HI-SPEED INDUSTRIAL SERVICE

MILLINGTON, TN

December 1, 2021

Mitsubishi Chemicals

Subject: December vibration report

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

QualiTest® 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,

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Observations

ACN 07C ACH Product Feed Pump South
The vibration data still shows what looks to be outer race defects in the motor inboard bearing and non-synchronous frequencies in the inboard pump bearings which are also most likely bearing defect harmonics. There could be a little cavitation also. We will keep an eye on this unit in the future. No action is required at this time. **Rated a Class I Defect**

ACN 13A #2 Kettle Transfer Pump North
Vibration data still shows non-synchronous peaks in the spectrum for the motor bearings. We suspect race bearing defects are present since the frequencies match the overlay. Ensure adequate bearing lubrication if applicable. Prepare to change out the motor. **Rated a Class III Defect.**

ACN 14 ACH Off Grade Pump
The data still shows signs of slight distress in the motor bearings. We see 3 to 4 g's RMS overall for the horizontal measurements. There seems to be long intervals between collected data, and the defects seem to have been there for some time. We also see an elevated vertical vibration in the motor at shaft speed above 0.4:/second velocity peak. Inspect the coupling and fasteners and have the alignment checked and adjusted if needed. **Rated a Class II Defect**

ACN22 ACN Ref Booster Pump #2
The motor and pump axial vibrations are still elevated 4x shaft speed. We suspect a pump issue. Ensure the pump is operating properly in the correct point on the performance curve. Inspect the unit for loose fasteners, alignment, and coupling wear at time allows. **Rated a Class I Defect.**

ACN29C ACN Cooling Tower Pump South
Pump bearing data still shows non-synchronous harmonic peaks in the spectrum. Vibrations are most likely low amplitude bearing defect frequencies. A more detailed analysis could be provided if we had the bearing numbers in the database. **Rated a Class I Defect.**

ACN36 ACN West Tank Circulation Pump
The pump inboard horizontal vibrations are still elevated, especially at 4x shaft speed. We suspect an impeller vane pass vibration, or possibly a coupling issue. Check to make sure the pump flow and pressure are at design levels. Inspect the coupling also. **Rated a Class I Defect.**

MON 32B ARC Reflux Pump South
Pump vibration data for the inboard bearing overall has dropped again. No action required

MON 63E LBS Side Stream Pump East
Unit impeller pass has dropped; however non-synchronous harmonic vibration peaks are up in the ODE motor bearing. No immediate concern yet. **Rated a Class I Defect.**

MON 63W LBS Side Stream Pump West
Vibration data suggests the motor was changed out. No further action required.

MON 65 Amide Reactor Circulation Primary
The motor is still showing a shaft speed vibration in the vertical measurements. Inspect the unit for loose fasteners, alignment, and coupling wear at time allows. Ensure the cooling fan is nor defective. **Rated a Class I Defect.**

MON 73W Skim Tub Transfer Pump W
Vibrations have dropped. No further action required.

MON132 Decanter Feed Pump Spare
The pump inboard vertical and motor inboard vertical vibrations are elevated, especially at 1x, 2x and 3x shaft speed. Inspect the unit for loose fasteners, alignment, and coupling wear at time allows. **Rated a Class I Defect.**

SAR 03 Turbine Compressor Main Blower
Vibrations in the compressor have dropped. Nonrated this month.

SAR 10 Process Air Fan E
A fan shaft speed vibration has increased especially in the inboard fan bearing. The fan bearings still show a raised noise floor in the acceleration spectrum and impacting in the time domain as well as a few harmonics of the fundamental speed. This could be distress in the bearings, lubrication, mechanical looseness, or some other anomaly issue. Clean and inspect the fan wheel and all drive train components and inspect the unit and bearings soon. **Rated a Class III Defect.**

SAR 14 Combustion Air Fan West
The data still indicates distress in the inboard motor bearing. We only see about 1.5 g's RMS overall for the horizontal measurements. The fan bearings show a raised noise floor in the acceleration spectrum and impacting in the time domain as well as a few low amplitude harmonics of the fundamental speed. This could be distress in the bearings, lubrication, mechanical looseness, or some other anomaly. Ensure the bearings are lubricated if applicable. We will keep an eye on this unit in the future. No other action is required at this time. **Rated a Class I Defect.**

SAR55B Neutralization Pump South
The data continues to show signs of early distress in the inboard motor bearing. The motor also had a 1xRPM vibration but that has dropped considerably Ensure the motor bearings are lubricated if applicable. We will keep an eye on this unit in the future. **Rated a Class I Defect.**

SAR 63 EM Spent Acid Feed Pump E
The pump inboard bearing vibration data still indicates slight issues that are most like bearing defects. Ensure the bearings are lubricated. **Rated a Class I Defect.**

SAR 66 B, C Vertical Cooling Tower Pumps
These units still have high vibrations at near ½" per second velocity overall. Vertical pumps are susceptible to imbalance and resonance. Some sheet metal covers prevent good bearing data to be collected. Inspect units for fastener and structure issues. Trim balancing might help. **Rated a Class I Defect.**

SAR78A Cooling Tower Fan #1
The motor continues have an elevated 1x RPM vibration in the axial measurements. Inspect the fasteners, structure, coupling and alignment as time allows. **Rated a Class I Defect.**

SAR78D Cooling Tower Fan #4
Motor speed vibration continues to be high in the motor inboard vertical and axial. Inspect the installation for issues in the structure, fasteners, coupling and alignment. We will watch carefully for changes going forward. **Rated a Class II Defect.**

SAR 137A Contain Pit Pump North
The 5x RPM vibration has increased slightly in the motor. We suspect an impeller pass vibration due to wear or flow issues. Clean/inspect as time allows. **Rated a Class I Defect.**

Previously reported equipment but not running this survey

ACN13B #2 Kettle Circulation Pump
Motor bearing data still shows outer race defects in the inboard bearing. The vibrations have not changed much recently. We will watch this carefully going forward. **Rated a Class II Defect.**

ACN28B ACN Fan East
The motor drive end vertical vibration is still elevated at shaft speed. Inspect for loose fasteners and coupling or alignment issues. **Rated a Class I Defect.**

ACN29A ACN Cooling Tower Pump North
Pump data continues to suggest cavitation. Check for proper pump operation. **Rated a Class I Defect.**

MON 45 EM ACH Ref Brine Pump East
Data for the motor outboard bearing shows possible outer race defects. We will watch this unit carefully going forward and recommend action as required. **Rated a Class II Defect.**

MON 55 MM Hut Pump Mid
Pump vibration data shows what looks to be cavitation. Check for proper operation. **Rated a Class I Defect.**

MON 85E Water Treatment Pump East
The pump inboard horizontal vibration is slightly elevated at 5x shaft speed. Ensure the pump is operating properly in the correct point on the performance curve. **Rated a Class I Defect.**

SAR 38 Drying Tower Pump-out
The pump inboard horizontal vibration is still slightly elevated, especially at 1x shaft speed. Inspect the unit for loose fasteners, alignment, and coupling wear as time allows. Also ensure the pump is operating properly in the correct point on the performance curve. **Rated a Class I Defect.**

SAR 39C Boiler Feed Water Pump Northeast
We still see a slight shaft speed vibration in the motor outboard. Inspect the motor and drivetrain as time allows. **Rated a Class I Defect.**

SAR 50A Drying Tower Circulation Pump West
We see a slight increase of the shaft speed vibration in the motor. Inspect the motor and motor cooling fan, and drivetrain as time allows. **Rated a Class I Defect.**

SAR 161A North SAR Cooling Tower Fan West (September data was of poor quality), previous data showed:
The motor still has a 1xRPM vibration and two smaller harmonics. Check for loose fasteners, coupling and drive train issues if so equipped. **Rated a Class I Defect.**

SAR222 Oleum Tower Drain Pump
Inboard pump bearing still has multiple synchronous and non-synchronous vibration peaks. Overall acceleration is over 3g's RMS. The bearing is in distress. Ensure they are lubricated properly. We will watch carefully going forward. **Rated a Class II Defect.**

SAR231A Final Tower Circulation Pump North
Vibrations have dropped substantially. No further actions required.

December 2021 survey data

Abbreviated Last Measurement Summary
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Database: Lucite Memphis MMA.rbm
Area: MMA
Report Date: 01-Dec-21 08:12

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD	EQUIPMENT SPEED
0126 - Carrier Ref Unit	(28-Sep-20)		
	OVERALL LEVEL	1K-20kHz	
MOH	.025 In/Sec	.358 G-s	1780.0 RPM
MOP	.026 G-s		
MOV	.028 In/Sec	.091 G-s	
MOA	.028 In/Sec	.045 G-s	
MIH	.031 In/Sec	.396 G-s	
MIP	.031 G-s		
MIV	.022 In/Sec	.188 G-s	
MIA	.015 In/Sec	.123 G-s	
IIH	.176 In/Sec		
IIP	1.505 G-s		
IIV	.160 In/Sec		
IIA	.098 In/Sec		
OOH	.166 In/Sec		
OOP	2.072 G-s		
OOV	.196 In/Sec		
OOA	.098 In/Sec		
CIH	.085 In/Sec		
CIP	.622 G-s		
CIV	.088 In/Sec		
CIA	.063 In/Sec		
COH	.041 In/Sec		
COP	.245 G-s		
COV	.043 In/Sec		
COA	.048 In/Sec		
ACN04 - Topping Col Circ Pump	(24-Nov-21)		
	OVERALL LEVEL	1K-20kHz	
MOH	.023 In/Sec	.214 G-s	1175.0 RPM
MOP	.127 G-s		
MOV	.029 In/Sec	.062 G-s	
MOA	.033 In/Sec	.020 G-s	
MIH	.021 In/Sec	.210 G-s	
MIP	.110 G-s		
MIV	.030 In/Sec	.107 G-s	
MIA	.027 In/Sec	.051 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.101 In/Sec	1.018 G-s	
PIP	.734 G-s		
PIV	.096 In/Sec	.609 G-s	
PIA	.104 In/Sec	.441 G-s	
POH	.058 In/Sec	.986 G-s	

