





















	Check valve number	N/A
	Check valve size	N/A
<b>G3</b>	<b>Choke Manifold</b>	
<b>G3.1</b>	<b>Choke Manifold General</b>	
	Choke manifold assembled by	N/A
	Built as per API specification	N/A
	All connection ends not threaded	N/A
<b>G3.2</b>	<b>Choke Manifold High Pressure Section</b>	N/A
<b>G3.3</b>	<b>Power Adjustable Choke Valve</b>	
	Quantity	N/A
	Make type	N/A
	Size / WP	N/A
<b>G3.4</b>	<b>Manual Adjustable Choke Valve</b>	
	Quantity	N/A
	Make type:	N/A
	WP (psi)	N/A
<b>G3.5</b>	<b>Valve Upstream Each Choke Valve</b>	
	Quantity	N/A
	Make type:	N/A
	Size and WP:	N/A
<b>G3.6</b>	<b>Choke Manifold Lower Pressure Section</b>	N/A
	Inside diameter - WP	N/A
	Outlet points	N/A
	Each with exclusion valve size	N/A
<b>G3.7</b>	<b>Outlet to Mud Gas Separator</b>	N/A
	Quantity	N/A
	Valve size and WP	N/A
	Connecting line type	N/A
<b>G3.8</b>	<b>Outlet to Flare Line</b>	
	Quantity	N/A
	Valve size and WP: in-psi	N/A
<b>G3.9</b>	<b>Flare Line</b>	N/A
	Size x Length	N/A
<b>G3.10</b>	<b>Outlet to Waste Pit</b>	N/A
	Quantity	N/A
	Valve size and WP	N/A
<b>G4</b>	<b>Choke Manifold Accessories</b>	
<b>G4.1</b>	<b>Power Choke Control Panel</b>	
	Make – Type	N/A
	Location	N/A

**G5 Pressure Unit and Control System**

**G5.1 Accumulator Unit**

Make and type	N/A
Oil reservoir capacity Let.	N/A
Total bottle installed	N/A
Nominal capacity of each gal	N/A
Max. working pressure psi	N/A
Accumulator unit installation site:	N/A
Low accumulator pressure alarm	N/A
Low fluid level alarm type	N/A
Low air pressure alarm type	N/A

**G5.2 Electrical Recharging Pump**

Quantity	N/A
Make and type	N/A
Flow rate gal/min	N/A
Max. working pressure psi	N/A
Pump driven by motor power hp	N/A
Motor driven also by emergency generator	N/A

**G5.3 Air-Driven Recharging Pump**

Quantity	N/A
Make and type	N/A
Flow rate gal/mn	N/A
Max. working pressure psi	N/A
Air supplying pressure psi	N/A
Air supplying sources	N/A

**G5.4 Accumulator Unit Control Manifold**

Make and type	N/A
Number of control valves	N/A
Control valve type	N/A
Low/High pressure by-pass valve	N/A
Annular pressure regulator type	N/A
Manifold pressure regulator type	N/A

**G5.5 BOP Control Lines**

Control lines	N/A
Size in	N/A

**G5.6 BOP Driller's Control Panel**

Make and type	N/A
Installation site	N/A
Explosion proof	N/A

**G5.7 Toolpusher BOP Control Panel**

Make and type	N/A
Installation site	N/A

**G6 BOP Testing Equipment**

**G6.1 Portable Test Unit**

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WP: psi  
Make and type  
Power supply  
Pressure recorder type (psi)

N/A
N/A
N/A
N/A

**G6.2**

**Gray Valves  
For 5" DP**

Number:  
Make and type  
Bottom connection:  
Working Pressure psi

N/A
N/A
N/A
N/A

**For 3 1/2" DP**

Number:  
Make and type  
Bottom connection:  
Working Pressure psi

N/A
N/A
N/A
N/A

**G6.3**

**Circulating Subs  
For 5" DP**

Number  
Bottom connection  
Top connection  
Working pressure psi

N/A
N/A
N/A
N/A

**For 3 1/2" DP**

Number  
Bottom connection  
Top connection  
Working pressure psi

N/A
N/A
N/A
N/A
N/A

**H**

**DRILLING RIG FLOOR EQUIPMENT**

**H1**

**D.P & D.C Handling Tools**

**H1.1**

**Link Elevators**

Make  
Number:  
Sizes:  
Length:  
Rated load capacity:

