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EMC Services

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VIAMED LIMITED

**15, STATION ROAD
CROSS HILLS
KEIGHLEY
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BD20 7DT**

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SUMMARY REPORT

For

PORTABLE OXYGEN ANALYSER

Model Number: VN 202

Serial Number: VN 0011

Issue Date:	9/02/96
SGS Serial No:	1006
Date of test:	6/02/96
Test required:	Tested for compliance with EN 60601-1-2

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TESTS PERFORMED

RADIATED IMMUNITY - SEE NOTE 1

ELECTROSTATIC DISCHARGE - No degregation was observed in the performance of the EUT during ESD. test.

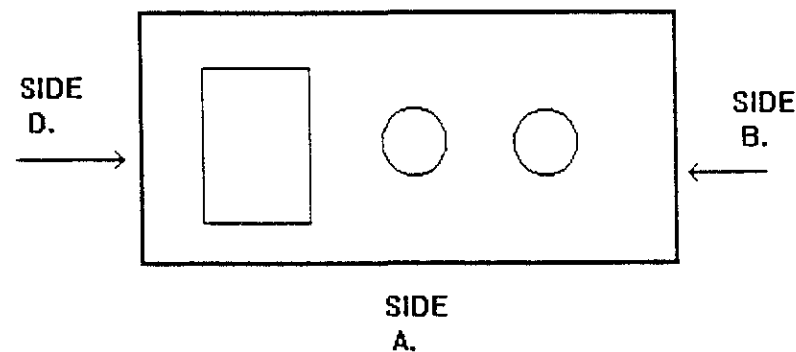
PRE SCAN FOR RADIATED EMISSIONS - Test was carried out in a semi- Anechoic chamber.

EUT was operated with a class R-7 oxygen senor.

NOTE 1. During the test (radiated immunity) the following degregation was observed - hor. pol. side C & D :- 42.2MHz to 60.5MHz, & 80.6MHz to 98.5MHZ.
Ver. pol. side A & C :- 40.1MHz to 45.3MHz, & 68.1MHz to 96.5MHz.
The readings on the VN202 varied between 9 to 34.

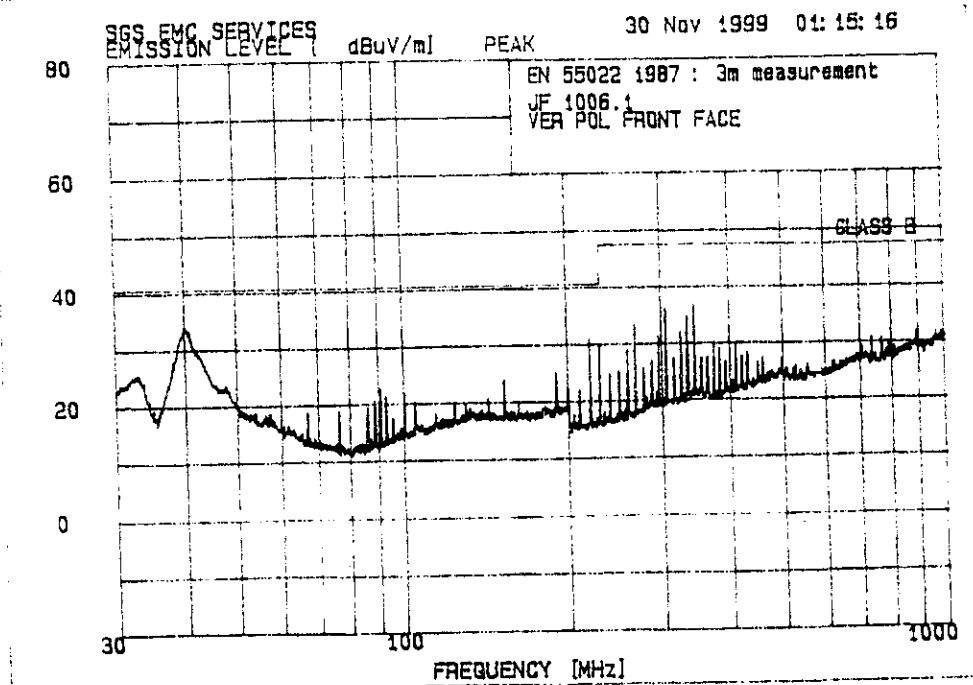
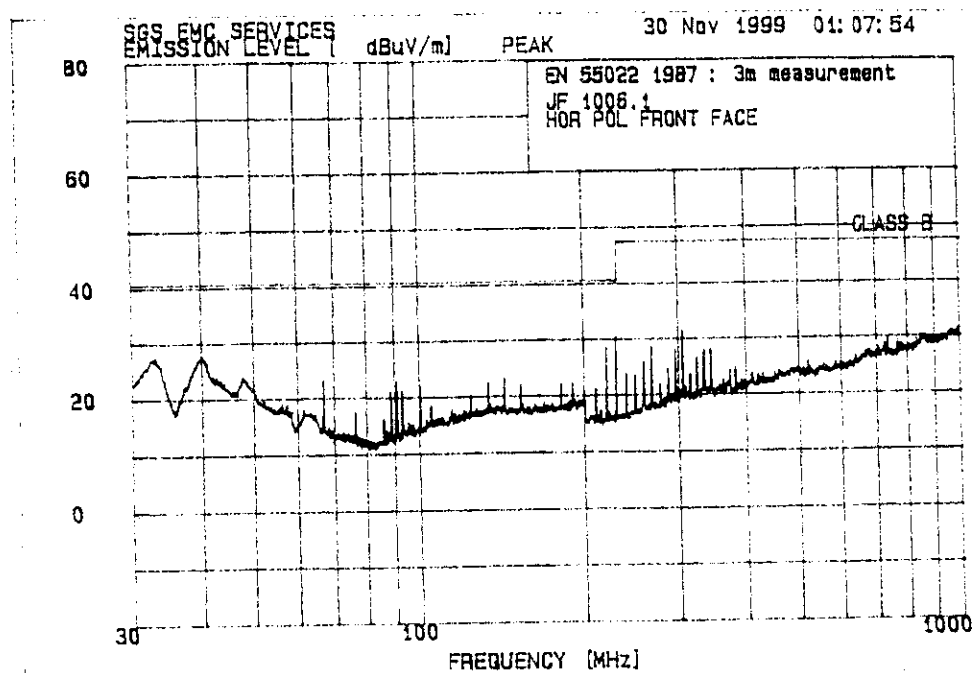
EUT layout for radiated immunity.

