



1 INTRODUCTION		
1.1 RIG	Rig Name: Rig Manufacturer: Type: Year of Manufacturer: Rig Depth Rating:	MB Century Rig 32 Drillmec HH350-B Super Single Electric/Hydraulic Rig 2012 12,000 ft (3,650 m) with 5" DP in bins
2 HOISTING SYSTEM		
2.1 MAST	Manufacturer: Type: Model: Pullback Rating: Pulldown Rating: Working Stroke: Drill lines: Crown Block Sheaves:	Drillmec Hydraulic telescoping. HH350-B 700,000 lb 66,000 lb 16.6 m (54.46 ft) 4 off 42mm 8 off 1000mm dia.
2.2 SUBSTRUCTURE	Manufacturer: Model: Rotary Table to Ground Level: Setback area carrying capacity: Rotary Table Beams Capacity: Rotary Table Beams to Ground Level: Rotary Beams to BOP trolley:	Drillmec HH350-B 7.81m (25.6 ft) 15 joints of up to 8-1/4" Drill Collars 7 joints of up to 9-1/2" Drill Collars 700,000 lb 6.74m (22 ft) 5.85m ((19.2 ft)
2.2.1 Skidding System	Manufacturer: Range:	Drillmec 20m along longitudinal axis
2.3 ELEVATOR LINKS	Manufacture: Size: Load Capacity: Quantity: Manufacture: Size: Load Capacity: Quantity:	B & V 2-3/4" x 108" 350 ton 1 pair Varco 2-3/4" x 180" 350 ton 1 pair
2.4 WINCHES		
2.4.1 Hydraulic Service Winch	Manufacturer: Rated capacity:	Drillmec 1 off 4,000 kg hydraulic 1 off 12,000kg hydraulic
2.4.2 Manrider Winch	Manufacturer: Rated capacity:	<i>Not applicable for super single. Crane mancage used if required.</i>

3 CIRCULATING EQUIPMENT		
3.1 MUD TANKS:	Total Capacity:	2265 bbl
3.1.1 Shaker Tank	Total Capacity: Compartments:	440 bbl Desilter 94 bbl Desander 138 bbl Shaker 120 bbl Sand Trap 88 bbl
3.1.2 Intermediate Tank	Total capacity: Compartments:	554 bbl 1 off 340 bbl 1 off 214 bbl
3.1.3 Suction Tank	Total capacity: Compartments:	484 bbl 1 off 151 bbl 1 off 333 bbl
3.1.4 Reserve Tank	Total capacity: Compartments:	504 bbl 1 off 290 bbl 1 off 214 bbl
3.1.5 Mixing Tank	Total capacity:	283 bbl
3.2 SURFACE LINES	4" NB 5000 psi	
3.3 STANDPIPE	4" NB 5000 psi	
3.4 SHOCK HOSE	Size: Rating: Connection:	3" ID 5000 psi 4" Fig 1002
3.5 KELLY HOSES	Size: Rating: Connection: Quantity:	3" ID 5000 psi 4" Fig 1002 1 off
3.6 SHALE SHAKERS	Manufacturer: Model: Capacity: Quantity:	MI Swaco Mongoose PT 600 gpm 3 off
3.7 DESANDER	Manufacturer: Model: No. of Cones: Feed Rate: Pump Unit:	MI Swaco 2-12 D-Sander 2 x 12" 1000 gpm Baker SPD Mud Hog 8" x 6" x 14", 100HP
3.8 DESILTER	Manufacturer: Model: No. of Cones: Feed Rate: Pump Unit:	MI Swaco 6T4 D-Silter 12 x 4" 900 gpm Baker SPD 8" x 6" x 14", 100HP
3.9 COOLING TOWER	Type Circulating Pump	Evaporative Baker SPD Mud Hog 8" x 6" x 14", 100 HP
3.10 DEGASSERS		
3.10.1 Degasser	Manufacturer: Model: Type: Maximum Flow:	Swaco CD-1400 Centrifugal degasser 1300 gpm
3.10.2 Poorboy Degasser <i>Note: Degasser is available but is not part of normal rig inventory. Installation would be required.</i>	Manufacturer: Size: Vent Line: Quantity:	CDL 48" dia. 8" 1 off
3.11 MUD MIXER	Manufacturer: Type: Model:	MI Swaco Eductor/diffuser Hi-Ride