N/A
N/A
N/A
N/A
N/A
N/A

**H1.2**

**Drill Pipe Elevators**

**For Drill Pipes 5"**  
Quantity:  
Make:  
Type  
Max. rating load capacity

N/A
N/A
N/A
N/A
N/A
N/A

**For Drill Pipes 3 1/2"**

Quantity:  
  
Make:  
Type  
Max. rating load capacity

N/A
N/A
N/A
N/A
N/A
N/A

		N/A
<b>H1.3</b>	<b>Drill Pipes Manual Slips</b>	N/A
	<b>For Drill Pipes 5"</b>	N/A
	Quantity	N/A
	Make	N/A
	Type	N/A
		N/A
	<b>For Pipes 3 1/2"</b>	N/A
	Quantity	N/A
	Make	N/A
	Type	N/A
<b>H1.4</b>	<b>Drill Collar Slips</b>	N/A
		N/A
	<b>For OD Drill Collar: 6 1/2"</b>	N/A
	Quantity:	N/A
	Make:	N/A
	Type:	N/A
		N/A
	<b>For OD Drill Collar : 4 3/4"</b>	N/A
	Quantity:	N/A
	Make:	N/A
	Type:	N/A
<b>H1.4</b>	<b>Safety Clamps</b>	N/A
	Quantity:	N/A
	Make:	N/A
	Type:	N/A
	For OD Range:	N/A
<b>H1.5</b>	<b>Manual Tongs</b>	N/A
<b>H1.5.1</b>	<b>DP and DC Manual Rotary Tongs</b>	N/A
	Quantity:	N/A
	Make:	N/A
	Type:	N/A
	For OD tubular range (in)	N/A
	Max rating torque (ft-lb)	N/A
		N/A
<b>H1.6</b>	<b>Drill Pipe Spinner</b>	N/A
	A drill pipe power tongs is required for sizes:	N/A
	5" and 3-1/2"	N/A
	Make	N/A
	Type	N/A
	Main characteristics	N/A
		N/A
<b>H1.7</b>	<b>Bit Breaker</b>	N/A
		N/A
<b>H1.7</b>	<b>Bit Breaker Adapter Plate</b>	N/A
		N/A
<b>H2</b>	<b>Counterbalance System for Manual Tongs</b>	
	Installed	N/A
	Quantity	N/A

	Air powered	N/A
<b>H3</b>	<b>Mud Saver Box</b>	N/A
	With rubber inserts to fit 3 1/2", 5", and pipe sizes. Bucket to be fitted with a rubber hose capable of draining into the bell nipple/flowline.	N/A
	Make:	N/A
	Type:	N/A
	Size range:	N/A
<b>H4</b>	<b>Rig Floor Hoist Winch (CARRIER)</b>	
	Quantity:	2
	Make and type	INGERSOLL RAND Force 5, (FA5A)
	Air operated	Yes
	Rated pull capacity	17,000 lbs
	Complete with safety guard	Yes
	Complete with automatic brake	Yes
Complete with overload protection	Yes	
<b>H4.1</b>	<b>Personnel Safe Hoist Winch</b>	
	Quantity (Complete with wireline guards, a manual spooling device, and a breaking system. To be exclusively used for man riding).	N/A
	Make and Type	N/A
<b>H5</b>	<b>Hoist Winch on Derrickman Platform</b>	
	Quantity:	N/A
	Make and type	N/A
	Air operated	N/A
	Rated pull capacity	N/A
	Complete with safety guard	N/A
	Complete with automatic brake	N/A
Complete with overload protection	N/A	
<b>H6</b>	<b>Bop Handling System Inside the Substructure</b>	
	Make and type:	
	Electric or hydraulic driven	Manual
	Rated hoist capacity (m.) – Capable of handling BOP assemblies complete with mud cross, spacers, valves, etc...	5 ton
	Max. vertical travelling stroke	N/A
	Max. horizontal travelling stroke	7 m.
	Handling system certified	Yes
<b>H7</b>	<b>Chicksan Hoses</b>	
	Contractor to provide a minimum of 100 ft. Chicksan type hose and swivels to accommodate all routine pressure testing and cementing requirements.	N/A
	Working Pressure:	N/A
	Connection:	N/A

