



MILLINGTON, TN

August 3, 2020

Lucite

Subject: August vibration report

Most of the machines surveyed were found to be in good condition with the exception of the following:

QualiTTest® uses a four step rating system for defects.

Class I: Defect is present, but effect on reliability is not clear; no immediate action is required. Continue to normally monitor.

Class II: Defect (s) present that may cause problem in long term (2-6 months.). Repair during normal maintenance scheduling. Continue to monitor.

Class III: Defect (s) present that may cause failure in short term (less than 2 months.). This should be addressed as soon as practical, with a high maintenance priority. Increase monitoring frequency.

Class IV: Defect (s) present that makes continued reliability unpredictable, and possibility of secondary damage is high. Repairs should be made ASAP. An unscheduled shutdown should be considered for repairs

Hi-Speed Industrial Service tests and inspects industrial machinery and equipment and makes recommendations concerning maintenance and repairs based on its experience in the field of industrial repair and maintenance. The information contained herein is provided as an opinion only, not as a guaranty or warranty of the matters discussed herein.

This completes our assessment of your equipment for this survey. Thank you for your business and don't hesitate to call if you have any comments or questions.

Sincerely,

David W. Shook
Senior Reliability Specialists
Hi-Speed Industrial Service
dshook@gohispeed.com

Detailed Defects

SAR 03 Turbine Compressor Main Blower

The unit 1x RPM vibration has increased again. Inspection of unit near the compressor end is recommended. Our motion amplification camera system could help to identify if there are any structural issues. **Rated a Class II Defect.**

SAR 10 Process Air Fan E

Almost 3 g's RMS acceleration is still evident in the fan bearing data as noise. Unit seemed to be repaired in April. Higher speed fans like this one will usually generate more normally, so we will watch this unit closely. Make sure bearings are lubricated for service and environment; and inspect the installation and fasteners. **Rated a Class II Defect.**

Observations

MON 36 Irganox Mix Feed Pump

The vibration data looks to indicate a bearing outer race defect due to a first vibration at just over 3 orders of shaft speed has multiple harmonics. Periodic weaker impacting reduces the analysis rating. Ensure the unit bearings receive lubrication if possible. Inspect as time allows. We will watch this unit closely for changes. **Rated a Class I Defect.**

MON 55SM Hut Pump S

After further evaluation, the vibrations in the motor appear to be more related to rotor bar. No immediate actions required. **Rated a Class I Defect.**

SAR55A Neutralization Pump North

The data continues to indicate distress in the inboard motor bearing. Still recommend replacing the motor in the next few months or possibly sooner. **Rated a Class II Defect for now.**

ACN 07B ACH Product Feed Pump

Pump cavitation seems to be what we are seeing here most likely. Check the process parameters to make sure the pump is running optimally. **Rated a Class I Defect.**

MON 65 Amide Reactor Circulation Pump

The unit vibration has dropped to more normal levels. We will take it off the report for now.

MON56 Inhibited MON transfer pump E

The overall vibration continues to zigzag up and down. The pump axial vibration is still 0.38"/sec velocity peak and consists mostly of noise around 2-20 orders of shaft speed. We suspect recirculation caused by either pump wear or not running near the optimal point on the curve. The inboard horizontal also has what looks to be cavitation between 40 and 60 orders. Inspect as time allows. **Rated A Class II Defect.**

SAR66A, SAR66B, SAR 66C and SAR78A Vertical Cooling Tower Pumps

These pumps all have a 1xRPM vibration at near or above 0.4"/second velocity peak. The vibration should be lowered if possible. Trim balancing might help if the unit is out. Check all fasteners for tightness and the shafts if possible, for runout. **Rated A Class I Defect.**

SAR57B Oleum Tower Circulation Pump B

Vibration data still suggests possible cavitation in the pump and wear in the pump and motor bearings. Inspect the unit for operation in the optimal part of the pump curve. **Rated a Class I Defect.**

SAR 14 Combustion Air Fan

Fan unit appears to have an elevated noise floor in the higher frequencies. Ensure the bearings are properly lubricated. **Rated a Class I Defect.**

ACN 07B ACH Product Feed Pump

The bearings could be in some distress. Ensure they are receiving the correct lubrication periodically. Pump cavitation shows similar vibrations; however, we don't believe they are the root cause now. Inspect the pump bearings only if time allows. **Rated a Class I Defect.**

ACN 36 ACH Neutralization Tank Circulation Pump

The pump has a 4x RPM vibration in it that we believe is vane pass. The vibration is back up to 0.4"/sec velocity peak again after dropping last month. We suspect wear in the pump or a process or flow issue. Could also be a coupling issue. Investigate as time allows. **Rated a Class II Defect.**

ACN13A #2 Kettle transfer pump N

The motor bearings still appear to be in some distress. Be prepared to change the motor out in the future. **Rated a Class II Defect.**

SAR50A Drying Tower Circulation Pump W

The outboard end of the motor is still vibrating at shaft speed. Inspect the motor and pump for loose fasteners or coupling, and motor cooling fan for defects. Have the alignment checked also. **Rated a Class I Defect.**

ACN28B ACN Fan E

A 1xRPM still dominates the velocity spectrum for the motor inboard vertical at near 0.45"/sec velocity peak. Inspect the motor and structure. Inspect, clean, and trim balance the fan in the near future if possible. **Rated a Class II Defect.**

Reported prior but not running this survey

ACN14 ACH Off Grade Pump

Reported in June. Motor inboard axial shows 4.5 g's overall. Multiple vibration peaks look to be mostly non-synchronous. The motor bearings are in some distress. We will keep a close eye on this unit for changes. **Rated a Class II Defect.**

ACN13B #2 Kettle Transfer Pump South

The May inboard motor bearing is showing signs of distress. This motor looks to have a strong rotor bar vibration. We suggest replacing the motor this year. **Rated a Class II Defect.**

SAR39A Boiler Feed Water Pump NW

The April motor data shows 1x and 2x vibrations and slight rotor bar. We recommend inspecting the coupling and insert. Perform an alignment if possible. **Rated a Class I Defect.**

MON132 Decanter Feed Pump Spare

A high 1xRPM vibration still appears to be in both the pump and motor bearings in the vertical. Inspect the unit for loose fasteners and structural issues. Check the coupling for wear and perform an alignment check and a shaft run out check. **Rated a Class II Defect.**

Raw Data for Routes 1, 2

Abbreviated Last Measurement Summary

Database: Lucite Memphis MMA.rbm
Area: MMA
Report Date: 03-Aug-20 13:51

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
SAR03 - Turb Comp Main Blower	(03-Aug-20) OVERALL LEVEL	
5 - Turbine CPL X	.192 Mils	
6 - Turbine CPL Y	.165 Mils	
7 - Turbine Gov X	.146 Mils	
8 - Turbine Gov Y	.081 Mils	
9 - Blwr IB X	.384 Mils	
10 - Blwr IB Y	.440 Mils	
11 - Blwr OB X	1.039 Mils	
12 - Blwr OB Y	1.301 Mils	
15 - Blwr HSG IB	.018 Mils	
16 - Blwer HSG OB	.023 Mils	

Clarification Of Vibration Units:

Dsp --> Mils P-P

Abbreviated Last Measurement Summary

Database: Lucite Memphis MMA.rbm
Area: MMA
Route No. 6: TJ ROUTE 1
Report Date: 03-Aug-20 08:27

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
SAR03 - Turb Comp Main Blower	(21-Jul-20) OVERALL LEVEL	
5 - Turbine CPL X	.219 Mils	
6 - Turbine CPL Y	.214 Mils	
7 - Turbine Gov X	.173 Mils	
8 - Turbine Gov Y	.099 Mils	
9 - Blwr IB X	.395 Mils	
10 - Blwr IB Y	.409 Mils	
11 - Blwr OB X	.954 Mils	
12 - Blwr OB Y	1.129 Mils	
15 - Blwr HSG IB	.016 Mils	
16 - Blwer HSG OB	.021 Mils	
ACN17DP - DP Comp	(21-Jul-20)	

		OVERALL LEVEL
21 - ACH Motor CPL		.035 Mils
22 - ACH GB CPL		.124 Mils
27 - ACH CMP MTR		.022 Mils
23 - ACH CMP CPL		.064 Mils
24 - ACH CMP OB		.033 Mils
 ACN28ADP - Cooling Twr Fan W	(21-Jul-20)	
28 - CT Fan 1 W	OVERALL LEVEL	
	.234 Mils	
 ACN28BDP - Cooling Twr Fan E	(21-Jul-20)	
26 - CT Fan 2 E	OVERALL LEVEL	
	.292 Mils	
 SAR55A - Neutralization Pump N	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.045 In/Sec	.376 G-s
MOV - Motor Outboard Vertical	.056 G-s	
MOA - Motor Outboard Axial	.092 In/Sec	.056 G-s
MIH - Motor Inboard Horizontal	.081 In/Sec	.085 G-s
MIP - Motor Inboard Horz Peakvue	.070 In/Sec	1.851 G-s
MIV - Motor Inboard Vertical	1.245 G-s	
MIA - Motor Inboard Axial	.116 In/Sec	.358 G-s
	.083 In/Sec	.384 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
PIP - Pump Inboard Horz Peakvue	.066 In/Sec	.296 G-s
PIV - Pump Inboard Vertical	.081 G-s	
PIA - Pump Inboard Axial	.050 In/Sec	.201 G-s
	.035 In/Sec	.175 G-s
 SAR59C - Scrub Twr Circ Pmp E	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.049 In/Sec	.141 G-s
MOV - Motor Outboard Vertical	.053 G-s	
MOA - Motor Outboard Axial	.050 In/Sec	.085 G-s
MIH - Motor Inboard Horizontal	.055 In/Sec	.032 G-s
MIP - Motor Inboard Horz Peakvue	.031 In/Sec	.473 G-s
MIV - Motor Inboard Vertical	.264 G-s	
MIA - Motor Inboard Axial	.029 In/Sec	.050 G-s
	.036 In/Sec	.039 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
PIP - Pump Inboard Horz Peakvue	.096 In/Sec	.530 G-s
PIV - Pump Inboard Vertical	.306 G-s	
PIA - Pump Inboard Axial	.049 In/Sec	.331 G-s
POH - Pump Outboard Horizontal	.065 In/Sec	.155 G-s
POP - Pump Outboard Horz Peakvue	.062 In/Sec	.474 G-s
POV - Pump Outboard Vertical	.302 G-s	
POA - Pump Outboard Axial	.066 In/Sec	.173 G-s
	.067 In/Sec	.140 G-s
 SAR59B - Scrub Twr Circ Pmp M	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.031 In/Sec	.460 G-s
MOV - Motor Outboard Vertical	.218 G-s	
MOA - Motor Outboard Axial	.041 In/Sec	.166 G-s
	.042 In/Sec	.129 G-s