	Solids Induction Rate: Flow Rate: Pump Unit: Quantity:	15,000 – 30,000 lb/hr 400 – 800 gpm Baker SPD Mud Hog 8" x 6" x 14", 100HP 2 off
3.12 MUD AGITATORS	Manufacturer: Model: Power unit: Quantity:	MI Swaco SWAGX32HC3811 15 kW 9 off
3.13 MUD PUMPS	Manufacture: Model: Max Input: Input Drive: Max Pressure: Stroke: Gallons per minute - maximum Quantity:	Drillmec 9T1000 1000 HP Electric 5000 psi 9" 674 gpm (7" liners) 3 off
3.13.1 Pulsation Dampeners	Manufacture: Model: Maximum Pressure Rating: Quantity:	Hydril K20 5000 psi 3 off
3.13.2 Pressure Relief Valves	Manufacture: Model: Pressure Settings: Quantity:	NOV Type C/M2 5000 psi 3 off
3.13.3 Drive Motors	Manufacture: Model: Rating: Quantity:	General Electric GEB22 AC 1150 HP 3 off
3.14 CELLAR PUMP	Manufacturer: Model: Rating: Quantity:	Flygt HS 3127 HT 466 320 gpm 2 off
3.15 RISER & FLOWLINE	Riser Diameter: Connected to the Conductor Pipe Via:	14", 22", 30", 40" Flanged
	Flowline Diameter: Connected Via:	12" 14" Tank Union
3.16 RIG WATER TANK	Capacity: Quantity:	440 bbl 2 off

4 ROTATING EQUIPMENT		
4.1 TOP DRIVE	Manufacturer: Drive: Load Rating Input power: Torque/Speed:	Drillmec Hydraulic 700,000 lb 627 HP Speed 1 36,200 ft.lb at 91 rpm max. Speed 2 23,670 ft.lb at 139 rpm max. Speed 3 16,580 ft.lb at 199 rpm max.
4.2 ROTARY TABLE	Manufacturer: Opening: Drive: Torque: Capacity: Max. speed: API Bowls:	Drillmec 37-1/2" Hydraulic 7,200 ft.lb 700,000 lb 45 rpm #1, #2, #3

5 WELL CONTROL EQUIPMENT		
5.1 BLOWOUT PREVENTERS		
5.1.1 Annular	Manufacturer: Model: Size: Work Pressure: Quantity:	Shaffer Spherical 30" 1000 psi 1 off
5.1.2 Annular	Manufacturer: Model: Size: Work Pressure: Quantity:	T3 Energy Services 7082 21-1/4" 2000 psi 1 off
5.1.3 Annular	Manufacturer: Model: Size: Work Pressure: Quantity:	Shaffer Spherical 13-5/8" 5000 psi 1 off
5.1.4 Double Gates	Manufacturer: Model: Size: Work Pressure: Quantity: Ram Blocks:	T3 Energy Services 6012 26-3/4" 3000 psi 1 off CSO, 5", 13-3/8", 18-5/8"
5.1.5 Double Gates	Manufacturer: Model: Size: Work Pressure: Quantity: Ram Blocks:	T3 Energy Services 6012 13-5/8" 5000 psi 1 off CSO, 5", 7", 9-5/8"
5.1.6 BOP Handling System	Manufacturer: Type:	Drillmec Trolley and rail
5.1.7 Drilling Spool	Drilling Spools:	30" 1000psi, c/w 1 x 9" 2000psi & 1 x 3-1/8" 5000psi side outlet 26-3/4" 3000psi, c/w 2 x 3-1/8" 5000psi side outlets 13-5/8" x 5000psi, c/w 2 x 3-1/8" 5000psi side outlets
5.1.8 DSA's	Double Studded Adaptors:	21-1/4" 2000psi x 26-3/4" 3000psi 30" 1000psi x 26-3/4" 3000psi 13-5/8" 5000psi x 13-5/8" 3000psi 13-5/8" 5000psi x 11" 3000psi 13-5/8" 5000psi x 9" 3000psi 9" 2000psi x 3-1/8" 5000psi
5.1.9 Valves on the BOP's	Kill Line Valves:	2 off 3-1/8" 5M Type FC Gate Valves
	Choke Line Valves:	1 off 3-1/8" 5M Type FC Gate Valves 1 off 3-1/8" 5M HCR Valve
5.2 ACCUMULATOR	Manufacturer: Model: Bottles: Manifold Quantity: Reservoir Volume: Functions: Triplex Pump:	T3 Energy Services 4B505406B15T3P-API 36 x 15 gal 4 off 840 gal 5 station 4 off Bear BD60 (two independent power)

