



VESSEL M/V OCEAN PEARL



Combined source/cable/buoy handling vessel currently working offshore Nigeria.

Reservoir Exploration Technology ASA (RXT) is the only marine geophysical company specializing in multi-component seafloor seismic data acquisition. Seafloor seismic data comprises two categories – two component (2C) which is primarily used for appraisal and development where oil companies need higher quality data to optimise reservoir recovery and four component (4C) which is able to solve geophysical imaging challenges that cannot be addressed using conventional towed streamer technology. Other application areas include 4D or timelapse solutions where towed streamers are impractical due to high density of platforms, full azimuth seismic data, and shallow water areas. The Company has offices in Abu Dhabi, Azerbaijan, Houston, Moscow and Rio de Janeiro and has its headquarters in Oslo, Norway. RXT is listed on Oslo Stock Exchange. (OSE ticker: RXT)

Name:	M/V OCEAN PEARL
Year built:	1997
Shipyard name and location:	Gemyat Shipyard, Turkey
Year refurbished:	2001
Shipyard name and location:	Viktor Lenac Shipyard, Rijeka, Croatia
Vessel owner:	Norfield Shipping AS

Classification:	BV Class I 3/3, IE, Cable layer, AUT MS, PYD, MA, TA
Registration:	Bergen, Norway
Flag:	Norwegian, NIS
Gross tons:	7429
Net tons:	2228
Length:	108.61m
Beam:	18.0m
Draft:	6.80m

Seismic

SEISMIC RECORDING INSTRUMENT

Type:	VectorSeis Ocean (VSO)
Number of Channels:	240 4 component stations per VSO cable - 960 channels
Sample interval:	1, 2 or 4 msec
Filters:	3Hz-6dB/octave
Low cut:	1-90 Hz, selectable
High cut:	350 Hz, 15 Hz and 87.5 Hz dependant on sample rate
Recording format:	SEG-Y
Recording medium:	Hard disk transcribed to IBM 3592
QC system:	VSO QC via dual frequency radio transmission
Online display:	Sony 20" monitor

VECTORSEIS OCEAN (VSO) CABLE

Number of Cables:	12
Type:	Ion Geophysical VSO cable
Max. length:	6000m
4C Station spacing:	25m
No of sensors/ station:	4
1 x hydrophone:	High Tech
3 x accelerometers:	VSO MEMS (orthogonal)
Hydrophone sensitivity:	0.39 or 22 v/bar
Hydrophone:	Pascals or pascals/sec
Accelerometers sensitivity:	40 ng/bit
Accelerometers:	gals
Acoustic positioning:	Sonardyne OBC 12 and Fusion 8035 Transponders
Transponde spacing:	300m

NAVIGATION EQUIPMENT

Intergrated Nav system:	Gator CSL
Primary DGPS:	C-Nav RTG
Secondary DGPS:	Veripos Standard+ /Ultra v1.07
USBL:	Sonardyne 8021, Ranger v5
Echosounder:	Simrad EA500
Primary Heading Sensor:	SGBrown 1000S
Secondary Heading Sensor:	SGBrown 1000S
Tertiary Heading Sensor:	Alpha Minicourse
RGPS:	Seatex Seatrack 330, seadiff
Secondary RGPS:	Radius
Binning System:	OMNI v 7.013
Processing software:	SLIP/RAP21/SPSEditor
SPS QC:	GeometricSPSCheck v 1.0

ENERGY SOURCE

Type:	G-Guns; 3990 cu.in
Size of guns:	40 cu in. up to 250 cu in.
Number of Sub. Arrays:	6
Configuration:	2 x 3990 cu in.
Tow width:	50m
Firing control:	RTS Bigshot
Depth transducers:	AG Geophysical
Tow system:	ADV
Compressor:	LMF 138-62 x 2
Compressor capacity:	2200CFM each
Pressure:	2000 psi