MIH - Motor Inboard Horizontal	.033 In/Sec	.963 G-s
MIP - Motor Inboard Horz Peakvue	.671 G-s	
MIV - Motor Inboard Vertical	.042 In/Sec	.445 G-s
MIA - Motor Inboard Axial	.034 In/Sec	.444 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.148 In/Sec	.647 G-s
PIP - Pump Inboard Horz Peakvue	.382 G-s	
PIV - Pump Inboard Vertical	.062 In/Sec	.479 G-s
PIA - Pump Inboard Axial	.074 In/Sec	.482 G-s
POH - Pump Outboard Horizontal	.089 In/Sec	.749 G-s
POP - Pump Outboard Horz Peakvue	.481 G-s	
POV - Pump Outboard Vertical	.069 In/Sec	.225 G-s
POA - Pump Outboard Axial	.088 In/Sec	.153 G-s
SAR59A - Scrub Twr Circ Pmp W	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.033 In/Sec	.244 G-s
MOV - Motor Outboard Vertical	.117 G-s	
MOA - Motor Outboard Axial	.042 In/Sec	.115 G-s
MIH - Motor Inboard Horizontal	.029 In/Sec	.354 G-s
MIP - Motor Inboard Horz Peakvue	.026 In/Sec	.420 G-s
MIV - Motor Inboard Vertical	.200 G-s	
MIA - Motor Inboard Axial	.033 In/Sec	.163 G-s
	.024 In/Sec	.108 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
PIP - Pump Inboard Horz Peakvue	.126 In/Sec	.469 G-s
PIV - Pump Inboard Vertical	.310 G-s	
PIA - Pump Inboard Axial	.064 In/Sec	.196 G-s
POH - Pump Outboard Horizontal	.100 In/Sec	.180 G-s
POP - Pump Outboard Horz Peakvue	.081 In/Sec	.267 G-s
POV - Pump Outboard Vertical	.155 G-s	
POA - Pump Outboard Axial	.082 In/Sec	.167 G-s
	.121 In/Sec	.096 G-s
SAR39C - Boiler Feed H2O Pmp NE	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.216 In/Sec	.345 G-s
MOV - Motor Outboard Vertical	.078 G-s	
MOA - Motor Outboard Axial	.155 In/Sec	.117 G-s
MIH - Motor Inboard Horizontal	.079 In/Sec	.095 G-s
MIP - Motor Inboard Horz Peakvue	.164 In/Sec	.795 G-s
MIV - Motor Inboard Vertical	.113 G-s	
MIA - Motor Inboard Axial	.140 In/Sec	.254 G-s
	.075 In/Sec	.267 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
PIP - Pump Inboard Horz Peakvue	.155 In/Sec	.605 G-s
PIV - Pump Inboard Vertical	.030 G-s	
PIA - Pump Inboard Axial	.111 In/Sec	.212 G-s
POH - Pump Outboard Horizontal	.090 In/Sec	.139 G-s
POP - Pump Outboard Horz Peakvue	.233 In/Sec	1.041 G-s
POV - Pump Outboard Vertical	.150 G-s	
POA - Pump Outboard Axial	.094 In/Sec	.565 G-s
	.081 In/Sec	.267 G-s
SAR39D - Boiler Feed H2O Pmp SE	(23-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
	.062 In/Sec	.286 G-s

MOP - Motor Outboard Horz Peakvue	.019 G-s	
MOV - Motor Outboard Vertical	.044 In/Sec	.103 G-s
MOA - Motor Outboard Axial	.091 In/Sec	.088 G-s
MIH - Motor Inboard Horizontal	.044 In/Sec	.456 G-s
MIP - Motor Inboard Horz Peakvue	.051 G-s	
MIV - Motor Inboard Vertical	.069 In/Sec	.203 G-s
MIA - Motor Inboard Axial	.110 In/Sec	.141 G-s
OVERALL LEVEL		1K-20kHz
PIH - Pump Inboard Horizontal	.241 In/Sec	.145 G-s
PIP - Pump Inboard Horz Peakvue	.010 G-s	
PIV - Pump Inboard Vertical	.118 In/Sec	.106 G-s
PIA - Pump Inboard Axial	.057 In/Sec	.051 G-s
POH - Pump Outboard Horizontal	.151 In/Sec	.067 G-s
POP - Pump Outboard Horz Peakvue	.0036 G-s	
POV - Pump Outboard Vertical	.067 In/Sec	.036 G-s
POA - Pump Outboard Axial	.029 In/Sec	.039 G-s
SAR39B - Boiler Feed H2O Pmp SW		(20-Jul-20)
OVERALL LEVEL		1K-20kHz
MOH - Motor Outboard Horizontal	.042 In/Sec	.492 G-s
MOP - Motor Outboard Horz Peakvue	.021 G-s	
MOV - Motor Outboard Vertical	.069 In/Sec	.250 G-s
MOA - Motor Outboard Axial	.031 In/Sec	.108 G-s
MIH - Motor Inboard Horizontal	.034 In/Sec	.256 G-s
MIP - Motor Inboard Horz Peakvue	.021 G-s	
MIV - Motor Inboard Vertical	.045 In/Sec	.215 G-s
MIA - Motor Inboard Axial	.023 In/Sec	.231 G-s
OVERALL LEVEL		1K-20kHz
PIH - Pump Inboard Horizontal	.051 In/Sec	.357 G-s
PIP - Pump Inboard Horz Peakvue	.156 G-s	
PIV - Pump Inboard Vertical	.062 In/Sec	.269 G-s
PIA - Pump Inboard Axial	.082 In/Sec	.209 G-s
POH - Pump Outboard Horizontal	.037 In/Sec	.317 G-s
POP - Pump Outboard Horz Peakvue	.102 G-s	
POV - Pump Outboard Vertical	.055 In/Sec	.228 G-s
POA - Pump Outboard Axial	.083 In/Sec	.104 G-s
SAR54B - Weak Acid Xfer Pump N		(20-Jul-20)
OVERALL LEVEL		1K-20kHz
MOH - Motor Outboard Horizontal	.050 In/Sec	.264 G-s
MOP - Motor Outboard Horz Peakvue	.079 G-s	
MOV - Motor Outboard Vertical	.049 In/Sec	.146 G-s
MOA - Motor Outboard Axial	.044 In/Sec	.115 G-s
MIH - Motor Inboard Horizontal	.051 In/Sec	.346 G-s
MIP - Motor Inboard Horz Peakvue	.088 G-s	
MIV - Motor Inboard Vertical	.063 In/Sec	.115 G-s
MIA - Motor Inboard Axial	.061 In/Sec	.053 G-s
OVERALL LEVEL		1K-20kHz
PIH - Pump Inboard Horizontal	.107 In/Sec	.750 G-s
PIP - Pump Inboard Horz Peakvue	.107 G-s	
PIV - Pump Inboard Vertical	.117 In/Sec	.364 G-s
PIA - Pump Inboard Axial	.087 In/Sec	.535 G-s
SAR50A - Drying Tower Circ Pump W		(28-Jul-20)
OVERALL LEVEL		1K-20kHz
MOH - Motor Outboard Horizontal E-W	.432 In/Sec	.360 G-s
MOP - Motor Outboard Horz Peakvue	.100 G-s	

MOV - Motor Outboard Vertical N-S	.118 In/Sec	.173 G-s
MOA - Motor Outboard Axial	.431 In/Sec	.064 G-s
MIH - Motor Inboard Horizontal E-W	.220 In/Sec	.880 G-s
MIP - Motor Inboard Horz Peakvue	.508 G-s	
MIV - Motor Inboard Vertical N-S	.163 In/Sec	.415 G-s
MIA - Motor Inboard Axial	.169 In/Sec	.176 G-s
SAR50B - Drying Tower Circ Pump E	(20-Jul-20)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.107 In/Sec	.880 G-s
MOP - Motor Outboard Horz Peakvue	.439 G-s	
MOV - Motor Outboard Vertical	.161 In/Sec	.275 G-s
MOA - Motor Outboard Axial	.194 In/Sec	.152 G-s
MIH - Motor Inboard Horizontal	.087 In/Sec	.540 G-s
MIP - Motor Inboard Horz Peakvue	.257 G-s	
MIV - Motor Inboard Vertical	.177 In/Sec	.174 G-s
MIA - Motor Inboard Axial	.188 In/Sec	.128 G-s
SAR66E - Vertical Cool Twr Pump #5	(21-Jul-20)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal E-W	.117 In/Sec	.273 G-s
MOP - Motor Outboard Horz Peakvue	.140 G-s	
MOV - Motor Outboard Vertical N-S	.092 In/Sec	.645 G-s
MOA - Motor Outboard Axial	.090 In/Sec	.569 G-s
MIH - Motor Inboard Horizontal E-W	.046 In/Sec	.588 G-s
MIP - Motor Inboard Horz Peakvue	.218 G-s	
MIV - Motor Inboard Vertical N-S	.060 In/Sec	.365 G-s
MIA - Motor Inboard Axial	.067 In/Sec	.516 G-s
SAR66D - Vertical Cool Twr Pump #4	(21-Jul-20)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.094 In/Sec	.108 G-s
MOP - Motor Outboard Horz Peakvue	.045 G-s	
MOV - Motor Outboard Vertical	.106 In/Sec	.090 G-s
MOA - Motor Outboard Axial	.070 In/Sec	.094 G-s
MIH - Motor Inboard Horizontal	.059 In/Sec	.088 G-s
MIP - Motor Inboard Horz Peakvue	.046 G-s	
MIV - Motor Inboard Vertical	.105 In/Sec	.058 G-s
MIA - Motor Inboard Axial	.093 In/Sec	.051 G-s
SAR66C - Vertical Cool Twr Pump #3	(21-Jul-20)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.442 In/Sec	.075 G-s
MOP - Motor Outboard Horz Peakvue	.038 G-s	
MOV - Motor Outboard Vertical	.096 In/Sec	.043 G-s
MOA - Motor Outboard Vertical	.242 In/Sec	.037 G-s
MIH - Motor Inboard Horizontal	.183 In/Sec	.075 G-s
MIP - Motor Inboard Horz Peakvue	.035 G-s	
MIV - Motor Inboard Vertical	.129 In/Sec	.022 G-s
MIA - Motor Inboard Axial	.080 In/Sec	.048 G-s
SAR66B - Vertical Cool Twr Pump #2	(21-Jul-20)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.263 In/Sec	.130 G-s
MOP - Motor Outboard Horz Peakvue	.063 G-s	
MOV - Motor Outboard Vertical	.161 In/Sec	.081 G-s
MOA - Motor Outboard Axial	.454 In/Sec	.136 G-s

MIH - Motor Inboard Horizontal	.131 In/Sec	.149 G-s
MIP - Motor Inboard Horz Peakvue	.088 G-s	
MIV - Motor Inboard Vertical	.178 In/Sec	.088 G-s
MIA - Motor Inboard Axial	.175 In/Sec	.068 G-s
SAR66A - Vertical Cool Twr Pump #1	(21-Jul-20) OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.452 In/Sec	.156 G-s
MOP - Motor Outboard Horz Peakvue	.070 G-s	
MOV - Motor Outboard Vertical	.195 In/Sec	.102 G-s
MOA - Motor Outboard Axial	.462 In/Sec	.108 G-s
MIH - Motor Inboard Horizontal	.170 In/Sec	.133 G-s
MIP - Motor Inboard Horz Peakvue	.078 G-s	
MIV - Motor Inboard Vertical	.243 In/Sec	.097 G-s
MIA - Motor Inboard Axial	.184 In/Sec	.052 G-s
SAR78A - Cooling Tower Fan #1	(21-Jul-20) OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.210 In/Sec	.390 G-s
MOP - Motor Outboard Horz Peakvue	.235 G-s	
MOV - Motor Outboard Vertical	.395 In/Sec	.256 G-s
MOA - Motor Outboard Axial	.174 In/Sec	.210 G-s
MIH - Motor Inboard Horizontal	.120 In/Sec	.635 G-s
MIP - Motor Inboard Horz Peakvue	.455 G-s	
MIV - Motor Inboard Vertical	.122 In/Sec	.258 G-s
MIA - Motor Inboard Axial	.131 In/Sec	.170 G-s
SAR78B - Cooling Tower Fan #2	(21-Jul-20) OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.068 In/Sec	.775 G-s
MOP - Motor Outboard Horz Peakvue	.329 G-s	
MOV - Motor Outboard Vertical	.081 In/Sec	.182 G-s
MOA - Motor Outboard Axial	.173 In/Sec	.209 G-s
MIH - Motor Inboard Horizontal	.108 In/Sec	.921 G-s
MIP - Motor Inboard Horz Peakvue	.156 G-s	
MIV - Motor Inboard Vertical	.125 In/Sec	.553 G-s
MIA - Motor Inboard Axial	.157 In/Sec	.138 G-s
SAR78C - Cooling Tower Fan #3	(21-Jul-20) OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.087 In/Sec	.962 G-s
MOP - Motor Outboard Horz Peakvue	.447 G-s	
MOV - Motor Outboard Vertical	.077 In/Sec	.213 G-s
MOA - Motor Outboard Axial	.152 In/Sec	.144 G-s
MIH - Motor Inboard Horizontal	.064 In/Sec	1.388 G-s
MIP - Motor Inboard Horz Peakvue	.710 G-s	
MIV - Motor Inboard Vertical	.129 In/Sec	.642 G-s
MIA - Motor Inboard Axial	.175 In/Sec	.459 G-s
SAR78D - Cooling Tower Fan #4	(21-Jul-20) OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.098 In/Sec	.465 G-s
MOP - Motor Outboard Horz Peakvue	.224 G-s	
MOV - Motor Outboard Vertical	.180 In/Sec	.284 G-s
MOA - Motor Outboard Axial	.260 In/Sec	.199 G-s
MIH - Motor Inboard Horizontal	.116 In/Sec	.446 G-s
MIP - Motor Inboard Horz Peakvue	.259 G-s	

