

PLATFORM 3-A

IADC STANDARD FORMAT EQUIPMENT LIST

Contents

- A. UNIT SPECIFICATIONS3
 - A.1. MAIN DIMENSION / TECHNICAL DESCRIPTION.....3
 - A.2. STORAGE CAPACITIES.....4
 - A.3. JACK UP SYSTEM.....4
 - A.4. OPERATIONL CAPABILITIES6
 - A.5. VARIABLE LOAD CAPACITY6
 - A.6. ENVIRONMENTAL LIMITS7
 - A.7. MOORING SYSTEM7
 - A.8. MARINE LOADING HOSES8
 - A.9. CRANES, HOIST, AND MATERIALS HANDLING9
 - A.10. HELICOPTER LANDING DECK.....12
 - A.11. AUXILIARY EQUIPMENT13
- B. GENERAL RIG SPECIFICATIONS COMPANY REQUIREMENTS CONTRACTOR TO PROVIDE14
 - B.1. DERRICK AND SUBSTRUCTURE14
 - B.2. DRAWWORKS AND ASSOCIATED EQUIPMENT15
 - B.3. DERRICK HOISTING EQUIPMENT16
 - B.4. ROTATING SYSTEM17
- C. POWER SUPPLY SYSTEMS.....19
 - C.1. RIG POWER PLANT19
 - C.2. EMERGENCY GENERATOR.....21
- D. DRILLSTRING EQUIPMENT21
 - D.1. TUBULARS21
 - D.2. HANDLING TOOLS30
 - D.3. FISHING EQUIPMENT35
- E. WELL CONTROL / SUBSEA EQUIPMENT39
 - E.1. DIVERTER39
 - E.2. LOW PRESSURE BLOWOUT PREVENTERS40
 - E.3. HIGH PRESSURE BLOWOUT PREVENTERS40
 - E.4. OTHER BLOWOUT PREVENTERS.....42
 - E.5. BOP CONTROL SYSTEM.....42
 - E.6. CHOKE MANIFOLD44
 - E.7. FLEXIBLE CHOKE & KILL LINES (BOP to MANIFOLD).....44
 - E.8. FLEXIBLE BOP CONTROL HOSES45
 - E.9. BOP TESTING EQUIPMENT45
 - E.10. BOP HANDLING45
- F. MUD SYSTEM / BULK SYSTEM46
 - F.1. HIGH PRESSURE MUD SYSTEM.....46
 - F.2. LOW PRESSURE MUD SYSTEM.....48
 - F.3. BULK SYSTEM52
- G. CASING/ CEMENTING EQUIPMENT53
 - G.1. CASING EQUIPMENT53
 - G.2. CEMENTING EQUIPMENT56
- H. INSTRUMENTATION / COMMUNICATION57
 - H.1. DRILLING INSTRUMENTATION AT DRILLER'S POSITION57
 - H.2. DRILLING PARAMETER RECORDER59
 - H.3. INSTRUMENTATION AT CHOKE MANIFOLD59
 - H.4. INSTRUMENTATION AT STANDPIPE59
 - H.5. DEVIATION EQUIPMENT60
 - H.6. RIG COMMUNICATION SYSTEM60
 - H.7. ENVIRONMENTAL INSTRUMENTATION60
 - H.8. NAVIGATION INSTRUMENTATION.....61
 - H.9. EXTERNAL COMMUNICATIONS EQUIPMENT62
- I. PRODUCTION TEST EQUIPMENT63
 - I.1. BURNERS63
 - I.2. BURNER BOOMS64
 - I.3. PIPING ON BURNER BOOMS.....64
 - I.4. SPRINKLER SYSTEM65

I.5.	FIXED PIPING FOR WELL TESTING	65
I.6.	AUXILIARY POWER AVAILABILITY	66
J.	WORKOVER TOOLS	66

K.	ACCOMODATION.....	66
K.1.	OFFICES.....	66
K.2.	LIVING QUARTERS.....	67
L.	SAFETY EQUIPMENT.....	68
L.1.	GENERAL SAFETY EQUIPMENT.....	68
L.2.	GAS/FIRE/SMOKE DETECTION.....	69
L.3.	FIRE FIGHTING EQUIPMENT.....	71
L.4.	BREATHING APPARATUS.....	73
L.5.	EMERGENCY FIRST AID EQUIPMENT.....	74
L.6.	HELIDECK RESCUE EQUIPMENT.....	74
L.7.	EMERGENCY WARNING ALARMS.....	74
L.8.	SURVIVAL EQUIPMENT.....	75
M.	POLUTION PREVENTION EQUIPMENT.....	76
M.1.	SEWAGE TREATMENT.....	76
M.2.	GARBAGE COMPACTION.....	76
M.3.	GARBAGE DISPOSAL/GRINDER.....	76
M.4.	INCINERATOR.....	76
M.5.	OILY WATER SEPARATOR.....	76

A. UNIT SPECIFICATIONS		
Rig type		Cantilever Jack Up
Unit / Design / Shape		Four Legs/Sonnat,/Rectangular
Unit flag		Valleta, Malta
Unit classification		GL, Mobile Self elevating unit
IMO Certification:	yes/no	Yes, IMO No.
Which code version		Character of class 100 A5
Year of Construction		1985, rebuilt in 2007
Construction yard		Galati, Romania
A.1. MAIN DIMENSION / TECHNICAL DESCRIPTION		
Light ship:	lt	9,894
Displacement at load line:	lt	11,514
Overall Length of unit (including helideck):	ft	224
Overall width of unit (including sponsons),:	ft	162
Hull length:	ft	172
Hull Width:	ft	134
Hull depth:	ft	22 ft in center line of hull, 21 ft on sides of hull
Number of legs/length:	no. x ft	4 / 399
Leg length available below hull:	ft	352.75
Type of leg:		Lattice tubular (equilateral triangle cross section)
Leg spacing (center to center)		
Transverse:	ft	109
Longitudinal:	ft	126
Independent leg or matt		Independent
Spud can jetting system, yes/no	yes/no	Yes
Spud can diameter/bearing area:	ft/ft ²	39 ft / 1,160 ft ²
Spud can height	ft	8.0
Spud can jetting system, yes/no:	yes/no	Yes
Bottom jets, yes/no:	yes/no	High pressure line, each leg from mud pumps.
Top jets, yes/no:	yes/no	No
Mat dimensions:		Not Applicable
Length:	ft	Not Applicable
Width:	ft	Not Applicable
Depth:	ft	Not Applicable
Cantilever or slot		Cantilever
Skid-off, yes /no:	yes/no	Yes
Cantilever envelope:	ft/ft	
Reach AFT, from / to	ft/ft	From 0 to 55 ft with extension From 0 to 45 ft without extension
Transverse, port / stbd	ft/ft	10 ft port/10 ft stbd
Slot dimensions :		Not Applicable
Length:		Not Applicable
Width:		Not Applicable
Mat slot dimensions :		Not Applicable
Length:		Not Applicable
Width:		Not Applicable

Max. cantilever load (combined hook +rotary+ setback):	st	582.5
Max. rotary load	st	440
Max. setback load	st	231
Fuel consumption,	bbl/day	95
Accommodation for max. no. of personnel	no	96
A.2. STORAGE CAPACITIES		
Fuel	bbl	1,640
Drilling water	bbl	1,595 (5,331 with tanks 9-P & 10-S)
Potable water	bbl	1,272
Mud processing tank (see F.2):	bbl	132
Active liquid mud (see F.2):	bbl	1,760
Independent oil base mud storage	bbl	No
Agitated:	yes/no	
Independent brine storage	bbl	No
Heavy brine accepted (e.g. bromide):	yes/no	
Bulk bentonite / barite (see F.3):	ft ³	4,620 cu. Ft
Bulk cement (see F.3):	ft ³	4,620 cu. Ft
Sack storage	sacks	1,000 sacks covered area (45 mt)
Pipe rack:	ft ²	2,453 ft ²
Upper racks dimensions,	ft x ft	43.5 ft x 31.8 ft
Maximum load capacity	lb/ft ²	256 lb/ft ² / 160 mt
Lower racks dimensions,	ft x ft	43.5 ft x 24.6 ft
Maximum load capacity	lb/ft ²	600 lb/ft ²
Other rack:	ft x ft:	
Maximum load capacity:	lb/ft ²	
Miscellaneous storage area:	ft ²	3,400 ft ²
Operator storage area:	ft ²	Various spaces all over the rig (main deck, shakers roof, accommodations roof, cantilever pipe rack)
Preload capacity	kips	7,218 kips/leg
Time to fill and dump preload, hrs	hrs	5-6 hours
A.3. JACK UP SYSTEM		
A.3.1. Jacking Systems		
Make / type		System electro-hydraulic with inter-blocking (pin & hole system); mode of operating with barge: semiautomatic
No. of jacks or pinions	no	6 cylinders/each leg, 2 pins each cylinder; 24 cylinders for all 4 legs
Maximum jacking load, kips:	kips	The maximum leg loading due to fixed weight, variables, hook and setback, and storm reserve must not exceed 3,274 MT (7,218 kips) per leg.
Jacking speed	ft/min	1 ft/min
Rack chocks available, yes/no	yes/no	Not Applicable
Required for field tow, yes/no	yes/no	Not Applicable
Required for ocean tow, yes/no	yes/no	Not Applicable
A.3.2. Raw Water Systems		

Pump location (water tower or leg)		Located on the leg #2
Suction distance below hull (max):	ft	100 ft
Additional Information Available:		
Quantity, no:		3
Make/type:		1 x Flowserve / Pleuger QN 101 – 2a+M8-530-2 2 x Franklin, USA / model 2396027223
Capacity, bbl/min:	bbl/min	20.96 / 26.2 / 26.2
@ pressure, psi:	psi	58 / 72 / 72
Horsepower, hp:	hp	60
A.3.2.1 Salt water service pump:		
Quantity, no:		2 (for drilling water transfer)
Make/type:		NOV / Mission Magnum I 8x6x14
Capacity, bbl/min:	bbl/min	20.96
@ pressure, psi:	psi	87
Horsepower, hp:	hp	100
Quantity, no:		2 (for caterpillar cooling)
Make/type:		Grundfos CRN 64-3-2 A-F-G-E-EQBE
Capacity, bbl/min:	bbl/min	6.7
@ pressure, psi:	psi	100
Horsepower, hp:	hp	7.4
Quantity, no:		2 (for caterpillar cooling)
Make/type:		Grundfos CR 64-2-2 A-F-A-E-EQBE
Capacity, bbl/min:	bbl/min	6.7
@ pressure, psi:	psi	58
Horsepower, hp:	hp	10
Quantity, no:		2 (for drawwowk cooling – fresh water)
Make/type:		Mecanex Botosani / Lotru 65/196
Capacity, bbl/min:	bbl/min	1.57
@ pressure, psi:	psi	72
Horsepower, hp:	hp	10
Quantity, no:		1 (for EDS brake cooling – fresh water)
Make/type:		Grundfos CR 64-3-2-A-F-A-E-EQBE
Capacity, bbl/min:	bbl/min	6.7
@ pressure, psi:	psi	58
Horsepower, hp:	hp	10
Quantity, no:		2 (for EDS brake cooling – fresh water)
Make/type:		EUROFLO-EU/50 20MBM
Capacity, bbl/min:	bbl/min	7.44
@ pressure, psi:	psi	72
Horsepower, hp:	hp	30

A.3.2.2 Dedicated preload pump:		
Quantity, no:		2
Make/type:		Iron Pump / BDV 100
Capacity, bbl/min:		13.31
@ pressure, psi:		145
Horsepower, hp:		24.8
Additional Information Available:		
		Pumps from A.3.2. and A.3.2.1. and A.3.2.2. is available for preloading activity also
A.4. OPERATIONAL CAPABILITIES		
Max design water depth capability		
	ft	300
Outfitted max water depth capability		
	ft	300
Normal min. water depth capability		
	ft	32
Draft at load line (deepest):		
	ft	17.08
Drilling depth capability (rated)		
	ft	25,000
Transit speed towed (historical avg) :		
	knots	3
Leg (spud can) below hull in transit		
		There are 5 (five) assigned tow position. Leg length below keel is from 5.068 m (position #1) up to 40.7 m (position #5)
Maximum leg length permitted in tow		
Ocean tow (Wet),		
	ft	85.5 ft (pos. #4) bellow the hull
Field tow:		
	ft	121.5 ft (pos. #5) bellow the hull
Number of tugs for ocean tow		
	no	1 – 3
Associated minimum bollard pull per tug		
	lt	Min 89 st on total bollard pull (for ocean tow) Min 69 st total bollard pull (for field tow)
Anti – roll system, yes/no :		
	yes/no	No
Maximum preload reaction per leg, lt:		
	lt	3,226 lt
Bearing pressure at maximum preload		
	psi	3,300 psi
Additional Information Available:		
Thrusters :		
		Not Applicable
Quantity:		
		Not Applicable
Fixed / Azimuthing:		
		Not Applicable
Total horsepower per thruster:		
		Not Applicable
A.5. VARIABLE LOAD CAPACITY		
(exclusive of drilling loads)		
Transit VL capacity		
	lt	738 (1,650 kips)
Drilling VL capacity		
	lt	1969 (4,410 kips)
Survival VL capacity		
	Lt	Same as 1,969 lt above, with the following guidelines for full storm conditions – Eliminate hook load, Lay down all pipe (no setback), empty ballast tanks, re level MODU if needed, redistribute variable loads to achieve equal leg reaction, assure that jack cylinders and jack pines are shimmed properly, turn off electrical power to jacking system, check anchor bolts, derrick-to-substructure and cantilever clamp bolts, protect equipment from wind driven rain, secure all deck

		equipment, cranes, and pipe, turn on fog horn and obstruction lights, secure all water tight doors and hatches, reduce rotary load to 98 lt
Jacking VL capacity	lt	738 (1,650 kips)
A.6. ENVIRONMENTAL LIMITS		
Transit:		
Max. wave height, ft:	ft	16.5
Max. wave period, sec:	sec	10
Max. wind velocity, knots:	knots	100 (ocean transit)
Max. current velocity, knots:	knots	2
Max. heave (double amplitude), ft:	ft	4.9
Max. pitch (double amplitude), degrees:	degrees	15 degrees with 10 sec. period (ocean transit)
Max. roll (double amplitude), degrees:	degrees	15 degrees with 10 sec. period (ocean transit)
Working water depth		
	ft	300 ft
Drilling		
Air gap (below bottom of main hull)	ft	36.74 ft, maximum air gap above still water depth plus 4 ft minimum required air gap above wave crest elevation
Max. wave height:	ft	35
Max. wave period:	sec	10
Max. wind velocity:	knots	70 knots simultaneous w/max. wave
Max. current velocity:	knots	2
Survival:		
Air gap (below bottom of main hull)	ft	40.74 ft
Max. wave height:	ft	39'4"
Max. wave period:	sec	10 sec
Max. wind velocity:	knots	86 knots simultaneous w/max. wave
Max. current velocity:	knots	2
Additional Information Available:		Survival Conditions: Same as drilling conditions with the following guidelines for full storm conditions – Eliminate hook load, Lay down all pipe (no. setback), empty ballast tanks, re level MODU if needed, redistribute variable loads to achieve equal leg reaction, assure that jack cylinders and jack pines are shimmed properly, turn off electrical power to jacking system, check anchor bolts, derrick-to-substructure and cantilever clamp bolts, protect equipment from wind driven rain, secure all deck equipment, cranes, and pipe, turn on fog horn and obstruction lights, secure all water tight doors and hatches, reduce rotary load to 100 MT.
A.7. MOORING SYSTEM		
A.7.1. Anchor Winches		
Quantity	no	2 nos
Make / model		Icepronav Galatz / ASFN225M
Type (electric / hydraulic / diesel)		Electric

