

JU2000E

IADC LIST



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SECTION A. UNIT SPECIFICATIONS

Rig Type:	Self-Elevating, Cantilever, Independent Leg, Jack-Up Mobile Offshore Drilling Unit,
Unit/Design/Shape	JU2000E Independent Cantilevered Triangular Jack-Up
Unit Flag:	TBD
Unit Classification:	ABS, A1 Self-Elevating Drilling Unit, CDS, CRC
IMO Certification:	YES
Which Code Version:	Code for the Construction and Equipment of Mobile Offshore Drilling Units, 2009
Year of construction	2013
Design Temperature:	-20°C--+45°C
Construction Yard:	TBD

CLASSIFICATION, RULES AND REGULATIONS

The vessel, including its hull, machinery and equipment, shall be built under the survey of class and shall be distinguished in the record by the notation of A1 Self-Elevating Drilling Unit CDS CPS CRC.

The following rules and regulations including their amendments set into force before signing of the contract with class to be applied during design and fabrication of the Self-Elevating Drilling Unit and its components:

-Maritime Safety Regulation of the Flag Authority

- ABS Rules for Building and Classing Mobile Offshore Drilling Units (2012). Including load line assignment, cargo gear, Certification of Drilling System (CDS) and distinguished in Record by Maltese Cross Symbols.
- ABS Steel Vessel Rules (2012).
- International Convention on Load lines 1966 Regulation, with 1988 protocol.
- International Convention for the Prevention of Pollution from Ships (MARPOL Consolidated Edition, 2006), as amended (Single point discharge collection and treatment)
- International Convention for the Safety of Life at Sea (SOLAS) Consolidated Edition 2009, including all amendments in force at the time of contract signing.
- The International Convention of Tonnage Measurement of Ships 1969
- International Regulations for Prevention of Collision at Sea, 1972, consolidated edition 2003 (COLREG).
- IMO international convention on the control of harmful anti-fouling systems on ships, adopted Oct. 2001, into force Sept. 2008.
- IEC publication 61892, part 1 through 7. Mobile and fixed offshore units – Electrical installations.
- IMO Code for Construction and Equipment of Mobile Offshore Drilling Units, 2009.
- International Tele-Communication and Radio Regulations Convention (1974 and 1982).
- USCG regulations for foreign flagged vessels; CFR 155, CFR 159, CFR 164.
- UK Civil Aviation Authority, CAP 437 (for heliport design) 6th edition, April 2010.
- WHO/US department of health and human services, CDC, Vessel sanitation program, construction guidelines
- ILO, 92 and 133, Accommodation of crews convention, as applied to MODU's by the Flag State.
- IMO FSS (Fire Safety Systems) code (2007 edition).
- IMO resolution A.468 (XII) Codes of noise levels on board ships.
- ABS Guide for Certification of Cranes and lifting appliances 2007.
- IMO LSA (Life-Saving Appliances) Code (2010 edition).
- IEEE Standard No:45 "Recommended Practice for Electrical Installation Shipboard 1983".
- Singapore Merchant Shipping (Crew Accommodation) Regulations 1997

A.1 MAIN DIMENSIONS/TECHNICAL DESCRIPTION

Light ship:	40308kips
Displacement at loadline:	22994.21M.Tons
Overall length of unit (including helideck):	326'
Overall width of unit (including anchor racks):	255'

Hull length:	231'
Hull width:	249'
Hull depth:	31'
Number of legs/length:	3 x 547.8' including Spud Cans
Leg length available below hull:	450'
Type of leg:	Triangular Structural Truss Cross Section, Three Chord Leg Structure
Leg spacing (centre to centre):	
Transverse:	156ft
Longitudinal:	150ft
Independent leg or matt:	Independent leg
Spud can diameter/bearing area:	59.0ft / 2734 ft ²
Spud can height:	19.5ft
Spud can jetting system:	1 system bottom & 1 system top - 2 total per can
Bottom jets	12 Nozzles, - 1000psi pressure
Top jets	12 Nozzles, 1000 psi pressure
Mat dimensions:	N/A
Length:	N/A
Width:	N/A
Depth:	N/A
Cantilever or slot:	Cantilever
Skid-off:	No
Cantilever envelope:	
Reach AFT, from/to:	0 ft / 75 ft
Transverse, port/STB:	15 ft / 15 ft
Slot dimensions:	
Length:	N/A
Width:	N/A
Mat slot dimensions:	
Length:	N/A
Width:	N/A
Max. cantilever load:	
combined (hook+ rotary + setback):	3000kips
Max. rotary load:	2000kips
Max. setback load:	950kips
Fuel consumption (avg. drilling):	N/A
Accommodation for maximum No. personnel:	140
See K.2.1.):	

A.2 STORAGE CAPACITIES

Diesel fuel:	4151bbl
Drill water:	9874bbl
Potable water:	3428bbl
Mud Processing tank (see F.2):	324bbl
Active liquid mud (see F.2):	4729bbl
Independent oil base mud storage:	
Agitated:	N/A
Independent base oil storage:	1340bbl
Independent brine storage:	1340bbl
Heavy brine accepted (e.g. bromide):	N/A
Bulk bentonite/barite (see F.3):	8828ft ³ (4x2207ft ³ each)
Bulk Cement (see F.3):	8828ft ³ (4x2207ft ³ each)
Sack storage:	5,000 sacks
Pipe rack load capacity:	
- Cantilever beam pipe rack	4876ft ²
- Main Deck pipe rack	2594ft ²

A.3 JACKUP SYSTEMS

A.3.1 Jacking Systems

NOV-BLM

Make/type:	NOV-BLM / electric driven
No. of jacking units	54 units
Maximum jacking load :	1424 kips
Maximum preload jacking capacity:	1140kips/units
Maximum Jacking speed:	1.5ft/min
Rack chocks available:	Yes
Required for field tow:	Yes
Required for ocean tow:	Yes

A.3.2 Raw Water Systems

Elevated:	
pump location (water tower or leg):	leg
Suction distance below hull(max)	170ft

Afloat:	
pump location (water tower or leg):	N/A
Suction distance below hull(max)	N/A

Salt water service pump	
Quantity	3
Make/type	S&N submersible
Capacity	41.9bbbl/min
Pressure	87psi
Horsepower	170hp

Dedicated preload pumps	
Quantity	1
Make/type	RITZ, submersible
Capacity	52.4bbbl/min
Pressure	29psi
Horsepower	67hp

A.4 OPERATIONAL CAPABILITIES

Maximum design water depth capability:	400 ft
Outfitted max/min water depth capability:	400ft
Normal minimum water depth capability:	
Draft at load line (deepest):	
Drilling depth capability (rated):	35,000 ft
Transit speed towed (historical avg):	5 knot

Leg (spud can) below hull in wet transit):	0.
Maximum leg length permitted in tow:	
Ocean tow(wet):	428ft
Ocean tow(dry)	547.8ft
Field tow:	547.8ft
Number of tugs for field tow	3, As per Marine Surveyor's Requirement
Associated minimum bollard pull per tug:	As per Marine Surveyor's Requirement
Anti-roll system:	N/A
Maximum preload reaction per leg:	23484 kips
Bearing pressure at maximum preload:	8600 lb/ft ²
Thrusters:	N/A
Quantity:	N/A
Fixed/Azimuthing:	N/A
Total horsepower per thruster:	N/A

A.5 VARIABLE LOAD CAPACITY (VL) (Exclusive of drilling loads)

Transit VL capacity:	6167kips
Drilling VL capacity:	14300kips
Survival VL capacity:	6597kips

A.6 ENVIRONMENTAL LIMITS

Working water depth: 400 ft
Drilling:
Air gap (below bottom of main hull): 40 ft
Max. wave height: 56 ft
Max. wave period: 14.5 sec
Max. wind velocity: 70Knots
Max. current velocity: 1.5 knots

Survival:
Air gap (below bottom of main hull): 40ft
Max. wave height: 44ft
Max. wave period: 14.1 sec
Max. wind velocity: 70 knots
Max. current velocity: 1.5knots

Working water depth: 350 ft
Drilling:
Air gap (below bottom of main hull): 50 ft
Max. wave height: 68 ft
Max. wave period: 14.7 sec
Max. wind velocity: 70Knots
Max. current velocity: 2 knots

Survival:
Air gap (below bottom of main hull): 50ft
Max. wave height: 57ft
Max. wave period: 15.5 sec
Max. wind velocity: 100knots
Max. current velocity: 2knots

A.7 MOORING SYSTEM

A.7.1. Anchor Winches

Quantity: 4
Make/Model: MEP
Type (electric/hydraulic/diesel): Electric
Rated pull: 300KN
Total HP per winch: 120hp
Control locations(local/remote/both) both

A.7.2 Anchor

Quantity: 4
Make/type: HHP-type anchors(Flipper Delta)
Weight: 7500kg

A.7.3 Anchors Line

Wire: steel rope
Quantity (installed + spare): 4pcs
Make/type: made in China
Diameter: 52 mm
Useful length (Nominal): 914m

A.7.4 Towing Gear

Towing butts: 2sets
Fairleads: yes inline with towing bits
Towing bridle size: 72mm Length 30m.

