Engine Room Simulator

ERS Sulzer 12RTA84C-III

ALARM LIST

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1 DIRECTORY LIST

2 VARIABLE LIST PAGES

2.1 Page:0100 AG01** FUEL OIL SUPPLY SYSTEM (1/4)

A:					
B:					
C:	P00023	bar	L=8.0	H=12.0	FO pressure inlet ME
D:					
E:	T00002	degC	L=20.0	H=150.0	FO temp inlet ME
F:	W00011	cSt	L=10.0	H=17.0	FO visco inlet ME
G:					
H:	P00021	bar	L=---	H=1.5	FO filter diff pressure
I:					
J:					
K:	P00024	bar	L=3.0	H=6.0	FO Supply pump pressure
L:					
M:	T00043	degC	L=---	H=135.0	FO Supply pump 1 casing temp
N:	T00044	degC	L=---	H=135.0	FO Supply pump 2 casing temp
O:					
P:					
Q:	Z00055	<0-1>	L=---	H=1.0	FO pipe leakage detector
R:					
S:					
T:					

2.2 Page:0101 AG01** FO SERVICE

A:					
B:					
C:					
D:	L00300	m	L=1.8	H=5.8	HFO Service tank level
E:	T00302	degC	L=60.0	H=90.0	HFO Service tank temp
F:	G00305	ton/h	L=---	H=0.1	HFO Service tank overflow
G:					
H:					
I:	L00340	m	L=1.5	H=5.8	MDO Service tank level
J:	T00342	degC	L=30.0	H=70.0	MDO Service tank temp
K:	G00345	ton/h	L=---	H=0.1	MDO Service tank overflow
L:					
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.3 Page:0102 AG01** FO SETTLING TANKS (3/4)

A:					
B:	L00400	m	L=2.0	H=5.8	Settling tank 1 level
C:	T00401	degC	L=60.0	H=90.0	Settling tank 1 temperature
D:	L00402	m	L=---	H=0.8	Settling tank 1 water level
E:	G00404	ton/h	L=---	H=0.1	Settling tank 1 overflow
F:					
G:	L00440	m	L=2.0	H=5.8	Settling tank 2 level
H:	T00441	degC	L=60.0	H=90.0	Settling tank 2 temperature
I:	L00442	m	L=---	H=0.8	Settling tank 2 water level
J:	G00444	ton/h	L=---	H=0.1	Settling tank 2 overflow
K:					
L:	L00480	m	L=2.0	H=5.8	Settling tank 3 level
M:	T00480	degC	L=40.0	H=70.0	Settling tank 3 temperature
N:	L00481	m	L=---	H=0.8	Settling tank 3 water level
O:	G00480	ton/h	L=---	H=0.1	Settling tank 3 overflow
P:					
Q:					
R:					
S:					
T:					

2.4 Page:0103 AG01** SPILL OIL TANK / BUNKER TANKS (4/4)

A:					
B:	L00263	m	L=---	H=2.5	Spill oil tank level
C:	G00256	<0-1>	L=---	H=1.0	Spill oil tank overflow (fire !!)
D:					
E:					
F:	L00270	m	L=---	H=0.5	HFO Overflow tank FO level
G:	L00284	m	L=---	H=0.5	MDO Overflow tank FO level
H:					
I:	X00270	<0-1>	L=---	H=1.0	HFO deck overflow alarm
J:	X00284	<0-1>	L=---	H=1.0	MDO deck overflow alarm
K:					
L:	T00205	degC	L=40.0	H=---	Aft HFO Bunker tank FO temp
M:	T00251	degC	L=40.0	H=---	Fwd HFO Bunker tank FO temp
N:	T00221	degC	L=40.0	H=---	Port HFO Bunker tank FO temp
O:	T00235	degC	L=40.0	H=---	Stbd HFO Bunker tank FO temp
P:					
Q:					
R:					
S:					
T:					

2.5 Page:0200 AG02** LTFW / HTFW SYSTEM (1/1)

A:					
B:					
C:	L01150	m	L=0.4	H=1.7	ME FW exp tank level
D:	G01154	ton/h	L=---	H=0.1	ME FW exp tank overflow
E:					
F:	P01005	bar	L=2.5	H=---	HTFW press inlet ME
G:	T01010	degC	L=60.0	H=---	HTFW temp inlet ME
H:	T01011	degC	L=---	H=88.0	HTFW temp outlet ME
I:					
J:					
K:	Z01164	%	L=---	H=5.0	ME FW system gas detector (cyl crack)
L:					
M:	Z01160	ppm	L=---	H=60.0	ME FW system salinity
N:	Z01161	ppm	L=---	H=30.0	ME FW system oil content
O:					
P:					
Q:	P01001	bar	L=2.1	H=---	LTFW pump discharge pressure
R:	T01015	degC	L=26.0	H=36.0	LTFW temp outlet LTFW pumps
S:					
T:					

2.6 Page:0300 AG03** START AIR SYSTEM (1/2)

A:					
B:	P04300	bar	L=12.0	H=32.0	Start Air Receiver 1 pressure
C:	Z04312	%	L=---	H=50.0	Start Air Receiver 1 water content
D:	V04446	<0-1>	L=---	H=1.0	Start Air Receiver 1 safety valve
E:					
F:	P04301	bar	L=12.0	H=32.0	Start Air Receiver 2 pressure
G:	Z04313	%	L=---	H=50.0	Start Air Receiver 2 water content
H:	V04450	<0-1>	L=---	H=1.0	Start Air Receiver 2 safety valve
I:					
J:					
K:	X04503	<0-2>	L=---	H=1.0	Start Air Compr 1 trip indication
L:	P04335	bar	L=1.5	H=---	Start Air Compr 1 LO inlet press
M:	T04342	degC	L=---	H=90.0	Start Air Compr 1 air outlet temp
N:	Z04350	%	L=---	H=80.0	Start Air Compr 1 Airc water content
O:					
P:	X04504	<0-2>	L=---	H=1.0	Start Air Compr 2 trip indication
Q:	P04336	bar	L=1.5	H=---	Start Air Compr 2 LO inlet press
R:	T04343	degC	L=---	H=90.0	Start Air Compr 2 air outlet temp
S:	Z04351	%	L=---	H=80.0	Start Air Compr 2 Airc water content
T:					

2.7 Page:0301 AG03** SERV AIR / CONTROL AIR SYSTEM (2/2)

A:					
B:	X04380	<0-2>	L=---	H=1.0	Start Air Compr 3 trip indication
C:	P04380	bar	L=1.5	H=---	Start Air Compr 3 LO inlet press
D:	T04380	degC	L=---	H=90.0	Start Air Compr 3 air outlet temp
E:	Z04382	%	L=---	H=80.0	Start Air Compr 3 Airc water content
F:					
G:	X04505	<0-2>	L=---	H=1.0	Serv Air Compr trip indication
H:	P04337	bar	L=1.5	H=---	Serv Air Compr LO inlet press
I:	T04344	degC	L=---	H=90.0	Serv Air Compr air outlet temp
J:	Z04352	%	L=---	H=80.0	Serv Air Compr Airc water content
K:	P04306	bar	L=7.0	H=9.0	Serv Air Receiver pressure
L:	Z04314	%	L=---	H=50.0	Serv Air Receiver water content
M:	V04454	<0-1>	L=---	H=1.0	Serv Air Receiver safety valve
N:					
O:	Z04458	%	L=---	H=40.0	Control Air filter/dryer water content
P:	P04313	bar	L=10.0	H=---	HP control air pressure (start/rev)
Q:	P04314	bar	L=6.5	H=---	Air spring air pressure (exh.valves)
R:	P04311	bar	L=6.0	H=10.0	LP control air press (normal supply)
S:	P04312	bar	L=5.0	H=---	LP control air press (safety supply)
T:					

2.8 Page:0400 AG04** ME LO SYSTEM (1/2)

A:					
B:	P01303	bar	L=3.4	H=---	Main LO supply pressure
C:	T01350	degC	L=40.0	H=50.0	Main LO temp inlet ME
D:	P01304	bar	L=---	H=1.0	Main LO filter diff press
E:					
F:	L01340	m	L=0.8	H=1.8	Main LO Service tank level
G:	T01344	degC	L=35.0	H=---	Main LO Service tank temp
H:	G01353	ton/h	L=---	H=0.1	Main LO Service tank overflow
I:					
J:	Z01342	ppm	L=---	H=200.0	Main LO contamination
K:					
L:	P01302	bar	L=10.0	H=---	Cross head LO supply pressure
M:					
N:					
O:	L01500	m	L=0.5	H=1.8	ME Cyl LO day tank level
P:	G01501	kg/h	L=---	H=2.0	ME Cyl LO day tank overflow
Q:					
R:					
S:					
T:					

