Vessel Characteristics

- **D’SOUZA TIDE as shown**
- **COURTNEY TIDE similar**

**Fujian SE 5,150 BHP**

**Anchor Handling Tug**

<table>
<thead>
<tr>
<th>Length, Overall:</th>
<th>194.3 ft</th>
<th>59.3 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beam:</td>
<td>49 ft</td>
<td>15 m</td>
</tr>
<tr>
<td>Depth:</td>
<td>20 ft</td>
<td>6.1 m</td>
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<tr>
<td>Maximum Draft:</td>
<td>16.3 ft</td>
<td>5 m</td>
</tr>
<tr>
<td>Minimum Height:</td>
<td>77.8 ft</td>
<td>23.7 m</td>
</tr>
<tr>
<td>Freeboard:</td>
<td>3.7 ft</td>
<td>1.1 m</td>
</tr>
<tr>
<td>Displacement:</td>
<td>2,840 lt</td>
<td>2,880 mt</td>
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<tr>
<td>Deadweight:</td>
<td>1,320 lt</td>
<td>1,340 mt</td>
</tr>
<tr>
<td>Clear Deck Space:</td>
<td>90 x 41 ft</td>
<td>27.4 x 12.4 m</td>
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<tr>
<td>Clear Deck Area:</td>
<td>3,660 ft²</td>
<td>340 m²</td>
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<tr>
<td>Deck Strength:</td>
<td>1,540 lb/ft²</td>
<td>7.5 t/m²</td>
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</tbody>
</table>

**Class Notations:**
- ABS: +A1, (E), Towing Vessel, OSV, FFV-1, +AMS, +DPS-1

**Last update:** 6/10/2016
## Capacities

<table>
<thead>
<tr>
<th>Deck Cargo:</th>
<th>490 ft</th>
<th>500 t</th>
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<tbody>
<tr>
<td>Fuel Oil:</td>
<td>134,000 gal</td>
<td>510 m³</td>
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<tr>
<td>Potable Water:</td>
<td>22,600 gal</td>
<td>85.7 m³</td>
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<tr>
<td>Fresh Water:</td>
<td>71,800 gal</td>
<td>270 m³</td>
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<tr>
<td>Drill/Ballast Water:</td>
<td>105,000 gal</td>
<td>400 m³</td>
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<tr>
<td>Bulk Tanks (4 tanks):</td>
<td>6,600 ft³</td>
<td>190 m³</td>
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<tr>
<td>Liquid Mud (21 lbs/gal):</td>
<td>2,390 bbl</td>
<td>380 m³</td>
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<tr>
<td>Oil Dispersant:</td>
<td>3,520 gal</td>
<td>13.3 m³</td>
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<tr>
<td>Fire Fighting Foam:</td>
<td>3,520 gal</td>
<td>13.3 m³</td>
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</table>

## Main Engines (2):

- CAT 3516B-HD
- Total HP: 5,150

## Propellers (2):

- KH680 4 Blade CPP
- Kort Nozzles: 2

## Primary Generators (2):

- 350 kw
- 410 v
- 50 Hz
- Driven by: CAT C18

## Secondary Generators (2):

- 800 kw
- 410 v
- 50 Hz
- Driven by: Main Engines

## Emergency Generators (1):

- 65 kw
- 410 v
- 50 Hz
- Driven by: CAT 2438/1500

## Bow Thruster (2):

- Kawasaki KT-72B3 CPP
- Driven by: 515kW Electric Motor
- Total Thrust: 17.3 st 15.7 mt

## (Approximate values assuming Ideal Conditions)

### Fuel Consumption Vs Speed

- Maximum: 21 m³/day (230 gph) @ 13 knots
- Cruising: 16 m³/day (180 gph) @ 10 knots
- Economical: 12 m³/day (130 gph) @ 8 knots
- Standby: 2.2 m³/day (24.2 gph) @ 0 knots

### Range @ 10 Knots:

- 7,440 nm

### Bollard Pull:

- 74 st 67 mt

## Transfer Rates

- Fuel Oil: 660 gpm @ 250 ft 150 m³/h @ 75 m
- Fresh Water: 550 gpm @ 250 ft 120 m³/h @ 75 m
- Drill/Ballast Water: 440 gpm @ 250 ft 100 m³/h @ 75 m
- Bulk: 28 cfm @ 190 ft 47.6 m³/h @ 57 m
- Liquid Mud: 310 gpm @ 280 ft 70 m³/h @ 85 m