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       POP              .769 G-s
       POV              .093 In/Sec       .374 G-s
       POA              .066 In/Sec       .343 G-s

ACN05A     - Topp Column Xfer Pmp W        (01-Feb-21)
                     OVERALL LEVEL     1K-20kHz
       MOH              .074 In/Sec       .821 G-s        3575.0 RPM
       MOP              .134 G-s
       MOV              .054 In/Sec       .164 G-s
       MOA              .068 In/Sec       .157 G-s
       MIH              .086 In/Sec       .694 G-s
       MIP              .169 G-s
       MIV              .053 In/Sec       .126 G-s
       MIA              .096 In/Sec       .100 G-s
                     OVERALL LEVEL     1K-20KHz
       PIH              .319 In/Sec       .585 G-s
       PIP              .138 G-s
       PIV              .137 In/Sec       .261 G-s
       PIA              .095 In/Sec       .319 G-s
     * POH              .147 In/Sec       .370 G-s
     * POP              .045 G-s
     * POV              .056 In/Sec       .261 G-s
     * POA              .067 In/Sec       .485 G-s

ACN05B     - Topp Column Xfer Pmp E        (24-Nov-21)
                     OVERALL LEVEL     1K-20kHz
       MOH              .066 In/Sec       .845 G-s        3575.0 RPM
       MOP              .091 G-s
       MOV              .052 In/Sec       .139 G-s
       MOA              .038 In/Sec       .157 G-s
       MIH              .063 In/Sec      1.049 G-s
       MIP              .129 G-s
       MIV              .049 In/Sec       .205 G-s
       MIA              .034 In/Sec       .062 G-s
                     OVERALL LEVEL     1K-20KHz
       PIH              .158 In/Sec      1.015 G-s
       PIP              .160 G-s
       PIV              .156 In/Sec       .465 G-s
       PIA              .118 In/Sec       .252 G-s
     * POH              .032 In/Sec       .042 G-s
     * POV              .025 In/Sec       .022 G-s
     * POA              .029 In/Sec       .032 G-s

ACN07A     - ACH  Prod Feed Pump N         (13-Sep-21)
                     OVERALL LEVEL     1K-20kHz
       MOH              .034 In/Sec       .107 G-s        3575.0 RPM
       MOP             .0088 G-s
       MOV              .131 In/Sec       .043 G-s
       MOA              .046 In/Sec       .057 G-s
       MIH              .068 In/Sec       .265 G-s
       MIP              .030 G-s
       MIV              .073 In/Sec       .068 G-s
       MIA              .072 In/Sec       .023 G-s
                     OVERALL LEVEL     1K-20KHz
       PIH              .107 In/Sec       .240 G-s
       PIP              .025 G-s
       PIV              .045 In/Sec       .172 G-s
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	PIA	.069 In/Sec	.183 G-s	
*	POA	.117 In/Sec	1.952 G-s	

ACN07B - ACH Prod Feed Pump M (24-May-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.060 In/Sec	1.396 G-s	3575.0 RPM
MOP	.106 G-s		
MOV	.081 In/Sec	.215 G-s	
MOA	.062 In/Sec	.149 G-s	
MIH	.052 In/Sec	1.134 G-s	
MIP	.119 G-s		
MIV	.052 In/Sec	.204 G-s	
MIA	.052 In/Sec	.200 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.244 In/Sec	1.812 G-s	
PIP	.344 G-s		
PIV	.252 In/Sec	.716 G-s	
PIA	.101 In/Sec	.492 G-s	
* POV	.052 In/Sec	.159 G-s	
* POA	.046 In/Sec	.195 G-s	

ACN07C - ACH Prod Feed Pump S (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.102 In/Sec	1.324 G-s	3575.0 RPM
MOP	.368 G-s		
MOV	.121 In/Sec	.601 G-s	
MOA	.118 In/Sec	.414 G-s	
MIH	.069 In/Sec	1.754 G-s	
MIP	.432 G-s		
MIV	.099 In/Sec	.951 G-s	
MIA	.065 In/Sec	.403 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.177 In/Sec	1.488 G-s	
PIP	.171 G-s		
PIV	.227 In/Sec	.723 G-s	
PIA	.180 In/Sec	.987 G-s	
* POH	.130 In/Sec	.859 G-s	
* POP	.071 G-s		
* POV	.149 In/Sec	1.177 G-s	
* POA	.124 In/Sec	.800 G-s	

ACN08 - ACH Blend Tank (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.041 In/Sec	.183 G-s	3575.0 RPM
MOP	.0080 G-s		
MOV	.178 In/Sec	.111 G-s	
MOA	.143 In/Sec	.051 G-s	
MIH	.052 In/Sec	.341 G-s	
MIP	.028 G-s		
MIV	.119 In/Sec	.095 G-s	
MIA	.147 In/Sec	.046 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.076 In/Sec	.464 G-s	
PIP	.097 G-s		
PIV	.066 In/Sec	.244 G-s	
PIA	.059 In/Sec	.161 G-s	
* POH	.090 In/Sec	.122 G-s	

* POP	.016 G-s			
* POV	.053 In/Sec	.146 G-s		
* POA	.060 In/Sec	.259 G-s		

ACN09 - ACH Flash Tank Pump (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.130 In/Sec	.441 G-s	3575.0 RPM
MOP	.020 G-s		
MOV	.092 In/Sec	.201 G-s	
MOA	.087 In/Sec	.136 G-s	
* MIH	.087 In/Sec	.230 G-s	
* MIP	.072 G-s		
* MIV	.068 In/Sec	.831 G-s	
* MIA	.108 In/Sec	1.139 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.078 In/Sec	.171 G-s	
PIP	.011 G-s		
PIV	.056 In/Sec	.128 G-s	
PIA	.065 In/Sec	.041 G-s	
* POH	.070 In/Sec	1.406 G-s	
* POV	.065 In/Sec	1.369 G-s	
* POA	.081 In/Sec	.559 G-s	

ACN10 - #1 Kettle Circ Pmp (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.021 In/Sec	.710 G-s	1775.0 RPM
MOP	.448 G-s		
MOV	.038 In/Sec	.431 G-s	
MOA	.029 In/Sec	.194 G-s	
MIH	.020 In/Sec	.620 G-s	
MIP	.311 G-s		
MIV	.029 In/Sec	.345 G-s	
MIA	.031 In/Sec	.250 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.043 In/Sec	.355 G-s	
PIP	.257 G-s		
PIV	.057 In/Sec	.175 G-s	
PIA	.044 In/Sec	.193 G-s	
* POH	.020 In/Sec	.367 G-s	
* POP	.211 G-s		
* POV	.026 In/Sec	.524 G-s	
* POA	.022 In/Sec	.156 G-s	

ACN11 - #2 Kettle Circ Pump (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.024 In/Sec	.329 G-s	1775.0 RPM
MOP	.157 G-s		
MOV	.048 In/Sec	.249 G-s	
MOA	.045 In/Sec	.143 G-s	
MIH	.026 In/Sec	.924 G-s	
MIP	.490 G-s		
MIV	.055 In/Sec	.129 G-s	
MIA	.036 In/Sec	.169 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.046 In/Sec	.265 G-s	
PIP	.149 G-s		
PIV	.098 In/Sec	.206 G-s	

	PIA	.031 In/Sec	.123 G-s	
*	POH	.028 In/Sec	.141 G-s	
*	POP	.053 G-s		
*	POV	.104 In/Sec	.200 G-s	
*	POA	.038 In/Sec	.253 G-s	

ACN12 - #1 Kettle Xfer Pump (24-Nov-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.084 In/Sec	.349 G-s	3575.0 RPM
	MOP	.019 G-s		
	MOV	.058 In/Sec	.205 G-s	
	MOA	.071 In/Sec	.098 G-s	
	MIH	.054 In/Sec	.446 G-s	
	MIP	.041 G-s		
	MIV	.065 In/Sec	.297 G-s	
	MIA	.055 In/Sec	.131 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.060 In/Sec	.102 G-s	
	PIP	.0056 G-s		
	PIV	.110 In/Sec	.109 G-s	
	PIA	.050 In/Sec	.034 G-s	
*	POH	.063 In/Sec	.193 G-s	
*	POP	.035 G-s		
*	POV	.113 In/Sec	.177 G-s	
*	POA	.057 In/Sec	.791 G-s	

ACN13A - #2 Kettle Xfer Pump N (24-Nov-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.134 In/Sec	1.632 G-s	3575.0 RPM
	MOP	.226 G-s		
	MOV	.142 In/Sec	1.337 G-s	
	MOA	.084 In/Sec	.596 G-s	
	MIH	.196 In/Sec	4.797 G-s	
	MIP	.335 G-s		
	MIV	.102 In/Sec	1.228 G-s	
	MIA	.071 In/Sec	.437 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.090 In/Sec	.681 G-s	
	PIP	.169 G-s		
	PIV	.099 In/Sec	.925 G-s	
	PIA	.074 In/Sec	.659 G-s	
*	POH	.017 In/Sec	.032 G-s	
*	POV	.034 In/Sec	.069 G-s	
*	POA	.042 In/Sec	.471 G-s	

ACN13B - #2 Kettle Xfer Pump S (02-Aug-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.044 In/Sec	.843 G-s	3575.0 RPM
	MOP	.048 G-s		
	MOV	.056 In/Sec	.246 G-s	
	MOA	.040 In/Sec	.200 G-s	
	MIH	.068 In/Sec	2.913 G-s	
	MIP	.645 G-s		
	MIV	.060 In/Sec	.617 G-s	
	MIA	.047 In/Sec	.729 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.060 In/Sec	.631 G-s	

	PIP	.112 G-s		
	PIV	.065 In/Sec	.194 G-s	
	PIA	.071 In/Sec	.131 G-s	
*	POH	.045 In/Sec	.213 G-s	
*	POP	.036 G-s		
*	POV	.049 In/Sec	.305 G-s	
*	POA	.045 In/Sec	.299 G-s	

