



Maritime Specifications / Particulars

Main Particulars

Ships Name	Geco Emerald
Call Sign	3 FYK 3
International Maritime Org. (IMO) No.	9043079
Owner	Gecoship AS
Previous Name	N/A
Flag State & Port of Registry	Panama
Panama Official No. (if applicable)	23043-PEXT-2
Date of Build	14 th June 1992
Yard No. and Type of Vessel	149, Seismic Research
Yard Built	Flekkefjord Slipp OG Maskinv. A/S
Date Converted / Upgraded	Aug 1997
Yard Converted / Upgraded	Pan United Shipyard, Singapore. Jul 2006
Classification Society and Class Notations	DnV+1A1 ICE-1A, EO, Helideck
Class Id No.	DnV 17494
Classification Machinery System	EO
Class Approved Maintenance System	DnV Approval No. PMS/S-287
International Safety Management (ISM) Code Compliance	DOC, Issued 05-May-2011, Exp 26-Apr-2016 SMC, Issued 11-Jun-2013, Exp 15-Jul-2018
Safe Manning Certificate (Minimum)	Master, 2 Officers, 4 Ratings, 3 Engineers, 2 Motormen

COTEJADO

Principal Particulars

Gross Tonnage - International	4546
Gross Tonnage - Suez Canal	5539.73
Gross Tonnage - Panama Canal	4596.65
Net Tonnage - International	1364
Net Tonnage - Suez Canal	4592.16
Net Tonnage - Panama Canal	3933.68
Lightship Displacement	3532.40



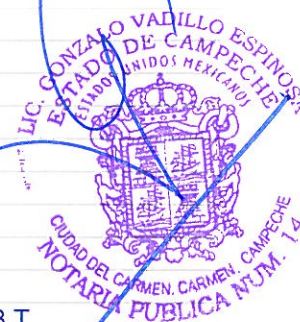
Dead Weight	1697
Length Over All (LOA)	80.6 m
Length Between Perpendiculars	71.424 m
Breadth (Moulded)	14.8 m
Breadth (Extreme)	18.8 m
Depth (Moulded)	8.536 m
Draft (Max)	7.65 m
Draft (Mean)	7.23 m
Air Draft (to highest antenna)	30 m
Helicopter Deck Rating	Superpuma AS 332L2 / Bell 214ST / 9.3 T
Helicopter Deck Diameter (D-Value)	18.95 m / 210 deg
Helicopter Deck Markings Standard	UK-CAA / NOR / DK / AUST
Additional Notes:	

Capacities and Endurances

Pulling Capacity, 5 knots	45 tons
Fresh Water Capacity	165 m³
Fresh Water Maker Production	Evaporator, 12 m³/day
Engine room HP Air Compressors	N/A
Potable Water System	Evaporator
Fuel Capacity, All Tanks Topped	1152 m³
Fuel, Useful for 100 % Consumption	1000 m³
Fuel Type	Marine Gas Oil
Fuel Tank Heating	N/A
Lub. Oil, Engine Oil (m³)	25.0 m³
Cylinder Oil, HP Compressors (m³)	6.89 m³
Cable Oil, Kerosene (Clean/Separated/Dirty)	24 m³
Ballast, Sea Water (m³)	212 m³
Speed, Transit, Max, in calm sea	12 knots
Speed, Transit, Economy, in calm sea	9.5 knots
Consumption of Fuel, Full Speed	24 m³
Consumption of Fuel, Economy Speed	18 m³
Operational Consumption	26 m³
Endurance of Fuel, during survey	40 days
Consumption of Fuel in Port	3 m³
Safety Equipment Certificate	49
Additional Notes:	

Bridge Navigation Equipment

Radar No 1	Furuno FR-2827 X-band
Radar No 2	Furuno FR-2837 S-band
Radar No 3	N/A
VDR / S-VDR	Furuno VR-3000S
ECDIS	Maris, ECDIS 900
Gyro Compass	2 x Simrad GC-80 Master
Auto Pilot	Robertson AP9 MK3
GPS Receiver	2 x Furuno GP150 (DGPS), 2 x Trimble 4000 DL - Sat. C (located in instrument room)
Speed Log	1 x Furuno Doppler Log DS 80
Echo Sounder	1 x Simrad EN-250 / EQ 100,



COTEJADO



RFC: CIN050623NW1 RPMN:2656-5557
 Ave. Insurgentes Sur No. 1863, Piso 8
 Col. Guadalupe Inn, Delegacion Alvaro Obregón
 C.P. 01020, Mexico, D.F.



