

PLATFORM 2-O

IADC STANDARD FORMAT EQUIPMENT LIST

Contents

A.	UNIT SPECIFICATIONS	3
A.1.	MAIN DIMENSION / TECHNICAL DESCRIPTION.....	3
A.2.	STORAGE CAPACITIES.....	4
A.3.	JACK UP SYSTEM.....	4
A.4.	OPERATIONL CAPABILITIES	6
A.5.	VARIABLE LOAD CAPACITY	6
A.6.	ENVIRONMENTAL LIMITS	6
A.7.	MOORING SYSTEM	7
A.8.	MARINE LOADING HOSES	8
A.9.	CRANES, HOIST, AND MATERIALS HANDLING	9
A.10.	HELICOPTER LANDING DECK.....	12
A.11.	AUXILIARY EQUIPMENT	12
B.	GENERAL RIG SPECIFICATIONS COMPANY REQUIREMENTS CONTRACTOR TO PROVIDE	13
B.1.	DERRICK AND SUBSTRUCTURE	13
B.2.	DRAWWORKS AND ASSOCIATED EQUIPMENT	15
B.3.	DERRICK HOISTING EQUIPMENT	16
B.4.	ROTATING SYSTEM	17
C.	POWER SUPPLY SYSTEMS.....	18
C.1.	RIG POWER PLANT	18
C.2.	EMERGENCY GENERATOR	20
D.	DRILLSTRING EQUIPMENT	21
D.1.	TUBULARS	21
D.2.	HANDLING TOOLS.....	30
D.3.	FISHING EQUIPMENT.....	35
E.	WELL CONTROL / SUBSEA EQUIPMENT	38
E.1.	DIVERTER	38
E.2.	LOW PRESSURE BLOWOUT PREVENTERS	39
E.3.	HIGH PRESSURE BLOWOUT PREVENTERS	39
E.4.	OTHER BLOWOUT PREVENTERS.....	41
E.5.	BOP CONTROL SYSTEM.....	41
E.6.	CHOKE MANIFOLD	43
E.7.	FLEXIBLE CHOKE & KILL LINES (BOP to MANIFOLD).....	43
E.8.	FLEXIBLE BOP CONTROL HOSES	44
E.9.	BOP TESTING EQUIPMENT	44
E.10.	BOP HANDLING	44
F.	MUD SYSTEM / BULK SYSTEM	44
F.1.	HIGH PRESSURE MUD SYSTEM.....	44
F.2.	LOW PRESSURE MUD SYSTEM.....	47
F.3.	BULK SYSTEM	51
G.	CASING/ CEMENTING EQUIPMENT	52
G.1.	CASING EQUIPMENT	52
G.2.	CEMENTING EQUIPMENT	55
H.	INSTRUMENTATION / COMMUNICATION	56
H.1.	DRILLING INSTRUMENTATION AT DRILLER'S POSITION	56
H.2.	DRILLING PARAMETER RECORDER	58
H.3.	INSTRUMENTATION AT CHOKE MANIFOLD	58
H.4.	INSTRUMENTATION AT STANDPIPE	58
H.5.	DEVIATION EQUIPMENT	58
H.6.	RIG COMMUNICATION SYSTEM	59
H.7.	ENVIRONMENTAL INSTRUMENTATION	59
H.8.	NAVIGATION INSTRUMENTATION	60
H.9.	EXTERNAL COMMUNICATIONS EQUIPMENT	60

I.	PRODUCTION TEST EQUIPMENT	62
I.1.	BURNERS	62
I.2.	BURNER BOOMS	63
I.3.	PIPING ON BURNER BOOMS.....	63
I.4.	SPRINKLER SYSTEM	63
I.5.	FIXED PIPING FOR WELL TESTING	64
I.6.	AUXILIARY POWER AVAILABILITY	65

J.	WORKOVER TOOLS.....	65
K.	ACCOMODATION.....	65
K.1.	OFFICES.....	65
K.2.	LIVING QUARTERS.....	66
L.	SAFETY EQUIPMENT.....	67
L.1.	GENERAL SAFETY EQUIPMENT.....	67
L.2.	GAS/FIRE/SMOKE DETECTION.....	68
L.3.	FIRE FIGHTING EQUIPMENT.....	70
L.4.	BREATHING APPARATUS.....	72
L.5.	EMERGENCY FIRST AID EQUIPMENT.....	73
L.6.	HELIDECK RESCUE EQUIPMENT.....	73
L.7.	EMERGENCY WARNING ALARMS.....	74
L.8.	SURVIVAL EQUIPMENT.....	74
M.	POLUTION PREVENTION EQUIPMENT.....	75
M.1.	SEWAGE TREATMENT.....	75
M.2.	GARBAGE COMPACTION.....	75
M.3.	GARBAGE DISPOSAL/GRINDER.....	75
M.4.	INCINERATOR.....	75
M.5.	OILY WATER SEPARATOR.....	75

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		1982, rebuilt in 2008, upgraded in 2010
Construction yard		Galati Shipyard, Romania
A.1. MAIN DIMENSION / TECHNICAL DESCRIPTION		
Light ship:	lt	9,466.5
Displacement at load line:	lt	11,846
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	38.83 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+satback):	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:		Submersible pumps
Quantity, no:		2
Make/type:		Vogel Pump / TVS 10.3-2
Capacity, bbl/min:	bbl/min	26.2
@ pressure, psi:	psi	97
Horsepower, hp:	hp	49.5
Quantity, no:		1
Make/type:		SAER Elettropompe / XP 252-B/2C
Capacity, bbl/min:	bbl/min	33.5
@ pressure, psi:	psi	53
Horsepower, hp:	hp	80
Quantity, no:		1
Make/type:		ITT FLUID TECHNOLOGY CORPORATION / Flyght BIBO BS 2250.011 HT-433
Capacity, bbl/min:	bbl/min	20.44
@ pressure, psi:	psi	65
Horsepower, hp:	hp	50
A.3.2.1 Salt water service pump:		
Quantity, no:		2 (for drilling water transfer)
Make/type:		Aversa, Romania / AG 150-III Centrifuge pumps
Capacity, bbl/min:	bbl/min	15.7 bpm
@ pressure, psi:	psi	72 psi
Horsepower, hp:	hp	100 hp
Quantity, no:		4 (for engines cooling)
Make/type:		3 x Grundfos NB 65-100/157 1 x Grundfos CRN 64-3-2-AFAE-HQQE
Capacity, bbl/min:	bbl/min	6.7 bpm each
@ pressure, psi:	psi	45 psi
Horsepower, hp:	hp	7.4 hp
A.3.2.2 Dedicated preload pump:		
Quantity, no:		2
Make/type:		Turbine Works Ltd, Croatia / CGB 100 V48 BAN+VK20 vacuum pump
Capacity, bbl/min:		13.1 bbl/min (125 m ³ /hr)
@ pressure, psi:		72 psi
Horsepower, hp:		49.5 hp
Additional Information Available:		Pumps from A.3.2. and A.3.2.1. are 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	17.4
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	253 ft / 85.5 ft (pos. #4) bellow the hull
Field tow:	ft	399 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	3,222 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	1785 (4,000 kips) 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 sec.

