

Standards and Requirements

Please reconfirm all bulleting and Standards issuance dates

1 Drilling Equipment:

1.1 Drawworks

- API RP54 9.4.7 (Recommended Practice for Occupational Safety for Oil and Gas Well Drilling and Servicing Operations- Drilling and Well Servicing Rig Equipment - Drawworks)
- SI 289, 4th Ed. GN 46.5.2(ii)(UK Requirement)
- IADC Drilling Manual Ch.F Section 1.5 (Drawworks Brakes – Maintenance Procedures – Inspection of cooling system)
- IADC Drilling Manual Ch.F Section 1.4 (Drawworks Brakes – Maintenance Procedures – Inspection of lining(blocks) and brake rims for wear)
- IADC Drilling Manual Ch.F Section II (Drawworks Brakes – Brake Linings- (Blocks))
- IADC Drilling Manual Ch.F Section IV (Brake Rims (Flanges))
- IADC Drilling Manual Ch.F Section 1.7 (Drawworks Brakes - Maintenance Procedures – Inspection of linkage(Live and dead end) for wear)
- IADC Drilling Manual Ch.F Section V (Drawworks Brakes – Brake Linkage)
- IADC Drilling Manual Ch.F Sections 1.3 (Drawworks Brakes – Maintenance Procedures- Adjustment of band rollers and springs)
- SI 289, GN 46.5.2
- SI 1019 15.1(UK Requirement)
- SHELL D.E.N. 45/1991
- API RP 54 Section 9.4.8 (Recommended Practice for Occupational Safety for Oil and Gas Well Drilling and Servicing Operations - Drilling and Well Servicing Rig Equipment -Drawworks)
- IADC Drilling Manual Chapter U-4.D (Electric Drilling Rigs – Maintenance – Driller’s Console and Foot Throttle)

- API Spec 7F Appendix A.3.5 (Specification for Oil-Field Chain and Sprockets- Recommended Practice for Installation, Lubrication, And Maintenance of Roller Chain Drives – Inspect for Chain Wear)
- API Spec 7F Appendix A.3.6 (Specification for Oil-Field Chain and Sprockets- Recommended Practice for Installation, Lubrication, And Maintenance of Roller Chain Drives – Inspect for Sprocket Wear)
- API Spec 7F Appendix A, Table A.4 (Specification for Oil-Field Chain and Sprockets- Recommended Practice for Installation, Lubrication, And Maintenance of Roller Chain Drives – Chain Wear Elongation Limits)
- API Spec 7F Appendix A.2.3.3 (Specification for Oil-Field Chain and Sprockets- Recommended Practice for Installation, Lubrication, And Maintenance of Roller Chain Drives – Type III – Oil Stream Lubrication)
- Operating Practice

1.1.1 Disk Brake – Universal

- IADC Drilling Manual Chapter U-4.D (Electric Drilling Rigs – Maintenance – Driller’s Console and Foot Throttle)
- SHELL DEN 48/90

1.2 Rotary Table

1.3 Top Drive Drilling System

- TDS SB #82 Rev.A
- Varco Product Bulletin TDS-96-02
- SHELL DEN 37/91
- P/N 112611, Varco RBS-95-01 Rev.A
- Safety Alert RBS-97-01
- MH Product Bulletin PB-027/30 Aug.1996
- MH Safety Alert SA-002/23 Aug.1996
- Varco Safety Alert TDS-94-4 Rev.A
- MH Safety Bulletin SB-030/03 Dec 1996
- SHELL DEN 4/93

1.4 Swivel

- Operating Practice

1.5 Kelly Spinner

1.6 Kelly & Kelly Drive Bushing

- Varco Service Bulletin No.12, 03/31/93
- Varco Service Bulletin No.16, 11/03/93

1.7 Crown Block

- API Spec 8A Section 8.4 (Specification for Drilling and Production Hoisting Equipment – Sheaves for Hoisting Blocks – Marking)
- API Spec 8A Section 8.2 and 8.3 (Specification for Drilling and Production Hoisting Equipment – Sheaves for Hoisting Blocks – Drilling and Casing Line Sheaves & Sand-Line Sheaves)

1.8 Travelling Block

- SHELL DEN 12/91

1.9 Hook

- API RP 54 Section 9.7.3 (Recommended Practice for Occupational Safety for Oil and Gas Well Drilling and Servicing Operations- Drilling and Well Servicing Rig Equipment - Hoisting Tools, Hooks, Bails, Elevators, and Other Related Equipment)

1.10 Drilling Instrumentation

- API RP 54 Section 9.10.2 (Recommended Practice for Occupational Safety for Oil and Gas Well Drilling and Servicing Operations- Drilling and Well Servicing Rig Equipment - Weight Indicators)
- SHELL DEN 31/93

1.11 Derrick

- API RP 54 Section 9.2.2 (Recommended Practice for Occupational Safety for Oil and Gas Well Drilling and Servicing Operations- Drilling and Well Servicing Rig Equipment – Derrick and Masts)
- API Spec 4F Section 4.2
- API RP 54 Section 9.2.12
- API RP 54 Section 9.3

- API RP Section 9.2.16
- API RP 4G Section 3
- API RP 54 Section 9.3.17
- API RP 54 Section 9.3.18
- API RP 54 Section 9.7
- API RP 54 Section 9.2.1
- API RP 54 Section 9.3.8
- API RP 54 Section 9.3
- API RP 54 Section 5.5.1
- API RP 54 Section 9.2.13

1.12 Casing Stabbing Board

- SI 289, 4th Ed. GN 46.4.1(UK Requirement)
- API RP 54 Section 9.7.3

1.13 Tuggers and Sheaves

- SHELL DEN 55

1.13.1 Man-Riding Winches

- SI 289, 4th Ed. GN 46.4.2.i (UK Requirement)
- SI 289, 4th Ed. GN 46.4.2.ii (UK Requirement)
- SI 289, 4th Ed. GN 46.4.2.iii (UK Requirement)
- SI 289, 4th Ed. GN 46.4.2.iv (UK Requirement)
- Operating Practices
- HSE

1.14 Survey Line

1.15 Pipe Spinning Wrench

- BHPP Safety Alert 20/11/96
- Hydraulic Spin Master, Model 550, failure

1.16 EZY-TORQ

1.17 Pipe Handling Equipment

- API RP 54 Section 9.2.17
- SHELL DEN 14/1990

- TOTAL REQUIREMENT

1.17.1 Slips and Dog Collars

- Varco Oil Tools Service (VOTS) Bulletin #13 11/8/93
- Safety Notice
- SHELL DEN 30/91