## Winch:

- Plimsoll (6m/min)
- Model: Electro-Hydraulic w/200t Brake
- Line Pull: 150 mt
- Tow Wire: 1000 m of 56 mm
- Work Wire: 1000 m of 56 mm
- Pennant Reels (1): 1000 m of 56 mm
- Shark Jaw: Plimsoll 200 MT
- Tow Pins: Plimsoll 200 MT (1 set)
- Stern Pins: 4.4m x 1.6m; 200 mt SWL

## Anchors (2):

- 2881 lbs HHP STOCKLESS
- Anchor Chain: 220 m of 36 mm chain per side
- Crane: 3 t @ 9 m
- Capstans (2): 5 t Plimsoll (15min)
- Tugger (2): 10 t Plimsoll (15min)

## Radar(s):

- 2
- Depth Sounder:
- Gyro Compass:
- Doppler Log:
- Radio:
- 2 x VHF; 1 x SSB
- Sat Com:
- 1 x Inmarsat-C

## Nº of Berths:

- 42
- 1-man cabins:
- 4
- 2-man cabins:
- 3
- 4-man cabins:
- 8
- Certified to Carry:
- 42
- Galley seating:
- 30
- Hospital:
- Yes

## Firefighting:

- FiFi-1

## Dynamic Positioning:

- DP-1 CLASSED

## Ref. Systems:

- 1 x MRU; 2 x DGPS

## Water Maker:

- 5T/Day

## Mud Circulation System:

- Yes

## Rescue Boat:

- 6 Man SOLAS Approved

## Flag:

- VANUATU

## IMO No.:

- 9582192

## Year Built:

- 2010

## Builder:

- FUJIAN SOUTHEAST SHIPYARD

## Call Sign:

- YJV7

## Tonnage (ITC):

- 1678 GT
- 503 NT

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### Tank Table

<table>
<thead>
<tr>
<th>Tank</th>
<th>Contents</th>
<th>Volume [m³]</th>
<th>Base Oil</th>
<th>Fuel Oil</th>
<th>Dry Bulk</th>
<th>DW/WB Potable Water</th>
<th>Fresh Water</th>
<th>Brine</th>
<th>Liquid Mud</th>
<th>Methanol</th>
<th>Lube Oil</th>
<th>Foam</th>
<th>Oil Disp.</th>
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</table>

Total Volume [m³]: 0.0 539.9 186.9 396.4 85.7 271.6 0.0 380.2 0.0 6.4 13.3 13.3
Spec Sheet Total Volume [m³]: 0.0 508.2 186.9 396.4 85.7 271.6 0.0 380.2 0.0 6.4 13.3 13.3

*Capacities shown are for lead vessel. Actual capacities may vary slightly.
*Capacities shown in RED are excluded from the total volume.
*Capacities shown in BLUE are included in another Tank’s Capacity.
*Capacities shown in GREEN are counted for multiple Tank Capacities.

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DP Capability Plot

FUJIAN DN59M-83

Input file reference : 59372_B.scp
Last modified : 2011-05-30 12:43 (v. 2.8.0)

Length overall : 59.3 m
Length between perpendiculars : 52.2 m
Breadth : 14.9 m
Draught : 4.9 m
Displacement : 2755.0 t (C_b = 0.70)
Longitudinal radius of inertia : 13.1 m (≈ 0.25 * Lpp)
Pos. of origin ahead of Lpp/2 (X_o) : 0.0 m
Wind load coefficients : Calculated (Blendermann)
Current load coefficients : Calculated (Strip-theory)
Wave-drift load coefficients : Database (Scaled by Breadth/Length)

Tidal current direction offset : 0.0 deg
Wave direction offset : 0.0 deg
Wave spectrum type : JONSWAP (gamma = 3.30)
Wind spectrum type : NPD
Current - wave-drift interaction : OFF
Load dynamics allowance : 1.0 * STD of thrust demand
Additional surge force : 0.0 tf
Additional sway force : 0.0 tf
Additional yawing moment : 0.0 tf.m
Additional force direction : Fixed
Density of salt water : 1026.0 kg/m³
Density of air : 1.226 kg/m³ (15 °C)
Power limitations : OFF
Thrust loss calculation : ON

# Thruster X [m] Y [m] F+ [tf] F- [tf] Max [%] Pe [kW] Rudder
1 TUNNEL 20.7 0.0 6.0 -6.0 100 390 BECKER
2 PROP_AS -26.0 -3.3 33.9 -23.8 100 1920 BECKER
3 PROP_AS -26.0 3.3 33.9 -23.8 100 1920 BECKER

VARIABLE WIND AND WAVES
Limiting 1 minute mean wind speed in knots at 10 m above sea level

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