



APPENDIX B

SPARTAN RIG 151 Rig Inventory

Drilling Vessel Description	Designed and constructed by Bethlehem Steel Corporation in 1981, completely refurbished and up graded in 2006. The 150' independent leg/cantilever unit was built in accordance with the rules of the American Bureau of Shipping and is classified as an A-1 Self-Elevating Mobile Drilling Unit.												
Type:	Baker Marine Corporation 150 H Class Independent Leg Cantilever Jackup.												
Class:	ABS + A1 Self Elevating Mobile Drilling Unit, 1980 Rules USCG Requirements for Mobile Offshore Drilling Units.												
Design Operating Conditions:	<table> <tr> <td>Maximum water depth (non-hurricane)</td> <td>150'</td> </tr> <tr> <td>Minimum water depth</td> <td>12'</td> </tr> <tr> <td>Drilling depth capacity</td> <td>25,000'</td> </tr> </table>	Maximum water depth (non-hurricane)	150'	Minimum water depth	12'	Drilling depth capacity	25,000'						
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	<p>Liquids:</p> <p>Drilling mud 1,315 bbls. Drill water 3,373 bbls. Diesel fuel 1,543 bbls. Potable water 1,186 bbls.</p>
Legs:	Three (3) triangular Truss type, 250'-3" long.
Elevating System:	Baker Marine electro-hydraulic drive rack and pinion system.
Engine Generator Units:	<p>Four (4) Caterpillar D-398, radiator cooled diesel engines, each driving an 800 kW, 600 volt, 60 Hz AC generator.</p> <p>One (1) Caterpillar D-398, radiator cooled engine driving an 800 kW, 600 volt AC generator – can be used as a standby or on main AC buss.</p> <p>Two (2) Caterpillar D-399, radiator cooled diesel engines, each driving a 1050 kW, 600 volt AC generator to be used for the top drive and Drawworks.</p>
Electrical Distribution:	<p>Ross-Hill Model 1400 four (4) bay SCR distribution system for drilling and shipboard operations.</p> <p>Gulf Coast two (2) bay SCR system for powering the Drawworks and Top Drive.</p>
Drawworks:	Mid-Continent U-1220 driven by two GE 752 DC motors each rated at 1000 HP (intermittent) complete, with two (2) catheads, 1-3/8 Lebus grooving, crown safety device. Complete with Elmagco 7838 electric brake.
Derrick:	Branham 147' high x 30' base rated at 1,300,000 pounds static hook load. Complete with adjustable air powered casing stabbing board, derrick climbing assistor, racking platform.



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Mud Pumps:	<p>Two (2) Gardner Denver PZ-10 triplex pumps each rated at 1350 HP and driven by two (2) GE 752 DC motors complete with suction and discharge pulsation dampeners.</p> <p>One (1) Continental Emsco FB1600 Triplex Pump driven by two (2) GE 752 DC motors complete with suction and discharge pulsation dampeners.</p> <p>Note: Spartan Offshore will provide one (1) size liner for mud pumps. Operator to designate size prior to rig mobilization. The pumps shall be operated at a maximum of 85% of manufacturer's stroke and pressure rating when operating on a continuous basis.</p>
Rotary:	National C-375 with a 37.5 inch opening, independently driven by a GE 752 DC motor through a two-speed gear box complete with air brake.
Crown Block:	Branham 583 ton.
Traveling Block:	500 ton
Standpipe:	Dual 5-9/16" OD x 4.25" ID 5,000 psi.
Top Drive:	Varco TDS-3, High Torque, powered by a GE 752 traction motor
Rotary Hose:	Two 3.5" ID 7500 psi wp hoses.
Ezy-Torque:	Varco
Spinning Wrench:	Varco SSW30 or equivalent.
Upper Kelly Valve:	10,000 psi, TIW.
Inside BOP:	10,000 psi, Gray.
Lower Kelly Valve:	Two 10,000 psi, TIW.
Drill Pipe Elevators:	Two B.J. Type GG 350 ton.



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Drill Pipe Slips:	Two Varco SD XL.
Drill Collar Slips:	Two Varco
Rotary Tongs:	BJ DB with 3-1/2" through 12-3/8" jaw capability.
Deadline Anchor:	National EB for 1-3/8" drill line.
Drill Line:	1-3/8 EIPS
Wire Line Unit:	Electro hydraulic 20,000' capacity 0.105" wire line.
Rig Floor Air Hoist:	Two (2) Ingersoll Rand 5KUL 7000# pull.
Instrumentation:	Weight indicator Driller's console Tong torque indicator Pump pressure gauge Pump strokes Rotary RPM Pit Volume Gain/loss indicator Mud flow Air purge 6-pen recorder (ROP, wt. pump pressure, torque, rpm, strokes)
Shale Shaker:	Two (2) Brandt King Cobra
Desander/Desilter/Mud Cleaner:	One (1) Brandt King Cobra Mud Cleaner unit with, Three (3) Cone Desander and Twenty Four (24) Cone Desilter
Degasser:	Brandt DG-5 (500 gpm)
Gumbo Buster	Install a flow line gumbo buster under substructure
Desander Pump:	6x8 centrifugal driven by a 75 HP 1180 rpm AC motor.
Desilter Pump:	6x8 centrifugal driven by a 75 HP 1180 rpm AC motor.
Mud Mix and Transfer Pump:	Two (2) 6x8 centrifugal pumps driven by a 75 HP 1800 rpm AC motor.



