Vessel Name:	
Serial number MCU:	
Serial Number EPU:	
Serial Number Skid:	
Mains Supply:	V AC @ Hz
Software version MCU:	
Software version EPU:	
K-factor Cell:	
K-factor Skid Flowmeter:	P/L
Maximum capacity of Flowmeter 1:	T/hr
Maximum Capacity of Flowmeter 2:	T/hr
Ships volume (DWT):	kilo Ton
Number of sample points:	

Introduction / Warning

Overboard Valve

This procedure will attempt to operate the overboard discharge valve. Permission from the vessel personnel is required too assure that the discharge piping has been blanked and/or manual valves closed and that NO oil is spilled.

Slop Tank

Running the oil discharge monitor will typically discharge some fresh water into the slop tank. Throughout this procedure, approximately 750 liters of water fresh will be discharged. Permission from the vessel personnel is required to assure that cargo is not contaminated and necessary slop tank space is available. If required, the discharge piping can be disconnected and the water dumped into the bilge instead.

Oil

This procedure will check the calibration of the optics on fresh water. The oil measuring features will be electrically simulated or manually entered. We will NOT inject the oil at this time. Therefore the discharge of the Oilcon monitor will be clean and OIL FREE.

Pump Room

This procedure will require that the inspecting engineer be allowed to enter the pump room. Permission is required from the vessel personnel before entry into any enclosed space. Assure that the ventilation is ON and that it is safe to enter.

Physical Inspection

Cargo Control Room

- MCU mounted correctly adequately supported Y or N
- Operating Instructions are available Y or N
- Previous Printout Rolls are stored Y or N
- Communication Cable made out of 1 (one) piece of cable Y or N
- MCU Display's Backlight operates well Y or N
- Global Position System input tested Y or N

Engine Room

- EPU (Electro-Pneumatic Unit) and Started Box mounted correctly Y or N
- All cables terminated correctly and placed in correct slots Y or N
- Earth cables installed conform drawings 0806-005-3 and 0806-0005-4 Y or N
- Is oil reservoir of sample pump filled with lubricator Y or N
- Sample pump motor turning freely (by hand) Y or N
- Air lines correctly connected and free of leaks Y or N
- Air supply set to 4 bar minimum Y or N

Pump Room

- Skid mounted correctly Y or N
- Piping secured and free of leaks Y or N
- Maximum distance from sample probe to skid less then 26 meters Y or N
- Flow rate of Skid set to 500 liter per minute Y or N
- Fresh water regulator shows 1.5 bar pressure at all times Y or N
- Sample Pump discharge pressure (measured on pressure gauge on the shuttle valve) ...MPa
- Window Wash pump operate properly Y or N
- Detector Cell K-factor on cell tag match the MCU printout Y or N
- DP Transmitter mounted correctly and free of leaks Y or N
- Orifice plate installed correctly Y or N

OPERATION

Before the test is carried out the following conditions should be met:

- Control air supply is on
- Fresh water supply is on
- Electrical supplies are on
- EPU and MCU are switched on
- All manual valve in the system are open

Under no circumstances must the sample pump run without liquid. The pump casing must be filled with liquid first otherwise the pump will seize and damage will occur.

Prior to testing switch MCU key switch to 'OFF' position, Main switch on the back side of the MCU to 'OFF' and switch off the 24VDC back up supply. Wait for 30 seconds. Make sure the EPU in engine room is switched On. Switch ON the Main switch on the back of the MCU. Switch the key switch to Control (CTRL). Wait 1 minute and write down any alarm which comes up. Acknowledge the alarm by pressing 'ALARM RESET' wait again for one minute and write down any alarms come up.
List of alarm which were triggered during the above procedure:

