

A GENERAL RIG SPECIFICATIONS

A.1 Mast & Substructure

	Contractor Specifications
A.1.1 Mast	
Make/type :	UPET S.A. / MU 160-37 (telescoping with 2 sections)
Height (m) :	31.6
Width of base (m x m) :	1,25m x 2,10m
Width of top (m x m) :	1,00m x 1,30m
Max. hook load with No. of lines strung (lbs)	353,000 lbs. with 8 lines
A.1.2 Racking platform	
Make/type :	UPET S.A. / MU 160-37 (telescoping with 2 sections)
Racking platform capacity of drill pipe : Size/No.	Racking capacity with Primary Drillstring (m) = 2600 m Racking capacity with Secondary Drillstring(m) = 3200 m
Racking platform capacity of drill collar : Size/No.	Racking capacity with 6 1/2" OD DC (m) = 175 m
Racking platform capacity of drill collar : Size/No.	-
A.1.3 Substructure	
Make/type :	UPET S.A. /Foldable
Height (m) :	5,66m
Width (m) :	6,5m
Setback capacity (lbs):	617 klbs.
Rotary capacity (lbs):	353 klbs.
Clear height below rotary table beams (m):	4.69 m
Substructure footprint (m x m) :	7.5m x 6.5m
Catwalk (m):	N/A
A.1.4 Rig floor winches	
Make/ Type :	UPET S.A. / Hydraulic
Quantity :	1
Capacity & S.W.L. (Lb/KN) :	8820 lb/ 41kN
Wire diameter (inches) :	9/16 inch
Automatic Brakes & Spooling :	yes
A.1.5 Monkey board work winch	
Make/ Type :	N/A
Capacity & S.W.L. (daN) :	-
Wire diameter (mm) :	-
Automatic brakes :	-
A.1.6 Rig floor man-riding winch	
Make/ Type :	INGERSOLL-RAND/ LS2-150RLP-L-E
Capacity & S.W.L. (daN) :	150 daN

Non-rotating wire diameter (mm) :	10mm
Automatic Brakes & Spooling :	yes

A.2 Drawworks and Associated Equipment

	Contractor Specifications
A.2.1 Drawworks	
Make/type :	UPET S.A. / Conventional
Drum type :	AVB 900 x 250
Spinning cathead type :	N/A
Breakout cathead type :	N/A
Blocks safety device type/model:	pneumatic
Rated capacity (kW/HP) :	810 kW/1100 HP
Input power continuous (kW/HP) :	696 kW/ 946 HP
Brake type :	Brake band type
Maximum Safe Hook load 10 lines (lbs) :	N/A
Maximum Safe Hook load 8 lines (lbs) :	353,000 lbs
A.2.2 Draw works power	
Number of engines :	2
Engine make :	Caterpillar
Engine model :	C 15
Maximum input power continuous (kW/HP) :	2 x 330kW/450 HP
A.2.3 Auxiliary brake	
Make/Type :	UPET/ hydraulic
Model :	FH 460
Torque Rating (ft.lbs) :	6329 ft.lbs

A.3 Hoisting Equipment

	Contractor Specifications
A.3.1 Crown block	
Make/type :	UPET/ GF 200-5 x 29
Rated capacity (lbs):	441,000 lbs
No. of sheaves :	5
A.3.2 Travelling block	
Make/type :	UPET/ MC 160-4 x 29
Rated capacity (lbs) :	353,000 lbs
No. of sheaves :	4
A.3.3 Hook	
Make/type :	UPET/ MC 160-4 x 29
Rated capacity (lbs) :	353,000 lbs
A.3.4 Swivel	
Make/type :	UPET/ CH 200

API Rated bearing capacity (lbs) :	238,000 lbs
Comparative dead load (lbs) :	441,000 lbs
Test/working pressure (psi) :	5,000 psi
A.3.5 Drilling line	
Size (inch)/type :	1 1/8 in/ SEALE
Breaking strength (daN) :	49,400 daN
Length (ft) :	4,000 ft
A.3.6 Deadline Anchor	
Make/type :	HERCULES/ HA 119
Load rating (lbs) :	60,000 lbs
Weight sensor type :	compression