MIV - Motor Inboard Vertical	.208 In/Sec	.347 G-s
MIA - Motor Inboard Axial	.231 In/Sec	.248 G-s
SAR161C - N SAR Cool Twr Fan E	(21-Jul-20) OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.122 In/Sec	.310 G-s
MOP - Motor Outboard Horz Peakvue	.103 G-s	
MOV - Motor Outboard Vertical	.160 In/Sec	.106 G-s
MOA - Motor Outboard Axial	.240 In/Sec	.063 G-s
MIH - Motor Inboard Horizontal	.245 In/Sec	.369 G-s
MIP - Motor Inboard Horz Peakvue	.132 G-s	
MIV - Motor Inboard Vertical	.186 In/Sec	.149 G-s
MIA - Motor Inboard Axial	.252 In/Sec	.098 G-s
SAR161B - N SAR Cool Twr Fan Middle	(21-Jul-20) OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.112 In/Sec	.940 G-s
MOP - Motor Outboard Horz Peakvue	.288 G-s	
MOV - Motor Outboard Vertical	.130 In/Sec	.454 G-s
MOA - Motor Outboard Axial	.117 In/Sec	.401 G-s
MIH - Motor Inboard Horizontal	.117 In/Sec	.981 G-s
MIP - Motor Inboard Horz Peakvue	.490 G-s	
MIV - Motor Inboard Vertical	.132 In/Sec	.269 G-s
MIA - Motor Inboard Axial	.138 In/Sec	.188 G-s
SAR161A - N SAR Cool Twr Fan W	(21-Jul-20) OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.120 In/Sec	1.075 G-s
MOP - Motor Outboard Horz Peakvue	.567 G-s	
MOV - Motor Outboard Vertical	.160 In/Sec	.439 G-s
MOA - Motor Outboard Axial	.196 In/Sec	.163 G-s
MIH - Motor Inboard Horizontal	.241 In/Sec	1.438 G-s
MIP - Motor Inboard Horz Peakvue	.738 G-s	
MIV - Motor Inboard Vertical	.066 In/Sec	.457 G-s
MIA - Motor Inboard Axial	.226 In/Sec	.322 G-s
SAR231A - Final Twr Circ Pump N	(23-Jul-20) OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal E-W	.078 In/Sec	1.170 G-s
MOP - Motor Outboard Horz Peakvue	.360 G-s	
MOV - Motor Outboard Vertical N-S	.065 In/Sec	.456 G-s
MOA - Motor Outboard Axial	.104 In/Sec	.219 G-s
MIH - Motor Inboard Horizontal E-W	.055 In/Sec	.655 G-s
MIP - Motor Inboard Horz Peakvue	.296 G-s	
MIV - Motor Inboard Vertical N-S	.060 In/Sec	.156 G-s
MIA - Motor Inboard Axial	.080 In/Sec	.158 G-s
SAR231B - Final Twr Circ Pump S	(21-Jul-20) OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.075 In/Sec	.443 G-s
MOP - Motor Outboard Horz Peakvue	.210 G-s	
MOV - Motor Outboard Vertical	.030 In/Sec	.166 G-s
MOA - Motor Outboard Axial	.063 In/Sec	.171 G-s
MIH - Motor Inboard Horizontal	.050 In/Sec	.442 G-s
MIP - Motor Inboard Horz Peakvue	.273 G-s	
MIV - Motor Inboard Vertical	.036 In/Sec	.369 G-s
MIA - Motor Inboard Axial	.041 In/Sec	.196 G-s

SAR 56A	- N Oleum Storage Tank Feed	(20-Jul-20)	
M1H - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
M1P - Motor Outboard Horz Peakvue	.079 In/Sec	.089 G-s	
M1V - Motor Outboard Vertical	.016 G-s		
M1A - Motor Outboard Axial	.039 In/Sec	.060 G-s	
M2H - Motor Inboard Horizontal	.043 In/Sec	.040 G-s	
M2P - Motor Inboard Horz Peakvue	.081 In/Sec	.190 G-s	
M2V - Motor Inboard Vertical	.115 G-s		
M2A - Motor Inboard Axial	.054 In/Sec	.035 G-s	
P1H - Pump Inboard Horizontal	.054 In/Sec	.040 G-s	
P1P - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20KHz	
P1V - Pump Inboard Vertical	.076 In/Sec	.115 G-s	
P1A - Pump Inboard Axial	.082 G-s		
	.041 In/Sec	.051 G-s	
	.052 In/Sec	.040 G-s	
SAR 56B	- M Oleum Storage Tank Feed	(20-Jul-20)	
M1H - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
M1P - Motor Outboard Horz Peakvue	.060 In/Sec	.175 G-s	
M1V - Motor Outboard Vertical	.102 G-s		
M1A - Motor Outboard Axial	.111 In/Sec	.080 G-s	
M2H - Motor Inboard Horizontal	.110 In/Sec	.093 G-s	
M2P - Motor Inboard Horz Peakvue	.170 In/Sec	.240 G-s	
M2V - Motor Inboard Vertical	.031 G-s		
M2A - Motor Inboard Axial	.123 In/Sec	.088 G-s	
P1H - Pump Inboard Horizontal	.199 In/Sec	.061 G-s	
P1P - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20KHz	
P1V - Pump Inboard Vertical	.166 In/Sec	.184 G-s	
P1A - Pump Inboard Axial	.112 G-s		
	.115 In/Sec	.050 G-s	
	.066 In/Sec	.048 G-s	
SAR 56C	- S Oleum Storage Tank Feed	(20-Jul-20)	
M1H - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
M1P - Motor Outboard Horz Peakvue	.036 In/Sec	.156 G-s	
M1V - Motor Outboard Vertical	.106 G-s		
M1A - Motor Outboard Axial	.060 In/Sec	.783 G-s	
M2H - Motor Inboard Horizontal	.028 In/Sec	.164 G-s	
M2P - Motor Inboard Horz Peakvue	.060 In/Sec	.209 G-s	
M2V - Motor Inboard Vertical	.174 G-s		
M2A - Motor Inboard Axial	.031 In/Sec	.136 G-s	
P1H - Pump Inboard Horizontal	.044 In/Sec	.105 G-s	
P1P - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20KHz	
P1V - Pump Inboard Vertical	.103 In/Sec	.123 G-s	
P1A - Pump Inboard Axial	.071 G-s		
	.041 In/Sec	.059 G-s	
	.026 In/Sec	.068 G-s	
SAR128	- Oleum Fume Scrub Blwr	(20-Jul-20)	
MIH - Motor Inboard Horizontal	OVERALL LEVEL	1K-20kHz	
MIP - Motor Inboard Horz Peakvue	.072 In/Sec	.191 G-s	
MIV - Motor Inboard Vertical	.035 G-s		
MIA - Motor Inboard Axial	.043 In/Sec	.076 G-s	
FIH - Fan Inboard Horizontal	.069 In/Sec	.052 G-s	
	OVERALL LEVEL	1K-20KHz	
	.090 In/Sec	.264 G-s	

FIP - Fan Inboard Horz Peakvue	.042 G-s	
FIV - Fan Inboard Vertical	.034 In/Sec	.159 G-s
FIA - Fan Inboard Axial	.059 In/Sec	.129 G-s
FOH - Fan Outboard Horizontal	.111 In/Sec	.179 G-s
FOP - Fan Outboard Horz Peakvue	.029 G-s	
FOV - Fan Outboard Vertical	.091 In/Sec	.136 G-s
FOA - Fan Outboard Axial	.097 In/Sec	.155 G-s
SAR137B - Contain Pit Pumps	(20-Jul-20)	
MOH - Motor Outboard Horizontal E-W	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.055 In/Sec	.200 G-s
MOV - Motor Outboard Vertical N-S	.111 G-s	
MOA - Motor Outboard Axial	.111 In/Sec	.123 G-s
	.117 In/Sec	.088 G-s
SAR57A - Oleum Twr Circ Pump W	(23-Jul-20)	
MOH - Motor Outboard Horizontal E-W	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.081 In/Sec	.616 G-s
MOV - Motor Outboard Vertical N-S	.013 G-s	
MOA - Motor Outboard Axial	.055 In/Sec	.062 G-s
MIH - Motor Inboard Horizontal E-W	.055 In/Sec	.089 G-s
MIP - Motor Inboard Horz Peakvue	.074 In/Sec	1.315 G-s
MIV - Motor Inboard Vertical N-S	.239 G-s	
MIA - Motor Inboard Axial	.090 In/Sec	1.380 G-s
	.054 In/Sec	.573 G-s
SAR57B - Oleum Twr Circ Pump E	(20-Jul-20)	
MOH - Motor Outboard Horizontal E-W	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.102 In/Sec	2.253 G-s
MOV - Motor Outboard Vertical N-S	1.273 G-s	
MOA - Motor Outboard Axial	.110 In/Sec	.621 G-s
MIH - Motor Inboard Horizontal E-W	.117 In/Sec	.476 G-s
MIP - Motor Inboard Horz Peakvue	.115 In/Sec	3.436 G-s
MIV - Motor Inboard Vertical N-S	1.845 G-s	
MIA - Motor Inboard Axial	.110 In/Sec	1.119 G-s
	.105 In/Sec	1.114 G-s
SAR37A - Interpass Twr Circ Pump N	(20-Jul-20)	
MOH - Motor Outboard Horizontal E-W	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.066 In/Sec	.446 G-s
MOV - Motor Outboard Vertical N-S	.265 G-s	
MOA - Motor Outboard Axial	.054 In/Sec	.144 G-s
MIH - Motor Inboard Horizontal E-W	.074 In/Sec	.093 G-s
MIP - Motor Inboard Horz Peakvue	.043 In/Sec	.547 G-s
MIV - Motor Inboard Vertical N-S	.293 G-s	
MIA - Motor Inboard Axial	.052 In/Sec	.221 G-s
	.051 In/Sec	.193 G-s
SAR14 - Combustion Air Fan W	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.070 In/Sec	.749 G-s
MOV - Motor Outboard Vertical	.333 G-s	
MOA - Motor Outboard Axial	.077 In/Sec	.414 G-s
MIH - Motor Inboard Horizontal	.088 In/Sec	.265 G-s
MIP - Motor Inboard Horz Peakvue	.070 In/Sec	1.324 G-s
MIV - Motor Inboard Vertical	.632 G-s	
	.076 In/Sec	.694 G-s