**SECTION I: TUBULAR MATERIAL**

**I1**

**5" OD Drill Pipe**

API steel grade:  
 Total length:  
 Length of each (range):  
 Nominal weight (ppf)  
 Connection between pipe and tool joint  
 Tool joint outside diameter:  
 Tool joint inside diameter:  
 Outside taper of box connection  
 Tool joint hardfacing:  
 Tool joint API connection:  
 Actual classification:  
 Thread protectors

N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A

**I2**

**3 1/2" OD Drill Pipe**

API steel grade:  
 Total length:  
 Length of each (range) :  
 Nominal weight:  
 Connection between pipe and tool joint  
 Tool joint outside diameter:  
 Tool joint inside diameter:  
 Outside taper of box connection  
 Tool joint hardfacing:  
 Tool joint API connection:  
 Actual classification:  
 Thread protectors

N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A

**I3**

**Drill Collars**

**I3.1**

**Outside Diameter: 6 1/4" / 6 1/2"**

Number:  
 Inside diameter:  
 Length of each joint:  
 Elevator recess:  
 Slip recess:  
 API connection:  
 Thread protectors  
 Bore-back on box:  
 Stress relief groove on pin:

N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A

**I3.2**

**Outside Diameter: 4 3/4"**

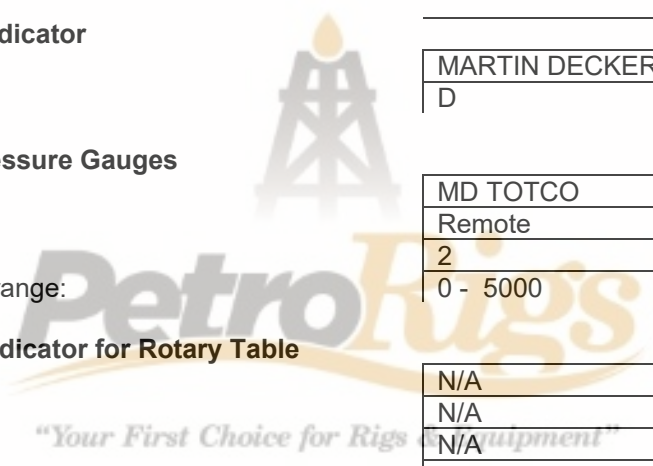
Number:  
 Inside diameter:  
 Length of each joint:  
 Elevator recess: required  
 Slip recess: required  
 API connection:  
 Thread protectors:  
 Bore-back on box:  
 Stress relief groove on pin:

N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A

**I4**

**Bit Subs**

	Two (2) bit subs for each size of drill collar bored for float valves	N/A
<b>I5</b>	<b>Cross-Over Subs</b> Quantity of each x-over sub to connect and run in hole all the Contractor's furnished tubulars: two of each size	N/A
		N/A
		N/A
		N/A
<b>I6</b>	<b>Lifting Subs</b> Lifting subs required for all sizes of Contractor's Drill Collars	N/A
		N/A
		N/A
<b>I7</b>	<b>Wipers</b> 5" DP Wipers 3 1/2" DP Wipers	N/A
		N/A
<b>J</b>	<b>PARAMETERS RECORDING/INDICATING EQUIPMENT</b>	
<b>J1</b>	<b>Instrumentation at Driller's Console</b>	
<b>J1.1</b>	<b>Weight Indicator</b> Make: Type:	MARTIN DECKER
		D
<b>J1.2</b>	<b>Pump Pressure Gauges</b> Make: Type: Quantity: Pressure range:	MD TOTCO
		Remote
		2
		0 - 5000
<b>J1.3</b>	<b>Torque Indicator for Rotary Table</b> Make: Type: Range: Torque indicator sensor type:	N/A
		N/A
		N/A
		N/A
<b>J1.4</b>	<b>Pump Stroke Counter and Totalizer</b> Quantity: 1 for each pump Make: Type:	N/A
		N/A
		N/A
<b>J1.5</b>	<b>Speed Indicator (RPM) for Rotary Table</b> Make: Type: Range: Speed indicator sensor type:	N/A
		N/A
		N/A
		N/A
<b>J1.6</b>	<b>Tongs Torque Indicator</b> Make: Type: Pull indicator sensor type: Max. rated load:	N/A
		N/A
		N/A
		N/A





<b>J1.7</b>	<b>Mud Pits Volume Totalizer</b>	
	Make:	N/A
	Type:	N/A
	Monitoring:	N/A
		N/A
	Pit level sensors type:	N/A
	Pit level sensors installed in tanks: all active tanks and reserve tanks	N/A
	Pit volume gain/loss alarm: required	N/A

<b>J1.8</b>	<b>Mud Flow Rate Indicator</b>	
	Make:	N/A
	Type:	N/A
	Flow rate sensor:	N/A
	Flow rate gain/loss alarm:	N/A

<b>J1.9</b>	<b>Trip Tank Level Indicator</b>	
	Make:	N/A
	Type:	N/A
	Pit volume gain/loss alarm:	N/A
	Recorder:	N/A

**J2 Instrumentation Inside Driller's Dog House**

<b>J2.1</b>	<b>Drilling Parameter Recorder</b>	
	Make:	Epoch System
	Pens quantity:	N/A
	Pneumatic or electric:	ELECTRONIC
	Parameter recorded: ROP	Y
	Parameter recorded: Weight on hook	Y
	Parameter recorded: Rotary speed	N/A
	Parameter recorded: Rotary torque	Yes
	Parameter recorded: SPM pump 1	Yes
Parameter recorded: SPM pump 2	Yes	

**K : SAFETY EQUIPMENT**

<b>K1</b>	<b>Safety Clothing</b>	
	To reflect safe oilfield working practices	
	- Working clothes:	N/A
	- Safety gloves:	N/A
	- Safety helmets:	N/A
	- Safety helmets for visitors:	N/A
	- Safety boots:	N/A
	- Safety goggles:	N/A

<b>K2</b>	<b>Fire Extinguishers and Fire Fighting Equipment</b>	N/A
	State provision as required to meet	N/A

<b>K2.1</b>	<b>Rig Site Fire Extinguishers</b>	N/A
	<b>CO2 Type</b>	N/A
	Capacity:	N/A
		N/A

