

Introduction

The Geoquip Saentis is a 2005 build, DP2 MPSV vessel, designed for offshore support and ROV services in harsh weather conditions. The Geoquip Saentis comes with good spacious accommodation and workspace. Geoquip's fully heave compensated GMR600 drilling rig has been installed over the 4.0m x 4.0m midship moonpool. At over 80m length and 18m beam, she provides a stable platform for offshore geotechnical operations, allowing seabed PCPT equipment and ROV to be mobilised alongside the GMR600.



Key Features:

- Class 2 Dynamic Positioning
- Remote tool handling, Iron Roughneck and pipe handler
- Heave compensated offshore geotechnical drilling rig
- Combined water and borehole depth of 600m
- Comprehensive on board soil and rock testing laboratory

Positioning

DP2 System Installed: Kongsberg K-Pos DP-21, Reference Systems (2 x DGPS, taut wire) and Sonardyne (Ranger 2) HPR system for subsea positioning

Drilling Monitoring and Downhole Tools

The GMR600 drill rig operates with standard safety features, including remote tool handler, mechanical pipe handling, Iron Roughneck and use of Erifon and air as a compensator buffer. A range of wireline downhole sampling and testing tools is available, including PCPT (Piezocone Penetration Test), piston sampling, push sampling, wireline core barrel, and percussion (hammer) sampling. All downhole tools (coring, sampling, PS logging, etc.) are fully compatible with the 5½" API drill string. Additionally, a range of drag and specialised coring bits are provided. Large diameter drill pipe can also be used to allow for the retrieval of large diameter cores to be taken.

DRILLING RIG GMR600	
Power Swivel	Dando 1000 twin motor with dual speed setting for high torque / high rotation <ul style="list-style-type: none"> Max torque: 9600 Nm Max speed: 280 RPM Max dynamic load: 40t Max static load: 50t
Drill String	5½" or 6¾" API drill string
Seabed Frame	12t, with hydraulic clamps and compensation up to 4.0m
Heave Compensation	Effective drill string compensation 0m to 4m. Seabed frame and seabed CPT unit heave compensation with an effective stroke from 0m to 4m
Mud	4,000l mix tank, 8,000l storage tank guar gum seawater miscible
Downhole Sampling	Wireline piston / push sampler, percussion / hammer sampler
Downhole <i>in situ</i> Testing Tools	WISON-APB PCPT cone penetration testing with pore water pressure and seismic velocity measurements PS wireline logging
Downhole Coring	Traditional and leading shoe core barrel
Drill Control Cabin	Control cabin for remote control via hydraulic / electric interface of all drilling and sampling operations. Allows driller, assistant driller and PCPT operator coordinated control of all drilling / sampling operations. Rig specific DMS recording
Drill Rig Workshop	ISO 20ft container sized fully equipped workshop, tools and equipment. 220v supply
Equipment Winches	Braden draw-works winch, seabed frame umbilical winch, 2 x piston sample winch (electro mechanical), 2 x headline tugger winch, tail line tugger winch.
Seabed CPT Unit	20t deep push seabed CPT system. Straight rod push thrust mechanism allows recording of <i>in situ</i> data to 40m below mudline, or greater, depending on soil conditions.

GEOQUIP SAENTIS	
Flag, IMO, Call Sign	Cyprus, IMO 9282132, Call Sign: 5BBX6
Class	BV Hull MACH Supply Vessel Unrestricted Navigation AUT-UMS DYNPOS-AM/AT-R, SDS
Built	2005, converted 2019
Tonnage	GRT 3,404 NRT 1,131
Principal Dimensions <ul style="list-style-type: none"> • LOA • Breadth (moulded) • Draft (max) 	80.5m 18.0m 6.1m
Tank Capacity <ul style="list-style-type: none"> • Fuel Oil • Fresh Water 	1,000m ³ 933m ³
Speed / Consumption <ul style="list-style-type: none"> • Standby • On DP • Economic (transit) 	3m ³ /24h 10m ³ /24h 8m ³ /24h at 7 knots
Endurance	>28days
Machinery <ul style="list-style-type: none"> • Main engine • Shaft Generators • Other Generators • Bow Thrusters • Stern Thrusters • Propellers • Fuel Type 	2 x MAK 8L26 marine diesel engines each developing 3,217bhp @ 750rpm each driving 1,600kW shaft alternator and CP propeller. Total developed power 4,800kW 2 x 1,600kW 2 x 350kW and 1 x 190kW 2 x 610kW 2 x 610kW 2 x CPPs MGO
DP System	Kongsberg K-POS DP 21
Moon Pool	4.0m x 3.8m
Cargo Deck	600m ²
Accommodation	11 x Single berth cabins 23 x Double berth cabins (en-suite) 3 x Offices 1 x Messroom / duty mess 1 x Conference room 1 x Dayroom / lounge 1 x Recreation room 1 x Hospital Dedicated survey area Fully air-conditioned.