ACN14 - ACH Off Grade Pump (24-Nov-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.181 In/Sec	2.458 G-s	3575.0 RPM
	MOP	.539 G-s		
	MOV	.213 In/Sec	.609 G-s	
	MOA	.248 In/Sec	.423 G-s	
	MIH	.231 In/Sec	3.658 G-s	
	MIP	.190 G-s		
	MIV	.487 In/Sec	.972 G-s	
	MIA	.349 In/Sec	.725 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.225 In/Sec	.329 G-s	
	PIP	.055 G-s		
	PIV	.205 In/Sec	.095 G-s	
	PIA	.141 In/Sec	.120 G-s	
*	POH	.022 In/Sec	.0042 G-s	
*	POV	.022 In/Sec	.0040 G-s	
*	POA	.184 In/Sec	.910 G-s	

ACN16 - ACH Scrb Circ PumpN (24-Nov-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.208 In/Sec	.238 G-s	1780.0 RPM
	MOP	.051 G-s		
	MOV	.037 In/Sec	.107 G-s	
	MOA	.136 In/Sec	.061 G-s	
	MIH	.141 In/Sec	.533 G-s	
	MIP	.128 G-s		
	MIV	.057 In/Sec	.178 G-s	
	MIA	.108 In/Sec	.090 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.147 In/Sec	.487 G-s	
	PIP	.370 G-s		
	PIV	.091 In/Sec	.217 G-s	
	PIA	.112 In/Sec	.119 G-s	
*	POH	.076 In/Sec	.0035 G-s	
*	POP	.0011 G-s		
*	POV	.132 In/Sec	.412 G-s	
*	POA	.202 In/Sec	.396 G-s	

AC17 - Carrier Ref Unit (30-Nov-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.018 In/Sec	.177 G-s	1780.0 RPM
	MOP	.027 G-s		
	MOV	.018 In/Sec	.053 G-s	
	MOA	.014 In/Sec	.037 G-s	
	MIH	.022 In/Sec	.160 G-s	
	MIP	.027 G-s		
	MIV	.018 In/Sec	.091 G-s	
	MIA	.013 In/Sec	.037 G-s	

IIH	.207 In/Sec		
IIP	1.099 G-s		
IIV	.084 In/Sec		
IIA	.120 In/Sec		
OOH	.212 In/Sec		
OOP	1.668 G-s		
OOV	.066 In/Sec		
OOA	.098 In/Sec		
CIH	.075 In/Sec		
CIP	.485 G-s		
CIV	.095 In/Sec		
CIA	.124 In/Sec		
COH	.066 In/Sec		
COP	.397 G-s		
COV	.039 In/Sec		
COA	.052 In/Sec		

ACN17DP - DP Comp (30-Nov-21)

	OVERALL LEVEL		
21	.028 Mils		1775.0 RPM
22	.224 Mils		
27	.014 Mils		
23	.064 Mils		
24	.066 Mils		

ACN22 - ACN Ref Unit Booster #2 (30-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.135 In/Sec	.292 G-s	3575.0 RPM
MOP	.017 G-s		
MOV	.125 In/Sec	.086 G-s	
MOA	.177 In/Sec	.058 G-s	
MIH	.145 In/Sec	.199 G-s	
MIP	.018 G-s		
MIV	.149 In/Sec	.099 G-s	
MIA	.209 In/Sec	.065 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.051 In/Sec	.342 G-s	
PIP	.072 G-s		
PIV	.228 In/Sec	.290 G-s	
PIA	.337 In/Sec	.118 G-s	
POH	.119 In/Sec	.366 G-s	
POP	.045 G-s		
POV	.172 In/Sec	.361 G-s	
POA	.263 In/Sec	.193 G-s	