_____
_____
_____

Overboard Valve Simulation

1. Switch the MCU to "CTRL" (Control) position.
2. Press [>] to begin SETUP mode. Press [ENTER] until 'Total Oil Limit' is displayed. Press [CHANGE] and enter Total Oil Limit of 40 L. Press [ENTER] to display 'Reset Oil Total ?'. Press [CHANGE] and [CLEAR] to reset the Oil Total to zero.
3. Press [ENTER] until 'Sips speed input' is selected. Change mode to manual and enter **15 knots**.
4. Press [ENTER] until 'Flow rate Input' is selected. Change mode to manual and enter **1000T/H**.
5. Press [ENTER] until 'Oil contents input' is selected. Change mode to manual and enter **400ppm**.
6. Press [ENTER] until end of SETUP mode is reached.
7. Press [ENTER] and system will go to IDLE mode (Flushing cycle will be skipped).
8. Press [>] to start the 'SAMPLE MODE'.
9. After approximately 2 minutes, the command to open the overboard valve and to shut the slop tank valve will be given. Confirm that the display indicate it by the change of' 'COM' and 'POS' from 'C' to 'O' and page containing following is produced by the printer:
    a. 'DISCH RATE 26 L/NM' Y or N
    b. Overboard Valve 'COMMAND OPEN' Y or N
    c. Overboard Valve 'POSITION OPEN' Y or N
10. Check that the valves have in fact operated.
11. Press [STOP MONITORING]. The system will return to 'IDLE' mode and the signal to close overboard valve and open the slop tank valve will be given. On the display of the MCU this is indicated by change of COM/POS from 'O' to 'C'
12. Press [CHANGE] to enter extra setup mode.
13. Press [ENTER] until 'Flow rate Input' is selected. Change flow rate to **2000T/H**.

14. Wait till system is back in IDLE mode (15 seconds after last keyboard action)
15. Press [>] to start 'SAMPLE MODE'. The MCU should generate 'DISCHARGE RATIO' alarm showed on display as 'DISCH. FLT L/NM'. The overboard discharge valve will remain closed (wait at least 3 minutes).
    System operated as described Y or N
16. Press [CHANGE] to enter extra setup mode.
17. Press [ENTER] until 'Flow rate Input' is selected. Change flow rate to **1000T/H**.
18. Wait till system is back in SAMPLE MODE mode (15 seconds after last keyboard action).
19. After approximately 2 minutes, the signal to open the overboard valve and to shut the slop tank valve will be given. Confirm MCU indicates as follows:
    a. 'DISCH RATE 26 L/NM' Y or N
    b. Overboard Valve 'COMMAND OPEN' Y or N
    c. Overboard Valve 'POSITION OPEN' Y or N
    d. TOT OIL will increase till 40 L Y or N
    e. After 40L reached MCU generate 'TOT.OIL FLT' alarm Y or N
    f. Overboard Discharge Valve will close Y or N
20. Verify that the valves have in fact operated Y or N
21. Press [STOP MONITORING] to select IDLE mode.
22. Press [STOP MONITORING] to select SHUT DOWN mode. Wait until system returns to the STANDBY mode.

Zero Check

1. Switch all the input to AUTO:
    a. Press [>] to select set up mode
    b. Press [ENTER] until 'Ship's speed input' is selected. Change to auto mode
    c. Press [ENTER] until 'Flow rate input' is selected. Change to auto mode
    d. Press [ENTER] until "Oil content input' is selected. Change to auto mode
    e. Press [ENTER] until end of set up mode is reached.
2. Press [ENTER] to start FLUSH mode
3. Wait until system complete the calibration cycle and switch to IDLE mode
    a. The calibration cycle ended without alarm Y or N
    b. List any alarm which came up _____
       _____

Read Oil

1. Start the cargo pump (the MCU will divert the flow into the slop tank).
2. Confirm that water circulate in discharge pipes by checking the flow rate indication on the MCU.
3. With the MCU in IDLE mode, press [>] to start the SAMPLE MODE
    a. Verify that the PPM indication on the MCU display is changing Y or N
    b. Verify that Flow Rate indication on the MCU changing Y or N
4. Press [STOP MONITORING] and select the next sample valve (if any).
5. Press [>] to start sampling
    a. Verify that the correct sample point is indicated on the MCU Y or N
    b. Verify that the correct sample probe is selected Y or N

c. Verify that the PPM indication on MCU is changing Y or N
d. Verify that the Flow Rate indication is changing Y or N

6. Press [STOP MONITORING] to select IDLE mode
7. Repeat steps 4 and 5 for each sample point
   a. Sample point #_____; Results satisfactory Y or N
   b. Sample point #_____; Results satisfactory Y or N
   c. Sample point #_____; Results satisfactory Y or N
   d. Sample point #_____; Results satisfactory Y or N

Overall Results

Ballast Monitor portion of ODME working satisfactory? Y or N
Valve Control portion of ODME working satisfactory? Y or N

Crew Training

Is the crew familiar with the system operation? Y or N
Is the crew familiar with the valve location? Y or N

System Recommendations

1. Indicate Items that should be done by Service Engineer in near future:

_____
_____
_____

2. Indicate items that should be done by vessel's crew in near future:

_____
_____
_____

Date: _____ - _____- _____

Service Engineer

_____

Ship's Officer signature & stamp:

_____