Innovative Support for Offshore Wind Permitting and Installation

Capabilities Statement

Our Expertise and Services



Berger Geosciences, LLC.

B-geO provides services and expertise designed to reduce the carbon footprint, improve safety, and streamline project activities.

Berger Geosciences, LLC. (B-geO) is an innovative company providing geoscience expertise to the energy industry since 2007. We offer comprehensive site investigation services to support energy development with significant expertise in the ocean environment. B-geO has combined experience of 150+ years with offshore projects in many different basins in the US and Internationally. Permitting and installation for the energy industry is a complex process involving many regulatory hurdles and challenging earth science considerations. Our highly experienced team consists of archeologists, biologists, cartographers (with GIS), engineers, geologists, and geophysicists.

As a company, we take pride in commingling experts in different fields of knowledge with an ability to innovate and adapt to client needs. We focus on effective solutions, quality and timing while keeping cost reasonable for the required scope of work.

The Bergers (Bill Jr. and Bill Sr.) are founders and co-owners of the company with a strategic vision of empowering every employee with transparent communications within the organization and with our clients.



President & CEO Mr. William "Bill" Berger III (Jr.)



Executive Vice President & CFO Mr. William "Bill" Berger II (Sr.)



Manager, Survey Services Mr. Zachary Metz



Manager, Geohazards Services Mr. James Keenan



Manager, Geopressure Services Dr. Shams Ul-Hadi



Office Manager Mrs. Patricia Brantner

B-geO's Team Brings Worldwide

B-geO has successfully assisted small to major sized operators worldwide for 15 years to improve their energy project performances. Our clients include:

- Atlantic Shores Offshore Wind
- BP America Inc.
- Mayflower Wind
- RPS Group
- US Wind

- Attentive Energy
- Chevron
- Ocean Winds
- Shell

- Bluepoint Wind
- Equinor
- Ørsted
- Southcoast Wind

























Our company has conducted successful operations and completed projects in US onshore and offshore along with nations around the globe including:

- Angola
- Australia
- Azerbaijan
- Benin
- Brazil

- Brunei
- Canada
- China
- Colombia
- Congo

- Cote d'Ivoire
- Equatori al Guinea
- Guiana
- Gabon
- Ghana

- Greenland
- Indonesia
- Israel
- Malaysia
- Mauritania

- New Zealand
- Nigeria
- Papua New
- _

- Mexico
- New Zearanc
- 1-8----
- Guinea
- Peru

- Sao Tome and Principe
- Singapore
- South Korea
- Suriname
- Trinidad and Tobago

BERGER GEOSCIENCES, LLC.

Marine Survey Project Management

B-geO's Marine Survey Project Management Service covers both geophysical and geotechnical phases, starting with a thorough desktop study and preliminary ground model development. This informs the scope of the geophysical and geotechnical campaign, tendering, and procurement processes. Our team aids in tendering, conducting tender analysis, evaluating and selecting contractors, and responding to candidate queries. We offer contracting support and manage the project schedule. Additionally, we provide risk management consultancy to support ongoing offshore work. We ensure verification of the scope of work for the campaign and prepare all necessary tender elements. Our team supervises the initial campaign preparation, including survey preparation and specifications. We ensure adherence to HSSE standards, provide supervision of the surveyor contractor, and manage data collection. B-geO's Marine Survey Project Management Service can aid with:

- We formulate a thorough site investigation geophysical/geotechnical strategy;
- Our strategy incorporates risk documentation, biological, archeological, and UXO considerations;
- Our team prepares pre-project documentation, oversees vessel mobilization, and conducts kick-off meetings;
- Serving as the client representative we assess and provide feedback on field reports;
- We coordinate kick-off meetings and ensure 24/7 supervision of offshore fieldwork;
- Committed to transparency and efficiency, our team delivers daily reports, and timely deliverables:
- After the initial geophysical campaign, we conduct a thorough data interpretation, identifying shallow hazards and archaeological resources. Performing visual ROV survey where needed. This information is then utilized to update the ground model.