ACN23 - ACH Scrb Circ Pump S (13-Sep-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.023 In/Sec	.323 G-s	1780.0 RPM
MOP	.179 G-s		
MOV	.035 In/Sec	.202 G-s	
MOA	.034 In/Sec	.168 G-s	
MIH	.023 In/Sec	.481 G-s	
MIP	.272 G-s		
MIV	.049 In/Sec	.371 G-s	
MIA	.033 In/Sec	.221 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.084 In/Sec	.342 G-s	

```
       PIP              .252 G-s
       PIV              .108 In/Sec       .208 G-s
       PIA              .061 In/Sec       .132 G-s
     * POH              .096 In/Sec       .146 G-s
     * POP              .041 G-s
     * POV              .141 In/Sec       .152 G-s
     * POA              .086 In/Sec       .201 G-s

ACN28A     - ACN Fan W                     (13-Sep-21)
                      OVERALL LEVEL     1K-20kHz
       MOH              .142 In/Sec       .758 G-s        1775.0 RPM
       MOP              .220 G-s
       MOV              .209 In/Sec       .268 G-s
       MOA              .211 In/Sec       .121 G-s
       MIH              .240 In/Sec      1.248 G-s
       MIP              .314 G-s
       MIV              .172 In/Sec       .710 G-s
       MIA              .207 In/Sec       .289 G-s

ACN28B     - ACN Fan E                     (13-Sep-21)
                      OVERALL LEVEL     1K-20kHz
       MOH              .232 In/Sec       .549 G-s        1775.0 RPM
       MOP              .169 G-s
       MOV              .239 In/Sec       .265 G-s
       MOA              .164 In/Sec       .221 G-s
       MIH              .418 In/Sec       .860 G-s
       MIP              .313 G-s
       MIV              .452 In/Sec       .234 G-s
       MIA              .239 In/Sec       .181 G-s

ACN28BDP   - Cooling Twr Fan E            (30-Nov-21)
                      OVERALL LEVEL
       26               .337 Mils                        1775.0 RPM

ACN29A     - ACN Cool Twr Pump N           (13-Sep-21)
                      OVERALL LEVEL     1K-20kHz
       MOH              .063 In/Sec       .955 G-s        1775.0 RPM
       MOP              .172 G-s
       MOV              .062 In/Sec       .517 G-s
       MOA              .049 In/Sec       .283 G-s
       MIH              .058 In/Sec       .821 G-s
       MIP              .223 G-s
       MIV              .113 In/Sec      1.571 G-s
       MIA              .083 In/Sec       .755 G-s
                      OVERALL LEVEL     1K-20KHz
       PIH              .223 In/Sec       .952 G-s
       PIP              .596 G-s
       PIV              .141 In/Sec       .563 G-s
       PIA              .176 In/Sec       .629 G-s
       POH              .117 In/Sec      1.791 G-s
       POP              .996 G-s
       POV              .120 In/Sec       .397 G-s
       POA              .156 In/Sec       .518 G-s

ACN28ADP   - Cooling Twr Fan W            (30-Nov-21)
                      OVERALL LEVEL
       28               .250 Mils                        1775.0 RPM
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ACN29B	- ACN Cool Twr Pump M		(24-Nov-21)	
		OVERALL LEVEL	1K-20kHz	
	MOH	.048 In/Sec	.810 G-s	1775.0 RPM
	MOP	.434 G-s		
	MOV	.059 In/Sec	.340 G-s	
	MOA	.056 In/Sec	.194 G-s	
	MIH	.051 In/Sec	.898 G-s	
	MIP	.364 G-s		
	MIV	.070 In/Sec	.397 G-s	
	MIA	.054 In/Sec	.246 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.118 In/Sec	.763 G-s	
	PIP	.446 G-s		
	PIV	.084 In/Sec	.316 G-s	
	PIA	.164 In/Sec	.175 G-s	
	POH	.072 In/Sec	.891 G-s	
	POP	.487 G-s		
	POV	.088 In/Sec	.425 G-s	
	POA	.119 In/Sec	.410 G-s	
ACN29C	- ACN Cool Twr Pump S		(24-Nov-21)	
		OVERALL LEVEL	1K-20kHz	
	MOH	.047 In/Sec	.392 G-s	1775.0 RPM
	MOP	.119 G-s		
	MOV	.076 In/Sec	.190 G-s	
	MOA	.049 In/Sec	.124 G-s	
	MIH	.039 In/Sec	.443 G-s	
	MIP	.166 G-s		
	MIV	.071 In/Sec	.221 G-s	
	MIA	.044 In/Sec	.217 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.133 In/Sec	.837 G-s	
	PIP	.443 G-s		
	PIV	.093 In/Sec	.331 G-s	
	PIA	.098 In/Sec	.248 G-s	
	POH	.082 In/Sec	1.946 G-s	
	POP	.614 G-s		
	POV	.082 In/Sec	.626 G-s	
	POA	.087 In/Sec	.538 G-s	
ACN30	- ACH Scrubber Xfer Pmp		(24-Nov-21)	
		OVERALL LEVEL	1K-20kHz	
	MOH	.066 In/Sec	.348 G-s	1780.0 RPM
	MOP	.207 G-s		
	MOV	.076 In/Sec	.267 G-s	
	MOA	.141 In/Sec	.127 G-s	
	MIH	.080 In/Sec	.616 G-s	
	MIP	.489 G-s		
	MIV	.110 In/Sec	.288 G-s	
	MIA	.119 In/Sec	.161 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.070 In/Sec	.081 G-s	
	PIP	.033 G-s		
	PIV	.077 In/Sec	.121 G-s	
	PIA	.073 In/Sec	.049 G-s	
	POH	.064 In/Sec	.110 G-s	

	POP	.027 G-s		
	POV	.056 In/Sec	.083 G-s	
	POA	.062 In/Sec	.018 G-s	

ACN36 - ACH Neut Tank Circ Pmp (24-Nov-21)

		OVERALL LEVEL	1K-20kHz	
*	MOH	.047 In/Sec	.134 G-s	3575.0 RPM
*	MOP	.0059 G-s		
*	MOV	.048 In/Sec	.138 G-s	
	MIH	.072 In/Sec	.970 G-s	
	MIP	.237 G-s		
	MIV	.097 In/Sec	.386 G-s	
	MIA	.079 In/Sec	.177 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.475 In/Sec	.314 G-s	
	PIP	.034 G-s		
	PIV	.281 In/Sec	.446 G-s	
	PIA	.243 In/Sec	.205 G-s	
*	POH	.118 In/Sec	.371 G-s	
*	POP	.027 G-s		
*	POV	.073 In/Sec	.323 G-s	
*	POA	.212 In/Sec	1.298 G-s	

ACN44 - ACN Ref Unit Booster #3 (14-Sep-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.132 In/Sec	3.174 G-s	3575.0 RPM
	MOP	.035 G-s		
	MOV	.126 In/Sec	1.042 G-s	
	MOA	.098 In/Sec	.631 G-s	
	MIH	.174 In/Sec	.923 G-s	
	MIP	.038 G-s		
	MIV	.124 In/Sec	.346 G-s	
	MIA	.128 In/Sec	.499 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.110 In/Sec	.965 G-s	
	PIP	.412 G-s		
	PIV	.167 In/Sec	.833 G-s	
	PIA	.146 In/Sec	.398 G-s	
	POH	.098 In/Sec	.592 G-s	
	POP	.062 G-s		
	POV	.148 In/Sec	.837 G-s	
	POA	.129 In/Sec	.409 G-s	

MON 32A - ARC Reflux Pmp N (24-Nov-21)

		OVERALL LEVEL	1K-20kHz	
	M1V	.241 In/Sec	.313 G-s	3520.0 RPM
	M1A	.063 In/Sec	.055 G-s	
	M2H	.058 In/Sec	.440 G-s	
	M2P	.050 G-s		
	M2V	.189 In/Sec	.123 G-s	
	M2A	.079 In/Sec	.071 G-s	
		OVERALL LEVEL	1K-20KHz	
	P1H	.066 In/Sec	.538 G-s	
	P1P	.046 G-s		
	P1V	.126 In/Sec	.292 G-s	
	P1A	.088 In/Sec	.100 G-s	
	P2H	.092 In/Sec	.311 G-s	

	P2P	.041 G-s		
	P2V	.126 In/Sec	.252 G-s	
	P2A	.088 In/Sec	.096 G-s	
		OVERALL LEVEL	1K-20kHz	
	M1H	.094 In/Sec	.347 G-s	
	M1P	.042 G-s		

MON 32B - ARC Reflux Pmp S (24-Nov-21)

		OVERALL LEVEL	1K-20kHz	
	M1H	.041 In/Sec	.256 G-s	3520.0 RPM
	M1P	.056 G-s		
	M1V	.068 In/Sec	.230 G-s	
	M1A	.077 In/Sec	.110 G-s	
	M2H	.033 In/Sec	.337 G-s	
	M2P	.092 G-s		
	M2V	.078 In/Sec	.096 G-s	
	M2A	.047 In/Sec	.064 G-s	
		OVERALL LEVEL	1K-20KHz	
	P1H	.217 In/Sec	.525 G-s	
	P1P	.039 G-s		
	P1V	.204 In/Sec	.271 G-s	
	P1A	.126 In/Sec	.138 G-s	
	P2H	.220 In/Sec	.514 G-s	
	P2P	.039 G-s		
	P2V	.175 In/Sec	.242 G-s	
	P2A	.137 In/Sec	.124 G-s	

MON36 - Irganox Mix/Feed Pump (24-Nov-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.073 In/Sec	.258 G-s	1750.0 RPM
	MOP	.116 G-s		
	MOV	.065 In/Sec	.155 G-s	
	MOA	.049 In/Sec	.143 G-s	
*	MIH	.059 In/Sec	.263 G-s	
*	MIP	.185 G-s		
*	MIV	.050 In/Sec	.388 G-s	
*	MIA	.053 In/Sec	.378 G-s	
	IIH	.080 In/Sec		
	IIP	.480 G-s		
	IIV	.069 In/Sec		
	IIA	.046 In/Sec		
*	IOH	.031 In/Sec		
*	IOP	.163 G-s		
*	IOV	.024 In/Sec		
*	IOA	.049 In/Sec		
*	OIH	.047 In/Sec		
*	OIP	.321 G-s		
*	OIV	.052 In/Sec		
*	OOH	.034 In/Sec		
*	OOP	.534 G-s		
*	OOV	.031 In/Sec		
*	OOA	.051 In/Sec		
		OVERALL LEVEL	1K-20KHz	
*	PIH	.055 In/Sec	.305 G-s	
*	PIP	.177 G-s		
*	PIV	.080 In/Sec	.652 G-s	
*	PIA	.071 In/Sec	.889 G-s	