Total HP per winch	hp	22 HP/each
Rated pull	lt	19.6
Control locations (local / remote / both)		Local
A.7.2. Anchors		
Quantity	no	2 nos
Make/type		Hall
Weight	lt	4.4
A.7.3. Anchor Lines		
Wire		Steel rope
Quantity (installed + spare):		2 (two)
Make/type:		Bridon
Construction:		(6 x 37) - 180/B - S/Z
Diameter:	in	1 ¼"
Useful length (nominal):	ft	985
A.7.4. Towing Gear		
Towing bridle size:	in	2 ½"
Hook-up system		Delta Plate
Rating, lt	lt	108
Spare bridle	yes/no	Yes
A.7.5. Supply Vessel Mooring System		
System description:		Rope
Rating :	lt	101 lt
Location (port/stbd/both):		Both
A.8. MARINE LOADING HOSES		
Location of loading manifolds (port/stbd/both):		One each side (starboard and portside)
A.8.1. Potable Water Hoses		
Quantity		2 nos, one each side, 196 ft long
Size		3" x 10 bar
Make / type:		Phoenix / soft wall
Color coding, yes/no:	yes/no	Yes
Make / type connection		Marine quick connection, brass coupling
A.8.2. Drilling Water Hose		
Quantity	no	N/A
Size	in	
Make / type:		
Color coding, yes/no:	yes/no	
Make / type connection		
A.8.3. Gas Oil Hose		

Quantity	no	2 nos, one each side, 196 ft long
Size	in	3" x 10 bar
Make / type:		Phoenix / soft wall
Color coding, yes/no:	yes/no	Yes
Make / type connection		Spill proof, brass coupling
A.8.4. Mud Chemical Hoses		
Quantity	no	2 nos, one each side, 196 ft long
Size	in	5" x 10 bar
Make / type:		Phoenix / soft wall
Color coding, yes/no:	yes/no	Yes
Make / type connection		Marine quick connection
A.8.5. Cement Hose		
Quantity	no	2 nos, one each side, 196 ft long
Size	in	5" x 10 bar
Make / type:		Phoenix / soft wall
Color coding, yes/no:	yes/no	Yes
Make / type connection		Marine quick connection
A.8.6. Base Oil Hose		
Quantity	no	N/A
Size	in	
Make / type:		
Color coding, yes/no:	yes/no	
Make / type connection		
A.8.7. Brine Hose		
Quantity	no	N/A
Size	in	
Make / type:		
Color coding, yes/no:	yes/no	
Make / type connection		
A.8.8. Other		
Use:		
Quantity	no	
Size	in	
Make / type:		
Color coding, yes/no:	yes/no	
Make / type connection		
A.9. CRANES, HOIST, AND MATERIALS HANDLING		
A.9.1. Cranes,		
Quantity	no	2 nos
Specification (API, etc.)		API

Make		National Oilwell Varco
Type		Amclyde Model 10000
Location (frwd / aft / port / stbd)		Portside (1) and Starboard (1)
Boom length	ft	70
Hook reach below main deck (block/whip):	ft / ft	100 ft / 100 ft
Block capacities and hoisting speeds:		
Load / radius / speed (minimum radius)	st/ft/(ft/sec)	44 st / 14.4 ft / 1 (ft/sec)
Load / radius / speed (maximum radius)	st/ft/(ft/sec)	21 st / 74.7 ft / 0.7 (ft/sec)
Whip capacity and hoist speed, st/ft/(ft/sec):	st/ft/(ft/sec)	5.2 st / 79.4 ft / 4.72 (ft/sec)
Hook load indicator automatically:		
corrected for boom angle	yes/no	Yes
Alarm (audible, visual, both)		Both alarms
Automatic brake (yes / no)	yes/no	Yes
Safety latch on hooks (yes / no)	yes/no	Yes
Crown saver (limit switch) (yes / no)	yes/no	Yes
Boom illumination (yes / no)	yes/no	Yes
Quantity	no.	1 nos
Specification (API, etc.)		API
Make		National Oilwell Varco
Type		Amclyde Model 10000 LD
Location (frwd / aft / port / stbd)		Aft
Boom length	ft	100 ft
Hook reach below main deck (block/whip), ft/ft :	ft / ft	100 ft / 100 ft
Block capacities and hoisting speeds		
Load / radius / speed (minimum radius)	st/ft/(ft/sec)	27.5 st / 23.6 ft / 1.43 (ft/sec)
Load / radius / speed (maximum radius)	st/ft/(ft/sec)	9.5 st / 104.3 ft / 1.43 (ft/sec)
Whip capacity and hoist speed, st/ft/(ft/sec):	st/ft/(ft/sec)	5.2 st / 109.2 ft / 4.0 (ft/sec)
Hook load indicator automatically:		
corrected for boom angle	yes/no	Yes
Alarm (audible, visual, both)		Both alarms
Automatic brake (yes / no)	yes/no	Yes
Safety latch on hooks (yes / no)	yes/no	Yes
Crown saver (limit switch) (yes / no)	yes/no	Yes
Boom illumination (yes / no)	yes/no	Yes
Additional information available:		
A.9.2. Forklifts		N/A - lifting pallet device
Quantity	no.	
Make / type		
Rated capacity	lt	
explosion proof:	yes/no	

A.9.3. Monorail Overhead Cranes		
Quantity	no.	4
Make		Ingersoll Rand ,
Type		Pneumatic
Rated Capacity, st:	st	27.5 st each
Location(s)		Underneath pipe rack and under drill floor
A.9.4. Air Hoist / Derrick Winches		
A.9.4.1 Rig Floor Winches (Non man-riding)		
Quantity:	no.	2
Make:		Ingersoll Rand
Type:		LS 5000R-L-S-E
Rated capacity:	lt	4.92 lt
Wire diameter:	in	3/4"
Automatic brake:	yes/no	Yes
Overload protection:	yes/no	Yes
Automatic spooling :	yes/no	Yes
A.9.4.1.1 Rig Floor Winch		
Quantity:	no.	1
Make:		Ingersoll Rand
Type:		FA5A-24XK1G
Rated capacity:	lt	4.4
Wire diameter:	in	3/4"
Automatic brake:	yes/no	Yes
Overload protection:	yes/no	Yes
Automatic spooling :	yes/no	Yes
A.9.4.2 Monkey Board Work Winch		
Quantity:	no.	1
Make:		Ingersoll Rand
Type:		2UW 702
Rated capacity:	lt	0.492
Wire diameter:	in	1/4"
Automatic brake:	yes/no	Yes
Overload protection:	yes/no	Yes
A.9.4.3 Rig Floor "Man-Riding" Winch		
Quantity	no.	1
Make		Ingersoll Rand
Type		FA2.5AMR-24MK1G
Rated capacity, lt	lt	3,125 lbs as man-riding winch 5,000 lbs as utility winch
Wire diameter, in:	in	5/8"
Non-twisted wire, yes/no:	yes/no	Yes
Automatic brake, yes/no:	yes/no	Yes
Overload protection, yes/no:	yes/no	Yes

Automatic spooling yes/no:	yes/no	Yes
Certified for man-riding, yes/no:	yes/no	Yes
A.9.4.4 Utility Winch (i.e. Deck Winch)		
Quantity	no.	2
Make		Ingersoll Rand
Type		LS 5000 R
Rated capacity, lt:	lt	4.92 lt
Wire diameter, in:	in	3/4"
Automatic brake, yes/no:	yes/no	Yes
Overload protection, yes/no:	yes/no	Yes
Automatic spooling yes/no:	yes/no	Yes
Locations		derrick sub base
A.9.4.5 BOP Hoists (see E.10.1)		
Quantity	no.	1
Make		Ingersoll Rand
Type		Pneumatic
Rated capacity, lt:	lt	2.95 lt
Wire diameter, in:	in	5/8"
Automatic brake, yes/no:	yes/no	Yes
Overload protection, yes/no:	yes/no	Yes
Automatic spooling yes/no:	yes/no	Yes
Locations		Main Deck
A.9.5. Transfer Baskets / Containers		
Quantity	no.	1
Make		Ingersoll Rand
Type		FA5IMR24MK103GP1
Rated capacity, lt:	lt	
Wire diameter, in:	in	3/4"
Automatic brake, yes/no:	yes/no	Yes
Overload protection, yes/no:	yes/no	Yes
Automatic spooling yes/no:	yes/no	Yes
Locations		Under rig floor – for spider deck
A.9.5.1 Personnel Transfer Baskets		
		As required for all Contractor's equipment and tools handling
A.9.5.2 Cargo Containers		Two (2) ring bottom nets, Billy Pugh
Quantity		As required for all Contractor's equipment and tools handling
Make / type		See above
Additional Information Available:		
A.10.HELICOPTER LANDING DECK		

Location (frwd / aft / port / stbd)		Forward
Dimensions	ft x ft	80 ft x 80 ft
Perimeter safety net (yes / no)	yes/no	Yes
Deck load capacity	lb/ft ²	3
Maximum helicopter weight	lbs	19,000
Designed for helicopter type		Puma SA 330 B or Bell 212
Tie down points (yes / no)	yes/no	Yes
Covered by foam fire system (yes / no)	yes/no	Yes
A.10.1. Helicopter Refueling System		Comply with MODU Code 89, Cap. 437
System make/type		Hellifuel / skid with pump unit and dispenser unit
Fuel storage capacity	US gal	766
Jettisonable	yes/no	Yes
Fuel transport containers, no:		-
Volume:	US gal	766
Covered by foam fire system	yes/no	No
A.11. AUXILIARY EQUIPMENT		
A.11.1. Water Distillation		
Quantity		2 nos
Make / type		Offshore Marine Laboratories / reverse osmosis model PW 6000
Capacity (each / total):	US gal/day	6000 / 12,000
Quantity		1
Make / type		Aquamar Electric Reverse Osmosis Plant / model AQE-60
Capacity (each / total):	US gal/day	13,200 (total 25,200gpm)
A.11.2. Boilers		Steam boiler not available
Quantity		
Make / type		
Capacity (each / total), lbs/hr		
A.11.3. Air Conditioning		
Make/type:		York Air Conditioning Plant (internal), Climaster Novenco Hi-press HVAC ZCR 13/8 POS L, compressor York CMO-28
Capacity (total system),	m3/hr:	11,340 m ³ / hr
Max. temperature rating,:	0F	78 °F environmental
Make/type:		Carrier / 50TJ-024-933S

Automatic spooling yes/no:	yes/no	Yes
Certified for man-riding, yes/no:	yes/no	Yes

A.9.4.4 Utility Winch (i.e. Deck Winch)		
Quantity	no.	2
Make		Ingersoll Rand
Type		LS 5000 R
Rated capacity, lt:	lt	4.92 lt
Wire diameter, in:	in	3/4"
Automatic brake, yes/no:	yes/no	Yes
Overload protection, yes/no:	yes/no	Yes
Automatic spooling yes/no:	yes/no	Yes
Locations		derrick sub base
Quantity	no.	1
Make		Ingersoll Rand
Type		Pneumatic
Rated capacity, lt:	lt	2.95 lt
Wire diameter, in:	in	5/8"
Automatic brake, yes/no:	yes/no	Yes
Overload protection, yes/no:	yes/no	Yes
Automatic spooling yes/no:	yes/no	Yes
Locations		Main Deck
Quantity	no.	1
Make		Ingersoll Rand
Type		FA5IMR24MK103GP1
Rated capacity, lt:	lt	
Wire diameter, in:	in	3/4"
Automatic brake, yes/no:	yes/no	Yes
Overload protection, yes/no:	yes/no	Yes
Automatic spooling yes/no:	yes/no	Yes
Locations		Under rig floor – for spider deck
A.9.4.5 BOP Hoists (see E.10.1)		
A.9.5. Transfer Baskets / Containers		
		As required for all Contractor's equipment and tools handling
A.9.5.1 Personnel Transfer Baskets		Two (2) ring bottom nets, Billy Pugh
A.9.5.2 Cargo Containers		
Quantity		As required for all Contractor's equipment and tools handling
Make / type		See above
Additional Information Available:		
A.10.HELICOPTER LANDING DECK		

Location (frwd / aft / port / stbd)		Forward
Dimensions	ft x ft	80 ft x 80 ft
Perimeter safety net (yes / no)	yes/no	Yes
Deck load capacity	lb/ft ²	3
Maximum helicopter weight	lbs	19,000
Designed for helicopter type		Puma SA 330 B or Bell 212
Tie down points (yes / no)	yes/no	Yes
Covered by foam fire system (yes / no)	yes/no	Yes
A.10.1. Helicopter Refueling System		Comply with MODU Code 89, Cap. 437
System make/type		Hellifuel / skid with pump unit and dispenser unit
Fuel storage capacity	US gal	766
Jettisonable	yes/no	Yes
Fuel transport containers, no:		-
Volume:	US gal	766
Covered by foam fire system	yes/no	No
A.11. AUXILIARY EQUIPMENT		
A.11.1. Water Distillation		
Quantity		2 nos
Make / type		Offshore Marine Laboratories / reverse osmosis model PW 6000
Capacity (each / total):	US gal/day	6000 / 12,000
Quantity		1
Make / type		Aquamar Electric Reverse Osmosis Plant / model AQE-60
Capacity (each / total):	US gal/day	13,200 (total 25,200gpm)
A.11.2. Boilers		Steam boiler not available
Quantity		
Make / type		
Capacity (each / total), lbs/hr		
A.11.3. Air Conditioning		
Make/type:		York Air Conditioning Plant (internal), Climaster Novenco Hi-press HVAC ZCR 13/8 POS L, compressor York CMO-28
Capacity (total system),	m3/hr:	11,340 m ³ / hr
Max. temperature rating,:	0F	78 °F environmental
Make/type:		Carrier / 50TJ-024-933S
Capacity (total system),	m3/hr:	13,600
Max. temperature rating,:	0F	95 °F environmental
Additional Information Available:		
A.11.4. Electric Welding Sets		
Quantity		8 sets
Current capacity		400/600A

Make / model	5 x Miller Gold Star 602 & 2 x Lincoln 600A & 1 x Nelson Alpha 850A
Type (fixed / portable)	Fixed
A.11.5. High Pressure Cleaner	
Quantity	2
Make/type	Karcher,HD 6/16- 4M
Electric / pneumatic / diesel	Electric
Max delivered pressure, psi:	2755
With steam (yes / no)	No

