

Curriculum Vitae



FRITS CHRISTIANSEN

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Geologist, Sedimentologist, Geotechnical Consultant

Geology and Geotechnical Engineering, Sedimentology, Quaternary Geology, Geological and Geotechnical Data Management, Laboratory testing, Supervision of construction works, drilling program etc., Education

DATE OF BIRTH

4 May 1974

NATIONALITY

Danish

CIVIL STATUS

Married - 2 children, 7 & 11 years old

EDUCATION

Master of Science, Geology, University of Aarhus, Denmark, 2005

Bachelor of Science, Geology, University of Aarhus, Denmark, 2001

TRAINING

2-day course, "Supervision – Tracks" by Banedanmark (Rail Net Denmark)

Field course in Glaciology and Glacial geology, Kangerlussuaq, Greenland, University of Aarhus, 2012

Radiation safety when employing portable moisture and density gauges containing radioactive sources, FORCE Technology, 2009

Classes in Soil Engineering, Engineering School of Aarhus (IHA), 2006

Classes in various Geology and Engineering subjects, Kansas State University, USA, 2001 - 2002

Arctic Engineering, Danish Technical University (DTU) BYG & Sismiut, Greenland, 2001 - 2002

KEY QUALIFICATIONS

At the Office:

- › Project management
- › Prepared written proposals, reports etc for ground investigations
- › Slope stability analysis using *Slide*
- › GIS analysis using *MapInfo* and *Vertical Mapper*
- › Geotechnical data management, borehole logs and cross section diagrams using *GeoGIS* and *HoleBASE Standard SI*
- › Geophysical surveys – Ultra shallow seismic refraction surveys, data management and processing using *Berlach* software
- › Georadar surveys, data management and processing using *Berlach* software

- › Bathymetrical survey processing using *HYPACK* software

At the laboratory:

- › Classification, identification and description of soil and rock samples / cores
- › Various geotechnical laboratory classification tests
- › Quality Management

In the Field:

- › Geological and geotechnical site surveys
- › Supervision, earthworks and dewatering, large scale projects
- › Identification, description and classification of soil and rock samples
- › Core logging, supervision of drilling program
- › Geotechnical field test e.g. plate load tests, LWD, DPL, Nuclear density gauge
- › Geophysical site surveys – Seismic refraction
- › Georadar surveys
- › Bathymetrical surveys, 2D
- › Baseline studies
- › Surveying using Leica RTK-GPS

LANGUAGE SKILLS

	SPEAKING	READING	WRITING
DANISH	Mother tongue	Mother tongue	Mother tongue
NORWEGIAN	Excellent	Excellent	Excellent
ENGLISH	Excellent	Excellent	Very good
GERMAN	Fair	Fair	Basic
SPANISH	Basic	Basic	Basic

OTHER SKILLS

Teaching a short course in Geology at University at Southern Denmark - SDU.

Drivers licence, car, Denmark, Greenland & USA.

'Personal Track Safety', Banedanmark.

'Arctic First Aid', short course by Kalaallit Røde Korsiat, Greenland.

Maritime VHF radio certificate (SRC - short range certificate).

EMPLOYMENT RECORD

09/2015 -	GEOhelper.dk, Denmark (owner) Geologist, Sedimentologist, Geotechnical engineering, Listed above
09/2008 -08/2015	COWI A/S, Denmark Geologist, Sedimentologist, Geotechnical engineering
05/2007 - 09/2008	ASIAQ - Greenland Survey, Greenland Geologist, Geology / Geotechnical engineering

06/2006 - 05/2007 Franck Geoteknik AS, Denmark
Geologist, Geology / Geotechnical engineering

10/2000 - 06/2006 Geoscandic A/S, Denmark
Student assistant, Drilling assistant, *Roughneck*

WORK EXPERIENCE Denmark, Poland, Greenland & U.K.

TRAVEL EXPERIENCE Denmark, Norway, Sweden, Iceland, Poland, Germany, Czech Republic, France, England, Ireland, Northern Ireland, Holland, Austria, Italy, Spain, Switzerland, Greece, Thailand, Malaysia, Singapore, Philippines, Brazil, Argentina, Chile, Peru, Greenland, Canada, USA.

SELECTED PROJECTS

DENMARK BALLAST INVESTIGATIONS. Field geologist.
2016 Railway line København – Høje Tåstrup.
AARSLEFF RAIL A/S FOR Logging and describing soil probe samples, data management and creating borehole logs
BANEDANMARK etc.