2.9 Page:0401 AG04** ME CYL OIL LUBRICATION (2/2)

A:					
B:					
C:					
D:					
E:	G11017	kg/h	L=0.3	H=---	ME Cyl 1 cylinder oil flow
F:	G11027	kg/h	L=0.3	H=---	ME Cyl 2 cylinder oil flow
G:	G11037	kg/h	L=0.3	H=---	ME Cyl 3 cylinder oil flow
H:	G11047	kg/h	L=0.3	H=---	ME Cyl 4 cylinder oil flow
I:	G11057	kg/h	L=0.3	H=---	ME Cyl 5 cylinder oil flow
J:	G11067	kg/h	L=0.3	H=---	ME Cyl 6 cylinder oil flow
K:	G11217	kg/h	L=0.3	H=---	ME Cyl 7 cylinder oil flow
L:	G11227	kg/h	L=0.3	H=---	ME Cyl 8 cylinder oil flow
M:	G11237	kg/h	L=0.3	H=---	ME Cyl 9 cylinder oil flow
N:	G11247	kg/h	L=0.3	H=---	ME Cyl 10 cylinder oil flow
O:	G11257	kg/h	L=0.3	H=---	ME Cyl 11 cylinder oil flow
P:	G11267	kg/h	L=0.3	H=---	ME Cyl 12 cylinder oil flow
Q:					
R:					
S:					
T:					

2.10 Page:0500 AG05** ME SHUT DOWN SIGNALS (1/5)

A:					
B:					
C:	X02444	<0-2>	L=---	H=1.0	AUTOCHIEF : SHUT DOWN
D:	X02445	<0-2>	L=---	H=1.0	AUTOCHIEF : SLOW DOWN
E:	X02446	<0-2>	L=---	H=1.0	AUTOCHIEF : FAIL
F:					
G:	Z20001	bar	L=3.0	H=---	SHU1-1: Main LO pressure signal 1
H:	Z20002	bar	L=2.7	H=---	SHU1-2: Main LO pressure signal 2
I:					
J:	Z20011	bar	L=2.4	H=---	SHU2-1: ME JW pressure signal 1
K:	Z20021	kg/s	L=2.0	H=---	SHU3-1: ME piston LO flow signal
L:					
M:	Z20031	bar	L=4.5	H=---	SHU4-1: ME exh v air spring p signal 1
N:	Z20032	bar	L=4.5	H=---	SHU4-2: ME exh v air spring p signal 2
O:					
P:	Z20041	rpm	L=---	H=110.0	SHU5-1: ME speed signal 1
Q:	Z20042	rpm	L=---	H=110.0	SHU5-2: ME speed signal 2
R:					
S:	X20190	<0-2>	L=---	H=1.0	VIT/VEC control fail (auto speed red)
T:					

2.11 Page:0501 AG05** ME SLOW DOWN SIGNALS (2/5)

A:					
B:					
C:	Z20051	bar	L=3.2	H=---	SLO1-1: Main LO pressure signal 3
D:	Z20052	bar	L=9.0	H=---	SLO1-2: Cross head LO pressure signal
E:					
F:	Z20061	bar	L=2.5	H=---	SLO2-1: ME JW pressure signal 2
G:	Z20062	degC	L=---	H=95.0	SLO2-2: ME JW cyl outl temp signal
H:					
I:	Z20071	degC	L=---	H=85.0	SLO3-1: ME piston LO outlet temp signal
J:					
K:	Z20082	degC	L=---	H=520.0	SLO4-1: ME cyl exh outl temp signal
L:	Z20083	degC	L=---	H=70.0	SLO4-2: ME cyl exh dev temp signal
M:	Z20081	degC	L=---	H=530.0	SLO4-3: TBCH exh inlet temp signal
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.12 Page:0502 AG05** ME SLOW DOWN SIGNALS (3/5)

A:					
B:	Z20091	bar	L=6.0	H=---	SLO5-1: ME exh v air spring p signal 3
C:	Z20092	degC	L=---	H=55.0	SLO5-2: ME LO inlet temp signal
D:	Z20093	degC	L=---	H=65.0	SLO5-3: ME thrust LO outl temp signal
E:	Z20094	%	L=---	H=60.0	SLO5-4: ME oil mist signal
F:					
G:	Z20095	degC	L=---	H=120.0	SLO5-5: TBCH bearing LO temp signal
H:	Z20096	degC	L=---	H=94.0	SLO5-6: TBCH casing JW temp signal
I:	Z20100	degC	L=---	H=70.0	SLO5-7: TBCH vibration signal
J:					
K:	Z20097	kg/h	L=0.3	H=---	SLO5-8: ME cyl oil flow signal
L:	Z20098	degC	L=---	H=70.0	SLO5-9: ME Airc air outlet temp signal
M:	Z20099	degC	L=---	H=120.0	SLO5-10: ME cyl scav air box t signal
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.13 Page:0503 AG05** ME CYLINDER PRESSURES (4/5)

A:					
B:					
C:					
D:					
E:	P18013	bara	L=---	H=190.0	ME Cyl 1 max pressure
F:	P18023	bara	L=---	H=190.0	ME Cyl 2 max pressure
G:	P18033	bara	L=---	H=190.0	ME Cyl 3 max pressure
H:	P18043	bara	L=---	H=190.0	ME Cyl 4 max pressure
I:	P18053	bara	L=---	H=190.0	ME Cyl 5 max pressure
J:	P18063	bara	L=---	H=190.0	ME Cyl 6 max pressure
K:	P18213	bara	L=---	H=190.0	ME Cyl 7 max pressure
L:	P18223	bara	L=---	H=190.0	ME Cyl 8 max pressure
M:	P18233	bara	L=---	H=190.0	ME Cyl 9 max pressure
N:	P18243	bara	L=---	H=190.0	ME Cyl 10 max pressure
O:	P18253	bara	L=---	H=190.0	ME Cyl 11 max pressure
P:	P18263	bara	L=---	H=190.0	ME Cyl 12 max pressure
Q:					
R:					
S:					
T:					

2.14 Page:0504 AG05** MISCELLANEOUS SIGNALS (5/5)

A:					
B:	X07509	<0-1>	L=---	H=1.0	Bridge Control Loss of Response
C:					
D:					
E:	E02005	MW	L=---	H=53.5	ME shaft power
F:					
G:	Z02481	%	L=---	H=60.0	ME vibration index (general)
H:					
I:	Z03764	%	L=---	H=60.0	Propeller/hull vibration
J:					
K:	X07077	<0-2>	L=---	H=1.0	Pump auto stby start (warning)
L:					
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.15 Page:0600 AG06** ME LINER COOLING (1/6)

A:					
B:					
C:					
D:					
E:	T11013	degC	L=---	H=90.0	ME Cyl 1 liner JW outlet temp
F:	T11023	degC	L=---	H=90.0	ME Cyl 2 liner JW outlet temp
G:	T11033	degC	L=---	H=90.0	ME Cyl 3 liner JW outlet temp
H:	T11043	degC	L=---	H=90.0	ME Cyl 4 liner JW outlet temp
I:	T11053	degC	L=---	H=90.0	ME Cyl 5 liner JW outlet temp
J:	T11063	degC	L=---	H=90.0	ME Cyl 6 liner JW outlet temp
K:	T11213	degC	L=---	H=90.0	ME Cyl 7 liner JW outlet temp
L:	T11223	degC	L=---	H=90.0	ME Cyl 8 liner JW outlet temp
M:	T11233	degC	L=---	H=90.0	ME Cyl 9 liner JW outlet temp
N:	T11243	degC	L=---	H=90.0	ME Cyl 10 liner JW outlet temp
O:	T11253	degC	L=---	H=90.0	ME Cyl 11 liner JW outlet temp
P:	T11263	degC	L=---	H=90.0	ME Cyl 12 liner JW outlet temp
Q:					
R:					
S:					
T:					

2.16 Page:0601 AG06** ME PISTON COOLING (2/6)

A:					
B:					
C:					
D:					
E:	T11014	degC	L=---	H=80.0	ME Cyl 1 piston LO outlet temp
F:	T11024	degC	L=---	H=80.0	ME Cyl 2 piston LO outlet temp
G:	T11034	degC	L=---	H=80.0	ME Cyl 3 piston LO outlet temp
H:	T11044	degC	L=---	H=80.0	ME Cyl 4 piston LO outlet temp
I:	T11054	degC	L=---	H=80.0	ME Cyl 5 piston LO outlet temp
J:	T11064	degC	L=---	H=80.0	ME Cyl 6 piston LO outlet temp
K:	T11214	degC	L=---	H=80.0	ME Cyl 7 piston LO outlet temp
L:	T11224	degC	L=---	H=80.0	ME Cyl 8 piston LO outlet temp
M:	T11234	degC	L=---	H=80.0	ME Cyl 9 piston LO outlet temp
N:	T11244	degC	L=---	H=80.0	ME Cyl 10 piston LO outlet temp
O:	T11254	degC	L=---	H=80.0	ME Cyl 11 piston LO outlet temp
P:	T11264	degC	L=---	H=80.0	ME Cyl 12 piston LO outlet temp
Q:					
R:					
S:					
T:					