Max. wind velocity, knots:	knots	70 knots field transit / 100 knots ocean transit
Max. current velocity, knots:	knots	2
Max. heave (double amplitude), ft:	ft	4.9
Max. pitch (double amplitude), degrees:	degrees	6 degrees with 10 sec. Period - field transit 15 degrees with 10 sec. Period - ocean transit
Max. roll (double amplitude), degrees:	degrees	6 degrees with 10 sec. Period - field transit 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		Galatz Shipyard / 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"
Usful 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		
		Not available
Quantity		
Size		
Make / type:		
Color coding, yes/no:	yes/no	
Make / type connection		
A.8.2. Drilling Water Hose		
		Not available
Quantity	no	
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"
Make / type:		PHSFLEX Super S&D Oil Petroleum
Color coding, yes/no:	yes/no	Yes
Make / type connection		Spill proof
A.8.4. Mud Chemical Hoses		
Quantity	no	2 nos, one each side, 196 ft long
Size	in	4"

Make / type:		Alfagomma T-720
Color coding, yes/no:	yes/no	Yes
Make / type connection		Cam-Lock, marine quick connection
A.8.5. Cement Hose		
Quantity	no	2 nos, one each side, 196 ft long
Size	in	4"
Make / type:		Alfagomma T-720
Color coding, yes/no:	yes/no	Yes
Make / type connection		Cam-Lock, marine quick connection
A.8.6. Base Oil Hose		
Quantity	no	Not available
Size	in	
Make / type:		
Color coding, yes/no:	yes/no	
Make / type connection		
A.8.7. Brine Hose		
Quantity	no	Mud Liquid Hose
Size	in	1 no, 196 ft (60 m) long
Make / type:		4"
Color coding, yes/no:	yes/no	PHSFLEX Mud Liquid Hose 250
Make / type connection		Yes
Make / type connection		Cam-Lock, marine quick 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	1 nos
Specification (API, etc.)		API
Make		LBS S.P.A., Milano, Italy
Type		Link Belt Type ABS –218, rebuilt 1996
Location (frwd / aft / port / stbd)		Starboard
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)	35 st / 19.7 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)	5.5 st / 19.7 ft / 4.72 (ft/sec)
Hook load indicator automatically		
corrected for boom angle	yes/no	Yes
Alarm (audible, visual, both)	yes/no	Both alarms
Automatic brake :	yes/no	yes
Safety latch on hooks :	yes/no	yes
Crown saver (limit switch) :	yes/no	yes
Boom illumination :	yes/no	yes
Quantity	no	1 nos
Specification (API, etc.)		API
Make		LBS S.P.A., Milano, Italy
Type		Link Belt Type ABS –218, rebuilt 1996
Location (frwd / aft / port / stbd)		Portside
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)	35 st 19.7 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		LBS S.P.A., Milano, Italy
Type		ped. Mount , Diesel powered, Link-Belt,THC-80
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)	20.4 st / 24.6 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)	3.8 st / 26.2 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(manual)		
Quantity	no.	N/A - lifting pallet device
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)		2 x Underneath pipe rack & 2 x under drill floor
A.9.4. Air Hoist / Derrick Winches		
A.9.4.1 Rig Floor Winches (Non man-riding)		
Quantity:	no.	3
Make:		Ingersoll Rand
Type:		LS 5000R
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.9.4.2 Monkey Board Work Winch		
Quantity:	no.	1
Make:		Ingersoll Rand
Type:		PS 2 -1000R
Rated capacity:	lt	0.98 lt
Wire diameter:	in	5/16"
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		LS 150 RLP
Rated capacity, lt	lt	0.15 lt
Wire diameter, in:	in	13/32"
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.	1
Make		Ingersoll Rand
Type		
Rated capacity, lt:	lt	2.95 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)		
A.9.5. Transfer Baskets / Containers		
		As required for all Contractor's equipment and tools handling
A.9.5.1 Personnel Transfer Baskets		
		One (1) ring bottom net
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 212-412
Tie down points (yes / no)	yes/no	Yes
Covered by foam fire system (yes / no)	yes/no	Yes
A.10.1. Helicopter Refueling System		
		Not available
System make/type		
Fuel storage capacity	US gal	
Jettisonable	yes/no	
Fuel transport containers, no:		
Volume:	US gal	
Covered by foam fire system	yes/no	
A.11. AUXILIARY EQUIPMENT		
A.11.1. Water Distillation		

Quantity		3 nos
Make / type		Gefico, Spain / Aquamar Electric 3 x AQE 30-MD
Capacity (each / total):	US gal/day	7,925 / 23,775
Quantity		1 no
Make / type		Gefico, Spain / Aquamar Electric AQE 120-MD
Capacity (each / total):	US gal/day	31,700 (total 55,475)
A.11.2. Boilers		Steam boiler not available
Quantity		
Make / type		
Power		
A.11.3. Air Conditioning		
Make/type:		Novenco / Climaster ZCR 13/8 Carrier / 50TJ024-933S
Capacity (total system), m ³ /hr:		11,340 m ³ / hr 13,600 m ³ / hr
Max. temperature rating, °F:		78 °F environmental 95 F environmental
Additional Information Available:		
A.11.4. Electric Welding Sets		
Quantity		4 sets
Current capacity		250/260/500A
Make / model		2 x Miller / SRH 444 ; 2 x Lincoln / DC 600
Type (fixed / portable)		Fixed
A.11.5. High Pressure Cleaner		
Quantity		1
Make/type		IDROMATIC /ITALY
Electric / pneumatic / diesel		ELECTRIC
Max delivered pressure, psi:		1200
With steam (yes / no)		YES

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 ft 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" DP stand	stands	177 stands
5" HWDP stand	stands	15 stands
8" DC stand	stands	10 stands
6-1/2" DC stand	stands	10 stands
Tubing belly board (yes / no)		N/A
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
Derrickman wind breaks ,	yes/no	Yes
Around process pits ,	yes/no	Yes

B.1.7. Derrick TV Camera System		
Camera located at		1 crown block 2 monkey board, 1 shake shakers 1 mud return flow
Make / type		
Zoom / Pan / Tilt-function	yes/no	yes
Monitor located at		Drillers cabin