1.17.2 Elevator Links

- Varco Service Bulletin No.44, October 1996

1.17.3 Elevators

- VOTS Bulletin #14 11/8/93, Safety Notice
- Varco Bulletin No.34, 1/96
- SHELL DEN 3/90

1.17.4 Master Bushings

- API RP 8B 1990
- VOTS Bulletin #9 15/3/93, Safety Notice
- VOTS Bulletin #11, Safety Notice

1.18 Iron Roughneck

- SHELL WESA 113, 14/8/96
- Varco Service Bulletin 134, 23/1/87

1.19 Pipe Racking Systems

1.19.1 Drill Floor

- SHELL DEN 15/90

1.19.2 Pipe Racking ARM (Manipulator ARM)

- SHELL DEN 21/1993

1.20 Drill String

1.21 Drilling Subs

1.22 Fishing Tools

1.23 Power Tong

1.24 Well Testing Equipment

2 Mud System

2.1 Mud Pumps

- IADC Drilling Manual Section J-5.II
- HSE S/N 7/91 (UK Requirement)
- API RP 54 Section 9.13.5
- API RP 54 9.13.2
- HSE S/N 7/91 (UK Requirement)

2.2 Shale Shaker

2.2.1 Shale Shaker: Brandt Triple Tandem

2.2.2 Brandt Cascade Shaker

2.3 Mud Cleaner

2.4 Desilter

2.5 Desander

2.5.1 Brandt Hydrocyclone

2.6 Degasser

2.6.1 Brandt

2.7 Centrifugal Pumps

2.8 Mud Agitators

2.9 Mud Mixing System

- IMO Section 9.3.1
- ANSI/ API 2610, API 51, 14G, 14C

2.9.1 Trip Tank System

- API RP 53 Section 15.6
- API RP 53 Section 6.A.5
- API RP 53 Section 10.A.11

2.9.2 Flow Line System

2.9.3 Casing Fill-Up Line

2.9.4 Base Oil System

2.9.5 Reverse Circulating Line

2.9.6 High Rate Mixers

2.10 Standpipe Manifold and Rotary Hoses

- API RP 574 Section 7.2
- API RP 54 Section 9.7.7
- HSE S/N 5/84 (UK Requirement)
- HSE S/N 17/79 (UK Requirement)
- BHPP Fatal Accident, S.A. 20/11/96
- SHELL
- API RP 53 Section 9.2.1.b in accordance with API Spec 6A

2.10.1 Cement Manifold

2.11 Bulk Air System and Tanks

- API RP 54 Section 9.13.2

2.12 Centrifuge

2.13 Cementing Unit

- API RP 574 Section 7.2

3 Well Control Equipment

3.1 BOP Ram Type

3.1.1 BOP RAM Type, General

- API RP 53 Section 17.10.3 (3-5 yearly)
- Total CLT.04-251/SHELL EP 1500.2.1.4.10.b.1
- API RP 53 Section 17.5.9.2
- Total CLT 04-252 2.1.c
- CIW EB No. 463 D, 10/91
- API RP 53 Section 7.5
- SHELL DEN 25/91
- HYDRIL EB 92004
- API RP 53 Section 17.11.2
- API RP 53 Section 17.5.9.2
- API RP 53 Section 17.12.1

3.1.2 BOP RAM Type, Cameron Type U and U-II

- COT EB No. 797D/5/94
- API RP 53 Section 17.10.3
- EB #463 D, 10/91, EB #196 D, 1/66
- API RP 53 Section 17.3.2.4
- CIW EB 463D 30-10-1991
- API RP 53 Section 6.3
- API RP 53 Section 17.5.8

3.1.3 BOP RAM Type, Shaffer

- Shaffer
- Shaffer Manual A-X060172-2.1
- Shaffer PM Manual- Section I
- Shaffer PM Manual Section VIII – 3.b
- Shaffer PM Manual Section VIII-4.a
- Shaffer PM Manual Section VIII-6.a
- Shaffer PM Manual Section VIII-3.a+b
- Shaffer PM Manual Section VIII 8.E.b
- Shaffer PM Manual Section VIII-D.1.b
- Shaffer EB #124A
- API RP 53 Section 17.3.2.4
- API RP 53 Section 6.3

3.1.4 BOP RAM Type, HYDRIL (13 5/8" 5K & 10K)

- Hydril Inspection Manual 4.2.3
- Hydril Manual 6844 3.1.1.3
- Hydril Engineering Bulletin 98001
- Engineering Bulletin 93008
- Engineering Bulletin 90051RS/29 Oct 90
- Hydril E.B. 93007, 19 July 93
- API RP 53 Section 17.3.2.4
- API RP 53 Section 6.3
- API RP 53 Section 17.3.2.1
- API RP 53 Section 17.5.5
- Hydril EB No. 92007
- Hydril EB No. 96002
- Hydril EB No. 96003

3.1.5 Pressure Testing (All BOPs)

- API RP 53 Section 18.3.8
- API RP 7G
- SHELL DEN 18/90
- API Spec 6A
- API RP 53 Section 18.5.5
- API RP 53 Section 18.11.2

- API RP 53 Section 18.12.1

3.2 Annular Type Preventers

3.2.1 Annular Preventers General

- API RP 53 Section 18.10.3(Every 3-5 years)
- NL, 3-yearly; Shaffer 69-00241 Section 3.3
- Shaffer 69-00241 Section 3.1
- API RP 53 Section 17.5.11
- API Spec 16D Section 2.2.1.1
- API Spec 16A
- API RP 53 Section 17.3.2.1 & Section 17.3.2.2

3.2.2 Annular Preventer, Cameron Type D

- CIW EB No. 527D
- CIW EB No. 699
- API RP 53 Section 18.3.2.4
- CIW EB No. 522D
- API RP 53 Section 18.2.4

3.2.3 Annular Preventer, Shaffer

- Shaffer 69-00241 Section 3.2.10
- Shaffer 69-00241 Section 3.2.6
- API RP 53 Section 17.3.2.4 ; Shaffer yearly

3.2.4 Annular BOP, Hydril Type GL/GK

- Hydril Catalogue 822 page 21
- Hydril GL, not on GK Hydril preventer
- Bulletin 93006, 9 July 93
- Hydril Gk only
- API 53 Section 18.3.2.4
- Hydril yearly

