Ballast Water Management System Operation Record

Cycle number	NO.6 cycle				
Test date	2012-6-21				
Operation mode	Ballasting operation (Treatment Tank)				
The record of preparation status for Ballast Water Management System					
Start-up time	10:40		Ready time	10:40	
System power consumption	44		UV lamp power	40	
Standby status error	/		Malfunction	/	
The record of operation status for Ballast Water Management system					
Operation start time	10:45		Operation end time	11:35	
Sampling NO.1 time	10:50	Sampling NO.2 time	11:05	Sampling NO.3 time	11:20
Operation status error	/	Fault handling situation	/	Any influence on result?	/

The record of operational data for Ballast Water Management system					
Record time	10:50	11:00	11:10	11:20	11:30
Operation mode	Ballasting				
Flow rate (m^3/h)	313.7	318.6	301.3	306.7	308.2
System power consumption (KW)	44	44	44	44	44
UV lamp power (KW)	40	40	40	40	40
UV intensity (mw/cm^2)	630	620	620	620	620
Pump outlet pressure (bar)	3.0	3.0	3.0	3.0	3.0
Filtrate pressure (bar)	3.0	3.0	3.0	3.0	3.0
The filter differential pressure (bar)	0.0	0.0	0.0	0.0	0.0
UV lamp temperature (℃)	23.5	23.6	23.7	23.7	23.7

No: 21

Recorder: Supervisor: CCS Site Witness:

Ballast Water Management System Operation Record

Cycle number	NO.6 cycle				
Test date	2012-6-21				
Operation mode	Ballasting Operation (Comparison Treatment)				
The record of preparation status for Ballast Water Management System					
Start-up time	11:50		Ready time	11:50	
System power consumption	✓		UV lamp power	✓	
Standby status error	✓		Malfunction	✓	
The record of operation status for Ballast Water Management system					
Operation start time	11:55		Operation end time	12:45	
Sampling NO.1 time	12:00	Sampling NO.2 time	12:15	Sampling NO.3 time	12:30
Operation status error	✓	Fault handling situation	✓	Any influence on result?	✓

The record of operational data for Ballast Water Management system					
Record time	12:00	12:10	12:20	12:30	12:40
Operation mode	Ballasting				
Flow rate (m^3/h)	307.1	308.7	302.4	306.6	308.2
System power consumption (KW)	✓	✓	✓	✓	✓
UV lamp power (KW)	✓	✓	✓	✓	✓
UV intensity (mw/cm^2)	✓	✓	✓	✓	✓
Pump outlet pressure (bar)	3.0	3.0	3.0	3.0	3.0
Filtrate pressure (bar)	✓	✓	✓	✓	✓
The filter differential pressure (bar)	✓	✓	✓	✓	✓
UV lamp temperature (℃)	✓	✓	✓	✓	✓

No: 22

Recorder: Supervisor: CCS Site Witness:

Ballast Water Management System Operation Record

Cycle number	No. 6 cycle				
Test date	2012-6-26				
Operation mode	Deballasting operation (Treatment Tank)				
The record of preparation status for Ballast Water Management System					
Start-up time	13:00		Ready time	13:00	
System power consumption	44		UV lamp power	40	
Standby status error	/		Malfunction	/	
The record of operation status for Ballast Water Management system					
Operation start time	13:00		Operation end time	13:50	
Sampling NO.1 time	13:05	Sampling NO.2 time	13:20	Sampling NO.3 time	13:35
Operation status error	/	Fault handling situation	/	Any influence on result?	/

The record of operational data for Ballast Water Management system					
Record time	13:10	13:20	13:30	13:40	13:50
Operation mode	Deballasting				
Flow rate (m^3/h)	324.0	321.7	312.8	310.5	316.2
System power consumption (KW)	44	44	44	44	44
UV lamp power (KW)	40	40	40	40	40
UV intensity (mw/cm^2)	620	620	610	620	620
Pump outlet pressure (bar)	3.0	3.0	3.0	2.9	3.0
Filtrate pressure (bar)	/	/	/	/	/
The filter differential pressure (bar)	/	/	/	/	/
UV lamp temperature (℃)	24.2	24.3	24.2	23.8	24.1