Hook-up system	2 1/2" tow line
Rating:	yes , one handing winch system
Spare bridle:	Yes

A.7.5 Supply Vessel Mooring System

As per the bollard type of MODU

System description:	8-Φ400 BOLLARD
Rating:	28.6 lt
Location(port/stbd/both)	Both

A.8 MARINE LOADING HOSES

Location of loading manifolds (port/stbd/both):	both
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A.8.1 Potable Water Hoses

Quantity:	2
Size:	4in
Make/type:	
Color coding:	yes
Make/type connection:	ANSON fig.200

A.8.2 Drilling Water Hose

Quantity:	2
Size:	4 in
Make/type:	
Color coding:	yes
Make/type connection:	ANSON fig.200

A.8.3 Diesel Oil Hose

Quantity:	2
Size:	4in
Make/type:	
Color coding:	Yes
Make/type connection:	ANSON fig.200

A.8.4 Bulk Barite , Gel Hose

Quantity:	2
Size:	5in
Make/type:	
Color coding:	yes
Make/type connection:	ANSON fig.200

A.8.5 Cement Hose

Quantity:	2
Size:	5in
Make/type:	
Color coding:	yes
Make/type connection:	ANSON fig.200

A.8.6 Base Oil Hose

Quantity:	2
Size:	4in
Make/type:	
Color coding:	yes
Make/type connection:	ANSON fig.200

A.8.7 Brine Hose

Quantity:	2
Size:	4in
Make/type:	
Color coding:	yes
Make/type connection:	ANSON fig.200

A.8.8 Other N/A

Use:
Quantity:
Size:
Make/type:
Color coding:
Make/type connection:

A.9 CRANES, HOISTS, AND MATERIAL HANDLING

A.9.1 Cranes, Revolving

Quantity:	3
Specification (API, etc.):	36.25m boom crane with maximum safe working load of 3x 60 metric ton at 7.5m.
Maker:	MEP
Type:	slewing bearing
Location (frwd/aft/port/stbd):	
Boom length:	120ft
Hook reach below main deck(block/whip)	Sea level
Corrected for boom angle:	Yes
Alarm (audible, visual, both):	Yes
Automatic brake:	Yes
Safety latch on hooks:	Yes
Boom illumination:	Yes

A.9.2 Forklift

Quantity:	1
Make/type:	TOYOTA 8FBN30
Rated capacity:	3 mt
Explosion proof:	No

A.9.3 Monorail Overhead Cranes

Quantity:
Make:
Type:
Rated capacity:
Location(s):

Quantity:
Make:
Type:
Rated capacity:
Location(s):

Quantity:
Make:
Type:
Rated capacity:
Location(s):

Quantity:
Make:

Type:	12+2
Rated capacity:	Jiangyin Chengjiang or equivalent
Location(s):	trolley & chain block (manual)
	12*3mt+2*8mt
Quantity:	engine generator room
Make:	
Type:	6+2
Rated capacity:	Jiangyin Chengjiang or equivalent
Location(s):	trolley & chain block (manual)
	6*8 mt+2*10mt
	mud pump room
	1
	Jiangyin Chengjiang or equivalent
	trolley & chain block (manual)
	1.5mt
	machine shop
	2 sets
	China
	trolley & wire (air driven)
	20st each
	under cantilever beams
	1
	China
	trolley & chain block (manual)
	3 st
	heavy tools storage

A.9.4 Air Hoist/Derrick Winches

A.9.4.1 Rig Floor Winches (Non Man-riding)

Quantity:
 Make:
 Type:
 Rated capacity:
 Wire diameter:
 Automatic brake:
 Overload protection:
 Automatic spooling:

A.9.4.2 Monkey Board Work Winch

Quantity:	1
Make:	Ingersoll Rand
Type:	PS2-1000R-L
Rated capacity:	1mT
Wire diameter:	Ø8mm
Automatic brake:	Yes
Overload protection:	Yes

A.9.4.3 Rig Floor “Man-Riding Winch”

Quantity:	1
Make:	Ingersoll Rand
Type:	FA150KGi
Rated capacity:	150Kg
Wire diameter:	10mm
Non-twisted wire:	Yes
Automatic brake:	Yes
Overload protection:	Yes

Automatic spooling:	No
Certified for man-riding:	Yes
A.9.4.4 Utility Winch (i.e. Deck Winch)	
Quantity:	4
Make:	Ingersoll Rand
Type:	FA5i -12MK1
Rated capacity:	5mtT
Wire diameter:	3/4 in
Automatic brake:	No
Overload protection:	No
Automatic spooling:	No
Certified for man-riding	No
Locations:	Drill Floor
A.9.4.5 BOP Hoists (See E.10.1)	
A.9.5 Transfer Baskets/Containers	
Quantity:	2
Make/type:	
A.9.5.1 Personnel Transfer Net	
Quantity:	2
Make/type:	
A.9.5.2 Food Containers	
Quantity:	2
Make/type:	Standard size refrigerator type
A.10 HELICOPTER LANDING DECK	
Location (frwd/aft/port/stbd):	Forward of bow leg and quarters
Dimensions:	72.83ft / 73.83ft
Perimeter safety net:	Yes
Deck Load capacity:	42lb/ft2
Maximum helicopter weight:	26455lbs
Designed for helicopter type:	Sikorsky S61N or S92
Tie down points:	Yes
Covered by foam fire system (see L.3.6):	Yes
A.10.1 Helicopter Refueling System	
System make/type:	Parker
Fuel storage capacity:	1500US.gal
Jettisonable:	yes
Fuel transport container, quantity:	2
Volume:	750US.gal
Covered by foam fire system (see L.3.6):	Yes
A.11 AUXILIARY EQUIPMENT	
A.11.1 Water Distillation	
Quantity:	2
Make/type:	Danfoss
Capacity (each/total):	15850 US gal/day
A.11.2 Calorifier unit (Hot Water Heater)	
Quantity:	3
Make:	JOWA
Capacity (total system):	450L/each, electric heating:54kw/each
A.11.3 Air Conditioning	
Make/type:	Shanghai Cadar/Carrier/30HXC285

Capacity (total system): 876KW/each set x 2sets
Max. temperature rating: -20°C--+45°C

A.11.4 Electric Welding Sets

Quantity: 2
Current capacity: 400 Amp-AC
Make/model: Miller/XMT 304
Type (fixed/portable): Portable

A.11.5 High Pressure Cleaner

N/A

Quantity:
Make/type:
Electric/pneumatic/diesel:
Max delivered pressure:

SECTION B - GENERAL RIG SPECIFICATIONS

B.1 DERRICK AND SUBSTRUCTURE

B.1.1 Derrick/Mast

Make/type:	Aker MH
Rated for wind speed	
Operating	32knots
With full set back:	70 Knots
With No set back:	100 Knots
Transportation	32knots
Height:	170ft clear height
Dimensions of base:	40ft x 40ft
Dimensions of crown:	18 ft x 18 ft
Static hook load:	2000kips
Gross nominal capacity	2000kips
Maximum number of lines:	14
Ladders with safety cages and rests:	Yes
Platform for crown sheave access:	Yes
Counter balance system for rig tongs and pipe spinning tong:	Yes
Lightning explosion proof:	Yes
Lightning protection system :	No

B.1.2 Racking Platform

B.1.2.1 Drill Pipe Finger Board

Make/type:	Aker MH
Total current simultaneous capacity - drill pipe:	
5-1/2" DP&5"-1/2 HWDP	361stands
6-5/8"DP:DP(25.5ppf)	
3- 1/2" DP:	90 stands

B.1.3 Automated Pipe Handling

Make/type	Aker MH
B.1.3.1 Eagle Light	
Make/Type:	Aker MH
Tubular length	4,5 - 14,3m
Max reach	5600 mm from guide rail
SWL	3.2mT HTV, 6.4mT Vertical above mouse holes
Pipe range	3 1/2" through 20" (Three grip head sizes included)
Tubular Length	4.5 - 14.6 m (15 - 48 ft)
Travelling height	20.7m (Top of grip head)
Travelling speed	0.5m/s

B.1.3.2 Catwalk Machine

Make/Type:	Aker MH
Max load	20mT
Tubulars	2.7/8" - 30"
Tubular length	Minimum 6', maximum 50'

B.1.3.3 Lower Guiding Arm

Make/Type:	Aker MH
Description:	The Lower Guiding Arm(LGA) is a part of the pipe racking system. LGA is designed to guide tubular between the Fingerboard and Well-centre/Mouse hole. It can also be used to guide drill collar and wire. Range is 3 1/2" - 9

3/4" OD

B.1.3. 4 Pipe deck Pipe handler (PDPH)

Make/Type:
Description:

Aker MH
The Pipe Deck Pipe Handler (PDPH) is located at pipe deck and its main purpose is to transport tubulars from pipe deck to the catwalk machine. The PDPH is equipped with its own HPU. Hydraulic hoses and electrical cables are drawn to the PDPH through the pedestal. Jib cylinders and gears are automatically operated through the control system.

B.1.4 Service and Access Basket

Make/type:
SWL
Telescopic stroke
Operating radius
Tilt angle
Safety Devices

Aker MH/ MKII, 4.6m - ONE MAN BASKET
300KG
4.6m
60° (in vertical)
plus or minus 90° (in plane)
Rescue line in basket/Emergency stop

B.1.5 Substructure

Make/type:
Drill floor height (above main deck):
Length:
Width:
Setback capacity
Simultaneous setback-hook load capacity:
Clear height below rotary table beams (to main deck):

CIMC-Raffles/NA
16.155m
23.89m
15.38m
431mt
1338MT maximum
14.097m

B.1.6 Weather Proofing

Rig floor windbreaks:
Derrickman windbreaks:
Around solid process pits:

Yes
Yes
No

B.1.7 Derrick TV Camera System

Camera
Camera located at:
Make/type:
Zoom/Pan/Tilt-function:
Monitor located at:

8 pcs
Finger Board Level Derrick
Aker MH
Yes
Driller Station , Toolpusher's office, communal drilling office, etc

B.2 DRAWWORKS AND ASSOCIATED EQUIPMENT

B.2.1 Drawworks

Make/type:
Motors make/type:
Quantity:
Rated input power:
Drum size (diameter x length):
Drum type (grooved/smooth):
Grooved For drill line size:
Brake type (disk/drum):
Maximum line pull 14 lines:
Makeup cathead type:

Aker Wirth GH 4500EG-AC
1150HP GE B22 A2 AC Drilling Motors
3
3x858Kw
1259mmx2616mm
LeBus grooved drum
2"
Disc
2000kips
140KN

Breakout cathead type:	140KN
Crown block safety devices:	Yes
Independent Sea water cooling system for drawworks:	Yes
Automatic driller:	Yes

B.2.2 Auxiliary Brake

Make:	Aker MH
Model:	WN 72 Eddy Current Brake

B.2.3 Sandline

Make:	N/A
Length capacity:	N/A
Line size/type:	N/A

B.2.4 Wireline

Make/model:	MH Wirth (Milernium)
Wire length (Nominal):	35,000 Ft
Wire size:	0.92 Inch