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 actuated by Lidan DBS servo system
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		Lidan Engineering
Model		Disc brake Wichita AM 336 DM with EDS Control
Independent back-up system type		AC System
B.2.3. Sand line		
		Wire line not installed
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		
		N/A
Make / model		
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.	6
Sheave diameter	in	55"
Sheave grooved for line size, in	in	1 3/8"
B.3.2. Traveling Block		
Make / type		Upetrom / MC 400-5-35 Type National
Rated capacity :	st	440 st
Number of sheaves :	no.	5
Sheave diameter:	in	55"
Sheave grooved for line size :	in	1 3/8"
B.3.3. Hook		
Make / type		Upetrom / MC 400-5-35
Rated capacity	st	440 st
Complete with spring assembly/hook locking device :	yes/no	Yes
B.3.4. Swivel		
Make / type		N/A
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		KENNEDY WIRE ROPE & SLING CO/- 6 x 19 (S) IWRC
Length (original):	ft	7,500 ft
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 for tender
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 type National
Maximum opening		37- 1/2"
Rated capacity	st	550
Two speed gearbox , yes/no	yes/no	Yes
Emergency chain drive , yes/no	yes/no	No
Driven by an independent electric motor	yes/no	Yes
Electric motor make/type		Electroputere / MCF 850
Output power	hp	1150 HP
Max. continuous torque	ft-lbs	87,000 lbs-ft
Drip pan / mud collection system (yes / no)	yes/no	Yes
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 11 SA
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)		

Lower 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 3/8"
Max. ID body	in	3 1/16"
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	75,000 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 B 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		Caterpillar / SR 4B
Continuous power	KVA	1500 KVA / 1200 KW
at rotation speed of	rpm	1500
Output volts	volts	600 V
C.1.4. SCR System		
Number of SCR		10 nos

Make / type		Siemens SIMOREG DC Master 6 RA 7093 - 4KS22-0-Z
Maximum continuous power (total)		
Output volts		830 V / 1500 A
C.1.5. Transformer System		
Quantity	no.	2
Make/type		Euro Electro /Disarego Vicenza / ATSTTG 1600
Continuous power (each)	KVA	1,600
Output volts	volts	400 V / 2,309 A
Frequency	Hz	50 Hz
Quantity	no.	3
Make/type		Euro Electro /Disarego Vicenza / ATSTTG 1500
Continuous power (each)	KVA	150
Output volts	volts	230 V / 377 A
Frequency	Hz	50 Hz
C.1.6. Emergency Shutdown		
Emergency shutdown switches for the complete power system , 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		Almig Kompressoren, Germany
Model		Belt 45-10
Rated Capacity , ft ³ /min	ft ³ /min	238
Working pressure , psi	psi	140
Prime mover (electric/diesel)		Electric
Continuous power , hp	hp	60
Air compressors – Medium pressure (rig air)		
Quantity , no		1
Make		Ingersoll Rand
Model		UP5-37-14
Rated Capacity :	ft ³ /min	167
Working pressure	psi	145
Prime mover (electric/diesel)		Electric
Continuous power :	hp	50
Quantity , no		3
Make		Ingersoll Rand
Model		SSR42-MH 30
Rated Capacity :	ft ³ /min	140.5

Working pressure	psi	140
Prime mover (electric/diesel)		Electric
Continuous power :	hp	40
Air dryers		
Quantity , no	no	1
Make		Ingersoll Rand / RS 90
Rated capacity , ft3/min	ft ³ /min	293.5
Quantity , no		
Quantity , no	no	1
Make		Ingersoll Rand / RS 42
Rated capacity , ft3/min	ft ³ /min	175.5
Air compressors – Low pressure (bulk air)		
Quantity , no	no.	2
Make		AMA , Sweden
Model		Type 111731
Rated Capacity :	ft ³ /min	198
Working pressure :	psi	108
Prime mover (electric/diesel)		Electric
Continuous power :	hp	50.6
Air dryers		
Quantity , no	no.	1
Make		Ingersoll Rand / TS 060
Rated capacity , ft3/min	ft ³ /min	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) :		
Volume (total) :	ft ³	70.63
Pressure:	psi	145
Location		Air compressors room- Cold Start
Volume (total) :		
Volume (total) :	ft ³	70.63
Pressure:	psi	100
Location		Bulk Cement Room
Additional Information Available:		
C.2. EMERGENCY GENERATOR		
C.2.1. Engine		
Quantity		
Quantity	no.	1

Make / type		Caterpillar / Marine Model C18
Maximum output	hp	587 HP
At rotation speed	rpm	1500 RPM
Automatic starting , yes/no	yes/no	Yes
Starting methods (air, hydraulic, battery)		Battery
C.2.2. AC - Generator		
Quantity	no.	1
Make / type		Leroy Somer LSAM 47.2
Maximum output	kw	400 KW
At rotation speed	rpm	1500 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		
Quantity:	no.	N/A
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	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	
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		
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		Shaffer
OD		7 1/4"
Connection type		4 1/2 IF
Working pressure rating		10,000 PSI
Quantity		1
Make		Shaffer
OD		5"
Connection type		3 1/2 IF

Working pressure rating		10,000 PSI
D.1.16. Fast Shut-off coupling		
		N/A
Make/type:		
Quantity, no:		
Tool joint to fit:		
D.1.17. Circulation Head		
		N/A
Quantity	no.	1 no
Make/type		Smith
Bottom connection type		4 ½" 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 no
Make/type		Smith
Bottom connection type		3 ½" 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 ½ IF pin
Top connection type		4 ½ 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>		
		N/A
Quantity	no.	
Make / type		
Working pressure	psi	

Max. OD body	in	
Max. ID body	in	
Connection type		
<Lower>		N/A
Quantity	no.	
Make / type		
Working pressure	psi	
Max. OD body	in	
Max. ID body	in	
Connection type		
Used as full open safety valve:	yes/no	
<Full Opening Safety Valves>		
Quantity	no.	1
Make / type		Varco or similar
Working pressure	psi	10,000 psi
Connection type		4 ½ IF
Quantity	no.	1
Make / type		Varco or similar
Working pressure	psi	10,000 psi
Connection type		3 ½ IF
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	13 3/8" : 61 - 72
Test cup for casing weight:	lb/ft	13 3/8" : 48 - 61
Test cup for casing weight:	lb/ft	9 5/8" : 32.3 - 40
Test cup for casing weight:	lb/ft	7" : 29 - 38
Connection type:		4 ½ IF
D.1.21. 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.1.22. 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		
Additional information available		
D.1.23. Drilling Bumper Subs		N/A
Quantity, no:	no	
Make:		
OD:	in	
Stroke:	in	
Connection type, in:		
D.1.24. Hole Openers		N/A
Quantity, no:		
Make:		
OD, in:		
Connection type:		