No: 23

Recorder: Supervisor: CCS Site Witness:

Ballast Water Management System Operation Record

Cycle number	No.6 cycle				
Test date	2012-6-26				
Operation mode	Deballasting operation (Comparison Treatment)				
The record of preparation status for Ballast Water Management System					
Start-up time	14:00		Ready time	14:00	
System power consumption	/		UV lamp power	/	
Standby status error	/		Malfunction	/	
The record of operation status for Ballast Water Management system					
Operation start time	14:00		Operation end time	14:50	
Sampling NO.1 time	14:05	Sampling NO.2 time	14:20	Sampling NO.3 time	14:35
Operation status error	/	Fault handling situation	/	Any influence on result?	/

The record of operational data for Ballast Water Management system					
Record time	14:10	14:20	14:30	14:40	14:50
Operation mode	Deballasting				
Flow rate (m^3/h)	308.2	310.3	308.8	306.8	308.7
System power consumption (KW)	/	/	/	/	/
UV lamp power (KW)	/	/	/	/	/
UV intensity (mw/cm^2)	/	/	/	/	/
Pump outlet pressure (bar)	3.0	3.0	3.0	3.0	3.0
Filtrate pressure (bar)	/	/	/	/	/
The filter differential pressure (bar)	/	/	/	/	/
UV lamp temperature (℃)	/	/	/	/	/

No: 24

Recorder: Supervisor: CCS Site Witness:

Ballast Water Management System Operation Record

Cycle number	No.7 Cycle				
Test date	2012-6-28				
Operation mode	Ballasting Operation				
The record of preparation status for Ballast Water Management System					
Start-up time	11:00		Ready time	11:00	
System power consumption	44kW		UV lamp power	40kW	
Standby status error	/		Malfunction	/	
The record of operation status for Ballast Water Management system					
Operation start time	11:00		Operation end time	11:50	
Sampling NO.1 time	11:05	Sampling NO.2 time	11:20	Sampling NO.3 time	11:35
Operation status error	/	Fault handling situation	/	Any influence on result?	/

The record of operational data for Ballast Water Management system					
Record time	11:10	11:20	11:30	11:40	11:50
Operation mode	Ballasting				
Flow rate (m^3/h)	308.2	308.3	306.5	306.6	302.3
System power consumption (KW)	44	44	44	44	44
UV lamp power (KW)	40	40	40	40	40
UV intensity (mw/cm^2)	630	630	630	630	620
Pump outlet pressure (bar)	2.9	3.0	3.0	3.0	3.0
Filtrate pressure (bar)	2.9	3.0	3.1	3.1	3.0
The filter differential pressure (bar)	0.0	0.0	0.1	0.1	0.0
UV lamp temperature (℃)	24.7	24.7	24.8	24.8	24.8

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Recorder: Supervisor: CCS Site Witness:

Ballast Water Management System Operation Record

Cycle number	NO.7 cycle				
Test date	2012-6-28				
Operation mode	Ballasting operation (Comparison Tank)				
The record of preparation status for Ballast Water Management System					
Start-up time	12:00		Ready time	12:00	
System power consumption	/		UV lamp power	/	
Standby status error	/		Malfunction	/	
The record of operation status for Ballast Water Management system					
Operation start time	12:00		Operation end time	12:50	
Sampling NO.1 time	12:05	Sampling NO.2 time	12:20	Sampling NO.3 time	12:35
Operation status error	/	Fault handling situation	/	Any influence on result?	/