B-geO's Marine Survey Project Management Service creates an integrated ground model and a geotechnical interpretative report, accompanied by geological and engineering documentation. We assess seabed mobility, offer final summary support, and generate a ground-based risk assessment. We provide conceptual foundation design including preparing design basis documentation for Pre-FEED design and reporting. Additionally, we conduct a cable burial risk assessment and furnish a pile driveability report. B-geO's comprehensive capabilities ensure that every phase of your marine survey project is expertly managed from initial planning to final reporting.

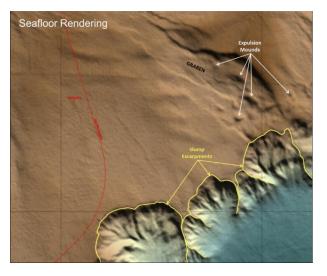


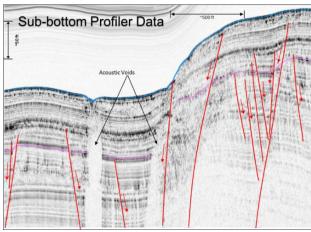
Geophysical Site Investigation

Our subject matter experts are ready to provide comprehensive geophysical investigation services for the energy industry. A geophysical site investigation includes the study of the seafloor and shallow sediments to identify hazards and/or constraints to the placement of offshore energy industry installations. B-geO can apply its expertise and experience for the following:

- Development of cost-effective geophysical survey planning and acquisition designs with well-defined scope and specifications for offshore energy industry installations and transmission routes;
- Effective client representation onboard with oversight of a marine geophysical survey requiring the quality assurance and quality control (QA/QC) that B-geO excels at providing;
- Appropriate interpretation and processing of the geophysical data;
- Shallow geohazard and scour assessments of existing installations (cables, foundations, etc.);
- Assurance that the geophysical site investigation complies with BOEM requirements for Site Assessment Plans for both the project site and transmission corridor;
- Geological mapping of seafloor topography and morphology that includes slope stability analysis, GIS, and cartography;
- Seismic interpretation of subsurface structure, stratigraphy, and attribute analysis for hazards assessment and mitigation development;
- Archeological survey planning, design, and implementation for assessing anthropogenic hazards;
- Biological assessment and reporting for the evaluation of benthic communities;
- A 3-D geologic model that incorporates all of the necessary data into a single space to expedite the BOEM review process.

With a proper geophysical site investigation, in compliance with client and BOEM requirements, we make sure that the project is completed correctly in order to avoid unnecessary delays.





Archeological Site Investigation

The need for marine archeologists in the offshore energy industry is related to the potential impacts of offshore developments on the submerged cultural resources such as: shipwrecks, submerged landscapes, and other historic marine environments. B-geO's marine archeologists can help identify, assess, and mitigate these impacts by conducting surveys, analyses, and reporting of the archaeological resources within the offshore project areas. Our marine archeologists are available to ensure compliance with the relevant legislation, policies, and guidance that protect the marine historic environment, such as the National Historic Preservation Act (NHPA), the Outer Continental Shelf Lands Act (OCSLA), and the Bureau of Ocean Energy Management (BOEM) regulations. As well as provide guidance that protect our maritime past. B-geO's archeological site investigation services can aid in:

- Providing valuable services and expertise to help offshore developers comply with the regulatory requirements and protect the marine historic environment;
- Protecting shipwrecks and other cultural resources on the seabed from harm due to
 offshore energy activities, such as construction, operation and decommissioning of wind
 turbines and cables;
- Conducting marine archaeological resources assessments (MARA) of geophysical and geotechnical survey data collected for offshore projects, to identify any potential archaeological resources and evaluate their significance;
- Developing marine archaeology plans (MAP) to outline the procedures for avoiding, minimizing or mitigating impacts to marine archaeological resources during offshore activities, in compliance with relevant legislation, policy and guidance;
- Balancing the interests of offshore development with the preservation of the historic environment, and engaging with stakeholders such as regulators, developers, heritage agencies and the public.