POH	.201 In/Sec	.888 G-s		
POP	.758 G-s			
POV	.156 In/Sec	1.146 G-s		
POA	.179 In/Sec	.699 G-s		

MON38A - LBS Reflux Pmp S (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.045 In/Sec	.352 G-s	3575.0 RPM
MOP	.034 G-s		
MOV	.035 In/Sec	.121 G-s	
MOA	.038 In/Sec	.076 G-s	
MIH	.035 In/Sec	.219 G-s	
MIP	.036 G-s		
MIV	.054 In/Sec	.065 G-s	
MIA	.023 In/Sec	.113 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.069 In/Sec	.957 G-s	
PIP	.105 G-s		
PIV	.061 In/Sec	.578 G-s	
PIA	.069 In/Sec	.273 G-s	
* POH	.040 In/Sec	.648 G-s	
* POP	.058 G-s		
* POV	.062 In/Sec	.562 G-s	
* POA	.079 In/Sec	.461 G-s	

MON38B - LBS Reflux Pmp N (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.192 In/Sec	.572 G-s	3575.0 RPM
MOP	.050 G-s		
MOV	.100 In/Sec	.117 G-s	
MOA	.079 In/Sec	.176 G-s	
MIH	.157 In/Sec	.650 G-s	
MIP	.064 G-s		
MIV	.098 In/Sec	.070 G-s	
MIA	.071 In/Sec	.089 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.113 In/Sec	.886 G-s	
PIP	.081 G-s		
PIV	.145 In/Sec	.481 G-s	
PIA	.109 In/Sec	.494 G-s	
* POH	.063 In/Sec	.474 G-s	
* POP	.080 G-s		
* POV	.097 In/Sec	.466 G-s	
* POA	.109 In/Sec	.868 G-s	

MON38CNM - LBS Tails Pump N (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.048 In/Sec	.370 G-s	3575.0 RPM
MOP	.035 G-s		
MOV	.072 In/Sec	.171 G-s	
MOA	.049 In/Sec	.092 G-s	
MIH	.051 In/Sec	.988 G-s	
MIP	.111 G-s		
MIV	.068 In/Sec	.258 G-s	
MIA	.048 In/Sec	.100 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.091 In/Sec	.834 G-s	

PIP	.045 G-s			
PIV	.072 In/Sec	.407 G-s		
PIA	.057 In/Sec	.371 G-s		
* POH	.145 In/Sec	.371 G-s		
* POP	.021 G-s			
* POV	.102 In/Sec	.205 G-s		
* POA	.063 In/Sec	1.026 G-s		

MON38CSM - LBS Tails Pump S (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.040 In/Sec	.308 G-s	3575.0 RPM
MOP	.037 G-s		
MOV	.041 In/Sec	.074 G-s	
MOA	.034 In/Sec	.071 G-s	
MIH	.052 In/Sec	.859 G-s	
MIP	.067 G-s		
MIV	.039 In/Sec	.275 G-s	
MIA	.034 In/Sec	.128 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.077 In/Sec	.453 G-s	
PIP	.086 G-s		
PIV	.062 In/Sec	.230 G-s	
PIA	.052 In/Sec	.192 G-s	
* POH	.153 In/Sec	.274 G-s	
* POP	.020 G-s		
* POV	.074 In/Sec	.275 G-s	
* POA	.044 In/Sec	.282 G-s	

MON40 - Acetone Pump (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.047 In/Sec	1.025 G-s	3575.0 RPM
MOP	.171 G-s		
MOV	.054 In/Sec	.517 G-s	
MOA	.073 In/Sec	.227 G-s	
MIH	.097 In/Sec	2.744 G-s	
MIP	.529 G-s		
MIV	.065 In/Sec	.448 G-s	
MIA	.050 In/Sec	.194 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.104 In/Sec	.859 G-s	
PIP	.238 G-s		
PIV	.095 In/Sec	.621 G-s	
PIA	.068 In/Sec	.287 G-s	
* POH	.118 In/Sec	2.183 G-s	
* POP	.085 G-s		
* POV	.098 In/Sec	1.522 G-s	
* POA	.214 In/Sec	2.647 G-s	

MON43A - Amide Reactor Circ Pmp #1N (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.098 In/Sec	1.082 G-s	1785.0 RPM
MOP	.050 G-s		
MOV	.109 In/Sec	.267 G-s	
MOA	.123 In/Sec	.056 G-s	
MIH	.101 In/Sec	.538 G-s	
MIP	.020 G-s		
MIV	.138 In/Sec	.369 G-s	

MIA	.125 In/Sec	.165 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.208 In/Sec	.316 G-s	
PIP	.170 G-s		
PIV	.236 In/Sec	.285 G-s	
PIA	.216 In/Sec	.065 G-s	
* POH	.159 In/Sec	.438 G-s	
* POP	.158 G-s		
* POV	.116 In/Sec	.394 G-s	
* POA	.129 In/Sec	.190 G-s	

MON43B - Amide Reactor Circ Pmp #2S (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.150 In/Sec	.224 G-s	1785.0 RPM
MOP	.078 G-s		
MOV	.198 In/Sec	.103 G-s	
MOA	.147 In/Sec	.077 G-s	
MIH	.091 In/Sec	.077 G-s	
MIP	.012 G-s		
MIV	.157 In/Sec	.026 G-s	
MIA	.104 In/Sec	.040 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.252 In/Sec	.447 G-s	
PIP	.276 G-s		
PIV	.159 In/Sec	.332 G-s	
PIA	.259 In/Sec	.119 G-s	
* POH	.158 In/Sec	.486 G-s	
* POP	.164 G-s		
* POV	.128 In/Sec	.538 G-s	
* POA	.153 In/Sec	.452 G-s	

MON45EM - ACH Ref Brine Pump E (20-Aug-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.059 In/Sec	.922 G-s	1750.0 RPM
MOP	.472 G-s		
MOV	.110 In/Sec	1.394 G-s	
MOA	.076 In/Sec	.511 G-s	
MIH	.054 In/Sec	1.256 G-s	
MIP	.684 G-s		
MIV	.084 In/Sec	.996 G-s	
MIA	.081 In/Sec	.537 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.067 In/Sec	.818 G-s	
PIP	.591 G-s		
PIV	.103 In/Sec	.802 G-s	
PIA	.067 In/Sec	.687 G-s	
POH	.056 In/Sec	1.044 G-s	
POP	.564 G-s		
POV	.075 In/Sec	.551 G-s	
POA	.049 In/Sec	.224 G-s	

MON45WM - ACH Ref Brine Pump W (30-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.080 In/Sec	2.296 G-s	1750.0 RPM
MOP	.583 G-s		
MOV	.113 In/Sec	.736 G-s	
MOA	.081 In/Sec	.287 G-s	

	MIH	.077 In/Sec	1.667 G-s	
	MIP	1.011 G-s		
	MIV	.159 In/Sec	.830 G-s	
	MIA	.088 In/Sec	.365 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.127 In/Sec	.746 G-s	
	PIP	.405 G-s		
	PIV	.107 In/Sec	.420 G-s	
	PIA	.087 In/Sec	.535 G-s	
	POH	.082 In/Sec	1.298 G-s	
	POP	.679 G-s		
	POV	.094 In/Sec	.427 G-s	
	POA	.080 In/Sec	.241 G-s	

MON50 - Decanter Feed Pump (13-Sep-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.049 In/Sec	.338 G-s	3575.0 RPM
	MOP	.040 G-s		
	MOV	.130 In/Sec	.493 G-s	
	MOA	.110 In/Sec	.170 G-s	
	MIH	.056 In/Sec	.459 G-s	
	MIP	.099 G-s		
	MIV	.103 In/Sec	.232 G-s	
	MIA	.143 In/Sec	.103 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.264 In/Sec	.599 G-s	
	PIP	.127 G-s		
	PIV	.288 In/Sec	.256 G-s	
	PIA	.194 In/Sec	.585 G-s	
*	POH	.083 In/Sec	.0042 G-s	
*	POV	.076 In/Sec	.0056 G-s	
*	POA	.103 In/Sec	2.080 G-s	

MON 51 - WCM Tails Swing/Spare Pmp (24-Nov-21)

		OVERALL LEVEL	1K-20kHz	
	M1H	.058 In/Sec	.341 G-s	3530.0 RPM
	M1P	.176 G-s		
	M1V	.050 In/Sec	.079 G-s	
	M1A	.117 In/Sec	.060 G-s	
	M2H	.062 In/Sec	.609 G-s	
	M2P	.299 G-s		
	M2V	.062 In/Sec	.121 G-s	
	M2A	.043 In/Sec	.064 G-s	
		OVERALL LEVEL	1K-20KHz	
	P1H	.060 In/Sec	.159 G-s	
	P1P	.0068 G-s		
	P1V	.074 In/Sec	.153 G-s	
	P1A	.060 In/Sec	.134 G-s	
	P2H	.052 In/Sec	.180 G-s	
	P2P	.030 G-s		
	P2V	.044 In/Sec	.139 G-s	
	P2A	.087 In/Sec	.049 G-s	

MON55NM - HUT Pump N (24-Nov-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.024 In/Sec	.247 G-s	1775.0 RPM
	MOP	.114 G-s		

MOV	.040 In/Sec	.161 G-s	
MOA	.027 In/Sec	.143 G-s	
MIH	.029 In/Sec	.303 G-s	
MIP	.057 G-s		
MIV	.041 In/Sec	.084 G-s	
MIA	.026 In/Sec	.057 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.197 In/Sec	.200 G-s	
PIP	.118 G-s		
PIV	.128 In/Sec	.144 G-s	
PIA	.121 In/Sec	.057 G-s	
POH	.077 In/Sec	.265 G-s	
POP	.166 G-s		
POV	.085 In/Sec	.123 G-s	
POA	.077 In/Sec	.068 G-s	

MON55MM - HUT Pump Mid (13-Sep-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.088 In/Sec	.544 G-s	1775.0 RPM
MOP	.318 G-s		
MOV	.073 In/Sec	.214 G-s	
MOA	.095 In/Sec	.148 G-s	
MIH	.062 In/Sec	.733 G-s	
MIP	.437 G-s		
MIV	.093 In/Sec	.298 G-s	
MIA	.087 In/Sec	.320 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.199 In/Sec	.702 G-s	
PIP	.381 G-s		
PIV	.150 In/Sec	.329 G-s	
PIA	.140 In/Sec	.207 G-s	
POH	.113 In/Sec	1.287 G-s	
POP	.642 G-s		
POV	.134 In/Sec	.363 G-s	
POA	.150 In/Sec	.364 G-s	

MON55SM - HUT Pump S (02-Aug-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.035 In/Sec	1.825 G-s	1775.0 RPM
MOP	1.189 G-s		
MOV	.050 In/Sec	.836 G-s	
MOA	.042 In/Sec	.361 G-s	
MIH	.031 In/Sec	2.050 G-s	
MIP	1.000 G-s		
MIV	.044 In/Sec	.840 G-s	
MIA	.039 In/Sec	.270 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.168 In/Sec	.842 G-s	
PIP	.478 G-s		
PIV	.110 In/Sec	.375 G-s	
PIA	.097 In/Sec	.380 G-s	
POH	.106 In/Sec	.739 G-s	