The record of operational data for Ballast Water Management system					
Record time	12:10	12:20	12:30	12:40	12:50
Operation mode	Ballasting				
Flow rate (m^3/h)	308.2	310.5	310.2	309.7	308.5
System power consumption (KW)	/	/	/	/	/
UV lamp power (KW)	/	/	/	/	/
UV intensity (mw/cm^2)	/	/	/	/	/
Pump outlet pressure (bar)	2.9	2.9	3.0	3.0	3.0
Filtrate pressure (bar)	/	/	/	/	/
The filter differential pressure (bar)	/	/	/	/	/
UV lamp temperature (℃)	/	/	/	/	/

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Recorder: Supervisor: CCS Site Witness:

Ballast Water Management System Operation Record

Cycle number	No.7 cycle				
Test date	2012-7-3				
Operation mode	Deballasting operation (Treatment Tank)				
The record of preparation status for Ballast Water Management System					
Start-up time	13:30		Ready time	13:30	
System power consumption	44		UV lamp power	40	
Standby status error	/		Malfunction	/	
The record of operation status for Ballast Water Management system					
Operation start time	13:30		Operation end time	14:20	
Sampling NO.1 time	13:35	Sampling NO.2 time	13:50	Sampling NO.3 time	14:05
Operation status error	/	Fault handling situation	/	Any influence on result?	/

The record of operational data for Ballast Water Management system					
Record time	13:40	13:50	14:00	14:10	14:20
Operation mode	Deballasting				
Flow rate (m^3/h)	306.5	312.7	310.5	315.8	309.8
System power consumption (KW)	44	44	44	44	44
UV lamp power (KW)	40	40	40	40	40
UV intensity (mw/cm^2)	580	580	580	580	580
Pump outlet pressure (bar)	2.9	2.9	3.0	3.0	3.0
Filtrate pressure (bar)	/	/	/	/	/
The filter differential pressure (bar)	/	/	/	/	/
UV lamp temperature (℃)	24.8	24.9	24.9	25.0	25.0

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Recorder: Supervisor: CCS Site Witness:

Ballast Water Management System Operation Record

Cycle number	No.7 cycle				
Test date	2012-7-3				
Operation mode	Deballasting operation (Comparison Tank)				
The record of preparation status for Ballast Water Management System					
Start-up time	14:30		Ready time	14:30	
System power consumption	✓		UV lamp power	✓	
Standby status error	✓		Malfunction	✓	
The record of operation status for Ballast Water Management system					
Operation start time	14:30		Operation end time	15:20	
Sampling NO.1 time	14:35	Sampling NO.2 time	14:50	Sampling NO.3 time	15:05
Operation status error	✓	Fault handling situation	✓	Any influence on result?	✓

The record of operational data for Ballast Water Management system					
Record time	14:40	14:50	15:00	15:10	15:20
Operation mode	Deballasting				
Flow rate (m^3/h)	307.8	308.2	308.2	309.7	306.5
System power consumption (KW)	✓	✓	✓	✓	✓
UV lamp power (KW)	✓	✓	✓	✓	✓
UV intensity (mw/cm^2)	✓	✓	✓	✓	✓
Pump outlet pressure (bar)	3.0	3.0	3.0	3.0	3.0
Filtrate pressure (bar)	✓	✓	✓	✓	✓
The filter differential pressure (bar)	✓	✓	✓	✓	✓
UV lamp temperature (℃)	✓	✓	✓	✓	✓

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Recorder: Supervisor: CCS Site Witness:

Ballast Water Management System Operation Record

Cycle number	No.8 cycle				
Test date	2012-7-5				
Operation mode	Ballasting operation (Treatment Tank)				
The record of preparation status for Ballast Water Management System					
Start-up time	11:00		Ready time	11:00	
System power consumption	44kW		UV lamp power	40kW	
Standby status error	/		Malfunction	/	
The record of operation status for Ballast Water Management system					
Operation start time	11:00		Operation end time	11:50	
Sampling NO.1 time	11:05	Sampling NO.2 time	11:20	Sampling NO.3 time	11:35
Operation status error	/	Fault handling situation	/	Any influence on result?	/