	<p>Air Pumps: Working Pressure: Annular Pressure regulator: Manifold Regulator: Bypass valve Safety Alarms:</p> <p>Drillers Remote Control:</p>	<p>supplies) Nil 3000psi Yes, remote controlled Yes Yes, remote controlled Low Reservoir level, Low accumulator Pressure, Communication Failure, Emergency Power, Low Battery Voltage 1 off touchscreen</p>
5.3 CHOKE MANIFOLD	<p>Size: Number of Valves:</p>	<i>Not standard rig inventory can be supplied on request.</i>
5.3.1 Super Choke	<p>Manufacture: Type: Size: Remote Operating Panel: Quantity:</p>	<i>Not standard rig inventory can be supplied on request.</i>
5.3.2 Manual Choke	<p>Manufacture: Model: Type: Quantity:</p>	<i>Not standard rig inventory can be supplied on request.</i>
5.4 SAFETY VALVES		
5.4.1 Lower Kelly Cock	<p>Manufacturer: WP: Quantity:</p>	<p>Hydril 10,000psi 1 off</p>
5.4.2 Stab-In safety valve (full opening)	<p>Manufacturer: Connection, Box: Connection, Pin: WP Quantity:</p>	<p>VAM NC50 NC50 5000psi 2 off</p>
5.4.3 Inside BOP	<p>Manufacturer: Connection, Box: Connection, Pin: WP Quantity:</p>	<p>VAM NC50 NC50 5000psi 1 off</p>

6 POWER SYSTEM		
6.1 ENGINES	Manufacturer: Model: Prime Rating: Quantity:	Caterpillar 3512B 1757 bHP 4 off
6.2 GENERATORS	Manufacturer: Model: Rating: Quantity:	Caterpillar SR4B 1805 kVA 4 off
6.3 SWITCHBOARD	Manufacturer: System Voltage: System Frequency:	Drillmec 600V / 400V 50 Hz
6.4 VFD UNIT	Manufacture: No. of Independent Modules:	Drillmec 3 off 1258 Amp (Mud Pumps) 2 off 953 Amp (HPUs)
6.5 HPU	Manufacturer: Input Power: Quantity:	Drillmec 575 kW 2 off
6.6 AIR SYSTEM		
6.6.1 Air Compressor	Manufacturer: Model: Type: Pressure: Rating: Quantity:	Atlas Copco GA22+FF Screw 150 psi 100 cfm 2 off
6.6.2 Air Reciever	Capacity: Quantity:	3000 ltr 1 off
6.7 FUEL TANKS	Total Diesel Capacity:	50,000ltr
6.7.1 Stationary Tanks	Tank Capacity: Type: Quantity:	25,000 ltr Containerised bunded 2 off