3.3 Gate Valves (BOP Mounted)

- (Total-SHELL) API RP 53 Section 3.2.b
- SHELL DEN 23/90
- API RP 53 Section 17.3.2.5
- API RP 53 Section 17.3.2.4

- API RP 53 Section 17.10.3
- API RP 53 Section 17.11.2

3.4 Choke Manifold

3.4.1 Choke Manifold General

- API RP 53 Section 8.2.d
- API RP 53 Section 10.2.1.b
- API RP 53 Section 8.2.b
- API RP 53 Section 8.2.j
- HSE S/N 11/90; must be treated as critical in the UK and on SHELL Rigs
- API RP 53 Section 8.3.1.b
- Cameron Alert Nov. 26 1990, SHELL DEN 5/91
- API RP 53 Section 8.3.1.a.1
- TOTAL(This is mandatory on all TOTAL Inspections)
- API RP 53 Section 17.3.2.5
- According to manufacturer specs/ API RP 53 Section 17.10.3
- API RP 53 Section 17.13.1
- API RP 53 Section 8.2.e
- API RP 53 Section 8.2.i
- API RP 53 Section 8.3.1.c.1
- API RP 53 Section 8.3.1.c.4
- API RP 53 Section 8.3.1.c.5t
- API RP 53 Section 17.11.2

3.4.2 Mud-Gas Separator (Poorboy Degasser)

- HSE S/N 11/90 (UK Requirement)
- API Spec 16C Section 9.10.3.2
- API RP 53 Section 18.11.8
- TOTAL Clt 04-257-7.1.3
- HSE Safety Notice 11/90
- SHELL EP 1500 Appendix 32
- API RP 53 Section 17.11.8

3.4.3 Swaco Ultra Choke

3.4.4 Choke Control Unit (Swaco and General)

- API Spec 16C Section 9.16.7
- API Spec 16C Section 10.9.1.2
- API Spec 16C Section 10.9.1.4
- API Spec 16C Section 10.9.1.7
- API Spec 16C Section 10.9.8.1
- API Spec 16C Section 10.9.1.5
- API Spec 16C Section 10.9.1.6
- API Spec 16C Section 10.9.2
- API Spec 16C Section 10.9.9.1

3.4.5 Choke Remote Control Panel, Cameron

- Cameron

3.5 Cameron Style Hub Clamps

- Cameron EB 595 D, 22/7/94

3.6 BOP Handling Equipment

3.6.1 Bridge Crane

3.7 Hydraulic BOP Control and Accumulator Unit

- API Spec 16D Section 2.2.1.4
- API Spec 16D Section 2.2.1.2
- API RP 53 Section 12.6.2
- API RP 16E Section 2.2.1
- API Spec 16D Section 2.2.1.2
- API Spec 16D Section 2.2.1.3
- API RP 16E Section 2.3
- API RP 53 Section 12.4.4
- API RP 16E Section 2.3.2
- API Spec 16D Section 3.1.2.4
- API RP 16E Section 2.4.1
- API RP 53 Section 12.3.5
- API RP 16E Section 2.4.2
- API RP 53 Section 12.3.6

- API Spec 16D Section 2.2.2.4
- API Spec 16D Section 2.2.1.6
- API Spec 16D Section 2.2.1.6.1
- SHELL EP 89-1500 3.2.5.1
- API Spec 16D Section 2.2.1.6.2
- API Spec 16D Section 2.2.1.7
- SHELL EP 89-1500 3.2.5.2
- API RP 53 Section 17.3.8
- API RP 16E Section 2.6.1.1
- API Spec 16D Section 2.2.1.7.1
- API Spec 16D Section 2.2.1.7.2
- API RP 16E Section 2.6
- API Spec 16D Section 2.2.1.7.3
- API Spec 16D Section 2.2.1.7.4
- API Spec 16D Section 2.2.1.7.5.1-4
- API RP 16E Section 2.6.5
- API RP 53 12.5.3.C
- API Spec 16D Section 2.2.1.7.6.1-4
- API RP 16E Section 2.6.6
- API Spec 16D Section 2.2.1.8
- SHELL EP 89-1500 3.2.5.1
- API RP 53 Section 12.7
- API Spec 16D Section 3.1.2.2
- API RP 500
- API RP 53 Section 12.5.3.f
- API RP 16E Section 2.5.2
- API Spec 16D Section 2.2.2.6
- API RP 53 Section 12.5.2
- SHELL EP 89-1500 3.2.5.3
- API RP 53 Section 12.4.5
- API Spec 16D Section 2.2.1.1
- API Spec 16D Section 2.2.1.5.1
- API RP 53 Section 17.7.1a-g
- Moducode (1979) section 5.3.2.3.4

- Moducode (1989) section 5.3.5.4.4.4
- API RP 53 Section 12.5.3.g
- API Spec 16D Section 2.2.4
- API Spec 16D Section 2.2.4.5
- API Spec 16D Section 2.2.4.6
- API RP 53 Section 18.4.1.c
- API Spec 16D Section 2.2.4
- API Spec 16D Section 2.2.4.1
- API Spec 16D Section 2.2.4.4
- API Spec 16D Section 2.2.4.5
- API RP 53 Section 4.2.3
- API RP 53 Section 4.2.4
- Vetco F.S.A 18 July 93
- API RP 64 Section 3.6.8.1

4 Marine Equipment

4.1 Ballast System

4.1.1 Bilge System

4.2 Overflow and Vent Checks

- Load Line Reg. 19 (1) (Ventilators) and 20 (air pipes)

4.3 Watertight Compartments (*)

4.4 Mooring System

- UK Requirement

4.5 Communication Equipment (*)

- 1997 SOLAS, Chap IV, Reg 7.1
- 1974 SOLAS, Chap IV, Reg 15d
- 1974 SOLAS, Chap IV Reg. 15f
- 1997 SOLAS, Chap IV, Reg. 16.1
- MODU Code 79, 11.4.1.1
- 1974 SOLAS Chap IV, Reg
- MODU Code 79, 11.4.1.4

4.6 General Operations (*)

4.7 Jacking Systems

- (S.I. 1019) (UK Requirement)