B. GENERAL RIG SPECIFICATIONS COMPANY REQUIREMENTS CONTRACTOR TO PROVIDE

B.1. DERRICK AND SUBSTRUCTURE

B.1.1. Derrick / Mast	164 ft
Make / type	Upetrom – Romania / TD 320-43R Type National, reinforced
Rated for wind speed	
With full set back:	knots 70
With no set back:	knots 100
Height	ft 144 Clear height
Dimensions of base	ft x ft 45 ft x 30 ft
Dimensions of crown	ft x ft 24 ft x 9 ft
Gross nominal capacity	lbs 1,520,000
Static hook load	lbs 880,000
Maximum number of lines	no. 12 lines
Ladders with safety cages and rests :	yes/no Yes
Platform for crown sheaves access:	yes/no Yes
Counter balance system for rig tongs:	yes/no Yes
Lighting system explosion proof :	yes/no Yes
B.1.2. Racking Platform	
Make / type	
Total current simultaneous capacity- drill pipes:	
5 7/8" DP stand	stands 275 stands
5 7/8" HWDP stand	stands 10 stands
8-1/4" DC stand	stands 10 stands
9-1/2" DC stand	stands 3 stands
Tubing belly board (yes / no)	N/A Can be installed as per company request
B.1.3. Automated Pipe Handling	
Make / type	NOV / BX 4-50
Description	Hydraulic Elevator
Make / type	

Description			
B.1.4. Casing Stabbing Board			
Make / type		Aker Solution MH / Standard Access Basket MK-1	
Adjustable from / to height above rotary	ft / ft	20 ft/50 ft	
B.1.5. Substructure			
Make / type		Upetrom, type FOMAR / S-400	
Drill floor height (above main deck), ft	ft	30	
Length	ft	55.4	
Width	ft	45.5	
Setback capacity	kips	463	
Simultaneous setback + hook load capacity	kips	1,168	
Rotary beam capacity (total)	st	500	
Clear height below rotary table beams (to main deck)	ft	18.5 ft	
B.1.6. Weather Proofing			
Rig floor wind breaks ,	yes/no	yes/no	No
Derrickman wind breaks ,	yes/no	yes/no	Yes
Around process pits ,	yes/no	yes/no	Yes
B.1.7. Derrick TV Camera System			
Camera located at		1-Crown Block 1-Monkey Board 1-Stabbing board 1-drill floor,1-shale shaker,-1 main deck,1- mud pump room 1-mud pit room,1-spider deck	
Make / type		ELECTRO FLOW CONTROLS JELEC SYSTEM	
Zoom / Pan / Tilt-function	yes/no	Yes Yes	
Monitor located at		Drillers cabin OIM Office Company Office	

B.2. DRAWWORKS AND ASSOCIATED EQUIPMENT

B.2.1. Drawworks		
Make / type		Upetrom, Romania / TFM 38 E type National
Motors make / type		DC electric motors / MCF 850
Quantity	no	2
Rated input power	hp	2500 HP
Drum size (diameter x length),	in x in	31.5" x 51.4"
Drum type (grooved/smooth)		Grooved
For drill line size	in	1 3/8"
Brake type (disc / drum)		Drum, band brake
Maximum line pull 12 lines	lbs	880,000 lbs
Maximum line pull 10 lines	lbs	705,000 lbs

Makeup cathead type		Pneumatic
Breakout cathead type		Pneumatic
Crown block safety devices (yes / no)	yes/no	Yes
Make/type		Upetrom
Independent fresh water cooling system for drawworks and electric brake (yes / no)	yes/no	Yes
Automatic driller	yes/no	Yes
Make/type		Upetrom / DAAS & EDS Varco
B.2.2. Auxiliary Brake		
Make		NOV
Model		V 336 C
Independent back-up system type		AC System
B.2.3. Sand line		
Make		Upetrom
Length capacity		20,000 ft
Line size/type	in	9/16
Breaking strength	st	
Safe working load	lt	11.8
B.2.4. Slickline Unit		
Make / model		N/A
Wire length (nominal)	ft	
Wire size	in	
Breaking strength :	lt	
Safe working load :	lt	
Depth counter :	yes/no	
Pull indicator :	yes/no	
B.3. DERRICK HOISTING EQUIPMENT		
B.3.1. Crown Block		
Make / type		Upetrom/ GFM 400 type National
Rated capacity	st	440 st
No. of sheaves	no.	7
Sheave diameter	in	55"
Sheave grooved for line size, in	in	1 3/8"
B.3.2. Traveling Block		
Make / type		Upetrom / MC 400
Rated capacity :	st	440 st
Number of sheaves :	no.	6
Sheave diameter:	in	55"
Sheave grooved for line size :	in	1 3/8"
B.3.3. Hook		
Make / type		Upetrom / MC 400

Rated capacity	st	440 st
Complete with spring assembly/hook locking device :	yes/no	Yes
B.3.4. Swivel		N/A
Make / type		
Rated capacity	st	
Test / working pressure	psi	
Gooseneck and wash pipe minimum ID, i	in	
Left hand pin connection type		
Access fitting for wire line entry on top gooseneck	yes/no	
B.3.5. Drilling Line		
Diameter	in	1 3/8"
Construction		6 x 19 S BXIP Bethlehem Wire Rope
Length (original):	ft	7,626
Drilling line reel		
Drum cover :	yes/no	Yes
Drilling line drum power driven	yes/no	Yes, pneumatic
Spare drilling line :	yes/no	No
Location (rig, shore, etc)		
Roller guides :	yes/no	No
B.3.6. Dead Line Anchor		
Make/type		AMPLO Ploiesti / Martin Decker E131 T
Weight sensor ,	yes/no	Yes
Deadline dampener ,	yes/no	Yes
B.3.7. Block Guidance system		
Make/type		Varco
B.4. ROTATING SYSTEM		
B.4.1. Rotating Table		
Make / type		Upetrom / MRL 375
Maximum opening		37- 1/2"
Rated capacity	st	550
Two speed gearbox ,	yes/no	Yes
Emergency chain drive ,	yes/no	No
Driven by an independent electric motor	yes/no	Yes
Electric motor make/type		Electroputere / MCF 850
Output power	hp	1,150 HP
Max. continuous torque	ft-lbs	87,000 lbs-ft
Drip pan / mud collection system (yes / no)	yes/no	Yes, Zero pollution System
B.4.2. Master Bushings		

Make / type		Upetrom / split, 37 1/2"
Insert bowls (see G.1.8):	yes/no	Yes
B.4.3. Kelly Bushing		
Make/type		N/A
Lock down assembly :	yes/no	
B.4.4. Top Drive System		
Make		Varco TDS 11SA
Type (electric / hydraulic)		Electric
Rated capacity	st	500
Test / working pressure	psi	7,500 psi test press. 5,000 psi WP
Output power	hp	2 x 400 HP
Maximum output continuous torque	lb-ft	37,500 ft-lbs @ 125 rpm
Two-speed gear box (yes / no)	yes/no	Single speed, double reduction helical gear system
Maximum rotary speed	rpm	228
Remote operated kelly cock , yes/no	yes/no	Yes
Cooling system type		Air cooling
Upper inside BOP (see also D.1.15)		
Quantity	no.	1
Make / type		Varco hydraulic actuated
Working pressure		15,000 psi test press. 10,000 psi WP
Max. OD body	in	7 1/4"
Max. ID body	in	2 13/16"
Connection type (box)		6 5/8 Reg
Connection type (pin)		
Upper inside BOP		
Quantity	no.	1
Make / type		Varco , manual operated
Working pressure		15,000 psi test press. 10,000 psi WP
Max. OD body	in	7 1/4"
Max. ID body	in	2 13/16"
Connection type (box)		6 5/8 Reg
Connection type (pin)		6 5/8 Reg
B.4.4.1 Top Drive Makeup / Breakout System		
Make / type		Varco
Model		PH -75
Max. makeup torque	ft – lbs	75,000 ft – lbs
Max. break out torque	ft – lbs	95,000 ft – lbs
Raised backup system , yes/no	yes/no	Yes
Make/type		Yes
Working height (range) , ft		3 ft / hydraulic range

C. POWER SUPPLY SYSTEMS		
C.1. RIG POWER PLANT		
C.1.1. Diesel Engines		
Quantity		5 nos
Make / type		Caterpillar /3512 3JA 2B DI-TA
Maximum continuous power	hp	1,686 HP
At rotation speed of	rpm	1500 rpm
Equipped with spark arrestors	yes/no	Yes
Mufflers installed	yes/no	Yes
C.1.2. DC – Generator		
Quantity		-
Make/type		-
Continuous power		-
At rotation speed of , rpm		-
Output volts , volts		-
C.1.3. AC – Generator		
Quantity	no.	5 nos
Make / type		Leroy Somer / LSA 52.2 S55/4P
Continuous power	KVA	1,463 KVA
at rotation speed of	rpm	1,500
Output volts	volts	600 V / 1,408 Amps
C.1.4. SCR System		
Number of SCR		11 nos
Make / type		Siemens / SIMOREG DC Master 6 RA 7093 - 4KS20-0-Z
Maximum continuous power (total)		~ 800 KW each, max 6 units simultaneous
Output volts		0-770 V / 1,160 Amps (DC)
C.1.5. Transformer System		
Quantity	no.	2
Make/type		Trafo Electro Service TES-F dry type 600 / 400 V
Continuous power (each)	KVA	1600
Output volts	volts	400 V / 2,309 A
Frequency	Hz	50 Hz
C.1.5. Transformer System		
Quantity	no.	3
Make/type		Victor Industrial & Trading LDT U.A.E. / dry type 380/220 V
Continuous power (each)	KVA	150
Output volts	volts	220 V / 393 A
Frequency	Hz	50/60 Hz
C.1.5. Transformer System		
Quantity	no.	1 – emergency
Make/type		Victor Industrial & Trading LDT U.A.E. / dry type 380/220 V
Continuous power (each)	KVA	50
Output volts	volts	220 V / 131 A

Frequency	Hz	50/60 Hz
C.1.6. Emergency Shutdown		
Emergency shutdown switches for the complete power system (AC and DC), located at the following points		Drill floor (driller's console), Accommodation low level , Engine room console
C.1.7. Compressed Air System		
Air compressors – Cold Start		
Quantity , no	no.	2
Make		Ingersoll Rand
Model		UP5-37-14
Rated Capacity , ft3/min	ft ³ /min	167
Working pressure , psi	psi	203
Prime mover (electric/diesel)		Electric
Continuous power , hp	hp	50
Air dryers		
Quantity , no	no	1
Make		Ingersoll Rand / TS060
Rated capacity , ft3/min	ft ³ /min	500
Air compressors – Medium pressure (rig air)		
Quantity , no		2
Make		Atlas Copco
Model		GA 45
Rated Capacity :	ft ³ /min	211
Working pressure	psi	188
Prime mover (electric/diesel)		Electrical
Continuous power :	hp	73
Air dryers		
Quantity , no	no	1
Make		Sullair Corporation / Sullair RD-400-400-3-50-A
Rated capacity , ft3/min	ft ³ /min	400
Air compressors – Low pressure (bulk air)		
Quantity , no	no.	2
Make		Ingersoll Rand
Model		UP5-30-75
Rated Capacity :	ft ³ /min	190
Working pressure :	psi	108 psi – Ingersoll Rand Pac EII pressure regulator 108-43 psi
Prime mover (electric/diesel)		Electric
Continuous power :	hp	40

Air dryers		
Quantity , no	no.	2
Make		ALMIG ALM 400 & Ingersoll Rand TS060
Rated capacity , ft3/min	ft ³ /min	211 & 500
C.1.8. Air Receivers		
Volume (total) , ft ³	ft ³	70.63
Pressure , psi	psi	145
Location		Air compressors room- Cold Start
Volume (total) :	ft ³	70.63
Pressure:	psi	145
Location		Air compressors room
Volume (total) :	ft ³	35.31
Pressure:	psi	100
Location		Bulk Cement Room
Additional Information Available:		
C.2. EMERGENCY GENERATOR		
C.2.1. Engine		
Quantity	no.	1
Make / type		Caterpillar /Marine Model C18 DI-TA
Maximum output	hp	587 HP
At rotation speed	rpm	1,500 RPM
Automatic starting , yes/no	yes/no	Yes
Starting methods (air, hydraulic, battery)		Battery /2 Starter
C.2.2. AC - Generator		
Quantity	no.	1
Make / type		Leroy Somer LSAM 47.2 M7 C6/4
Maximum output	kw	375 KW
At rotation speed	rpm	1,500 rpm
Output volts	volts	400 V
Capable of back-feeding power to main bus (yes /no)	yes/no	Yes

D. DRILLSTRING EQUIPMENT		
D.1. TUBULARS		
D.1.1. Kellies		
Quantity, no:	no.	N/A

Nominal size OD:	in	
Shape type (hexagonal, square or triangular):		
Total / Working length	ft / ft	
Connection type		
Quantity, no:	no.	
Nominal size OD:	in	
Shape type (hexagonal, square or triangular):		
Total / Working length , ft/ft:	ft / ft	
Connection type		
D.1.2. Kelly Saver Subs		N/A
Quantity:	no.	
Nominal kelly size:	in	
Connection type		
Protector:		
Quantity:	no.	
Nominal kelly size:	in	
Connection type		
Protector:		
D.1.3. Drill Pipe		N/A
Drill pipe OD	in	
Grade		
Total length	ft	
Range		
Weight	lb/ft	
Internally plastic coated	yes/no	
Tool joint OD / ID	in / in	
Tapered shoulder tool joints degree (box/pins), degree/degree:		
Connection type		
Type of hardfacing		
API classification		
Thread protectors:		
Drill pipe OD	in	
Grade		
Total length	ft	
Range		
Weight	lb/ft	
Internally plastic coated	yes/no	
Tool joint OD / ID	in / in	
Tapered shoulder tool joints degree		

(box/pins), degree/degree:		
Connection type		
Type of hardfacing		
API classification		
Thread protectors:		
Additional Information Available:		
D.1.4. Drill Pipe Pup Joints		N/A
Nominal OD:	in	
Tool joint OD / ID :	in / in	
Grade		
Length,	ft	
Quantity	no.	
Length	ft	
Quantity	no.	
Length	ft	
Quantity	no.	
Weight:	lbs/ft	
Connection type		
Internally plastic coated :	yes/no	
API Classification:		
Thread protectors, yes/no:	yes/no	
Nominal OD:	in	
Tool joint OD / ID :	in / in	
Grade		
Length,	ft	
Quantity		
Length	ft	
Quantity		
Length	ft	
Quantity		
Weight:	lbs/ft	
Connection type		
Internally plastic coated :	yes/no	
API Classification:		
Thread protectors, yes/no:	yes/no	
Additional information available:		
D.1.5. Drill Pipe Casing Protectors		N/A
Initial stock:, no		
Make /Type		
OD, in:		
Installation tools (manually, hydraulic,		

none)		
D.1.6. Heavy Wall Drill Pipe		N/A
Quantity	joints	
Nominal size OD	in	
Weight	lbs/ft	
Range		
Tool joint OD / ID	in / in	
Type of hardfacing		
internally plastic coated:	yes/no	
Connection type		
Thread protectors, yes/no:	yes/no	
Quantity	joints	
Nominal size OD	in	
Weight	lbs/ft	
Range		
Tool joint OD / ID	in / in	
Type of hardfacing		
internally plastic coated:	yes/no	
Connection type		
Thread protectors, yes/no:	yes/no	
D.1.7. Drill Collars		N/A
Quantity, no:	joints	
OD Body	in	
ID body	in	
Nominal length of each joint:	ft	
Drill collar body (slick / spiral)		
Recess for "zip" elevator	yes/no	
Recess for slips	yes/no	
Stress relief pin groove	yes/no	
Bore back on box	yes/no	
Connection type		
Quantity, no	joints	
OD Body	in	
ID body	in	
Nominal length of each joint:	ft	
Drill collar body (slick / spiral)		
Recess for "zip" elevator	yes/no	
Recess for slips	yes/no	
Stress relief pin groove	yes/no	
Bore back on box	yes/no	
Connection type		