B.3 DERRICK HOISTING EQUIPMENT

B.3.1 Crown Block

Make/type:	Aker MH
Rated capacity:	1000st
No. of sheaves:	6+2+1
Sheave diameter:	Cluster sheaves :6x72", Dead line sheaves:1x72" Fast line sheaves: 2x72"
Sheave grooved for line size:	2 inch

B.3.2 Traveling Block

Make/type:	Aker MH/1000shT
Rated capacity:	1000st
No. of sheaves:	7
Sheave diameter:	72 inch
Sheave grooved for line size:	2 inch

B.3.3 Hook (inapplicable)

Make/type:	N/A
Rated capacity:	N/A
Complete with spring assembly/hook locking device:	N/A

B.3.4 Swivel (inapplicable) N/A

B.3.5 Drilling Line

Diameter:	2 inch
Make/Type	6X31 Grade EIPS
Length (original):	7500 ft
Drilling line reel:	Yes
Drum cover:	No
Drilling line drum power driven:	Yes
Spare drilling line:	N/A

Location (rig, shore, etc.): N/A
Roller guides: N/A

B.3.6 Dead Line Anchor

Make/type: MH 1496011
Weight sensor: Yes
Deadline dampener: N/A
Capacity: 200,000lbs

B.3.7 Block Guidance System (System included in Top Drive Dolly)

Make/type: Aker MH/ H-hydraulic driven

B.4 ROTATING SYSTEM

B.4.1 Rotating Table

Make/type: Aker MH/ H-hydraulic driven
Maximum opening: 49-1/2 inch
Rated Capacity: 1000 short ton
Two speed gearbox: No
Emergency chain drive: No
Driven by an independent electric motor: No
Electric motor make/type: Hydraulic type
Output power:
Maximum continuous torque: 34000ft/lbs
Drip pan/mud collection system: Yes

B.4.2 Master Bushings

Make/type: hinged type
Insert bowls (see G.1.8): No.1 13.3/8" and 11.3/4"
No.1 10.3/4" and 9.5/8"
No.3 8-5/8" and 2-3/8"

B.4.3 Kelly Bushing (inapplicable)

Make/type: N/A
Lock down assembly: N/A

B.4.4 Top Drive

Make/Type (electric/hydraulic): Aker MH
DDM1000-AC-2M AC Electric, 2 motors
Rated capacity: 1000 Short tons
Test/working pressure: (psi/psi) 11,250 / 7,500
Input power: 2x 857kW, 690VAC
Maximum rotary speed: 220
Remote operated Kelly cock: yes
Cooling system type : Air , Local Blowers
Upper inside BOP (see also D.1.15)
Quantity: 1
Make/type: Aker MH (AIR)
Working pressure: 15,000 psi CWP
Max. OD body: 7 3/4"
Max. ID body: 3-1/16"
Connection type (box): 6-5/8" REG, Box
Connection type (pin): 6-5/8" REG, Pin

B.4.4.1 Top Drive Makeup/Breakout System

Make/type:	Aker MH
Torque boost torque:	
Make-up:	77800ft-lbs
Break out:	77800ft-lbs
Raised backup system	N/A

SECTION C - POWER SUPPLY SYSTEMS

C.1 RIG POWER PLANT

C.1.1 Diesel Engines

Quantity: 6
Make/type: Caterpillar/3516 C HD
Maximum continuous power: 1603 ekw
At rotation speed of: 1200rpm
Equipped with spark arrestors: Yes
Mufflers installed: Yes

C.1.2 DC Generator (inapplicable)

N/A

Quantity: Inapplicable
Make/type: Inapplicable
Continuous power: Inapplicable
At rotation speed of: Inapplicable
Output volts: Inapplicable

C.1.3 AC Generator

Quantity: 6
Make/type: Caterpillar SR4B
Continuous power: 1530KW
At rotation speed of: 1200rpm
Output volts: 690V/60HZ

C.1. 4. VFD System

Number of converter: 1
Make/type: ABB
Maximum continuous power (total): 2*5980kva
Output volts: 0-660V
The equipment inside the electric VFD house
2 sets checking and Measuring 690V and 480V Network for Grounding
1 set power Feed Unit for the Interconnection of two Electric Control Houses
4 sets rectifier unit
Variable Frequency Control Cabinet for Mud Pump(vendor to advise the sets)
Variable Frequency Control Cabinet for Drawworks(vendor to advise the sets)
Variable Frequency Control Cabinet for top drive
2 sets motor Dynamic Braking System.It includes brake units and braking resistance .
1 set combination Control Cabinet PLC programmable control system and related electrical components are installed in the Synthesize cabinet. (vendor standard)
1 set switch cabinet for 690V power
2 sets 480V 60Hz MCC cabinet
2 sets 480V 60Hz ventilation MCC cabinet
1 sets 220V 60Hz main switchboard
lighting panel /emergency lighting panel/
power distribution panel/emergency power distribution panel for the rig according to the detail design

C.1.5 Transformer System

Quantity: 2
Make/type:

Continuous power (each):	4000/5000(AN/AF)
Output volts:	600V/710V/710V
Frequency:	60Hz
Quantity:	2
Make/type:	Made in China
Continuous power (each):	2000(AN)
Output volts:	690V/480V
Frequency:	60Hz
Quantity:	2
Make/type:	Made in China
Continuous power (each):	225kva
Output volts:	230V
Frequency:	60Hz
Quantity:	1
Make/type:	Made in China
Continuous power (each):	125kva
Output volts:	230V
Frequency:	60Hz

C.1.6 Emergency Shutdown

Emergency shutdown pushbuttons for the ventilation system, fuel oil and lubricating oil system, AC generation system , located at the following points:

Driller's Cabin, Tool Pusher's Office, Main Deck Port/Stbd, Radio Room, Motorman's Office, Helideck, Near the Lifeboats

C.1.7 Compressed Air Systems

Air Compressors - Cold Start:

Quantity:	1
Make:	Ingersoll Rand
Model:	
Rated capacity:	18ft ³ /min
Working pressure:	125psi
Prime mover (electric/diesel):	Diesel

Air Compressors - Medium Pressure (rig air):

Quantity:	3
Make:	
Model:	
Rated capacity:	540ft ³ /min
Working pressure:	125psi
Prime mover (electric/diesel):	Electric
Continuous power:	120hp

Air dryers:

Quantity:	2
Make:	Ingersoll Rand.
Type	TMC-RM1200
Rated Capacity:	1800ft ³ /min

Air Compressors - Low Pressure (bulk air):

Quantity:	N/A
Make:	
Model:	
Rated capacity:	
Working pressure:	
Prime mover (electric/diesel):	

Continuous power:

Air dryers: N/A
Quantity:
Make:
Model:
Rated Capacity:

C.1.8 Air Receivers

Quantity: 2
Volume (total): 120ft3
Design Pressure: 125psi
Location: air compressor room

Quantity: 1
Volume (total): 110ft3
Design Pressure: 125psi
Location: Cantiever

Quantity: 1
Volume (total): 35t3
Design Pressure: 125psi
Location: eng/gen room

Quantity: 1
Volume (total): 70ft3
Design Pressure: 125psi
Location: emergency generator room

C.2 EMERGENCY GENERATOR

C.2.1 Engine

Quantity: 1
Make/type: Caterpillar/CAT C32
Maximum output: 1333hp
At rotation speed: 1800rpm
Automatic starting: Yes
Starting methods (air, hydraulic, battery): Battery + Air
Max. angle of operation: As per ABS rule specified

C.2.2 AC – Generator

Quantity: 1
Make/type: LEROY SOMER / SR5
Maximum output: 909.6kw
At rotation speed: 1800rpm
Output: 480V
Capable of back-feeding power to main bus: yes

SECTION D- DRILLSTRING EQUIPMENT	N/A
D.1 TUBULARS	N/A
D.1.1 Kellies	N/A
D.1.2 Kelly Saver Subs/TDS saver Sub	N/A
D.1.3 Drill pipe	N/A
D.1.4 Drill pipe Pup Joints	N/A
D.1.5 Drill pipe Casing Protectors	N/A
D.1.6 Hevi-Wate Drill Pipe	N/A
D.1.7 Drill Collars	N/A
D.1.8 Short Drill Collars	N/A
D.1.9 Non-Magnetic Drill Collars	N/A
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 Jars	N/A
D.1.15 Inside BOP Valve	N/A
D.1.16 Fast Shut-Off Coupling	N/A
D.1.17 Circulation Head	N/A
D.1.18 Kelly Cocks	N/A
D.1.19 Circulation Subs	N/A
D.1.20 Cup Type Testers	N/A
D.1.21 Plug Type Testers	N/A
D.1.22 Drop-In Valve	N/A
D.1.23 Near-Bit Subs(Box-Box)	N/A
D.1.24 Crossover Subs	
Quantity:	1
OD size(in/in) Max/Min:	7-5/8"
ID size(inch):	3.82"
Top connection size:	4-1/2"
Type(pin/box):	BOX
Bottom connection size:	7-5/8"
Type(pin/box):	BOX
D.1.25 Drilling Bumper Subs	N/A
D.1.26 Hole Openers	N/A

D.1.27 Under Reamer	N/A
D.2 HANDLING TOOLS	N/A
D.2.1 Drill Pipe Elevators	N/A
Quantity:	1
Maker/type:	B&V
Size(in):	3 1/2"
Model:	VES-SD-750
Rated capacity:	750mt
D.2.2 Drill Collar Elevators	N/A
D.2.3 Tubing Elevators	N/A
D.2.4 Drill Pipe Hand Slips	N/A
D.2.5 Semi-Automatic DP Slips	N/A
D.2.6 Drill Collar Slips	N/A
D.2.7 Drill Collar Safety Clamps	N/A
D.2.8 Tubing Slips	N/A
D.2.9 Tubing Spider	N/A
D.2.10 Drill Collar Lifting Subs	N/A
D.2.11 DC Lifting Plugs	N/A
D.2.12 Bit Breakers	N/A
D.2.13 Elevator Links	
Quantity of sets:	1SET
Maker/type:	
Size(in):	4 3/4"
Length(in):	108"
Rated capacity:	750Ton
D.2.14 Kelly Spinner	N/A
D.2.15 Drill Pipe Spinner	N/A
D.2.16 Mud Saver Bucket	
Maker:	Aker MH
Size(in):	2 7/8"-6 5/8"
D.2.17 Hydraulic Makeup/Breakout(EZ Torque)	N/A
D.2.18 Rotary Rig Tongs	N/A
D.2.19 Tubing Tongs(manual)	N/A
D.2.20 Tubing Tongs(power)	N/A
D.2.21 Iron Roughneck	
Quantity:	1
Maker/type:	Aker MH
Range Size(max OD/min OD):	3 1/2"-9 3/4"