A.4 Rotary System

	Contractor Specifications
A.4.1 Rotary table	
Make/type :	UPET/ MRL 275
Minimum opening (mm/inch) :	698.5 mm/ 27 1/2"
Static load rating (daN) :	50,000 daN
Rated power (kW/HP) :	440kW/ 600 HP
Maximum continuous torque (ft/lbs) :	20,270 ft.lbs
Soft torque rotary system (Bentec Mark II or equivalent)	N/A
Maximum rotary speed (RPM) :	300
Emergency chain drive :	N/A
A.4.2 Hinged/Split type master bushings	
Make/ Type :	UPET/ MB for MRL 275
Full Opening Diameter:	10 1/8 inch
A.4.3 Kelly bushing	
Make/type :	UPET/ hexagonal
Size :	4 1/2"
Lock down assembly :	yes
A.4.4 Kelly bushing safety guard	
Make/type :	N/A
A.4.5 Top drive	
Make & Type :	NorDrill/ ND 250H- 500HP
Rated capacity (tons) :	250
Test/working pressure (psi) :	5,000 PSI
Remote operated kelly cock :	yes
Drive :	hydraulic
Make & Type :	Perkins/ P500
Rated power (kW/HP) :	500kW/ 680HP
Rated torque (daN/m) :	1,550 daN/m
Two-speed gearbox :	yes
Maximum rotary speed (RPM) :	170
Mudline diameter (mm/inch) :	76/3

B POWER SUPPLY SYSTEMS

B.1 Rig Power Plant

	Contractor Specifications
B.1.1 Diesel engine plant	
Quantity :	4
Make :	Perkins
Type :	P400
Continuous output power available (kW/HP) each engine :	400kW/ 500HP
B.1.2 AC- Generator	N/A
Quantity :	-
Make :	-
Type :	-
Continuous output power available (kW/HP) each generator :	-
Output volts (Volts) :	-
B.1.3 VFD system	N/A
Number of VFD bays :	-
Make :	-
Type :	-
Cable trays above ground level :	-
B.1.4 Transformer system	
Quantity :	2
Make/ Type :	ICPE- ACTEL
Output volts (Volts) :	400 V
Frequency (Hz) :	50 Hz
B.1.5 Rig service air system	
Air Compressors	
Quantity :	2
Make & Model :	Atlas Copco/ GA 11 +P13
Rated capacity :	1.51 mc/min
Working pressure: kPa	1,000 psi
Air Receivers	
Quantity :	2
Make & Type :	Atlas Copco
Rated capacity :	2 mc
Working pressure: kPa	1,000 psi

C. WELL CONTROL EQUIPMENT

C.1 BOP Stack

	Contractor Specifications
C.1.1 13 5/8" 10,000 psi WP BOP	
a) Annular type preventer	
Quantity :	1 pcs.
Make :	YANCHENG SANYI PETROCHEMICAL MACHINERY
Type :	Shaffer type
Size (inch) :	13 5/8
WP (psi) :	5000
Connection top/bottom :	Studded / Flanged
Fitted with accumulator bottle for stripping :	yes
b.1) Ram type preventer	
Quantity :	1
Make :	YANCHENG SANYI PETROCHEMICAL MACHINERY
Type :	Cameron
Single/double :	Double
Size (inch) :	13 5/8"
WP (psi) :	5000
Side outlet ID (inch) :	4 1/4"
Connection top/bottom :	Flanged
Lock mechanism :	N/A
b.2) Ram type preventer	
Quantity :	-
Make :	-
Type :	-
Single/double :	-
Size (inch) :	-
WP (psi) :	-
Side outlet ID (inch) :	-
Connection top/bottom :	-
Lock mechanism :	-

C.2 BOP Control System

	Contractor Specifications
C.2.1 Accumulator unit	
Make :	YANCHENG SANYI PETROCHEMICAL MACHINERY
Model/type :	FKQ640-6
Installation site :	10m from wellhead

System fluid capacity	liter	40
No. of bottles installed	Qty	16
Total bottles capacity	liter	640
Bottle working pressure	psi	3000
Control manifold model :		3 1/8" x 5000 psi skid mounted complete
Low pressure/low reservoir level alarms	y/n	y
Serial (No.) :		1102011
C.2.2 Triplex pumps		
Quantity :		1
Make :		YANCHENG SANYI PETROCHEMICAL MACHINERY
Model :		Triplex plunger pump
Each driven by motor of	kW	18
Flow rate of pump	liter	N/A
At max. operating pressure	kPa (psi)	20,600 (3,000)
C.2.3 Air pumps		
Quantity :		2
Make :		YANCHENG SANYI PETROCHEMICAL MACHINERY
Model :		Qsp-35
Flow rate of each pump	liter	12,56 liter/stroke
At max. operating pressure	kPa (psi)	101.52 psi
C.2.4 Driller's control panel		
Make :		YANCHENG SANYI PETROCHEMICAL MACHINERY
Model :		SZQ 116
Serial No. :		1102397
Low accumulator system pressure warning		N/A
Low reservoir level warning		N/A
Low rig air pressure warning		N/A
Pressure regulator for bag		Yes
Control for by-pass valve		Yes
Quantity of pressure gauges :		4
C.2.5 Remote control panel		
Make :		YANCHENG SANYI PETROCHEMICAL MACHINERY
Model :		Jy1-35bjt
Location site :		Rig floor

