



M.V. BINH MINH 02
2D SEISMIC RESEARCH VESSEL



TECHNICAL SPECIFICATION

Name of Vessel	: M.V. BINH MINH 02	Builder	: Folkswerft Stralzung, Germany, 1983
Type of Vessel	: Seismic Research Vessel	Converted	: India, 2008
Owner	: PTSC Marine	Length O.A.	: 64.67m
Operator	: Nordic Maritime Pte Ltd.	Length P.P	: 55.0m
Call Sign	: 3EQY5	Breadth (Moulded)	: 13.80m
Flag State	: Vietnam	Breadth (Extreme)	: 13.80m
Port of Registry	: Vietnam	Depth (Moulded)	: 9.20m
Classification	: Russian Maritime Register of Shipping	Draft (Max)	: 5.22m
Gross Tonnage (Grt)	: 2281 R.T	Draft (Mean)	: 5.22m
		Air Draft	: 29.5m (to highest antenna)

CAPACITIES AND ENDURANCE

Pulling Capacity, 5 Knots	: Min 36 tons
Fresh Water Capacity	: 43 Tonnes
Fresh Water Maker	: Approx. 25 Tonnes/day
Fuel Capacity	: 530 cu.meters
Fuel Type	: MGO
Speed Transit, Max (In calm sea)	: 12 knots
Speed Transit, Economy (In calm sea)	: 10 knots
Consumption Of Fuel, Full Speed	: 9 cubic meters/day
Consumption Of Fuel, Economy	: 7 cubic meters/day
Operational Endurance	: 35 Days up
Endurance Of Fuel During Survey	: 35 Days up

BRIDGE NAVIGATION EQUIPMENT

Radar No. 1	: Sperry Arpa 10cm and 3cm,2007
Radar No. 2	: JMA-5310-6
Intergraded into the system	: TRON UAIS TR-2500,2007
ECDIS	: C-map
Gyro Compass	: 2, Anschutz STD 22
Magnetic compass	: Standard, Germany
Auto Pilot	: Anschutz Pilot Star D
GPS Receiver	: Leica MX-420
Speed Log	: SKIPPER
Echo Sounder	: JMC F-3000
Radio's, VHF, Gmdss*, Type 1	: SAMYUNG STV 160
Weather Station	: AANDERAA Data Instrument 3634
Navtex Receiver	: Standard Radio
GMDSS	: SAMYUNG (in accordance with IMO regulations for operations within sea area A3)

COMMUNICATION EQUIPMENT

Class/Corr. Category	: MF/HF	Emergency Radio	: COMPASASAT Samyung 406
Transmitter/Receiver, Main (MF)	: Samyung1150 DN/SN 100	Beacon (EPIRB)	: 2, SART (Jotron)9.2-9.5GHz
Transmitter/Receiver, Reserve (MF)	: Samyung1150 DN/SN 100	Radar Transponder	: PA System
Transmitter/Receiver,Main (VHF)	: STR 580D	Loudhailer	: Yes
Transmitter/Receiver,Main (Dsc)	: STR 580D	Headset radios	: 4 pcs
Radio, Portable, VHF	: 3, SP3300	CCTV system	: Back deck to Bridge/Instrument room/...

SATELLITE COMMUNICATIONS

Inmarsat Type F	: Thrane & Thrane Capsat fleet 77
Inmarsat Type C	: 2, Thrane & Thrane Aalborg A/S H2095C
VSAT	: Seatel DAC 2200
Iridium Type	: Marconi

SAFETY EQUIPMENT CREW

Life Rafts Type/Capacity	: RFD, 20 men
Number Of Life Raft	: 6
Life Jackets	: 45 pcs
Survival Suits, Thermo Insulated	: 45 pcs
Fast Rescue Craft	: Mare Safety GRP 700 FRC, 10 men
MOB	: 6 man

FIRE FIGHTING SYSTEM

Fire Detection System	: Autronica FDMS
Main Fire Pump	: 2 x 70 m3/hr, 5 bar
Emergency Fire Pump	: 70 m3/hr, 5 bar
Fireman's Outfit	: 2 pieces

HULL OUTFITTING

Decks Crane,	: 3 ton/16m, knuckle boom
Crew Accommodation, Bunks	: 44
Hospital	: 2 persons
Single Berths Cabins	: 4