MIA - Motor Inboard Axial	.086 In/Sec	.677 G-s
OVERALL LEVEL	1K-20KHz	
FIH - Fan Inboard Horizontal	.104 In/Sec	1.150 G-s
FIP - Fan Inboard Horz Peakvue	.106 G-s	
FIV - Fan Inboard Vertical	.040 In/Sec	.197 G-s
FIA - Fan Inboard Axial	.093 In/Sec	.149 G-s
FOH - Fan Outboard Horizontal	.083 In/Sec	1.762 G-s
FOP - Fan Outboard Horz Peakvue	.928 G-s	
FOV - Fan Outboard Vertical	.056 In/Sec	.790 G-s
FOA - Fan Outboard Axial	.065 In/Sec	.341 G-s
SAR11 - Recycle Fan W	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.041 In/Sec	.507 G-s
MOV - Motor Outboard Vertical	.339 G-s	
MOA - Motor Outboard Axial	.048 In/Sec	.220 G-s
MIH - Motor Inboard Horizontal	.048 In/Sec	.220 G-s
MIP - Motor Inboard Horz Peakvue	.034 In/Sec	.896 G-s
MIV - Motor Inboard Vertical	.636 G-s	
MIA - Motor Inboard Axial	.040 In/Sec	.272 G-s
FIH - Fan Inboard Horizontal	.042 In/Sec	.146 G-s
FIP - Fan Inboard Horz Peakvue	OVERALL LEVEL	1K-20KHz
FIV - Fan Inboard Vertical	.013 In/Sec	.044 G-s
FIA - Fan Inboard Axial	.029 G-s	
FOH - Fan Outboard Horizontal	.012 In/Sec	.022 G-s
FOP - Fan Outboard Horz Peakvue	.016 In/Sec	.019 G-s
FOV - Fan Outboard Vertical	.019 In/Sec	.072 G-s
FOA - Fan Outboard Axial	.043 G-s	
SAR15 - Process Air Fan W	.0097 In/Sec	.020 G-s
MOH - Motor Outboard Horizontal	.053 In/Sec	.011 G-s
MOP - Motor Outboard Horz Peakvue	(20-Jul-20)	
MOV - Motor Outboard Vertical	OVERALL LEVEL	1K-20kHz
MOA - Motor Outboard Axial	.070 In/Sec	.336 G-s
MIH - Motor Inboard Horizontal	.127 G-s	
MIP - Motor Inboard Horz Peakvue	.051 In/Sec	.313 G-s
MIV - Motor Inboard Vertical	.059 In/Sec	.346 G-s
MIA - Motor Inboard Axial	.061 In/Sec	.351 G-s
FIH - Fan Inboard Horizontal	.170 G-s	
FIP - Fan Inboard Horz Peakvue	.049 In/Sec	.123 G-s
FIV - Fan Inboard Vertical	.047 In/Sec	.089 G-s
FIA - Fan Inboard Axial	OVERALL LEVEL	1K-20KHz
FOH - Fan Outboard Horizontal	.062 In/Sec	.627 G-s
FOP - Fan Outboard Horz Peakvue	.368 G-s	
FOV - Fan Outboard Vertical	.052 In/Sec	.701 G-s
FOA - Fan Outboard Axial	.063 In/Sec	.640 G-s
SAR12 - Recycle Fan E	.071 In/Sec	1.244 G-s
MOH - Motor Outboard Horizontal	.693 G-s	
MOP - Motor Outboard Horz Peakvue	.058 In/Sec	.735 G-s
MOV - Motor Outboard Vertical	.055 In/Sec	.527 G-s
MOA - Motor Outboard Axial	(20-Jul-20)	
OVERALL LEVEL	1K-20kHz	
FIH - Fan Inboard Horizontal	.118 In/Sec	.711 G-s
FIP - Fan Inboard Horz Peakvue	.090 G-s	
FIV - Fan Inboard Vertical	.102 In/Sec	.224 G-s
FIA - Fan Inboard Axial	.201 In/Sec	.101 G-s

MIH - Motor Inboard Horizontal	.099 In/Sec	1.116 G-s
MIP - Motor Inboard Horz Peakvue	.713 G-s	
MIV - Motor Inboard Vertical	.193 In/Sec	.748 G-s
MIA - Motor Inboard Axial	.168 In/Sec	.315 G-s
	OVERALL LEVEL	1K-20KHz
FIH - Fan Inboard Horizontal	.088 In/Sec	.168 G-s
FIP - Fan Inboard Horz Peakvue	.162 G-s	
FIV - Fan Inboard Vertical	.067 In/Sec	.299 G-s
FIA - Fan Inboard Axial	.112 In/Sec	.208 G-s
FOH - Fan Outboard Horizontal	.126 In/Sec	.473 G-s
FOP - Fan Outboard Horz Peakvue	.358 G-s	
FOV - Fan Outboard Vertical	.184 In/Sec	.204 G-s
FOA - Fan Outboard Axial	.154 In/Sec	.208 G-s
SAR10 - Process Air Fan E	(20-Jul-20)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.169 In/Sec	.670 G-s
MOP - Motor Outboard Horz Peakvue	.440 G-s	
MOV - Motor Outboard Vertical	.040 In/Sec	.306 G-s
MOA - Motor Outboard Axial	.059 In/Sec	.163 G-s
MIH - Motor Inboard Horizontal	.116 In/Sec	1.755 G-s
MIP - Motor Inboard Horz Peakvue	1.093 G-s	
MIV - Motor Inboard Vertical	.074 In/Sec	.513 G-s
MIA - Motor Inboard Axial	.065 In/Sec	.352 G-s
	OVERALL LEVEL	1K-20KHz
FIH - Fan Inboard Horizontal	.189 In/Sec	2.545 G-s
FIP - Fan Inboard Horz Peakvue	1.462 G-s	
FIV - Fan Inboard Vertical	.123 In/Sec	1.807 G-s
FIA - Fan Inboard Axial	.141 In/Sec	.873 G-s
FOH - Fan Outboard Horizontal	.232 In/Sec	2.728 G-s
FOP - Fan Outboard Horz Peakvue	1.552 G-s	
FOV - Fan Outboard Vertical	.096 In/Sec	1.048 G-s
FOA - Fan Outboard Axial	.121 In/Sec	.622 G-s
SAR13 - Combustion Air Fan E	(20-Jul-20)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.067 In/Sec	.468 G-s
MOP - Motor Outboard Horz Peakvue	.239 G-s	
MOV - Motor Outboard Vertical	.041 In/Sec	.249 G-s
MOA - Motor Outboard Axial	.055 In/Sec	.216 G-s
MIH - Motor Inboard Horizontal	.073 In/Sec	.453 G-s
MIP - Motor Inboard Horz Peakvue	.157 G-s	
MIV - Motor Inboard Vertical	.051 In/Sec	.119 G-s
MIA - Motor Inboard Axial	.075 In/Sec	.168 G-s
	OVERALL LEVEL	1K-20KHz
FIH - Fan Inboard Horizontal	.083 In/Sec	.334 G-s
FIP - Fan Inboard Horz Peakvue	.181 G-s	
FIV - Fan Inboard Vertical	.075 In/Sec	.361 G-s
FIA - Fan Inboard Axial	.060 In/Sec	.097 G-s
FOH - Fan Outboard Horizontal	.057 In/Sec	.517 G-s
FOP - Fan Outboard Horz Peakvue	.277 G-s	
FOV - Fan Outboard Vertical	.200 In/Sec	.453 G-s
FOA - Fan Outboard Axial	.120 In/Sec	.309 G-s
SAR61NM - Spent Acid Circ Pmp N	(20-Jul-20)	
	OVERALL LEVEL	1K-20kHz
MIH - Motor Inboard Horizontal	.019 In/Sec	.169 G-s

MIP - Motor Inboard Horz Peakvue	.041 G-s	
MIV - Motor Inboard Vertical	.025 In/Sec	.060 G-s
MIA - Motor Inboard Axial	.030 In/Sec	.045 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.023 In/Sec	.084 G-s
PIP - Pump Inboard Horz Peakvue	.042 G-s	
PIV - Pump Inboard Vertical	.054 In/Sec	.116 G-s
PIA - Pump Inboard Axial	.058 In/Sec	.078 G-s
SAR63WM - Spent Acid Feed Pmp W	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.029 In/Sec	.075 G-s
MOV - Motor Outboard Vertical	.010 G-s	
MOA - Motor Outboard Axial	.032 In/Sec	.018 G-s
MIH - Motor Inboard Horizontal	.021 In/Sec	.018 G-s
MIP - Motor Inboard Horz Peakvue	.035 In/Sec	.363 G-s
MIV - Motor Inboard Vertical	.044 G-s	
MIA - Motor Inboard Axial	.027 In/Sec	.064 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.022 In/Sec	.067 G-s
PIP - Pump Inboard Horz Peakvue	.065 In/Sec	.545 G-s
PIV - Pump Inboard Vertical	.020 G-s	
PIA - Pump Inboard Axial	.058 In/Sec	.280 G-s
.063 In/Sec		.236 G-s
SAR135 - Spent Acid Circ Pmp E	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.036 In/Sec	.125 G-s
MOV - Motor Outboard Vertical	.0080 G-s	
MOA - Motor Outboard Axial	.059 In/Sec	.029 G-s
MIH - Motor Inboard Horizontal	.057 In/Sec	.017 G-s
MIP - Motor Inboard Horz Peakvue	.040 In/Sec	.319 G-s
MIV - Motor Inboard Vertical	.067 G-s	
MIA - Motor Inboard Axial	.043 In/Sec	.103 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.049 In/Sec	.027 G-s
PIP - Pump Inboard Horz Peakvue	.080 In/Sec	.108 G-s
PIV - Pump Inboard Vertical	.025 G-s	
PIA - Pump Inboard Axial	.057 In/Sec	.038 G-s
POH - Pump Outboard Horizontal	.045 In/Sec	.054 G-s
POP - Pump Outboard Horz Peakvue	.059 In/Sec	.378 G-s
POV - Pump Outboard Vertical	.138 G-s	
POA - Pump Outboard Axial	.062 In/Sec	.215 G-s
.065 In/Sec		.308 G-s
SAR63EM - Spent Acid Feed Pmp E	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.017 In/Sec	.146 G-s
MOV - Motor Outboard Vertical	.0045 G-s	
MOA - Motor Outboard Axial	.024 In/Sec	.091 G-s
MIH - Motor Inboard Horizontal	.036 In/Sec	.045 G-s
MIP - Motor Inboard Horz Peakvue	.024 In/Sec	.137 G-s
MIV - Motor Inboard Vertical	.0074 G-s	
MIA - Motor Inboard Axial	.036 In/Sec	.037 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.045 In/Sec	.020 G-s
.017 In/Sec		.130 G-s