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Charging Pumps:	Two (2) 5x6 centrifugal pumps driven by a 100 HP1800 rpm AC motor.
Mixing Hoppers:	One barite hopper and one chemical hopper.
Surge Tank:	One 75 cu. ft. barite tank and one 75 cu. ft. cement tank
Bulk Mud:	Total capacity of 3000 cu. ft.
Bulk Cement:	Total capacity of 3000 cu.ft.
Rig Air:	Two (2) Quincy QSI-500 rotary screw compressors or equivalent- 500 cfm @ 125 psi, each.
Auxiliary Pumps & Equipment:	<p>Two (2) 3x4 centrifugal drill water pumps driven by 40 HP AC motors.</p> <p>Two (2) 3x4 centrifugal fire pumps driven by 50 HP AC motors.</p> <p>Two (2) 3x4 centrifugal bilge pumps driven by 10 HP AC motors.</p> <p>Two (2) gear type fuel transfer pumps driven by 5 HP AC motors.</p> <p>One (1) Miller 400 amp welding machines</p> <p>One (1) waste oil gear pump driven by 3 HP AC motors.</p> <p>Two (2) potable water pressure sets.</p> <p>Two (2) sanitary water pressure sets.</p> <p>Two (2) 60 HP AC stage 6" submersible deep well pump.</p> <p>Omnipure sewage treatment unit.</p>
Quarters:	62-man air-conditioned quarters complete with galley, mess hall, recreation room, hospital room, bath facilities, change room, laundry and state rooms and office for rig manager and Operator's representatives.
Heliport:	62' nominal diameter designed for Sikorsky S-61 loading.
Communication System:	24-station, Gai-tronics inter-rig system and VHF marine radio.



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Cranes:	<p>One (1) Baker Marine Model 900 cranes with 100' of boom rated at 49,965# at a 20' radius and 41,055# at a 40' radius.</p> <p>One (1) Draco King Post crane to accommodate heavier loads 80,000 lbs. @ 25'.</p>
Cementing Unit:	<p>BJ Unit is onboard. Costs for the Unit and associated equipment shall be for Operator's account.</p>
Life Saving & Fire Protection:	<p>Two (2) 65-man life boats.</p> <p>Three (3) 25-man life rafts.</p> <p>CO₂ fire extinguisher system or both engine room and emergency generator room.</p> <p>All safety and fire protection equipment per USCG, ABS and MMS regulations.</p>
Weather Instruments:	<p>Wind speed and direction unit – Barometer.</p>
Drill Pipe:	<p>As per Contract provisions</p>
Hevi-Wate:	<p>As per Contract Provisions</p>
Drill Collars:	<p>As per Contract Provisions</p>



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<p>BOP Equipment:</p>	<p>All have H₂S trim</p> <p>Diverter: 21-1/4" with hydro control valves & over board lines 2000 psi. (Recharged per Contract provisions)</p> <p>Annular: 13 5/8" Shaffer 5,000 psi</p> <p>Single: 13-5/8" Cameron Type "U" 10,000 psi</p> <p>Double: 13-5/8" Cameron Type "U", 10,000 psi equipped with one (1) pair of booster bonnets for shear rams.</p> <p>Gate Valves: Two (2) 4-1/16" Cameron Type "F" 10,000 psi (hydraulically operated)</p> <p>Accumulator: Masco 7 station, 15 bottle, 3000 psi closing unit with two air pumps, a triplex electric driven pump</p> <p>Choke Manifold: 3-1/16" 10,000 psi, with two (2) adjustable chokes and one (1) Swaco automatic choke.</p> <p>BOP Handling System: Two (2) 25-ton pneumatic hoists with a BOP lift ring to install BOPs.</p> <p>BOP Choke and Kill Hoses: One (1) each</p> <p>Note: Contractor will provide the initial size rams for Contractor supplied drill pipe and one (1) set of shear rams. All replacement BOP rubber goods shall be recharged per Contract.</p>
<p>Satellite/Cell Communications</p>	<p>Communications provided by Broadpoint (Recharged per Contract provisions).</p>