POP	.303 G-s		
POV	.110 In/Sec	.290 G-s	
POA	.117 In/Sec	.282 G-s	

MON56 - Inhibited Mon Xfer Pump E (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.047 In/Sec	.213 G-s	3575.0 RPM
MOP	.037 G-s		
MOV	.044 In/Sec	.084 G-s	
MOA	.032 In/Sec	.023 G-s	
MIH	.067 In/Sec	.385 G-s	
MIP	.039 G-s		
MIV	.039 In/Sec	.108 G-s	
MIA	.038 In/Sec	.042 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.066 In/Sec	.475 G-s	
PIP	.075 G-s		
PIV	.045 In/Sec	.329 G-s	
PIA	.059 In/Sec	.249 G-s	
* POH	.074 In/Sec	.665 G-s	
* POP	.039 G-s		
* POV	.096 In/Sec	.609 G-s	
* POA	.191 In/Sec	.362 G-s	

MON 63E - LBS Side Stream Pump E (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
M1H	.089 In/Sec	1.495 G-s	3515.0 RPM
M1P	.044 G-s		
M1V	.103 In/Sec	.452 G-s	
M1A	.082 In/Sec	.319 G-s	
M2H	.222 In/Sec	.551 G-s	
M2P	.075 G-s		
M2V	.101 In/Sec	.268 G-s	
M2A	.149 In/Sec	.147 G-s	
	OVERALL LEVEL	1K-20KHz	
P1H	.218 In/Sec	.529 G-s	
P1P	.074 G-s		
P1V	.105 In/Sec	.284 G-s	
P1A	.140 In/Sec	.143 G-s	
P2H	.067 In/Sec	.430 G-s	
P2P	.018 G-s		
P2V	.133 In/Sec	.158 G-s	
P2A	.168 In/Sec	.102 G-s	

MON 63W - LBS Side Stream Pump W (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
M1H	.088 In/Sec	1.271 G-s	3515.0 RPM
M1P	.019 G-s		
M1V	.102 In/Sec	.623 G-s	
M1A	.094 In/Sec	.376 G-s	
M2H	.230 In/Sec	.494 G-s	
M2P	.127 G-s		
M2V	.124 In/Sec	.491 G-s	
M2A	.164 In/Sec	.266 G-s	
	OVERALL LEVEL	1K-20KHz	
P1H	.229 In/Sec	.494 G-s	
P1P	.142 G-s		
P1V	.119 In/Sec	.487 G-s	
P1A	.158 In/Sec	.282 G-s	
P2H	.069 In/Sec	.786 G-s	
P2P	.043 G-s		
P2V	.082 In/Sec	.296 G-s	

	P2A	.102 In/Sec	.159 G-s	
MON65	- Amide Reactor Circ Primary		(24-Nov-21)	
		OVERALL LEVEL	1K-20kHz	
	MOH	.121 In/Sec	.338 G-s	1180.0 RPM
	MOP	.187 G-s		
	MOV	.295 In/Sec	.166 G-s	
	MOA	.114 In/Sec	.112 G-s	
	MIH	.096 In/Sec	.534 G-s	
	MIP	.324 G-s		
	MIV	.181 In/Sec	.108 G-s	
	MIA	.097 In/Sec	.096 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.132 In/Sec	.110 G-s	
	PIP	.061 G-s		
	PIV	.118 In/Sec	.084 G-s	
	PIA	.098 In/Sec	.045 G-s	
*	POH	.177 In/Sec	.132 G-s	
*	POP	.075 G-s		
*	POV	.161 In/Sec	.150 G-s	
*	POA	.052 In/Sec	.171 G-s	
MON67NM	- PTZ Xfer Pump N		(24-May-21)	
		OVERALL LEVEL	1K-20kHz	
	MOH	.085 In/Sec	.265 G-s	3575.0 RPM
	MOP	.038 G-s		
	MOV	.062 In/Sec	.097 G-s	
	MOA	.038 In/Sec	.114 G-s	
	MIH	.078 In/Sec	.577 G-s	
	MIP	.051 G-s		
	MIV	.052 In/Sec	.238 G-s	
	MIA	.042 In/Sec	.224 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.052 In/Sec	.606 G-s	
	PIP	.104 G-s		
	PIV	.047 In/Sec	.325 G-s	
	PIA	.043 In/Sec	.215 G-s	
*	POH	.0077 In/Sec	.0050 G-s	
*	POV	.0053 In/Sec	.0070 G-s	
*	POA	.034 In/Sec	.234 G-s	
MON67SM	- PTZ Xfer Pump S		(24-Nov-21)	
		OVERALL LEVEL	1K-20kHz	
	MOH	.145 In/Sec	.967 G-s	3575.0 RPM
	MOP	.0019 G-s		
	MOV	.117 In/Sec	.079 G-s	
	MOA	.052 In/Sec	.228 G-s	
	MIH	.143 In/Sec	.588 G-s	
	MIP	.028 G-s		
	MIV	.063 In/Sec	.083 G-s	
	MIA	.085 In/Sec	.122 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.053 In/Sec	.414 G-s	
	PIP	.063 G-s		
	PIV	.045 In/Sec	.405 G-s	
	PIA	.048 In/Sec	.285 G-s	
*	POH	.025 In/Sec	.345 G-s	

* POP	.029 G-s			
* POV	.025 In/Sec	.653 G-s		
* POA	.026 In/Sec	.293 G-s		

MON68A - #1 Reactor H2O Circ Pump (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.059 In/Sec	.358 G-s	1180.0 RPM
MOP	.102 G-s		
MOV	.041 In/Sec	.223 G-s	
MOA	.057 In/Sec	.017 G-s	
MIH	.060 In/Sec	.227 G-s	
MIP	.087 G-s		
MIV	.048 In/Sec	.030 G-s	
MIA	.052 In/Sec	.033 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.043 In/Sec	.212 G-s	
PIP	.116 G-s		
PIV	.036 In/Sec	.291 G-s	
PIA	.030 In/Sec	.146 G-s	
* POH	.033 In/Sec	.226 G-s	
* POP	.137 G-s		
* POV	.022 In/Sec	.157 G-s	
* POA	.019 In/Sec	.105 G-s	

MON73E - Skim Tub Xfer Pmp E (21-Jul-20)

	OVERALL LEVEL	1K-20kHz	
MOH	.030 In/Sec	.153 G-s	1400.0 RPM
MOP	.097 G-s		
MOV	.040 In/Sec	.078 G-s	
MOA	.050 In/Sec	.053 G-s	
MIH	.026 In/Sec	.316 G-s	
MIP	.148 G-s		
MIV	.044 In/Sec	.110 G-s	
MIA	.037 In/Sec	.078 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.045 In/Sec	.084 G-s	
PIP	.045 G-s		
PIV	.026 In/Sec	.048 G-s	
PIA	.036 In/Sec	.055 G-s	
* POH	.0073 In/Sec	.011 G-s	1800.0 RPM
* POP	.0057 G-s		
* POV	.0051 In/Sec	.0055 G-s	
* POA	.012 In/Sec	.126 G-s	1400.0 RPM

MON73W - Skim Tub Xfer Pmp W (30-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.048 In/Sec	.220 G-s	1200.0 RPM
MOP	.077 G-s		
MOV	.047 In/Sec	.123 G-s	
MOA	.083 In/Sec	.040 G-s	
MIH	.051 In/Sec	.446 G-s	
MIP	.220 G-s		
MIV	.046 In/Sec	.352 G-s	
MIA	.064 In/Sec	.156 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.040 In/Sec	.090 G-s	
PIP	.064 G-s		

	PIV	.035 In/Sec	.071 G-s	
	PIA	.024 In/Sec	.032 G-s	
*	POH	.020 In/Sec	.131 G-s	1519.0 RPM
*	POP	.037 G-s		
*	POV	.019 In/Sec	.115 G-s	
*	POA	.026 In/Sec	.050 G-s	1534.0 RPM

MON81 - Uninhibited Mon Tank Pump S (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.046 In/Sec	.177 G-s	3575.0 RPM
MOP	.0074 G-s		
MOV	.027 In/Sec	.081 G-s	
MOA	.025 In/Sec	.058 G-s	
MIH	.046 In/Sec	.275 G-s	
MIP	.027 G-s		
MIV	.032 In/Sec	.085 G-s	
MIA	.039 In/Sec	.055 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.100 In/Sec	1.015 G-s	
PIP	.129 G-s		
PIV	.092 In/Sec	.615 G-s	
PIA	.076 In/Sec	.230 G-s	
POH	.065 In/Sec	.607 G-s	
POP	.037 G-s		
POV	.083 In/Sec	.198 G-s	
POA	.053 In/Sec	.063 G-s	

MON80 - Uninhibited Mon Tank Pump N (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.066 In/Sec	.164 G-s	3575.0 RPM
MOP	.013 G-s		
MOV	.061 In/Sec	.380 G-s	
MOA	.145 In/Sec	.068 G-s	
MIH	.126 In/Sec	.167 G-s	
MIP	.011 G-s		
MIV	.165 In/Sec	.088 G-s	
MIA	.173 In/Sec	.024 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.212 In/Sec	.060 G-s	
PIP	.0012 G-s		
PIV	.071 In/Sec	.058 G-s	
PIA	.067 In/Sec	.082 G-s	
POH	.144 In/Sec	.104 G-s	
POP	.0014 G-s		
POV	.080 In/Sec	.039 G-s	
POA	.085 In/Sec	.015 G-s	

MON84 - WCM Tails Pump S (02-Aug-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.044 In/Sec	.409 G-s	3575.0 RPM
MOP	.043 G-s		
MOV	.084 In/Sec	.060 G-s	
MOA	.164 In/Sec	.076 G-s	
MIH	.065 In/Sec	1.072 G-s	
MIP	.079 G-s		
MIV	.108 In/Sec	.125 G-s	
MIA	.152 In/Sec	.111 G-s	

		OVERALL LEVEL	1K-20KHz	
	PIH	.107 In/Sec	.902 G-s	
	PIP	.096 G-s		
	PIV	.118 In/Sec	.480 G-s	
	PIA	.121 In/Sec	.389 G-s	
*	POH	.113 In/Sec	.349 G-s	
*	POP	.043 G-s		
*	POV	.125 In/Sec	.298 G-s	
*	POA	.110 In/Sec	.525 G-s	

MON85E - Water Treatment Pmp E (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.130 In/Sec	.156 G-s	1775.0 RPM
MOP	.074 G-s		
MOV	.058 In/Sec	.063 G-s	
MOA	.160 In/Sec	.036 G-s	
MIH	.139 In/Sec	.537 G-s	
MIP	.273 G-s		
MIV	.131 In/Sec	.322 G-s	
MIA	.091 In/Sec	.259 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.288 In/Sec	.432 G-s	
PIP	.249 G-s		
PIV	.097 In/Sec	.387 G-s	
PIA	.140 In/Sec	.193 G-s	
POH	.178 In/Sec	.428 G-s	
POP	.253 G-s		
POV	.077 In/Sec	.297 G-s	
POA	.128 In/Sec	.148 G-s	

MON85W - Water Treatment Pmp W (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.052 In/Sec	.484 G-s	1775.0 RPM
MOP	.259 G-s		
MOV	.096 In/Sec	.196 G-s	
MOA	.081 In/Sec	.110 G-s	
MIH	.068 In/Sec	.707 G-s	
MIP	.388 G-s		
MIV	.127 In/Sec	.370 G-s	
MIA	.082 In/Sec	.395 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.112 In/Sec	.716 G-s	
PIP	.397 G-s		
PIV	.153 In/Sec	.445 G-s	
PIA	.104 In/Sec	.305 G-s	
POH	.093 In/Sec	.714 G-s	
POP	.422 G-s		
POV	.130 In/Sec	.412 G-s	