2.17 Page:0602 AG06** ME PISTON COOLING FLOW (3/6)

A:					
B:					
C:					
D:					
E:	G11016	kg/s	L=1.0	H=---	ME Cyl 1 piston LO flow
F:	G11026	kg/s	L=1.0	H=---	ME Cyl 2 piston LO flow
G:	G11036	kg/s	L=1.0	H=---	ME Cyl 3 piston LO flow
H:	G11046	kg/s	L=1.0	H=---	ME Cyl 4 piston LO flow
I:	G11056	kg/s	L=1.0	H=---	ME Cyl 5 piston LO flow
J:	G11066	kg/s	L=1.0	H=---	ME Cyl 6 piston LO flow
K:	G11216	kg/s	L=1.0	H=---	ME Cyl 7 piston LO flow
L:	G11226	kg/s	L=1.0	H=---	ME Cyl 8 piston LO flow
M:	G11236	kg/s	L=1.0	H=---	ME Cyl 9 piston LO flow
N:	G11246	kg/s	L=1.0	H=---	ME Cyl 10 piston LO flow
O:	G11256	kg/s	L=1.0	H=---	ME Cyl 11 piston LO flow
P:	G11266	kg/s	L=1.0	H=---	ME Cyl 12 piston LO flow
Q:					
R:					
S:					
T:					

2.18 Page:0603 AG06** ME CYLINDER LINER TEMP (low) (4/6)

A:					
B:					
C:					
D:					
E:	T11015	degC	L=110.0	H=240.0	ME Cyl 1 liner metal temp (lower)
F:	T11025	degC	L=110.0	H=240.0	ME Cyl 2 liner metal temp (lower)
G:	T11035	degC	L=110.0	H=240.0	ME Cyl 3 liner metal temp (lower)
H:	T11045	degC	L=110.0	H=240.0	ME Cyl 4 liner metal temp (lower)
I:	T11055	degC	L=110.0	H=240.0	ME Cyl 5 liner metal temp (lower)
J:	T11065	degC	L=110.0	H=240.0	ME Cyl 6 liner metal temp (lower)
K:	T11215	degC	L=110.0	H=240.0	ME Cyl 7 liner metal temp (lower)
L:	T11225	degC	L=110.0	H=240.0	ME Cyl 8 liner metal temp (lower)
M:	T11235	degC	L=110.0	H=240.0	ME Cyl 9 liner metal temp (lower)
N:	T11245	degC	L=110.0	H=240.0	ME Cyl 10 liner metal temp (lower)
O:	T11255	degC	L=110.0	H=240.0	ME Cyl 11 liner metal temp (lower)
P:	T11265	degC	L=110.0	H=240.0	ME Cyl 12 liner metal temp (lower)
Q:					
R:					
S:					
T:					

2.19 Page:0604 AG06** ME CYLINDER LINER TEMP (high) (5/6)

A:					
B:					
C:					
D:					
E:	T11016	degC	L=---	H=290.0	ME Cyl 1 liner metal temp (upper)
F:	T11026	degC	L=---	H=290.0	ME Cyl 2 liner metal temp (upper)
G:	T11036	degC	L=---	H=290.0	ME Cyl 3 liner metal temp (upper)
H:	T11046	degC	L=---	H=290.0	ME Cyl 4 liner metal temp (upper)
I:	T11056	degC	L=---	H=290.0	ME Cyl 5 liner metal temp (upper)
J:	T11066	degC	L=---	H=290.0	ME Cyl 6 liner metal temp (upper)
K:	T11216	degC	L=---	H=290.0	ME Cyl 7 liner metal temp (upper)
L:	T11226	degC	L=---	H=290.0	ME Cyl 8 liner metal temp (upper)
M:	T11236	degC	L=---	H=290.0	ME Cyl 9 liner metal temp (upper)
N:	T11246	degC	L=---	H=290.0	ME Cyl 10 liner metal temp (upper)
O:	T11256	degC	L=---	H=290.0	ME Cyl 11 liner metal temp (upper)
P:	T11266	degC	L=---	H=290.0	ME Cyl 12 liner metal temp (upper)
Q:					
R:					
S:					
T:					

2.20 Page:0605 AG06** ME CYLINDER HEAD TEMP (6/6)

A:					
B:					
C:					
D:					
E:	T11017	degC	L=---	H=340.0	ME Cyl 1 cover metal temp (mean)
F:	T11027	degC	L=---	H=340.0	ME Cyl 2 cover metal temp (mean)
G:	T11037	degC	L=---	H=340.0	ME Cyl 3 cover metal temp (mean)
H:	T11047	degC	L=---	H=340.0	ME Cyl 4 cover metal temp (mean)
I:	T11057	degC	L=---	H=340.0	ME Cyl 5 cover metal temp (mean)
J:	T11067	degC	L=---	H=340.0	ME Cyl 6 cover metal temp (mean)
K:	T11217	degC	L=---	H=340.0	ME Cyl 7 cover metal temp (mean)
L:	T11227	degC	L=---	H=340.0	ME Cyl 8 cover metal temp (mean)
M:	T11237	degC	L=---	H=340.0	ME Cyl 9 cover metal temp (mean)
N:	T11247	degC	L=---	H=340.0	ME Cyl 10 cover metal temp (mean)
O:	T11257	degC	L=---	H=340.0	ME Cyl 11 cover metal temp (mean)
P:	T11267	degC	L=---	H=340.0	ME Cyl 12 cover metal temp (mean)
Q:					
R:					
S:					
T:					

2.21 Page:0700 AG07** ME CYL EXHAUST TEMP (1/3)

A:					
B:					
C:					
D:					
E:	T11018	degC	L=---	H=480.0	ME Cyl 1 exh outlet temp (sensor)
F:	T11028	degC	L=---	H=480.0	ME Cyl 2 exh outlet temp (sensor)
G:	T11038	degC	L=---	H=480.0	ME Cyl 3 exh outlet temp (sensor)
H:	T11048	degC	L=---	H=480.0	ME Cyl 4 exh outlet temp (sensor)
I:	T11058	degC	L=---	H=480.0	ME Cyl 5 exh outlet temp (sensor)
J:	T11068	degC	L=---	H=480.0	ME Cyl 6 exh outlet temp (sensor)
K:	T11218	degC	L=---	H=480.0	ME Cyl 7 exh outlet temp (sensor)
L:	T11228	degC	L=---	H=480.0	ME Cyl 8 exh outlet temp (sensor)
M:	T11238	degC	L=---	H=480.0	ME Cyl 9 exh outlet temp (sensor)
N:	T11248	degC	L=---	H=480.0	ME Cyl 10 exh outlet temp (sensor)
O:	T11258	degC	L=---	H=480.0	ME Cyl 11 exh outlet temp (sensor)
P:	T11268	degC	L=---	H=480.0	ME Cyl 12 exh outlet temp (sensor)
Q:					
R:					
S:					
T:					

2.22 Page:0701 AG07** ME CYL EXHAUST TEMP DEVIATION (2/3)

A:					
B:					
C:					
D:					
E:	T11019	degC	L=-40.0	H=40.0	ME Cyl 1 exh temp deviation
F:	T11029	degC	L=-40.0	H=40.0	ME Cyl 2 exh temp deviation
G:	T11039	degC	L=-40.0	H=40.0	ME Cyl 3 exh temp deviation
H:	T11049	degC	L=-40.0	H=40.0	ME Cyl 4 exh temp deviation
I:	T11059	degC	L=-40.0	H=40.0	ME Cyl 5 exh temp deviation
J:	T11069	degC	L=-40.0	H=40.0	ME Cyl 6 exh temp deviation
K:	T11219	degC	L=-40.0	H=40.0	ME Cyl 7 exh temp deviation
L:	T11229	degC	L=-40.0	H=40.0	ME Cyl 8 exh temp deviation
M:	T11239	degC	L=-40.0	H=40.0	ME Cyl 9 exh temp deviation
N:	T11249	degC	L=-40.0	H=40.0	ME Cyl 10 exh temp deviation
O:	T11259	degC	L=-40.0	H=40.0	ME Cyl 11 exh temp deviation
P:	T11269	degC	L=-40.0	H=40.0	ME Cyl 12 exh temp deviation
Q:					
R:					
S:					
T:					

2.23 Page:0702 AG07** ME CYL EXHAUST (MISC) (3/3)

A:					
B:					
C:	Z02013	%	L=---	H=80.0	ME Exhaust gas smoke content
D:					
E:	Z02014	g/kWh	L=---	H=25.0	ME Exhaust gas NOx generation
F:					
G:					
H:					
I:					
J:					
K:					
L:					
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.24 Page:0800 AG08** ME CYL SCAV AIR TEMP (1/1)