BACK OF EUT
SIDE C.



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RADIATED EMISSIONS PRE-SCAN.



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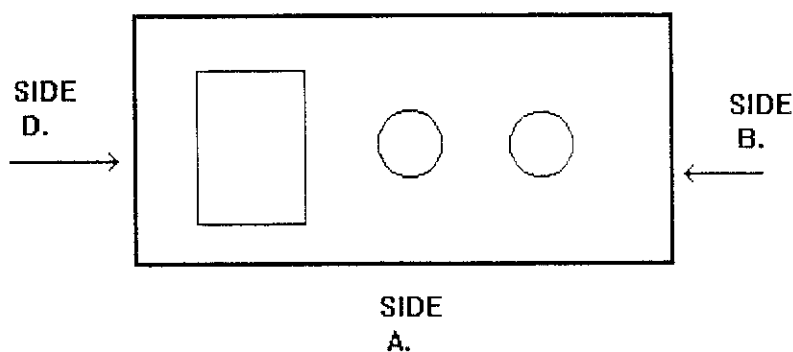
PRE SCAN FOR RADIATED EMISSIONS - Test was carried out in a semi- Anechoic chamber.

EUT was operated with a class R-7 oxygen sensor.

NOTE 1. During the test (radiated immunity) the following degregation was observed - hor. pol. side C & D :- 42.2MHz to 60.5MHz, & 80.6MHz to 98.5MHZ.
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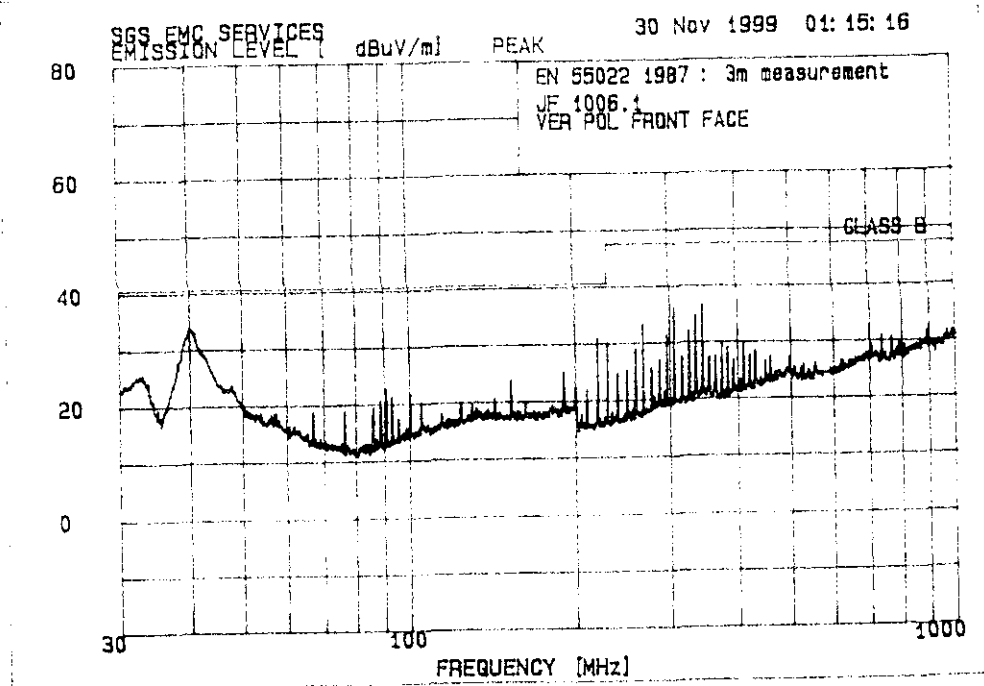
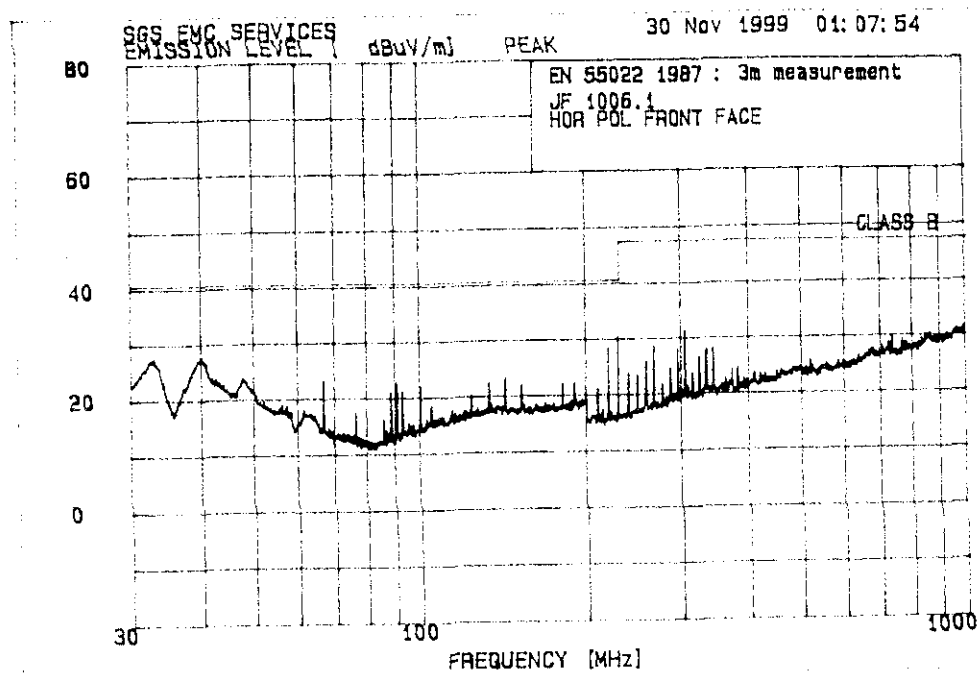
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BACK OF EUT
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RADIATED EMISSIONS PRE-SCAN.



VANDAGRAPH
LIMITED

DATE 23 rd February 1996
TO John Whaley,
SGS EMC Services
FROM : John S. Lamb

TO BE PASSED TO JOHN WHALEY TONIGHT

Dear John,

Please find the circuit diagram I promised you on the VN202 Oxygen Analyser we have sent for EMC testing.

The sensor is a microfuel cell generating 10.5Mv in air. it is connected to the instrument via a coiled cable approximately 50 cms long.

The sensor output is a 2.5 mm single pole jack socket wired directly onto the P.C.B.

In order to improve EMC we have taken the following steps.

The case has been sprayed with a zinc coating and grounded to the -ve side of the battery (0 volt rail).

The coiled cable has been screened . The screen is not electrically connected to the plug at the sensor end but is connected to the earthing point inside the case which is at the -ve battery bus

Sorry about the cable being missing from the envelope.

At this stage it is still possible to connect the screen to one side of the sensor but I presume I would have to connect the case to the same point instead of to the -ve side of the battery.

Kind Regards

John S Lamb

*Screen to all case
not just pigtail to PCB
Tel 28/1/96*