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Fire Extinguishers	:	5 x CO2 type, 5 kgs	Double Berths Cabins	:	5
	:	9 x Foam type, 9 L	3 men Cabins	:	3
	:	3 x Powder type, 6 kgs	4 men Cabins	:	5
	:	29 x Powder type, 9 kgs	Client Cabins, Single Berths	:	1
Wheeled Fire Extinguishers	:	2 x powder type, 50 kgs	Total	:	46, fully air-conditioned
Incinerator	:	N/A	Fitness Room	:	1
			Survey Instrument room	:	70m2
			Laundry	:	2 x washing machine 2 x tumble dryers

MACHINERY EQUIPMENT

Main Engines	:	2x Wartsila 6D20 Diesel (2x1080kW) Installed 2002	Emergency & Harbour Gen. Engine	:	SKL 6VD14,5/12-2SRW
Shaft Generator	:	1 x 640 kW; 1 x 325 kW	Emergency & Harbour Gen.	:	DGKIO 75-4 70KVA
Emergency Generator	:	1 x 56 kW	Cooling System for Aux. Engines	:	Close Loop
Propellers	:	C/P propeller (CPP)	Fresh Water Generator (Fwg)	:	25 tons / per day
Diameter & RPM	:	4 blades, 2900mm, at 203rpm in nozzle	Steering Gear	:	ORSTA hydraulic TGL 1068S
	:		Sewage Plan	:	Evac
Propeller Type	:	DMR 1764 kW	El. Poer, Useful, Out from M.S. Board	:	3067 Kw
Propeller Control	:	Remote	Ups Power to Instrument Room	:	1X LP Series 30KVA
			Power Supply Instrument Room Back-up	:	1X LP Series 30KVA

ENERGY SOURCE

Manufacturer	:	Sercel (France)
Type	:	2 x G.Gun II Parallel cluster
Number of arrays	:	2
Number of sub-arrays	:	4
Nominal working pressure	:	2000 PSI
Sub array configuration	:	08 Gun In parallel cluster
Source Volume	:	4,240 cu. Inch

AIR GUN CONTROLLER SYSTEM

Manufacturer	:	SEAMAP
Type	:	GunLink2000 gun controller

COMPRESSOR PLANT

Manufacturer	:	Neuman & Esser (Germany)
Capacity	:	2 x 1800 cfm = 3600 cfm
Generators	:	Caterpillar, 2 x 485 kW

STREAMER

Manufacturer	:	Sercel (France)
Type of streamer	:	Seal Fluid.24.bit Digital
Effective length of the streamer	:	1 x 12000m
Module Type	:	Acquisition Line Section (ALS)
Active Group Lengths	:	150 m
Groups per streamer section	:	12
Group sensitivity	:	17.4 V/bar
Hydrophone type & model	:	ALH20 or Geopoint
Hydrophones per group	:	16

SEISMIC RECORDING SYSTEM

Manufacturer	:	Sercel (France)
Type & Model	:	Seal CMXL 2000 recoding system
Maximum Number of Channels	:	20 000
Number of auxiliary channels	:	60
Recording Format	:	SEG D 8058
Recording Media	:	3592 IBM
Number of cartridge drivers	:	6
Sampling rates	:	0.25, 0.5, 1.2, 4 ms

2D ONBOARD SEISMIC PROCESSING SYSTEM

Manufacturer	:	GeoCluster – CGG Veritas
Software description	:	CGG 2D/3D GEOCLUSTER Software
Hardware description	:	Cluster 8 Nodes dual 5150, 32 x cores

INTEGRATED NAVIGATION SYSTEM

Manufacturer	:	Quest Geo Solution Ltd
Primary system	:	TriggerFish 2D
Manufacturer	:	Subsea 7
Secondary system	:	Veripos Ultra 2D

RELATIVE GLOBAL POSITIONING SYSTEM (STREAMER & SOURCE POSITIONING)

Manufacturer	:	IO DigiCOURSE (USA)
Streamer positioning	:	Bird-Compass 5011E
Source positioning	:	Bird-Compass 5011E

All particulars presented are believed to be accurate but given entirely without warranty. Interested parties are advised to verify details through inspections.