5 Power Plant

5.1 Diesel Engines

- API RP 7C-11F Section Appendix A3
- MODU Code 4.2.3 (79/89)
- API RP 14F Section 5.2.5.1
- MODU Code 4.2.6
- SOLAS Reg 27 Chapter II-1
- API RP 14F Section 3.2
- MODU Code 4.2.7
- API RP 14F Section 3.2
- SOLAS Chapter 11-1 Rg 27

5.1.1 Portable Engines and Stationary Small Prime Movers

- (SI 289/GN Section 42.3.2) (UK Requirements)
- (GN 42.3.1) (UK Requirements)
- MODU Code 6.7
- MODU Code 4.2.3
- (GN 42.3.1) (UK Requirement)
- MODU Code 6.4
- (GN 42.3.2) (UK Requirement)

5.1.2 Engines in Hazardous Areas

- (SI 289, 4th Ed. 1990 G.N. 42.3.2) (UK Requirement)

5.1.3 Fuel and Lubrication Oil Centrifuges

5.2 Emergency Generator Set

- MODU Code 5.3.8.1
- HSE (90.4.3) (UK Requirement)
- Class and HSE (90.3.4) (UK Requirement)
- Class and MODU Code (5.3.2)

- Class and MODU Code (5.3.13)
- Class and MODU Code (9.1)
- HSE (13.2.2) (UK Requirement)
- Class and MODU Code 5.4
- MODU Code 5.4.2

5.2.1 Emergency Power Supply

- MODU Code 79 (5.3.2)
- MODU Code 89 (5.3.6)
- MODU Code 79 Art.5.3.3
- MODU Code 89 Art.5.3.8
- MODU Code 5.3.8.3
- MODU Code 5.4.2
- MODU Code 5.4.1
- MODU Code 5.3.14

5.3 Air Compressor

- IADC Safety Alert 98-7
- API RP 54 Section 9.13.2

5.3.1 Air Receivers

- MODU Code 79
- MODU Code 89/4.2.2

5.4 Refrigerating and Airconditioning

- SI 289, 4th Ed. GN47.2.2(b) (UK Requirement)

5.5 Sea-Water Pumps and Piping System

5.5.1 Piping System

- 1.5 times the MAWP or 1.1 times MAWP in conjunction with wall thickness gaugings

5.6 Cranes and Power Systems

- API RP 2D C.4.1.2.d
- API Spec 2C 6.4.1.6
- API Spec 2C 12.3

- API Spec 2C 12.5
- API Spec 2C 12.7
- API Spec 2C 12.8
- API Spec 2C 9.2
- API Spec 2C 9.3
- API Spec 2C 9.6
- API Spec 2C 11.3
- API Spec 2C 11.6
- API Spec 2C 11.7
- HSE (46.3.2(ii)) (UK Requirement)
- HSE (46.3.2(iv)) (UK Requirement)
- SI 289 GN 46.3.2(V) (UK Requirement)
- API Spec 2C 3.3
- API Spec 2C 12.1
- API Spec 2C 6.4.1.1
- API Spec 2C 6.3.3
- API Spec 2C 7.1.2.C
- API Spec 2C 7.1.2
- API Spec 2C 7.2.1.a
- API Spec 2C 7.1
- API Spec 2C 7.2.3
- API Spec 2C 8.1.b
- API Spec 2C 9.1.a
- API Spec 2C 9.2.a
- API Spec 2C 10.1.b
- API Spec 2C 10.1c
- API Spec 2C 10.1d
- API Spec 2C 11.2
- API Spec 2C 12.1b
- API Spec 2C 12.a
- API Spec 2C 12.1.e
- API Spec 2C 11.1
- API Spec 2D 3.5.2
- API RP 2D C.4.3.3.b

- API Spec 2C 6.5.2.1
- API Spec 2C 6.5.3.3
- API Spec 2C 6.5.4
- API Spec 2C 6.5.6.1
- API Spec 2C 6.5.6.3

5.7 Watermaker

5.8 Boiler

- MODU Code 4.3.2
- MODU Code 4.2.2
- MODU Code 4.3.1
- API RP 54 Section 9.13.2

6 Electrical

6.1 Elmagco Brake

- HSE (46.5.2(ii)) (UK Requirement)
- API RP 14F Section 10.1
- API RP 10.6.11.1.6
- SI 289, 4th Ed. GN (46.5.2. (ix)) (UK Requirement)
- HSE (46.5.2(v-ix)) (UK Requirement)
- SI 289, 4th Ed. GN 46.5.2.viii (UK Requirement)
- API RP 10.6.11.1.6

6.2 Main Generators

- API RP 10.6.11.1.6
- API RP 14F Section 5.3.2.5.1
- API RP 7L Section 6.3
- API RP 14F Section 5.3.4
- MODU Code 4.2.3 (79/89)
- API RP 14F Section 5.3.2.5
- API RP 54 Section 5.6.4

6.3 Main Transformers

- API RP 10.6.11.1.6

6.4 Converters (SCR and Variable Frequency Drives)

- API 14F Section 12.8

6.5 Main Switch Boards

- API RP 10.6.11.1.6
- Class, MODU Code (5.5.5)
- API 14F Section 12.8

6.6 Emergency Switch Boards

- API RP 10.6.11.1.6
- Class, MODU Code (5.5.5)
- API 14F Section 12.8

6.7 DC Motors

- API RP 10.6.11.1.6
- API RP 54 Section 5.6.4
- API RP 7L Section 1.4.2

6.8 AC Motors

- API RP 54 Section 5.6.4
- API RP 10.6.11.1.6

6.9 Motor Control (MCC's and Motor Starters)

- API RP 14F Section 7.4.5
- Special Survey, HSE: Major Survey
- Class, MODU code (5.5.5)
- API 14F Section 12.8

6.10 Lighting System (Main)

6.11 Lighting System (Emergency)

- Class, HSE (90.6) (UK Requirement)
- API RP 14F Section 9.4
- Class (30min)
- MODU Code (5.3.6.1)
- HSE (90.4.1(i)) (UK Requirement)
- API RP 14F Section 9.3

6.12 Electrical Outlets and Portable Electrical Equipment

- API RP 54 Section 5.6

6.13 Cables and Cable Trays

- API RP 14F Section 6.8.3
- Class, API RP 14F Section 6.8.1
- MODU Code (9.1)
- HSE (40.6.3(i) +(ii)) (UK Requirement)
- API RP 14F Section 12.1.2.1