7 PIPE & HANDLING EQUIPMENT		
7.1 TUBULARS		
7.1.1 Drillpipe	Size: Grade: Class: Weight: Range: Footage: Connection: Tool Joint: Hard Banded: Internal Plastic Coating:	5" G105 Premium 19.5 ppf 3 3500m NC50 6-5/8" Yes, Arnco 100XT Nil
7.1.2 Drill Pipe Pup Joints	Size: Connection: Length: Qty:	5" NC50 5ft, 10ft, 15ft 3 off each
7.1.3 Heavy-Weight Drillpipe	Size: Connection: ID Quantity:	5" NC50 3" 20 off
7.1.4 Drill Collars	Size: Connection: ID Type: Quantity:	9-1/2" 7-5/8" Reg 3-3/4" Spiral 12 off
7.1.5 Drill Collars	Size: Connection: ID Type: Quantity:	8-1/4" 6-5/8" Reg 3" Spiral 24 off
7.1.6 Drill Collars	Size: Connection: ID Type: Quantity:	6-3/4" NC50 3-1/4" Spiral 30 off
7.1.7 Drill Collar Pup Joints	Size: Connection: Length: Quantity:	8-1/4" 6-5/8" Reg 10 ft 1 off
7.1.8 Drill Collar Pup Joints	Size: Connection: Length: Quantity:	6-3/4" NC50 10 ft 1 off

7.2 SUBS						
Description	Qty	OD	ID	Top Connection	Bottom Connection	Bored for Float
Bit Sub	2	9-1/2"	3-3/4"	7-5/8" Reg Box	7-5/8" Reg Box	5F-6R box down
Bit Sub	2	9-1/2"	3-3/4"	6-5/8" Reg Box	7-5/8" Reg Box	5F-6R box down
Bit Sub	2	8-1/4"	3"	6-5/8" Reg Box	6-5/8" Reg Box	5F-6R box down
Bit Sub	2	8-1/4"	3"	NC50 Box	6-5/8" Reg Box	5F-6R box down

Bit Sub	2	6-3/4"	3-1/4"	NC50 Box	4-1/2" Reg box	4R box down
Cross over	2	9-1/2" - 8-1/4"	3"	6-5/8" Reg Box	7-5/8" Reg Pin	No
Cross over	2	8-1/4" - 6-3/4"	3"	NC50 Box	6-5/8" Reg Pin	No
String Float	1	6-5/8"	3"	NC50 Box	NC50 Pin	4R Box up
CHF Drive Sub	1	6-5/8"	3-3/4"	NC50 Box		No
Saver sub	3	7-3/4"	3"	6-5/8" Reg Box	NC-50 Pin	No
Saver sub	2	7-3/4"	3"	6-5/8" Reg Box	6-5/8" Reg Pin	No

7.3 CUP TESTERS	Manufacturer: Model: Connection, Box: Connection, Pin: Casing Size:	Supreme Type F NC50 NC50 9-5/8", 13-3/8"
7.4 FISHING TOOLS		
7.4.1 Overshots	Manufacturer Size: Basket/Grapples: Cut-lip Oversize Guides:	Bowen 11-3/4" Series 150 9-1/2", 9-3/8", 9-1/4", 9", 8-7/8", 8-1/4", 8-1/8", 8", 7-7/8", 7-3/4", 6-3/4", 6-5/8", 6-1/2", 6-3/8", 6-1/4", 6-1/8", 6", 5-1/2", 5-3/8", 5-1/4", 5-1/8", 5", 4-7/8" 21", 15"
7.4.2 Overshots	Manufacturer Size: Basket/Grapples: Cut-lip Oversize Guides:	Bowen 8-3/8" Series 150 6-3/4", 6-5/8", 6-1/2", 6-3/8", 6-1/4", 6-1/8", 6", 5-1/2", 5-3/8", 5-1/4", 5-1/8", 5", 4-7/8" 20", 15", 11"
7.4.3 Junk Mill	Size	12" OD and 8" OD
7.4.4 Magnet	Size	11-1/2" and 8"
7.5 ELEVATORS		
7.5.1 Drillpipe elevators	Size: Capacity: Quantity:	5" 350 ton 2 off
7.5.2 Casing elevators	Size: Capacity: Quantity:	7", 9-5/8", 13-3/8", 18-5/8", 24" 250 ton 1 off each
7.5.3 Casing elevators	Size: Capacity: Quantity:	7", 9-5/8", 10-3/4", 13-3/8", 18-5/8" 350 ton 1 off each
7.6 SLIPS		
7.6.1 Drill pipe slips	Size: Quantity:	5" 2 off
7.6.2 Drill collar slips	Size: Quantity:	6-3/4", 8-1/4", 9-1/2" 1 off each/
7.6.3 Casing slips	Size: Quantity:	7", 9-5/8", 10-3/4", 13-3/8", 18-5/8", 24" 1 off each
7.7 SAFETY CLAMP	Manufacture: Model:	AOT Type C

