

MTR 2

Tender Assist Drilling Unit

Drilling – Short Description



DESIGN SPECIFICATIONS

Rig Design: Self Erecting Tender Barge
Builder: ACSO, Bordeaux, built in 1981
Class: Bureau Veritas Maltese Cross 1 3/3
Upgraded: 1997, Last SPS – Nov 2002
Certification: MODU Code, SOLAS 1974, Marpol 73-78
Maximum Water Depth: 100 m (330 ft)
Minimum Water Depth: 5.5 m (18 ft)
Drilling Capacity: 4846 m (15,900 ft) w/ 5" DP or
 5943 m (19,500 ft) w/4" DP

Dimensions:
 Length overall: 91.44 m (300 ft)
 Width overall: 27.50 m (90 ft)
 Depth of hull (moulded depth): 6.10 m (20 ft)
 Load Draft (ABS load line): 3.9 m (12.8 ft)
 Gross Tonnage: 7989 mT
 Load line displacement: 9239 mT

Helicopter Deck: Design for Sikorsky S-61 (69 x 69 feet)

Quarters/ Accommodation: 115 Persons

CAPACITIES

Bulk Barite/Ben & Cement Storage: 120 + 160 m³ (9,800 ft³)
 Sack Storage: 2600 ft² covered area (290 mT)
 Drilling Water Storage: 1,190 m³ (7500 bbls)
 Fresh Water: 604 m³ (3840 bbls)
 Fuel Oil: 445 m³ (2800 bbls)
 Liquid Mud: 370 m³ (2,300 bbls)
 Brine: 360m³ (2,264 bbls)

Environ. Limits of Operation	Operating	Rig Up/Dn
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Vertical motion – tip of crane	N/a	0.30 – 0.90 m
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Other – wind velocity	50 Knots	20 Knots
Other – current velocity	5 Knots	2.5 Knots
Other – barge roll	3 deg	calm

MAJOR TENDER EQUIPMENT

Main Power: Total horsepower 5904 Hp.

4x **CATERPILLAR** 3512, Max of 1,476 Hp – 1,200 rpm.

4x **CATERPILLAR** Type 3867 AC generators, 1750KVA / 1225 KW, 600V, 60 Hz.

Mud System: 2x **Mud pumps NATIONAL** 10-P-160 pumps, 1,600 Hp, each drove by 2x **JS** 423 (800HP) DC motors.

9x **Mud Pits:** 4x Active/Res Pits (60m³ ea) + 4x Reserve Pits (30m³ ea) - 1x Slug Tank (10m³) & 1 OBM storage tank (320 bbls) 4x **Brine Pits:** 1x Active Pit (50m³) + 3x Reserve Pits (150m³).

2x Gel pre-hydration tank 30m³ fitted with LP bottom guns

Cranes: 1x **FAVCO** PC200 rated at 150 mT @ 15.5 m (47') - 1x **LIEBHERR** S50/Z85 rated at 50 mT @ 3.6 m to 28 m

Anchoring System: 4x **SKAGIT** DMX-250SXS double drum anchor windlasses + 8x 2" wire 1,066 m (3,500 ft) anchors lines + 4x **LWT VICINAY** 15mT and 4x **DELTA FLIPPER** 10mT anchors.

DERRICK SET : DS 29

The **MTR -2** is working with the derrick-set DS 29. The tender is able to erect the DS 29 with its own main crane on platform beams up to 21.9m (72 ft) above M.S.L.

The DS 29 is supported by the skid beams of the platform deck which is parallel to the tender axes.

- Distance between skid beams: 9.14 to 12.8 m (30' to 41' 3").

- Lateral displacement: 1.83 (6 ft) from centerline of skid beams

The DS 29 is Pride Foramer design, built in 1997 by HUMA, USA

Number of lifts: 3 heavy lift
Maximum weight heaviest lift: 142 MT

MAJOR DERRICK SET EQUIPMENT

Drawworks: **NATIONAL** 80UE, 1,000 Hp, driven by 1xGE 752 DC motors with **STEWART STEVENSON** Crown-O-Matic system (with electrical back up) and **BAYLOR ELMAGCO** 5032 auxiliary brake
Derrick: **IRI LT140** lift & telescopic, 140' high, 15' x 15' base, 500,000 lbs Static Hook Load (SHL) w/ 10 lines – 500,000lbs (226 mT) static rotary capacity + 350,000 lbs (158 mT) setback. Maximum combined capacity 850,000 lbs (384 mT)

Rotary: **NATIONAL** C 375, 37 ½", rated at 650mT, driven by drawworks, roller chain 2" double transmission limited by skid beam at 300 mT

Traveling Block: **Oilwell** type, 295m T (325 tons) rated, w/ five (5) 50" sheaves grooved for 1 1/4" IWRC-EIPS drilling line

Crown block: **IRI**, 272mT (300 tons) rated w/ six (6) 42" sheaves grooved for 1 1/4" drilling line.

Top drive: **VARCO** TDS-9, 450 tons capacity, driven by 2 AC motor 700 Hp continuous output torque of 32,000 ft/lbs and maximum of 46,000 ft/lbs

Iron Roughneck: Hawk Jaw JR model 65K-2GJR

Drilling Depth: 18,000 ft

Drill pipe: as per requirement

BOP: 13 3/8" – 5K BOP stack:

1x **HYDRIL** type GK, 13 3/8", 5,000 psi WP bag preventer

1x **CAMERON** type U, 13 3/8", 5,000 psi WP double rams

1x **CAMERON** type U, 13 5/8", 5,000 psi WP single ram

BOP Control: **STEWART STEVENSON** BOP control unit w/ two (2) independent sources of energy (air & electricity)

Choke Manifold: 3 " - 10,000 psi w/1 manual + 1 remote choke, one vertical poor boy degasser w/ discharge over trip tank

Mud Treatment

Equipment: **S. Shakers** - 4 x **DERRICK FLC-2000** , 1600 GPM capacity, 50-250 mesh size