PIP - Pump Inboard Horz Peakvue	.014 G-s	
PIV - Pump Inboard Vertical	.017 In/Sec	.087 G-s
PIA - Pump Inboard Axial	.016 In/Sec	.068 G-s
SAR157 - Spent Acid Feed Booster S	(20-Jul-20) OVERALL LEVEL	1K-20kHz
MIH - Motor Inboard Horizontal	.036 In/Sec	.190 G-s
MIP - Motor Inboard Horz Peakvue	.103 G-s	
MIV - Motor Inboard Vertical	.027 In/Sec	.058 G-s
MIA - Motor Inboard Axial	.028 In/Sec	.027 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz
PIP - Pump Inboard Horz Peakvue	.041 In/Sec	.068 G-s
PIV - Pump Inboard Vertical	.040 G-s	
PIA - Pump Inboard Axial	.035 In/Sec	.029 G-s
	.059 In/Sec	.029 G-s
MON169 - A/B Booster Pump W	(21-Jul-20)	1K-20kHz
MOH - Motor Outboard Horizontal	OVERALL LEVEL	
MOP - Motor Outboard Horz Peakvue	.068 In/Sec	.378 G-s
MOV - Motor Outboard Vertical	.129 G-s	
MOA - Motor Outboard Axial	.030 In/Sec	.165 G-s
MIH - Motor Inboard Horizontal	.044 In/Sec	.056 G-s
MIP - Motor Inboard Horz Peakvue	.067 In/Sec	.307 G-s
MIV - Motor Inboard Vertical	.136 G-s	
MIA - Motor Inboard Axial	.034 In/Sec	.353 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz
PIP - Pump Inboard Horz Peakvue	.038 In/Sec	.340 G-s
PIV - Pump Inboard Vertical	.127 In/Sec	.090 G-s
PIA - Pump Inboard Axial	.070 G-s	
	.049 In/Sec	.033 G-s
	.057 In/Sec	.038 G-s
MON73E - Skim Tub Xfer Pmp E	(21-Jul-20)	1K-20kHz
MOH - Motor Outboard Horizontal	OVERALL LEVEL	
MOP - Motor Outboard Horz Peakvue	.030 In/Sec	.153 G-s
MOV - Motor Outboard Vertical	.097 G-s	
MOA - Motor Outboard Axial	.040 In/Sec	.078 G-s
MIH - Motor Inboard Horizontal	.050 In/Sec	.053 G-s
MIP - Motor Inboard Horz Peakvue	.026 In/Sec	.316 G-s
MIV - Motor Inboard Vertical	.148 G-s	
MIA - Motor Inboard Axial	.044 In/Sec	.110 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz
PIP - Pump Inboard Horz Peakvue	.037 In/Sec	.078 G-s
PIV - Pump Inboard Vertical	.045 In/Sec	.084 G-s
PIA - Pump Inboard Axial	.045 G-s	
	.026 In/Sec	.048 G-s
	.036 In/Sec	.055 G-s
MON45EM - ACH Ref Brine Pump E	(21-Jul-20)	1K-20kHz
MOH - Motor Outboard Horizontal	OVERALL LEVEL	
MOP - Motor Outboard Horz Peakvue	.060 In/Sec	1.061 G-s
MOV - Motor Outboard Vertical	.651 G-s	
MOA - Motor Outboard Axial	.095 In/Sec	.706 G-s
MIH - Motor Inboard Horizontal	.095 In/Sec	.424 G-s
MIP - Motor Inboard Horz Peakvue	.052 In/Sec	1.232 G-s
MIV - Motor Inboard Vertical	.655 G-s	
	.099 In/Sec	1.000 G-s

MIA - Motor Inboard Axial	.102 In/Sec	.737 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
PIP - Pump Inboard Horz Peakvue	.141 In/Sec	.700 G-s
PIV - Pump Inboard Vertical	.382 G-s	
PIA - Pump Inboard Axial	.127 In/Sec	.274 G-s
POH - Pump Outboard Horizontal	.086 In/Sec	.356 G-s
POP - Pump Outboard Horz Peakvue	.104 In/Sec	.949 G-s
POV - Pump Outboard Vertical	.491 G-s	
POA - Pump Outboard Axial	.111 In/Sec	.313 G-s
	.091 In/Sec	.442 G-s
AC17 - Carrier Ref Unit	(21-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.032 In/Sec	.105 G-s
MOV - Motor Outboard Vertical	.021 G-s	
MOA - Motor Outboard Axial	.031 In/Sec	.053 G-s
MIH - Motor Inboard Horizontal	.018 In/Sec	.055 G-s
MIP - Motor Inboard Horz Peakvue	.026 In/Sec	.127 G-s
MIV - Motor Inboard Vertical	.019 G-s	
MIA - Motor Inboard Axial	.020 In/Sec	.131 G-s
IIH - Inboard Input Horizontal	.014 In/Sec	.064 G-s
IIP - Input Inboard Horizontal PK	.169 In/Sec	
IIV - Inboard Input Vertical	.876 G-s	
IIA - Inboard Input Axial	.116 In/Sec	
OOH - Output Outboard Horizontal	.127 In/Sec	
OOP - Output Outboard Horizontal PK	.159 In/Sec	
OOV - Output Outboard Vertical	1.306 G-s	
OOA - Output Outboard Axial	.072 In/Sec	
CIH - Compressor Inboard Horizontal	.112 In/Sec	
CIP - Compressor Inboard Horz Peakvue	.088 In/Sec	
CIV - Compressor Inboard Vertical	.591 G-s	
CIA - Compressor Inboard Axial	.090 In/Sec	
COH - Compressor Outboard Horizontal	.099 In/Sec	
COP - Compressor Outboard Horz Peakvue	.043 In/Sec	
COV - Compressor Outboard Vertical	.302 G-s	
COA - Compressor Outboard Axial	.051 In/Sec	
	.046 In/Sec	
ACN44 - ACN Ref Unit Booster #3	(21-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.108 In/Sec	2.078 G-s
MOV - Motor Outboard Vertical	.051 G-s	
MOA - Motor Outboard Axial	.101 In/Sec	.631 G-s
MIH - Motor Inboard Horizontal	.127 In/Sec	.487 G-s
MIP - Motor Inboard Horz Peakvue	.157 In/Sec	.550 G-s
MIV - Motor Inboard Vertical	.046 G-s	
MIA - Motor Inboard Axial	.133 In/Sec	.215 G-s
	.103 In/Sec	.264 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
PIP - Pump Inboard Horz Peakvue	.091 In/Sec	.843 G-s
PIV - Pump Inboard Vertical	.375 G-s	
PIA - Pump Inboard Axial	.182 In/Sec	.524 G-s
POH - Pump Outboard Horizontal	.112 In/Sec	.341 G-s
POP - Pump Outboard Horz Peakvue	.121 In/Sec	.493 G-s
POV - Pump Outboard Vertical	.118 G-s	
POA - Pump Outboard Axial	.139 In/Sec	.256 G-s
	.142 In/Sec	.203 G-s

Clarification Of Vibration Units:

Acc	-->	G-s	RMS
Vel	-->	In/Sec	PK
Dsp	-->	Mils	P-P

Database: Lucite Memphis MMA.rbm

Area: MMA

Route No. 7: TJ ROUTE 2

Report Date: 03-Aug-20 08:28

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
MON80 - Uninhibited Mon Tank Pump N	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL .045 In/Sec	1K-20kHz .133 G-s
MOP - Motor Outboard Horz Peakvue	.010 G-s	
MOV - MotorOutboard Vertical	.053 In/Sec	.549 G-s
MOA - Motor Outboard Axial	.108 In/Sec	.055 G-s
MIH - Motor Inboard Horizontal	.091 In/Sec	.264 G-s
MIP - Motor Inboard Horz Peakvue	.0044 G-s	
MIV - Motor Inboard Vertical	.121 In/Sec	.136 G-s
MIA - Motor Inboard Axial	.112 In/Sec	.035 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL .161 In/Sec	1K-20KHz .100 G-s
PIP - Pump Inboard Horz Peakvue	.0024 G-s	
PIV - Pump Inboard Vertical	.046 In/Sec	.091 G-s
PIA - Pump Inboard Axial	.071 In/Sec	.122 G-s
MON81 - Uninhibited Mon Tank Pump S	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL .044 In/Sec	1K-20kHz .156 G-s
MOP - Motor Outboard Horz Peakvue	.0066 G-s	
MOV - MotorOutboard Vertical	.031 In/Sec	.068 G-s
MOA - Motor Outboard Axial	.022 In/Sec	.037 G-s
MIH - Motor Inboard Horizontal	.050 In/Sec	.172 G-s
MIP - Motor Inboard Horz Peakvue	.040 G-s	
MIV - Motor Inboard Vertical	.035 In/Sec	.066 G-s
MIA - Motor Inboard Axial	.036 In/Sec	.070 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL .112 In/Sec	1K-20KHz .480 G-s
PIP - Pump Inboard Horz Peakvue	.037 G-s	
PIV - Pump Inboard Vertical	.091 In/Sec	.269 G-s
PIA - Pump Inboard Axial	.070 In/Sec	.153 G-s
MON56 - Inhibited Mon Xfer Pump E	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL .070 In/Sec	1K-20kHz .346 G-s
MOP - Motor Outboard Horz Peakvue	.022 G-s	
MOV - Motor Outboard Vertical	.058 In/Sec	.058 G-s
MOA - Motor Outboard Axial	.114 In/Sec	.087 G-s
MIH - Motor Inboard Horizontal	.095 In/Sec	.325 G-s
MIP - Motor Inboard Horz Peakvue	.065 G-s	
MIV - Motor Inboard Vertical	.059 In/Sec	.086 G-s

MIA - Motor Inboard Axial	.115 In/Sec	.096 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz
PIP - Pump Inboard Horz Peakvue	.323 In/Sec	1.275 G-s
PIV - Pump Inboard Vertical	.122 G-s	
PIA - Pump Inboard Axial	.324 In/Sec	.525 G-s
	.385 In/Sec	.424 G-s
MON40 - Acetone Pump	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.024 In/Sec	.578 G-s
MOV - Motor Outboard Vertical	.060 G-s	
MOA - Motor Outboard Axial	.037 In/Sec	.237 G-s
MIH - Motor Inboard Horizontal	.036 In/Sec	.093 G-s
MIP - Motor Inboard Horz Peakvue	.026 In/Sec	1.504 G-s
MIV - Motor Inboard Vertical	.175 G-s	
MIA - Motor Inboard Axial	.031 In/Sec	.181 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz
PIP - Pump Inboard Horz Peakvue	.024 In/Sec	.247 G-s
PIV - Pump Inboard Vertical	.120 In/Sec	.746 G-s
PIA - Pump Inboard Axial	.079 G-s	
	.088 In/Sec	.574 G-s
	.062 In/Sec	.322 G-s
ACN08 - ACH Blend Tank	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.030 In/Sec	.111 G-s
MOV - Motor Outboard Vertical	.0078 G-s	
MOA - Motor Outboard Axial	.406 In/Sec	.059 G-s
MIH - Motor Inboard Horizontal	.151 In/Sec	.040 G-s
MIP - Motor Inboard Horz Peakvue	.080 In/Sec	.162 G-s
MIV - Motor Inboard Vertical	.017 G-s	
MIA - Motor Inboard Axial	.289 In/Sec	.053 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz
PIP - Pump Inboard Horz Peakvue	.122 In/Sec	.039 G-s
PIV - Pump Inboard Vertical	.124 In/Sec	.452 G-s
PIA - Pump Inboard Axial	.035 In/Sec	.193 G-s
	.086 In/Sec	.124 G-s
ACN07B - ACH Prod Feed Pump M	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.079 In/Sec	1.031 G-s
MOV - Motor Outboard Vertical	.361 G-s	
MOA - Motor Outboard Axial	.060 In/Sec	.327 G-s
MIH - Motor Inboard Horizontal	.049 In/Sec	.274 G-s
MIP - Motor Inboard Horz Peakvue	.077 In/Sec	1.484 G-s
MIV - Motor Inboard Vertical	.573 G-s	
MIA - Motor Inboard Axial	.061 In/Sec	.519 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz
PIP - Pump Inboard Horz Peakvue	.061 In/Sec	.385 G-s
PIV - Pump Inboard Vertical	.195 In/Sec	1.831 G-s
PIA - Pump Inboard Axial	.292 G-s	
	.197 In/Sec	.678 G-s
	.183 In/Sec	.933 G-s
MON85E - Water Treatment Pmp E	(20-Jul-20)	
	OVERALL LEVEL	1K-20kHz