A:					
B:	P13070	bar	L=---	H=2.5	ME Air Receiver pressure
C:	G13071	ton/h	L=---	H=1.0	ME Air Receiver safety valve flow
D:					
E:	T18011	degC	L=---	H=80.0	ME Cyl 1 suction temp
F:	T18021	degC	L=---	H=80.0	ME Cyl 2 suction temp
G:	T18031	degC	L=---	H=80.0	ME Cyl 3 suction temp
H:	T18041	degC	L=---	H=80.0	ME Cyl 4 suction temp
I:	T18051	degC	L=---	H=80.0	ME Cyl 5 suction temp
J:	T18061	degC	L=---	H=80.0	ME Cyl 6 suction temp
K:	T18211	degC	L=---	H=80.0	ME Cyl 7 suction temp
L:	T18221	degC	L=---	H=80.0	ME Cyl 8 suction temp
M:	T18231	degC	L=---	H=80.0	ME Cyl 9 suction temp
N:	T18241	degC	L=---	H=80.0	ME Cyl 10 suction temp
O:	T18251	degC	L=---	H=80.0	ME Cyl 11 suction temp
P:	T18261	degC	L=---	H=80.0	ME Cyl 12 suction temp
Q:					
R:					
S:					
T:					

2.25 Page:0900 AG09** ME TURBOCHARGER no 1 (1/4)

A:					
B:	N13010	rpm	L=---	H=10000.0	ME TBCH 1 speed
C:	T13011	degC	L=---	H=230.0	ME TBCH 1 compressor outlet temp
D:	P13012	mmWC	L=---	H=220.0	ME TBCH 1 air filter diff press
E:					
F:	T13042	degC	L=25.0	H=65.0	ME TBCH 1 Airc air outlet temp
G:	P13040	mmWC	L=---	H=450.0	ME TBCH 1 Airc diff pressure
H:					
I:	T13015	degC	L=---	H=515.0	ME TBCH 1 turbine inlet temp
J:	T13016	degC	L=---	H=470.0	ME TBCH 1 turbine outlet temp
K:					
L:	Z13012	%	L=---	H=60.0	ME TBCH 1 vibration
M:					
N:	T13110	degC	L=---	H=110.0	ME TBCH 1 bearing LO outlet temp
O:	T13112	degC	L=---	H=92.0	ME TBCH 1 cooling water outlet temp
P:					
Q:	L13040	%	L=---	H=40.0	ME TBCH 1 Airc water level (demister)
R:	T13046	degC	L=---	H=57.0	ME TBCH 1 Airc CW outlet temp
S:					
T:					

2.26 Page:0901 AG09** ME TURBOCHARGER no 2 (2/4)

A:					
B:	N13020	rpm	L=---	H=10000.0	ME TBCH 2 speed
C:	T13021	degC	L=---	H=230.0	ME TBCH 2 compressor outlet temp
D:	P13022	mmWC	L=---	H=220.0	ME TBCH 2 air filter diff press
E:					
F:	T13052	degC	L=25.0	H=65.0	ME TBCH 2 Airc air outlet temp
G:	P13050	mmWC	L=---	H=450.0	ME TBCH 2 Airc diff pressure
H:					
I:	T13025	degC	L=---	H=515.0	ME TBCH 2 turbine inlet temp
J:	T13026	degC	L=---	H=470.0	ME TBCH 2 turbine outlet temp
K:					
L:	Z13022	%	L=---	H=60.0	ME TBCH 2 vibration
M:					
N:	T13120	degC	L=---	H=110.0	ME TBCH 2 bearing LO outlet temp
O:	T13122	degC	L=---	H=92.0	ME TBCH 2 cooling water outlet temp
P:					
Q:	L13050	%	L=---	H=40.0	ME TBCH 2 Airc water level (demister)
R:	T13056	degC	L=---	H=57.0	ME TBCH 2 Airc CW outlet temp
S:					
T:					

2.27 Page:0902 AG09** ME TURBOCHARGER no 3 (3/4)

A:					
B:	N13030	rpm	L=---	H=10000.0	ME TBCH 3 speed
C:	T13031	degC	L=---	H=230.0	ME TBCH 3 compressor outlet temp
D:	P13032	mmWC	L=---	H=220.0	ME TBCH 3 air filter diff press
E:					
F:	T13062	degC	L=25.0	H=65.0	ME TBCH 3 Airc air outlet temp
G:	P13060	mmWC	L=---	H=450.0	ME TBCH 3 Airc diff pressure
H:					
I:	T13035	degC	L=---	H=515.0	ME TBCH 3 turbine inlet temp
J:	T13036	degC	L=---	H=470.0	ME TBCH 3 turbine outlet temp
K:					
L:	Z13032	%	L=---	H=60.0	ME TBCH 3 vibration
M:					
N:	T13130	degC	L=---	H=110.0	ME TBCH 3 bearing LO outlet temp
O:	T13132	degC	L=---	H=92.0	ME TBCH 3 cooling water outlet temp
P:					
Q:	L13060	%	L=---	H=40.0	ME TBCH 3 Airc water level (demister)
R:	T13066	degC	L=---	H=57.0	ME TBCH 3 Airc CW outlet temp
S:					
T:					

2.28 Page:0903 AG09** ME TBCH AUXIL SYSTEMS (4/4)

A:					
B:					
C:	P14050	bar	L=3.0	H=---	ME TBCH LO supply line pressure
D:	T14050	degC	L=50.0	H=75.0	ME TBCH LO supply line temp
E:					
F:	P14040	bar	L=---	H=0.5	ME TBCH LO filter diff pressure
G:					
H:					
I:	L14010	m	L=0.6	H=1.4	ME TBCH LO Service tank level
J:					
K:	G14010	ton/h	L=---	H=0.1	ME TBCH LO Service tank overflow
L:					
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.29 Page:1000 AG10** ME MAIN BEARINGS (1/4)

A:					
B:					
C:	T12050	degC	L=---	H=75.0	ME Thrust bearing temp (sensor)
D:					
E:	T12051	degC	L=---	H=85.0	ME Main bearing 1 temp (sensor)
F:	T12052	degC	L=---	H=85.0	ME Main bearing 2 temp (sensor)
G:	T12053	degC	L=---	H=85.0	ME Main bearing 3 temp (sensor)
H:	T12054	degC	L=---	H=85.0	ME Main bearing 4 temp (sensor)
I:	T12055	degC	L=---	H=85.0	ME Main bearing 5 temp (sensor)
J:	T12056	degC	L=---	H=85.0	ME Main bearing 6 temp (sensor)
K:	T12057	degC	L=---	H=85.0	ME Main bearing 7 temp (sensor)
L:	T12058	degC	L=---	H=85.0	ME Main bearing 8 temp (sensor)
M:	T12059	degC	L=---	H=85.0	ME Main bearing 9 temp (sensor)
N:	T12060	degC	L=---	H=85.0	ME Main bearing 10 temp (sensor)
O:	T12061	degC	L=---	H=85.0	ME Main bearing 11 temp (sensor)
P:	T12062	degC	L=---	H=85.0	ME Main bearing 12 temp (sensor)
Q:	T12063	degC	L=---	H=85.0	ME Main bearing 13 temp (sensor)
R:					
S:	T12049	degC	L=---	H=60.0	ME Thrust bearing LO outl temp (sensor)
T:					

2.30 Page:1001 AG10** ME CRANK BEARINGS (2/4)

A:					
B:					
C:					
D:					
E:	T12151	degC	L=---	H=85.0	ME Crank pin bearing 1 temp (sensor)
F:	T12152	degC	L=---	H=85.0	ME Crank pin bearing 2 temp (sensor)
G:	T12153	degC	L=---	H=85.0	ME Crank pin bearing 3 temp (sensor)
H:	T12154	degC	L=---	H=85.0	ME Crank pin bearing 4 temp (sensor)
I:	T12155	degC	L=---	H=85.0	ME Crank pin bearing 5 temp (sensor)
J:	T12156	degC	L=---	H=85.0	ME Crank pin bearing 6 temp (sensor)
K:	T12157	degC	L=---	H=85.0	ME Crank pin bearing 7 temp (sensor)
L:	T12158	degC	L=---	H=85.0	ME Crank pin bearing 8 temp (sensor)
M:	T12159	degC	L=---	H=85.0	ME Crank pin bearing 9 temp (sensor)
N:	T12160	degC	L=---	H=85.0	ME Crank pin bearing 10 temp (sensor)
O:	T12161	degC	L=---	H=85.0	ME Crank pin bearing 11 temp (sensor)
P:	T12162	degC	L=---	H=85.0	ME Crank pin bearing 12 temp (sensor)
Q:					
R:					
S:					
T:					