D.1.25. 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.	2 nos
Make		Blohm+Voss
Model		
Rated capacity	st	350 st
Size	in	5" & 3-1/2"
Quantity	no.	1 no
Make		Blohm+Voss
Model		VES-CL-250
Rated capacity	st	250 st
Size	in	3-1/2"
Quantity	no.	2 nos
Make		
Model		GOS 1325
Rated capacity	st	350 st
Size	in	2 3/8" - 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 3/8" – 3 1/2" slips elevator
Quantity	no.	1
Make		Varco
Model		BJ HYT

Rated capacity	st	150 st
Size (max / min)	in	2 7/8" – 7 5/8" slips elevator
Quantity	no.	1
Make		Varco
Model		MFG HYC
Rated capacity	st	200 st
D.2.4. Drill Pipe Hand Slips		
Size	in	5"
Quantity	no.	2 nos
Make / type		Varco / type SDXL
Size	in	3-1/2"
Quantity	no.	2 nos
Make / type		Varco / type SDML
D.2.5. Semi-Automatic DP Slips		
Size range (largest / smallest)	in / in	5 7/8" / 2 3/8"
Quantity	set	1
Make / type		Varco
D.2.6. Drill Collar Slips		
Size	in	8 " - 9-1/2"
Quantity	no.	1
Make / type		Varco / DCS-L
Size	in	6-3/4" – 8-1/4"
Quantity	no.	1
Make / type		Varco / DCS-L
Size	in	5 1/2" - 7"
Quantity	no.	1
Make / type		Varco / DCS-R
Size	in	4-3/4"
Quantity	no.	1
Make / type		Varco / DCS-S
D.2.7. Drill Collar Safety Clamps		
Quantity	no.	1
Range	in / in	9-1/4" – 10-1/2"
Quantity	no.	1

Range	in / in	8" - 9-1/4"
Quantity	no.	1
Range	in / in	5-1/2" – 7"
Quantity	no.	1
Range	in / in	4-3/4"
D.2.8. Tubing Slips		N/A
D.2.9. Tubing Spider		N/A
D.2.10. Drill Collar Lifting Subs		N/A
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
Quantity	no.	
For DC OD	in	
Connection type		
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	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		Varco / for TDS
Size	in	3-1/2"
Length	ft	16 (190")
Rated capacity	st	500 st
Quantity of sets	set	1set
Make/type		Varco / for TDS
Size	in	2-3/4"
Length	ft	11 (132")
Rated capacity	st	350 st
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		
		N/A
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		TSC
Size		5" and 3 1/2" DP
D.2.17. Hydraulic Make-Up / Breakout Machine (e.g. EZ Torque)		
Make / type		Upetrom /Easy Torque
Maximum line pull	st	
Additional Information Available		60,000 ft/lbs Make up Torque; 80,000 ft/lbs Brake out Torque
D.2.18. Rotary Rig Tongs		
Quantity (sets)	no.	1 set
Make / type		Varco BJ / type BD
Size range (max OD / min OD)	in / in	17" / 3 1/2"
Torque rating:	ft/lbs	60,000 ft-lbs
Quantity (sets)	no.	1 set
Make / type		Blohm & Voss / BV 100
Size range (max OD / min OD)	in / in	15" / 3 1/2"
Torque rating:	ft/lbs	100,000 ft-lbs
D.2.19. Tubing Tongs (manual)		
Quantity (sets)	no.	1
Make / type		Blohm & Voss / WRT-35
Size range (max OD / min OD)	in / in	7 5/8" / 2 3/8"
Torque rating:	ft/lbs	35,000 ft-lbs
D.2.20. Tubing Tongs (power)		
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		NOV / ST 80 Varco
Size range (max OD / min OD)		For 8-1/2"DC to 3-1/2"DP
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.	
Make / type		
Overshot OD	in	
To catch size:	in	
To catch size:	in	
To catch size:	in	
Overshot guide OD:	in	
Extension sub length:	ft	
Lipped guide (oversize, regular)		
Grapples (spiral, basket, both):		
Pack offs, yes/no:	yes/no	
Top sub connection type Contractor to Specify		
Quantity	no.	
Make / type		
Overshot OD	in	
To catch size:	in	
To catch size:	in	
To catch size:	in	
Overshot guide OD:	in	
Extension sub length:	ft	
Lipped guide (oversize, regular)		
Grapples (spiral, basket, both):		
Pack offs, yes/no:	yes/no	
Top sub connection type Contractor to Specify		
Additional Information Available:		
D.3.2. Hydraulic Fishing Jar		N/A
Quantity	no.	
Make / type		
OD body:	in	
Min ID::	in	
Stroke:	in	
Connection type:		
Repair kit:	yes/no	
D.3.3. Jar Intensifier		N/A

Quantity	no.	
Make / type		
OD body:	in	
Min ID:	in	
Connection type:		
Repair kit:	yes/no	
D.3.4. Surface Jars		N/A
Quantity	no.	
Make / type		
OD body:	in	
Min ID:	in	
Stroke:	in	
Connection type:		
Repair kit:	yes/no	
D.3.5. Fishing Bumper Subs		N/A
Quantity	no.	
Make / type		
OD body:	in	
Min ID:	in	
Stroke:	in	
Connection type:		
D.3.6. Safety joints		N/A
Quantity, no:	no.	
Make /type		
OD Body:	in	
Min ID:	in	
Connection type:		
D.3.7. Junk Baskets (Reverse Circulation)		N/A
Quantity	no.	
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		N/A

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		
Quantity	no.	
Make / type		
For hole size	in	
OD body	in	
Connection type		
D.3.9. Junk Mill (Taper, Flat bottom)		N/A
Quantity	no.	
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		
D.3.11. Taper Taps		N/A
Quantity	no.	
Make / type		
OD (max/min):	in / in	
OD body:	in	
Length overall:	ft	
Connection type		
D.3.12. Die Collars		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:		Wesco, Weir Group
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 ST 80
Location:		On cantilever beam – main deck
Remote make/type:		Electro Flow Control – Koomey 80
Location:		Drillers Cabin – Drill Floor
Remote make/type:		Electro Flow Control – electrically operated

Location:	Company man office	
E.2. LOW PRESSURE BLOWOUT PREVENTERS		
All appropriate components H ₂ S rated yes/no	No	
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 ea/pipe ram/5"
Quantity/type/size :	no./type/in	1 ea/blind/ 0"
Quantity/type/size :	no./type/in	
Quantity/type/size :	no./type/in	
Quantity/type/size :	no./type/in	
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 / MSP-2000 psi	
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/no	Yes	