The record of operational data for Ballast Water Management system					
Record time	11:00	11:10	11:20	11:30	11:40
Operation mode	Ballasting				
Flow rate (m^3/h)	308	308	312	310	311
System power consumption (KW)	44	44	44	44	44
UV lamp power (KW)	40	40	40	40	40
UV intensity (mw/cm^2)	570	570	570	570	570
Pump outlet pressure (bar)	3.0	3.0	3.0	2.9	3.0
Filtrate pressure (bar)	3.0	3.0	3.1	3.1	3.0
The filter differential pressure (bar)	0.0	0.0	0.1	0.2	0.0
UV lamp temperature (℃)	25.8	25.8	25.8	25.8	25.8

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Recorder: Supervisor: CCS Site Witness:

Ballast Water Management System Operation Record

Cycle number	No.8 Cycle				
Test date	2012-7-5				
Operation mode	Ballasting operation (comparison Tank).				
The record of preparation status for Ballast Water Management System					
Start-up time	12:00		Ready time	12:00	
System power consumption	✓		UV lamp power	✓	
Standby status error	✓		Malfunction	✓	
The record of operation status for Ballast Water Management system					
Operation start time	12:00		Operation end time	12:50	
Sampling NO.1 time	12:10	Sampling NO.2 time	12:25	Sampling NO.3 time	12:40
Operation status error	✓	Fault handling situation	✓	Any influence on result?	✓

The record of operational data for Ballast Water Management system					
Record time	12:00	12:10	12:20	12:30	12:40
Operation mode	Ballasting				
Flow rate (m^3/h)	308	310	311	309	308
System power consumption (KW)	✓	✓	✓	✓	✓
UV lamp power (KW)	✓	✓	✓	✓	✓
UV intensity (mw/cm^2)	✓	✓	✓	✓	✓
Pump outlet pressure (bar)	3.0	3.0	3.0	3.0	3.0
Filtrate pressure (bar)	✓	✓	✓	✓	✓
The filter differential pressure (bar)	✓	✓	✓	✓	✓
UV lamp temperature (℃)	✓	✓	✓	✓	✓

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Recorder: Supervisor: CCS Site Witness:

Ballast Water Management System Operation Record

Cycle number	No.8 cycle				
Test date	2012-7-10				
Operation mode	Deballasting operation (Treatment Tank).				
The record of preparation status for Ballast Water Management System					
Start-up time	13:00		Ready time	13:00	
System power consumption	44		UV lamp power	40	
Standby status error	/		Malfunction	/	
The record of operation status for Ballast Water Management system					
Operation start time	13:00		Operation end time	13:50	
Sampling NO.1 time	13:05	Sampling NO.2 time	13:20	Sampling NO.3 time	13:35
Operation status error	/	Fault handling situation	/	Any influence on result?	/

The record of operational data for Ballast Water Management system					
Record time	13:10	13:20	13:30	13:40	13:50
Operation mode	Deballasting				
Flow rate (m^3/h)	307	308	307	307	308
System power consumption (KW)	44	44	44	44	44
UV lamp power (KW)	40	40	40	40	40
UV intensity (mw/cm^2)	530	530	520	520	520
Pump outlet pressure (bar)	2.9	2.9	2.9	2.9	2.9
Filtrate pressure (bar)	/	/	/	/	/
The filter differential pressure (bar)	/	/	/	/	/
UV lamp temperature (℃)	26.6	26.6	26.6	26.7	26.7

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Recorder: Supervisor: CCS Site Witness:

Ballast Water Management System Operation Record

Cycle number	No.8 cycle				
Test date	2012-7-10				
Operation mode	Deballasting Operation (Comparison Treatment)				
The record of preparation status for Ballast Water Management System					
Start-up time	14:00		Ready time	14:00	
System power consumption	/		UV lamp power	/	
Standby status error	/		Malfunction	/	
The record of operation status for Ballast Water Management system					
Operation start time	14:00		Operation end time	14:50	
Sampling NO.1 time	14:05	Sampling NO.2 time	14:20	Sampling NO.3 time	14:35
Operation status error	/	Fault handling situation	/	Any influence on result?	/

