

**SCHEDULE 1**  
**DESCRIPTION OF RIG EQUIPMENT PROVIDED BY CONTRACTOR**  
**(ATTACHMENT TO EXHIBIT A)**

DATE: NOVEMBER 2018

**CONTRACTOR:** JOMAX DRILLING (1988) LTD. **RIG NUMBER:** 3E  
**DEPTH CAPACITY:** 5,000 METERS WITH 127 mm DRILL PIPE  
BI-FUEL

**A. DRAWWORKS**

Make: Rigmaster Model: 1200E Input Power Rating: 946 kw  
 Maximum Hoisting Capacity: (Manufacturers) 310,000 daN with 12 Lines  
 Maximum Hoisting Capacity: (Contractors) 310,000 daN with 12 Lines  
 No. of Hoisting Speeds: SIX  
 Auxilliary Brake: Type: HYDROMATIC Make: EATON Model: 19RD130  
 Crown Block Protection: CROWN SAVER: Make: CROWN ALERT Model: A  
 Drive Group: Make: G.E. Type: 752 HT Input Power Rating: 946 kw

**B. PRIME MOVER**

	ENGINE # 1	ENGINE #2	ENGINE # 3
Make:	<u>CATERPILLAR</u>	<u>CATERPILLAR</u>	<u>CATERPILLAR</u>
Model:	<u>3512</u>	<u>3512</u>	<u>3508B</u>
Continuous Power - HP (kw) @ 1200 RPM	<u>1 476 (1101)</u>	<u>1 476 (1101)</u>	<u>915 (682)</u>

**C: PRIME MOVERS (Electric Rigs Only)**

Electrical System: M.I. INDUSTRIES M1600 4 BAY

	GENERATOR # 1	GENERATOR # 2	GENERATOR # 3
Make:	<u>KATO</u>	<u>KATO</u>	<u>KATO</u>
Model:	<u>AA27673012</u>	<u>AA27673001</u>	<u>AA21064023</u>
kw	<u>1225</u>	<u>1225</u>	<u>1050</u>
KVA	<u>1750</u>	<u>1750</u>	<u>1500</u>

**D. ROTARY TABLE**

Make: NATIONAL Model: C2750 Maximum Table Opening: 698 mm  
 Power Available: 746 kw  
 Static Load Rating: 311,500 daN  
 Rotary Speeds Forward: 1 Maximum RPM: 30 Minimum RPM: 0  
 Reverse: 1 Maximum RPM: 30 Minimum RPM: 0

**E. DERRICK**

Make: HODGSON Model: M142-21-750 Type: CANTILEVER  
 Gross Nominal Capacity (Manufacturers): 444,800 daN  
 Maximum Hook Load (Manufacturers): 333,600 daN with 12 Lines  
 Maximum Hook Load (Contractor): 333,600 daN with 12 Lines  
 Racking Capacity: 5,200 Meters of 127 mm Drillpipe  
 Height: 43.30 Meters  
 Hook to Rotary Table: Distance with Blocks at Crown Stop: 37.8 Meters

**F. SUBSTRUCTURE**

Make: QUALITY FABRICATING Size: S24.5-31.75-500 Type: BOX ON BOX  
 Maximum Table Load (Casing Capacity): 300,000 daN with 222,400 daN Setback  
 KB to Ground: 7.47 Meters  
 Clear Height for BOP's: 6.40 Meters

**G. TRAVELLING EQUIPMENT**

	CROWN BLOCKS	TRAVELLING BLOCKS	BALES	ELEVATORS	TOP DRIVE
Make:	<u>OILWELL</u>	<u>MCKINNEY</u>	<u>BJ</u>	<u>BLOHM &amp; VOSS</u>	<u>CANRIG</u>
Model:	<u>6 x 50" x 1 1/4"</u>	<u>ARCTIC T400</u>	<u>2 3/4" x 144"</u>	<u>VESCL350</u>	<u>1275AC-865</u>
Ld. Rating (daN):	<u>311,600</u>		<u>318,000</u>	<u>350 TONS</u>	<u>750 TONS</u>
# of Sheaves:	<u>6+ 56" F.L.</u>	<u>6 x 50" x 1 1/4"</u>			
API Bearing Rating (daN) @ 100 RPM	<u>311,600</u>				
Min. ID (mm):					

**H. DRILLING LINE**

Rope Diameter: 32 mm Rope Type: 6 x 19 FLEX XIPS  
 Core Type: IWRC Nominal Strength: 80,000 daN  
 Slip Interval @ \_\_\_\_\_ MegaJoules Cut \_\_\_\_\_ Meters

**I. DEAD LINE ANCHOR**

Make: Lesko Model: HE-DBLO-75-1.25 Dead Load Rating: 33,360 daN

**J. MUD PUMPS**

PUMP # 1

Make: BSF Model: 1600 Power Rating: (1600 hp) 1200 kw  
 Available Power to Pump (2) (1 000 hp) 746 kw Stroke: 254 mm  
 Pulsation Dampner: Make: GOLDMARK Model: G-20 Precharge: 2,758 kPa  
 Liner Sizes Available: 120 - 193 mm  
 Minimum Strokes per Minute: 30 spm  
 Maximum Strokes per Minute: 120 spm  
 Max. Manufacturers Rated Press.: 7,500 psi  
 Max. Contractor's Allowed Press.: 7,500 psi