E.3.1. Ram Type Preventers			
Quantity:	no.	1 sets	
Make / model:		CIW	
Type (single /double / triple):		Double	
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	H ₂ S Service (DD Sour Service NACE)	
Side outlets:	no.	2 ea	
Size:	in	4 1/16"	
WP:	psi	5,000 psi	
Bottom connection:		16 3/4" x 5,000 psi flange	
Top connection:		16 3.4" x 5,000 psi flange	
Shear ram booster:	yes/no	Yes	
Quantity:	no.	1 sets	
Make / model:		CIW	
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	H ₂ S Service (DD Sour Service NACE)	
Side outlets:	no.	2 ea	
Size:	in	4 1/16"	
WP:	psi	10,000 psi	
Bottom connection:		16 3/4" x 5,000 psi flange	
Top connection:		16 3/4" x 5,000 psi flange	
Shear ram booster:	yes/no	No	
E.3.2. Available Rams (installed & spare)			
Quantity / type / size	no./type/in	no./type/in	1set of Blind rams
Quantity / type / size	no./type/in	no./type/in	1 set of 5" Drill pipe rams
Quantity / type / size	no./type/in	no./type/in	1 set of 3 1/2" Drill pipe rams
Quantity/type/size	no./type/in	no./type/in	1 set of 2 7/8" Drill pipe rams
Quantity/type/size	no./type/in	no./type/in	2 sets of 3 1/2"-7" variable rams
Quantity/type/size	no./type/in	no./type/in	1 set of 9 5/8" casing rams
Quantity/type/size	no./type/in	no./type/in	1 set of 7" casing rams
Quantity/type/size	no./type/in	no./type/in	1 set of 4 1/2" Drill pipe/casing rams
Quantity/type/size	no./type/in	no./type/in	1 set of 7 5/8" casing rams
Quantity/type/size	no./type/in	no./type/in	1 set of 9 7/8" casing rams
Quantity/type/size	no./type/in	no./type/in	1 set of 11 3/4" casing rams
Quantity/type/size	no./type/in	no./type/in	1 set of 11 7/8" casing rams

E.3.3. Annular Preventer		
Quantity:	no.	1 ea
Make / type:		Hydril GK, bag type preventer, H2S TRIM
Size:	in	16 3/4"
Working pressure:	psi	5000 psi
Bottom connection:		16 3/4" x 5,000 psi, BX 162
Top connection:		16 3/4" x 5000 psi, BX 162
E.3.4. Kill Line Valves		
Quantity:	no.	2 ea
Make / type:		Cameron
Size:	in	2 1/16"
Working pressure:	psi	10,000 psi
Gasket type:		BX - 152
Hydraulic/manual/non-return:		1 x hydraulic, 1 x manual
E.3.5. Choke Line Valves		
Quantity:	no.	2 ea
Make / type:		Cameron
Size:	in	3 1/16"
Working pressure:	psi	10,000 psi
Gasket type:		BX 154
Hydraulic/manual:		1 x HCR , 1 x manual
E.4. OTHER BLOWOUT PREVENTERS		N/A
All appropriate components H ₂ S rated yes/no		
E.4.1. Ram Type Preventers		N/A
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 gal
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 gal/min
Glycol reservoir capacity:	U.S. gal	460 gal
Control manifold model:		Koomey® Model GU2KB6S "G" Series Manifold
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		Electric driven
Quantity:	no.	1
Make/model:		TRIPLEX UET 25 HT 380
Each driven by motor of power:	hp	50 HP
Flow rate of each pump:	U.S.gal /min	40 GPM
At operating pressure:	psi	3,000 psi
Operable off emergency generator:	yes/no	Yes
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	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.	2ea
Make / model:		Cameron
Size (ID):	in	2" Orifice
Quantity of power chokes:	no	2 ea
Make / model:		Cameron/ Swaco
Size (ID):	in	3-1/16" nom.
Glycol injection:	yes/no	Yes
E.7. FLEXIBLE CHOKE & KILL LINES (BOP to MANIFOLD)		
Choke Line		
Quantity:	no	1
Make/type:		Dunlop Coflexip
ID:	in	3" x 75 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:		Dunlop Coflexip
ID:	in	2" x 75 ft x 2-1/16" flange (BX-152)
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
ID:	in	1"
Working pressure:	psi	5,000 psi
Fire resistant:	yes/no	Yes
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 Hercu-Link / HA1-20-BHS 40 MA6-30-30-4
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		Gardner Denver
Model		Gardner Denver PZL 11
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	1150 HP
Fluid end type		
Maximum working pressure, psi	psi	5,000
Test pressure, psi	psi	7,500
Pump stroke counter type		Smart Swaco / Smart 2000
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		Le Tourneau, L20 – K20-500 Hydril
Reset Relief Valve		Titan RX 7500 psi
Working flow rate per pump at 90% of max spm		
Liner size :	in	6 1/2", 6"
Pump speed (90% of max.) :	spm	110 spm
Pump pressure:	psi	4529 psi, 5000 psi
Working flowrate :	USgal/min	540 gpm; 465 gpm
F.1.2. Mud Pumps		
Quantity	no.	1
Make		Upetrom
Model		3PN 1600 L/5000 – 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	1150 HP
Fluid end type		
Maximum working pressure, psi	psi	5000
Test pressure, psi	psi	7,500
Pump stroke counter type		Smart Swaco / Smart 2000
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		Le Tourneau, L20 – K20-500 Hydril
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 I
Type / Size		8x6x14x1500 rpm Centrifugal
Output Capacity	gpm	880 gpm
Drive motor type		electric
Power output	hp	100 hp
Transfer Pumps		
Mixing pumps used also as 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 / Model		Mission Magnum I
Type / Size		8x6x14x1500 rpm Centrifugal
Capacity (each)		880 gpm
Drive motor type		electric
Power output		100 hp
Additional Information Available :		
Any pumps from F.1.2. and F.1.3 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	3 ½ "ID x 80 ft length
Working pressure	psi	5,000 psi

Snubbing lines	yes/no	Yes
F.1.6. Cementing Hose		
Quantity	no.	1 ea
Type (armor sheath/flexible steel pipe)		Coflex pipe
Length	ft	30
ID	in	2" x 2" Fig 1502 M-F
Working pressure	psi	5,000 psi
F.1.7. High pressure Flexible Steel Pipe		
Make/type		Fig 1502
Integral connection/fittings (non-threaded)		Yes
ID	in	3"
Working pressure	psi	10,000 psi
Section length:	ft	8 ft
Quantity	no	20 nos
Section length	ft	
Quantity	no.	
Sweep swivels, no./make/type	no.	6 nos / FMC,
Nom.size ID :	in	3"
Suitable for H2S service :	yes/no	Yes
F.2. LOW PRESSURE MUD SYSTEM		
F.2.1. Mud Processing Tank		
Sand trap tank, usable volume	bbl	27 bbl
Degasser tank, usable volume	bbl	30 bbl
Agitated:	yes/no	No
Desander tank, usable volume	bbl	27 bbl
Agitated:	yes/no	No
Desilter tank, usable volume	bbl	See F.2.9.
Agitated:	yes/no	no
Mud Cleaner tank, usable volume	bbl	42 bbl
Agitated:	yes/no	no
Centrifuge tank, usable volume	bbl	6 bbl
Agitated:	yes/no	No
Other tank, usable volume	bbl	No
Agitated:	yes/no	No
Total usable capacity		132 bbl
F.2.2. Mud Tanks		
Quantity , no	no.	5
Total capacity (usable) :	bbl	1760 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 bbls
Mud agitator (yes / no)		Yes
Mud guns (yes / no)		Yes
F.2.4. Trip/Stripping Tanks		
Capacity (usable)	bbl	50 bbls
Capacity / foot	bbl/foot	5.5 bbls/foot
Level indicator	yes/no	Yes, Smart Swaco
Electric pump make		Mission Magnum
Model / type		4 x 3 x 13
Rated capacity	hp	55
Facility for casing fill-up (yes / no)	yes/no	Yes
Alarm and strip chart recorder (yes / no)	yes/no	Yes, Smart Swaco
F.2.5. Chemical Mixing Tank		
Capacity (usable)		220 bbls
Chemical mixer type		Upetrom
F.2.6. Shale Shakers		
Primary		Swaco
Quantity	no.	4
Make / model		Swaco Mongoose PT Generation 2
Type		Dual Motions
Nominal flow rate (total)	gal/min	600