The future is on the seafloor

RESERVOIR EXPLORATION TECHNOLOGY

General

Last dry dock:	Apr-06
Next scheduled dry dock:	Apr-09
Total accommodation capacity:	65 persons
Fuel capacity/ endurance:	2000 metric tons/200 days
Fuel consumption (full ops):	10 metric tons/day
Water capacity/ endurance:	610 metric tons/days
Cruising speed:	12 knots
Propulsion:	2x1600 kw Aquamaster, US2001/5250 FP
Power plant:	2x1800 kw Wartsila 6SW28 @ 900 rpm 2x2340 kw Wartsila 6R32 @ 720 rpm
Autopilot:	Anschutz/Raytheon Nauto Pilot 2010
Gyro compass:	S.G.Brown 1000m x 2
VESSEL NAVIGATION AIDS	
GPS receiver (Bridge):	Navcom 2000-D
Radar - make/model:	Decca Bridge Master ARPA - 3 cm
Radar radius:	Max. radar range 96 NM
2nd Radar - make/model:	Decca Bridge Master ARPA - 10 cm
2nd Radar radius:	Max. radar range 96 NM
VESSEL COMMUNICATION	
Call sign:	LAGD 6
SSB make/model:	SAILOR HC4500 MF/HF, GMDSS A3 area equipped
SSB frequencies:	Marine band
SSB range or power:	150-200NM
VHF make/model:	2xMarine VHF DSC tx/rx each with an additional remote hand set
VHF frequencies:	Marine band
Emergency radio-type/make:	3xSailor Hand Held Marine VHF Survival Craft Radios
Emergency radio frequencies:	2182 kHz, VHF
Emergency radio range or power:	Emergency SSB 150-200 NM, Emergency VHF 20NM
Marisat - type/make/model:	2xInmarsat "C" trans-receiver 1xNera Saturn Bm, voice, MSD & fax
Vsat/Norsat - make/model:	1xSeaTel 2.4 mtr C-Band Antenna System, 128 kbps link for 6 voice/fax lines, data & internet access connected to shipboard network. Max. bandwidth capability of system is 2.0 Mbps.
Weather fax - make/model:	Furuno DFAX-207

VESSEL SAFETY	
Life boats - type/capacity:	2x65 man enclosed lifeboats
Life rafts - type/capacity:	2x25 persons plus 4x20 persons
Life jackets - type/number:	100 off, Type Margi art. No 0474, plus 30 work vests for seismic operations
Survival suits - type/number:	65 Helly Hansen E-307
MOB Boat:	GREBEN RB4.3
Size/capacity MOB Boat:	1x4.3m
Location/launching method MOB Boat:	Single point davit MOB launch system, GREBEN RC 12/3.3
Expected response time MOB Boat:	3-5 min.
Maximum speed MOB Boat:	15 knots
Emergency radios:	2 x ACR#2726a
Emergency beacons:	2 x Satellite 406 epirbs ADCE 0207CD 4201
Radar transponders:	2 - ACR pathfinders
Fire detection system:	Notifier AFP 200
Fire pumps:	2 x Carver 225 gpm 1 1/2 in. 480 V Marathon motor
Fire suits:	2 x Chieftan for structural type fires
CO2 systems:	Yes
FIRE FIGHTING EQUIPMENT	
Alarm system:	Minerva T2000, Thorn Systems
Engine room system(s):	Fixed CO2
Compressor room system(s):	Extinguisher and fire hoses
Instrument room system(s):	Extinguishers and fire hoses
Cable store system:	Cable deck area - Extinguishers and fire hoses
Galley system:	Extinguishers and fire hoses
Accommodation system:	Extinguishers and fire hoses
Other fixed systems:	Helicopter landing area, Fixed Foam system
Fire pumps - number/capacity:	2-15 cu.m/m each

HELICOPTER DECK	
Helicopter deck size/rating:	19.5mx19.5m octagonal/Super Puma AS 332S
Helicopter beacon details:	NDB beacon