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**K. MUD TANKS**

Tank # 1 # of Compartments: 3 Height: 2.31 m Useable Capacity: 88.7 m3  
Tank # 2 # of Compartments: 4 Height: 2.31 m Useable Capacity: 98.1 m3  
Tank # 3 # of Compartments: Height: m Useable Capacity: m3

**TRIP TANK:**

Width: 3.53 m Length: 1.00 m HEIGHT: 2.07 m Useable Capacity: 7.0 m3  
Trip Tank Location: NEXT TO SHALE SHAKERS  
Trip Tank Pump: Make: MISSION Model: 4" x 3" x 13" w9" Impeller Type: 1 7/8" PEDESTAL  
Pill Tank Volume: 4 m3  
Premix Tank Volume: 87 m3  
Total No. of Agitators: 5  
Number of Mixing Hoppers: 2 Type: 2 - 6" VENTURI W 3"X3/4" NOZZLES

**L. SCHEMATIC DIAGRAM (ATTACHED)**

**M. CENTRIFUGAL PUMPS**

	<u>PUMP # 1</u>	<u>PUMP # 2</u>	<u>PUMP # 3</u>
Make:	DOUBLE LIFE	DOUBLE LIFE	DOUBLE LIFE
Model:	MECHANICAL SEAL	MECHANICAL SEAL	MECHANICAL SEAL
Size:	11" x 5" x 6"	11" x 5" x 6"	11" x 5" x 6"
Impellor Size:	279 mm	279 mm	279 mm
RPM:	1,785	1,785	1,785
Input Power:	60	60	60

USED FOR:

PUMP # 1 CHARGE PUMP  
PUMP # 2 CHARGE PUMPS AND AGITATORS  
PUMP # 3 CHARGE PUMPS AND AGITATORS

**N. SOLIDS CONTROL**

	<u>SHALE SHAKER #1</u>	<u>SHALE SHAKER #2</u>
Make:	SWACO	SWACO
Model:	MONGOOSE PT	MONGOOSE PT
Contractor will Supply 150 Mesh Screens		
	<u>DESANDER</u>	<u>DESILTER</u>
Make:	NONE	NONE
Model:		
Make of Cones:		
Size of Cones (mm):		
Number of Cones:		
Capacity:		
Operating Pressure:		

Power Available to Run Centrifuge: 120 kw 600 Volts  
Breaker Rating: 200 Amps. Plug Type: ACP20034

**0. BLOW OUT PREVENTION EQUIPMENT**

	<u>ANNULAR</u>	<u>RAM #1</u>	<u>RAM # 2</u>	<u>RAM # 3</u>
Make:	SHAFFER	SHAFFER	SHAFFER	SHAFFER
Model:	BOLTED	SL	SL SHEAR	SL
Type:	SPHERICAL	SINGLE	SINGLE	SINGLE
Size (mm):	346	346	346	346
Working Press. (kPa)	34,700	34,700	34,700	34,700
Connection Type:	STUD x FLANGE	STUD x FLANGE	STUD x STUD	STUD x STUD
Nace:	YES	YES	YES	YES
Manual/Hydraulic:	HYDRAULIC	HYDRAULIC	HYDRAULIC	HYDRAULIC
Ram Size (mm):		127	127	127
Element Type:	NITRILE	NEOPRENE	NEOPRENE	NEOPRENE

**SHOCK HOSES:**

Make: GATES Pressure Rating: 7,500 psi

**ACCUMULATOR**

Make: OFFSHORE SYSTEMS Model: MB-165-1557 Pressure Rating: 20,700 kPa  
 Number of Bottles: 11 @ 56.8 Liters Each  
 Precharge Pressure: 8,400 kPa  
 Accumulator Pressure Operated by Contractor: 20,700 kPa  
 Manifold Pressure: 10,500 kPa  
 Number of Stations: 7  
 Master BOP Controls Location: DOGHOUSE  
 Remote BOP Controls Location: ACCUMULATOR Type: PILOT PRESSURE  
 Number of Pressure Regulators: TWO Make: VALVCON  
 Model: 1-25009, 1-105766 Location: ON ACCUMULATOR STAND  
 Number of N2 Bottles: 6 Size: 49 Liters Minimum Pressure: 15,400 kPa  
 Shear Ram Auxillary System (4) 15 Gallon Bottles

**PUMP # 1**

Make: UNION Model: TD28 Type: TRIPLEX  
 Pressure Rating: 20,700 kPa Pump Rate: 540 RPM Liters/Min. 54

**PUMP # 2**

Make: UNION Model: TD28 Type: TRIPLEX  
 Pressure Rating: 20,700 kPa Pump Rate: 540 RPM Liters/Min. 54