Quantity, no:	joints	
OD Body	in	
ID body	in	
Nominal length of each joint, ft:	ft	
Drill collar body (slick / spiral)		
Recess for "zip" elevator	yes/no	
Recess for slips	yes/no	
Stress relief pin groove	yes/no	
Bore back on box	yes/no	
Connection type		
D.1.8. Short Drill Collars		N/A
Quantity, no:	no	
OD Body	in	
ID body	in	
Nominal length of each joint, ft:	ft	
Drill collar body (slick / spiral)		
Stress relief pin groove	yes/no	
Bore back on box	yes/no	
Connection type	yes/no	
D.1.9. Non-magnetic Drill Collars		N/A
Quantity, no:	no	
OD Body	in	
ID body	in	
Nominal length of each joint, ft:	ft	
Drill collar body (slick / spiral)		
Recess for "zip" elevator	yes/no	
Recess for slips	yes/no	
Stress relief pin groove	yes/no	
Boreback on box	yes/no	
Connection type	yes/no	
Additional information available		
D.1.10. Core Barrels		N/A
D.1.11. Stabilizers		N/A
D.1.12. Roller reamers		N/A
D.1.13. Shock absorbers		N/A
D.1.14. Drilling jar		N/A

D.1.15. Inside BOP Valve (see also B.4.4)		
Quantity		1
Make		Varco
OD		7 1/4"
Connection type		4 1/2 IF
Working pressure rating		10,000 PSI
Quantity		1
Make		Varco
OD		5"
Connection type		3 1/2 IF
Working pressure rating		10,000 PSI
D.1.16. Fast Shut-off coupling		
Make/type:		
Quantity, no:		
Tool joint to fit:		
D.1.17. Circulation Head		
Quantity	no.	1 nos
Make/type		Smith
Bottom connection type		4 1/2" IF
Top connection type		2" Weco Fig 1502
Wire line stripper, yes/no:	yes/no	No
Working pressure, psi:	psi	10,000
Quantity	no.	1 nos
Make/type		Smith
Bottom connection type		3 1/2" IF
Top connection type		2" Weco Fig 1502
Wire line stripper, yes/no:	yes/no	No
Working pressure, psi:	psi	10,000 psi
Side Entry Sub		
Quantity	no.	1
Make/type		Smith or similar
Bottom connection type		4 1/2 IF pin
Top connection type		4 1/2 IF box
Side outlet connection type		2" Weco Fig 1502
Wire line stripper, yes/no:		No
Working pressure, psi:	psi	10,000 psi

Quantity	no.	1
Make/type		Smith or similar
Bottom connection type		3 ½ IF pin
Top connection type		3 ½ IF box
Side outlet connection type		2" Weco Fig 1502
Wire line stripper, yes/no:		No
Working pressure, psi:	psi	10,000 psi
D.1.18. Kelly Cocks		
<Upper>		
Quantity	no.	N/A
Make / type		
Working pressure	psi	
Max. OD body	in	
Max. ID body	in	
Connection type		
<Lower>		
Full Opening Safety Valve		
Quantity	no.	1
Make / type		Varco
Working pressure	psi	10,000 psi
Max. OD body	in	6 5/8"
Max. ID body	in	2 ¾"
Connection type		4 1/2 IF
Used as full open safety valve:	yes/no	Yes
Quantity	no.	1
Make / type		Varco
Working pressure	psi	10,000 psi
Max. OD body	in	
Max. ID body	in	
Connection type		3 1/2 IF
Used as full open safety valve:	yes/no	Yes
D.1.19. Circulation Subs		
N/A		
Quantity, no:	no.	
Make / type		
OD body, in:	in	
Ball size, in:	in	
Dressing kits, no:	no.	
Connection type:		
D.1.20. Cup Type Testers		
Quantity, no:	no.	1 for each casing size with spare rubber

Make:		Sterom
Size, in:	in	13 3/8", 9 5/8", 7"
Test cup for casing weight:	lb/ft	54.4 - 72.1
Test cup for casing weight:	lb/ft	43.5 - 53.5
Test cup for casing weight:	lb/ft	26 - 38
Connection type:		4 1/2 IF Pin - 4 1/2" IF Box
s		
D.1.21. Plug Type Testers		N/A
Quantity, no:	no.	
Make:		
Size test plugs, in:	in	
Connection type:		
D.1.22. Drop in Valves		N/A
Quantity, no:	no.	
For nominal OD drill pipe, in:	in	
Make/Type:		
Max. OD for dart:	in	
D.1.23. Near-Bit Subs (Box-Box)		N/A
Quantity	no.	
OD size	in	
ID size	in	
Top connection type		
Bottom connection type		
Bored for float valve	yes/no	
Float size:		
Quantity	no.	
OD size	in	
ID size	in	
Top connection type		
Bottom connection type		
Bored for float valve	yes/no	
Float size:		
Quantity	no.	
OD size	in	
ID size	in	
Top connection type		
Bottom connection type		
Bored for float valve	yes/no	
Float size:		

Quantity	no.	
OD size	in	
ID size	in	
Top connection type		
Bottom connection type		
Bored for float valve	yes/no	
Float size:		
Additional Information required:		
D.1.24. Crossover Subs		2 each size to fit Contractor's tubular and tools
Quantity	no	
OD size (max/min):	in / in	
ID size:	in	
Top Connections Size		
Type (pin/box):		
Bottom connection size		
Quantity	no	
OD size (max/min):	in / in	
ID size:	in	
Top Connections Size		
Type (pin/box):		
Bottom connection size		
Quantity	no	
OD size (max/min):	in / in	
ID size:	in	
Top Connections Size		
Type (pin/box):		
Bottom connection size		
Quantity	no	
OD size (max/min):	in / in	
ID size:	in	
Top Connections Size		
Type (pin/box):		
Bottom connection size		
Quantity	no	
OD size (max/min):	in / in	
ID size:	in	
Top Connections Size		
Type (pin/box):		
Bottom connection size		

Quantity	no	
OD size (max/min):	in / in	
ID size:	in	
Top Connections Size		
Type (pin/box):		
Bottom connection size		
Quantity	no	
OD size (max/min):	in / in	
ID size:	in	
Top Connections Size		
Type (pin/box):		
Bottom connection size		
Additional information available		
D.1.25. Drilling Bumper Subs		N/A
Quantity, no:	no	
Make:		
OD:	in	
Stroke:	in	
Connection type, in:		
D.1.26. Hole Openers		N/A
Quantity, no:		
Make:		
OD, in:		
Connection type:		
D.1.27. Underreamer		N/A
Quantity, no:	no	
Make:		
OD, in:	in	
Connection type:		
D.2. HANDLING TOOLS		
D.2.1. Drill Pipe Elevators		
Size	in	5"
Quantity	no.	1
Make		Varco
Model		18°
Rated capacity	st	350

Size	in	3-1/2"
Quantity	no.	1
Make		Varco
Model		MGG (air operated)
Rated capacity	st	250
Size	in	2 7/8" -3 1/2" – 4" – 5 1/2"
Quantity	no.	1
Make		NOV
Model		BX 4-50 (hydraulic elevator)
Rated capacity	st	500
D.2.2. Drill Collar Elevators		N/A
Size	in	
Quantity	no.	
Make		
Model		
Rated capacity	st	
D.2.3. Tubing Elevators		
Size (max / min)	in	2 7/8" -3 1/2" - 5"
Quantity	no.	1
Make		Blohm+Voss
Model		Slips elevator
Rated capacity	st	150 st
D.2.4. Drill Pipe Hand Slips		
Size	in	5"
Quantity	no.	1
Make / type		Varco, type SDML
Size	in	3-1/2"
Quantity	no.	1
Make / type		Varco, type SDML
D.2.5. Semi-Automatic DP Slips		N/A
Size range (largest / smallest)	in / in	
Quantity	set	
Make / type		
D.2.6. Drill Collar Slips		
Size	in	9-1/2"
Quantity	no.	1
Make / type		Sterom

Size	in	8"
Quantity	no.	1
Make / type		Sterom
Size	in	6-1/2"
Quantity	no.	1
Make / type		Sterom
Make / type		
D.2.7. Drill Collar Safety Clamps		
Quantity	no.	1 ea
Range	in / in	9-1/2", 8", 6-1/2"
D.2.8. Tubing Slips		
		N/A
D.2.9. Tubing Spider		
		N/A
D.2.10. Drill Collar Lifting Subs		
Quantity	no.	2 nos
For DC OD	in	9-1/2"
Connection type		7-5/8"Reg
Quantity	no.	5 nos
For DC OD	in	8"
Connection type		6-5/8"Reg
Quantity	no.	5 nos
For DC OD	in	6-1/2"
Connection type		4"IF
D.2.11. DC Lifting Plugs		
Quantity	no.	2 nos
For DC OD	in	9-1/2"
Connection type		7-5/8"Reg
Quantity	no.	2 nos
For DC OD	in	8"
Connection type		6-5/8"Reg
Quantity	no.	2 nos
For DC OD	in	6-1/2"
Connection type		4"IF

Quantity	no.	2 nos
For DC OD	in	4-3/4"
Connection type		3-1/2"IF
D.2.12. Bit Breakers		
Quantity	no.	1 nos
For bit size	in	36"
Quantity	no.	1 nos
For bit size	in	26"
Quantity	no.	1 nos
For bit size	in	17-1/2"
Quantity	no.	1 nos
For bit size	in	12-1/4"
Quantity	no.	1 nos
For bit size	in	8-1/2"
Quantity	no.	1 nos
For bit size	in	6"
Bit Gauges		1 each : 26", 17-1/2", 12-1/4", 8-1/2", 6"
D.2.13. Elevator Links		
Quantity of sets	set	1 set
Make/type		For TDS, To be used for running casing
Size	in	3-1/2"
Length	ft	108"
Rated capacity	st	500
Quantity of sets	set	1set
Make/type		For TDS
Size	in	2 3/4"
Length	ft	108"
Rated capacity	st	350
Quantity of sets	set	
Make/type		
Size	in	
Length	ft	
Rated capacity	st	
D.2.14. Kelly Spinner		
		N/A

Make/type		
D.2.15. Drill pipe Spinner		
Make / type		Iron roughneck ST 80 Varco
Size (max / min), in/in	in /in	For 8-1/2"DC to 3-1/2"DP
D.2.16. Mud Saver Bucket		
Make		Mabisa, Mexico
Size		3 1/2" and 5" DP
D.2.17. Hydraulic Make-Up / Breakout Machine (e.g. EZ Torque)		
Make / type		Upetrom Easy Torque / Size range 3 1/2" to 8 1/2"
Maximum line pull	st	60,000 ft/lbs Make up Torque; 80,000 ft/lbs Brake out Torque
Additional Information Available		
D.2.18. Rotary Rig Tongs		
Quantity (sets)	no.	1
Make / type		Varco / HT-65
Size range (max OD / min OD)	in / in	8 1/4" / 3 1/2" lug Jaws to 11 1/4"
Torque rating:	ft/lbs	65,000 ft-lbs
Quantity (sets)	no.	1
Make / type		Varco / HT-35
Size range (max OD / min OD)	in / in	8 1/4" / 2 7/8"
Torque rating:	ft/lbs	34,000 ft-lbs
D.2.19. Tubing Tongs (manual)		
Quantity (sets)	no.	1
Make / type		Varco / K-50
Size range (max OD / min OD)	in / in	5" / 2 3/8"
Torque rating:	ft/lbs	50,000
D.2.20. Tubing Tongs (power)		
		N/A
Quantity :	no.	
Make / type		
Size range (max OD / min OD)	in / in	
Max. output torque:	ft/lbs	
Torque indicator	yes/no	
Back-up arm:	yes/no	

D.2.21. Iron Roughneck		
Make / type		ST 80
Size range (max OD / min OD)		8-1/2" / 3-1/2"
Max. makeup torque		60,000 ft-lbs
Max. breakout torque		80,000 ft-lbs
D.3. FISHING EQUIPMENT		
D.3.1. Overshots		
		Will be provided to catch all sizes of all Contractor tubular
Quantity	no.	1ea
Make / type		GOTCO
Overshot OD	in	5-3/4"
To catch size:	in	4 3/4" spiral grapple
To catch size:	in	3 1/2" basket grapple
To catch size:	in	
Overshot guide OD:	in	
Extension sub length:	ft	
Lipped guide (oversize, regular)		R
Grapples (spiral, basket, both):		Both
Pack offs, yes/no:	yes/no	Yes
Top sub connection type Contractor to Specify		3 1/2"IF
Quantity	no.	1ea
Make / type		GOTCO
Overshot OD	in	8 1/8"
To catch size:	in	6 1/2" spiral grapple
To catch size:	in	5" basket grapple
To catch size:	in	
Overshot guide OD:	in	11"
Extension sub length:	ft	0.92
Lipped guide (oversize, regular)		R
Grapples (spiral, basket, both):		Both
Pack offs, yes/no:	yes/no	Yes
Top sub connection type Contractor to Specify		4 1/2"IF
Quantity	no.	1ea
Make / type		GOTCO
Overshot OD	in	9 5/8"
To catch size:	in	8" spiral grapple
To catch size:	in	6 1/2" basket grapple
To catch size:	in	6 5/8" basket grapple
To catch size:	in	5" basket grapple
Overshot guide OD:	in	11"
Extension sub length:	ft	0.92

Lipped guide (oversize, regular)		R
Grapples (spiral, basket, both):		Both
Pack offs, yes/no:	yes/no	Yes
Top sub connection type Contractor to Specify		5 ½"IF
Quantity	no.	1ea
Make / type		GOTCO
Overshot OD	in	11 ¾"
To catch size:	in	9 ½" spiral grapple
To catch size:	in	8" basket grapple
To catch size:	in	6 5/8" basket grapple
To catch size:	in	5" basket grapple
Overshot guide OD:	in	11"
Extension sub length:	ft	0.92
Lipped guide (oversize, regular)		R
Grapples (spiral, basket, both):		Both
Pack offs, yes/no:	yes/no	Yes
Top sub connection type Contractor to Specify		5 ½"IF
D.3.2. Hydraulic Fishing Jar		
Quantity	no.	N/A
Make / type		
OD body:	in	
Min ID::	in	
Stroke:	in	
Connection type:		
Repair kit:	yes/no	
D.3.3. Jar Intensifier		
Quantity	no.	N/A
Make / type		
OD body:	in	
Min ID:	in	
Connection type:		
Repair kit:	yes/no	
D.3.4. Surface Jars		
Quantity	no.	N/A
Make / type		-
OD body:	in	-
Min ID:	in	-
Stroke:	in	-