2.31 Page:1002 AG10** ME CROSSH BEARINGS (3/4)

A:					
B:					
C:					
D:					
E:	T12251	degC	L=---	H=90.0	ME Cross head bearing 1 temp (sensor)
F:	T12252	degC	L=---	H=90.0	ME Cross head bearing 2 temp (sensor)
G:	T12253	degC	L=---	H=90.0	ME Cross head bearing 3 temp (sensor)
H:	T12254	degC	L=---	H=90.0	ME Cross head bearing 4 temp (sensor)
I:	T12255	degC	L=---	H=90.0	ME Cross head bearing 5 temp (sensor)
J:	T12256	degC	L=---	H=90.0	ME Cross head bearing 6 temp (sensor)
K:	T12257	degC	L=---	H=90.0	ME Cross head bearing 7 temp (sensor)
L:	T12258	degC	L=---	H=90.0	ME Cross head bearing 8 temp (sensor)
M:	T12259	degC	L=---	H=90.0	ME Cross head bearing 9 temp (sensor)
N:	T12260	degC	L=---	H=90.0	ME Cross head bearing 10 temp (sensor)
O:	T12261	degC	L=---	H=90.0	ME Cross head bearing 11 temp (sensor)
P:	T12262	degC	L=---	H=90.0	ME Cross head bearing 12 temp (sensor)
Q:					
R:					
S:					
T:					

2.32 Page:1003 AG10** ME OIL MIST MONITOR (4/4)

A:					
B:					
C:	X12050	<0-1>	L=---	H=1.0	ME Crank case oil mist detector failure
D:					
E:	Z12051	%	L=---	H=40.0	ME Crank case 1 oil mist (sensor)
F:	Z12052	%	L=---	H=40.0	ME Crank case 2 oil mist (sensor)
G:	Z12053	%	L=---	H=40.0	ME Crank case 3 oil mist (sensor)
H:	Z12054	%	L=---	H=40.0	ME Crank case 4 oil mist (sensor)
I:	Z12055	%	L=---	H=40.0	ME Crank case 5 oil mist (sensor)
J:	Z12056	%	L=---	H=40.0	ME Crank case 6 oil mist (sensor)
K:	Z12057	%	L=---	H=40.0	ME Crank case 7 oil mist (sensor)
L:	Z12058	%	L=---	H=40.0	ME Crank case 8 oil mist (sensor)
M:	Z12059	%	L=---	H=40.0	ME Crank case 9 oil mist (sensor)
N:	Z12060	%	L=---	H=40.0	ME Crank case 10 oil mist (sensor)
O:	Z12061	%	L=---	H=40.0	ME Crank case 11 oil mist (sensor)
P:	Z12062	%	L=---	H=40.0	ME Crank case 12 oil mist (sensor)
Q:					
R:					
S:					
T:					

2.33 Page:1100 AG11** ME PISTON RING MONITOR (1/1)

A:					
B:					
C:					
D:					
E:	Z17011	<0-1>	L=---	H=1.0	ME Cyl 1 piston ring alarm
F:	Z17021	<0-1>	L=---	H=1.0	ME Cyl 2 piston ring alarm
G:	Z17031	<0-1>	L=---	H=1.0	ME Cyl 3 piston ring alarm
H:	Z17041	<0-1>	L=---	H=1.0	ME Cyl 4 piston ring alarm
I:	Z17051	<0-1>	L=---	H=1.0	ME Cyl 5 piston ring alarm
J:	Z17061	<0-1>	L=---	H=1.0	ME Cyl 6 piston ring alarm
K:	Z17211	<0-1>	L=---	H=1.0	ME Cyl 7 piston ring alarm
L:	Z17221	<0-1>	L=---	H=1.0	ME Cyl 8 piston ring alarm
M:	Z17231	<0-1>	L=---	H=1.0	ME Cyl 9 piston ring alarm
N:	Z17241	<0-1>	L=---	H=1.0	ME Cyl 10 piston ring alarm
O:	Z17251	<0-1>	L=---	H=1.0	ME Cyl 11 piston ring alarm
P:	Z17261	<0-1>	L=---	H=1.0	ME Cyl 12 piston ring alarm
Q:					
R:					
S:					
T:					

2.34 Page:1200 AG12** STERN TUBE SYSTEM (1/2)

A:					
B:					
C:	T03552	degC	L=---	H=60.0	Stern Tube fore bearing temp
D:	T03553	degC	L=---	H=60.0	Stern Tube aft bearing temp
E:					
F:	P03465	mWC	L=1.0	H=8.0	Stern Tube LO/SW diff press
G:					
H:					
I:	L03451	%	L=40.0	H=---	Stern Tube low grav tank level
J:	L03452	%	L=40.0	H=---	Stern Tube high grav tank level
K:					
L:					
M:	T03453	degC	L=---	H=60.0	Stern Tube LO sump temp
N:	L03450	%	L=30.0	H=90.0	Stern Tube LO sump level
O:	G03476	kg/h	L=---	H=10.0	Stern Tube LO sump overflow (to bilge)
P:					
Q:	Z03555	%	L=---	H=30.0	Stern Tube LO contamination
R:					
S:	X03565	<0-1>	L=---	H=1.0	Stern Tube serious damage
T:					

2.35 Page:1201 AG12** PROPELLER SYSTEM (if CPP) (2/2)

A:					
B:	P03701	bar	L=20.0	H=50.0	Prop servo oil press
C:	T03701	degC	L=---	H=75.0	Prop servo oil temp
D:					
E:	P03703	bar	L=---	H=1.5	Prop servo oil filter diff press
F:					
G:					
H:	T03713	degC	L=---	H=50.0	Prop servo oil tank temp
I:	L03712	%	L=30.0	H=90.0	Prop servo oil tank level
J:	G03722	ton/h	L=---	H=0.1	Prop servo oil tank overflow (to bilge)
K:					
L:					
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.36 Page:1300 AG13** SEA WATER COOLING SYSTEM (1/2)

A:					
B:					
C:	P00632	bar	L=1.6	H=---	Main SW line supply pressure
D:					
E:	T00617	degC	L=10.0	H=40.0	SW temp inlet main SW line
F:					
G:	P00630	bar	L=---	H=0.8	SW filter diff pressure (low suction)
H:	P00631	bar	L=---	H=0.8	SW filter diff pressure (high suction)
I:					
J:					
K:					
L:					
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.37 Page:1301 AG13** WATER BALLAST SYSTEM (2/2)

A:					
B:					
C:	X15483	<0-1>	L=---	H=1.0	Anti Heeling control fail
D:					
E:	L15200	m	L=---	H=9.8	Fore Peak WB tank level
F:	L15210	m	L=---	H=14.8	Stbd WB tank no 1 level
G:	L15220	m	L=---	H=14.8	Stbd WB tank no 2 level
H:	L15230	m	L=---	H=14.8	Stbd WB tank no 3 level
I:	L15240	m	L=---	H=14.8	Stbd WB tank no 4 level
J:	L15250	m	L=---	H=14.8	Stbd WB tank no 5 level
K:	L15260	m	L=---	H=14.8	Stbd WB tank no 6 level
L:					
M:	L15310	m	L=---	H=14.8	Port WB tank no 1 level
N:	L15320	m	L=---	H=14.8	Port WB tank no 2 level
O:	L15330	m	L=---	H=14.8	Port WB tank no 3 level
P:	L15340	m	L=---	H=14.8	Port WB tank no 4 level
Q:	L15350	m	L=---	H=14.8	Port WB tank no 5 level
R:	L15360	m	L=---	H=14.8	Port WB tank no 6 level
S:	L15300	m	L=---	H=9.8	Aft Peak WB tank level
T:					

2.38 Page:1400 AG14** DISTILLING PLANT (1/1)

A:					
B:					
C:	Z06674	ppm	L=---	H=15.0	Produced fresh water flow salinity
D:					
E:					
F:	T06710	degC	L=---	H=100.0	Fresh W Gen cooling flow outlet temp
G:	T06704	degC	L=40.0	H=---	Fresh W Gen heating flow outlet temp
H:					
I:	L06671	%	L=---	H=90.0	Fresh W Gen cooler distillate level
J:	L06648	%	L=10.0	H=95.0	Fresh W Gen chemical tank level
K:					
L:	P06661	bara	L=---	H=0.5	Fresh W Gen pressure (total)
M:					
N:	P06660	bar	L=4.0	H=---	Ejector pump discharge pressure
O:					
P:	L06680	m	L=0.4	H=4.8	Distilled Water tank level
Q:	G06680	t/h	L=---	H=0.1	Distilled Water tank overflow
R:					
S:					
T:					

2.39 Page:1500 AG15** STEERING GEAR SYSTEM (1/1)

A:					
B:	P15809	bar	L=---	H=1.5	Steering Gear oil filter 1 diff press
C:	P15810	bar	L=---	H=1.5	Steering Gear oil filter 2 diff press
D:					
E:	T15801	degC	L=---	H=50.0	Steering Gear oil sump 1 temp
F:	T15802	degC	L=---	H=50.0	Steering Gear oil sump 2 temp
G:					
H:					
I:	L15801	%	L=50.0	H=95.0	Steering Gear exp tank 1 level
J:	L15802	%	L=50.0	H=95.0	Steering Gear exp tank 2 level
K:					
L:	L15803	%	L=50.0	H=---	Steering Gear oil sump 1 level
M:	L15804	%	L=50.0	H=---	Steering Gear oil sump 2 level
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.40 Page:1600 AG16** BILGE WELLS / SLUDGE TANK (1/2)