B-geO's marine archeological services are ready to support the increasing demand for these projects and ensure that they do not adversely affect the marine historic environment.



Benthic Site Investigation

We provide comprehensive and adaptive benthic site investigation services for offshore energy projects, using a range of innovative and reliable tools and methods. We help our clients to assess and monitor the impacts of offshore development on benthic habitats, using existing frameworks such as essential fish habitat (EFH) and Habitat Area of Particular Concern (HAPC) designations, as well as regional and ecosystem-based data from National Marine Fisheries Service (NMFS) surveys. We also offer predictive modeling and habitat vulnerability indices to support site characterization and environmental impact assessment. Our services include:

- Benthic study design and scope/specifications;
- Benthic profile and drop camera image collection;
- Onboard client representation with QA/QC;
- Pre-construction surveys using grab sampling, video, sledge sampling, Hamon grab and Sediment Profile Imagery (SPI);
- Post-construction monitoring;
- Predictive modeling;
- Interpretations and summary of findings.

We ensure data quality in our surveys by following rigorous standards and protocols, such as, using calibrated and tested equipment and instruments.



Geotechnical Engineering Solutions

B-geO excels in delivering comprehensive geotechnical engineering solutions, offering a robust blend of subsurface explorations, assessments, and specialized foundation designs. Also, with our expertise in interpreting geophysical data, we can adeptly align our services with the offshore energy industry installation design plans and transmission routes to schedule meticulous geotechnical site investigations. Our diverse capabilities enable us to facilitate an extensive array of services:

- We develop cost-effective geotechnical site investigations that offer a well-defined scope. We are proficient in the collection of diverse samples through borings, jumbo piston cores, piston cores, gravity cores, grab samples, box cores, push cores, and vibracores. We conduct a broad range of field tests, such as the Cone Penetrometer Test (CPT), Standard Penetration Test (SPT), Vane Shear Test, Flat Dilatometer Test, Pile Load Test, and Plate Load Test, ensuring reliable and accurate results. Our geotechnical laboratory analysis includes basic tests on index properties and particle size analysis. We also perform direct shear tests, oedometer tests, triaxial tests, cyclic direct simple shear tests, and permeability tests;
- We provide comprehensive engineering analyses for advanced foundation design and settlement evaluations for offshore and onshore structures. Thus, ensuring high-performance construction that meets client specifications;
- We provide insightful geotechnical engineering analysis and solutions to various problems ranging from ground improvement, slope stability, retaining wall design, seepage & dewatering, seismic & earthquake assessments, soil-structure interaction, unsaturated soils, and geo-environmental engineering;
- Our detailed geotechnical consulting and reporting provides a comprehensive interpretation
 of the findings of the site investigations, foundation analysis, and geotechnical engineering
 analysis.
- Our other geotechnical services include: Client representation. Offshore geotechnical engineering. Forensic and Insurance Investigations: Forensic engineering, failure analysis, and remedial design. Litigation support and expert witness services. Insurance investigations. Landslide evaluations. Third-party reviews. Aside from these services, we are proficient in visual inspection surveys using remotely operated vehicles.

Berger Geosciences, LLC commits to delivering innovative, thorough, and effective geotechnical engineering services that meet the unique requirements and objectives of our client's projects.



All our services are client based, highly customized, and project oriented. Our goal is to provide the best available assessment and possible solutions to our clients to help them make efficient and timely decisions.

Our Entire B-geO Team Stands Ready to Assist You Any Time, Any Place on Any Project Where Our Capabilities and Experience Can Make a Positive Contribution to Your Continued Success!



Berger Geosciences, LLC.