6.14 Batteries, Battery Chargers and UPS

- API RP 7C-11F Section 2.11

6.15 Alarm Systems: Fire, Gas, General, Flooding

6.16 Navigation Lights and Fog Horns Incl. Obstruction Lights

6.17 Communications: Telephone and PA Systems

6.18 Electric Welding and Welding Distribution

6.19 Rig Instrumentation Incl. Vessel Management

6.20 Earthing and Bonding

- API RP 14F 6.10.1
- HSE (40.5) (UK Requirement)

6.21 Hazardous Areas

- Class, API RP 14F Section 4.3.3.3
- MODU Code (6.6.2)
- HSE (40.2) (UK Requirement)
- API RP 14F Section 4.3.1.1
- Class, API RP 14F Section 4.3.1.2
- MODU Code (6.6.2)
- HSE (40.2) (UK Requirement)
- API RP 14F Section 4.3
- HSE (40.6.3(iii)) (UK Requirement)
- API RP 500 Section 11.5.1.3
- API RP 500 Section 11.5.1.4

- API RP 500 Section 11.5.2.1
- API RP Section 11.5.2.3
- HSE (40.6.2(iii)) (UK Requirement)

6.22 Miscellaneous Items

- HSE (40.6.2(iv)) (UK Requirement)
- HSE (40.6.2(vii)) (UK Requirement)
- HSE(40.7(i)) (UK Requirement)
- MODU Code (14.1.2.18)
- HSE (40.7(ii)) (UK Requirement)
- HSE (40.7(iv)) (UK Requirement)
- HSE (40.7(iii)) (UK Requirement)
- HSE (40.7(v)) (UK Requirement)
- HSE (40.7(vi)) (UK Requirement)
- HSE (40.7(vii)) (UK Requirement)

7 Safety

7.1 Fire Control

7.1.1 Automatic Fire Detection System

- SOLAS II Reg. 13.2.2
- MODU Code 9.7.1 GN 3.1 (UK Requirement)
- SOLAS II-2 Reg. 13.1.5
- SOLAS II-2 Reg.3
- SOLAS II-2 Reg. 13.2.1

7.1.2 CO2/Halon System for Fire Control

- MODU Code (9.5.1.1.2)
- SOLAS II-2 Reg. 5
- SOLAS II-2 Reg. 5.3.2.4

7.1.2.1 Fixed Fire Extinguishing System (CO2)

- SOLAS II-2 Reg. 5.2.2/2.3
- SOLAS II-2 Reg. 5.2.4

7.1.2.2 Halon System

- SOLAS II-2 Reg. 5.3.2.10
- SOLAS II-2 Reg. 5.3.2.5
- SOLAS II-2 Reg. 5.3.3
- SOLAS II-2 Reg. 5.3.3.5
- SOLAS II-2 Reg. 5.3.3.7
- SOLAS II-2 Reg. 3.4.2.3
- Class Requirements

7.1.3 Fixed Fire Extinguishing Systems (Water and Foam) MODU Code 9.4 SOLAS-Chapter II-2 Reg.4

7.1.3.1 Hoses:

- MODU Code 9.4.20

7.1.3.2 Nozzles:

- MODU Code 9.4.20
- MODU Code 9.4.21.2

7.1.3.3 Foam Pick-up Nozzles:

7.1.3.4 Fire Hoses Stations:

7.1.3.5 Fire Main:

- MODU Code 9.4.19
- MODU Code 9.4.1
- MODU Code 9.4.3
- MODU Code 9.4.6
- MODU Code 9.4.14
- MODU Code 9.4.13
- MODU Code 9.4.22
- MODU Code 9.4.15
- MODU Code 9.4.16
- Operation Manual

7.1.3.6 Automatic Sprinkler Systems (When Installed) SOLAS Chapter II-2 Reg 12.

- SOLAS Reg. 12 (1.2)

- SOLAS Reg. 12 (2.1)
- SOLAS Reg. 12 (4.1)
- SOLAS Reg. 12 (4.2)
- SOLAS Reg. 12 (2.4)
- SOLAS Reg. 12 (3)
- SOLAS Reg.12 (2.3)
- SOLAS Reg. 12 (5.2)
- SOLAS Reg.12 (2.8)
- SOLAS Reg. 12 (9.1 to 9.3)
- SOLAS Reg 12 (2.5)

7.1.3.7 Emergency Fire Pump

- MODU Code 9.4.5

7.1.3.8 Deluge System

7.1.3.9 Foam System

- SOLAS Reg. 9 (1.1)

7.1.4 Portable Extinguishers & Fire Fighting Equipment

- Refer to units approved fire control plan
- SOLAS II-2 Reg 7 (2.3)
- MODU Code (9.5)
- SOLAS II-2 Reg. 6 (1.1)

7.1.4.1 All Extinguishers should comply with the following:

- SOLAS II-2 Reg. 6 (1.1)
- MODU Code (9.5)

7.1.4.2 Halon Extinguishers Should be clearly marked with:

- SOLAS II-2 Reg. 6 (1.1)
- MODU Code (9.5)

7.1.4.3 CO2 Extinguishers should have:

7.1.4.4 Foam Extinguishers should be marked with:

7.1.4.5 Dry Powder Extinguishers should be clearly marked with:

- SOLAS Reg. 6 (3)

- SOLAS Reg. 7 (2.2)
- MODU Code (9.5)

7.1.4.6 Fire Extinguisher:

- MODU Code (9.9.1)
- SOLAS Reg. 17 (1.1)
- MODU Code (9.9.1)

7.1.4.7 The fireman suits should consist out of:

- SOLAS Reg. 17 (1.1)
- SOLAS Reg. 17 (4)
- SOLAS Reg. 17 (2)

7.1.4.8 Fire-fighting Equipment Plans

- Class and MODU Code (9.13.1)

7.1.5 Foam System For Heli-Deck

- MODU Code (9.11.2.2)

7.2 Survival And Life Saving

7.2.1 Lifeboat – Ensure that the maintenance pendants are connected to the lifeboat prior to entering

- SOLAS III 48.1.6
- MODU Code (10.6.13)
- SOLAS III 48.1.7
- SOLAS Reg. 19 (4)
- HSE
- SOLAS III (41.7.1)
- SOLAS III (41.8)
- MODU Code 10.5.4
- TOTAL Red Alert No.4
- MODU Code 10.13.2
- MODU Code 10.17
- TOTAL Red Alert No.4

