HAKURYU-10

HAKURYU-10 is a 375 ft operating water depth self-elevating cantilever jack-up drilling rig, built by PPL Shipyard Pte. Ltd. using the Baker Marine Design. HAKURYU-10 was delivered in June 2006 to P.P.L. shipyard.

HAKURYU-10 is a high standard unit sized for large Variable Deck Load (VDL), useful deck space, 120 Person On Board (POB), full preload jacking capability, deep water drilling operation (375 ft water depth), deep drilling (30,000 ft drilling depth), High Pressure High Temperature (HPHT) drilling and zero discharge operation.

The cantilever design allows the rotary table to be skidded out to a maximum of 70 ft from the transom and 15 ft from the centre line.

**DESIGN:**
Baker Marine Pacific Class 375: 3 legs self-elevating, cantilever type mobile offshore drilling unit.

**CLASSIFICATIONS HELD:**

**FLAG:**
Panama.

**MAIN DIMENSIONS AND PARTICULARS:**
- Hull Overall Length (molded) ................. 236.5’ (72.1m)
- Hull Breadth (molded) .............................. 224.4’ (68.4m)
- Hull Depth (molded) .......................... 27.9’ (8.5m)
- Leg Length ........................................ 506’ (154.3m)
- Usable Leg Length (below hull) ................. 435’ (132.6m)
- Footing Area /each Spud Can ................... 2,493 sq.ft. (231.6 m²)
- Usable Leg Length (below hull) ................. 435’ (132.6m)
- Usable Leg Length (below hull) ................. 435’ (132.6m)
- Leg Length ........................................ 506’ (154.3m)
- Hull Depth (molded) .......................... 27.9’ (8.5m)
- Hull Overall Length (molded) ................ 236.5’ (72.1m)

**HULL DEPTH (MOLDED):**
- 27.9’ (8.5m)

**HULL OVERALL LENGTH (MOLDED):**
- 236.5’ (72.1m)

**TRANSMISSION:**
- Main Engines: Five (5) Caterpillar 3516BHD DITA engines, 1,603 kW @1,200 rpm
- Main Generators: Five (5) Kato 6P633000 generators, 1,875 kVA @ 1,200 rpm, AC 690 V, 60 Hz
- Emergency Engine: Caterpillar 3508B DITA engine, 968 kW @ 1,800 rpm
- Emergency Generator: Leroy Somer LSA-M50 generator, 720kW (900 KVA) @ 1,800 rpm, 480 V, 60 Hz.

**VEssel Management System:**
Centralized access and control system covering Alarm monitoring system, Tank level monitoring and remote valve control for pre loading operation.

**POWER EQUIPMENT:**
- Main Engines: Five (5) Caterpillar 3516BHD DITA engines, 1,603 kW @1,200 rpm
- Main Generators: Five (5) Kato 6P633000 generators, 1,875 kVA @ 1,200 rpm, AC 690 V, 60 Hz
- Emergency Engine: Caterpillar 3508B DITA engine, 968 kW @ 1,800 rpm
- Emergency Generator: Leroy Somer LSA-M50 generator, 720kW (900 KVA) @ 1,800 rpm, 480 V, 60 Hz.

**VEsSEL MANAGEMENT SYSTEM:**
Centralized access and control system covering Alarm monitoring system, Tank level monitoring and remote valve control for pre loading operation.

**DRILLING EQUIPMENT:**
- Draw Works: NOV D3000UE AC, Three, 1,350 HP, 690 V AC motors.
- Derrick: NOV, SSBN 750, 1,500kips maximum rated static hook load.

**Well Control Equipment:**
- Divertor: Vetco Gray, KFDJ-500 Removal Type, 49-1/2”.
- BOPs: 18-3/4” BOP Stack
- Control System: NovoCyberbase™
- Choke Manifold: RB Pipetech, 15,000 psi WP choke & kill manifold, sour gas service.
- Mud Gas Separator: RB Pipetech mud gas separator suitable for H₂S service, 150 HP, 10 mmscf.

**Jacking:**
- Jacking Units: 36 NOV-BLM D88 jacking units with 72 active pinions.
- Normal Jacking: 36, 632 kips (18,800 tons)
- Preload Jacking: 58,752 kips (26,640 tons)
- Drilling Condition: 81,288 kips (36,864 tons)

**Mud Handling:**
- Mud Bunkers: 3 (3) NOV 14-P-220, 7,500 psi WP, Two (2) 1,350 hp AC motors driven.

**Mud Treatment:**
- Separator: NOV-Brandt, 6’ Dual Chain Gumbo Box.
- Scalloping Shakers: Two (2) Demco FLC-504 single deck shakers.
- Primary Shakers: Four (4) Brandt VSM300 shale shakers.
- Desilter: NOV-Brandt desilter cone assembly (4’ x 24 cones).

**Other Equipment:**
- Anti-pollution Equip.: Hamworthy STBV, capable for 120 personnel.
- Water Makers: Two (2) Alfa Laval DPU-36-C125 water makers, 13,200 gal/day (50 K/day) each.
- Anchor Winches: Two (4) x Mentrade anchor winches.
- Anchor Winches: Four (4) x Mentrade anchor winches.

**Contact Information:**
Address: Japan Drilling Co., Ltd.
SHIN-HORIDOME BLDG. 6F,
2-4-3 NICHOBASHI HORIDOME-CHO,
CHUO-KU, TOKYO 103-0012, JAPAN
Tel:81-3-5847-5850 Fax: 81-3-5644-5702