Connection type:		-
Repair kit:	yes/no	-
D.3.5. Fishing Bumper Subs		
Quantity	no.	N/A
Make / type		
OD body:	in	
Min ID:	in	
Stroke:	in	
Connection type:		
D.3.6. Safety joints		
Quantity, no:	no.	N/A
Make /type		
OD Body:	in	
Min ID:	in	
Connection type:		
Quantity, no:	no.	
Make /type		
OD Body:	in	
Min ID:	in	
Connection type:		
D.3.7. Junk Baskets (Reverse Circulation)		
Quantity	no.	N/A
Make / type		
For hole size	in	
OD body	in	
Connection type	in	
Inside magnet available, yes/no:		
Mill shoes type (A, B, C)		
D.3.8. Junk Subs		
Quantity	no.	N/A
Make / type		
For hole size	in	
OD body	in	
Connection type		
Quantity	no.	
Make / type		

For hole size	in	
OD body	in	
Connection type		
Quantity	no.	
Make / type		
For hole size	in	
OD body	in	
Connection type		
D.3.9. Junk Mill (Taper, Flat bottom)		
Quantity	no.	N/A
Make / type		
OD flat mill, in:	in	
Connection type		
D.3.10. Magnet fishing tools		N/A
Quantity	no.	
Make / type		
OD body	in	
Connection type		
Quantity	no.	
Make / type		
OD body	in	
Connection type		
D.3.11. Taper Taps		N/A
Quantity	no.	
Make / type		
OD (max/min):	in / in	
OD body:	in	
Length overall:	ft	
Connection type		
Quantity	no.	
Make / type		
OD (max/min):	in / in	
OD body:	in	
Length overall:	ft	
Connection type		
D.3.12. Die Collar		N/A

Quantity	no.	
Make / type		
OD (max/min):	in / in	
OD body:	in	
Length:	ft	
Connection type		

E. WELL CONTROL / SUBSEA EQUIPMENT		
E.1. DIVERTER		
Fixed:	yes/no	Yes
Make / type:		Hydrill
Maximum bore:	in	29 ½"
ID of insert packer:	in	29 ½"
Working pressure:	psi	500
Annular:	no.	1
Make/type:		Hydril / MSP type
Maximum bore:	in	29 ½"
Working pressure	psi	500
Bottom connection:		
Size:	in	29 ½"
Working pressure:	psi	500
Gasket type:		R 95
Rams:	no.	Not Applicable
Make/type:		
Ram packer type:		
Ram packer type:		
Max. bore size:	in	
Number of diverter outlets:	no.	2
Outlet OD (nominal):	in	12
E.1.1. Diverter Flow Lines		
Quantity:	no	Two (port and starboard)
Nominal size of flow lines:	in	12"
Running from diverter to:		Port & Stbd. Overboard
Valve make/type:		Tri-Centric
Quantity:	no	2
Size	in	12"
Working pressure :	psi	145
Valve operator (air / hydraulic)		Hydraulic
E.1.2. Diverter Control Panel		
Primary make/type:		Koomey

Location:		On cantilever beam
Remote make/type:		Electro Flow Control
Location:		Drillers Cabin
Remote make/type:		Electro Flow Control
Location:		Company man office
E.2. LOW PRESSURE BLOWOUT PREVENTERS		
E.2.1. Ram Type Preventers		
Quantity:	no	1 ea
Make/model:		Upetrom
Type (single/double/triple):		Double
Size:	in	20 ¾"
Working pressure:	psi	3000
Ram locks	yes/no	Yes
Type (manual/hydraulic)		Manual
H ₂ S service:	yes/no	No
Side outlets:	no.	1 ea
Size:	in	4 1/16"
WP:	psi	3000
Bottom connection:		R 74
Top connection:		R 74
Shear ram boosters	yes/no	No
Available Rams(installed & spare)		
Quantity/type/size :	no./type/in	1 set / pipe ram / 5"
Quantity/type/size :	no./type/in	1 set / blind / 0"
Quantity/type/size :	no./type/in	1 set / casing ram / 13 3/8"
Quantity/type/size :	no./type/in	
E.2.2. BOP Ram configuration (normal)		
Upper:		Blind ram
Middle Upper:		
Middle Lower:		
Lower:		Pipe ram 5"
E.2.3. Annular Preventer		
Quantity:	no.	1 ea
Make/type:		Hydrill
Size:	in	21 1/4"
Working pressure:	psi	2000
Bottom connection:		20 ¾" x 3000 (R 74)
Top connection:		21 ¼" x 2000 (R 73)
E.3. HIGH PRESSURE BLOWOUT PREVENTERS		
All appropriate components H ₂ S rated		Yes

yes/no			
E.3.1. Ram Type Preventers			
Quantity:	no.	1 set	
Make / model:		CIW	
Type (single /double / triple):		Double	
Size:	in	16 3/4"	
Working pressure:	psi	5000 psi	
Ram locks:	yes/no	Yes	
Type (manual/hydraulic):		Hydraulic	
H ₂ S service:	yes/no	Yes	
Side outlets:	no.	2ea	
Size:	in	4 1/16"	
WP:	psi	5,000 psi	
Bottom connection:		16 3/4" x 5,000 psi flange (BX 162)	
Top connection:		16 3/4" x 5000 psi flange (BX 162)	
Shear ram booster:	yes/no		
Quantity:	no.	1 set	
Make / model:		Cameron / Type U	
Type (single /double / triple):		Single	
Size:	in	16 3/4"	
Working pressure:	psi	5,000 psi	
Ram locks:	yes/no	Yes	
Type (manual/hydraulic):		Hydraulic	
H ₂ S service:	yes/no	Yes	
Side outlets:	no.	2 ea	
Size:	in	4 1/16"	
WP:	psi	5000 psi	
Bottom connection:		16 3/4" x 5000 psi flange (BX 162)	
Top connection:		16 3/4" x 5000 psi flange (BX 162)	
Shear ram booster:	yes/no		
E.3.2. Available Rams (installed & spare)			
Quantity / type / size	no./type/in	no./type/in	1set / blind/shear / 0
Quantity / type / size	no./type/in	no./type/in	1 set / pipe rams/ 5"
Quantity / type / size	no./type/in	no./type/in	1 set / pipe rams / 3 1/2"
Quantity/type/size	no./type/in	no./type/in	1 set / pipe rams / 2 7/8"
Quantity/type/size	no./type/in	no./type/in	2 sets / VBR / 3 1/2" – 7"
Quantity/type/size	no./type/in	no./type/in	1 set / casing rams / 7"
Quantity / type / size	no./type/in	no./type/in	1 set / casing rams / 9 5/8"
Quantity / type / size	no./type/in	no./type/in	1 set / pipe/casing rams / 4 1/2"
Quantity / type / size	no./type/in	no./type/in	1 set / casing rams / 7 5/8"
Quantity / type / size	no./type/in	no./type/in	1 set / casing rams / 9 7/8"
Quantity / type / size	no./type/in	no./type/in	1 set / casing rams / 11 3/4"
Quantity / type / size	no./type/in	no./type/in	1 set / casing rams / 11 7/8"

Quantity / type / size	no/type/in	no./type/in	
E.3.3. Annular Preventer			
Quantity:		no.	1 ea
Make / type:			Hydril GK
Size:		in	16 3/4"
Working pressure:		psi	5000 psi
Bottom connection:			16 3/4" x 5,000 psi
Top connection:			16 3/4" x 5,000 psi
E.3.4. Kill Line Valves			
Quantity:		no.	2 ea
Make / type:			Cameron
Size:		in	4 1/16"
Working pressure:		psi	5,000 psi
Gasket type:			RX – 39
Hydraulic/manual/non-return:			1ea x HCR , 1ea x manual
E.3.5. Choke Line Valves			
Quantity:		no.	2 ea
Make / type:			Cameron
Size:		in	4 1/16"
Working pressure:		psi	5,000 psi
Gasket type:			RX 39
Hydraulic/manual:			1ea x HCR , 1ea x manual
E.4. OTHER BLOWOUT PREVENTERS			N/A
All appropriate components H ₂ S rated yes/no			
E.4.1. Ram Type Preventers			
Quantity:		no	
Make/model:			
Type (single/double/triple):			
Size:		in	
Working pressure:		psi	
Ram locks		yes/no	
Type (manual/hydraulic)			
H ₂ S service:		yes/no	
Side outlets:		no.	
Size:		in	
WP:		psi	
Bottom connection:			
Top connection:			
Shear ram boosters:		yes/no	
E.5. BOP CONTROL SYSTEM			

E.5.1. Accumulator Unit		
Make/model:		Koomey ST 80
Location:		Cantilever beam starboard side
Fluid reservoir capacity:	U.S gal	800
Total accumulator capacity (w/o precharge)		308 (28 bottles x 11 US gal)
System working pressure:	psi	3,000 psi
Oil/water mix.rate :	U.S.gal /min	35
Glycol reservoir capacity:	U.S. gal	460
Control manifold model:		KOOMEY MODEL GU2KB6S "G" SERIES
Regulator type:		KOOMEY
Total useful accumulator volume equals all preventer opening and closing volumes:	yes/no	Yes
Plus percent additional volume		100%
E.5.2. Accumulator Hydraulic Pumps		
Electric Driven		
Quantity:	no.	1
Make/model:		TRIPLEX UET 25 HT 380
Each driven by motor of power:	hp	50
Flow rate of each pump:	U.S.gal /min	40
At operating pressure:	psi	3,000 psi
Operable off emergency generator:	yes/no	Yes
Air Driven:		
Quantity:	no. no	3
Make / model:		ADMIRAL SPEEFLOW USA
Flow rate of each pump:	U.S.gal /min	20gpm @ 2000Psi 15.6gpm @ 3000 Psi
AT operating pressure	psi	3000
E.5.3. Primary Control Panel		
Control panel make/model:		
		Electro Flow Control
Location:		
		Cantilever beam
Panel controls for the following functions:		
All annular BOP's:	yes/no	Yes
All ram BOP's:	yes/no	Yes
Lock for ram BOP's:	yes/no	No
Diverter System:	yes/no	Yes
Kill and choke line valves:	yes/no	Yes
Low accumulator low pressure warning:	yes/no	Yes
Low reservoir level warning:	yes/no	Yes
Low rig air pressure warning:	yes/no	Yes
System pressure regulator:	yes/no	Yes

Pressure regulator for annular:	yes/no	Yes
Flow meter:	yes/no	No
Quantity of pressure gauges:	no	3
Other control functions:	yes/no yes/no	No
E.5.4. Remote Control Panels		
Make/model:		Electro Flow Control
Location:		Company Office
Location:		Drillers Office
Location:		
Ability to operate main closing unit valves directly:	yes/no	Yes
System routing (direct or through panel)	yes/no	Yes
Remote control of –system pressure regulator:	yes/no	Yes
Remote control of –annular pressure regulator:	yes/no	Yes
E.6. CHOKE MANIFOLD		
All appropriate components H2S rated	yes/no	Yes
E.6.1. Choke Manifold		
Nominal size:	in	3-1/16"
Minimum ID:	in	3"
Maximum WP:	psi	10,000 psi
Quantity of fixed chokes:	no.	N/A
Make/model:		N/A
Size (ID):	in	N/A
Quantity of adjustable chokes:	no.	2 ea
Make / model:		Cameron
Size (ID):	in	2" Orifice
Quantity of power chokes:	no	2 ea
Make / model:		Cameron
Size (ID):	in	3-1/16" nom.
Glycol injection:	yes/no	No
E.7. FLEXIBLE CHOKE & KILL LINES (BOP to MANIFOLD)		
Choke Line		
Quantity:	no	1
Make/type:		Coflexip
ID:	in	3" x 70 ft x 3-1/16" flange (BX-154)
Working pressure:	psi	10,000 psi
H ₂ S service:	yes/no	Yes
Kill Line		

Quantity:	no	1
Make/type:		Coflexip
ID:	in	3" x 70 ft x 3-1/16" flange (BX-154)
Working pressure:	psi	10,000 psi
H ₂ S service:	yes/no	Yes
E.8. FLEXIBLE BOP CONTROL HOSES		
Quantity:	no	12
Make/type:		Coflex SS armoured
ID:	in	1"
Working pressure:	psi	5,000 psi
Fire resistant:	yes/no	Yes
Quantity:	no	
Make/type:		
ID:	in	
Working pressure:	psi	
Fire resistant:	yes/no	
E.9. BOP TESTING EQUIPMENT		
E.9.1. Hydraulic BOP Test Pump		
Make/Model		Hydratron
Type:		AZ air operated pump
Pressure rating:	psi	20,000 psi
Chart recorder:	yes/no	Yes, circular
E.9.2. BOP Test Stump		
Size:	in	13 5/8" x 10,000 psi
E.10. BOP HANDLING		
E.10.1. BOP Hoist System		
Make / type:		Ingersoll Rand / HA2-025MA3-27-24PT
Quantity of hoists:		4 (four)
Number of lift points on BOP:	no.	4
System Safe Working Load (max BOP wt)	st	55 st
E.10.2. Work Platforms		
BOP work platform (adjustable / fixed/)		Adjustable
Conductor pipe platform:		Yes
E.10.3. Conductor Pipe Tensioning System		
Make / type		N/A

Tension capacity :	st	
Number of lift points:	no.	
Stroke:	in	

F. MUD SYSTEM / BULK SYSTEM		
F.1. HIGH PRESSURE MUD SYSTEM		
System working pressure	psi	5,000
System test pressure	psi	7,500
F.1.1. Mud Pumps		
Quantity	no.	2
Make		Continental EMSCO
Model		FB 1600
Type (Triplex / Duplex)		Triplex
Rated input power		1,600 hp
Mud pump drive motors/pump		2 ea
Motor type		MCF 850
Continuous power rating per motor	hp	1,150 hp
Fluid end type		
Maximum working pressure, psi	psi	5,000
Test pressure, psi	psi	7,500
Pump stroke counter type		
Supercharging pump type		6" x 5" x 11"
Driven by motor of power	hp	100 HP
Discharge/suction line ID	in / in	5" / 6"
Mud pump pulsation dampener type		K20-500 Hydrill
Reset Relief Valve		Retsco 3"
Working flow rate per pump at 90% of max spm		
Liner size :	in	from 5 1/2" to 7"
Pump speed (90% of max.) :	spm	110 spm
Pump pressure:	psi	liner 6 1/2": 4529 psi liner 6": 5000 psi
Working flowrate :	US gal/min	liner 6 1/2": 540 gal/min liner 6": 465 gal/min
Quantity	no.	1
Make		Upetrom
Model		3PN 1600 LG – 2EC
Type (Triplex / Duplex)		Triplex
Rated input power		1,600 hp
Mud pump drive motors/pump		2 ea
Motor type		MCF 850
Continuous power rating per motor	hp	1,150 HP
Fluid end type		
Maximum working pressure, psi	psi	5,000