A:					
B:	L06400	m	L=---	H=0.5	Aft ER Bilge well level
C:	L06405	m	L=---	H=0.5	Fwd ER Bilge well level
D:	L06414	m	L=---	H=0.5	Port CH Bilge well level
E:	L06422	m	L=---	H=0.5	Stbd CH Bilge well level
F:					
G:					
H:	L06432	m	L=---	H=1.5	Oil sludge tank level (total)
I:					
J:	L06490	m	L=---	H=1.8	Bilge Water tank level
K:					
L:					
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.41 Page:1601 AG16** BILGE WATER SEPARATOR (2/2)

A:					
B:					
C:	T06466	degC	L=65.0	H=95.0	Bilge Sep oil/water settling temp
D:	L06465	%	L=---	H=40.0	Bilge Sep oil/water interface level
E:					
F:	Z06463	ppm	L=---	H=15.0	Bilge Sep outlet flow oil content (sens)
G:					
H:					
I:					
J:	X06496	%	L=---	H=20.0	Bilge pump 1 auto time on (% of total)
K:					
L:					
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.42 Page:1700 AG17** FUEL OIL PURIFIERS (1) (1/3)

A:					
B:	T04021	degC	L=90.0	H=105.0	HFO Purif 1 heater FO outlet temp
C:	L04041	m	L=0.3	H=0.9	HFO Purif 1 water tank level
D:	Z04018	%	L=0.1	H=0.8	HFO Purif 1 outlet flow water content
E:	X04026	<0-7>	L=---	H=1.0	HFO Purif 1 ALCAP trip indicator
F:	G04041	kg/h	L=---	H=0.1	HFO Purif 1 water tank overflow
G:					
H:	C04001	A	L=---	H=40.0	HFO Purif 1 electic motor current
I:	L04042	m	L=0.1	H=0.4	HFO Purif 1 LO sump level
J:					
K:					
L:	T24021	degC	L=90.0	H=105.0	HFO Purif 2 heater FO outlet temp
M:	L24041	m	L=0.3	H=0.9	HFO Purif 2 water tank level
N:	Z24018	%	L=0.1	H=0.8	HFO Purif 2 outlet oil water content
O:	X24026	<0-7>	L=---	H=1.0	HFO Purif 2 ALCAP trip indicator
P:	G24041	kg/h	L=---	H=0.1	HFO Purif 2 water tank overflow
Q:					
R:	C24001	A	L=---	H=40.0	HFO Purif 2 electric motor current
S:	L24042	m	L=0.1	H=0.4	HFO Purif 2 LO sump level
T:					

2.43 Page:1701 AG17** FUEL OIL PURIFIERS (2) (2/3)

A:					
B:					
C:	T16011	dgrC	L=90.0	H=105.0	HFO Purif 3 heater outlet temp
D:	L16070	m	L=0.3	H=0.9	HFO Purif 3 water tank level
E:	G16072	kg/h	L=---	H=0.1	HFO Purif 3 water tank overflow
F:	Z16026	%	L=---	H=70.0	HFO Purif 3 sludge oil content
G:	X16035	<0-1>	L=0.0	H=---	HFO Purif 3 lost seal alarm
H:					
I:					
J:	T04121	degC	L=45.0	H=70.0	DO Purif heater outlet temp
K:	L04141	m	L=0.3	H=0.9	DO Purif water tank level
L:	G04141	kg/h	L=---	H=0.1	DO Purif water overflow
M:	Z04116	%	L=---	H=90.0	DO Purif sludge flow oil content
N:	X04156	<0-1>	L=---	H=1.0	DO Purif lost seal (low pressure)
O:					
P:					
Q:	P05250	bar	L=2.0	H=---	Purifier steam supply pressure
R:					
S:					
T:					

2.44 Page:1702 AG17** LUB OIL PURIFIERS (3/3)

A:					
B:					
C:	T04221	degC	L=80.0	H=95.0	LO Purif 1 heater outlet temp
D:	L04241	m	L=0.3	H=0.9	LO Purif 1 water tank level
E:	G04241	kg/h	L=---	H=0.1	LO Purif 1 water overflow
F:	Z04216	%	L=---	H=90.0	LO Purif 1 sludge flow oil content
G:	X04256	<0-1>	L=---	H=1.0	LO Purif 1 lost seal (low pressure)
H:					
I:					
J:	T24221	degC	L=80.0	H=95.0	LO Purif 2 heater outlet temp
K:	L24241	m	L=0.3	H=0.9	LO Purif 2 water tank level
L:	G24241	kg/h	L=---	H=0.1	LO Purif 2 water overflow
M:	Z24216	%	L=---	H=90.0	LO Purif 2 sludge flow oil content
N:	X24256	<0-1>	L=---	H=1.0	LO Purif 2 lost seal (low pressure)
O:					
P:	L04266	m	L=---	H=3.9	LO Purifier tank level
Q:	G04266	kg/h	L=---	H=0.1	LO Purifier tank overflow
R:					
S:	L04270	m	L=---	H=3.9	LO Storage tank level
T:					

2.45 Page:1800 AG18** AIR VENTILATION SYSTEM (1/1)

A:					
B:					
C:	P00761	mmWC	L=-70.0	H=30.0	Engine Room air pressure
D:	T00761	degC	L=2.0	H=48.0	Engine Room air temp
E:					
F:	T15650	degC	L=---	H=40.0	Eng contr room air temperature
G:	R15650	%	L=30.0	H=80.0	Eng contr room air humidity
H:					
I:	T15660	degC	L=---	H=30.0	Accommodation air temperature
J:	R15660	%	L=30.0	H=80.0	Accommodation air humidity
K:					
L:	X15790	<0-1>	L=---	H=1.0	Air Conditioning unit general alarm
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.46 Page:1900 AG19** REFRIGERATION SYSTEM (1/2)

A:					
B:	T06554	degC	L=-22.0	H=-15.0	Refrig Room 1 air temp
C:	T16554	degC	L=1.5	H=4.5	Refrig Room 2 air temp
D:	T26554	degC	L=5.5	H=8.5	Refrig Room 3 air temp
E:					
F:	P06530	bar	L=-0.1	H=---	Refrig Compr suction line press
G:	P06527	bar	L=---	H=14.0	Refrig Compr discharge line press
H:					
I:					
J:					
K:	X06524	<0-4>	L=---	H=1.0	Refrig Compr 1 trip indication
L:	T06532	degC	L=---	H=130.0	Refrig Compr 1 discharge temp
M:	E06525	kW	L=---	H=40.0	Refrig Compr 1 motor power
N:	L06522	%	L=30.0	H=90.0	Refrig Compr 1 LO sump level
O:					
P:	X16524	<0-4>	L=---	H=1.0	Refrig Compr 2 trip indication
Q:	T16532	degC	L=---	H=130.0	Refrig Compr 2 discharge temp
R:	E16525	kW	L=---	H=40.0	Refrig Compr 2 motor power
S:	L16522	%	L=30.0	H=90.0	Refrig Compr 2 LO sump level
T:					

2.47 Page:1901 AG19** REFRIGERATION SYSTEM (2/2)

A:					
B:					
C:	P06500	bar	L=---	H=16.0	Refrig Condenser pressure
D:	L06501	%	L=---	H=60.0	Refrig Condenser level
E:	L06542	%	L=10.0	H=90.0	Refrig Receiver level
F:					
G:	T06504	degC	L=---	H=40.0	Refrig Cond SW outlet temp
H:					
I:					
J:					
K:					
L:					
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.48 Page:2000 AG20** SEWAGE / SLUDGE TREATMENT

A:					
B:	B15960	mg/l	L=---	H=50.0	Overboard flow biochemical oxygen demand
C:	S15960	mg/l	L=---	H=50.0	Overboard flow suspended solids
D:	N15960	1/100ml	L=---	H=250.0	Overboard flow coliform bacteria
E:	X15960	ppm	L=---	H=4.0	Overboard flow chlorine content
F:					
G:	G15931	kg/h	L=---	H=0.5	Chlorination tank emerg overflow
H:					
I:					
J:	X15878	<0-1>	L=---	H=1.0	Incinerator trip
K:	T15865	degC	L=---	H=380.0	Incinerator flue gas temp
L:	T15860	degC	L=---	H=1200.0	Incinerator furnace temperature
M:	P15860	mmWC	L=-30.0	H=10.0	Incinerator furnace pressure
N:					
O:					
P:	L15840	m	L=---	H=2.3	Sludge mixing tank level
Q:	T15840	degC	L=---	H=90.0	Sludge mixing tank temperature
R:	L15830	m	L=---	H=1.8	Sewage sludge tank level
S:	G15834	kg/h	L=---	H=0.1	Sewage sludge tank overflow
T:					