The record of operational data for Ballast Water Management system					
Record time	14:00	14:10	14:20	14:30	14:40
Operation mode	Deballasting				
Flow rate (m^3/h)	300	302	301	298	306
System power consumption (KW)	/	/	/	/	/
UV lamp power (KW)	/	/	/	/	/
UV intensity (mw/cm^2)	/	/	/	/	/
Pump outlet pressure (bar)	3.0	2.9	2.9	3.0	3.0
Filtrate pressure (bar)	/	/	/	/	/
The filter differential pressure (bar)	/	/	/	/	/
UV lamp temperature (℃)	/	/	/	/	/

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Recorder: Supervisor: CCS Site Witness:

Ballast Water Management System Operation Record

Cycle number	No. 9 Cycle				
Test date	2012-7-12				
Operation mode	Ballasting operation (Treatment Tank)				
The record of preparation status for Ballast Water Management System					
Start-up time	11:00		Ready time	11:00	
System power consumption	44kW		UV lamp power	40kW	
Standby status error	/		Malfunction	/	
The record of operation status for Ballast Water Management system					
Operation start time	11:00		Operation end time	11:50	
Sampling NO.1 time	11:05	Sampling NO.2 time	11:20	Sampling NO.3 time	11:35
Operation status error	/	Fault handling situation	/	Any influence on result?	/

The record of operational data for Ballast Water Management system					
Record time	11:00	11:10	11:20	11:30	11:40
Operation mode	Ballasting				
Flow rate (m^3/h)	310	312	308	315	310
System power consumption (KW)	44	44	44	44	44
UV lamp power (KW)	40	40	40	40	40
UV intensity (mw/cm^2)	560	570	560	550	570
Pump outlet pressure (bar)	2.9	2.9	3.0	3.0	3.0
Filtrate pressure (bar)	2.9	3.0	3.1	3.0	3.0
The filter differential pressure (bar)	0.0	0.1	0.1	0.0	0.0
UV lamp temperature (℃)	25.9	26.1	26.1	26.1	26.1

No: 33

Recorder: Supervisor: CCS Site Witness:

Ballast Water Management System Operation Record

Cycle number	No.9 cycle				
Test date	2012-7-12				
Operation mode	Ballasting Operation (comparison Treatment)				
The record of preparation status for Ballast Water Management System					
Start-up time	12:00		Ready time	12:00	
System power consumption	/		UV lamp power	/	
Standby status error	/		Malfunction	/	
The record of operation status for Ballast Water Management system					
Operation start time	12:00		Operation end time	12:50	
Sampling NO.1 time	12:10	Sampling NO.2 time	12:25	Sampling NO.3 time	12:40
Operation status error	/	Fault handling situation	/	Any influence on result?	/

The record of operational data for Ballast Water Management system					
Record time	12:00	12:10	12:20	12:30	12:40
Operation mode	Ballasting				
Flow rate (m^3/h)	306	312	310	316	312
System power consumption (KW)	/	/	/	/	/
UV lamp power (KW)	/	/	/	/	/
UV intensity (mw/cm^2)	/	/	/	/	/
Pump outlet pressure (bar)	2.9	3.0	3.0	3.0	3.0
Filtrate pressure (bar)	/	/	/	/	/
The filter differential pressure (bar)	/	/	/	/	/
UV lamp temperature (℃)	/	/	/	/	/

No: 34

Recorder: Supervisor: CCS Site Witness:

Ballast Water Management System Operation Record

Cycle number	No. 9 cycle				
Test date	2012-7-17				
Operation mode	Deballasting operation (Comparison Treatment)				
The record of preparation status for Ballast Water Management System					
Start-up time	14:30		Ready time	14:30	
System power consumption	✓		UV lamp power	✓	
Standby status error	✓		Malfunction	✓	
The record of operation status for Ballast Water Management system					
Operation start time	14:30		Operation end time	15:20	
Sampling NO.1 time	14:35	Sampling NO.2 time	14:50	Sampling NO.3 time	15:05
Operation status error	✓	Fault handling situation	✓	Any influence on result?	✓

The record of operational data for Ballast Water Management system					
Record time	14:40	14:50	15:00	15:10	15:20
Operation mode	Deballasting				
Flow rate (m^3/h)	307	302	308	310	298
System power consumption (KW)	✓	✓	✓	✓	✓
UV lamp power (KW)	✓	✓	✓	✓	✓
UV intensity (mw/cm^2)	✓	✓	✓	✓	✓
Pump outlet pressure (bar)	3.0	3.0	3.0	3.0	3.0
Filtrate pressure (bar)	✓	✓	✓	✓	✓
The filter differential pressure (bar)	✓	✓	✓	✓	✓
UV lamp temperature (℃)	✓	✓	✓	✓	✓

No: 35

Recorder: Supervisor: CCS Site Witness:

Ballast Water Management System Operation Record

Cycle number	No.9 Cycle				
Test date	2012-7-17				
Operation mode	Deballasting Operation (Treatment Tank)				
The record of preparation status for Ballast Water Management System					
Start-up time	13:30		Ready time	13:30	
System power consumption	44		UV lamp power	40	
Standby status error	/		Malfunction	/	
The record of operation status for Ballast Water Management system					
Operation start time	13:30		Operation end time	14:20	
Sampling NO.1 time	13:35	Sampling NO.2 time	13:50	Sampling NO.3 time	14:05
Operation status error	/	Fault handling situation	/	Any influence on result?	/

The record of operational data for Ballast Water Management system					
Record time	13:40	13:50	14:00	14:10	14:20
Operation mode	Ballasting				
Flow rate (m^3/h)	307	308	308	311	317
System power consumption (KW)	44	44	44	44	44
UV lamp power (KW)	40	40	40	40	40
UV intensity (mw/cm^2)	570	570	570	570	570
Pump outlet pressure (bar)	3.0	3.0	3.0	3.0	3.0
Filtrate pressure (bar)	/	/	/	/	/
The filter differential pressure (bar)	/	/	/	/	/
UV lamp temperature (℃)	25.9	25.9	25.9	25.9	25.9

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Recorder: Supervisor: CCS Site Witness:

Ballast Water Management System Operation Record

Cycle number	No. 10 Cycle				
Test date	2012-7-19				
Operation mode	Ballasting Operation C Treatment Tank D				
The record of preparation status for Ballast Water Management System					
Start-up time	11:00		Ready time	11:00	
System power consumption	44kW		UV lamp power	40kW	
Standby status error	/		Malfunction	/	
The record of operation status for Ballast Water Management system					
Operation start time	11:00		Operation end time	11:50	
Sampling NO.1 time	11:05	Sampling NO.2 time	11:20	Sampling NO.3 time	11:35
Operation status error	/	Fault handling situation	/	Any influence on result?	/

The record of operational data for Ballast Water Management system					
Record time	11:00	11:10	11:20	11:30	11:40
Operation mode	Ballasting				
Flow rate (m^3/h)	309	310	308	311	315
System power consumption (KW)	44	44	44	44	44
UV lamp power (KW)	40	40	40	40	40
UV intensity (mw/cm^2)	550	560	550	550	550
Pump outlet pressure (bar)	3.0	3.0	3.0	3.0	3.0
Filtrate pressure (bar)	3.0	3.1	3.0	3.0	3.0
The filter differential pressure (bar)	0.0	0.1	0.0	0.0	0.0
UV lamp temperature (℃)	26.2	26.1	26.2	26.2	26.2

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Recorder: Supervisor: CCS Site Witness:

Ballast Water Management System Operation Record

Cycle number	NO.10 Cycle				
Test date	2012-7-19				
Operation mode	Ballasting operation (Comparison Treatment)				
The record of preparation status for Ballast Water Management System					
Start-up time	12:00		Ready time	12:00	
System power consumption	/		UV lamp power	/	
Standby status error	/		Malfunction	/	
The record of operation status for Ballast Water Management system					
Operation start time	12:00		Operation end time	12:50	
Sampling NO.1 time	12:10	Sampling NO.2 time	12:25	Sampling NO.3 time	12:40
Operation status error	/	Fault handling situation	/	Any influence on result?	/

The record of operational data for Ballast Water Management system					
Record time	12:00	12:10	12:20	12:30	12:40
Operation mode	Ballasting				
Flow rate (m^3/h)	312	310	310	309	316
System power consumption (KW)	/	/	/	/	/
UV lamp power (KW)	/	/	/	/	/
UV intensity (mw/cm^2)	/	/	/	/	/
Pump outlet pressure (bar)	3.0	3.0	3.0	3.0	3.0
Filtrate pressure (bar)	/	/	/	/	/
The filter differential pressure (bar)	/	/	/	/	/
UV lamp temperature (℃)	/	/	/	/	/

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Recorder: Supervisor: CCS Site Witness:

Ballast Water Management System Operation Record

Cycle number	NO.10 cycle				
Test date	2012-7-24				
Operation mode	Deballasting operation (Treatment Tank)				
The record of preparation status for Ballast Water Management System					
Start-up time	13:00		Ready time	13:00	
System power consumption	44		UV lamp power	40	
Standby status error	/		Malfunction	/	
The record of operation status for Ballast Water Management system					
Operation start time	13:00		Operation end time	13:50	
Sampling NO.1 time	13:05	Sampling NO.2 time	13:20	Sampling NO.3 time	13:35
Operation status error	/	Fault handling situation	/	Any influence on result?	/

The record of operational data for Ballast Water Management system					
Record time	13:10	13:20	13:30	13:40	13:50
Operation mode	Deballasting				
Flow rate (m^3/h)	307	307	308	308	311
System power consumption (KW)	44	44	44	44	44
UV lamp power (KW)	40	40	40	40	40
UV intensity (mw/cm^2)	530	530	530	530	530
Pump outlet pressure (bar)	3.0	3.0	3.0	3.0	3.0
Filtrate pressure (bar)	/	/	/	/	/
The filter differential pressure (bar)	/	/	/	/	/
UV lamp temperature (℃)	27.9	27.9	27.9	28.1	28.1

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Recorder: Supervisor: CCS Site Witness:

Ballast Water Management System Operation Record

Cycle number	No. 10 cycle				
Test date	2012-7-24				
Operation mode	Deballasting Operation (Comparison Treatment)				
The record of preparation status for Ballast Water Management System					
Start-up time	14:00		Ready time	14:00	
System power consumption	/		UV lamp power	/	
Standby status error	/		Malfunction	/	
The record of operation status for Ballast Water Management system					
Operation start time	14:00		Operation end time	14:50	
Sampling NO.1 time	14:05	Sampling NO.2 time	14:20	Sampling NO.3 time	14:35
Operation status error	/	Fault handling situation	/	Any influence on result?	/

The record of operational data for Ballast Water Management system					
Record time	14:00	14:10	14:20	14:30	14:40
Operation mode	Deballasting				
Flow rate (m^3/h)	296	302	299	301	301
System power consumption (KW)	/	/	/	/	/
UV lamp power (KW)	/	/	/	/	/
UV intensity (mw/cm^2)	/	/	/	/	/
Pump outlet pressure (bar)	3.0	3.0	2.9	3.0	3.0
Filtrate pressure (bar)	/	/	/	/	/
The filter differential pressure (bar)	/	/	/	/	/
UV lamp temperature (℃)	/	/	/	/	/

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Recorder: Supervisor: CCS Site Witness: