

Marine Geohazards

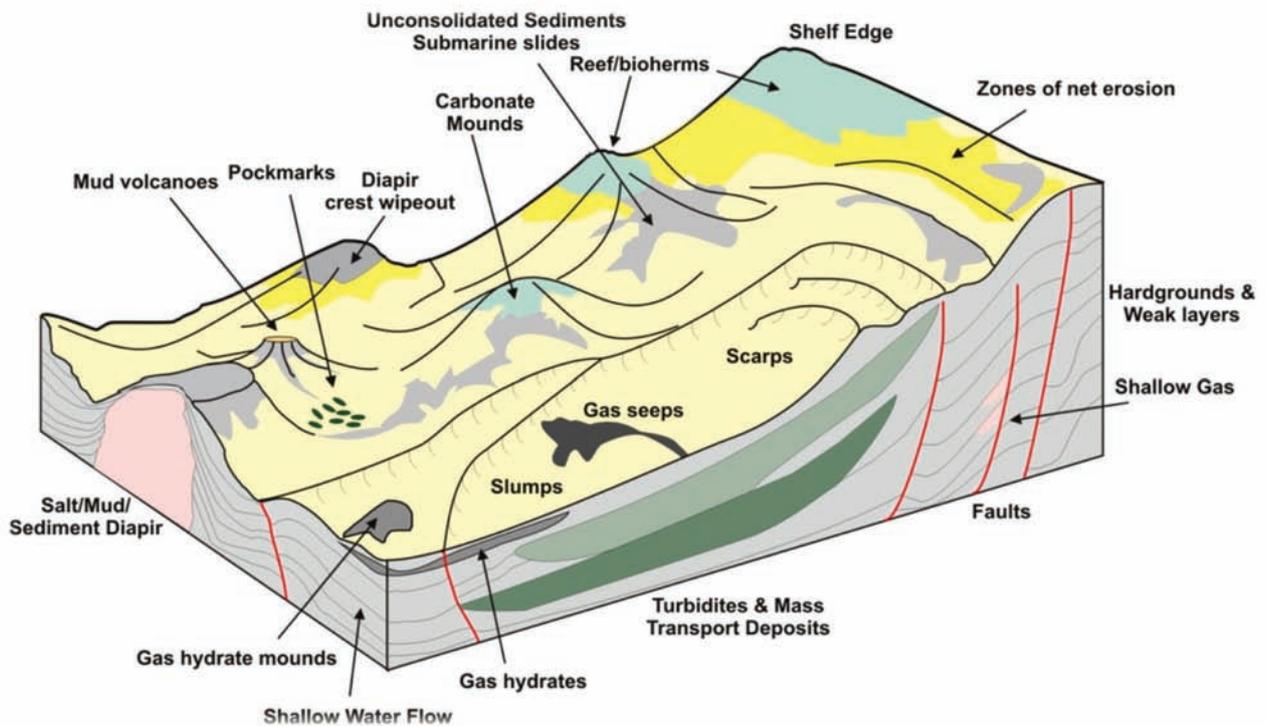
RPS is a world leader in the detection and analysis of geohazards. We draw on broad-ranging and truly international geohazards' experience, spanning 30+ years, to provide a fully integrated response to our clients changing needs.

A complete assessment requires an understanding of broader geological processes acting on the shelf and slope to understand the geological complexity and regional variability.

To achieve a world class geohazard evaluation RPS takes a multi-disciplinary approach for the detection and mapping of geohazards that are significant to drilling operations, field development

and the emplacement of structures on the seabed.

Features which can represent potential issues:



Geohazard assessment is based on clearly communicating how the presence of these features could impact on an operation, from seabed and foundation

conditions, mass movement/soil stability issues, formation pressure & potential for overpressure to possible shallow gas issues - kicks/blow out. On the basis of

this knowledge, mitigating measures can be put in place by the operator.

Geohazard Products

A flexible and innovative approach to geohazard analysis enables RPS to deliver bespoke solutions to our clients. We work with our clients to meet their planning requirements and minimise risk. Typical reporting preferences include:

Drilling Constraints Appraisal (DCA)

- Specifically designed for geohazard assessments of locations on the continental shelf.
- A DCA provides an independent site specific analysis tailored to a driller's requirements and provides relevant concise information from seafloor to subsurface hazards including shallow soils and gas risks.

Deepwater Locations

- Deep water well locations beyond the shelf benefit from a three-phase programme:
 - (i) A regional study drawing on existing data to fully understand the geological regime of the proposed drill site and the influence of seafloor processes on the slope over time.
 - (ii) A risk register with all deep water drilling hazards and known local issues.
 - (iii) A site specific geohazard assessment that applies the regional knowledge and risk register to the proposed location and analyses the geohazards at location.

Expert Review

- RPS can provide an independent review of site survey reports and geohazard assessments.

Regional Geohazard Studies

- A large scale review of regional data to determine the current level of understanding in an offshore area.
- The aim is to identify areas of potential high risk that should be avoided in favour of low risk well locations ahead of well planning and more detailed assessments. Additional data sources or targeted data acquisition to support more detailed analyses are identified.

Post-mortem Studies

- RPS conducts independent investigations after shallow drilling incidents eg. blow-outs, where contributing factors are identified. The primary value of these studies is to put in place safeguards for future operations.

RPS provide a range of complimentary services within our Site Investigation and Environmental groups.

