



SPECTRAL VIBRATION SURVEY
SAMPLE COOLSTORE LTD
COOLSTORE ROAD

28.3.2014



DISTRICT

Survey Intention:

It was the intent of this survey to inspect the operating rotating equipment in the below listed areas with the VB 2000 data logger to identify any potential problems. The areas with high readings caused by wear or mass imbalance, these anomalies will be digitally recorded and presented in this report.

The areas inspected were:

- Main Engine Room
- Water pumps

Inspection details and Chronology:

This inspection was a part of our regular maintenance and is performed in these areas on an annual basis.

The inspection was carried out over a period of one day on the 28.3.2014

The start time was 7:00am with a completion that day at 6:00pm. The report was completed on the 31.3.2014

The inspection was performed by David Lambert – Lambert Condition Monitoring – with an accompanying refrigeration engineer.

Comments:

Ultrasound: An inspection of the motor and Compressor set was undertaken and no evidence of electrical discharge was evident.

Results:

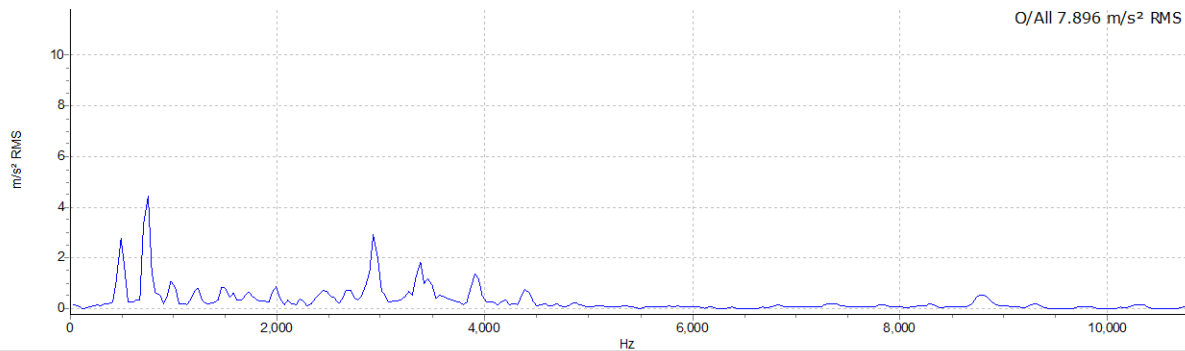
The results have been listed in the order of severity according to their amplitude. The following repair priority table is a guideline only. Responsibility for any repair rests with the area supervisor or maintenance manager.

Location	Schedule Entry	Type	Prev 4	Prev 3	Prev 2	Prev 1	Latest	Units	% change	Date
#2 hort Generator										
NDE Motor - Vertical	Acc Spec 15000 Hz	Spec Power 10 Hz - 15000 Hz	7.744	5.402	13.67	24.51	8.254	m/s ² RMS	-66.33 %	17/06/2014
DE Motor - Vertical	Acc Spec 15000 Hz	Spec Power 10 Hz - 15000 Hz	13.1	10.37	33.46	41.96	6.456	m/s ² RMS	-84.62 %	17/06/2014
DE Motor - Axial	Acc Spec 15000 Hz	Spec Power 10 Hz - 15000 Hz	15.08	15.69	10.76	64.72	11.77	m/s ² RMS	-81.82 %	17/06/2014
#2 DE comp - Horizontal	Acc Spec 15000 Hz	Spec Power 10 Hz - 15000 Hz	21.32	23.93	53.47	59.43	7.896	m/s ² RMS	-86.71 %	17/06/2014
#2 DE comp - Vertical	Acc Spec 15000 Hz	Spec Power 10 Hz - 15000 Hz	23.23	16.37	69.52	42.23	12.76	m/s ² RMS	-69.78 %	17/06/2014
#2 NDE comp - Horizontal	Acc Spec 15000 Hz	Spec Power 10 Hz - 15000 Hz	17.52	18.15	42.85	75.6	7.191	m/s ² RMS	-90.49 %	17/06/2014
#2 NDE comp - Axial	Acc Spec 15000 Hz	Spec Power 10 Hz - 15000 Hz	28.5	14.99	41.15	57.78	11.72	m/s ² RMS	-79.71 %	17/06/2014
#2 NDE comp - Vertical	Acc Spec 15000 Hz	Spec Power 10 Hz - 15000 Hz	17.15	20.68	30.56	69.3	8.252	m/s ² RMS	-88.09 %	17/06/2014

This is the overall data reading for air compressor 2. The last set taken after the air end was replaced with a new unit.

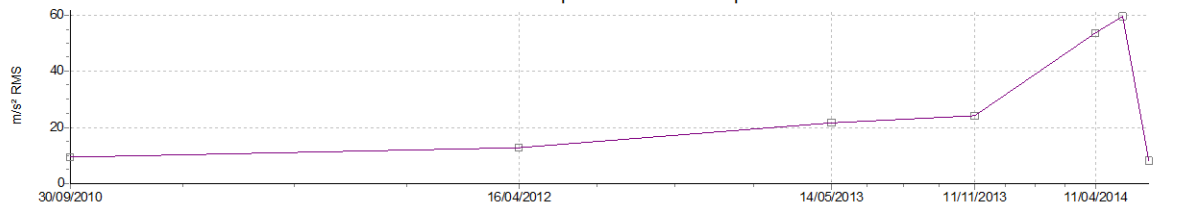
#2 hort Generator - #2 DE comp - Horizontal - Acc Spec 15000 Hz
17/06/2014 5:09:47 p.m.

Machine Note (17/06/2014 6:30:46 p.m.)
Air end replacement



17/06/2014 5:09:47 p.m. O/All 7.896 m/s² RMS <set RPM>

#2 hort Generator - #2 DE comp - Horizontal - Acc Spec 15000 Hz



Spec Power 10 Hz - 15000 Hz
Spectrum Overalls

Disclaimer:

The measurements taken during this routine inspection are only an indication of the vibration characteristics at the time of inspection and no responsibility for changes in the mechanical loading after the visit are implied.

Any removed Bearings should be retained for analysis by LCM at the next visit.