POA	.086 In/Sec	.454 G-s	

MON118 - Tempered H20 Pmp (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.101 In/Sec	1.220 G-s	865.0 RPM
MOP	.104 G-s		
MOV	.035 In/Sec	.187 G-s	
MOA	.057 In/Sec	.324 G-s	
MIH	.055 In/Sec	.142 G-s	

	MIP	.078 G-s		
	MIV	.025 In/Sec	.109 G-s	
	MIA	.035 In/Sec	.114 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.040 In/Sec	.049 G-s	
	PIP	.028 G-s		
	PIV	.022 In/Sec	.025 G-s	
	PIA	.030 In/Sec	.033 G-s	
	POH	.033 In/Sec	.056 G-s	
	POP	.037 G-s		
	POV	.022 In/Sec	.037 G-s	
	POA	.029 In/Sec	.024 G-s	

MON132 - Decanter Feed Pmp Spare (24-Nov-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.060 In/Sec	.302 G-s	3575.0 RPM
	MOP	.021 G-s		
	MOV	.146 In/Sec	.123 G-s	
	MOA	.176 In/Sec	.107 G-s	
	MIH	.215 In/Sec	.344 G-s	
	MIP	.042 G-s		
	MIV	.342 In/Sec	.203 G-s	
	MIA	.189 In/Sec	.096 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.210 In/Sec	.362 G-s	
	PIP	.052 G-s		
	PIV	.329 In/Sec	.179 G-s	
	PIA	.183 In/Sec	.115 G-s	
*	POH	.109 In/Sec	.237 G-s	
*	POP	.019 G-s		
*	POV	.050 In/Sec	.160 G-s	
*	POA	.074 In/Sec	.237 G-s	

MON168 - A/B Booster Pump E (22-Jul-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.076 In/Sec	.374 G-s	1020.0 RPM
	MOP	.159 G-s		
	MOV	.028 In/Sec	.103 G-s	
	MOA	.043 In/Sec	.083 G-s	
	MIH	.060 In/Sec	.174 G-s	
	MIP	.077 G-s		
	MIV	.036 In/Sec	.091 G-s	
	MIA	.047 In/Sec	.034 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.063 In/Sec	.173 G-s	
	PIP	.077 G-s		
	PIV	.035 In/Sec	.099 G-s	
	PIA	.046 In/Sec	.042 G-s	
*	POH	.012 In/Sec	.0009 G-s	1200.0 RPM
*	POV	.0074 In/Sec	.0008 G-s	
*	POA	.237 In/Sec	.100 G-s	1344.0 RPM

MON169 - A/B Booster Pump W (30-Nov-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.042 In/Sec	.303 G-s	1100.0 RPM
	MOP	.140 G-s		
	MOV	.035 In/Sec	.165 G-s	

MOA	.073 In/Sec	.056 G-s		
MIH	.031 In/Sec	.324 G-s		
MIP	.190 G-s			
MIV	.025 In/Sec	.128 G-s		
MIA	.054 In/Sec	.082 G-s		
	OVERALL LEVEL	1K-20KHz		
PIH	.042 In/Sec	.077 G-s		
PIP	.061 G-s			
PIV	.033 In/Sec	.117 G-s		
PIA	.046 In/Sec	.045 G-s		
* POH	.029 In/Sec	.064 G-s	1210.0 RPM	
* POP	.042 G-s			
* POV	.019 In/Sec	.098 G-s		
* POA	.025 In/Sec	.077 G-s	1224.0 RPM	

SAR03 - Turb Comp Main Blower (30-Nov-21)

	OVERALL LEVEL		
5	.305 Mils		4450.0 RPM
6	.295 Mils		
7	.236 Mils		
8	.322 Mils		
9	.228 Mils		
10	.170 Mils		
11	.224 Mils		
12	.231 Mils		
15	.016 Mils		
16	.025 Mils		

SAR10 - Process Air Fan E (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.500 In/Sec	.318 G-s	1775.0 RPM
MOP	.102 G-s		
MOV	.206 In/Sec	.354 G-s	
MOA	.180 In/Sec	.151 G-s	
MIH	.357 In/Sec	.441 G-s	
MIP	.262 G-s		
MIV	.257 In/Sec	.262 G-s	
MIA	.177 In/Sec	.196 G-s	
	OVERALL LEVEL	1K-20KHz	
FIH	.897 In/Sec	3.509 G-s	
FIP	2.059 G-s		
FIV	.254 In/Sec	2.894 G-s	
FIA	.700 In/Sec	1.345 G-s	
FOH	.765 In/Sec	2.198 G-s	
FOP	1.091 G-s		
FOV	.396 In/Sec	1.959 G-s	
FOA	.750 In/Sec	.882 G-s	

SAR11 - Recycle Fan W (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.035 In/Sec	.668 G-s	1775.0 RPM
MOP	.372 G-s		
MOV	.052 In/Sec	.377 G-s	
MOA	.059 In/Sec	.191 G-s	
MIH	.035 In/Sec	.768 G-s	
MIP	.512 G-s		
MIV	.051 In/Sec	.355 G-s	

MIA	.044 In/Sec	.173 G-s	
	OVERALL LEVEL	1K-20KHz	
FIH	.017 In/Sec	.010 G-s	
FIP	.0053 G-s		
FIV	.012 In/Sec	.016 G-s	
FIA	.029 In/Sec	.0035 G-s	
FOH	.020 In/Sec	.014 G-s	
FOP	.0070 G-s		
FOV	.011 In/Sec	.019 G-s	
FOA	.021 In/Sec	.0026 G-s	

SAR12 - Recycle Fan E (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.042 In/Sec	.095 G-s	1775.0 RPM
MOP	.020 G-s		
MOV	.055 In/Sec	.038 G-s	
MOA	.051 In/Sec	.039 G-s	
MIH	.053 In/Sec	.853 G-s	
MIP	.447 G-s		
MIV	.048 In/Sec	.504 G-s	
MIA	.037 In/Sec	.253 G-s	
	OVERALL LEVEL	1K-20KHz	
FIH	.034 In/Sec	.093 G-s	
FIP	.056 G-s		
FIV	.024 In/Sec	.144 G-s	
FIA	.018 In/Sec	.018 G-s	
FOH	.040 In/Sec	.130 G-s	
FOP	.058 G-s		
FOV	.024 In/Sec	.257 G-s	
FOA	.027 In/Sec	.068 G-s	

SAR13 - Combustion Air Fan E (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.062 In/Sec	.676 G-s	1120.0 RPM
MOP	.357 G-s		
MOV	.060 In/Sec	.375 G-s	
MOA	.074 In/Sec	.201 G-s	
MIH	.065 In/Sec	.372 G-s	
MIP	.209 G-s		
MIV	.050 In/Sec	.184 G-s	
MIA	.053 In/Sec	.235 G-s	
	OVERALL LEVEL	1K-20KHz	
FIH	.056 In/Sec	.314 G-s	
FIP	.153 G-s		
FIV	.099 In/Sec	.410 G-s	
FIA	.078 In/Sec	.079 G-s	
FOH	.099 In/Sec	.522 G-s	
FOP	.252 G-s		
FOV	.257 In/Sec	.279 G-s	
FOA	.149 In/Sec	.159 G-s	

SAR14 - Combustion Air Fan W (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.096 In/Sec	.736 G-s	1120.0 RPM
MOP	.153 G-s		
MOV	.061 In/Sec	.368 G-s	
MOA	.054 In/Sec	.279 G-s	

MIH	.088 In/Sec	1.473 G-s	
MIP	.767 G-s		
MIV	.083 In/Sec	1.105 G-s	
MIA	.049 In/Sec	.798 G-s	
	OVERALL LEVEL	1K-20KHz	
FIH	.087 In/Sec	1.176 G-s	
FIP	.619 G-s		
FIV	.054 In/Sec	.599 G-s	
FIA	.049 In/Sec	.307 G-s	
FOH	.104 In/Sec	.781 G-s	
FOP	.458 G-s		
FOV	.044 In/Sec	.257 G-s	
FOA	.054 In/Sec	.233 G-s	

SAR15 - Process Air Fan W (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.072 In/Sec	.488 G-s	1180.0 RPM
MOP	.244 G-s		
MOV	.060 In/Sec	.414 G-s	
MOA	.053 In/Sec	.180 G-s	
MIH	.056 In/Sec	1.361 G-s	
MIP	.469 G-s		
MIV	.058 In/Sec	.324 G-s	
MIA	.049 In/Sec	.142 G-s	
	OVERALL LEVEL	1K-20KHz	
FIH	.067 In/Sec	.275 G-s	
FIP	.146 G-s		
FIV	.050 In/Sec	.491 G-s	
FIA	.065 In/Sec	.472 G-s	
FOH	.075 In/Sec	.689 G-s	
FOP	.427 G-s		
FOV	.061 In/Sec	.818 G-s	
FOA	.041 In/Sec	.276 G-s	

SAR16 - Startup Fan (10-May-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.033 In/Sec	.144 G-s	1775.0 RPM
MOP	.046 G-s		
MOV	.027 In/Sec	.058 G-s	
MOA	.027 In/Sec	.032 G-s	
MIH	.027 In/Sec	.064 G-s	
MIP	.059 G-s		
MIV	.031 In/Sec	.035 G-s	
MIA	.019 In/Sec	.022 G-s	
	OVERALL LEVEL	1K-20KHz	
FIH	.060 In/Sec	1.366 G-s	
FIP	.684 G-s		
FIV	.044 In/Sec	.173 G-s	
FIA	.042 In/Sec	.214 G-s	
FOH	.081 In/Sec	.774 G-s	
FOP	.360 G-s		
FOV	.048 In/Sec	.152 G-s	
FOA	.057 In/Sec	.242 G-s	

SAR37A - Interpass Twr Circ Pump N (04-Mar-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.054 In/Sec	.416 G-s	1775.0 RPM

	MOP	.227 G-s		
	MOV	.055 In/Sec	.218 G-s	
	MOA	.065 In/Sec	.119 G-s	
	MIH	.050 In/Sec	.495 G-s	
	MIP	.198 G-s		
	MIV	.052 In/Sec	.201 G-s	
	MIA	.055 In/Sec	.225 G-s	
		OVERALL LEVEL	1K-20KHz	
*	PIH	.083 In/Sec	2.533 G-s	
*	PIP	1.463 G-s		
*	PIV	.078 In/Sec	.871 G-s	
*	PIA	.110 In/Sec	1.060 G-s	
*	POH	.140 In/Sec	2.749 G-s	
*	POP	1.174 G-s		
*	POV	.155 In/Sec	1.379 G-s	
*	POA	.145 In/Sec	.644 G-s	

SAR37B - Interpass Twr Circ Pump S (24-Nov-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.071 In/Sec	1.638 G-s	1775.0 RPM
	MOP	.605 G-s		
	MOV	.048 In/Sec	.583 G-s	
	MOA	.093 In/Sec	.385 G-s	
	MIH	.049 In/Sec	1.740 G-s	
	MIP	.487 G-s		
	MIV	.043 In/Sec	.319 G-s	
	MIA	.064 In/Sec	.275 G-s	
		OVERALL LEVEL	1K-20KHz	
*	PIH	.092 In/Sec	1.788 G-s	
*	PIP	.647 G-s		
*	PIV	.078 In/Sec	.847 G-s	
*	PIA	.108 In/Sec	.560 G-s	

SAR38 - Drying Tower Pumpout (30-Aug-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.072 In/Sec	.214 G-s	3575.0 RPM
	MOP	.063 G-s		
	MOV	.177 In/Sec	.085 G-s	
	MOA	.155 In/Sec	.086 G-s	
	MIH	.084 In/Sec	.257 G-s	
	MIP	.059 G-s		
	MIV	.171 In/Sec	.035 G-s	
	MIA	.150 In/Sec	.043 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.351 In/Sec	.201 G-s	
	PIP	.059 G-s		
	PIV	.125 In/Sec	.181 G-s	
	PIA	.239 In/Sec	.064 G-s	
*	POH	.128 In/Sec	.449 G-s	
*	POP	.028 G-s		