Motion Monitor	Seatex HMS 100
Navtex Receiver	JRC NCR - 333A
UPS, Power Supply to all GMDSS equipment	Merlin Gerin 20 kVA
Additional Notes:	
BNWAS	Furuno BR-500

Communication Equipment, Compliant With GMDSS Requirements

Radio Station License No.	23675-G
Class / Corr. Category	A1, A2, A3
Ship / Air Craft Radio	I2 x COM IC- A 110 EURO
Helicopter Beacon	SAC SA100 – 410kHz
Automatic Identification System (AIS)	Saab - AIS
Transmitter / Receiver, Main (MF)	Sailor system 5000 MF/HF DSC CU5100
Transmitter / Receiver, Main (VHF/ DSC)	2 x Sailor 6222 VHF DSC
Radio, VHF, GMDSS, Type 1	2 x Sailor RT 2047
Radio, VHF, GMDSS, Type 2	2 x Sailor 6222 VHF DSC
Radio, VHF, GMDSS, Type 3	N/A
Radio, VHF, GMDSS, Portable / Hand Held	3 x SRH 250 GMDSS
Radio, VHF, Portable	3 x AXIS 250 GMDSS NAVICO
Radio, UHF, Fixed	2 x SIMRAD HT53
Radio, UHF, Portable	3 x Motorola Radius GM900
Booster Unit for Portable Radio (UHF)	14 x Motorola Radius GP328
Emergency Radio Beacon (EPIRB)	9 x Motorola Radius GP340
Radar Transponder	HK75 Sound Tech
Long Range Identification Transmitter	1 x Tron 406 EPS
Radio Direction Finder	4 x Jotron Tron SART 9 GHz
Weather Facsimile / Weather Station	1 x Sailor TT3000 LRIT mini C
Ship Security Alert System (SSAS)	
Additional Notes:	Furuno IC-307

Satellite Communications

MMSI Number:	352 926 000
Accounting Authority Code (AAIC)	GB11
Inmarsat Type A	N/A
Inmarsat Type B	N/A
Inmarsat Type C	2 x Thrane & Thrane TT 3020 C No1: 435 292 610 No2: 435 292 620
Inmarsat Fleet 77	Service Provider - Nera Fleet 77 Ph: +870 761 122 873 Fax: +870 761 122 874 (On Request)
V-Sat	Ph & Fax +44 207 576 6864 Ph & Fax +1 469 484 5164
Max. Bandwidth on V-Sat	512 kbps
Telefax Machine	HP Officejet Pro L7780 All in one
Internal E-Mail & PC Network	Outlook, Cisco, Windows XP
E-Mail Address To Vessel	captain@emerald.westerngeco.slb.com
Additional Notes:	

COTEJADO



Safety Equipment Crew

Lifeboat Type / Capacity/ No. of Boats	N/A
Engine, Lifeboat	N/A
Life Raft Type /Capacity	6 x Viking DKF 25, Inflatable + 1 x Viking 6DK
Number of Life Rafts	7
Life Jackets No.	108 x Regatta Kontiki 88
Survival Suits, Thermo Insulated	66 x Unitor, 9 x Helly Hansen
Working Suits, Thermo Insulated	10 x Typhoon, 1 x Helly Hansen
Man Overboard Boat (FRB) Type	MP-741 Springer
Engine and Speed of Boat (FRB)	Yanmar 6LYAM-STP/340HP
Waterjet and Gear Drive (FRB)	Hamilton 274 Waterjet
FRB Davit	Vestdavit AS, Type P-3600, S/N 466
Work Boat No.1	Norpower B. No. 1417, 25"
Engine Work Boat no.1 and Speed of Boat	Cummins 6BT 5.9 m / 133 kW / 210-180 HP
WB No.1 propulsion type	NOGVA AGF 1131, S/N 1983
WB No. 1 Davit	Vestdavit AS, type PLR-10002, S/N P-08056
Work Boat No.2	
Engine Work Boat no.2 and Speed of Boat	
WB No.2 propulsion type	
WB No. 2 Davit	Vestdavit AS, type CL-7000, S/N 882
Additional Notes:	

Fixed Fire Extinguisher System

Engine Room / Compressor Room	CO ₂
Emergency Generator Room / Separator Room	CO ₂
Incinerator Room	Foam (AFFF)
Galley Ducting	CO ₂
Tape Store	CO ₂
Cable Store	Foam (AFFF)
Streamer Winch Room	Foam (AFFF)
Helicopter Deck	Foam (AFFF), 2 x Monitors
Paint Store	Foam (AFFF)
Chemical Store	Foam (AFFF)
Central Store	
Main Foam Pump, AFFF Foam Mixture	CR4-120/11 3%
Main Fire Pump	2 x Allweiler NISM 80 m³/h
Emergency Fire Pump	Allweiler NISM 40 m³/h
Fire Detection Monitoring System	Eltek Delta OP
Additional Notes:	