7.2.1.1 *The Release Mechanism should have 2 release capabilities as follows:*

SOLAS CH III Reg. 41, ART. 7.6

- TOTAL Red Alert No.4

7.2.2 Davit-Launched Life-Raft Station

7.2.2.1 *Life-Raft and Ring Buoys (SOLAS Reg 71/27. 1/29/31)*

- MODU Code (10.18.8, 10.18.9 & 10.18.10)

7.2.3 Escape Routes

- SOLAS Reg. 45
- MODU Code 9.3 (3)
- SOLAS Reg. 45.1 (4)
- MODU Code 14.1.4.2
- MODU Code 10.11.1 (1) (79)
- SOLAS Reg. 45.3 (1)

7.2.4 Breathing Apparatus

7.3 Flammable Gas Detection

- MODU Code 9.8
- HSE (47.4.1)

7.3.1 H2S Gas Detection

7.3.2 Portable Gas Detectors

7.4 Helicopter Operations

7.4.1 Heli-Deck and Markings. MODU Code (13.1, 13.2, 13.3, 13.4) CAP 437
(UK Requirement)

- CAP 437 3.2.4 (UK Requirement)
- MODU Code 13.2.2.2
- MODU Code 13.2.3
- MODU Code 13.2.5
- CAP 437 5.3.2 (UK Requirement)
- MODU Code 13.3.2
- MODU Code (13.4.4.2)

- CAP 437-6.1.1 (UK Requirement)
- CAP 437-6.2.1 (UK Requirement)
- CAP 437-6.2.2 (UK Requirement)
- CAP 437-6.2.4 (UK Requirement)
- MODU Code 13.4.3
- CAP 437-6.3.1 (UK Requirement)
- CAP 437-6.2.4 (UK Requirement)
- MODU Code 13.4.1
- MODU Code 13.3.3
- CAP 437-7.1.1 (UK Requirement)
- MODU Code 13.4.1

7.4.1.1 Helicopter Landing Area Equipment

- MODU Code (9.11.2.1)
- MODU Code (9.11.2.3)
- CAP 7.1 (UK Requirement)

7.4.1.2 Helicopter (Re-) Fuel System. All refuelling operations should be as per unit's approved Operating Manual.

- MODU Code 9.11.4 (7)
- MODU Code (9.11.14)

7.5 Drilling Facilities Safety

- MODU Code 6.3.1
- MODU Code 6.5.1

7.5.1 Protective Clothing

7.5.2 Hazardous Areas

7.5.3 Dangerous Substances

- MODU Code (6.3.1)
- API RP 500 11.23.1.1.2.1

7.5.4 Dangerous Machinery

7.6 First-AID and Sick-Bay

7.6.1 Sick Bay

- API RP 54 Section 3.1.1
- UK Requirement
- API RP 53 Section 4.1.2

7.6.2 Health

7.7 Emergency Procedures Manual

7.7.1 Alarm and Public Address System. MODU Code (10.16)

7.8 Lifting and Handling

7.8.1 Independent Lifting Gear Inspections

- API RP 8B

7.8.2 Registrations and Certificates

- UK Requirement

7.8.3 Lifting and Handling Appliances

7.9 Accommodation

- HSE (50.3) (UK Requirement)
- HSE (50.4) (UK Requirement)
- HSE (50.6) (UK Requirement)
- HSE (50.7) (UK Requirement)
- MODU Code (9.7.1)
- MODU Code (9.6)
- MODU Code (10.16)
- MODU Code (14.8.10)

7.9.1 Fire Protection for Accommodation & Control Station

- MODU Code 9.1.3.2
- MODU Code Chapter 9, sec ½ sec 2
- MODU Code Chapter 9
- MODU Code 9.2.5

- HSE(13.2.2)

7.9.2 Fire Rating requirements A-60: MODU Code Table (9-1) and (9-2)

- MODU Code 9.2.9
- HSE(13.2.2) (UK Requirement)
- MODU Code (9.2.9)
- HSE (13.2.2) and (13.6) (UK Requirement)

7.9.3 Galley

7.10 Pollution Control

- Refer to record A attached to the IOPP Certificate
- SHELL Companies need to be informed if such equipment is on the Rig
- Refer to unit's approved SOPEP.
- MARPOL Annex I Reg. 26
- MARPOL Annex V

7.11 Housekeeping

7.11.1 Walkways and Railings

- HSE (54.4) (UK Requirement)

7.11.2 Decks and Stairways

- HSE (54.3) (UK Requirement)
- HSE (54.4) (UK Requirement)
- HSE (54.5) (UK Requirement)

7.12 General Safety Items

- API RP 53 Section 17.3.8
- API RP 54 Section 5.6.2
- As Per unit's approved SOPEP.
- MODU Code (14.3)
- MARPOL Annex I Reg. 26
- API RP 54 Section 6.1.7
- API RP 54 Section 5.1.4

7.12.1 Remote Controlled Safety Systems

7.12.2 Fuel Oil System

7.12.3 Gas Bottles

- MODU Code 9.12
- Safety Notice 3/82 FRMR'64-2 (Dutch Requirement)

7.13 Work Permits

- API RP 14F Section 12.8

8 Maintenance System

8.1 Maintenance Organisation

- API RP 7L 1.3
- MODU Code (14.1.2.2)
- Approved class drawings
- API RP 7L 2

8.2 Preventive Maintenance General

- MR'64 Art 106 Par 4 (Dutch Requirement)
- MR'64 Art 114 Par 5 (Dutch Requirement)
- MRcs Art 83 Par 4 (Dutch Requirement)
- MRcs Art 92 Par 5 (Dutch Requirement)

8.3 Analysis and Reporting

- API RP 7L 1.4.1
- MR'64 Art 114 Par 5 (Dutch Sector North Sea)

8.4 Development Maintenance Organisation

8.5 Organisation Drilling

8.5.1 PM on Drilling Equipment

8.5.1.1 Drawworks

- PM Tasks
- History Records

8.5.1.2 Disc Brake – Universal

- PM Tasks
- History Records

8.5.1.3 Rotary Table

- PM Tasks
- History Records

8.5.1.4 Top Drive Drilling System

- PM Tasks
- History Records
- Oil Sample Records
- SHELL DEN 43/93
- Varco Safety Alert TDS-94-4 Rev A
- Certification Records
- S.I.1019
- MH Safety Alert SA.001 dated 23/8/96
- TEB Records
- API RP 8B
- Varco Service Bulletin No.38 Rev. F