DENMARK KØGE BUGT BANEN. Track renovation. Supervision team member.
2016 Railroad renovation of tracks, rail road ballast and stations between Hundige and Køge.
BANEDANMARK Supervision, Earthworks and drainage.

DENMARK NYBORG - ODENSE. Track renovation. Supervision team member.
2016 Railroad renovation of tracks, rail road ballast and stations between Nyborg and Odense
BANEDANMARK (Østfyn).
Supervision, Earthworks and drainage.

GREENLAND NUUK. Laboratory Services
2016 Update laboratory procedures, calibration of test equipment, Set up Quality Management
ASIAQ system for future ISO 9001 / ISO 17025 certification.

DENMARK STRIB. HDD. Geological services.
2015 Site investigation for Horizontal Directional Drilling (HDD) for high voltage between Funen
ENERGINET.DK and Jutland.
Geological classification and laboratory classification tests.

DENMARK TAULOV - PADBORG. Supervision team member.
2015 Railroad renovation of tracks, rail road ballast, crossings and stations between Taulov and
BANEDANMARK Padborg.
Supervision, Earthworks and drainage.

DENMARK COBRACable. Geological services.
2014 Site investigation for off shore high voltage cable between Denmark and Holland. Section
ENERGINET.DK "Jutland - Fanø".
Geological classification and laboratory classification tests.

DENMARK 2014 ODENSE LETBANE	ODENSE. Light Rail Project. Geological services. Site investigation for 14 km new tramway line, including 26 stations. Geological classification and laboratory classification tests.
DENMARK 2014 - 2015 BANEDANMARK	VAMDRUP - VOJENS. Upgrade of existing railway. Supervision team member. Earthworks and drainage. Construction of double track railway line between Vamdrup and Vojens in southern Denmark. Supervision.
DENMARK 2013 - 2014 ENERGINET.DK	HORNS REV 3 and VEJLE ÅDAL. Geological services. Site investigation for Horizontal Directional Drilling (HDD) at two locations 1) landfall of high voltage cable from off shore wind farm 2) new high voltage cable under the Vejle stream valley. Geological classification and laboratory classification tests.
DENMARK 2013 ENERGINET.DK	DIFF. LOCATIONS. Shallow waters offshore Denmark. Geological services. Screening of six new potential sites for offshore wind farms. Geological classification and laboratory classification tests on approx. 150 grab samples.
DENMARK 2013 ENERGINET.DK	KRIGERS FLAK & HORNS REV 3. Off shore wind farm. Clients' representative. Supervision of all laboratory test activities during the preface geotechnical investigations in 2013. Classification tests and advanced laboratory testing.
DENMARK 2013 DANISH TRANSPORT AUTHORITY	BIRKERØD. Tornevangsvej. Assessment team member. Common Safety Method (CSM) on risk evaluation and assessment for the construction of a new pedestrian tunnel under existing rail road line. Geotechnical assessment.
DENMARK 2013 BANEDANMARK	VAMDRUP - VOJENS. Upgrade of existing railway. Geological services. Site investigation for construction of double track railway line between Vamdrup and Vojens in Southern Denmark. Geological classification and laboratory classification tests
DENMARK 2012 - 2013 ENERGINET.DK	FRØSLEV – EGTVED II. Capacity expansion project. Supervision team member. Construction of 94 km gas transmission line between Frøslev (Ellund) and Egtved. Dewatering management and civil works.
ENGLAND 2012 DONG ENERGY	WESTERNMOST ROUGH. Supervision, clients' representative on site. Supervision of drilling program. Site investigation for landfall of high voltage cable from off shore wind farm.