Test pressure, psi	psi	7,500
Pump stroke counter type		SENSE EDM Technology
Supercharging pump type		8" x 6 " x 14 " x 1500 rpm
Driven by motor of power	hp	100 HP
Discharge/suction line ID	in / in	5" / 6"
Mud pump pulsation dampener type		Hydril K-20-7500
Reset Relief Valve		Titan RX 7500 psi
Working flow rate per pump at 90% of max spm		
Liner size :	in	5 1/2", 6", 6 3/4", 7 1/2"
Pump speed (90% of max.) :	spm	110 spm
Pump pressure:	psi	5000 psi, 4424 psi, 3495 psi, 2828 psi
Working flowrate :	USgal/min	444 gpm; 528 gpm; 669 gpm; 826 gpm
Additional Information Available :		
F.1.2. Transfer Pumps / Mixing Pumps		
Mixing Pumps		
Quantity	no.	2
Make / model		Mission – Magnum
Type / Size		8x6x14x1500 rpm Centrifugal
Output Capacity	gpm	880 gpm
Drive motor type		Electric
Power output	hp	100 hp
Transfer Pumps		
Quantity	no.	
Make / model		
Type / Size		
Output Capacity	gpm	
Drive motor type		
Power output	hp	
F.1.3. Booster Pump		
Quantity		3
Make / Mode		Mission Magnum
Capacity (each)		880 gpm
Drive motor type		Electric
Power output		100 hp
Additional Information Available :		
		Any pumps from F.1.3. and 1.4 have the facility for switch-over such they can be used as back-up for each other.
F.1.4. Standpipe Manifold		
Quantity of standpipes	no.	2 ea
Standpipe ID	in	4"
H-type standpipe manifold	yes/no	Yes

Kill line outlet	yes/no	Yes
Fill up line outlet	yes/no	Yes
Bleed-off line outlet	yes/no	Yes
F.1.5. Rotary Hoses		
Quantity	no	2 ea
Make / type		Continental
ID x length	in x ft	1 x 4"ID x 75 ft length x 5" Fig 1002 M-F x grade E 1 x 4"ID x 85 ft length x 5" Fig 1002 M-F x grade E
Working pressure	psi	5,000 psi
Snubbing lines	yes/no	Yes
F.1.6. Cementing Hose		
Quantity	no.	4
Type (armor sheath/flexible steel pipe)		armor sheath
Length	ft	2 x 30 ft + 2 x 40 ft
ID	in	2" x 2" Fig 1502 M-F
Working pressure	psi	10,000
F.1.7. High pressure Flexible Steel Pipe		
Make/type		Fig 1502
Integral connection/fittings (non-threaded)		Yes
ID	in	2"
Working pressure	psi	10,000 psi
Section length:	ft	8 ft
Quantity	no	8 nos
Section length	ft	
Quantity	no.	
Sweep swivels, no./make/type	no.	6 nos / FMC,
Nom.size ID :	in	2"
Suitable for H2S service :	yes/no	Yes
F.2. LOW PRESSURE MUD SYSTEM		
F.2.1. Mud Processing Tank		
Sand trap tank, usable volume	bbbl	27 bbl
Degasser tank, usable volume	bbbl	30 bbl
Agitated:	yes/no	No
Desander tank, usable volume	bbbl	27 bbl
Agitated:	yes/no	No
Desilter tank, usable volume	bbbl	See F.2.9.
Agitated:	yes/no	No
Mud Cleaner tank, usable volume	bbbl	42 bbl
Agitated:	yes/no	No
Centrifuge tank, usable volume	bbbl	6 bbl
Agitated:	yes/no	No
Other tank, usable volume	bbbl	No

Agitated:	yes/no	N/A
Total usable capacity		132 bbl
F.2.2. Mud Tanks		
Quantity , no	no.	5
Total capacity (usable) :	bbl	1,760 bbl
Usable capacity No.1 :	bbl	440 bbl
Type (active/reserve):		Active
Height :	ft	8.03 ft
Mixer :	yes/no	Yes
Mud guns :	yes/no	Yes
Usable capacity No.2 :	bbl	440 bbl
Type (active/reserve):		Active
Height :	ft	8.03 ft
Mixer :	yes/no	Yes
Mud guns :	yes/no	Yes
Usable capacity No.3 :	bbl	220
Type (active/reserve):		Reserve
Height :	ft	8.03 ft
Mixer :	yes/no	Yes
Mud guns :	yes/no	Yes
Usable capacity No.4 :	bbl	440 bbl
Type (active/reserve):		Reserve
Height :	ft	8.03 ft
Mixer :	yes/no	Yes
Mud guns :	yes/no	Yes
Usable capacity No.5:	bbl	220
Type (active/reserve):		Reserve
Height :	ft	8.03 ft
Mixer :	yes/no	Yes
Mud guns :	yes/no	Yes
F.2.3. Pill / Slug Tank		
Capacity (usable)		220 bbl
Mud agitator (yes / no)		Yes
Mud guns (yes / no)		Yes
F.2.4. Trip/Stripping Tanks		
Capacity (usable)	bbl	50 bbl
Capacity / foot	bbl/foot	5.5 bbl/foot
Level indicator	yes/no	Yes, MD-Totco Spectrum 1000
Electric pump make		NOV
Model / type		Mission 1-7/8, 3 x 4R
Rated capacity	hp	55 hp / 198 gpm
Facility for casing fill-up (yes / no)	yes/no	Yes
Alarm and strip chart recorder (yes / no)	yes/no	Yes, MD-Totco Spectrum 1000

F.2.5. Chemical Mixing Tank		
Capacity (usable)		25 bbls
Chemical mixer type		Upetrom
F.2.6. Shale Shakers		
Primary		BRANDT
Quantity	no.	4
Make / model		Brandt / VSM 300
Type		Balanced Elliptical
Nominal flow rate (total)	bbl/min	14.28
Cascading		
Quantity		
Make / model		
Type		
Nominal flow rate (total)		
F.2.7. Desander		Shaker # 4 has mud cleaner configuration
Quantity		1
Make / model		Brandt
Type		SRS – 3
Nominal flow rate :	bbl/min	35.71
Number of cones	no.	3
Size	in	12
Feed pump make/model		Mission Magnum I
Type/size		8x6x14
Capacity:	gpm	880
Drive motor :	hp	100 hp
Is pump dedicated to desander :	yes/no	Yes
F.2.8. Desilter		Shaker # 4 has mud cleaner configuration
Quantity		1
Make / model		Brandt
Type		SE – 20
Nominal flow rate :	bbl/min	28.57
Number of cones	no.	16
Size	in	4
Feed pump make/model		Mission Magnum I
Type/size		8x6x14
Capacity	gpm	880
Drive motor :	hp	100 hp
Is pump dedicated to desander	yes/no	Yes
F.2.9. Mud Cleaner		Shaker # 4 has mud cleaner configuration
Quantity		1
Make/model		BRANDT / VSM 300 Balanced Elliptical 16/0
Type		3 x 12" + 16 x 4" hydro cyclones

Nominal flow rate :	bbl/min	28.57 bbl/min
Number of cones :	no.	16 cones
Size :	in	4"
Feed pump make/model		Mission Magnum I
Type/size		8x6x14
Capacity:	gpm	880 gpm
Drive motor :	hp	100 hp
Is pump dedicated to mud cleaner	yes/no	Yes
F.2.10. Mud/Gas Separator (Poor Boy)		
Make / type		Ingersoll Rand
Dimensions (height x OD):	ft x in	
Gas discharge line ID:	in	8"
Gas discharge location, primary		Above crown block
Can discharge be tied into burner system		Yes
Vacuum breaker		No
Mud seal height:	ft	5 ft
Pressure gauge:	yes/no	Yes
Calculated gas throughput :	mmscf	5.32 mmscf
F.2.11. Degasser		
Make/type		MI Swaco
Nominal flow rate :	bbl/min	19 bbl/min
Feed pump make / model		Mission Magnum I
Type / size		8x6x14
Capacity :	gpm	880 gpm
Drive motor:	hp	100 hp
Is pump dedicated to degasser	yes/no	Yes
Vacuum pump make type		Ingersoll Rand MD D -255; 5 HP
F.2.12. Mud Agitators		
Quantity		4
Make /model		Double Life MA 20-251
Driven by motor of power		Electric, 20 HP
Located in tanks		active pits #1 & #2 (2 nos each pit)
Quantity :	no	1
Make /model		Double Life MA 20-251
Driven by motor of power :	hp	Electric, 20 HP
Located in tanks		Reserve pit #3
Quantity	no	2
Make /model		Double Life MA 20-251
Driven by motor of power	hp	Electric, 20 HP
Located in tanks		Reserve pit #4
Quantity	no	1

Make /model		Double Life MA 20-251
Driven by motor of power	hp	Electric, 20 HP
Located in tanks		Reserve pit # 5
F.2.13. Mud Centrifuge		
Quantity	no.	2 nos
Make / model		NOV Brandt / SCS 142 & SCS 152
Feed pump make / model		Mission Magnum
Type/size		M 2601 – 20
Capacity	bbl/min	5.95
Drive motor	hp	15 hp
Is feed pump dedicated to centrifuge(s) yes/no		Yes
F.2.14. Mud Laboratory And Facilities		
Separate room (yes / no)		Yes
Equipped with		
Mud balance , yes/no		Yes
Marsh funnel , yes/no		Yes
Filtration kit , yes/no		No
Sand content kit , yes/no		No
Air conditioning , yes/no		Yes
Positive pressure , yes/no		
F.3. BULK SYSTEM		
F.3.1. Barite/ Bentonite Silos		
Quantity	no	4 silos
Capacity of each silo:	ft ³	1,155 ft ³ / each
Locations		Under main deck
Type weight load cell		electronic
Manufacturer		Bio Electronic Ploiesti
Pressure rating	psi	45
Relief valve(s) installed :	yes/no	Yes
F.3.2. Cement Silos		
Quantity	no	4 silos
Capacity of each silo	ft ³	1,155 ft ³ / each
Locations		Under main deck
Type weight load cell		Electronic
Manufacturer		Bio Electronic Ploiesti
Pressure rating	psi	45
Relief valve(s) installed	yes/no	Yes
Separate mud/cement loading facilities	yes/no	Yes
Cement discharge independent from barite / bentonite		Yes

F.3.3. Surge Tank for Barite/Bentonite		
Quantity	no	1 ea
Capacity of each tank	ft ³	70 ft ³ / each
Type weight load cell		Electronic
Manufacturer		Bio electronic, Ploiesti
Pressure rating	psi	45
Relief valve(s) installed	yes/no	Yes
F.3.4. Mud Hopper		
Quantity	nos	2
Make / Model		Upetrom and Lobestar (shear mixer V VE-U-6S-M4)
Feed pump make / model		Magnum
Type/size		8x6x14"
Capacity:	bbl/min:	23.8 bbl/min
Drive motor	hp	100 HP
Is feed pump dedicated to mud hopper(s)	yes/no	Yes
F.3.5. Surge Tank for Cement		
Quantity	no	N/A
Capacity of each tank ,	ft ³	
Type weight load cell		
Manufacturer		
Pressure rating :	psi	
Relief valve(s) installed :	yes/no	
F.3.6. Bulk Transfer System		
(see also C.1.8 - Compressed Air Systems)		
Independent air system for the silos and surge tanks consisting of a high-volume low-pressure compressor and air drier, yes/no:	yes/no	Yes
Air reduced from main air supply through Pressure regulators, yes/no:	yes/no	Yes
Separate volume tank and drier, yes/no:	yes/no	Yes

G. CASING/ CEMENTING EQUIPMENT	
G.1. CASING EQUIPMENT	
G.1.1. Drive Hammer	
Make/type:	N/A
Maximum casing/conductor OD: in	
G.1.2. API Casing drifts	
For casing OD, weight, quantity	13-3/8", 68 lbs/ft, 1 ea

For casing OD, weight, quantity		9-5/8", 40 lbs/ft, 1 ea
For casing OD, weight, quantity		7", 23 lbs/ft, 1 ea
For casing OD, weight, quantity		
G.1.3.Clamp-on Casing Thread Protectors		N/A
For casing OD, quantity:	in / no.	
For casing OD, quantity:	in / no.	
For casing OD, quantity:	in / no.	
G.1.4.Side Door Casing Elevator		N/A
Quantity :	no.	
For OD casing :	in	
Make / type:		
Capacity :	st	
G.1.5.Single Joint Casing Elevators		N/A
Quantity:	no.	
For OD casing:	in	
Make/type:		
G.1.6.Slip Type Elevator / Spiders		N/A
Quantity:	no.	
Make / type:		
Pneumatic/manual:		
Capacity :	st	
Slips for OD casing sizes :	in	
G.1.7.Casing Slips		N/A
Quantity:	no.	
Make/type:		
For OD casing:	in	
For OD casing:	in	
G.1.8.Casing Bowls		
Quantity:	no.	1 set
Make/type :		Upetrom
For OD casing (max/min) :	in / in	18 5/8" – 143/4"
Quantity:	no.	1 set
Make/type :		Upetrom
For OD casing (max/min) :	in / in	13-3/8" – 11 3/4"
G.1.9.Manual Casing Tongs		N/A
Quantity:	no.	