**HCR VALVES**

Make: SHAFFER Model: 3" - 34,700 kPa Nace Trim: YES  
 Number: TWO Size: 76 mm Pressure Rating: 34,700 kPa

**CHOKE MANIFOLD**

Make: SWACO Model: E Nace Trim: YES  
 Number: 18 Size: 76 mm Pressure Rating: 34,700 kPa

**CHOKE # 1:**

Make: WILLIS Model: M3 Nace Trim: YES  
 Size: 76 mm Pressure Rating: 34,700 kPa

CHOKE # 2:

Make: WILLIS Model: M3 Nace Trim: YES  
Size: 76 mm Pressure Rating: 34,700 kPa

CHOKE # 3:

Make: Model: Nace Trim:  
Size: mm Pressure Rating: kPa

UPPER KELLY COCK:

Make: VARCO Model: 11D103-500 Nace Trim: YES  
Size: 200 mm Pressure Rating: 70,000 kPa

LOWER KELLY COCK:

Make: VARCO Model: 114706-500 Nace Trim: YES  
Size: 200 mm Pressure Rating: 70,000 kPa

STABBING VALVE:

Make: HI-KALIBRE Model: IBOP-4.5IF-024 Nace Trim: YES  
Number: 1 Size: 159 mm Pressure Rating: 70,000 kPa

INSIDE BOP:

Make: HI-KALIBRE Model: 5"XH Nace Trim: YES  
Number: 1 Size: 159 mm Pressure Rating: 70,000 kPa

BLEED OFF LINES:

Number: 10 Size: 101 mm Nace Trim: YES  
Pressure Rating: 34,700 kPa

KILL LINE:

Number: 2 Size: 76 mm Nace Trim: YES  
Pressure Rating: 34,700 kPa

CHECK VALVE:

Make: HI-KALIBRE Model: 3350 SERIES  
Number: 2 Size: 76 mm Pressure Rating: 34,700 kPa

MUD GAS SEPARATOR # 1

Type: ALTA NORTH Location: FREE STANDING  
Vessel OD: 914 mm  
Inlet Size: 76 mm  
Outlet Size: 254 mm Line Size to Flarepit: 219 mm  
Overall Height: 4.3 Meters  
Distance Above Bottom of Tank: 58 cm  
Design Level: CLASS V

MUD GAS SEPARATOR # 2

Type: ALTA NORTH Location: REMOTE  
Vessel OD: 914 mm  
Inlet Size: 76 mm  
Outlet Size: 254 mm Line Size to Flarepit: 219 mm  
Overall Height: 4.3 Meters  
Distance Above Bottom of Tank: 58 cm  
Design Level: CLASS V



**S. LIGHTPLANTS**

CAMP

Plant # 1 Output: 75 kw Volts 208  
Plant # 2 Output: 75 kw Volts 208

RIG MANAGER

Plant # 1 Output: 100 kw Volts 280  
Plant # 2 Output: 100 kw Volts 280

RIG

Power and Outlets to run 5 Additional Wellsite Units  
Power Available to run Rental Equipment: 150 kw  
200 Amps 600 Volts 3 Phase

**T. GENERAL**

Drilling Instrumentation:

Automatic Driller: PASON  
High Pressure Wash Guns: 2 - MH 32CX MAGIKIST  
Electric Sump Circulating Pump: 2" FLYGT PUMP  
Kelly Spinner:  
Pipe Spinner: VARCO ST80 IRON ROUGHNECK  
Kelly Hose: ARMCO 3" x 75' SIZE: 76 mm Working Pressure: 34,700 kPa  
Make Up Tongs Make: W.W. Size: H Jaws Available: VARIOUS  
Breakout Tongs: Make: W.W. Size: H Jaws Available: VARIOUS  
Drill Pipe Elevators: Make: BYRON JACKSON Size: 127 mm  
Drill Collar Elevators: Make: BLOHM & VOSS VESCL 350 Size: 127 mm  
Matting: No.: 46 Size: VARIOUS  
Fuel Storage: 53,500 Liters  
Water Storage: 56 m3  
Water Pumps: No.: TWO Size: 2 1/2" x 7.5 HP Output: 420 Liters/Min.

**U. BOILERS (2)**

Power Rating: 465 kw  
Operating Pressure Rating: 1034 kPa

**V. LOADS**

RIG 49 Including BOILER & LOADER  
CAMP 8

**W. OTHER MAJOR PIECES OF EQUIPMENT**

CATERPILLAR 930G LOADER WITH QUICK ATTACH, FORKS AND BUCKET  
UNIT HAS GROUND STEERING  
CREW VEHICLE  
8 - 8' X 45' EXTRA MATTING  
8 - 8' X 32'6" EXTRA MATTING  
B.O.P. SHEAR RAM AUXILLARY SYSTEM  
8' x 12' x 5' FLARE TANK  
ALLAN NELSON RAIL STYLE WALKING SYSTEM WITH 250' UMBILICAL ZIPPER SYSTEM