



ENVIRONMENTAL EXPOSURE CERTIFICATE

Report Date	6/6/2012	MTO #	2012-047
Customer	Weir Minerals Multiflo	Quote #	Q2011-539B
Test Sample	Fuel Filling System	PO #	33083
Part Number(s)	HF1105Z0001, HF1105Z0003, HF1008Z0006		
Serial Number(s)	CSZ 001-CSZ 006		
Test Start Date	5/31/2012		
Test Completion Date	6/2/2012		
Performed By	L.Orr		

<u>Equipment Used</u>	<u>Description</u>	<u>Serial #</u>	<u>Calibration Date</u>	<u>Calibration Due Date</u>
ESSC 063	Accelerometer	S/N: 96052	8/24/2011	8/24/2012
ESSC 037	Agree	S/N: 99-AV13526	6/15/2011	6/15/2012
ESSC 009	SD Controller	S/N: 2932-7832D	9/26/2011	9/26/2012
ESSC 032	Signal Conditioner	S/N: 2144	8/29/2011	8/29/2012
ESSC 048	Accelerometer	S/N: 70515	3/14/2012	3/14/2013
ESSC 047	Accelerometer	S/N: 70514	5/25/2012	5/25/2013

Test samples were subjected to the following conditions

Temperature with Vibration per MIL-STD-810G, Method 514.6, Category 4:
Composite Wheeled Vehicle Vibration Exposure.

- The samples were mounted in the vertical axis.
 - Ramped chamber to -65C (-85F) and subjected test item to the vibration profile (Figure 514.6C-3 Category 4) for one hour.
 - Ramped chamber to 24C (75F) and subjected test item to the vibration profile (Figure 514.6C-3 Category 4) for one hour.
 - Ramped chamber to 43.3C (110F) and subjected test item to the vibration profile (Figure 514.6C-3 Category 4) for one hour.
 - Returned chamber to 24C (75 F), repeated steps 2 through 5 for the remaining two axes.
- Pictures and video were taken at the start of each axes. Samples were inspected after each temperature. No anomalies were noted.

OBSERVATIONS AND ANOMALIES

Date	Time	Initials	Description
5/31/2012	1055	L.O.	The vertical axis starting frequency was changed from 5Hz to 6.25Hz to accommodate shaker limitations. The modification is allowed per this test method.

Test results apply only to those parts and serial numbers listed above
Estimation of Uncertainty Measurements available upon request.