MOH - Motor Outboard Horizontal	.122 In/Sec	.729 G-s
MOP - Motor Outboard Horz Peakvue	.138 G-s	
MOV - Motor Outboard Vertical	.092 In/Sec	.208 G-s
MOA - Motor Outboard Axial	.078 In/Sec	.127 G-s
MIH - Motor Inboard Horizontal	.161 In/Sec	.407 G-s
MIP - Motor Inboard Horz Peakvue	.176 G-s	
MIV - Motor Inboard Vertical	.191 In/Sec	.171 G-s
MIA - Motor Inboard Axial	.087 In/Sec	.181 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.236 In/Sec	.668 G-s
PIP - Pump Inboard Horz Peakvue	.455 G-s	
PIV - Pump Inboard Vertical	.131 In/Sec	.384 G-s
PIA - Pump Inboard Axial	.115 In/Sec	.405 G-s
MON85W - Water Treatment Pmp W	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.110 In/Sec	.431 G-s
MOV - Motor Outboard Vertical	.109 G-s	
MOA - Motor Outboard Axial	.166 In/Sec	.204 G-s
MIH - Motor Inboard Horizontal	.149 In/Sec	.133 G-s
MIP - Motor Inboard Horz Peakvue	.097 In/Sec	.364 G-s
MIV - Motor Inboard Vertical	.141 G-s	
MIA - Motor Inboard Axial	.138 In/Sec	.147 G-s
PIH - Pump Inboard Horizontal	.100 In/Sec	.128 G-s
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20KHz
PIV - Pump Inboard Vertical	.200 In/Sec	.820 G-s
PIA - Pump Inboard Axial	.531 G-s	
	.148 In/Sec	.442 G-s
	.139 In/Sec	.380 G-s
ACN28B - ACN Fan E	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.226 In/Sec	.642 G-s
MOV - Motor Outboard Vertical	.195 G-s	
MOA - Motor Outboard Axial	.177 In/Sec	.278 G-s
MIH - Motor Inboard Horizontal	.115 In/Sec	.139 G-s
MIP - Motor Inboard Horz Peakvue	.217 In/Sec	.681 G-s
MIV - Motor Inboard Vertical	.331 G-s	
MIA - Motor Inboard Axial	.479 In/Sec	.261 G-s
	.119 In/Sec	.245 G-s
ACN28A - ACN Fan W	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.117 In/Sec	.529 G-s
MOV - Motor Outboard Vertical	.177 G-s	
MOA - Motor Outboard Axial	.197 In/Sec	.256 G-s
MIH - Motor Inboard Horizontal	.200 In/Sec	.141 G-s
MIP - Motor Inboard Horz Peakvue	.229 In/Sec	1.462 G-s
MIV - Motor Inboard Vertical	.305 G-s	
MIA - Motor Inboard Axial	.150 In/Sec	.768 G-s
	.183 In/Sec	.262 G-s
ACN29C - ACN Cool Twr Pump S	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.040 In/Sec	.788 G-s
MOV - Motor Outboard Vertical	.309 G-s	
	.060 In/Sec	.209 G-s

MOA - Motor Outboard Axial	.048 In/Sec	.199 G-s
MIH - Motor Inboard Horizontal	.038 In/Sec	.553 G-s
MIP - Motor Inboard Horz Peakvue	.215 G-s	
MIV - Motor Inboard Vertical	.061 In/Sec	.176 G-s
MIA - Motor Inboard Axial	.039 In/Sec	.151 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.138 In/Sec	.949 G-s
PIP - Pump Inboard Horz Peakvue	.456 G-s	
PIV - Pump Inboard Vertical	.121 In/Sec	.312 G-s
PIA - Pump Inboard Axial	.105 In/Sec	.324 G-s
POH - Pump Outboard Horizontal	.109 In/Sec	1.541 G-s
POP - Pump Outboard Horz Peakvue	.466 G-s	
POV - Pump Outboard Vertical	.081 In/Sec	.451 G-s
POA - Pump Outboard Axial	.083 In/Sec	.538 G-s
ACN29B - ACN Cool Twr Pump M	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.044 In/Sec	1.086 G-s
MOV - Motor Outboard Vertical	.409 G-s	
MOA - Motor Outboard Axial	.071 In/Sec	.286 G-s
MIH - Motor Inboard Horizontal	.085 In/Sec	.193 G-s
MIP - Motor Inboard Horz Peakvue	.044 In/Sec	1.369 G-s
MIV - Motor Inboard Vertical	.407 G-s	
MIA - Motor Inboard Axial	.062 In/Sec	.262 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.061 In/Sec	.286 G-s
PIP - Pump Inboard Horz Peakvue	.133 In/Sec	.864 G-s
PIV - Pump Inboard Vertical	.551 G-s	
PIA - Pump Inboard Axial	.105 In/Sec	.451 G-s
POH - Pump Outboard Horizontal	.114 In/Sec	.376 G-s
POP - Pump Outboard Horz Peakvue	.079 In/Sec	1.659 G-s
POV - Pump Outboard Vertical	.962 G-s	
POA - Pump Outboard Axial	.086 In/Sec	.430 G-s
	.108 In/Sec	.320 G-s
ACN29A - ACN Cool Twr Pump N	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.057 In/Sec	.853 G-s
MOV - Motor Outboard Vertical	.154 G-s	
MOA - Motor Outboard Axial	.051 In/Sec	.393 G-s
MIH - Motor Inboard Horizontal	.043 In/Sec	.262 G-s
MIP - Motor Inboard Horz Peakvue	.051 In/Sec	.786 G-s
MIV - Motor Inboard Vertical	.161 G-s	
MIA - Motor Inboard Axial	.095 In/Sec	1.207 G-s
	.100 In/Sec	1.058 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
PIP - Pump Inboard Horz Peakvue	.234 In/Sec	.847 G-s
PIV - Pump Inboard Vertical	.570 G-s	
PIA - Pump Inboard Axial	.130 In/Sec	.323 G-s
POH - Pump Outboard Horizontal	.145 In/Sec	.296 G-s
POP - Pump Outboard Horz Peakvue	.105 In/Sec	1.568 G-s
POV - Pump Outboard Vertical	1.015 G-s	
POA - Pump Outboard Axial	.116 In/Sec	.485 G-s
	.151 In/Sec	.445 G-s
ACN36 - ACH Neut Tank Circ Pmp	(20-Jul-20)	
	OVERALL LEVEL	1K-20kHz

MIH - Motor Inboard Horizontal	.098 In/Sec	.364 G-s
MIP - Motor Inboard Horz Peakvue	.107 G-s	
MIV - Motor Inboard Vertical	.103 In/Sec	.088 G-s
MIA - Motor Inboard Axial	.093 In/Sec	.069 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.281 In/Sec	.262 G-s
PIP - Pump Inboard Horz Peakvue	.051 G-s	
PIV - Pump Inboard Vertical	.128 In/Sec	.164 G-s
PIA - Pump Inboard Axial	.384 In/Sec	.220 G-s
 ACN12 - #1 Kettle Xfer Pump	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.069 In/Sec	.219 G-s
MOV - Motor Outboard Vertical	.012 G-s	
MOA - Motor Outboard Axial	.088 In/Sec	.170 G-s
MIH - Motor Inboard Horizontal	.061 In/Sec	.042 G-s
MIP - Motor Inboard Horz Peakvue	.052 In/Sec	.192 G-s
MIV - Motor Inboard Vertical	.046 G-s	
MIA - Motor Inboard Axial	.064 In/Sec	.153 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.054 In/Sec	.135 G-s
PIP - Pump Inboard Horz Peakvue	.067 In/Sec	.115 G-s
PIV - Pump Inboard Vertical	.021 G-s	
PIA - Pump Inboard Axial	.044 In/Sec	.112 G-s
	.055 In/Sec	.164 G-s
 ACN10 - #1 Kettle Circ Pmp	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.036 In/Sec	.574 G-s
MOV - Motor Outboard Vertical	.042 G-s	
MOA - Motor Outboard Axial	.039 In/Sec	.177 G-s
MIH - Motor Inboard Horizontal	.035 In/Sec	.127 G-s
MIP - Motor Inboard Horz Peakvue	.025 In/Sec	.450 G-s
MIV - Motor Inboard Vertical	.237 G-s	
MIA - Motor Inboard Axial	.031 In/Sec	.117 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.032 In/Sec	.110 G-s
PIP - Pump Inboard Horz Peakvue	.049 In/Sec	.398 G-s
PIV - Pump Inboard Vertical	.206 G-s	
PIA - Pump Inboard Axial	.052 In/Sec	.136 G-s
	.045 In/Sec	.172 G-s
 ACN13A - #2 Kettle Xfer Pump N	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.121 In/Sec	1.005 G-s
MOV - Motor Outboard Vertical	.210 G-s	
MOA - Motor Outboard Axial	.136 In/Sec	1.018 G-s
MIH - Motor Inboard Horizontal	.101 In/Sec	.757 G-s
MIP - Motor Inboard Horz Peakvue	.117 In/Sec	2.268 G-s
MIV - Motor Inboard Vertical	.481 G-s	
MIA - Motor Inboard Axial	.096 In/Sec	.820 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.078 In/Sec	.558 G-s
PIP - Pump Inboard Horz Peakvue	.096 In/Sec	.862 G-s
PIV - Pump Inboard Vertical	.084 G-s	
PIA - Pump Inboard Axial	.109 In/Sec	.613 G-s
	.107 In/Sec	1.187 G-s

ACN11	- #2 Kettle Circ Pump	(20-Jul-20)	
MOH -	Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP -	Motor Outboard Horz Peakvue	.024 In/Sec	.403 G-s
MOV -	Motor Outboard Vertical	.177 G-s	
MOA -	Motor Outboard Axial	.041 In/Sec	.125 G-s
MIH -	Motor Inboard Horizontal	.043 In/Sec	.081 G-s
MIP -	Motor Inboard Horz Peakvue	.023 In/Sec	.585 G-s
MIV -	Motor Inboard Vertical	.330 G-s	
MIA -	Motor Inboard Axial	.043 In/Sec	.111 G-s
		.035 In/Sec	.107 G-s
PIH -	Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz
PIP -	Pump Inboard Horz Peakvue	.040 In/Sec	.414 G-s
PIV -	Pump Inboard Vertical	.247 G-s	
PIA -	Pump Inboard Axial	.095 In/Sec	.232 G-s
		.036 In/Sec	.193 G-s
ACN09	- ACH Flash Tank Pump	(20-Jul-20)	
MOH -	Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP -	Motor Outboard Horz Peakvue	.105 In/Sec	.435 G-s
MOV -	Motor Outboard Vertical	.068 G-s	
MOA -	Motor Outboard Axial	.094 In/Sec	.182 G-s
		.097 In/Sec	.202 G-s
PIH -	Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz
PIP -	Pump Inboard Horz Peakvue	.044 In/Sec	.174 G-s
PIV -	Pump Inboard Vertical	.024 G-s	
PIA -	Pump Inboard Axial	.064 In/Sec	.215 G-s
		.047 In/Sec	.204 G-s
ACN23	- ACH Scrb Circ Pump S	(20-Jul-20)	
MOH -	Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP -	Motor Outboard Horz Peakvue	.019 In/Sec	.303 G-s
MOV -	Motor Outboard Vertical	.158 G-s	
MOA -	Motor Outboard Axial	.035 In/Sec	.171 G-s
MIH -	Motor Inboard Horizontal	.032 In/Sec	.286 G-s
MIP -	Motor Inboard Horz Peakvue	.018 In/Sec	.370 G-s
MIV -	Motor Inboard Vertical	.220 G-s	
MIA -	Motor Inboard Axial	.039 In/Sec	.332 G-s
		.030 In/Sec	.156 G-s
PIH -	Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz
PIP -	Pump Inboard Horz Peakvue	.089 In/Sec	.300 G-s
PIV -	Pump Inboard Vertical	.265 G-s	
PIA -	Pump Inboard Axial	.094 In/Sec	.214 G-s
		.069 In/Sec	.118 G-s
ACN30	- ACH Scrubber Xfer Pmp	(20-Jul-20)	
MOH -	Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP -	Motor Outboard Horz Peakvue	.056 In/Sec	.323 G-s
MOV -	Motor Outboard Vertical	.200 G-s	
MOA -	Motor Outboard Axial	.085 In/Sec	.225 G-s
MIH -	Motor Inboard Horizontal	.109 In/Sec	.099 G-s
MIP -	Motor Inboard Horz Peakvue	.069 In/Sec	.352 G-s
MIV -	Motor Inboard Vertical	.220 G-s	
MIA -	Motor Inboard Axial	.095 In/Sec	.146 G-s
		.091 In/Sec	.164 G-s
PIH -	Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz
		.056 In/Sec	.119 G-s