Hull Outfitting

Anchor	2 x SPEK 2460
Windlass	2 x Hydraulic Braatvag
Mooring Winches	2 x Hydraulic Braatvag
Capstan no.1	1 x ODIM
Capstan no.2	1 x ODIM
Capstan no.3	2 x SPEK



COTEJADO



Decks Crane 1, Capacity / Reach / Location
Decks Crane 2, Capacity / Reach / Location
Decks Crane 3, Capacity / Reach / Location
Decks Crane 4, Capacity / Reach / Location
Anti Rolling Damping System
Heeling Tanks, Volume and Fuel / FW / SW
Bunker Connections, Locations
Bunker Connections, Type
Bunker Hose Length and Dimension (Loose)
Crew Accommodation, No of Bunks
Single Berth Cabins
Double Berth Cabins
Client Cabins, Single Berth
Business Conference and Training Room
Training Room with Computers / Network
Sauna and Fitness Room
Additional Notes:

1 x Hydralift 2.0 tons / 12 m (FWD)
1 x Hydralift 5.5 tons / 14.5 m (AFT)
N/A
N/A
Passive
2 x Heeling Tanks each 78 m³ MGO
Port / Starboard Shelter Deck Frame #45
Forecastle Deck Forward Frame #105
4" Camlock and TODO 3"
1, 4" x 50 m + 1, 3" x 75 m
49 beds
36
6
2
Poop Deck
Main Deck



International Oil Pollution Prevention (IOPP) Equipment

Incinerator, Sludge and Waste Oil	Golar OG200C IMO approved
Bilge / Oily Water Separator	SKIT/S-DEB 2.5 - capacity 2.5 m³/h
Oily Water / Sludge Holding Tanks Cap.	14.6 m³
Oil Spill Absorbent / Damage Control	Unitor Oil Spill Kit
Sewage Treatment Plant	Hamann AG, Type HL-CONT, S/N 6836
Additional Notes:	

Machinery Equipment

Air Source, HP Compressors	LMF310E VC2216W14 / LMF420E VCS2413W14
Air Capacity, Each and Total (CFM)	2 x 1100 CFM / 2 x 1500 CFM
HP Compressor Drive Motors	2 x ABB 710 kW 2 x ABB 500 kW
Main Engine or Electric Prop. Motors	2 x Bergen Diesel BRG6 / 2330 kW / 3170 BHP
Auxiliary Engines (Generator Drive)	1 x Bergen Diesel BRG6 / 2330 kW / 3170 BHP
Redundancy Propulsion, Az-Thruster	1 x Brunvoll AR-63-LNC-1650/736 kW
Vessels Total Brake hp / kW for Prop.	6220 hp / 4580 kW
Main Engines, Power Supply	Single Screw / Direct Diesel
Propeller Type, Main Propulsion	4 x NiAlBronze (Right hand rotation)
Propeller and Thruster Control	Ulstein / Brunvoll
Propeller Blade, Spare	NIL
Generators / Alternators	3 x Leroy LSA 56 m / 2770 kVA / 6001 2000 kW
El. Power, Useful, Out from M. S. Board	Merlin Gerlin 80 kVA
UPS Power To Instrument Room	Rotating Converter
Power Supply Instrument Room Back-Up	1 x Cummins KTA- 19 G2 / 600 HP
Emergency & Harbour Gen. Engine	1 x Stamford / MHC5340 / 450 kVA / 91
Emergency & Harbour Generator	No
Fuel Back-Up System for Aux. Engines	Separate
Cooling System for Aux. Engines	1 x Brunvoll FU-45-LTC-1375, 423 kW
Bow Thruster	1 x Brunvoll FU-45-LTC-1375, 423 kW
Stern Thruster	

COTEJADO



RFC: CIN050623NW1 RPMN:2656-5557
Ave. Insurgentes Sur No. 1863, Piso 8
Col. Guadalupe Inn, Delegacion Alvaro Obregón
C.P. 01020, Mexico, D.F.



