

CURRICULUM VITAE

PHILLIP G. WATSON
Director

DATE OF BIRTH	29 July 1972
NATIONALITY	Australian
ACADEMIC BACKGROUND	PhD, The University of Western Australia (1999) BE (Civil Engineering, 1 st Class Honours), The University of Western Australia (1994) BComm (Management), The University of Western Australia (1994)
PROFESSIONAL AFFILIATIONS	Chartered Professional Engineer, The Institution of Engineers Australia Member, The Institution of Engineers Australia Member, Australian Geomechanics Society Member, API Geotechnical Resource Group (RG7) and ISO Foundation Panel (P4)
COUNTRIES WORKED IN	Australia; United Kingdom; Nigeria; Yemen; United States; New Zealand
LANGUAGE PROFICIENCY	English
EXPERTISE	Offshore geomechanics; Foundation design and installation of steel and concrete gravity based structures; Soil-structure interaction; Offshore and onshore site investigation; Offshore ground improvement; Soil characterisation; Soil testing and physical modelling
MAJOR PROJECT EXPERIENCE	<ul style="list-style-type: none">• Preliminary foundation development of steel gravity base concept for Pluto development, North West Shelf• Lead Geotechnical Engineer during concept development, site investigation and detailed design phases of the Maari Wellhead Platform, New Zealand• Foundation design and soil studies during concept phase of Woodside Browse Development, Australia• Foundation design and soil studies during concept and FEED stages of Gulf Landing Development, Gulf of Mexico• Managed joint research project (with COFS) to examine skirt installation in layered soils• Preliminary foundation design of an All Concrete LNG tank proposed for the Bay Crossing project, Galveston, Texas• Site investigation, soil interpretation and foundation design for

- concept development phase of the Costa Azul Second Berth project, Mexico
- Preliminary foundation design for offshore concrete breakwater, and then Owners Engineer during construction phase of Costa Azul LNG Terminal, Mexico
 - Preliminary site investigation and soil interpretation for Olokola Port LNG Plant, Nigeria
 - Foundation design, soil studies and casting basin design during concept development phase of the Brass LNG Terminal, Nigeria
 - Lead Geotechnical Engineer for concept, pre-FEED and FEED phases (including offshore site investigation and onshore casting basin design) of the Compass Port LNG Receiving Terminal project, Gulf of Mexico
 - Foundation design and soil studies for the concept development phase of the Beacon Port LNG Receiving Terminal, Gulf of Mexico
 - Conceptual foundation design for the Valhall concrete gravity structure, North Sea
 - Geotechnical review and foundation design of gravity base foundations for the INPEX project, North West Shelf
 - Soil interpretation and pile analysis of offshore piling template for Sakhalin I Phase 1, Russia
 - Pile driveability study and assessment of remedial options for the Hazira Platform, India
 - Lead geotechnical engineer for the conceptual, detailed design (including all site investigation stages) and installation phases of the Yolla A Platform, Bass Strait, Australia
 - Development of foundation alternatives for the Otway Development, Otway Basin, Australia
 - Preliminary foundation design and soil interpretation for the Turrum Platform, Bass Strait, Australia
 - Lead Foundation Engineer for the Hebron Field Development gravity base design competition, Grand Banks, Canada
 - Concept development of gravity based structure for BigOil GBS development, Indonesia
 - Specialist laboratory testing for Sakhalin II development, Russia
 - Concept design, geohazard assessment and preliminary offshore soil investigation for Tassie Shoal Development, Timor Sea
 - Foundation design and geotechnical evaluations for Bayu Undan pile template, Timor Sea
 - Back analysis of geotechnical and structural performance of Lambert 5 conductor, North West Shelf
 - Review of site investigation data for the Perth Convention and Exhibition Centre development, Perth, Australia
 - Preliminary foundation design of LNG tanks subject to high seismicity for the NAWC LNG Terminal, Mexico
 - Geotechnical engineer during an offshore site investigation at the Bal Haf site, Yemen
 - Numerical modelling of subsea well growth observed during commissioning of HTPT wells for Shearwater Platform, North Sea
 - Expert witness study on the site investigation and foundation installation design of the South Arne platform, North Sea