<p>DENMARK 2011 CAPITAL REGION OF DENMARK</p>	<p>TAASTRUP. Jet grouting, Field geologist. In-situ jet injection of soil remediation agents into glacial soils, Høje Tåstrup. Geological field services.</p>
<p>DENMARK 2011 BANEDANMARK</p>	<p>BRAMMING – TØNDER. Supervision team member. Railroad renovation of tracks, rail road ballast, crossings and stations between Bramming and Tønder. Supervision, Earthworks and drainage.</p>
<p>DENMARK 2011 DANFOSS A/S</p>	<p>FLENSBURG, Danfoss A/S, Geological services. Geological and Hydrological conceptual model, Flensburg, Germany. Environmental investigations.</p>
<p>DENMARK 2011 ENERGINET.DK</p>	<p>FRØSLEV – EGTVED II. Capacity expansion project. Geological services. Expansion of existing gas transmission line, Frøslev - Egtved. Geotechnical survey, Classification of geological soil samples and geological model.</p>
<p>DENMARK 2010-2011 MUNICIPALITY OF ODENSE</p>	<p>ODENSE. Kanalforbindelsen - Section East. Supervision. Determine the E-modulus of unbound materials using a LWD (Light Weight Deflectometer). Compaction control using a Troxler Surface Moisture-Density Gauge. Supervision, Earthworks.</p>
<p>DENMARK 2010-2011 THE DANISH ROAD DIRECTORATE</p>	<p>ESBJERG. Motorway E20 extension. Supervision. Extension of existing motorway E20 at Esbjerg. Determine the E-modulus and compacting control of unbound materials. Supervision, Earthworks.</p>
<p>DENMARK 2009 - 2015 ARKIL MILJØTEKNIK A/S FOR BANEDANMARK</p>	<p>BALLAST INVESTIGATIONS. Field geologist. Ballast investigations at the following railway sections: Herning - Holstebro, Langå - Struer, Esbjerg - Bramming - Tønder, Taulov - Lunderskov - Padborg, Roskilde - Holbæk, Vanløse - Ballerup, Herning - Skjern, Aalborg - Frederikshavn, Fredericia - Nyborg, Hobro - Aalborg, Ringsted - Fehmern and Langå - Aalborg (Section 3+4). Describing soil probe samples on site. Sonic drilling.</p>
<p>POLAND 2009 DONG ENERGY</p>	<p>KARCINO WIND FARM PROJECT. Supervision. Geotechnical site inspection, foundations, 18 wind turbines. Supervision, earthworks.</p>
<p>GREENLAND 2008 PBPOWER FOR ALCOA</p>	<p>ALCOA GREENLAND HYDROPOWER. Field geologist. Geotechnical survey for power tunnel alignment and location of permafrozen bedrock, proposed hydro power plant, Evighedsfjorden, Maniitsoq. Core logging, drilling supervision.</p>

GREENLAND 2008 ORBICON A/S FOR LONDON MINING LTD	LONDON MINING LTD. Field assistant. Environmental Impact Assessment at Qugssuk, Godthåbsfjorden for a proposed iron mine located at Isukasia (ISUA). Assisting baseline studies for carrying out an EIA.
GREENLAND 2007 PBPOWER FOR ALCOA	ALCOA GREENLAND HYDROPOWER. Field geologist. Geological and geotechnical site survey for proposed hydro power plant - dams, canals and power tunnels. Geological and geotechnical site survey.
GREENLAND 2007 PBPOWER FOR ALCOA	ALCOA GREENLAND HYDROPOWER. Field geologist. Lake Tasersiaq, reservoir for proposed 600 MW hydro power plant. Water sampling, sediment measurements of lake water.
GREENLAND 2007 NUKISSIORFIIT, GOVERNMENT OF GREENLAND	ILULISSAT. Hydropower plant. Field assistant. Hydrological survey for the design of a new hydropower plant at Pakkitsoq, Ilulissat. Establishing fix points at SØ187 and SØ192.
GREENLAND 2007 NUKISSIORFIIT, GOVERNMENT OF GREENLAND	AASIAAT. Water reservoir no. 5. Field geologist Geological and geophysical site survey for design of a new dam in order to raise the capacity of the town's water reservoir. Geological and Geophysical site survey.
MEMBERSHIPS	Geological Society of Denmark. Geotechnical Society of Denmark: Member of the Laboratory Committee, Work Shop No. 2: 'Soil and rock classification'. ISRM - International Society of Rock Mechanics.
PUBLICATIONS	Larsen, N.K., Piotrowski, J.A., and Christiansen, F., 2006: S-matrix microstructures and microshears as proxy for strain subglacial diamicts: Implications for basal till formation.
PROFESSIONAL REFERENCES	Jan A. Piotrowski, Professor, Dept. of Geology, University of Aarhus, jan.piotrowski@geo.au.dk , phone: +45 8715 6409. Peder Hauritz, Owner, Franck Geoteknik AS, pbh@geoteknik.dk , +45 7625 9005 Frans Dupont, Vice President, Dept. 1521 Transport Infrastructure, DK South, fd�@cowi.dk , +45 2030 6073.