PIP - Pump Inboard Horz Peakvue	.120 G-s		
PIV - Pump Inboard Vertical	.048 In/Sec	.123 G-s	
PIA - Pump Inboard Axial	.033 In/Sec	.092 G-s	
ACN05A - Topp Column Xfer Pmp W	(20-Jul-20) OVERALL LEVEL	1K-20kHz	
MOH - Motor Outboard Horizontal	.092 In/Sec	.609 G-s	
MOP - Motor Outboard Horz Peakvue	.040 G-s		
MOV - Mot MOA - Motor Outboard Axial	.079 In/Sec	.121	
G-s			
MIH - Motor Inboard Horizontal	.077 In/Sec	1.127 G-sor	
Outboard Vertical	.073 In/Sec	.119 G-s	
MIP - Motor Inboard Horz Peakvue	.165 G-s		
MIV - Motor Inboard Vertical	.068 In/Sec	.123 G-s	
MIA - Motor Inboard Axial	.071 In/Sec	.103 G-s	
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz	
PIP - Pump Inboard Horz Peakvue	.193 In/Sec	.498 G-s	
PIV - Pump Inboard Vertical	.097 G-s		
PIA - Pump Inboard Axial	.143 In/Sec	.329 G-s	
	.095 In/Sec	.348 G-s	
ACN04 - Topping Col Circ Pump	(20-Jul-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.031 In/Sec	.198 G-s	
MOV - Motor Outboard Vertical	.100 G-s		
MOA - Motor Outboard Axial	.033 In/Sec	.072 G-s	
MIH - Motor Inboard Horizontal	.040 In/Sec	.054 G-s	
MIP - Motor Inboard Horz Peakvue	.023 In/Sec	.309 G-s	
MIV - Motor Inboard Vertical	.234 G-s		
MIA - Motor Inboard Axial	.029 In/Sec	.080 G-s	
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz	
PIP - Pump Inboard Horz Peakvue	.032 In/Sec	.070 G-s	
PIV - Pump Inboard Vertical	.114 In/Sec	.357 G-s	
PIA - Pump Inboard Axial	.234 G-s		
POH - Pump Outboard Horizontal	.062 In/Sec	.299 G-s	
POP - Pump Outboard Horz Peakvue	.062 In/Sec	.234 G-s	
POV - Pump Outboard Vertical	.058 In/Sec	.385 G-s	
POA - Pump Outboard Axial	.269 G-s		
	.076 In/Sec	.239 G-s	
	.049 In/Sec	.271 G-s	
MON38CNM - LBS Tails Pump N	(20-Jul-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.050 In/Sec	.371 G-s	
MOV - Motor Outboard Vertical	.045 G-s		
MOA - Motor Outboard Axial	.063 In/Sec	.126 G-s	
MIH - Motor Inboard Horizontal	.047 In/Sec	.080 G-s	
MIP - Motor Inboard Horz Peakvue	.046 In/Sec	.480 G-s	
MIV - Motor Inboard Vertical	.081 G-s		
MIA - Motor Inboard Axial	.056 In/Sec	.131 G-s	
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz	
PIP - Pump Inboard Horz Peakvue	.044 In/Sec	.070 G-s	
PIV - Pump Inboard Vertical	.073 In/Sec	1.248 G-s	
PIA - Pump Inboard Axial	.160 G-s		
	.064 In/Sec	.625 G-s	
	.062 In/Sec	.372 G-s	

MON38CSM	- LBS Tails Pump S	(20-Jul-20)	
MOH	- Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP	- Motor Outboard Horz Peakvue	.033 In/Sec	.187 G-s
MOV	- Motor Outboard Vertical	.020 G-s	
MOA	- Motor Outboard Axial	.044 In/Sec	.066 G-s
MIH	- Motor Inboard Horizontal	.048 In/Sec	.118 G-s
MIP	- Motor Inboard Horz Peakvue	.047 In/Sec	.605 G-s
MIV	- Motor Inboard Vertical	.050 G-s	
MIA	- Motor Inboard Axial	.056 In/Sec	.057 G-s
PIH	- Pump Inboard Horizontal	.041 In/Sec	.146 G-s
PIP	- Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20KHz
PIV	- Pump Inboard Vertical	.082 In/Sec	.326 G-s
PIA	- Pump Inboard Axial	.055 G-s	
PIV	- Pump Inboard Vertical	.060 In/Sec	.189 G-s
PIA	- Pump Inboard Axial	.051 In/Sec	.155 G-s
MON 63W	- LBS Side Stream Pump W	(20-Jul-20)	
M1H	- Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
M1P	- Motor Outboard Horz Peakvue	.065 In/Sec	.894 G-s
M1V	- Motor Outboard Vertical	.016 G-s	
M1A	- Motor Outboard Axial	.089 In/Sec	.248 G-s
M2H	- Motor Inboard Horizontal	.095 In/Sec	.437 G-s
M2P	- Motor Inboard Horz Peakvue	.080 In/Sec	1.566 G-s
M2V	- Motor Inboard Vertical	.090 G-s	
M2A	- Motor Inboard Axial	.158 In/Sec	.420 G-s
P1H	- Pump Inboard Horizontal	.052 In/Sec	.367 G-s
P1P	- Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20KHz
P1V	- Pump Inboard Vertical	.234 In/Sec	.648 G-s
P1A	- Pump Inboard Axial	.257 G-s	
P1V	- Pump Inboard Vertical	.113 In/Sec	.561 G-s
P1A	- Pump Inboard Axial	.176 In/Sec	.345 G-s
MON 63E	- LBS Side Stream Pump E	(20-Jul-20)	
M1H	- Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
M1P	- Motor Outboard Horz Peakvue	.143 In/Sec	.690 G-s
M1V	- Motor Outboard Vertical	.028 G-s	
M1A	- Motor Outboard Axial	.229 In/Sec	.229 G-s
M2H	- Motor Inboard Horizontal	.082 In/Sec	.159 G-s
M2P	- Motor Inboard Horz Peakvue	.129 In/Sec	.836 G-s
M2V	- Motor Inboard Vertical	.061 G-s	
M2A	- Motor Inboard Axial	.248 In/Sec	.332 G-s
P1H	- Pump Inboard Horizontal	.157 In/Sec	.298 G-s
P1P	- Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20KHz
P1V	- Pump Inboard Vertical	.198 In/Sec	.515 G-s
P1A	- Pump Inboard Axial	.051 G-s	
P1V	- Pump Inboard Vertical	.187 In/Sec	.360 G-s
P1A	- Pump Inboard Axial	.096 In/Sec	.239 G-s
MON50	- Decanter Feed Pump	(20-Jul-20)	
MOH	- Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP	- Motor Outboard Horz Peakvue	.045 In/Sec	.240 G-s
MOV	- Motor Outboard Vertical	.042 G-s	
MOA	- Motor Outboard Axial	.075 In/Sec	.168 G-s
MIH	- Motor Inboard Horizontal	.099 In/Sec	.064 G-s
MIP	- Motor Inboard Horz Peakvue	.046 In/Sec	.406 G-s
		.079 G-s	

MIV - Motor Inboard Vertical	.085 In/Sec	.189 G-s
MIA - Motor Inboard Axial	.095 In/Sec	.096 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
PIP - Pump Inboard Horz Peakvue	.222 In/Sec	.461 G-s
PIV - Pump Inboard Vertical	.112 G-s	
PIA - Pump Inboard Axial	.267 In/Sec	.217 G-s
	.174 In/Sec	.405 G-s
MON 51 - WCM Tails Swing/Spare Pmp	(20-Jul-20)	
M1H - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
M1P - Motor Outboard Horz Peakvue	.074 In/Sec	.098 G-s
M1V - Motor Outboard Vertical	.0076 G-s	
M1A - Motor Outboard Axial	.029 In/Sec	.046 G-s
M2H - Motor Inboard Horizontal	.027 In/Sec	.056 G-s
M2P - Motor Inboard Horz Peakvue	.075 In/Sec	.399 G-s
M2V - Motor Inboard Vertical	.062 G-s	
M2A - Motor Inboard Axial	.029 In/Sec	.060 G-s
P1H - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
P1P - Pump Inboard Horz Peakvue	.027 In/Sec	.177 G-s
P1V - Pump Inboard Vertical	.010 G-s	
P1A - Pump Inboard Axial	.064 In/Sec	.133 G-s
P2H - Pump Outboard Horizontal	.105 In/Sec	.144 G-s
P2P - Pump Outboard Horz Peakvue	.105 In/Sec	.176 G-s
P2V - Pump Outboard Vertical	.0094 G-s	
P2A - Pump Outboard Axial	.069 In/Sec	.162 G-s
	.109 In/Sec	.150 G-s
MON38A - LBS Reflux Pmp S	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.038 In/Sec	1.081 G-s
MOV - Motor Outboard Vertical	.242 G-s	
MOA - Motor Outboard Axial	.035 In/Sec	.324 G-s
MIH - Motor Inboard Horizontal	.040 In/Sec	.155 G-s
MIP - Motor Inboard Horz Peakvue	.039 In/Sec	.975 G-s
MIV - Motor Inboard Vertical	.167 G-s	
MIA - Motor Inboard Axial	.071 In/Sec	.147 G-s
P1H - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
P1P - Pump Inboard Horz Peakvue	.039 In/Sec	.079 G-s
P1V - Pump Inboard Vertical	.056 In/Sec	.927 G-s
P1A - Pump Inboard Axial	.157 G-s	
	.066 In/Sec	.919 G-s
	.056 In/Sec	.417 G-s
MON38B - LBS Reflux Pmp N	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.062 In/Sec	.506 G-s
MOV - Motor Outboard Vertical	.087 G-s	
MOA - Motor Outboard Axial	.085 In/Sec	.152 G-s
MIH - Motor Inboard Horizontal	.045 In/Sec	.117 G-s
MIP - Motor Inboard Horz Peakvue	.078 In/Sec	.432 G-s
MIV - Motor Inboard Vertical	.138 G-s	
MIA - Motor Inboard Axial	.109 In/Sec	.096 G-s
P1H - Pump Inboard Horizontal	OVERALL LEVEL	1K-20KHz
P1P - Pump Inboard Horz Peakvue	.046 In/Sec	.084 G-s
	.103 In/Sec	.842 G-s
	.071 G-s	