2.49 Page:2001 AG20** ICCP / MPGS SYSTEM

A:					
B:	X15030	<0-1>	L=---	H=1.0	ICCP alarm
C:					
D:	X15130	<0-1>	L=---	H=1.0	MGPS alarm
E:	X15116	ppm	L=0.7	H=2.0	Main SW line hypochlorite
F:					
G:					
H:					
I:					
J:					
K:					
L:					
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.50 Page:2100 AG21** DIESELGENERATOR 1 (1/3)

A:					
B:	N03100	rpm	L=---	H=760.0	DG 1 speed
C:					
D:	T03020	degC	L=---	H=90.0	DG 1 FW temp outlet DG
E:	P03012	bar	L=0.7	H=---	DG 1 FW press inlet DG
F:					
G:	T03057	degC	L=---	H=610.0	DG 1 exhaust temp inlet TBCH
H:	T03060	degC	L=---	H=520.0	DG 1 exhaust temp outlet TBCH
I:	T03051	degC	L=---	H=100.0	DG 1 air temp outlet AIRC
J:					
K:	P03066	bar	L=---	H=1.0	DG 1 FO filter diff press
L:	P03032	bar	L=1.4	H=---	DG 1 LO press inlet DG
M:	T03037	degC	L=---	H=75.0	DG 1 LO temp inlet DG
N:	L03045	%	L=30.0	H=90.0	DG 1 LO sump level
O:					
P:	L03026	%	L=30.0	H=90.0	DG 1 FW exp tank level
Q:	P04425	bar	L=10.0	H=---	DG 1 start air supply press
R:					
S:	X03160	<0-5>	L=---	H=1.0	DG 1 trip indication
T:					

2.51 Page:2101 AG21** DIESELGENERATOR 1 (2/3)

A:					
B:					
C:	T03081	degC	L=---	H=550.0	DG 1 exhaust temp cyl 1
D:	T03082	degC	L=---	H=550.0	DG 1 exhaust temp cyl 2
E:	T03083	degC	L=---	H=550.0	DG 1 exhaust temp cyl 3
F:	T03084	degC	L=---	H=550.0	DG 1 exhaust temp cyl 4
G:	T03085	degC	L=---	H=550.0	DG 1 exhaust temp cyl 5
H:	T03086	degC	L=---	H=550.0	DG 1 exhaust temp cyl 6
I:	T03087	degC	L=---	H=550.0	DG 1 exhaust temp cyl 7
J:	T03088	degC	L=---	H=550.0	DG 1 exhaust temp cyl 8
K:					
L:	T03130	degC	L=---	H=85.0	DG 1 bearing temp fwd
M:	T03131	degC	L=---	H=85.0	DG 1 bearing temp aft
N:					
O:	T06018	degC	L=---	H=135.0	DG 1 stator winding temperature
P:					
Q:					
R:					
S:					
T:					

2.52 Page:2102 AG21** DIESELGENERATOR 1 (3/3)

A:					
B:					
C:	T03091	degC	L=---	H=95.0	DG 1 FW temp outlet cyl 1
D:	T03092	degC	L=---	H=95.0	DG 1 FW temp outlet cyl 2
E:	T03093	degC	L=---	H=95.0	DG 1 FW temp outlet cyl 3
F:	T03094	degC	L=---	H=95.0	DG 1 FW temp outlet cyl 4
G:	T03095	degC	L=---	H=95.0	DG 1 FW temp outlet cyl 5
H:	T03096	degC	L=---	H=95.0	DG 1 FW temp outlet cyl 6
I:	T03097	degC	L=---	H=95.0	DG 1 FW temp outlet cyl 7
J:	T03098	degC	L=---	H=95.0	DG 1 FW temp outlet cyl 8
K:					
L:					
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.53 Page:2200 AG22** DIESELGENERATOR 2 (1/3)

A:					
B:	N03300	rpm	L=---	H=760.0	DG 2 speed
C:					
D:	T03220	degC	L=---	H=90.0	DG 2 FW temp outlet DG
E:	P03212	bar	L=0.7	H=---	DG 2 FW press inlet DG
F:					
G:	T03257	degC	L=---	H=610.0	DG 2 exhaust temp inlet TBCH
H:	T03260	degC	L=---	H=520.0	DG 2 exhaust temp outlet TBCH
I:	T03251	degC	L=---	H=100.0	DG 2 AIR temp outlet AIRC
J:					
K:	P03266	bar	L=---	H=1.0	DG 2 FO filter diff press
L:	P03232	bar	L=1.4	H=---	DG 2 LO press inlet DG
M:	T03237	degC	L=---	H=75.0	DG 2 LO temp inlet DG
N:	L03245	%	L=30.0	H=90.0	DG 2 LO sump level
O:					
P:	L03226	%	L=30.0	H=90.0	DG 2 FW exp tank level
Q:	P04426	bar	L=10.0	H=---	DG 2 start air supply press
R:					
S:	X03360	<0-5>	L=---	H=1.0	DG 2 trip indication
T:					

2.54 Page:2201 AG22** DIESELGENERATOR 2 (2/3)

A:					
B:					
C:	T03281	degC	L=---	H=550.0	DG 2 exhaust temp cyl 1
D:	T03282	degC	L=---	H=550.0	DG 2 exhaust temp cyl 2
E:	T03283	degC	L=---	H=550.0	DG 2 exhaust temp cyl 3
F:	T03284	degC	L=---	H=550.0	DG 2 exhaust temp cyl 4
G:	T03285	degC	L=---	H=550.0	DG 2 exhaust temp cyl 5
H:	T03286	degC	L=---	H=550.0	DG 2 exhaust temp cyl 6
I:	T03287	degC	L=---	H=550.0	DG 2 exhaust temp cyl 7
J:	T03288	degC	L=---	H=550.0	DG 2 exhaust temp cyl 8
K:					
L:	T03330	degC	L=---	H=85.0	DG 2 bearing temp fwd
M:	T03331	degC	L=---	H=85.0	DG 2 bearing temp aft
N:					
O:	T06038	degC	L=---	H=135.0	DG 2 stator winding temperature
P:					
Q:					
R:					
S:					
T:					

2.55 Page:2202 AG22** DIESELGENERATOR 2 (3/3)

A:					
B:					
C:	T03291	degC	L=---	H=95.0	DG 2 FW temp outlet cyl 1
D:	T03292	degC	L=---	H=95.0	DG 2 FW temp outlet cyl 2
E:	T03293	degC	L=---	H=95.0	DG 2 FW temp outlet cyl 3
F:	T03294	degC	L=---	H=95.0	DG 2 FW temp outlet cyl 4
G:	T03295	degC	L=---	H=95.0	DG 2 FW temp outlet cyl 5
H:	T03296	degC	L=---	H=95.0	DG 2 FW temp outlet cyl 6
I:	T03297	degC	L=---	H=95.0	DG 2 FW temp outlet cyl 7
J:	T03298	degC	L=---	H=95.0	DG 2 FW temp outlet cyl 8
K:					
L:					
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.56 Page:2300 AG23** DIESELGENERATOR 3 (1/3)

A:					
B:	N33100	rpm	L=---	H=760.0	DG 3 speed
C:					
D:	T33020	degC	L=---	H=90.0	DG 3 FW temp outlet DG
E:	P33012	bar	L=0.7	H=---	DG 3 FW press inlet DG
F:					
G:	T33057	degC	L=---	H=610.0	DG 3 exhaust temp inlet TBCH
H:	T33060	degC	L=---	H=520.0	DG 3 exhaust temp outlet TBCH
I:	T33051	degC	L=---	H=100.0	DG 3 air temp outlet AIRC
J:					
K:	P33066	bar	L=---	H=1.0	DG 3 FO filter diff press
L:	P33032	bar	L=1.4	H=---	DG 3 LO press inlet DG
M:	T33037	degC	L=---	H=75.0	DG 3 LO temp inlet DG
N:	L33045	%	L=30.0	H=90.0	DG 3 LO sump level
O:					
P:	L33026	%	L=30.0	H=90.0	DG 3 FW EXP tank level
Q:	P04427	bar	L=10.0	H=---	DG 3 start air supply press
R:					
S:	X33160	<0-5>	L=---	H=1.0	DG 3 trip indication
T:					

2.57 Page:2301 AG23** DIESELGENERATOR 3 (2/3)

A:					
B:					
C:	T33081	degC	L=---	H=580.0	DG 3 exhaust temp cyl 1
D:	T33082	degC	L=---	H=580.0	DG 3 exhaust temp cyl 2
E:	T33083	degC	L=---	H=580.0	DG 3 exhaust temp cyl 3
F:	T33084	degC	L=---	H=580.0	DG 3 exhaust temp cyl 4
G:	T33085	degC	L=---	H=580.0	DG 3 exhaust temp cyl 5
H:	T33086	degC	L=---	H=580.0	DG 3 exhaust temp cyl 6
I:					
J:					
K:	T33130	degC	L=---	H=85.0	DG 3 bearing temp fwd
L:	T33131	degC	L=---	H=85.0	DG 3 bearing temp aft
M:					
N:	T36018	degC	L=---	H=125.0	DG 3 stator winding temperature
O:					
P:					
Q:					
R:					
S:					
T:					