Make/type :		
For OD casing (max/min) :	in / in	
G.1.10. Power Casing Tongs		N/A
Quantity:	no.	
Make/type :		
With jaw for OD casing (max/min) :	in / in	
Max output torque:	ft - lbs	
Torque indicator:	yes/no	
Back-up arm:	yes/no	
G.1.11. Power Unit for Casing & Tubing Tongs		N/A
Quantity:	no.	
Make/type:		
Capacity (ea.):	gpm	
Output pressure:	psi	
Dedicated unit:	yes/no	
G.1.12. Casing Circulating Head (Swedge)		N/A
For OD casing :	in in	
Connection type:	top/bottom	
G.1.13. Casing spears (International)		N/A
Quantity :	no.	
Make/type :		
For OD casing:	in	
For casing weight:	lbs/ft	
Pack-off:	yes/no	
G.1.14. Casing Cutters (Internal)		
Quantity:	no.	N/A
Make/type :		
For OD casing (max/min) :	in / in	
G.1.15. Crossover to Handle Casing with Drill Pipe		
Quantity :	no.	N/A
For OD casing:	in	
Casing connection type:		
Drill pipe connection type:		
Rated capacity:	st	
G.1.16. Casing Scrapers		

Quantity:	no.	N/A
Make:		
For OD casing:	in	
For casing weight:	lbs/ft	
OD body:	in	
Connection type:		
Blade type (roller/fixed):		
G.2. CEMENTING EQUIPMENT		
G.2.1.Cement Unit		N/A
Owner:		Schlumberger
Free placement basis:	yes/no	
Make / type:		Twin triplex pump
Number of triplex pumps:	no.	See G.2.1
Maximum working pressure:	psi	See G.2.1
Maximum flowrate (total):	bbl/min	See G.2.1
Unit powered by Electric / diesel		As per requirements
Recirculation mixing system:	yes/no	Yes
Capacity:	bbl	20 bbls
Motor power :	hp	See G.2.1
Liquid additive system :	yes/no	Yes
Premix / batch tank	US gals/min	Yes
Quantity:		See G.2.1
Capacity :	bbl	20
Pressure recorder:		Yes
Densitometer recording device:		See G.2.1
G.2.2.Cementing Manifold		
Discharge manifold working pressure	psi	10,000
Cement pump discharge lines min. ID		2"
Cement pump disch. lines working pressure		10,000 min
Manifold safety pressure relief valve	yes/no	Yes
G.2.3.Cementing Standpipe		N/A
Quantity:	no.	
Working pressure:	psi	
ID :	in	
Connection to choke manifold :	yes/no	
Connection to standpipe manifold :	yes/no	
G.2.4.Cementing Kelly		N/A
Quantity		
Nominal size OD		
Total length		

Working length	
Connection type	
Cement head	
G.2.5.Cementing Tubing	N/A
Size:	in
Length (total):	ft
X-overs to drillpipe specified in section D.1.3	yes/no

H. INSTRUMENTATION / COMMUNICATION	
H.1. DRILLING INSTRUMENTATION AT DRILLER'S POSITION	MD TOTCO SPECTRUM 1000 equipped w/Rig Sense
H.1.1. Weight Indicator	
Make / Type:	MD TOTCO SPECTRUM 1000
Sensor type:	E80
Calibrated for no. of lines strung (yes / no)	Yes
H.1.2. Standpipe Pressure Gauges	
Quantity:	no. 2ea
Make / type:	MD TOTCO SPECTRUM 1000
Maximum pressure reading:	psi 5,000 psi
Quantity:	no. 1
Make / type:	Analog
Maximum pressure reading:	psi 5,000 psi
H.1.3. Choke Manifold Pressure Gauge	
Quantity:	no. 2ea
Make / type:	MD TOTCO SPECTRUM 1000
Maximum pressure reading:	psi 10,000 psi
Quantity:	no.
Make / type:	
Maximum pressure reading:	psi
H.1.4. Rotary Instrumentation	
H.1.4.1 Rotary Speed Tachometer	
Make/type:	MD TOTCO SPECTRUM 1000
Max. RPM:	rpm 0 -300 rpm
H.1.4.2 Rotary Torque Indicator	
Make / type:	MD TOTCO SPECTRUM 1000
Maximum torque:	ft-lbs

H.1.5. Top Drive Instrumentation		
H.1.5.1 Tachometer		
Make / type:		MD TOTCO SPECTRUM 1000
Maximum RPM:	rpm	0 – 300 rpm
H.1.5.2 Torque Indicator		
Make / type:		MD TOTCO SPECTRUM 1000
Maximum torque:	ft-lbs	
H.1.6. Pump Stroke Counters		
Quantity:	no.	1ea per pump
Make/type:		MD TOTCO SPECTRUM 1000
Stroke indicator and cumulative stroke counter for each pump:	yes/no	Yes
H.1.7. Tong Torque Indicator		
Make / type:		MD TOTCO SPECTRUM 1000
Maximum torque:	ft-lbs	100,000 ft-lbs
H.1.8. Pit Volume Totalizer		
Make / model:		Varc MD TOTCO SPECTRUM1000
Float in active mud tanks:	yes/no	Yes
Quantity per tank:	no.	1ea per tank
Floats in reserve mud tanks:	yes/no	Yes
Quantity per tank:	no.	1ea per tank
Floats in mud processing tanks:	yes/no	Yes
Quantity per tank:	no.	1ea per tank
Loss / Gain indicator:	yes/no	Yes
Audio Alarm:	yes/no	Yes
Visual Alarm:	yes/no	Yes
H.1.9. Mud Flow Indicator		
Make / model:		MD TOTCO SPECTRUM 1000
High / low alarm:		
Audio Alarm:	yes/no	Yes
Visual Alarm :	yes/no	Yes
Sensor location:		Flow line
H.1.10. Trip Tank Indicator		
Make / model:		MD TOTCO SPECTRUM 1000
Chart recorder:	yes/no	Yes
Alarm:	yes/no	Yes
H.1.11. Automatic Driller (see B.2.1)		

H.1.12. Remote Choke Control Unit (see d5)		
H.1.13. Crown Clearance Indicator	yes/no	Yes
Make / type:		MD TOTCO SPECTRUM 1000
H.2. DRILLING PARAMETER RECORDER		
Quantity:	no.	3
Make/type:		MD TOTCO SPECTRUM 1000
Location-1:		Drill floor
Type (display/recorder/both):		Both
Location-2:		TP office
Type(display/recorder/both):		Both
Location -3:		Company office
Type(display/recorder/both):		Both
Number of parameter recorded:	no.	All parameters
Parameter recorded:		MD TOTCO Technology Drilling parameters charts/tables configuration can be customized
List Parameters		Customize configuration for all drilling parameters
H.3. INSTRUMENTATION AT CHOKE MANIFOLD		
H.3.1. Standpipe Pressure Gauge (Drill pipe pressure gauge)		
Quantity:	no.	1 ea
Make / type:		MD TOTCO SPECTRUM 1000
Pressure range (maximum):	psi	10,000 psi
Visible from choke operating position:	yes/no	Yes
H.3.2. Choke Manifold Pressure Gauge (Casing pressure gauge)		
Quantity:	no.	2 ea
Make / type:		MD TOTCO SPECTRUM 1000
Pressure range:	psi	15,000 psi
H.4. INSTRUMENTATION AT STANDPIPE		
H.4.1. STANDPIPE PRESSURE GAUGE		
Quantity:	no.	2 ea
Make/type:		MD TOTCO SPECTRUM 500
Pressure range:	psi / psi	0 -15,000 psi
Visible from driller's position:	yes/no	Yes
Visible from choke operating position:	yes/no	Yes

H.5. DEVIATION EQUIPMENT		
H.5.1. Deviation Recorder		
Quantity:	no.	1ea
Make / type:		TOTCO with sinker bars
Deviation range:	degree/degree deg / deg	0-7deg, 0-14deg
H.5.2. Slickline Unit (see B.2.4)		
Make/type:		N/A
Line length (nominal):	ft	
Depth counter :	yes/no	
Wire size:	in	
Pull indicator :	yes/no	
H.6. RIG COMMUNICATION SYSTEM		
H.6.1. Rig Telephone System		
No. of stations:	no.	60
Make / type:		Panasonic / D – 1232
Explosion proof :	yes/no	Yes
H.6.2. Public Address System		
Can be combined with H.6.1 above:	yes/no	Yes
No. of stations:	no.	60
Make / type:		Philips/ Plena System
Explosion proof:	yes/no	Yes
H.6.3. Drill Floor Talkback System		
No. of stations:	no.	2ea
Location:		Drill floor, can be extended if required
Make / type:		GAI – Tronics
Explosion proof:	yes/no	Yes
H.6.4. Hand Held VHF Radios		
Quantity:	no.	18 ea
Quantity intrinsically safe:	no.	12 ea Icom IC-M88
H.6.5. Crane Communication System		
Quantity:	no.	2
Make / type:		Motorola / GP 340 ; integrated speaker and microphone
Explosion proof:	yes/no	Yes
Part of rig telephone system:	yes/no	No
Part of public address system:	yes/no	No
H.7. ENVIRONMENTAL INSTRUMENTATION		
H.7.1. Temperature Indicators		
Air temperature:	make / model:	Young 26800/ USA

Recorder:	yes/no	Yes
Sea water temperature (make / model):		N/A
Recorder:	yes/no	
H.7.2. Barometric Pressure Indicator		
Make / model:		Young 26800/ USA
Recorder:	yes/no	Yes
H.7.3. Humidity Sensing Indicator		
Make / model:		Young 26800/ USA
Recorder:	yes/no	Yes
H.7.4. Wind Speed/Direction Meter		
Make / model:		Young 26800/ USA
Recorder:	yes/no	Yes
H.7.5. Wave Profile Recorder		
Make / Model:		N/A
Recorder:	yes/no	
H.7.6. Current Indicator		
Make / Model:		Doppler
Located at:		Control room
Recorder:	yes/no	
H.7.7. Weather facsimile		
Make / Model:		NAVTEX / Furuno NX-700B
Located at:		Radio room
Recorder:	yes/no	Yes
H.8. NAVIGATION INSTRUMENTATION		
H.8.1. Gyro Compass		
Make/model:		N/A
Located at:		
H.8.2. Depth Sounder		
Make/model:		N/A
Located at:		
Recorder:	yes/no	
H.8.3. Radar		
Quantity:	no.	N/A
Make/model:		
Located at:		
Bandwidth:	cm	

H.9. EXTERNAL COMMUNICATIONS EQUIPMENT		
H.9.1. SSB Transceiver		
Location(s):		Radio Room & Office
Quantity:	no.	2ea
Make / model:		Thrane &Thrane SAILOR 6363 Thrane &Thrane SAILOR HT-4610
Power:	watts	250 W 250 W
Frequency ranges (low / high) (Synthesized crystal): Mhz/Mhz		50 KHz to 30 MHz
Facsimile capable:	yes/no	Yes
Telex capable:	yes/no	Yes
H.9.2. E.P.I.R.B's		
Quantity:	no.	1
Make / model:		McMurdo / Smartfind E5 (hydraulic release unit)
Location(s):		Near helideck
H.9.3. Marine VHF Radio		
Quantity:	no.	3 ea
Make / model:		VHF/DSC Thrane & Thrane SAILOR 6222 (2ea) VHF/DSC Thrane & Thrane SAILOR RT 4822 (1ea)
Power:	watts	25 W / 5 W
Channels:		All international & US VHF marine channels
Location:		Radio room &Office
H.9.4. Aircraft Radio Beacon Transmitter		
Quantity :	no.	1
Make / model:		SAC / SLF20050 – USA
Power:	watts	25
H.9.5. Aeronautical VHF Transceiver		
Quantity:	no.	2ea (including portable)
Make / model:		ICOM IC-A110 ICOM IC-A6E (portable)
Power:	watts	25 W / 5 W
Frequency range (low / high): (Synthesized/crystal):	Mhz / Mhz	All air band channels
Location(s):		Radio Room
H.9.6. Watch Receiver		
Quantity:	no.	1
Make / model:		Sailor System 6000
Frequency:	KHz	MF / HF

H.9.7. Satellite Communication System		
Make / model:		Inmarsat C Thrane&ThraneTT-3027C NERA Fleet 77
Type:		Sailor
Facsimile capable:	yes/no	Yes
Telex capable:	yes/no	Yes
Telephone link:	yes/no	Yes
Other capabilities :	E-Mail yes/no	Yes
Location(s)		Radio Room
H.9.8. Cellular		
Number of phone lines:	no.	1
H.9.9. Facsimile		
Make / model:		N/A
Connected to:		
H.9.10. Telex		
Make / model:		Sailor 6301
Connected to:		VHF Radio Station
H.9.11. Scrambler		
Make / model:		N/A
Connected to:		
H.9.12. Other Communication Systems		
Make/model:		Iridium Sailor SC 4120
Connected to:		Rig telephone System
Make/model:	no.	GPS Furuno GP – 150
		AIS Furuno FA-150
Radio System for Life Boats:		
Portable VHF – GMDSS:		SAILOR / SP 3520 (4 ea)
Radar transponder SART:		ACR Electronics / Pathfinder (4ea) – 2 x radio room & 2 x control room

I. PRODUCTION TEST EQUIPMENT		
I.1. BURNERS		
Make/type		A.F.E. – BB – 24
Quantity	no.	1

Capacity	bbl/day	
Weight		7
Water requirement at 100 psi	bbl/min	
I.2. BURNER BOOMS		
Make/type		
Quantity	no	1
Lenght	ft	85
Horizontal	yes/no	Yes
Maximum wind speed	knots	
Walkway and handrails	yes/no	Yes
Burner platform size, :	ft x ft	
Burner mounting rotatable, yes/no		No
I.3. PIPING ON BURNER BOOMS		
I.3.1. Oil Line		
ID	in	3
Working pressure	psi	600
Connection type at burner end		3"fig 602
H2S (yes / no)	yes/no	
Pressure gauge connection at barge end	in	No
I.3.2. Gas Line		
ID	in	3
Working pressure	psi	900
Extended beyond burner by		
Connection type at burner end		3" fig 602
H2S (yes / no)		
Pressure gauge connection at barge end		No
I.3.3. Water Line		
ID	In	3
Working pressure	psi	300
Connection type at burner end		3"fig 602
Pressure gauge connection at barge end		No
I.3.4. Air Line		
ID		2"
Working pressure		150
Connection type at burner end		2" fig 1502
Pressure gauge connection at barge end		No
I.3.5. Pilot Gas line		
ID		
Working pressure		
Connection type at burner end		

Pressure gauge connection at rig end	
I.4. SPRINKLER SYSTEM	Sufficient water spray system to give protection to rig and personnel against heat radiation damage from the burners.
System in place	Yes
Pump source	Independent
I.5. FIXED PIPING FOR WELL TESTING	
I.5.1. Drill Floor to Separator Area	3 1/16 x 10 k manifold connected to 3 1/6 x 10 K cofflex hose
Type (threaded/welded, both)	Threaded
Quantity	
Size ID	3 1/16"
Working pressure	10000 psi
Connection on drill floor	3 1/16"
Connection at separator	3 1/16"
Number of valves/lines	4 + manual and automatic choke valve
Size of valves	3 1/16"
H2S	
I.5.2. Separator Area to Burner Booms	
Service (oil/gas)	
Type (threaded/welded, both)	Threaded
Quantity	
Size ID	3
Working pressure	5000 psi
Connection at separator	3 1/16 x 10 000 psi
Connection at boom	3 1/8 x 5000 psi
Number of valves/lines	1
Size of valves	3 1/8 x 5000 psi
H2S (yes / no)	
Valves installed near separator area for switching gas to either burner (yes / no)	Yes
I.5.3. Water Lines to Burner Booms	
Type (threaded/welded/both)	Threaded
Quantity	
Size ID in	3"
Working pressure	
Number of valves required	
Size of valves	
Pump source	Mission Magnum
Rated line capacity at 300 psi	300 psi
I.5.4. Air System to Burner Booms	
Type (threaded/welded/both)	2" Hose + Anson loop 2" fig 1502
Quantity	

Size ID	2'
Working pressure	psi
Non-return valves fitted (yes / no)	No
Air source	Ingersoll Rand , A22 Model 9235 ,WP125 psi
I.5.5. Oil Storage Tank To Offload	
Type (threaded / welded / both)	Supplied by Operator
Quantity	Supplied by Operator
Size ID	Supplied by Operator
Working pressure	Supplied by Operator
Connection at separator area	Supplied by Operator
I.5.6. Separator to Vent Stack of Rig	
Type (threaded/welded, both)	Supplied by Operator
Quantity	Supplied by Operator
Size ID	Supplied by Operator
Working pressure	Supplied by Operator
Connection type at separator area	Supplied by Operator
I.6. AUXILIARY POWER AVAILABILITY	
I.6.1. For Field Laboratory	
Quantity	<i>As per company requirements</i>
Volts	<i>120 /220/ 380 V</i>
Frequency	<i>50 Hz</i>
Breaker , amp	<i>32 A</i>
I.6.2. For Crude Transfer Pump	
Quantity	<i>As per company requirements</i>
Volts	<i>As per requirements</i>
Frequency	<i>50 Hz</i>
Breaker , amp	<i>32 A</i>
I.6.3. For Electric Heaters	
Quantity	<i>As per company requirements</i>
Volts	<i>As per requirements</i>
Frequency	<i>50 Hz</i>
Breaker , amp	<i>32 A</i>