	Size: Quantity:	5-1/2" to 6-5/8", 8-1/2" to 9-5/8", 17-1/2" to 18-5/8" 1 off each
7.8 PIPE SPINNER:	Manufacturer: Model: Pipe Range: Power Unit: Quantity:	<i>Not applicable, pipe is spun in using Top Drive.</i>
7.9 POWER TONGS		
7.9.1 Power Tong	Manufacturer: Size Range: Torque Rating: Quantity:	Drillmec 3-1/2" to 11" OD 130,000 ft.lb 1 off
7.9.2 Casing Make Up Device	Manufacturer: Model: Casing Range: Qty:	Drillmec Casing Make-Up Device 20", 18-5/8", 13-3/8", 9-5/8", 7" BTC Casing 1 off
7.9.3 Casing Tong	Manufacturer: Model: Sizes: Torque Ratings: Quantity:	McCoy KT 13625 FBU 9-5/8", 13-3/8" 35,000 ft.lb 1 off
7.10 MANUAL TONGS		
7.10.1 Casing Tong	Manufacturer: Model: Casing Range: Qty:	B+V WRT-55C 13" – 25-1/2" 1 off
7.10.2 Rotary Tong	Manufacturer: Model: Casing Range: Qty:	B+V WRT-55 3-1/2" – 14-3/8" 1 off

8 MISCELLANEOUS		
8.1 WIRELINE UNIT	Manufacturer: Model: Power: Wire: Quantity:	Millennium Wireline Surveyor, fitted with safe spooling guide 20 HP 0.092" 3500m
8.2 VEHICLES		
8.2.1 Loader	1 off Kawasaki 80 Z IV Loader or equivalent complete with:- <ul style="list-style-type: none"> • Roll Over protection • Forklift tynes (7 Tonne) • Certified lifting stinger complete with lifting chains • Pipe clamping forks (5 Tonne) 	
8.2.2 Rig Ute	1 off Utility vehicle	
8.2.3 Crew Van	1 off Crew van (hire equipment)	
8.3 SURVEY EQUIPMENT	Manufacture: Type: Quantity:	Totco CVD System, 8°, Double recorder 1 off
8.4 BUG BLOWER	Manufacture: Quantity:	Monsoon 2 off
8.5 TORQUE WRENCH	Enerpac Hydraulic Torque Wrench, c/w cassettes and drives for 1-1/4", 1-7/16", 1-13/16", 2", 2-3/16", 2-9/16", 3-1/8", 2-3/4", 3-1/2" AF	
8.6 SAFETY EQUIPMENT	9 off BA sets 6 off ELSA sets Fire extinguishers	

<p>9 <u>INSTRUMENTATION</u></p>	
<p>9.1 Data Acquisition System.</p>	<p>The Drillemec Drilling Data Acquisition System is an advanced driller's monitoring system, monitor installed on driller control cabin, that can accurately measure, monitor, record and display all drilling variables in real time.</p> <p>The following measured variables are displayed in the driller's monitor:</p> <ul style="list-style-type: none"> • Hookload • Weight on Bit • Rate of Penetration • Top Drive Position • Top Drive Torque • Top Drive RPM • Standpipe Pressure • Mud Pump SPM for MP1, MP2, MP3 and Total • Mud Pump counter function for strokes and Mud Volume • Total Mud Volume, actual and trend • Single Tank Volume • Gain / Loss • Mud Flow Return