2.58 Page:2302 AG23** DIESELGENERATOR 3 (3/3)

A:					
B:					
C:	T33091	degC	L=---	H=95.0	DG 3 FW temp outlet cyl 1
D:	T33092	degC	L=---	H=95.0	DG 3 FW temp outlet cyl 2
E:	T33093	degC	L=---	H=95.0	DG 3 FW temp outlet cyl 3
F:	T33094	degC	L=---	H=95.0	DG 3 FW temp outlet cyl 4
G:	T33095	degC	L=---	H=95.0	DG 3 FW temp outlet cyl 5
H:	T33096	degC	L=---	H=95.0	DG 3 FW temp outlet cyl 6
I:					
J:					
K:					
L:					
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.59 Page:2400 AG24** DIESELGENERATOR 4 (1/3)

A:					
B:	N43100	rpm	L=---	H=760.0	DG 4 speed
C:					
D:	T43020	degC	L=---	H=90.0	DG 4 FW temp outlet DG
E:	P43012	bar	L=0.7	H=---	DG 4 FW press inlet DG
F:					
G:	T43057	degC	L=---	H=610.0	DG 4 exhaust temp inlet TBCH
H:	T43060	degC	L=---	H=520.0	DG 4 exhaust temp outlet TBCH
I:	T43051	degC	L=---	H=100.0	DG 4 air temp outlet AIRC
J:					
K:	P43066	bar	L=---	H=1.0	DG 4 FO filter diff press
L:	P43032	bar	L=1.4	H=---	DG 4 LO press inlet DG
M:	T43037	degC	L=---	H=75.0	DG 4 LO temp inlet DG
N:	L43045	%	L=30.0	H=90.0	DG 4 LO sump level
O:					
P:	L43026	%	L=30.0	H=90.0	DG 4 FW exp tank level
Q:	P04428	bar	L=10.0	H=---	DG 4 start air supply press
R:					
S:	X43160	<0-5>	L=---	H=1.0	DG 4 trip indication
T:					

2.60 Page:2401 AG24** DIESELGENERATOR 4 (2/3)

A:					
B:					
C:	T43081	degC	L=---	H=580.0	DG 4 exhaust temp cyl 1
D:	T43082	degC	L=---	H=580.0	DG 4 exhaust temp cyl 2
E:	T43083	degC	L=---	H=580.0	DG 4 exhaust temp cyl 3
F:	T43084	degC	L=---	H=580.0	DG 4 exhaust temp cyl 4
G:	T43085	degC	L=---	H=580.0	DG 4 exhaust temp cyl 5
H:	T43086	degC	L=---	H=580.0	DG 4 exhaust temp cyl 6
I:					
J:					
K:	T43130	degC	L=---	H=85.0	DG 4 bearing temp fwd
L:	T43131	degC	L=---	H=85.0	DG 4 bearing temp aft
M:					
N:	T46018	degC	L=---	H=125.0	DG 4 stator winding temperature
O:					
P:					
Q:					
R:					
S:					
T:					

2.61 Page:2402 AG24** DIESELGENERATOR 4 (3/3)

A:					
B:					
C:	T43091	degC	L=---	H=95.0	DG 4 FW temp outlet cyl 1
D:	T43092	degC	L=---	H=95.0	DG 4 FW temp outlet cyl 2
E:	T43093	degC	L=---	H=95.0	DG 4 FW temp outlet cyl 3
F:	T43094	degC	L=---	H=95.0	DG 4 FW temp outlet cyl 4
G:	T43095	degC	L=---	H=95.0	DG 4 FW temp outlet cyl 5
H:	T43096	degC	L=---	H=95.0	DG 4 FW temp outlet cyl 6
I:					
J:					
K:					
L:					
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.62 Page:2500 AG25** ELECTRIC POWER SYSTEM (1/3)

A:					
B:					
C:	V06140	V	L=410.0	H=460.0	Main bus bar 1 voltage
D:	F06141	Hz	L=56.0	H=64.0	Main bus bar 1 frequency
E:					
F:	E06130	kW	L=---	H=240.0	Emerg Gen power
G:	I06138	A	L=---	H=240.0	Emerg Gen current
H:					
I:	E06000	kW	L=---	H=2400.0	DG 1 active load
J:	I06003	A	L=---	H=3600.0	DG 1 current
K:	E06020	kW	L=---	H=2400.0	DG 2 active load
L:	I06023	A	L=---	H=3600.0	DG 2 current
M:					
N:	E36000	kW	L=---	H=1510.0	DG 3 active load
O:	I36003	A	L=---	H=2500.0	DG 3 current
P:	E46000	kW	L=---	H=1510.0	DG 4 active load
Q:	I46003	A	L=---	H=2500.0	DG 4 current
R:					
S:					
T:					

2.63 Page:2501 AG25** ELECTRIC POWER SYSTEM (2/3)

A:					
B:					
C:	X06014	<0-5>	L=---	H=1.0	DG 1 circuit breaker trip
D:	X06034	<0-5>	L=---	H=1.0	DG 2 circuit breaker trip
E:	X36014	<0-5>	L=---	H=1.0	DG 3 circuit breaker trip
F:	X46014	<0-5>	L=---	H=1.0	DG 4 circuit breaker trip
G:					
H:					
I:	I06142	mA	L=---	H=20.0	Earth leakage current - 440V
J:	I06143	mA	L=---	H=20.0	Earth leakage current - 220V
K:					
L:					
M:	X06166	<0-2>	L=---	H=1.0	Shore connection trip
N:	E06163	kW	L=-100.0	H=800.0	Shore connection power
O:					
P:	X06250	<0-1>	L=---	H=1.0	Pchief non ess. load trip
Q:					
R:					
S:					
T:					

2.64 Page:2502 AG25** ELECTRIC POWER SYSTEM (3/3)

A:					
B:					
C:	V14401	V	L=24.0	H=32.0	Battery voltage
D:	T14401	degC	L=---	H=45.0	Battery electrolyte temperature
E:					
F:	Y14414	<0-1>	L=---	H=1.0	Battery charger fault
G:					
H:	V14431	V	L=22.0	H=---	DC24V Emerg contr bus voltage
I:					
J:					
K:					
L:					
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.65 Page:2600 AG26** REEFER CONTAINERS (1/1)

A:					
B:	Y15580	<0-1>	L=---	H=1.0	Load shed indication (some breaker)
C:	X15567	<0-1>	L=---	H=1.0	Reefer Trafo 1 circuit breaker trip
D:	X15577	<0-1>	L=---	H=1.0	Reefer Trafo 2 circuit breaker trip
E:					
F:	X15514	<0-1>	L=---	H=1.0	Reefer Group 1 high temp alarm
G:	X15524	<0-1>	L=---	H=1.0	Reefer Group 2 high temp alarm
H:	X15534	<0-1>	L=---	H=1.0	Reefer Group 3 high temp alarm
I:	X15544	<0-1>	L=---	H=1.0	Reefer Group 4 high temp alarm
J:					
K:	V15510	V	L=190.0	H=---	Reefer Group 1 voltage
L:	V15520	V	L=190.0	H=---	Reefer Group 2 voltage
M:	V15530	V	L=190.0	H=---	Reefer Group 3 voltage
N:	V15540	V	L=190.0	H=---	Reefer Group 4 voltage
O:					
P:					
Q:					
R:					
S:					
T:					

2.66 Page:2700 AG27** STEAM GENERATION PLANT (1/1)

A:					
B:	X05450	<0-4>	L=---	H=1.0	Boiler trip indication
C:					
D:	P05411	bar	L=6.0	H=8.5	Boiler steam pressure
E:	L05410	mm	L=-200.0	H=200.0	Boiler water level
F:	T05402	degC	L=---	H=600.0	Boiler flue gas temperature
G:	Z05403	%	L=---	H=80.0	Boiler flue gas smoke content
H:					
I:	L05543	m	L=0.5	H=2.8	Feed water tank level
J:	G05537	kg/h	L=---	H=0.1	Feed water tank overflow
K:					
L:	T05320	degC	L=0.0	H=400.0	Exhaust temp after Boiler (inlet stack)
M:	P05321	mmWC	L=---	H=350.0	Exhaust boiler pressure drop
N:					
O:					
P:					
Q:					
R:					
S:					
T:					

2.67 Page:2800 AG28** FIRE DETECTION SYSTEM (1/1)

A:					
B:					
C:	Y00560	<0-1>	L=---	H=1.0	Fire Detection in ER area
D:	Y00561	<0-1>	L=---	H=1.0	Fire Detection in ACC area
E:	Y00562	<0-1>	L=---	H=1.0	Fire Detection in CARGO area
F:					
G:					
H:					
I:					
J:					
K:					
L:					
M:					
N:					
O:					
P:					
Q:					
R:					
S:					
T:					