J. WORKOVER TOOLS	N/A

K. ACCOMODATION	
K.1. OFFICES	

K.1.1. Company Representative's Office	
Quantity	2 (two) offices
Complete with desk, filing cabinets and other necessary furniture (yes / no)	Yes
Unrestricted view of the drill floor (yes / no)	Yes
K.1.2. Contractor's Representative's Office	
Quantity	1 (one) office
Quantity with unrestricted view of the drill floor , no	1 (one) office
K.1.3. Control Room	
Quantity	1 room
K.1.4. Radio Room	
Quantity	1 room
K.1.5. Helicopter Ready Room	
Quantity	1 room
K.1.6. Hospital Room	
Number of beds/bunks	2 ea
Dangerous drug locker (yes / no)	Yes
K.2. LIVING QUARTERS	
K.2.1. Accommodations	
Total beds, no:	96 pax
No. of beds per room (1,2,3, etc), no:	2
No of rooms	9
Toilets (private/shared/communal), no:	Private
Showers (private/shared/communal), no :	Private
No. of beds per room (1,2,3, etc), no:	2
No of rooms	2
Toilets (private/shared/communal), no:	Shared
Showers (private/shared/communal), no :	Shared
No. of beds per room (1,2,3, etc), no:	2
No of rooms	2
Toilets (private/shared/communal), no:	Communal
Showers (private/shared/communal), no :	Communal
No. of beds per room (1,2,3, etc), no:	4
No of rooms	16
Toilets (private/shared/communal), no:	Communal

Showers (private/shared/communal), no :	Communal
No. of beds per room (1,2,3, etc), no:	4
No of rooms	1
Toilets (private/shared/communal), no:	Private
Showers (private/shared/communal), no :	Private
No. of beds per room (1,2,3, etc), no:	1
No of rooms	2
Toilets (private/shared/communal), no:	Private
Showers (private/shared/communal), no :	Private
K.2.2. Galley	
Quantity	1
K.2.3. Mess Seating Capacity	
Main mess	28 seats
Aux. mess	No
K.2.4. Meeting Rooms	
Quantity	1
K.2.5. Recreation Rooms	
Quantity	2
Recreation facilities	
TV	Yes
VCR	Yes
Pool Table	Yes
Pin Pong Table:	
Computer:	Yes
Workout/Weight room	Yes
Other:	
K.2.6. Other Rooms	
Change rooms	1
Prayer room	No

L. SAFETY EQUIPMENT	
L.1. GENERAL SAFETY EQUIPMENT	
L.1.1. All Personnel Protective Gear	
Safety hats (contractor/everyone/not supplied)	Contractor
Safety boots (contractor/everyone/not supplied)	Contractor

Safety clothing (contractor/everyone/not supplied)	Contractor
Ear protection (contractor/everyone/not supplied)	Contractor
Safety glasses (contractor/everyone/not supplied)	Contractor
Ear protection (contractor/everyone/not supplied)	Contractor
Rubber gloves (contractor/everyone/not supplied)	Contractor
Rubber gloves – elbow length(contractor/everyone/not supplied)	Contractor
Rubber aprons (contractor/everyone/not supplied)	Contractor
Full-face visors (contractor/everyone/not supplied)	Contractor
Eye shields (contractor/everyone/not supplied)	Contractor
Dust masks (contractor/everyone/not supplied)	Contractor
Explosion proof hand torches (contractor/everyone/not supplied)	Contractor
Safety belts (contractor/everyone/not supplied)	Contractor
L.1.2. Decontamination Stations	
L.1.2.1 Eye Wash Stations.	
Quantity - fixed	Fixed stations – 3 pcs Eye wash bottles – minimum 10
Make / model	
Located at	Pipe deck, Drill floor, Mud pits Bottles to all other work places
L.1.2.2 Safety Showers	
Quantity	4
Make/model Contractor to Specify	Barikos,Brandley
Located at	Rig Floor, Chemical Store, Shale shaker, Pit Room
L.1.3. Derrick Safety Equipment	
Derrick escape belts	Yes
Geronimo line	Type donut Sala 150 safety harness
Derrick safety belts	Yes
Make/model Contractor to Specify	Miller Full Harness
L.1.4. Derrick Climbing Assistant	
Make/type	Ladder fall protection
L.1.5. Fresh Air Blowers (Bug Blowers)	
Quantity	2
Make / type	B 250
Located at	Rig Floor
L.2. GAS/FIRE/SMOKE DETECTION	
L.2.1. H2S Monitoring System	
Make / type	Zellweger Analytics, UK Sieger 220 VAC/24 V DC
Sampling points at:	

- Bell nipple (yes / no)	Yes
- Drillfloor (yes / no)	Yes
- Shale shaker (yes / no)	Yes
- Mud tanks (yes / no)	Yes
- Ventilation system into living quarters	Yes
- Other	Mud pumps
General Alarms at	
- Driller's console (audible / visual/both)	Both
- Engine room (audible / visual/both)	Both
- Mud room (audible / visual/both)	Both
- Living quarters each level (audible / visual/both)	Both
- Central area each structural level (audible/visual/both)	Both
- Other	
Central Alarm Panel	Yes
-Located at	Radio room
L.2.2. Combustible Gas Monitoring System	
Make / type	Zellweger Analytics, UK Sieger 220 VAC/24 V DC
Sampling points at	
- Bell nipple (yes / no)	Yes
- Drillfloor (yes / no)	Yes
- Shale shaker (yes / no)	Yes
- Mud tanks (yes / no)	Yes
- Ventilation system into living quarters (yes / no)	Yes
- Other	Mud pumps
Alarms at	
- Driller's console (audible / visual/both)	Both
- Engine room (audible / visual/both)	Both
- Mud room (audible / visual/both)	Both
- Living quarters each level (audible / visual/both)	Both
- Central area each structural level (audible / visual/both)	Both
- Other	-
Central Alarm Panel	Yes
-Located at	Radio room
L.2.3. H2S Detectors (Portable)	
Quantity	2
Make / type	Micro Clip
Phials for H2S measuring range	Yes
From 1 to 20 percent	2
From 100 to 600 percent	
L.2.4. Explosimeters	
Quantity	-
Make / type	-

L.2.5. CO2 Gas Detectors (portable)	
Quantity	3
Make / type	Micro Clip
Stain tubes for CO2: measuring range	Yes
From 1 to 20 percent	3
From 5 to 60 percent	
L.2.6. O2 Meter (portable)	
Quantity	-
Make / type	-
L.2.7. Fire/Smoke Detectors in	
Accommodation	
Make/type	Tyco Marine MX T2000
Fire detection (yes / no)	Yes
Smoke detection (yes / no)	Yes
Central Alarm (yes / no)	Yes
Mud room (audible / visual/both)	Both
Living quarters (audible / visual/both)	Both
Central area structural level (aud / vis / both)	Both
Tied to general alarm (yes / no)	Yes
L.3. FIRE FIGHTING EQUIPMENT	
L.3.1. Fire Pumps	
Quantity	2
Make / model	Turbine Works Lmt./Marine Vertical centrifugal pump with vacuum pump VK 20 and orifice plate, System Eureka
Type	CGC 125 v48 BAN HD+ VK 20
Output (each)	160 m ³ /hr each
Location	Service pumps room, hydrophore room
L.3.2. Hydrants and Hoses	
Hydrants positioned such that any point may be reached by a single hose length from two separate hydrants	Yes
Quantity of hydrants	22 outlets
Hose connections / hydrant	Adjustable min. 2 mm for storz; rubber coupling lined for bronze;
Hose max. diameter	heavy duty 2 1/2"
Length	30 m
L.3.3. Portable Fire Extinguishers	
Quantity (total)	131
Type 1 – C O2	53
Type 2 - Dry chemical	42
Type 3 – Foam	36

Water	0
Halon	0
L.3.4. Fire Blankets	
Quantity	5
Location(s)	Engine compartment, welder workshop, galley
L.3.5. Fixed Foam System	
Make/type	SNG / Aerofoam
Quantity of foam concentrate stored	2 x 45 liters
Foam type	AFFF 6%
Application rate	5,5
Foam nozzles	2 ea
Located at	Engine Room (port & starboard)
Located at	2 x 45 kg wheeled extinguishers air foam stationary in engine room
Located at	1 x 160 Kg wheeled extinguisher on drill floor (Firex Mobile Foam Unit – AFFF 6%)
Automatically injected into fixed fire water system	No
L.3.6. Helideck Foam System	
Make / type	Firex Mobile Foam / fixed foam installation
Quantity of monitors	2
Quantity of foam concentrated stored	2 x 200 ltrs
Foam type	AFFF 6%
Application rate	6
L.3.7. Fixed Fire Extinguishing System	
Protected spaces	SCR room, DG room, boilers (transformers) room, service pumps room, Emergency Gen-Set room and Galley
Engine room, type (Halon / CO2 / other)	CO2
Remote manual release located at	Main deck - inside CO2 tubes room
Paint locker, type (Halon / CO2 / other)	N/A
Remote manual release located at	N/A
Emergency generator type (Halon / CO2 / other)	CO2
Remote manual release located at	Outside emergency generator room
SCR room type (Halon / CO2 / other)	CO2
Remote manual release located at	Main deck - inside CO2 tubes room
Other (specify location & type)	boilers (transformers) room, ship's service pumps room
Remote manual release located at	Main deck - inside CO2 tubes room
Other (specify location & type)	Wellhead area below cantilever / Ansul 1,500 lbs Stationary Dry Chemical System
Remote manual release located at	Cantilever
Other (specify location & type)	Galley / CO ₂ (for galley duct only)
Remote manual release located at	Galley
Other (specify location & type)	12 Fire Water Monitors (2 x drill floor, 1 x shaker house, 9 x main deck – 3 each aft, port, starboard)
Remote manual release located at	Local

Alarms *audible, visual, or both)	Both
Automatic shutdown of ventilation fans in protected spaces	Yes
L.3.8. Manual Water Deluge System	
Protected spaced	Portside
Protected spaced	Starboard side
Water supplied from fire main line	Yes
L.3.9. Water Sprinkler System in Accommodation	N/A
Automatic activation	
Working pressure	
Tank capacity	
Salt water backup	
Type (wet pipe / dry pipe)	
L.4. BREATHING APPARATUS	
L.4.1. General Sets	
Quantity	16 pcs SCBAs 8 pcs spare air cylinders
Make	SCOTT & Sabre
Type (demand / positive pressure)	Positive pressure
Cylinder duration	30 min.
L.4.2. Escape Sets	
Quantity	15
Make	Sabre
Type	Type EEBD Positive pressure
Cascade system quick connect	Yes
Cylinder duration	15 min
Located at:	
Monkey board	1
Mechanical workshop	1
DG room	1
Drill floor	4
Shale shakers	1
Mud pumps	1
Mud pits	1
Cranes	3 (1 each crane)
Accommodation – Level 1 (dayroom)	1
Control Room	1
L.4.3. H2S Cascade Stations	N/A
Quantity	

Make / type	
Located at	
L.4.4. Breathing Air Recharge Compressor	
Quantity	1
Make/type	
Located at	Command deck
L.4.5. Compressed Air Breathing Apparatus Trolley Unit	N/A
L.4.6. Breathing Air Purity Test Equipment	N/A
L.5. EMERGENCY FIRST AID EQUIPMENT	
L.5.1. First Aid Kits	
Quantity	2
L.5.2. Burn Kits	
Quantity	4
L.5.3. Resuscitators	
Quantity	1
Charged (spare) oxygen cylinders	1
L.5.4. Stretchers	
Quantity	5
Type	Basket/Aluminium/Neil Roberson/Foldable/Foldable
Located at	Hospital/Hospital/Hospital/Main Deck/Helideck
L.6. HELIDECK RESCUE EQUIPMENT	
Aircraft Axe (yes / no)	Yes
Large fireman's rescue axe (yes / no)	Yes
Crowbar (yes / no)	Yes
Heavy duty hacksaw (yes / no)	Yes
Spare blades (yes / no)	Yes
Grapple hook (yes / no)	Yes
Length of wire rope attached (yes / no)	Yes
Quick release knife (yes / no)	Yes
Bolt cropper (yes / no)s	Yes
Fireman's outfit (yes / no)	Yes
CO2 Lance (yes / no)	Yes
L.7. EMERGENCY WARNING ALARMS	

Approved system to give warning of different emergencies	Yes
Activated from drill floor	Yes
L.8. SURVIVAL EQUIPMENT	
L.8.1. Lifeboats	
Make / type	Jiangsu Jiaoyan Marine Equipment / totally enclosed
Quantity	2
Capacity	50 pers / lifeboat
Locations (frwd / aft / port / stbd)	Portside & starboard side
Fire protection	Yes
Radio/EPIRB	Radio – Yes (4 nos Sailor SP 3520), EPIRB – No
L.8.2. Life rafts	
Make / type	Duncan Y Cossio /Elliot MKIII & Shanghai Youlong /KHA-25
Quantity	6 (4 & 2)
Capacity	25 each
Davit launched (yes / no)	No
Locations (frwd / aft / port / stbd)	port / stbd
L.8.3. Rescue Boat	
Make / Type	Schat Harding / MOB 4.5
Engine power	25 hp
L.8.4. Personal Floatation Devices	
Make/type	Panama 1 (with whistle, reflective tape & light) & Baltic 2010/A
Quantity	136 (116 + 20)
L.8.5. Survival suits	
Make/type	N/A
Quantity	
L.8.6. Life Ring Buoys	
Make/type	Plasticel
Quantity total	12
with lights	8
with smoke	2 with MOB
with EPIRB	No
L.8.7. Work Vests	
Quantity	V PFD 20
L.8.8. Escape Ladders/Nets	
Make / type	
Quantity	4 rigid ladders (1 on each leg) & 2 rope ladders & 1 spider net

M. POLLUTION PREVENTION EQUIPMENT	
M.1.SEWAGE TREATMENT	Biological sewage treatment plant
Quantity	1 unit for 110 persons (capacity)
Make/Model	Severn Trent de Nora / Ompipure 12 MX
System type	BST -120 (four chamber system)
Conforms to (Marpol annex IV etc)	Complies with IMO and MARPOL regulations
M.2.GARBAGE COMPACTION	
Make / model	GB INTERNATIONAL / MAX COMPACTOR /20EX SN 122
System type	Hydraulic system
Conforms to (Marpol annex IV etc)	Yes
M.3.GARBAGE DISPOSAL/GRINDER	
Make / model	OIL PRODUCTS / ENVIRO-PACK-TCH
System type	Worm type
Conforms to (Marpol annex IV etc)	Yes
M.4.INCINERATOR	
Make / model	
System type	
M.5.OILY WATER SEPARATOR	
Quantity	1 – zero pollution separator
Make / model	Marine Water Technology / RWO
System type	SKIT S DEB 5.0 – 5 m ³ /hr
Quantity	1 – bilge separator
Make / model	Turbulo / TCS2.5HD
System type	Centrifugal – 2.5 m ³ /hr