# R/V Seaprobe


The R/V *Seaprobe* has been specially developed to address the unique needs of continental shelf geotechnical operations. The *Seaprobe* is permanently equipped with a full suite of drilling, sampling and in situ testing equipment. The vessel is designed to routinely work in water depths of up to 500 ft. and deeper with special anchoring considerations. The vessel is also equipped with a geotechnical laboratory for onboard testing of soil samples, analysis and report production. Most importantly, all equipment is permanently installed onboard.

The drilling system includes a Failing DMX drill rig, mud plant, bulk mud systems, ancillary drilling tools and seabed reaction frame. The seabed frame, 7.5 tons, is utilized for reaction force during the in situ testing operation. All drilling is carried out through a moonpool installed at midship.

**Capabilities:**

- Soil Borings for Platform Design
- Jack-up Footing Penetration Studies
- In situ Geotechnical Testing
- Stratigraphic Coring
- Integrated Geophysical/Geotechnical Studies
- Pipeline Soil Investigations
- Dredgability and Burrow Source Studies
- Exploration Geochem Surveys
- Marine Environmental Baseline Studies
- Biological/Oceanographic Surveys

# Technical Information

**Built:**
Burton Shipyard Inc., 1974.
Refitted as coring vessel
by John Bludworth Marine Inc., 1990,
Houston, Texas, USA.

**Classification:**
ABS International Load Line Certificate
Oceanographic Research Vessel

**Flag:**
United States

**Callsign:**
WCQ7072

**Dimensions:**

| | |
|---|---|
| Length, Overall | : 190 feet |
| Beam, Moulded | : 40 feet |
| Depth, Moulded | : 18 feet |
| Maximum Draft | : 14 feet |
| GRT | : 296 tons |

**Accommodations:**

| | |
|---|---|
| Officer | : 1 x 1 Berth |
| Ships Crew | : 2 x 2, 1 x 4 |
| Passengers | : 3 x 2, 1 x 4, 2 x 3 |
| Total | : 25 |

All accommodations are fully air conditioned.

**Machinery:**

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|---|---|
| Main Engines | : (2) EMD 16-45-E5,<br>: Total 3,900 bhp |
| Bow Thruster | : 500 hp, 12,500 lbs thrust |
| Generators | : (2) 99 kw, 60 cycle<br>: 120/208 volts AC |

**Speed and Fuel Consumption:**

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|---|---|
| Maximum | : 14 kts |
| Cruising | : 13 kts |
| Consumption | : Maximum 2,800 GPD<br>: Economical 2,400 GPD |

**Discharge Pumps:**

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|---|---|
| Fuel Oil | : 350 GPM @ 200 ft head |
| Drill Water | : 350 GPM @ 200 ft head |
| Fresh Water | : 350 GPM @ 200 ft head |

**Deck Machinery/Equipment:**
4-point Mooring System consist of 3 winches, 1.25 in galvanized steel core cables with 9,000 lb anchors and approx. 5,000 ft lines. Special anchoring arrangements available in depths greater than 500 ft.

| | |
|---|---|
| Moonpool | : 30-in diameter |

**Capacities:**

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|---|---|
| Deck Cargo | : 450 tons |
| Fuel Oil | : 105,181 gallons |
| Drill/Ballast Water | : 105,939 gallons |
| Potable Water | : 46,438 gallons |

**Electronics:**

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|---|---|
| Satellite Navigator | : (2) MX4400 |
| Radar Main | : Raytheon R-72 |
| Radar Auxiliary | : Raytheon R-73 |
| Echo Sounder | : Raytheon R-2460W |
| Auto Pilot | : Robertson MK 11 |
| Gyro Compass | : Navitec KR005-A |
| Communications Systems | : Inmarsat and Cellular |
| SSB Radio | : Stevens SEA222 |
| VHF Radio | : (2) Standard and (1) Horizon<br>PA System, TV, Video |

**DRILLING SYSTEM DATA**

| | |
|---|---|
| **Type of Rig** | : Failing DMX |
| **Drillstring** | : 5 in. API w/4-1/2 in. Tool Joint |
| Capacities | : 1,200 feet (Steel) |
| **Derrick Height** | : 40 feet |
| Capacity | : 25 tons |
| **Mud Pumps** | : (2) Hydraulic Duplex<br>: (1) Triplex |
| **Stern A-Frame** | : 20 ton SWL |

**Downhole Testing Systems**

- Piezocone Penetrometer
- In situ Vane
- Seismic Cone Penetrometer
- Piezoprobe
- Temperature Probe

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