Max. makeup Torque (ft-lbs):	190kNm
Max. breakout Torque (ft-lbs):	1190kNm
D.2.22 Drill Pipe Drift	N/A
D.3 FISHING EQUIPMENT	N/A
D.3.1 Over shots	N/A
D.3.2 Hydraulic Fishing Jar	N/A
D.3.3 Jar intensifier	N/A
D.3.4 Surface Jar	N/A
D.3.5 Fishing Bumper Subs	N/A
D.3.6 Safety Joints	N/A
D.3.7 Junk Baskets(Reverse Circulation)	N/A
D.3.8 Junk Subs	N/A
D.3.9 Flat Bottom Junk Mill	N/A
D.3.10 Magnet Fishing Tools	N/A
D.3.11 Taper Taps	N/A
D.3.12 Die Collars	N/A
D.3.13 ITCO Type Junk Basket	N/A
D.3.14 Economill	N/A
D.3.15 Ditch Magnet	N/A

SECTION E - WELL CONTROL/SUBSEA EQUIPMENT

E.1 DIVERTER

Fixed:	Yes
Make/type:	GE VG/ KFDJ 500
Maximum bore:	49 1/2"
ID of insert packer:	28" 36" '
Working pressure:	500PSI
Bottom connection:	32" EC-6 Pin with thread protector
Number of diverter outlets:	6 pcs

E.1.1 Diverter Flow Lines

Quantity:	6
Nominal size of flow lines:	2X14", 1X16", 3X4"
Running from diverter to:	Flow line / Port & Starboard overboard / fill line / test line / annulus line / trip tank line,
Valve make/type:	ALTON
Quantity:	6ea hydraulic
Size:	14"(1600psi) ,16" ,4" (1305psi)
Working pressure:	
Valve operator (air hydraulic):	
Valve make/type:	

E.1.2 Diverter Control Panel

Combined with the BOP control panel

Primary make/type:	Cameron
Location:	Rig floor
Remote make/type:	Cameron
Location:	DCR
Remote make/type:	Cameron
Location:	Toolpusher's room

E.2 LOW PRESSURE BLOWOUT

N/A

E.2.1 Ram Type Preventers

N/A

E.2.2 Available Rams (Installed & Spare)

N/A

E.2.3 BOP Ram Configuration (Normal)

N/A"

E.2.4 Annular Preventer

N/A

E.2.5 Kill Line Valves

N/A

E.2.6 Choke Line Valves

N/A

E.3 HIGH PRESSURE BLOWOUT PREVENTERS

All appropriate components H₂S rated

Yes

E.3.1 Ram Type Preventers

Quantity:	1
Make/model:	CAMERON / U-TYPE
Type (single/double/triple):	Double
Size:	18-3/4 inch
Working pressure:	15,000 psi
Ram locks:	Yes
Type (manual/hydraulic):	manual
H ₂ S service:	Yes

Side Outlets:	Yes
Size:	3-1/16"
WP:	15,000 psi
Bottom connection:	Flange 15000PSI , Bx164
Top connection:	Flange 15000PSI , Bx164
Shear ram boosters:	YES

Quantity:	1
Make/model:	CAMERON / U-TYPE
Type (single/double/triple):	Double
Size:	18-3/4 inch
Working pressure:	15,000 psi
Ram locks:	Yes
Type (manual/hydraulic):	manual
H2S service:	Yes
Side outlets:	4
Size:	3-1/16"
VBR	yes
WP:	15,000 psi
Bottom connection:	18-3/4"
Top connection:	18-3/4"

E.3.2 Available Rams (Installed & Spare)

2 sets / seal Rams
 1 set / Shear Ram / 5 1/2"
 1 set /VBR Rams/ 3 1/2" to 7 5/8"

E.3.3 BOP Ram Configuration (Normal)

Upper:	SEAL
Upper Middle:	Shear Blind Shear
Middle	
Middle Lower	VBR
Lower:	SEAL

E.3.4 Annular Preventer

Quantity:	1
Make/type:	CAMERON
Size:	18-3/4 inch
Working pressure:	10,000psi
Bottom connection:	flanged 15000psi
Top connection:	Studded 10000psi

E.3.5 Kill Line Valves

Quantity:	1 ea manual & 1 ea hydraulic operated gate
Make/type:	Cameron
Size:	3-1/16"
Working pressure:	15000PSI
Gasket type	BX-154
Hydraulic/manual/non-return	Hydraulic

E.3.6 Choke Line Valves

Quantity:	1 ea manual & 1 ea hydraulic operated gate
valve	
Make/type:	Cameron
Size:	3-1/16"
Working pressure:	15000PSI
Gasket type:	BX-154

Hydraulic/manual:	Yes
E.4.0 OTHER BLOWOUT PREVENTERS	N/A
E.4.1 Ram Type Preventers	N/A
E.4.2 Available Rams (installed & spare)	N/A
E.4.3 BOP Ram Configuration (normal)	N/A
E.4.4 Annular Preventer	N/A
E.4.5 Kill Line Valves	N/A
E.4.6 Choke Line Valves	N/A
E.5 BOP CONTROL SYSTEM	N/A
E.5.1 Accumulator Unit	N/A
Make/model:	Cameron
Location:	In Cantilever
Fluid reservoir capacity:	1200 U.S gal
Oil/water mix. rate:	N/A
Glycol reservoir capacity:	N/A
Total accumulator capacity/w/o precharge):	64x15 U.S gal
System working pressure:	3,000psi
E.5.2 Accumulator Hydraulic Pumps	
Electric Driven	
Quantity:	2
Make/model:	Cameron
Each driven by motor of power:	75 HP
Flow rate of each pump:	30GMP
At operating pressure:	3,000 psi
Operable off emergency generator:	Yes
Air Driven:	
Quantity:	4
Make/model:	Cameron
At operating pressure:	3000psi
E.5.3 Primary Control Panel	
Control panel make/model:	Cameron
Location:	In cantilever
Panel controls for the following functions:	
All annular BOPs:	Yes
All ram BOPs:	Yes
Lock for ram BOPs:	No
Diverter System:	Yes
Kill and choke line valves:	Yes
Low accumulator pressure warning:	Yes
Low reservoir level warning:	Yes
Low rig air pressure warning:	Yes
System pressure regulator:	No
Pressure regulator for annular:	Yes
Flowmeter:	Yes/
Quantity of pressure gauges:	3 ea
Other control functions:	Yes
E.5.4 Remote Control Panels	

Make/model:	Cameron/PLC push button type
Location:	Drill's Control Panel
Location:	Tool pusher's Office
Ability to operate main closing unit valves directly:	Yes
System routing (direct or through panel):	through panels
Remote control of - system pressure regulator:	Yes
Remote control of - annular pressure regulator:	Yes

E.6 CHOKE MANIFOLD

All appropriate components H ₂ S rated	Yes
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E.6.1 Choke Manifold
(For instrumentation, see H.3)

Nominal size:	3-1/16"
Minimum ID:	3-1/16"
Maximum WP:	15,000psi

Quantity of fixed chokes:	2
Make/model:	Aker/manual
Size (ID):	3-1/16" / 15000psi

Quantity of adjustable chokes	2
Make/model:	Aker/manual
Size (ID):	3-1/16" / 15000psi

Power choke remote control panel:	Yes
Make/model:	double choke&kill console
Location:	DCR
Glycol injection:	Yes

E.7 FLEXIBLE CHOKE & KILL LINES
(BOP to MANIFOLD)

Quantity:	4
Make/type:	Technip
ID:	3
Working pressure:	15000PSI
H ₂ S service:	YES

E.8 FLEXIBLE BOP CONTROL HOSES

Quantity:	14 ea
Make:	GATE
ID:	1" With stainless steel cover
Working pressure:	3,000psi
Fire resistant:	Yes

E.9 BOP TESTING EQUIPMENT

E.9.1 Hydraulic BOP Test Pump

Make/model:	CAMERON
Type:	pneumatic piston pump
Pressure rating:	22500psi
Chart recorder:	Yes

E.9.2 BOP Test Stump

Size:	18-3/4"
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E.10 BOP HANDLING

E.10.1 BOP Hoist System

Make/type:	TSC/ 2x BOXER chain hoists BCH75-A
Quantity of hoists:	2
Number of lift points on BOP:	2 on lifting ring,
System safe working load (max BOP wt)	75 MT each

E.10.2 Work Platforms

Make	CIMC
BOP work platform (adjustable/fixed/None)	adjustable
Conductor pipe platform:	Yes

E.10.3 Conductor Pipe Tensioning System

N/A

Make/type:	TSC/Split
Tensioning capacity	600kips
Number of lift points:	8
Stroke:	610mm(24")

E11 Double Studded Adaptor

N/A

E.12 Drilling Spool

N/A

E.13 Spacer Spool

N/A

F. SECTION F - MUD SYSTEM/BULK SYSTEM

F.1 HIGH PRESSURE MUD SYSTEM

System working pressure: 7,500 psi
System test pressure: 10,000psi

F.1.1 Mud Pumps

Quantity: 3
Make: Aker Wirth
Model: TPK 7-1/2"x14 / 2200 CL-AC-RB
Type (triplex/duplex): Triplex
Mud pump drive motors/pump: 3
Motor type: YJ motor
Continuous Power rating per motor: 2200hp
Fluid end type L-type
Maximum working pressure 7500psi(with plunger and packing)
Pump stroke counter type: Electric , Proximity Switchch
Discharge/suction line ID: 4-1/16" &10"
Mud pump pulsation dampener type:
Reset Relief Valve:
Working flowrate per pump at 90% of max spm:
Liner size: 6-1/2"
Pump speed (90% of max)
Pump pressure
Working flowrate