8.5.1.5 Swivel

- PM Tasks (As per Sedco Forex Equipment Alert Ref: EA-92/003)
- History Records (As per Sedco Forex Equipment Alert Ref: EA-92/003)
- Oil Sample Records

8.5.1.6 Kelly Spinner

- PM Tasks
- History Records

8.5.1.7 Kelly & Kelly Drive Bushing

- PM Tasks
- History Records

8.5.1.8 Crown Block

- PM Tasks

- History Records
- API RP 8B

8.5.1.9 Travelling Block

- PM Tasks
- History Records
- Certification Records

8.5.1.10 Hook

- PM Tasks
- History Records

8.5.1.11 Drilling Instrumentation

- Certification Records

8.5.1.12 Casing Stabbing Board

- Certification Records

8.5.1.13 Tuggers and Sheaves

- PM Tasks
- History Records
- PM Tasks(Sedco Policy on North Sea)
- History Records (Sedco Policy on North Sea)
- Certification Records
- SI 289, 4th Ed. GN 46.4.2 (UK Requirement)

8.5.1.14 EZY TORQ

- PM Tasks
- History Records

8.5.1.15 Pipe Handling Equipment

- PM Tasks
- History Records
- API RP 8B (1990)

8.5.1.16 Pipe Racking Systems

- PM Tasks
- History Records

- 8.5.1.17 *Drill String*
- PM Tasks
 - History Records

- 8.5.1.18 *Drilling Subs*
- PM Tasks
 - History Records

- 8.5.1.19 *Fishing Tools*
- PM Tasks

- 8.5.1.20 *Well Testing Equipment*
- PM Tasks
 - History Records

8.5.2 NDT/Certification Drilling Equipment

- 8.5.2.1 *Drawworks*
- NDT Record

- 8.5.2.2 *Top Drive Drilling System*
- NDT Records
 - Varco Service Bulletin No.38 Rev.F
 - Varco Product Bulletin TDS-95-08

- 8.5.2.3 *Swivel*
- NDT Records
 - API RP 8B Section 5
 - API RP 8B 5.3.2.4 (Category III)

- 8.5.2.4 *Kelly Spinner*
- PM Tasks
 - History Records
 - API RP 8B Section 5

- 8.5.2.5 *Crown Block*
- NDT Records
 - API RP 8B Section 5

8.5.2.6 Travelling Block

- NDT Records
- API RP 8B Section 5

8.5.2.7 Hook

- NDT Records
- API RP 8B Section 5

8.5.2.8 Drilling Instrumentation

- NDT Records
- API RP 8B Section 5

8.5.2.9 Derrick

- NDT Records

8.5.2.10 Casing Stabbing Board

- NDT Records

8.5.2.11 Tuggers and Sheaves

- NDT Records

8.5.2.12 Pipe Spinning Wrench

- NDT Records

8.5.2.13 EZY-TORQ

- NDT Records

8.5.2.14 Pipe Handling Equipment

- NDT Records
- API RP 8B Section 5
- PM Tasks
- History Records

8.5.2.15 Iron Roughneck

- NDT Records

8.5.2.16 Drilling Subs

- NDT Records
- TOTAL Red Alert No.5

8.5.2.17 *Well Testing Equipment*

- NDT Records

8.6 Organisation Mud System

8.6.1 PM on Mud System

8.6.1.1 *Mud Pumps*

- API RP 574 Section 6.3.6
- API RP 574 Section 6.3.7

8.7 Organisation Well Control

8.7.1 PM on Well Control Equipment

8.7.1.1 *Annular Type Preventers*

8.7.1.1.1 Annular Preventer, Cameron Type D

8.7.1.1.2 Annular Preventer, Shaffer

8.7.1.1.3 Annular BOP, Hydril Type GL

8.7.1.1.4 Gate Valves (BOP Mounted)

- API RP 53 Section 17.10.3

8.7.1.1.5 Choke Manifold

8.7.1.1.6 Cameron Style Hub Clamps

- Cameron EB 595 D, 22/7/94

8.7.1.1.7 BOP Handling Equipment

8.7.1.1.7.1 *Bridge Crane*

8.7.1.1.7.2 *Hydraulic BOP Control and Accumulator Unit*

- API Spec 16D Section 3.1.2.4
- ASME Section VIII Division 1
- API Spec 16D 2.2.1.4
- API Spec 16D 3.1.2.3
- API RP 53 Section 12.3.5

8.7.2 NDT/Certification Well Control Equipment

8.7.2.1 BOP RAM Type

- API 16A appendix C.4.2.3
- Hydrill Engineering Bulletin (92007)

8.7.2.2 Annular Type Preventers

8.7.2.2.1 Annular Preventers General

8.7.2.3 Cameron Style Hub Clamps

- Cameron EB 595 D, 22/7/94

8.7.2.4 BOP Handling Equipment

8.7.2.4.1 Bridge Crane

8.8 Organisation Barge

8.8.1 Organisation on Barge Equipment

8.8.1.1 Watertight Compartments

- Operations Manual

8.8.1.2 Mooring System MODU Code (14.1.3.9)/HSE Section 32

- PM Tasks
- API RP 2.1
- History Records

8.8.1.3 General Operations

- HSE (UK Requirement)
- S.I. No. 702 (UK Requirement)
- S.I. No. 703 (UK Requirement)
- S.I. No. 1542 (UK Requirement)
- S.I. No. 1019 (UK Requirement)

8.8.1.4 Jacking Systems

- DNV

8.8.2 Registration and Classification

- Class

- MODU Code 79, 11.10
- (CA) (UK Requirement)
- (HSE) (UK Requirement)
- (DOT) (UK Requirement)
- (HSE) (UK Requirement)
- CAA
- SI 1970/1453 (UK Requirement)
- COLREG 1972
- D.E.N. Safety Ltr 7/79 (UK Requirement)
- D.EN. Safety Letter 14/88 Rev. Oct 89 (UK Requirement)
- S.I. 1976/1542 (UK Requirement)
- (OIM, HLO, Well Control)

8.8.2.1 Review of Other Documentation

- S.I. No. 1983/1298 & S.I. 1985/2040 (UK Requirement)
- MODU Code
- SOLAS Class. Local Authority