Fresh Water Generator (FWG)
Boiler, Exhaust Gas & Oil Fired
Steering Gear
Additional Notes:

Alfa Laval NIREX / JWP-26-C80 / 15 m³
Parat / Anders Halvorsen A/S 90 / 2.5 bar
Tenfjord I-12 M240/2GM 425

Seismic Specifications

Main Particulars

Streamers
Tow Points
Sub Arrays

8
8
6

Energy Systems

Gun Controller Hardware
(Model & Manufacturer)
Gun Controller Software (Type & Version)
Guns (Manufacturer, Type & Capacities)
Gun Cable Type
Diameter of Air Hose
Gun cable length
Nominal Source Pressure
Pressure Release
Sensor Return
Timing Resolution
Source
Total Compressor Capacity
Compressors (Manufacturer & Capacity)
Near Field Phone (Manufacturer & Type)
Far Field Phone (Manufacturer & Type)
Depth Indicators
Additional Notes

SUNFIRE V240

Trisor 1.6
Bolt, Long-Life (LL) Airgun, 1500 and 1900,
30 to 290 cu. in.
DAG-C
1 inch
500 m (Average Length)
2000 psi
Solenoid
Piezoelectric
0.1 ms
Standard combination of 1049 cu. in. sub arrays
5187 SCFM
2 x LMF 420E, 1500 SCFM
2 x LMF 310E, 1100 SCFM
WesternGeco, HD-1A or HD-1E-W
(Typically one NFP per ultrabox)
WesternGeco, REF-Tek17 or HA1-G11
WesternGeco (Typically one indicator per ultrabox)

Streamer & Recording Systems

Streamer (Manufacturer & Type)
Streamer Deflector Type
Section Breaking Strength (Typical)
Typical Towed-Streamer Stress
Streamer Capacity (Max onboard)
Streamer Control Device
(Manufacturer & Type)
Recording System Hardware
(Model & Manufacturer)
Recording System Software
(Type & Version)
Single & Multi-Trace Plotter
(Manufacturer & Type)
Auxiliary Systems
Recording System Format
Recording System Media

E4500 SUN Microsystem, SUNFIRE 445

TRIACQ 1.6.2 Hybrid with Triacq 5.0

OYO GS622

SEG D Rev.2 8036, 8048, 8058
IBM 3590 and 3592 Jaguar Tape



COTEJADO



RFC: CIN050623NW1 RPMN:2656-5557
Ave. Insurgentes Sur No. 1863, Piso 8
Col. Guadalupe Inn, Delegacion Alvaro Obregón
C.P. 01020, Mexico, D.F.



Recording System Device

Additional Notes

2 X Tape Drives IBM 3590
2 X 3592 Jaguar Tape Drives
Emerald is currently configured as source vessel

Navigation Systems

Instrument Room Gyrocompass
(Manufacturer & Type)
Source Positioning System
(Manufacturer & Type)
Global Positioning System (GPS) Receivers
(Manufacturer & Type)
DGPS QC System (Manufacturer & Type)
Integrated Navigation System
(Manufacturer & Type)
3-D Quality Control System
(Manufacturer & Type)
Tail Buoy (Manufacturer & Type)
Tail Buoy Positioning (Manufacturer & Type)
Onboard Tail Buoy Positioning
(Manufacturer & Type)
Ultra-Short Baseline (USBL) Acoustic
Positioning System (Manufacturer & Type)
Acoustic Positioning System
(Manufacturer & Type)
Current Profiler
(Manufacturer, Type & Frequency)
Temperature/Salinity Dip Profiler
(Manufacturer & Type)
Echo Sounder (Manufacturer & Type)

2 x Simrad GC-80 Master

Navia Maritime A/S, Seatrack 330

2 x Novatel, OEM-5 Dual Frequency
1 x Novatel, OEM-4 Dual Frequency
WesternGeco, TRINAV 4.1 U21 GPS
WesternGeco, TRINAV 4.1 U21 RT

WesternGeco, TRINAV 4.1 U21 QCPR

Transducer Frequency & Theoretical Range

Sonardyne

2 x RDI, Workhorse ADCP, 600 kHz Broad Band

1 x Sippican, XSV-02 and XCTD1
1 x Valeport, Valeport SV650 MK1
Kongsberg-Simrad, EA600
1 x 18 kHz to 3800 m
1 x 38 kHz to 3200 m
1 x 200 kHz to 500 m
-7.2 m Transducer from TFWLL
UKOOA P1/90, P2/94
IBM 3590 Tapes x 2
IBM 3592, Type B x 2

Transducer Draft

Recording System Format (Nav)

Recording System Media (Nav)

Recording System Device (Nav)

Additional Notes

Onboard Seismic QC

System

Software

Hardware

Additional Notes

TRIACQ QC 3.1

Omega / ATV / Profile / Charisma

Dell Precision

Onboard Seismic Processing

System

Software

Hardware

Additional Notes



COTEJADO