F.1.2 Transfer Pump/Mixing Pumps

Mixing Pumps

Quantity: 2
Make/model: MH Wirth
Type/size: HCP8x6x14
Output capacity: 220m³/h
Drive motor type: electric
Power output: 150hp

Charging Pumps

Quantity: 1
Make/model: MH Wirth
Type/size: HCP8x6x14
Output capacity: 227m³/h
Drive motor type: electric
Power output: 125hp

Transfer pump base oil transfer

Quantity: 2
Make/model: MH Wirth(Bornemann pumps)
Type/size: Two-spindle screw pump
Output capacity: 94.3m³/h
Drive motor type: electric
Power output: 35hp

F.1.3 Booster Pump

Quantity:
Make/model:
Output capacity:
Drive motor type:
Power output:

N/A

F.1.4 Standpipe Manifold

Quantity of standpipes:	1 ea
Standpipe/ID:	5-1/8"
H-Type Standpipe manifold:	Yes
Kill line outlet:	Yes
Fill-up line outlet:	Yes
Bleed-off line outlet:	Yes
Pressure rating	7500psi

F.1.5 Rotary Hoses

Quantity:	2 ea
Make/type:	contitech
ID x length:	4" x93m
Working pressure:	7,500psi
Snubbing lines	Yes

Quantity:	2 for deck to cantilever
Make/type:	
ID x length:	5"
Working pressure:	7,500psi
Snubbing lines	Yes

Quantity:	2 for deck to cantilever
Make/type:	
ID x length:	5"
Working pressure:	7,500psi
Snubbing lines	Yes

F.1.6 Cementing Hose

Quantity:	1 ea
Type (armor sheath/flexible steel pipe):	Contitech
Length:	57ft
ID:	3"
Working pressure:	15000psi
Connection type	Fig 4"2202union
Quantity	N/A
Type(armor sheath/flexible steel pipe)	
Length	
ID	
Working pressure	

F.1.7 High Pressure Flexible Steel Pipe **N/A**

F.2 LOW PRESSURE MUD SYSTEM

F.2.1 Mud Processing Tank

Sand trap tank,usable volume:	N/A
Degasser tank,usable volume	59bbl
Desander tank,usable volume	88bbl
Desilter tank , usable volume	87bbl
Mud cleaner tank, usable volume	90bbl
Centrifuge tank ,usable volume	No
Other tank , usable volume	No
Total usable capacity	324bbl

F.2.2 Mud Tanks

Quantity:	8
Total capacity (usable):	4877bbl
Actual capacity No. 1:	575bbl
Type (active/reserve):	

Height	12.5ft
Mud agitator:	yes 1
Mud guns:	yes 2
Usable capacity No. 2:	535bbl
Type (active/reserve):	
Height	12.5ft
Mud agitator	yes 1
Mud guns	yes 2
Height (usable):	2.75m
Mixer:	1
Mud guns:	2
Usable capacity No. 3:	610bbl
Type (active/reserve):	
Height	12.5ft
Mud agitator	yes 1
Mud guns	yes 2
Height (usable):	2.75m
Mixer:	1
Mud guns:	2
Usable capacity No. 4:	610bbl
Type (active/reserve):	
Height	12.5ft
Mud agitator	yes 1
Mud guns	yes 2
Height (usable):	2.75m
Mixer:	1
Mud guns:	2
Usable capacity No. 5:	610bbl
Type (active/reserve):	
Height	12.5ft
Mud agitator	yes 1
Mud guns	yes 2
Height (usable):	2.75m
Mixer:	1
Mud guns:	2
Usable capacity No. 6:	610bbl
Type (active/reserve):	
Height	12.5ft
Mud agitator	yes 1
Mud guns	yes 2
Height (usable):	2.75m
Mixer:	1
Mud guns:	2
Usable capacity No. 7:	610bbl
Type (active/reserve):	
Height	12.5ft
Mud agitator	yes 1
Mud guns	yes 2
Height (usable):	2.75m
Mixer:	1
Mud guns:	2
Usable capacity No. 8:	610bbl
Type (active/reserve):	
Height	12.5ft
Mud agitator	yes 1
Mud guns	yes 2
Height (usable):	2.75m
Mixer:	1
Mud guns:	2

F.2.3 Pill/Slug Tank

Capacity (usable):	75bbl
Mud agitator:	1
Mud guns:	1
Capacity (usable):	75bbl
Mud agitator:	1
Mud guns:	1
F.2.4 Trip/Stripping Tanks	
Capacity(usable)	63bbl
Capacity/foot	
Level indicator	yes
Electric pump make	Aker MH
Mode/type	horizontal centrifugal pump 8x6x14
Rated capacity	40hp
Facility for casing fill-up	
Alarm and strip chart record	
Capacity(usable)	5
Capacity/foot	
Level indicator	
Electric pump make	
F.2.5 Chemical Mixing Tank	
N/A	
Capacity (Usable):	
Chemical mixer type:	
F.2.6 Shale Shakers:	
Primary:	
Quantity:	4
Make:	derrick/FLC-513 VE
Type:	Linear Motion
Output Force	
Gross Screen Area	
Scalping Deck	
Primary Deck	
F.2.7 Desander	
Quantity	1
Make/Model	Aker MH
Type	Horizontal Centrifugal pump,8x6x14
F.2.8 Desilter	
Quantity	1
Make/model	Aker MH
Type	Horizontal Centrifugal pump,8x6x14
F.2.9 Mud Cleaner	
Quantity	1
Make /model	derrick/FLC 513VE 3-20
F.2.10 Mud/Gas Separator (Poor Boy)	
Make/Type	Aker MH
Dimensions(height x OD)	17.7ft x 47"
Gas discharge line ID	12"
Gas discharge location , primary	above drill floor wind wall roof
Can discharge be tied into burner system	no
Vacuum breaker	no
Mud seal height	19.7ft
Pressured gauge	yes
Calculated gas throughput	

F.2.11 Degasser:

Quantity:	2
Make/type:	ACD-1500
Nominal flow rate:	
Drive motor hp:	
Capacity	1500GPM
Drive motor hp	25hp

F.2.12 Mud Agitators

Quantity:	8
Make/model:	HA-18.5
Driven by motor of power:	7.5HP

Quantity:	2
Make/model:	HA-4
Driven by motor of power:	4.0HP

F.2.13 Mud Centrifuge

N/A

Quantity:	N/A
Make/model:	N/A
Speed Centrifuge;	
Feed pump for medium speed centrifuge make/model:	N/A
Type/size:	N/A
Drive motor:	N/A
Is feed pump dedicated to centrifuge(s)	N/A
Quantity:	N/A
Make/model:	N/A
Speed Centrifuge.	
Feed pump for high speed centrifuge make/model:	N/A
Type/size:	N/A
Capacity:	N/A
Drive motor:	N/A
Is feed pump dedicated to centrifuge(s)	N/A

F.2.14 Mud Laboratory and Facilities

Separate room:	YES
Equipped with:	
Mud balance:	YES
Marsh funnel:	YES
Filtration Kit:	YES
Sand content kit:	YES
Air conditioning:	YES
Positive pressure:	No

F.3 BULK SYSTEM

F.3.1 Barite/Bentonite Silos

Quantity:	4
Capacity of each silo:	64 m3
Locations:	
Type weight loadcell:	YES
Manufacturer:	
Pressure rating:	
Relief valve(s) installed:	Yes

F.3.2. Cement Silos

Quantity:	4
Capacity:	64 m3

Locations:	
Type weight loadcell:	Yes
Manufacturer:	
Pressure rating:	
Relief valve(s) installed:	Yes

F.3.3 Surge Tank for Barite/Bentonite

Quantity:	2
Capacity of each tank:	2.8m ³
Type weight loadcell:	N/A
Manufacturer:	
Pressure rating:	
Relief valve(s) installed:	Yes

F.3.4 Mud Hopper

Quantity:	3
Make:	Proven
Feed pump make/model:	
Type/size:	6*6*4
Capacity:	200m ³ /h

F.3.5 Surge Tank for Cement **N/A**

Quantity:	
Capacity of each tank:	
Type weight loadcell:	
Manufacturer:	
Pressure rating:	

F.3.6 Bulk Transfer System

Independent air system for the silos and surge tanks consisting of a high-volume low-pressure compressor and air drier:	No
Separate volume tank and drive	Yes
Air reduced from main air supply through pressure regulators:	Yes

G.1	CASING EQUIPMENT	N/A
G.1.1	Drive Hammer	N/A
	Make/type: Maximum casing/conductor OD:	
G.1.2	API Casing Drifts	N/A
	For Casing OD, Weight, Quantity(in/lbs/ft/No): For Casing OD, Weight, Quantity(in/lbs/ft/No): For Casing OD, Weight, Quantity(in/lbs/ft/No):	
G.1.3	Clamp-On Type Casing Protector	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: For OD Casing(in): Maker/Type: Capacity:	
G.1.5	Single Joint Elevators	N/A
	Quantity: For OD Casing(in): Maker/Type:	
G.1.6	Slip Type Elevator/Spiders	N/A
	Quantity: Maker/Type: Pneumatic/Manual: Capacity: Slips for OD Casing sizes(in): Maker/Type:	
G.1.7	Casing Slips	
	Quantity: Maker/Type: For OD Casing(in):	1 PS750-2 3-1/2"
	Quantity: Maker/Type: For OD Casing(in):	1 PS750-2 5-1/2"
G.1.8	Casing Bowls	N/A
	See B.4.2 Quantity: Maker/Type: For OD Casing(max/min):	
G.1.9	Manual Casing Tongs	N/A
	Quantity(sets): Maker/Type:	

W/jaws for OD Casing(max/min):