8.9 Organisation Engine Room

8.9.1 PM on Engine Room Equipment

8.9.1.1 Diesel Engines

- PM Tasks
- History Records
- API RP 7C-11F Section 2.8

8.9.1.2 Emergency Generator Set

- History Records
- PM Tasks
- API RP 7C-11F Section 2.8

8.9.1.3 Emergency Power Supply

- PM Tasks
- MODU Code 79/5.3.7
- History Records

8.9.1.4 Air Compressor

- History Records
- API 510 Section 4.3
- API 510 Section 6.2
- API 510 Section 6.5
- Certificate

8.9.1.5 Raw-Water Pump and System

- History Records
- Certificate

8.9.1.6 Crane and Power Systems

- History Records
- (GN 46.3.3) (UK Requirement)
- CSON 28
- API 2C 6.2
- API Spec 9A
- PM Tasks
- SI 289 GN 46.3.3 (UK Requirement)
- NDT

8.9.1.7 API RP 2D, Appendix B

- PM Tasks
- API RP 2D C.4.1.2c
- API RP 2D C.4.1.2d
- Certificate
- API Spec 2D C.3.1.b.9
- Certificate
- History Records
- API RP 2D 3.2.2
- API RP 2D Section C.4.1.2d

8.9.1.8 Boiler

- Certification Record
- PM Tasks
- History Records

8.10 Organisation Electrical

8.10.1 PM on Electrical Equipment

8.10.1.1 *Elmagco Brake*

8.10.1.2 *Generator: AC 3 Phase*

8.10.1.3 *Transformer, 3 Phase*

8.10.1.4 *DC Motors (Including Propulsion Motors)*

8.10.1.5 *AC Motors*

8.10.1.6 *General Items*

8.10.1.7 *Electrical Safety (*) Hazardous Zones – Electrical Equipment*

8.10.1.7.1 *Electrical Equipment*

- SI 289, 4th Ed. GN 40.6.3.i (UK Requirement)
- SI 289, 4th Ed. GN 40.6.2.iii (UK Requirement)
- SI 289, 4th Ed. GN 40.6.5.i (UK Requirement)
- SI 289, 4th Ed. GN 40.6.5.ii (UK Requirement)
- SI 289, 4th Ed. GN 40.6.3.vi (UK Requirement)
- SI 289, 4th ED. GN 40.6.5. iii (UK Requirement)

8.10.1.8 *Electrical Earthing and Bonding*

8.11 Organisation Safety

8.11.1 PM on Safety Equipment

8.11.1.1 *Automatic Fire Detection System*

8.11.1.2 *Halon/CO2 System for Fire Control*

- S.I.611 (UK Requirement)

8.11.1.3 *Fixed Fire Extinguisher Systems (Water and Foam)*

8.11.1.4 *Automatic Sprinkler Systems (When installed) – SOLAS Chapter II-2*

Reg 12

- SOLAS Reg. 12 (2.5)

8.11.1.5 *Emergency Fire Pump*

8.11.1.6 *Deluge System*

8.11.1.7 *Portable Extinguishers & Fire Fighting Equipment*

8.11.1.8 *Foam System for Heli-Deck*

8.11.1.9 *Survival and Life Saving*

8.11.1.10 *Breathing Apparatus*

- MR'64 Art. 249a (Dutch Requirement)
- MRcs Art. 163a par 2 (Dutch Requirement)

8.11.1.11 *Flammable Gas Detection*

9 Spare Parts

9.1 Drilling

9.1.1 Drawworks

9.1.2 Rotary Table

9.1.3 Top Drive

9.1.4 Swivel

9.1.5 Kelly Spinner

9.1.6 Kelly and Kelly Drive Bushing

9.1.7 Crown Block

9.1.8 Travelling Block

9.1.9 Hook

9.1.10 Drilling Instrumentation

9.1.11 Derrick

9.1.12 Casing Stabbing Board

9.1.13 Tuggers and Sheaves

9.1.14 Survey Line

9.1.15 Pipe Spinning Wrench

9.1.16 EZY-TORQ

9.1.17 Pipe Handling Equipment

9.1.18 Iron Roughneck

9.1.19 Pipe Racking System

9.1.20 Power Tong

9.2 Mud System

9.2.1 Mud Pumps

9.2.2 Shale Shakers

9.2.3 Mud Cleaner

9.2.4 Desilter

9.2.5 Desander

9.2.6 Degasser

9.2.7 Centrifugal Pumps

9.2.8 Mud Agitators

9.2.9 Standpipe Manifold

9.2.10 Bulk Air System and Tanks

9.3 Well Control

9.3.1 Ram Type Preventers

- API RP 53 (1997) Section 6.4

9.3.2 Annular Preventers

- API RP 53 (1997) Section 6.4.e

9.3.3 Gate Valves

9.3.4 Choke and Kill Manifold

- API RP 53 (1997) Section 9.4.a-e

9.3.5 Remotely Operated Choke

9.3.6 BOP Handling System

9.3.7 BOP Control Unit

9.3.8 Diverter System

9.4 Marine Equipment

9.4.1 Ballast and Bilge System

9.4.2 Mooring System

9.4.3 Communication System

9.4.4 General Operations

9.5 Engine Room

9.5.1 Main Engines

9.5.2 Emergency Generator Set

9.5.3 Watermaker

9.5.4 Air Compressors

9.5.5 Boiler

9.5.6 Cranes

9.5.7 Refrigerating and Air- Conditioning

9.5.8 Deepwell Pumps

9.6 Electrical

9.6.1 Elmagco Brake

9.6.2 Generators

9.6.3 Transformers

9.6.4 DC Motors

9.6.5 AC Motors

9.6.6 General Items

9.7 Safety

9.7.1 Automatic Fire Detection System

9.7.2 CO2/Halon Systems

9.7.3 Main Fire Water Extinguishing System

9.7.4 Portable Extinguishers

9.7.5 Foam System for Heli-Deck

9.7.6 Life Boats

9.7.7 Life Rafts and Stations, Etc

9.7.8 BA Sets

9.7.9 Gas Detection System

9.7.10 Helicopter Facilities

9.7.11 Drilling Safety Equipment

9.7.12 First Aid and Sick Bay

9.7.13 Lifting and Handling

9.7.14 Pollution Control

9.7.15 General Safety Items

10 Certification

10.1 General

10.2 Drilling Equipment

10.3 Mud System

10.4 Well Control Equipment

10.5 Marine Equipment

10.6 Power Plant

10.7 Electrical

10.8 Safety

10.9 Alarms