Cascading	
Quantity	
Make / model	
Type	
Nominal flow rate (total)	
F.2.7. Desander	Shaker # 4 has mud cleaner configuration
Quantity	1
Make / model	Swaco
Type	
Nominal flow rate :	bbl/min
Number of cones	no.
Size	in
Feed pump make/model	Mission Magnum I
Type/size	8x6x14x1500 rpm Centrifugal
Capacity:	gpm 880 (200 m ³ /hr) / 60 m head
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	
Nominal flow rate :	bbl/min 23.8 bpm
Number of cones	no. 16
Size	in 4"
Feed pump make/model	Mission Magnum I
Type/size	8x6x14x1500 rpm Centrifugal
Capacity	gpm 880 (200 m ³ /hr) / 60 m head
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	Swaco Mongoose PT Generation 2
Type	16 x 4" hydro cyclones
Nominal flow rate :	bbl/min 23.8 bbl/min
Number of cones :	no. 16 cones
Size :	in 4"
Feed pump make/model	Mission Magnum I
Type/size	8x6x14x1500 rpm Centrifugal
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		MI Swaco / Swaco D-Gasser
Dimensions (height x OD):	ft x in	22.5' x 8'
Gas discharge line ID:	in	6"
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	17.7 mmscf
F.2.11. Degasser		
Make/type		MI Swaco
Nominal flow rate :	bbbl/min	23.8 bbl/min
Feed pump make / model		Mission Magnum
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		2
Make /model		Double Life / MA 20-251
Driven by motor of power		Electric, 20 HP
Located in tanks		Active pit #1
Quantity :	no	2
Make /model		Double Life / MA 20-251
Driven by motor of power :	hp	Electric, 20 HP
Located in tanks		Active pit #2
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	2
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		Swaco / 414 & 518
Feed pump make / model		2 x Seepex
Type/size		BN—35-6L
Capacity	bbl/min	1.74
Drive motor	hp	4.7
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		Yes
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
Feed pump make / model		Magnum
Type/size		8x6x14"
Capacity:	bbbl/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 ,	ft3	
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	N/A
For casing OD, weight, quantity	
For casing OD, weight, quantity	
For casing OD, weight, quantity	
G.1.3. Clamp-on Casing Thread	
	N/A

Protectors		
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	
G.1.8.Casing Bowls		
Quantity:	no.	1 set
Make/type :		Upetrom
For OD casing (max/min) :	in / in	20" – 18 5/8"
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)		N/A
Quantity:	no.	
Make/type :		
For OD casing (max/min) :	in / in	
G.1.15. Crossover to Handle Casing with Drill Pipe		N/A
Quantity :	no.	
For OD casing:	in	
Casing connection type:		
Drill pipe connection type:		
Rated capacity:	st	
G.1.16. Casing Scrapers		N/A
Quantity:	no.	
Make:		
For OD casing:	in	
For casing weight:	lbs/ft	
OD body:	in	
Connection type:		

Blade type (roller/fixe):		
G.2.CEMENTING EQUIPMENT		
G.2.1.Cement Unit		
		N/A
Owner:		
Free placement basis:	yes/no	
Make / type:		
Number of triplex pumps:	no.	
Maximum working pressure:	psi	
Maximum flowrate (total):	bbl/min	
Unit powered by Electric / diesel		
Recirculation mixing system:	yes/no	
Capacity:	bbl	
Motor power :	hp	
Liquid additive system :	yes/no	
Premix / batch tank	US gals/min	
Quantity:		
Capacity :	bbl	
Pressure recorder:		
Densitometer recording device:		
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		
Quantity:	no.	1 ea
Working pressure:	psi	5,000 psi
ID :	in	2"
Connection to choke manifold :	yes/no	Yes
Connection to standpipe manifold :	yes/no	Yes
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		SMART VARCO SYSTEM
H.1.1. Weight Indicator		
Make / Type:		Martin Decker
Sensor type:		Martin Decker
Calibrated for no. of lines strung (yes / no)		Yes
H.1.2. Standpipe Pressure Gauges		
Quantity:	no.	2ea
Make / type:		Smart Swaco
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:		Smart Swaco / Smart 2000
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:		Smart Swaco / Smart 2000
Max. RPM:	rpm	0 -300 rpm
H.1.4.2 Rotary Torque Indicator		
Make / type:		Smart Swaco / Smart 2000
Maximum torque:	ft-lbs	
H.1.5. Top Drive Instrumentation		
H.1.5.1 Tachometer		
Make / type:		Smart Swaco / Smart 2000
Maximum RPM:	rpm	0 – 300 rpm

H.1.5.2 Torque Indicator		
Make / type:		Smart Swaco / Smart 2000
Maximum torque:	ft-lbs	
H.1.6. Pump Stroke Counters		
Quantity:	no.	1ea per pump
Make/type:		Smart Swaco / Smart 2000
Stroke indicator and cumulative stroke counter for each pump:	yes/no	Yes
H.1.7. Tong Torque Indicator		
Make / type:		Martin Decker
Maximum torque:	ft-lbs	100,000 ft-lbs
H.1.8. Pit Volume Totalizer		
Make / model:		Smart Swaco / Smart 2000
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:		Smart Swaco / Smart 2000
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:		Smart Swaco / Smart 2000
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:		Smart Swaco / Smart 2000