G.1.10 Power Casing Tongs **N/A**

Quantity:
Make/type:
W/jaws for OD casing (max/min):
Max output torque:
Torque indicator:
Back-up arm:

G.1.11 Power Unit For Casing & Tubing Tongs **N/A**

Quantity:
Make/type:
Capacity (ea):
Output pressure:
Dedicated unit:

G.1.12 Casing Circulating head(Swedge) **N/A**

For OD casing(psi):
Type of connection:

For OD casing(psi):
Type of connection:

G.1.13 Casing Spears (Internal) **N/A**

Quantity:
Make/type:
For OD casing:
For casing weight:
Pack-off:

G.1.14 Casing Cutters (Internal) **N/A**

Quantity:
Make/type:
For OD casing (max/min):

G.1.15 Crossover to handle Casing with Drill Pipe **N/A**

Quantity:
For OD casing (in):
Casing connection type:
Drill pipe connection type:
Rated capacity:

G.1.16 Casing Scrapers **N/A**

Quantity:
Maker:
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 Cementing Unit **N/A**

Free placement basis(Y/N):

Maker/type:
 No. of triplex pumps:
 Max. working pressure(psi):
 Max. flow rate total(bbl/min):
 Unit powered by electric or diesel:
 Recirculating mixing system(Y/N):
 Capacity(bbl):
 Motor power(hp):
 Liquid additive system(Y/N):
 Premix/batch tank(U.S. gals/min):
 Quantity:
 Total capacity(bbl):
 Pressure recorder(Y/N):
 Desionmeter recording device(Y/N):

G.2.2 Cementing Manifold

Discharge manifold working pressure:	15,000psi
Cement pump discharge lines min. ID:	3-1/16"
Cement pump disc. lines work. pressure:	15,000psi
Manifold safety pressure relief valve:	No
Cementing Manifold connected to chock manifold	No
Cementing Manifold connected to Standpipe manifold	Yes
Location	Rig Drill floor

G.2.3 Cementing Standpipe

Quantity:	1
Working pressure:	15,000psi
ID:	3
Connection to choke manifold:	No
Connection to standpipe manifold:	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:
 Length (total):
 X-overs to drill pipe specified in section D.1.3:

SECTION H - INSTRUMENT/COMMUNICATION

H.1 DRILLING INSTRUMENTATION AT DRILLER'S POSITION

H.1.1 Weight Indicator

Sensor type: E551 Compression

H.1.2 Standpipe Pressure Gauges

Quantity: 2
Make/type:
Maximum pressure reading: 10,000psi

H.1.3 Choke Manifold Pressure Gauges

Quantity: 2
Make/type:
Maximum pressure reading: 15000psi

H.1.4 Rotary Instrumentation

H.1.4.1 Tachometer

Make/type: Truck / PROXY SWITCH
Maximum RPM: 15

H.1.4.2 Torque Indicator

Make/type: HYDAC/PRESSURE TRANSDUCER
Maximum torque: 100N.m

H.1.5 Top Drive Instrumentation

H.1.5.1 Tachometer

Maximum RPM: 270rpm

H.1.5.2 Torque Indicator

Maximum torque: 63,000 ft-lb Continuous
96,000 ft-lb Intermittent

H.1.6 Pump Stroke Counters

Quantity: 3
Stroke indicator and cumulative
stroke counter for each pump: Yes

H.1.7 Tong Torque Indicator

Maximum torque: 14000lbs-ft

H.1.8	Pit Volume Totalizer	N/A
	Make/model:	
	Float in active mud pits:	
	Quantity per tank:	
	Floats in reserve mud pits:	
	Quantity per tank:	
	Floats in mud Storage pits:	
	Quantity per tank:	
	Floats in mud Brine pits:	
	Quantity per tank:	
	Floats in mud Slug pits:	
	Quantity per tank:	
	Loss/Gain indicator:	
	Audio Alarm:	
	Visual Alarm:	
H.1.9	Pit Volume Totalizer	
	Make/model:	VAGA
	High/low alarm:	Yes
	Audio Alarm:	Yes
	Visual Alarm:	Yes
	Sensor location:	Mud pits
H.1.10	Trip Tank Indicator	
	Make/model:	VAGA
	Alarm:	Yes
H.1.11	Automatic Driller	Yes
	Make/Type	MH Wirth
H.1.12	Remote Choke Control Unit (
H.1.13	Crown Clearance Indicator	
H.2	DRILLING PARAMETER RECORDER	N/A
H.3	INSTRUMENTATION AT CHOKE MANIFOLD	N/A
H.3.1	Choke Manifold Pressure Gauge (Casing Pressure Gauge)	
	Quantity:	
	Make/type:	
	Pressure range:	
H.4	INSTRUMENTATION AT STANDPIPE	N/A
H.4.1	Standpipe Pressure Gauge	
	Quantity:	2
	Make/type:	VOM/10,000psi
	Pressure range:	0~10,000psi
	Visible from driller's position:	Yes
	Visible from choke operating system:	Yes
H.5	DEVIATION EQUIPMENT	N/A
H.5.1	Deviation Recorder	N/A

Quantity:
Make/type:
Deviation range:

Quantity:
Make/type:
Deviation range:

H.5.2 Slickline Unit

H.6 RIG COMMUNICATION SYSTEMS

H.6.1 Rig Telephone System

Phontech 1set(totally 160 pcs)

No. of stations
Make/Type
Explosion proof

1
phontech
yes/no: part of speakers is Ex-proof type as hazardous area defination and rules

H.6.2 Public Address System

Can be combined with H.6.1 above

No. of stations
Make/Type
Explosion proof

Phontech
yes
2
phontech
yes/no: part of speakers is Ex-proof type as hazardous area defination and rules

H.6.3 Drill Floor Talkback System

No. of stations:
Location:
Location:
Location:
Location
Location
Location
Location
Location
Make/type:
Explosion proof:

9
Driller's Cabin(2)
Mud pump room
BOP Area
Drill Floor(Speaker only)
Fingerboard(Speaker only)
Cement unit
Upper mud process room
Lower mud process room

H.6.4 Hand Held VHF Radios

Quantity:
Quantity intrinsically safe

6
Yes

H.6.5 Crane Communication System

Quantity:
Quantity intrinsically safe

6
Yes

H6.6 Crane Communication System

Quantity
Make/Type
Explosion proof
Part of rig telephone system(H.6.1)
Part of rig telephone system(H.6.1)

3
Motorola GM3688
no
no
no

H.7 ENVIRONMENTAL INSTRUMENTATION

H.7.1 Temperature Indicators

Air temperature (make/model):
Recorder:

Observatory BV/Model: OMC-406
N/A

Sea water temperature (make/model):	N/A
Recorder:	Yes
H.7.2 Barometric Pressure Indicator	
Make/model:	Observatory BV/Model: OMC-506
Recorder:	N/A
H.7.3 Humidity Sensing Indicator	
Make/model:	Observatory BV/Model: OMC-406
Recorder:	N/A
H.7.4 Wind Speed/Direction Meter	
Make/model:	Observatory BV/Model: OMC-160
Recorder:	N/A
H.7.5 Wave Profile Recorder	
Make/model:	N/A
Recorder:	N/A
H.7.6 Current Indicator	
Make/model:	FSI/ ACM-PLUS-200
Located at:	Below Helideck
Recorder:	
H.7.7 Weather Facsimile	
Make/model:	SAMYUNG/SFAX-500
Located at:	Jacking control Room
Recorder:	N/A
H.8 NAVIGATION INSTRUMENTATION	
H.8.1 Gyro Compass	
Make/model:	ANSCHUTZ/STD-22
Located at:	Jacking Control Room
H.8.2 Depth Sounder	
Make/model:	N/A
Located at:	
Recorder:	
H.8.3 Radar (IN/Applicable)	
Quantity:	N/A
Make/model:	
Located at:	
Bandwidth:	
H.9 EXTERN/AL COMMUNICATIONS EQUIPMENT	
H.9.1 SSB Transceiver	
Location(s):	Radio Room, Jacking Control Room
Quantity:	2
Make/model:	SAILOR/6320

RF Output Power: 6320:250W
6350:500W
POWER: 24VDC

Frequency ranges (low/high): Transmit:1.6/27.5MHz
Receiver:0.1/30MHZ

(Synthesized crystal):
Facsimile capable (see also H.9.9): NO
Telex capable (see also H.9.10): 1

H.9.2 EPIRBs

Quantity: 1
Make/model: JOTRON/Tron 40SMk II
Location(s): Roof of Jacking Control room

H.9.3 Marine VHF Radio

Quantity: 3
Make/model: SAILOR/6222
RF Output Power: 25 W
Power: 6222: 12 VDC, 0.6 A (Standby), 1.6 A (RX),
4.7 A max. (TX)
6222: 12 VDC, 0.6 A (Standby), 1.6 A (RX),
7.2 A max. (TX)
Channels: All VHF channels according to ITU-R Radio
Regulations Appendix S18, All channels in
FCC
Part 80, Max 20 Private channels where
permitted by Administrations (preset by the
service agent), 10 weather channels (USA and
CaN/Ada, receive only)
Location: Jacking Control room/Radio Room/Tool
Pusher

H.9.4 Aircraft Radio Beacon Transmitter

Quantity: 1
Make/model: NAUTEL/VECTOR125
Power: 5-125W

H.9.5 AeroN/Autical VHF Transceiver

Quantity: 1
Make/model: ICOM/IC-A110
Power: 9W(13.75 V DC or 27.5 V DC)
Frequency range (low/high): 118.000–136.975 MHz
(Synthesized/crystal):

Location(s): Jacking Control Room

Quantity: 2
Make/model: ICOM/IC-A24
Power: 7.4/7.2V DC (Battery pack)
11.0V DC (ExterN/AI DC Jack)
Frequency range (low/high): Tx/Rx 118.000–136.975MHz
Rx 108.000–117.975MHz*
Weather 161.650–163.275MHz

