical (seismic, potential field) and geological data in Western US frontier areas (Utah, Nevada)

Academic experience

1993 - 1998

Dept. Geological Sciences, University of Durham

Lecturer in Geophysics

- Initiated and managed research projects in seismology and rock physics, including fracture and fault-seal evolution. Developed fluid-flow simulation software. Taught courses in geophysics, structural geology and scientific computing.

1992 - 1993

Dept. Geology & Geophysics, University of Edinburgh

Research Fellow

- Undertook research in seismology and rock physics; modelling fracture development in hydrocarbon reservoirs (£140,000 industry-funded project)

Education

1997 - 1999 Durham University Business School

MBA

- Courses include technology management, corporate finance, project management.
- Dissertation on high-tech entrepreneurship.

1989 - 1992 University of Edinburgh

PhD Geophysics

- Thesis title “Fracture-Mechanics and the Evolution of Seismicity in an Intra-Plate Setting”.

1980 - 1982 Massachusetts Institute of Technology

MSc Geophysics

- Thesis title “Numerical Experiments on Continental Lithosphere Extension”.
- Subsidiary research on oceanic heat flow, including two research cruises in W. Atlantic

1977 - 1980 St. Edmund Hall, University of Oxford

BA Geology

- Open scholarship holder

Scientific publications

Published numerous technical articles in peer-reviewed international journals, including:

- **Henderson, J.R.**, 1999, The influence of fault compaction on fault zone evolution, in Jones, G., Fisher, Q., and Knipe, R.J. (eds) *Faulting, Fault Sealing and Fluid Flow in Hydrocarbon Reservoirs*, Geol. Soc. London Special Publications, 147:231-242
- **Henderson, J.R.** and Maillot, B. 1997. The influence of fluid flow in the fault zone on patterns of seismicity: a numerical investigation. *J. Geophys. Res.*, 102:2915-2924.
- **Henderson, J.R.** and Main, I.G. 1992. A simple fracture-mechanical model for the evolution of seismicity. *Geophys. Res. Lett.*, 19:365-368.
- **Henderson, J.R.** 1991. An estimate of the stress tensor in Sweden using the earthquake fault-plane solution. *Tectonophysics*, 192:213-244.
- Bracco Gartner, G., Weger, R., **Henderson, J.R.**, Dunne, J., and Asyee, W. 2007. Solving the inter-well problem: pore shape and connectivity from seismic inversion in a carbonate reservoir. *AAPG European Region Conference, Athens, Greece*

Computing experience

- Programming in Java, C, and Fortran, in UNIX and Windows environments.
- Program development using Cray T3D, Connection Machine CM-200 and Meiko Computing Surface supercomputers.
- Developed websites using dHTML, JavaScript, Perl/CGI, Dreamweaver, Flash.

Languages

Fluent French (*Certificat du Chambre de Commerce de Paris*), good Swedish, elements of Dutch, Danish and German.