	Number:	N/A
	<b>Large Size Powder Type:</b>	N/A
	Capacity:	N/A
	Number:	N/A
		N/A
	<b>Small Size Powder Type:</b>	N/A
	Capacity:	N/A
	Number:	N/A
		N/A
<b>K2.2</b>	<b>Fire Water Pump</b>	N/A
	Quantity:	N/A
	Fire water supply	N/A
	Pump characteristics	N/A
	- Flow:	N/A
	- Pressure:	N/A
	- associated accessories (hoses, etc.):	N/A
		N/A
<b>K2.3</b>	<b>Personal Protection for Fire Fighting Personnel</b>	N/A
	Helmet with face shield:	N/A
	Number:	N/A
	Fire suits:	N/A
	Number:	N/A
	Fire-proof blankets:	N/A
	Number:	N/A
	Gas Masks	N/A
	Quantity	N/A
	Explosion Proof battery lights	N/A
	Quantity:	N/A
		N/A
<b>K3</b>	<b>First Aid Equipment</b>	N/A
	Stretcher:	N/A
	First aid kit:	N/A
	Oxygen resuscitator:	N/A
	Eye was bottles: on rig floor, monkey board, shale shakers, mixing hopper area	N/A
	Emergency shower:	N/A
<b>K4</b>	<b>Safety Warning Signs</b>	N/A
	"No Smoking" notices:	N/A
	"No Vehicles Beyond This Point":	N/A
	"Pressure Testing" signs:	N/A
	"Wearing Safety Helmet is Mandatory":	N/A
<b>Note</b>	All signs to be clearly drawn/written in Arabic, English and French language and located in: SH staff office, rig site, dog house, site entrance.	N/A
		N/A
<b>K5</b>	<b>Derrick Man Escape System</b>	N/A
		N/A
<b>K6</b>	<b>Safety Belts</b>	N/A
		N/A
<b>K7</b>	<b>Fixed Gas Detection System</b>	
	At the mud ditch, rig floor and over the shale	N/A

	shakers	
	General alarm system	N/A
<b>K8</b>	<b>Portable Gas Detection System</b>	
	Quantity:	N/A
	Make and type:	N/A
<b>K9</b>	<b>Eye Wash Stations</b>	N/A
<b>K10</b>	<b>Smoke Detectors</b>	N/A
<b>K11</b>	<b>Explosion Meter/Hand Gas detector</b>	N/A
<b>SECTION L</b>	<b>MISCELLANEOUS</b>	
<b>L1</b>	<b>Welding Machines</b>	
	Electric welding machine (300-amp minimum)	N/A
	Diesel welding machine	N/A
	Torch oxygen-acetylene cutting/welding set	N/A
<b>L2</b>	<b>Workshop</b>	
	Equipped with necessary tools:	N/A
	Dimensions:	N/A
<b>L3</b>	<b>Warehouse</b>	
	Dimensions	N/A
		N/A
<b>L4</b>	<b>Hand Tools</b>	
	Quantity and availability should be adequate for the proposed operations.	N/A
	Torque wrench	N/A
	Spanners, chain tongs in several dimensions, hammers, nozzle pliers, chisels, brushes, etc.	N/A
	All grinders are to have safety guards fitted.	N/A
<b>L6</b>	<b>Bell Nipples</b>	
	<b>11"</b>	N/A
	Diameter:	N/A
	Length:	N/A
	Type:	N/A
<b>SECTION M</b>	<b>CAMP EQUIPMENT</b>	
	Each porta-camp to be insulated and air conditioned for desert temperatures up to 140 degrees Each porta-camp to be insulated and air conditioned for desert temperatures up to 140 degrees Each room to have a heater for cold weather. Air	N/A

conditioners and heaters to be thermostatically controlled, side mounted with controls at eye level. Three porta-cabins per skid.

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**M1 Accommodation for Rig Camp**

-Type accommodation for company man  
 -Type accommodation for offices  
 -Type accommodation for company representatives and third party

N/A
N/A
N/A

**N COMMUNICATION**

**N1 Inter Rig System**

The internal rig site communications should extend to the following areas as a minimum; Company man, mud logger, tool pusher, camp and rig floor.

N/A

**SECTION O TANK STORAGE, HOISTING AND TRANSPORTATION MEANS**

**O1 Diesel Fuel (Contractor Use)**

Diesel fuel total storage tank capacity:  
 Diesel fuel transfer pumps number :  
 Diesel fuel transfer pumps type and power:

100 bbls
2
MISSION 3 x 2 - 15 HP Electric

**01.1 Drilling Water**

Drilling water total capacity:  
 Drill water tanks quantity:  
 Drill water transfer pump type and power:

150 bbl
1
MISSION - 3 x 2 Electric

**O2 Hoisting and Transportation Means**

**O2.1 Forklift**

Quantity:  
 Make and type:  
 Rated hoist capacity:

N/A
N/A
N/A