(Synthesized/crystal):
Location(s): Portable

H.9.6 Watch Receiver

Quantity: 1

Make/model:	NAUTEL/NRB4
Frequency:	190~245,245~315,315~415, 415~535,535~650kHz

H.9.7 Mobile Earth Station Inmarsat-C

Quantity:	2
Make/model:	SAILOR/6110
Type:	Inmarsat-C
Facsimile capable (see also H.9.9):	NO
Telex capable (see also H.9.10):	1
Location(s):	Radio Room/ Drilling Room

H.9.8 Cellular

Number of phone lines:	N/A
------------------------	-----

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

● **MF/HF DSC/Watch Receiver**

Quantity:	2
Make/model:	SAILOR/ 6320

● **N/AVTEX RECEIVER**

Quantity:	1
Make/model:	SAILOR/6391

● **Portable VHF Transceiver**

Quantity:	4
Make/model:	JOTRON/Tron TR20

● **SART**

Quantity:	4
Make/model:	JOTRON/Tron SART20

● **Satellite Communication System**

Quantity:	1
TYPE:	Antenna
Make/model:	INTELLIAN/ V100GX

Quantity:	1
TYPE:	Antenna
Make/model:	INTELLIAN /T130

● **MARINE GPS N/AVIGATOR**

Quantity:	1
Make/model:	SIMRAD/MX-610

● **RADIO CONSOLE**

Quantity:	1
Make/model:	

● **Mobile Earth Station Inmarsat-F**

Make/model:

SAILOR /FLEETBROADBAND

Type:

SAILOR500

Facsimile capable (see also H.9.9):

1

Telex capable (see also H.9.10):

NO

● **NBDP TERMINAL**

Quantity:

N/A

Make/model:

N/A

● **POWER SUPPLY UNIT**

Quantity:

2

TYPE:

Battery Charger

Make/model:

BC-6158

SECTION I - PRODUCTION TEST EQUIPMENT

I.1 BURNERS **N/A**
The Burner will be provided by rig operator.

I.2 BURNER BOOMS **N/A**
The burner boom will be provided by rig operator.

I.3 PIPING ON BURNER BOOMS **N/A**
The burner boom will be provided by rig operator.

I.3.1 Oil Line

ID:
Working pressure:
Connection type at burner end:
H2S:
Pressure gauge connection at barge end:

I.3.2 Gas Line

ID:
Working pressure:
Extended beyond burner by:
Connection type at burner end:
H2S:
Pressure gauge connection at barge end:

I.3.3 Water Line

ID:
Working pressure:
Connection type at burner end:
Pressure gauge connection at barge end:

I.3.4 Air Line

ID:
Working pressure:
Connection type at burner end:
Pressure gauge connection at barge end:

I.3.5 Pilot Gas line

ID:
Working pressure:
Connection type at burner end:
Pressure gauge connection at rig end:

I.4 SPRINKLER SYSTEM **N/A**

System in place:
Pump source:

I.5 FIXED PIPING FOR WELL TESTING

I.5.1 Drill Floor to Separator Area

Type (threaded/welded/both):	welded
Quantity:	1 pcs
Size ID:	3"
Working pressure:	10000psi
Connection type on drill floor:	Fig.1502
Connection type at separator:	Fig.1502

Number of valves/lines: none
H2S: yes

I.5.2 Separator Area to Each Burner Boom

Service (oil/gas): HP gas
Type (threaded, welded/both): welded
Quantity: 1 pcs
Size ID: 4" Nominal Diameter
Working pressure: 1500psi
Connection at separator: Fig.602
Connection at boom: Fig.602
Number of valves/lines: 1 pcs for each side
Size of valves: 4" Nominal Diameter
H2S: yes
Location: Valves installed near separator area for switching gas to either burner:

Service (oil/gas): LP gas
Type (threaded, welded/both): welded
Quantity: 1 pcs
Size ID: 4" Nominal Diameter
Working pressure: 300psi
Connection at separator: Fig.602
Connection at boom: Fig.602
Number of valves/lines: 1 pcs for each side
Size of valves: 4" Nominal Diameter
H2S: yes
Location: Valves installed near separator area for switching gas to either burner:

Service (oil/gas): OIL
Type (threaded, welded/both): welded
Quantity: 1 pcs
Size ID: 3" Nominal Diameter
Working pressure: 1500psi
Connection at separator: Fig.602
Connection at boom: Fig.602
Number of valves/lines: 1 pcs for each side
Size of valves: 3" Nominal Diameter
H2S: yes
Location: Valves installed near separator area for switching gas to either burner:

I.5.3 Water Lines To Burner Booms

Type (threaded/welded/both): welded
Quantity: 1 high pressure to each side
Size ID: 4" Nominal Diameter
Working pressure: 1000psi
Number of valves required: 1 pcs for each side
Size of valves: N4" Nominal Diameter
Booster pump source: From HP Mud Pump
Rated line capacity at 1000 psi: -

I.5.4 Rig Air System to Burner Booms

Type (threaded/welded/both): welded
Quantity: 1 pcs for each side
Size ID: 3" Nominal Diameter
Working pressure: 130psi
Non-return valves fitted: yes
Air source: rig air ring line

I.5.5 Oil Storage Tank To Offload N/A

Type (threaded/welded/both):
Quantity:
Size ID:
Working pressure:
Connection type at separator area:

I.5.6 Separator to Vent Stack Of Rig N/A

Type (threaded/welded/both):
Quantity:
Size ID:
Working pressure:
Connection type at separator area:

I.6 AUXILIARY POWER AVAILABILITY N/A

I.6.1 For Field Laboratory

Quantity:
Volts:
Frequency:
Breaker:

I.6.2 For Crude Transfer Pump

Quantity:
Volts:
Frequency:
Breaker:

I.6.3 For Electric Heaters

Quantity:
Volts:
Frequency:
Breaker:

SECTION J - WORKOVER TOOLS

N/A

SECTION K – ACCOMMODATION

K.1 OFFICES

K.1.1 Company Representative’s Office

Quantity: 1
 Number of combination office/staterooms in above:
 Complete with desk, filing cabinet(s) and other necessary furniture: 1
 Quantity with unrestricted view to drill floor: 1

K.1.2 Tool Pusher Office

Quantity: 1
 Quantity with unrestricted view to drill floor: 1

K.1.3 Control Room

Quantity: 1

K.1.4 Radio Room

Quantity: 1

K.1.5 Helicopter Waiting Room

Quantity: 1

K.1.6 Hospital Room

Number of beds/bunks: 2
 Dangerous drugs locker: 1

K.2 LIVING QUARTERS

K.2.1 Accommodations

Total double beds 73
 No. of beds per room type (1, 2 ,3, etc.) 2
 Number of rooms 73
 Toilets (private/shared/communal) Private
 Showers (private/shared/communal) Private

Total beds no 4
 No. of beds per room type (1, 2 ,3, etc.) no 1
 Number of rooms no 4
 Toilets (private/shared/communal) Private
 Showers (private/shared/communal) Private

K.2.2 Galley

Quantity: 1

K.2.3 Mess Seating Capacity

Main mess: 50

K.2.4 Conference Rooms

Quantity: 1

K.2.5 Recreation Rooms

Quantity: 2
 Recreation facilities:

TV:	1
VCR:	1

K.2.6 Other Rooms

Change Rooms:	1
Gym	1
Storage	7
Laundry	1
Training room	1
Fire Room	1

K.2.7 Mechanical Workshop

Lathe Machine Maker: Yangzhou Lichuang	1
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Drilling Press Maker: Anhui Huangshan	1
--	---

Grinder machine Maker: Jiangsu Jinding	1
---	---

K.2.8 Electrical Workshop

One Electrical test panel shall be mounted in the electric workshop to provide the following power supplies for testing purposes:

- 480 volt, 3 phase, 60 cycle A.C. - 20 amp
- 220 volt, 1 phase 60 cycle A.C. - 20 amp
- 127 volt, 1 phase, 60 cycle A.C. - 10 amp
- Adjustable Auto Transformer , AC 220V / 0~230VAC

SECTION L - SAFETY EQUIPMENT

To be provided by YCRO as per IMO, ABS, Flag States requirements

L.1 GENERAL SAFETY EQUIPMENT

L.1.1 General Personnel Protective Gear

Safety glasses: (contractor/everyone/Not supplied):	100No.
Safety hats (contractor/everyone/Not supplied):	150No.
Safety boots (contractor/everyone/Not supplied):	150No.
Safety clothing: (contractor/everyone/Not supplied):	
Ear protection (contractor/everyone/Not supplied):	100No.
Rubber gloves (contractor/everyone/Not supplied):	1000No.
Rubber gloves - elbow length: (contractor/everyone/Not supplied):	20No.
Full-face visors: (contractors/everyone/Not supplied):	20No.
Eye shields (for grinders): (contractor/everyone/Not supplied):	no
Dust masks (contractor/everyone/Not supplied):	no
Explosion proof hand torches: (contractor/everyone/Not supplied):	10No.
Safety belts c/w lines: (contractor/everyone/Not supplied):	10No.

L.1.2 Decontamination Stations

L.1.2.1 Eye Wash Stations:

Quantity - fixed: (with shower)	7
Make/model:	
Location(s):	Drill floor, Mud pit room, Sack storage room upper, solid control platform,

Quantity - fixed:
Make/model:
Location(s):

L.1.2.2. Safety Showers

Quantity:	9
Location(s):	Sack storage room, pump room, engine room, upper and lower cantilever mud process, drill floor, as per Class Requirement.