C.3 Choke Manifold & Testing Equipment

	Contractor Specifications	
C.3.1 Choke manifold		
Make :	YANCHENG SANYI PETROCHEMICAL MACHINERY	
Nominal Size:	inch	3 1/8"
Working Pressure:	(psi)	5000
H ₂ S service:	y/n	no
Quantity of valves :	7	
Quantity of adjustable chokes :	1 pcs.	
Make/type :	SWACO style	
Quantity of power chokes :	1 pcs	
Make/type :	SWACO style	
Power choke remote control panel :	y/n	yes
Make/type :	YANCHENG SANYI PETROCHEMICAL MACHINERY	

D. MUD SYSTEM

D.1 High Pressure Mud System

	Contractor Specifications	
D 1.1 Mud pumps		
a) Mud pump No. 1		
Make :	Shandong Qingneng Power Co. Ltd.	
Model :	NF 1300 HP	
Mud pump driven by Engines	No. Type :	1 diesel type
Continuous power rating of each Engine	kW (HP)	1,600 kW/ 2,176 HP
Fluid end	type	L
Cylinders/valves cover :	N/A	
Equipped with :-	4 1/2" to 7"	
Pump stroke counter	type	BC-200A
Liner sizes available	inch	4, 4 1/2, 5, 5 1/2, 6, 6 1/2, 6 3/4, 7
Supercharging pump	type	SB 6 x 8
Independently driven by motor	kW (HP)	1,600 kW/ 2,176 HP – Jinan Diesel Engine Co. Ltd.
Type :	Ltd.	
Discharge/suction line dia (ID x ID)	inch	6 x 8
Working flow rate	5000 psi	
b) Mud pump No. 2		
Make :	Shandong Qingneng Power Co. Ltd.	
Model :	NF 1300 HP	
Mud pump driven by motors	No. Type :	1 diesel type
Continuous power rating of each motor	kW (HP)	1,600 kW/ 2,176 HP
Fluid end	type	L
Cylinders/valves cover :	N/A	
Equipped with :-	4 1/2" to 7"	

Pump stroke counter	type	BC-200A
Liner sizes available	inch	4,4 ½ ,5, 5 ½ , 6, 6 ½ , 6 ¾ ,7
Supercharging pump	type	SB 6 x 8
Independently driven by motor Type :	kW (HP)	1,600 kW/ 2,176 HP – Jinan Diesel Engine Co. Ltd.
Discharge/suction line dia (ID x ID)	inch	6 x 8
Working flow rate		5000 psi

D.2 Low Pressure Mud System – Tanks

	Contractor Specifications	
D.2.1 Mud tank system		
a) Active mud tanks		
Quantity and Compartments:		6 pcs / 1
Total capacity	bbls	1568.04
Dimensions	m x m x m	8,756x2,945x3,162
Capacity degasser tank	bbls	91.2
b) Reserve tanks		
Quantity and Compartments:		1 pcs / 1
Total capacity	bbls	258
Dimensions:	m x m x m	8,756x2,945x3,162
c) Water tanks		
Quantity :		1 pcs.
Total capacity	bbls	252
Dimensions	m x m x m	8,756x2,945x3,162
D.2.2 Settling tank		
Capacity	bbls	N/A
D.2.3 Pill tank		
Quantity :		1 pcs.
Description/Capacity No.1	bbls	31.44
Description/Capacity No.2	bbls	
D.2.4 Trip tank		
Capacity	bbls	31.44
Level indicator make/type :		IMUT S.A.
Electric pump make/ type :		Aversa S.A. / 7,5kw
D.3.1 Shale shaker		
Quantity :		3 pcs.
Make :		M-I SWACO
Type :		MONGOOSE balanced elliptical motion
Size screens :		1.16x0.58 m
Driven by No. of electric motors :		3
Combined Max. flow rate	gpm	