H.2. DRILLING PARAMETER RECORDER			
Quantity:	no.		3
Make/type:			Smart Swaco
Location-1:			Driller's cabin
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:			Smart Swaco / Smart 2000 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)			Smart Swaco / Smart 2000
Quantity:	no.		1 ea
Make / type:			Smart Swaco / Smart 2000
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:			Smart Swaco / Smart 2000
Pressure range:	psi		10,000 psi
H.4. INSTRUMENTATION AT STANDPIPE			
H.4.1. STANDPIPE PRESSURE GAUGE			
Quantity:	no.		2 ea
Make/type:			Smart Swaco / Smart 2000
Pressure range:	psi / psi		0 -10,000 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)		N/A
Make/type:		
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 KX – TDA 200
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:		Bosch Plena
Explosion proof:	yes/no	yes
H.6.3. Drill Floor Talkback System		
No. of stations:	no.	3ea
Location:		Drill floor, Derrick, Texas deck, can be extended if required
Make / type:		GAI-Tronics USA
Explosion proof:	yes/no	Yes
H.6.4. Hand Held VHF Radios		
Quantity:	no.	4 x ICOM IC-M88 20 x Motorola PRO-7150 Elite
Quantity intrinsically safe:	no.	24 nos
H.6.5. Crane Communication System		
Quantity:	no.	2ea per crane
Make / type:		Motorola GP340 (portable VHF), integrated speaker & 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:	Type R.M.YOUNG 26800
Recorder:	yes/no	yes
Sea water temperature (make / model):		N/A
Recorder:	yes/no	
H.7.2. Barometric Pressure Indicator		

Make / model:	Type R.M. YOUNG
Recorder: yes/no	Yes
H.7.3. Humidity Sensing Indicator	
Make / model:	Type R.M. YOUNG
Recorder: yes/no	Yes
H.7.4. Wind Speed/Direction Meter	
Make / model:	Type R.M. YOUNG
Recorder: yes/no	Yes
H.7.5. Wave Profile Recorder	
Make / Model:	N/A
Recorder: yes/no	
H.7.6. Current Indicator	
Make / Model:	N/A
Located at:	
Recorder: yes/no	
H.7.7. Weather facsimile	
Make / Model:	NAVTEX McMURDO NAV 7
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 and Office
Quantity: no.	2ea

Make / model:		Thrane &Thrane SAILOR TU 5250 Furuno FS 1562-15
Power:	watts	250 W 150 W
Frequency ranges (low / high) (Synthesized crystal): Mhz/Mhz		ITU marine bands in the frequency range 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:		<i>McMurdo / Smartfind E5 (hydraulic release unit)</i>
Location(s):		Near helideck
H.9.3. Marine VHF Radio		
Quantity:	no.	3ea
Make / model:		VHF/DSC Thrane & Thrane SAILOR RT 5022 (2ea) VHF/DSC SPERRY RM2042 (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 - U.S.A. / SA 100
Power:	watts	100 W
H.9.5. Aeronautical VHF Transceiver		
Quantity:	no.	2 ea (including portable)
Make / model:		ICOM - IC-A210 ICOM IC-A24 (portable)
Power:	watts	25 W / 5 W
Frequency range (low / high):	Mhz / Mhz	All air band channels
(Synthesized/crystal):		
Location(s):		Radio Room
H.9.6. Watch Receiver		
Quantity:	no.	1
Make / model:		SAILOR SYSTEM 5000
Frequency:	KHz	MF / HF
H.9.7. Satellite Communication System		
Make / model:		Inmarsat C Thrane&ThraneTT-3020C Fleet Broadband 250 Thrane&ThraneTT-3738A
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:		N/A
Connected to:		
H.9.11. Scrambler		
Make / model:		N/A
Connected to:		
H.9.12. Other Communication Systems		
Make/model:		Iridium Control Unit
Connected to:		Rig telephone System
Make/model:	no.	Nokia GSM / Premicell (2ea)
Connected to:		Rig telephone System
Make/model:		GPS Navigator FURUNO GP-150
		AIS Tranponder FURUNO FA-150
Radio System for Life Boats:		
Portable VHF – GMDSS:		SRH Navico(4 ea)
Radar transponder SART:		JOTRON TronSart (2ea) Sevenstar Electronics S701 (2ea)

I. PRODUCTION TEST EQUIPMENT		
I.1. BURNERS		
Make/type		Al Ashraf For Equipment (AFE-BB-3)
Quantity	no.	1
Capacity	bbl/day	12000
Weight		
Water requirement at 100 psi	bbl/min	12

I.2. BURNER BOOMS		
Make/type		AFE
Quantity	no	1
Lenght	ft	85
Horizontal	yes/no	Yes
Maximum wind speed	knots	65
Walkway and handrails	yes/no	
Burner platform size, :	ft x ft	
Burner mounting rotatable, yes/no		Yes
I.3. PIPING ON BURNER BOOMS		
I.3.1. Oil Line		
ID	in	3"
Working pressure	psi	5,000
Connection type at burner end		3" Weco Fig 602
H2S (yes / no)	yes/no	Yes
Pressure gauge connection at barge end	in	
I.3.2. Gas Line		
ID		2 x 4"
Working pressure		5,000
Extended beyond burner by		
Connection type at burner end		3" Weco Fig 602
H2S (yes / no)		Yes
Pressure gauge connection at barge end		
I.3.3. Water Line		
ID		2 x 3"
Working pressure		5,000
Connection type at burner end		3" Weco Fig 602
Pressure gauge connection at barge end		
I.3.4. Air Line		
ID		2"
Working pressure		5,000
Connection type at burner end		2" Weco Fig 602
Pressure gauge connection at barge end		
I.3.5. Pilot Gas line		
ID		
Working pressure		
Connection type at burner end		1/2" LP
Pressure gauge connection at rig end		
I.4. SPRINKLER SYSTEM		

System in place	
Pump source	
I.5. FIXED PIPING FOR WELL TESTING	
I.5.1. Drill Floor to Separator Area	
Type (threaded/welded, both)	
Quantity	
Size ID	
Working pressure	
Connection on drill floor	
Connection at separator	
Number of valves/lines	
Size of valves	
H2S	
I.5.2. Separator Area to Burner Booms	
Service (oil/gas)	
Type (threaded/welded, both)	
Quantity	
Size ID	
Working pressure	
Connection at separator	
Connection at boom	
Number of valves/lines	
Size of valves	
H2S (yes / no)	
Valves installed near separator area for switching gas to either burner (yes / no)	
I.5.3. Water Lines to Burner Booms	
Type (threaded/welded/both)	
Quantity	
Size ID	
Working pressure	
Number of valves required	
Size of valves	
Pump source	
Rated line capacity at 300 psi	
I.5.4. Air System to Burner Booms	
Type (threaded/welded/both)	
Quantity	
Size ID	
Working pressure	
Non-return valves fitted (yes / no)	