L.1.3 Derrick Safety Equipment

Derrick escape line
Geronimo line:

Derrick safety belts:

N/A

L.1.4 Derrick Climbing Assistant

Maker/Type: Aker/MH

L.1.5 Fresh Air Blowers(Bug Blowers)

Quantity : 2
Located at : Aker MH

L.2 GAS/FIRE/SMOKE DETECTION

L.2.1 H₂S Monitoring System

Make/type:	Draeger
Sampling points at	
Bellnipple:	yes
Drill floor:	yes
Shale shaker:	yes
Mud tanks:	yes
Ventilation system into living quarters:	yes
Other:	Mud flow line
Alarms at:	
Drillers console (audible/visual/both):	audible
Engine room (audible/visual both):	Both
Mud room (audible/visual/both):	Both
Living quarters each level (audible/visual/both):	audible
Central area each structural level (audible/visual/both):	audible
Other:	\audible
Tied to general alarm:	Yes
Central control panel:	Radio room
Located at:	
Local alarm (audible/visual/both):	audible

L.2.2 Combustible Gas Monitoring System

Make/type:	Autronica/HC-300PL
Sampling points at	
Diverter:	1
Drill floor:	7
Shale shaker:	1
Mud tanks:	3
Ventilation system into living quarters:	10
Other:	1
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:	SWBD Room
Tied to general alarm:	Yes
Central control panel:	Jacking Control Room
Located at:	
Local alarm (audible/visual/both):	Both

L.2.3 H₂S Detectors (Portable)

Quantity:	2(H ₂ S detectors , explosimeters, 02 meter in one)
Make/type:	Honeywell
Stain tubes for H ₂ S: measuring range:	
from 1 to 20 percent:	Yes
From 100 to 600 percent:	No

L.2.4 Explosimeters (Portable)

Quantity:	2(Refer to L.2.3)
Make/type:	Honeywell

L.2.5 CO₂ Gas Detectors (Portable)

Quantity:	N/A
Make/type:	N/A
Stain tubes for CO ₂ : measuring range	
from 1 to 20 percent:	N/A
from 5 to 60 percent:	N/A

L.2.6 O₂ Meter (Portable)

Quantity:	2(Refer to L.2.3)
Make/type:	Honeywell

L.2.7 Fire/Smoke Detectors

Make/type:	Autronica
Fire detection	Yes
Flame detectors:	Yes
Smoke detectors:	Yes
Heating detection	Yes
Central control pannel	Yes
Location	Radio Room
Alarms	425
Pull boxes	70 Mac Points

L.3 FIRE FIGHTING EQUIPMENT

L.3.1 Fire Pumps

Quantity:	2
Make/model:	Azcue, Spain
Type:	Centrifugal vertical
Output (each):	308US gals/min
Location:	air compressor room/P tank room
Rated Powner:	52KW

L.3.2 Hydrants and Hoses

Hydrants positioned such that any point may be reached by a single hose length from two separate hydrants:

Quantity of hydrants:	13(accommodation)
Hose connections/hydrant:	
Hose max. diameter:	38-40mm
Length:	20m

Hydrants positioned such that any point may be reached by a single hose length from two separate hydrants:

Quantity of hydrants:	9 (Main Deck)
Hose connections/hydrant:	
Hose max. diameter:	64-66mm
Length:	15m

Hydrants positioned such that any point may be reached by a single hose length from two separate hydrants:

Quantity of hydrants:	9 (Below Main Deck)
Hose connections/hydrant:	
Hose max. diameter:	65
Length:	15m

Hydrants positioned such that any point may be reached by a single hose length from two separate hydrants:

Quantity of hydrants:	6 (Cantilever and Drill floor)
-----------------------	--------------------------------

Hose connections/hydrant:	
Hose max. diameter:	50
Length:	15m

L.3.3 Portable Fire Extinguishers

Quantity	
Type 1-CO ₂ :	
5kg	23
Type 2- Dry powder:	
25kg	2
6kg	96
Type 3-Foam:	
45L	3
20L	2

L.3.4 Fire Blankets

Quantity:	1
Location(s):	galley

L.3.5 Fixed Foam System

Make/type:	KIDDER China
Quantity of foam concentrate stored:	600L
Foam type:	AFFF 3%
Application rate:	4.1L/Min/M2
Foam Nozzles:	K40
Located at:	
Located at:	Mud Process Area
Located at:	
Automatically injected into fixed fire water system:	NA

L.3.6 Helideck Foam System

Make/type:	KIDDE CHINA LIMITED
Quantity of monitors:	2
Quantity of foam concentrated stored:	1
Foam type:	AFFF
Application rate:	3% of water flow rate

L.3.7 Fixed Fire Extinguishing System

Protected spaces:	
Engine room, type (Halon/CO ₂ /other):	CO ₂
Remote manual release located at:	Outside of ER & CO ₂ ROOM
Paint locker, type (Halon/CO ₂ /other):	CO ₂
Remote manual release located at:	Outside of Locker & CO ₂ ROOM
Emergency generator, type (Halon/CO ₂ /other):	CO ₂
Remote manual release located at :	Outside of Emergency generator room & CO ₂
Room	
VFD & ECR room, type (Halon/CO ₂ /other)	CO ₂
Remote manual release located at:	Outside room and co ₂ room
Other - (specify location & type):	galley areas(wet chemical sys only)
Remote manual release located at:	
Alarms (audible, visual or both):	both
Automatic shutdown of ventilation fans in protected spaces:	Yes

L.3.8 Manual Water Deluge System

Protected spaced: Drill floor K&C manifold area

Water supplied from fire main line: Yes

L.3.9 Water Sprinkler System in Accommodation

Automatic activation yes
Working pressure 158 psi
Tank capacity 925 US gal
Salt water backup yes
Type (wet pipe/dry pipe) wet

L.4 BREATHING APPARATUS

L.4.1 Firemen's outfit

Quantity: 4
Make: JIANGSU HUAYAN MARIINE EQUIPMENT
CO.LTD
Cylinder duration: 30min
Located at: 04 deck

L.4.2 EEBD

Quantity: 10
Make: JIANGSU HUAYAN MARIINE EQUIPMENT
CO.LTD
Cylinder duration: 15min
Located at: lower machinery deck-4pcs.
Located at: 01 deck-1pcs
Located at: 02 deck-1pcs
Located at: 03 deck-4pcs

L.4.3 Breathing Air Recharge Compressor

Quantity: 1pcs
Make/type: JIANGSU HUAYAN MARIINE EQUIPMENT
CO.LTD
Charging rate: 80L/min
pressure: 33bar
at: 03 Deck

L.4.4 Air Purity Test Equipment N/A

Quantity:
Make/type:

L.5 EMERGENCY FIRST AID EQUIPMENT

L.5.1 First Aid Kits

Quantity: 3

L.5.2 Burn Kits

Quantity: N/A

L.5.3 Stretchers

Quantity: 1
Type:
Located at: Hospital, Helicopter Wating Room

L.6 HELIDECK RESCUE EQUIPMENT

Adjustable Wrench	1Pcs
Rescue axe, large(non wedge or aircraft type)	1Pcs
Cutters, bolt.	1Pcs
Crowbar, large	1Pcs
Hook, grab or salving	1Pcs
Hacksaw heavy duty and six spare blades	1Pcs
Blanket, fire resistant	1Pcs
Ladder(two-piece)	1Pcs
Life line(5 cm circumference x 15 m in length) plus rescue harness	1Pcs 1Pcs
Pliers, side cutting(tin snips)	1Pcs
Set of assorted screwdrivers	1Pcs
Harness knife c/w sheath	4Pcs
Gloves, fire resistant	4Pcs
Self-contained breathing apparatus	4Pcs
First –aid kit DIN 13157-C	1Pcs
Fire training manual without maintenance booklet	1Pcs

L.7 EMERGENCY WARNING ALARMS

Approved system to give warning of different emergencies:	Abandon, General Alarm, H2S, Combustible Gas, Fire Alarm
Activated from drill floor:	Yes

L.8 SURVIVAL EQUIPMENT

L.8.1 Lifeboats

Make/type:	Jianyin wolong F.R.P boat Co., ltd /JY102F
Quantity:	3
Capacity:	75 person/craft
Locations (frwd/port/stbd):	port/stbd/frwd
Fire protection:	Total enclosed
Radio/EPIRB (see section H.9):	Yes

L.8.2 Liferrafts

Make/type:	VIKING LIFE-SAVING EQUIPMENT
TRADING (SHANGHAI) CO. LTD/25DK	
Quantity:	6
Capacity:	25 person/craft
Davit launched:	N/A
Locations	port/stbd

L.8.3 Rescue Boat

Make/type:	Jianguy wolong/JY45DR
Engine power:	6knots

L.8.4 Personal Floatation Devices

Make/type:	Jianguy Huayam Marine Equipment Co / HYJ-A3
Quantity:	202

L.8.5 Survival Suits

Make/type:	immersion suit
Quantity:	152pcs

Make/type: lifejacket
Quantity: 202pcs

L.8.6 Life Ring Buoys

Make/type:
Quantity total: 10
with lights: 4
with smoke: 2
with lifeline: 4

L.8.7 Work Vests

Quantity: 193

L.8.8 Embarkation ladder

Make/type: 25m
Quantity: 2

SECTION M - POLLUTION PREVENTION EQUIPMENT

M.1 SEWAGE TREATMENT

Make/model: EVAC(shanghai) / ORCA III300
System type: Physical/Chemical
Capacity: For 120 person

M.2 GARBAGE COMPACTION

Make/model: N/A
System type:

M.3 GARBAGE DISPOSAL/GRINDER (IN GALLEY)

Make/model: Wesco 526
System type: N/A

M.4 INCINERATOR

Make/model: N/A
System type:

M.5 OILY WATER SEPARATOR

Quantity: 1
Make/model: JOWA, Sweden / 3SEP OWS 5m3/h
System type: Coalescent type

Nominal throughput:
Separation capacity: 5m3/h

M.6 Drill floor drainage

Drainage from Drill floor is collected in 8" drain lines which are rooted to to the cantilever in 6" and onwards to the skimmer tank in 6". The contents of the tank can be pumped in to, portable tank.

SECTION N - ADDITIONAL INFORMATION

N.1 Tow Requirements

Towing bracket MBL.360T	4 Pcs.
Delta plate MBL.320T	1 Pcs.
Towing chock MBL.360T	2 Pcs.
Towing chain MBL.320T	4Pcs.
Towing wire rope MBL.320T	1 Pcs.
Towing wire rope MBL.320T	2 Pcs.
Shackle MBL.320T	5 Pcs.
Recovery shackle SWL.6.5T	1 Pcs.
Recovery steel wire rope SWL.5T	1 Pcs.
Sheave SWL.10T	2 Pcs.
Hanging chain SWL.5T	1 Pcs.