

ORIENT EXPLORER



***Reflect on Your
Seismic Needs***



Reflect

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ORIENT EXPLORER

SEISMIC VESSEL SPECIFICATIONS

Owner of the vessel: JSC "Dalmorneftegeophysica"
Flag: • Port of registry: Panama / Panama
Date build and rebuilt: 1988, Converted 1995
Call Sign: • Class: 3FFX5. DnV, 1A1 ECO + Helideck ICE1A
IMO #: 8409020

ACCOMMODATION

Total number of berths: 60
Hospital: 1
Helideck: Super Puma 332 / Bell 212 SI

AIRGUNS

Manufacturer: Bolt
Type: 1500 LL & 1900 LLXT
Operating pressure: 2000 psi
Volume: 3090 cu. In. "flip Flop"

COMPRESSORS

Manufacturer: Hamworthy
Number: 5
Total air capacity: 1005 scfm

GUN SYNCHRONIZATION SYSTEM

Gun control system: GCS90
Manufacturer: Syntron
Source array positioning system: RGPS, Acoustics

STREAMER

Manufacturer: Sercel
Type: Sercel Sentinel Solid Streamer
Maximum number of streamers: 4 x 6,000m @ 100m separation or 1 x 12000m
Number of groups per section: 12
Active section length: 150m Active Twinex
Group spacing: 12.5m
Hydrophones type: Sercel Flexible Hydrophone
Group sensitivity: 19.73 V / Bar @ 20 deg C
Group capacitance: 278 nF @ 20 deg C

STREAMER CONTROL

Depth controllers: DigiCourse 5011E Compass /
Acoustic: DigiCourse
Heading measurements: DigiCourse 5011E Compass Bird
Manufacturer: DigiCourse (ION)
Streamer separation: Barovane-BARO 48

RECORDING INSTRUMENTS

Manufacturer: Sercel
Type: Seal
Preamplifier gain: 12 db typical
Number of available channels: up to 10,000 (depending sampling rate)
Number of auxiliary channels: 48
Recording format: SEG D 8058 32 Bit
Sampling rate: 0.5, 1, 2, 4 ms
Recording media: LTO-3 Cartridge Tape
Online QC: Seapro
Hard drive capacity: 400 Gb / External Hard Drives
Low cut filter: 3 Hz analogue, 3 Hz 6dB / Oct digital
High cut filter: 0.8 Freq Digital, Finite Impulse Linear Phase

ON-BOARD DISPLAYS

Single trace recorder: OYO Geospace
Type: GS 624-2

SAFETY

FRC: Magnum-750 equipped with SOLAS
Life rafts: 4 x 20, 4 x 25, 1 x 10 man
Survival suits: 74
Life Jackets: 126

FIRE FIGHTING AND TYPE

Engine room: CO2
Compressor room: CO2
Instrument room: CO2 + portable extinguishers
Streamer reels: Foam
Firemen outfit: 7
Breathing apparatus: 7
Fire pumps: 1 x engine room, 1 x emergency pump

DIMENSIONS

Length: 81.85m
Beam: 14.8m
Mean draft: 6.5m
Gross tonnage: 3478
Maximum speed: 12 knots
Cruising speed: 10.5 knots
Fuel capacity: 1048m³
Endurance: unlimited – resupply at sea
Main engine: Zgoda – Sultzer 6 ZL 40/48, 4200 BHP / 3090 kW, 505 rpm
Blades, propeller: CPP PH 1150/4-R315, diameter 3000 mm
Rudder: • Bow thruster: 1 x Zamech, 300 hp / 220 kW
Auxiliary engine: Sulzer H.Cegielski 8AL20/24, 735BHP / 2 x 548 kW, 750rpm

NAVIGATION AND COMMUNICATION

VHF radio (Fixed): 2 X DSC VHF Furuno FM-8000
VHF radio (Portable): 12 x Motorola GP300
Navtex: Lo-Kata
Inmarsat receiver: VSAT
Radar 1: Furuno FAR-2830S ARPA
Radar 2: Furuno FAR-2100
Radar 3: Furuno FAR 1525 ARPA
GPS: Furuno GP-90 & JRC JNAV 500
Autopilot: Sperry ADG3000
Gyro: Tokimer 5000
Weather fax: Furuno Fax 207.
Speed Log: Furuno Doppler Log DS-80

INTEGRATED NAVIGATION SYSTEM

Manufacturer: Concept Systems Ltd (ION)
Type: Orca
Software version: 10.9.01
Platform: Red Hat Linux
Binning system: Reflex 1.9.4
Post Processing software: Sprint

POSITIONING SYSTEMS

D.GPS

Manufacturer: C-Nav / Veripos
Type: C-Nav – 2050 System ® w / C-Navigator
Receiver: C-Nav Dual Frequency Receiver

r.GPS

Manufacturer: Seamap
Type: Bouylink, GPS Seismic Tail Buoy Tracking

GYROCOMPASS

Manufacturer: Sperry Marine
Type: X MK2

ECHOSOUNDER

Manufacturer: Simrad EA500
Type: FE600 & Furuno FCV 668
Frequency: 38 kHz & 200 kHz

COMPASSES

Manufacturer: DigiCourse (ION)
Type: DigiCourse 5011E Compass Bird

ACOUSTICS

Manufacturer: DigiCourse (ION)
Type: DigiCourse CMX units (cable tx/rx)
DigiCourse 5011E Acoustics Bird (cable rx)
DigiCourse CMX units (source tx/rx)
Streamer Positioning: rGPS, compasses and acoustics
Source Positioning: rGPS and acoustics

ON-BOARD NAVIGATION DATA FINAL PROCESSING AND QC

Software description: Sprint 3D
Software version: 4.3.3
Final data products: UKOOA P1/90
Platform: Red Hat Linux

ONBOARD SEISMIC DATA PROCESSING & QC

Software: Globe Claritas
Platform: Linux
Capabilities: Full onboard processing

WORK BOAT

Manufacturer: Viking
Type: 2 x 6 personnel