Air source	
I.5.5. Oil Storage Tank To Offload	
Type (threaded / welded / both)	
Quantity	
Size ID	
Working pressure	
Connection at separator area	
I.5.6. Separator to Vent Stack of Rig	
Type (threaded/welded, both)	
Quantity	
Size ID	
Working pressure	
Connection type at separator area	
I.6. AUXILIARY POWER AVAILABILITY	
I.6.1. For Field Laboratory	
Quantity	As per company requirements
Volts	220 or 380 V
Frequency	50 Hz
Breaker , amp	32 A
I.6.2. For Crude Transfer Pump	
Quantity	As per company requirements
Volts	As per requirements
Frequency	50 Hz
Breaker , amp	32 A
I.6.3. For Electric Heaters	
Quantity	As per company requirements
Volts	As per requirements
Frequency	50 Hz
Breaker , amp	32 A

J. WORKOVER TOOLS	

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
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	5
Toilets (private/shared/communal), no:	Shared
Showers (private/shared/communal), no :	Shared
No. of beds per room (1,2,3, etc), no:	4
No of rooms	2
Toilets (private/shared/communal), no:	private
Showers (private/shared/communal), no :	private
No. of beds per room (1,2,3, etc), no:	4
No of rooms	1
Toilets (private/shared/communal), no:	Shared
Showers (private/shared/communal), no :	Shared
No. of beds per room (1,2,3, etc), no:	4

No of rooms	14
Toilets (private/shared/communal), no:	Communal
Showers (private/shared/communal), no :	Communal
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	No
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

supplied)	
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 – 1 Mobile stations – 1
Make / model	
Located at	Mixing area, Mud pits (mobile)
L.1.2.2 Safety Showers	
Quantity	1
Make/model Contractor to Specify	Barikos
Located at	Mixing area
L.1.3. Derrick Safety Equipment	
Derrick escape belts	Yes
Geronimo line	Type donut
Derrick safety belts	Yes
Make/model Contractor to Specify	Protecta Full Harness
L.1.4. Derrick Climbing Assistant	
Make/type	Sala / 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	Drager / Regard Politron TX
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	-
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	Drager / Regard Politron TX
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	Yes
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	1
Make / type	Drager , X-am 2000
Phials for H2S measuring range	yes
From 1 to 20 percent	6
From 100 to 600 percent	
L.2.4. Explosimeters	
Quantity	1
Make / type	Drager , X-am 2000
L.2.5. CO2 Gas Detectors (portable)	

Quantity	1
Make / type	Drager , X-am 2000
Stain tubes for CO2: measuring range	
From 1 to 20 percent	
From 5 to 60 percent	6
L.2.6. O2 Meter (portable)	
Quantity	1
Make / type	Drager , X-am 2000
L.2.7. Fire/Smoke Detectors in	
Accommodation	Yes
Make/type	Honeywell / ELTEK MARINE ANX 95
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 Ltd, Croatia / CGC 125 V48HD + VK20
Type	QV 5/300-4563
Output (each)	160 m ³ /h 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	19 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)	112
Type 1 – C O2	54
Type 2 - Dry chemical	35
Type 3 – Foam	20
Water	3
Halon	0

L.3.4. Fire Blankets	
Quantity	7
Location(s)	Engine compartment, welder workshop, galley
L.3.5. Fixed Foam System	N/A
Make/type	Aerofoam
Quantity of foam concentrate stored	2 x 45 liters
Foam type	AER-O-WATER 3EM 3%
Application rate	5,5
Foam nozzles	2 ea
Located at	Engine Room (port & starboard)
Located at	1 x F50 wheeled extinguisher air foam stationary in engine room
Located at	1 x foam installation 150 kg stationary on drill floor + 1 x P50 wheeled extinguisher
Automatically injected into fixed fire water system	No
L.3.6. Helideck Foam System	
Make / type	Towalex FP 3% EX 300 l
Quantity of monitors	2
Quantity of foam concentrated stored	150 l
Foam type	AFFF 3%
Application rate	6
L.3.7. Fixed Fire Extinguishing System	
Protected spaces	SCR room, DG room, Boilers room, Emergency Gen-Set room, Transformers room, 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)	Transformers room, boilers room – CO2
Remote manual release located at	Main deck - inside CO2 tubes room
Other (specify location & type)	Wellhead area below cantilever / Ansul 2,000 lbs stationary dry powder tank & fixed CO2 installation 2000 lbs
Remote manual release located at	Cantilever
Remote manual release located at	Galley / Wet powder fire suppression system (Ansul R-102 Wet Chemical)
Other (specify location & type)	Galley
Other (specify location & type)	11 Fire Water Monitors (2 x drill floor, 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	
Automatic activation	N/A
Working pressure	
Tank capacity	
Salt water backup	
Type (wet pipe / dry pipe)	
L.4. BREATHING APPARATUS	
L.4.1. General Sets	
Quantity	10 pcs SCBAs
Make	MSA Auer
Type (demand / positive pressure)	Positive pressure
Cylinder duration	30 minutes
L.4.2. Escape Sets	
Quantity	17
Make	8 x EEBD Diablo 600 PI & 9 x ISI EEBA 10
Type	Positive pressure
Cascade system quick connect	Yes
Cylinder duration	15 min & 10 min
Located at:	
Mud pits	1
Mud pumps	1
Shale shakers	1
Electrical workshop	1
SCR	1
DG	1
Mechanical workshop	1
Galley	1
Recreation room Level 1	1
Recreation room Level 2	1
Driller cabin	1
Driller office rig floor	4
OIM office	1
Monkey Board	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	BAUER / LEROY SUMER
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	4
Type	Paraguard
Located at	Hospital, space Rig floor, Machinery
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, China / JY-QFN-7,50A (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 Navico SRH 250), EPIRB - No
L.8.2. Life rafts	
Make / type	VIKING 25 DK
Quantity	6
Capacity	25 pers each
Davit launched (yes / no)	No
Locations (frwd / aft / port / stbd)	port / stbd
L.8.3. Rescue Boat	
Make / Type	Schat-Harding, USA / MOB 4.5
Engine power	25 hp
L.8.4. Personal Floatation Devices	
Make/type	PLASTICEL / BARCELONA (with whistle, reflective tape & light)
Quantity	150
L.8.5. Survival suits	
Make/type	N/A
Quantity	
L.8.6. Life Ring Buoys	
Make/type	10 x Besto Buoy DK-86, 4 x BPC
Quantity total	14
with lights	12
with smoke	2 (MOB)
with EPIRB	no
L.8.7. Work Vests	
Quantity	33
	For Stearns Inc. MO#1674-China

L.8.8. Escape Ladders/Nets	
Make / type	
Quantity	4 rigid ladders (on legs), 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	Exceltec Corporation / OMNIPURE 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
Make / model	Marine Water Technology / RWO
System type	SKIT S DEB 5.0 – 5 m ³ /hr
Quantity	1
Make / model	Turbulo / TCS 2.5HD
System type	Centrifugal, 2.5 m ³ /hr