PIV - Pump Inboard Vertical	.094 In/Sec	.353 G-s
PIA - Pump Inboard Axial	.099 In/Sec	.284 G-s
MON 32B - ARC Reflux Pmp S	(20-Jul-20)	
M1H - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
M1P - Motor Outboard Horz Peakvue	.058 In/Sec	.392 G-s
M1V - Motor Outboard Vertical	.053 G-s	
M1A - Motor Outboard Axial	.078 In/Sec	.190 G-s
M2H - Motor Inboard Horizontal	.077 In/Sec	.141 G-s
M2P - Motor Inboard Horz Peakvue	.059 In/Sec	.579 G-s
M2V - Motor Inboard Vertical	.146 G-s	
M2A - Motor Inboard Axial	.124 In/Sec	.135 G-s
P1H - Pump Inboard Horizontal	.075 In/Sec	.096 G-s
P1P - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz
P1V - Pump Inboard Vertical	.151 In/Sec	.232 G-s
P1A - Pump Inboard Axial	.066 G-s	
P2H - Pump Outboard Horizontal	.148 In/Sec	.220 G-s
P2P - Pump Outboard Horz Peakvue	.119 In/Sec	.342 G-s
P2V - Pump Outboard Vertical	.099 In/Sec	.386 G-s
P2A - Pump Outboard Axial	.107 G-s	
	.141 In/Sec	.337 G-s
	.124 In/Sec	.175 G-s
MON 32A - ARC Reflux Pmp N	(20-Jul-20)	
M1V - Motor Outboard Vertical	OVERALL LEVEL	1K-20kHz
M1A - Motor Outboard Axial	.066 In/Sec	.332 G-s
M2H - Motor Inboard Horizontal	.052 In/Sec	.065 G-s
M2P - Motor Inboard Horz Peakvue	.053 In/Sec	.256 G-s
M2V - Motor Inboard Vertical	.048 G-s	
M2A - Motor Inboard Axial	.054 In/Sec	.142 G-s
P1H - Pump Inboard Horizontal	.076 In/Sec	.078 G-s
P1P - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz
P1V - Pump Inboard Vertical	.064 In/Sec	.369 G-s
P1A - Pump Inboard Axial	.075 G-s	
P2H - Pump Outboard Horizontal	.117 In/Sec	.210 G-s
P2P - Pump Outboard Horz Peakvue	.066 In/Sec	.162 G-s
P2V - Pump Outboard Vertical	.061 In/Sec	.626 G-s
P2A - Pump Outboard Axial	.025 G-s	
	.113 In/Sec	.292 G-s
	.079 In/Sec	.271 G-s
M1H - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
M1P - Motor Outboard Horz Peakvue	.056 In/Sec	.406 G-s
	.046 G-s	
MON118 - Tempered H2O Pmp	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.074 In/Sec	.217 G-s
MOV - Motor Outboard Vertical	.120 G-s	
MOA - Motor Outboard Axial	.049 In/Sec	.107 G-s
MIH - Motor Inboard Horizontal	.081 In/Sec	.115 G-s
MIP - Motor Inboard Horz Peakvue	.058 In/Sec	.146 G-s
MIV - Motor Inboard Vertical	.082 G-s	
MIA - Motor Inboard Axial	.046 In/Sec	.078 G-s
	.073 In/Sec	.148 G-s
PIH - Pump Inboard Horizontal	OVERALL LEVEL	1K-20kHz
PIP - Pump Inboard Horz Peakvue	.063 In/Sec	.043 G-s
	.029 G-s	

PIV - Pump Inboard Vertical	.042 In/Sec	.033 G-s
PIA - Pump Inboard Axial	.046 In/Sec	.027 G-s
POH - Pump Outboard Horizontal	.049 In/Sec	.049 G-s
POP - Pump Outboard Horz Peakvue	.024 G-s	
POV - Pump Outboard Vertical	.027 In/Sec	.057 G-s
POA - Pump Outboard Axial	.043 In/Sec	.050 G-s
MON55MM - HUT Pump Mid	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.042 In/Sec	.261 G-s
MOV - Motor Outboard Vertical	.140 G-s	
MOA - Motor Outboard Axial	.045 In/Sec	.304 G-s
MIH - Motor Inboard Horizontal	.061 In/Sec	.138 G-s
MIP - Motor Inboard Horz Peakvue	.048 In/Sec	.284 G-s
MIV - Motor Inboard Vertical	.115 G-s	
MIA - Motor Inboard Axial	.069 In/Sec	.077 G-s
PIH - Pump Inboard Horizontal	.051 In/Sec	.124 G-s
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20KHz
PIV - Pump Inboard Vertical	.153 In/Sec	.848 G-s
PIA - Pump Inboard Axial	.474 G-s	
POH - Pump Outboard Horizontal	.128 In/Sec	.453 G-s
POP - Pump Outboard Horz Peakvue	.135 In/Sec	.335 G-s
POV - Pump Outboard Vertical	.111 In/Sec	1.741 G-s
POA - Pump Outboard Axial	.954 G-s	
MON55SM - HUT Pump S	.123 In/Sec	.612 G-s
MON67SM - PTZ Xfer Pump S	.131 In/Sec	.341 G-s
MOH - Motor Outboard Horizontal	(20-Jul-20)	
MOP - Motor Outboard Horz Peakvue	OVERALL LEVEL	1K-20kHz
MOV - Motor Outboard Vertical	.060 In/Sec	2.047 G-s
MOA - Motor Outboard Axial	.981 G-s	
MIH - Motor Inboard Horizontal	.085 In/Sec	1.458 G-s
MIP - Motor Inboard Horz Peakvue	.054 In/Sec	.824 G-s
MIV - Motor Inboard Vertical	.047 In/Sec	1.808 G-s
MIA - Motor Inboard Axial	.974 G-s	
PIH - Pump Inboard Horizontal	.061 In/Sec	.708 G-s
PIP - Pump Inboard Horz Peakvue	.040 In/Sec	.421 G-s
PIV - Pump Inboard Vertical	OVERALL LEVEL	1K-20KHz
PIA - Pump Inboard Axial	.327 In/Sec	.600 G-s
POH - Pump Outboard Horizontal	.330 G-s	
POP - Pump Outboard Horz Peakvue	.103 In/Sec	.962 G-s
POV - Pump Outboard Vertical	.119 In/Sec	.530 G-s
POA - Pump Outboard Axial	.242 In/Sec	.697 G-s
MON67SM - PTZ Xfer Pump S	.142 G-s	
MOH - Motor Outboard Horizontal	.119 In/Sec	.216 G-s
MOP - Motor Outboard Horz Peakvue	.138 In/Sec	.144 G-s
MOV - Motor Outboard Vertical	(20-Jul-20)	
MOA - Motor Outboard Axial	OVERALL LEVEL	1K-20kHz
MIH - Motor Inboard Horizontal	.082 In/Sec	.354 G-s
MIP - Motor Inboard Horz Peakvue	.0032 G-s	
MIV - Motor Inboard Vertical	.070 In/Sec	.139 G-s
MIA - Motor Inboard Axial	.032 In/Sec	.131 G-s
PIH - Pump Inboard Horizontal	.092 In/Sec	.355 G-s
PIP - Pump Inboard Horz Peakvue	.024 G-s	
PIV - Pump Inboard Vertical	.067 In/Sec	.124 G-s
PIA - Pump Inboard Axial	.042 In/Sec	.054 G-s

		OVERALL LEVEL	1K-20kHz
PIH - Pump Inboard Horizontal		.038 In/Sec	.500 G-s
PIP - Pump Inboard Horz Peakvue		.063 G-s	
PIV - Pump Inboard Vertical		.037 In/Sec	.466 G-s
PIA - Pump Inboard Axial		.028 In/Sec	.344 G-s
MON68A - #1 Reactor H2O Circ Pump	(20-Jul-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.152 In/Sec	.306 G-s	
MOV - Motor Outboard Vertical	.094 G-s		
MOA - Motor Outboard Axial	.054 In/Sec	.164 G-s	
MIH - Motor Inboard Horizontal	.079 In/Sec	.049 G-s	
MIP - Motor Inboard Horz Peakvue	.148 In/Sec	.167 G-s	
MIV - Motor Inboard Vertical	.079 G-s		
MIA - Motor Inboard Axial	.060 In/Sec	.025 G-s	
PIH - Pump Inboard Horizontal	.095 In/Sec	.036 G-s	
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz	
PIV - Pump Inboard Vertical	.073 In/Sec	.195 G-s	
PIA - Pump Inboard Axial	.107 G-s		
PIV - Pump Inboard Vertical	.046 In/Sec	.234 G-s	
PIA - Pump Inboard Axial	.063 In/Sec	.206 G-s	
MON43A - Amide Reactor Circ Pmp #1N	(20-Jul-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.080 In/Sec	.108 G-s	
MOV - Motor Outboard Vertical	.015 G-s		
MOA - Motor Outboard Axial	.085 In/Sec	.055 G-s	
MIH - Motor Inboard Horizontal	.137 In/Sec	.027 G-s	
MIP - Motor Inboard Horz Peakvue	.087 In/Sec	.211 G-s	
MIV - Motor Inboard Vertical	.023 G-s		
MIA - Motor Inboard Axial	.123 In/Sec	.087 G-s	
PIH - Pump Inboard Horizontal	.139 In/Sec	.096 G-s	
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz	
PIV - Pump Inboard Vertical	.255 In/Sec	.521 G-s	
PIA - Pump Inboard Axial	.293 G-s		
PIV - Pump Inboard Vertical	.244 In/Sec	.234 G-s	
PIA - Pump Inboard Axial	.214 In/Sec	.148 G-s	
MON43B - Amide Reactor Circ Pmp #2S	(20-Jul-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
MOP - Motor Outboard Horz Peakvue	.080 In/Sec	.265 G-s	
MOV - Motor Outboard Vertical	.0092 G-s		
MOA - Motor Outboard Axial	.086 In/Sec	.046 G-s	
MIH - Motor Inboard Horizontal	.060 In/Sec	.023 G-s	
MIP - Motor Inboard Horz Peakvue	.095 In/Sec	.085 G-s	
MIV - Motor Inboard Vertical	.0069 G-s		
MIA - Motor Inboard Axial	.145 In/Sec	.024 G-s	
PIH - Pump Inboard Horizontal	.075 In/Sec	.020 G-s	
PIP - Pump Inboard Horz Peakvue	OVERALL LEVEL	1K-20kHz	
PIV - Pump Inboard Vertical	.292 In/Sec	.424 G-s	
PIA - Pump Inboard Axial	.225 G-s		
PIV - Pump Inboard Vertical	.213 In/Sec	.533 G-s	
PIA - Pump Inboard Axial	.175 In/Sec	.316 G-s	
MON65 - Amide Reactor Circ Primary	(20-Jul-20)		
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz	
	.173 In/Sec	.333 G-s	

MOP - Motor Outboard Horz Peakvue	.173 G-s	
MOV - Motor Outboard Vertical	.268 In/Sec	.133 G-s
MOA - Motor Outboard Axial	.114 In/Sec	.070 G-s
MIH - Motor Inboard Horizontal	.137 In/Sec	.600 G-s
MIP - Motor Inboard Horz Peakvue	.281 G-s	
MIV - Motor Inboard Vertical	.234 In/Sec	.112 G-s
MIA - Motor Inboard Axial	.106 In/Sec	.092 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.151 In/Sec	.166 G-s
PIP - Pump Inboard Horz Peakvue	.104 G-s	
PIV - Pump Inboard Vertical	.182 In/Sec	.111 G-s
PIA - Pump Inboard Axial	.070 In/Sec	.071 G-s
MON36 - Irganox Mix/Feed Pump	(20-Jul-20)	
MOH - Motor Outboard Horizontal	OVERALL LEVEL	1K-20kHz
MOP - Motor Outboard Horz Peakvue	.058 In/Sec	.176 G-s
MOV - Motor Outboard Vertical	.062 G-s	
MOA - Motor Outboard Axial	.036 In/Sec	.116 G-s
IIH - Input Shaft Inboard Horizontal	.039 In/Sec	.114 G-s
IIP - Input Shaft Inboard Horz Peakvue	.048 In/Sec	
IIV - Input Shaft Inboard Vertical	.207 G-s	
IIA - Input Shaft Inboard Axial	.040 In/Sec	
	OVERALL LEVEL	1K-20KHz
POH - Pump Outboard Horizontal	.043 In/Sec	
POP - Pump Outboard Horz Peakvue	.060 In/Sec	.380 G-s
POV - Pump Outboard Vertical	.224 G-s	
POA - Pump Outboard Axial	.070 In/Sec	.644 G-s
	.076 In/Sec	.447 G-s

Clarification Of Vibration Units:

Acc --> G-s RMS
 Vel --> In/Sec PK

Abbreviated Last Measurement

Summary