- Resident geotechnical engineer for embankment stabilisation works for New Kiln Line project at Ewekoro, Nigeria
- Resident geotechnical engineer during CFA piling works at the New Clean Room Facility in Greenwich, United Kingdom
- Review of seismic effects for amphitheatre in Guadalajara, Mexico
- Development of general solutions for foundation capacity of ACE platforms for a range of soil and loading conditions (Arup internal spreadsheet development)
- Provision of specialist advice and site supervision of iron ore ballast trials for the Malampaya CGS, Philippines
- Contract centrifuge testing at UWA, including shallow foundations for Gorgon wellhead platform concept; suction caissons for Laminaria site (focusing on soil interpretation); and caisson supported jacket foundation for Gulf of Thailand

EMPLOYMENT HISTORY

Advanced Geomechanics	
Director	2008 – Present
Principal Engineer	2007
Arup (Perth, London, Houston)	
Associate	2006
Senior Engineer	2001 - 2006
Engineer	2000 - 2001
The University of Western Australia	
Research Associate	1999 - 2000
PhD Research Student	1995 - 1999
Main Roads Western Australia	
Engineer	1994 - 1995
Engineering Cadet	1992 - 1994

AWARDS

Geomechanics Studentship (1998)
F S Shaw Memorial Postgraduate Scholarship (1997)
Samaha Research Scholarship (1995)
Australian Postgraduate Research Award (1995)

PUBLICATIONS LIST

Journal Papers

Gaudin, C., Watson, P. and Randolph, M. 2004. Centrifuge testing of offshore filters. Accepted for publication March 2006.

Hu, Y., Watson, P.G. and Randolph, M.F. 2001. Effect of interface friction on N_c value for plate penetrometer. IACMAG, January 2001.

Hu, Y., Randolph, M.F. and Watson, P.G. 1999. Bearing response of skirted foundations. *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 125(11), 924-935.

Newson, T.A., Bransby, M.F. and Watson, P.G. 1999. Undrained shear

strength profiling using a spherical penetrometer. Submitted to Canadian Geotechnical Journal, August 1999.

Watson, P.G. and Randolph, M.F. 1998. Skirted foundations in calcareous soil. Geotechnical Engineering, Institution of Civil Engineers, 131(3), 171-179.

Watson, P.G. and Randolph, M.F. 1998. Failure envelopes for caisson foundations in calcareous sediments, Applied Ocean Research, 20, 83-94.

Conference Papers

19 conference papers, including the following recent papers (full list available on request):

Watson, P.G. and Humpheson, C. 2007. Foundation design and installation of the Yolla A Platform. 6th Int Conf on Offshore Site Investigation and Geotechnics, Upcoming conference in London, September 2007.

Pennington, D.P., Watson, P.G. and Kelleher, P. 2007. An accurate site investigation with high quality definition where it is needed – PROD deliver for the Maari gravity base platform. 6th Int Conf on Offshore Site Investigation and Geotechnics, Upcoming conference in London, September 2007.

Watson, P.G., Gaudin, C., Senders, M. and Randolph, M.F. 2006. Installation of suction caissons in layered soil. Int Conf on Physical Modelling in Geotechnics, Hong Kong.

Watson, P.G. and Randolph, M.F. 2006. A centrifuge study into cyclic loading of caisson foundations. Int Conf on Physical Modelling in Geotechnics, Hong Kong.

Watson, P.G. and Humpheson, C. 2005. Geotechnical Interpretation for the Yolla A Platform. Proc. Int Sym. Frontiers in Offshore Geotechnics, Perth, Australia.

Theses

Watson, P.G. 1999. Performance of skirted foundations for offshore structures. PhD Thesis, The University of Western Australia.

Watson, P.G. 1994. Stabilization of crushed rock. Undergraduate Thesis, The University of Western Australia.

Research Reports

3 research reports (list available on request)