*	POV	.167 In/Sec	.209 G-s	
*	POA	.092 In/Sec	.172 G-s	

SAR39A - Boiler Feed H2O Pmp NW (19-Aug-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.029 In/Sec	.567 G-s	3575.0 RPM
	MOP	.015 G-s		

MOV	.054 In/Sec	.174 G-s	
MOA	.079 In/Sec	.086 G-s	
MIH	.070 In/Sec	.360 G-s	
MIP	.059 G-s		
MIV	.055 In/Sec	.229 G-s	
MIA	.076 In/Sec	.177 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.136 In/Sec	.665 G-s	
PIP	.174 G-s		
PIV	.102 In/Sec	.468 G-s	
PIA	.083 In/Sec	.277 G-s	
POH	.144 In/Sec	.829 G-s	
POP	.152 G-s		
POV	.167 In/Sec	.347 G-s	
POA	.133 In/Sec	.338 G-s	

SAR39B - Boiler Feed H2O Pmp SW (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.072 In/Sec	.953 G-s	3575.0 RPM
MOP	.051 G-s		
MOV	.069 In/Sec	.399 G-s	
MOA	.040 In/Sec	.284 G-s	
MIH	.089 In/Sec	.631 G-s	
MIP	.041 G-s		
MIV	.075 In/Sec	.137 G-s	
MIA	.027 In/Sec	.208 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.096 In/Sec	.645 G-s	
PIP	.070 G-s		
PIV	.209 In/Sec	.502 G-s	
PIA	.103 In/Sec	.221 G-s	
POH	.060 In/Sec	.443 G-s	
POP	.079 G-s		
POV	.085 In/Sec	.430 G-s	
POA	.098 In/Sec	.226 G-s	

SAR39C - Boiler Feed H2O Pmp NE (03-Aug-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.246 In/Sec	.693 G-s	3575.0 RPM
MOP	.018 G-s		
MOV	.071 In/Sec	.298 G-s	
MOA	.054 In/Sec	.787 G-s	
MIH	.182 In/Sec	.560 G-s	
MIP	.021 G-s		
MIV	.095 In/Sec	.366 G-s	
MIA	.056 In/Sec	.077 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.125 In/Sec	.372 G-s	
PIP	.025 G-s		
PIV	.112 In/Sec	.166 G-s	
PIA	.115 In/Sec	.176 G-s	
POH	.221 In/Sec	.992 G-s	
POP	.133 G-s		
POV	.103 In/Sec	.342 G-s	
POA	.069 In/Sec	.154 G-s	

SAR39D - Boiler Feed H2O Pmp SE (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.101 In/Sec	2.325 G-s	3575.0 RPM
MOP	.148 G-s		
MOV	.092 In/Sec	1.296 G-s	
MOA	.066 In/Sec	.840 G-s	
MIH	.088 In/Sec	2.165 G-s	
MIP	.421 G-s		
MIV	.112 In/Sec	1.568 G-s	
MIA	.069 In/Sec	1.122 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.037 In/Sec	.235 G-s	
PIP	.019 G-s		
PIV	.046 In/Sec	.192 G-s	
PIA	.040 In/Sec	.328 G-s	
POH	.024 In/Sec	.229 G-s	
POP	.073 G-s		
POV	.052 In/Sec	.236 G-s	
POA	.032 In/Sec	.140 G-s	

SAR45N - Chill H2O Circ Pump N (11-Dec-18)

	OVERALL LEVEL	1K-20kHz	
MOH	.062 In/Sec	.552 G-s	1775.0 RPM
MOP	.183 G-s		
MOV	.069 In/Sec	.712 G-s	
MOA	.071 In/Sec	.679 G-s	
MIH	.064 In/Sec	.397 G-s	
MIP	.216 G-s		
MIV	.065 In/Sec	.388 G-s	
MIA	.093 In/Sec	.322 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.177 In/Sec	1.002 G-s	
PIP	.577 G-s		
PIV	.210 In/Sec	1.459 G-s	
PIA	.192 In/Sec	1.315 G-s	
* POH	.175 In/Sec	1.758 G-s	
* POP	1.142 G-s		
* POV	.157 In/Sec	1.485 G-s	
* POA	.275 In/Sec	.101 G-s	

SAR45M - Chill H2O Circ Pump S (05-Nov-18)

	OVERALL LEVEL	1K-20kHz	
MOH	.047 In/Sec	.658 G-s	1775.0 RPM
MOP	.324 G-s		
MOV	.076 In/Sec	.378 G-s	
MOA	.053 In/Sec	.298 G-s	
MIH	.027 In/Sec	.931 G-s	
MIP	.813 G-s		
MIV	.044 In/Sec	.304 G-s	
MIA	.046 In/Sec	.167 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.166 In/Sec	1.127 G-s	
PIP	.691 G-s		
PIV	.083 In/Sec	1.220 G-s	
PIA	.124 In/Sec	.565 G-s	
* POH	.077 In/Sec	.615 G-s	
* POP	.186 G-s		
* POV	.086 In/Sec	.705 G-s	

* POA	.085 In/Sec	.892 G-s		

SAR50A - Drying Tower Circ Pump W (13-Sep-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.227 In/Sec	.392 G-s	1775.0 RPM
MOP	.096 G-s		
MOV	.154 In/Sec	.148 G-s	
MOA	.245 In/Sec	.087 G-s	
MIH	.143 In/Sec	.800 G-s	
MIP	.198 G-s		
MIV	.160 In/Sec	.351 G-s	
MIA	.152 In/Sec	.113 G-s	
	OVERALL LEVEL	1K-20KHz	
* PIH	.269 In/Sec	.0007 G-s	
* PIP	.394 G-s		
* PIV	.129 In/Sec	.0021 G-s	
	OVERALL LEVEL	1K-20kHz	
* PIA	.783 In/Sec	.0024 G-s	
	OVERALL LEVEL	1K-20KHz	
* POH	.070 In/Sec	1.068 G-s	
* POP	.518 G-s		
* POV	.091 In/Sec	1.301 G-s	
	OVERALL LEVEL	1K-20kHz	
* POA	.109 In/Sec	.347 G-s	

SAR50B - Drying Tower Circ Pump E (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.044 In/Sec	1.636 G-s	1775.0 RPM
MOP	1.007 G-s		
MOV	.066 In/Sec	.558 G-s	
MOA	.134 In/Sec	.350 G-s	
MIH	.032 In/Sec	.744 G-s	
MIP	.418 G-s		
MIV	.068 In/Sec	.283 G-s	
MIA	.094 In/Sec	.138 G-s	
	OVERALL LEVEL	1K-20KHz	
* PIH	.076 In/Sec	.343 G-s	
* PIP	.192 G-s		
* PIV	.063 In/Sec	.305 G-s	
* PIA	.103 In/Sec	.196 G-s	
* POV	.108 In/Sec	.283 G-s	
* POA	.192 In/Sec	.208 G-s	

SAR55A - Neutralization Pump N (13-Sep-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.056 In/Sec	.058 G-s	3575.0 RPM
MOP	.0013 G-s		
MOV	.111 In/Sec	.032 G-s	
MOA	.075 In/Sec	.038 G-s	
MIH	.077 In/Sec	.180 G-s	
MIP	.014 G-s		
MIV	.078 In/Sec	.110 G-s	
MIA	.078 In/Sec	.054 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.071 In/Sec	.248 G-s	
PIP	.039 G-s		
PIV	.060 In/Sec	.171 G-s	

	PIA	.056 In/Sec	.161 G-s	
*	POH	.111 In/Sec	.514 G-s	
*	POP	.0088 G-s		
*	POV	.087 In/Sec	.502 G-s	
*	POA	.050 In/Sec	.288 G-s	

SAR55B - Neutralization Pump S (30-Nov-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.062 In/Sec	1.564 G-s	3575.0 RPM
	MOP	.188 G-s		
	MOV	.068 In/Sec	.501 G-s	
	MOA	.047 In/Sec	.549 G-s	
	MIH	.066 In/Sec	1.899 G-s	
	MIP	.098 G-s		
	MIV	.058 In/Sec	.392 G-s	
	MIA	.044 In/Sec	.383 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.043 In/Sec	.524 G-s	
	PIP	.084 G-s		
	PIV	.033 In/Sec	.240 G-s	
	PIA	.032 In/Sec	.197 G-s	
*	POH	.049 In/Sec	.500 G-s	
*	POP	.011 G-s		
*	POV	.045 In/Sec	.620 G-s	
*	POA	.042 In/Sec	.314 G-s	

SAR59A - Scrub Twr Circ Pmp W (30-Nov-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.032 In/Sec	.374 G-s	1775.0 RPM
	MOP	.174 G-s		
	MOV	.045 In/Sec	.074 G-s	
	MOA	.044 In/Sec	.166 G-s	
	MIH	.030 In/Sec	.454 G-s	
	MIP	.236 G-s		
	MIV	.035 In/Sec	.226 G-s	
	MIA	.025 In/Sec	.208 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.116 In/Sec	.345 G-s	
	PIP	.203 G-s		
	PIV	.083 In/Sec	.179 G-s	
	PIA	.098 In/Sec	.179 G-s	
	POH	.096 In/Sec	.284 G-s	
	POP	.147 G-s		
	POV	.083 In/Sec	.200 G-s	
	POA	.101 In/Sec	.121 G-s	

SAR59B - Scrub Twr Circ Pmp M (30-Nov-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.053 In/Sec	.527 G-s	1775.0 RPM
	MOP	.161 G-s		
	MOV	.056 In/Sec	.228 G-s	
	MOA	.050 In/Sec	.141 G-s	
	MIH	.062 In/Sec	.795 G-s	
	MIP	.502 G-s		
	MIV	.065 In/Sec	.584 G-s	
	MIA	.051 In/Sec	.409 G-s	
		OVERALL LEVEL	1K-20KHz	

	PIH	.241 In/Sec	.537 G-s	
	PIP	.355 G-s		
	PIV	.117 In/Sec	.753 G-s	
	PIA	.120 In/Sec	.272 G-s	
	POH	.150 In/Sec	.422 G-s	
	POP	.134 G-s		
	POV	.100 In/Sec	.179 G-s	
	POA	.146 In/Sec	.109 G-s	

SAR59C - Scrub Twr Circ Pmp E (30-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.019 In/Sec	.175 G-s	1775.0 RPM
MOP	.064 G-s		
MOV	.043 In/Sec	.064 G-s	
MOA	.040 In/Sec	.037 G-s	
MIH	.099 In/Sec	.646 G-s	
MIP	.451 G-s		
MIV	.055 In/Sec	.251 G-s	
MIA	.063 In/Sec	.209 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.108 In/Sec	.311 G-s	
PIP	.087 G-s		
PIV	.061 In/Sec	.084 G-s	
PIA	.060 In/Sec	.063 G-s	
POH	.104 In/Sec	.298 G-s	
POP	.134 G-s		
POV	.061 In/Sec	.149 G-s	
POA	.055 In/Sec	.089 G-s	

SAR54C - Weak Acid Xfer Pump S (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.063 In/Sec	.163 G-s	3575.0 RPM
MOP	.039 G-s		
MOV	.052 In/Sec	.105 G-s	
MOA	.029 In/Sec	.067 G-s	
MIH	.059 In/Sec	.337 G-s	
MIP	.066 G-s		
MIV	.052 In/Sec	.222 G-s	
MIA	.027 In/Sec	.086 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.107 In/Sec	.255 G-s	
PIP	.0054 G-s		
PIV	.044 In/Sec	.133 G-s	
PIA	.088 In/Sec	.159 G-s	
* POH	.086 In/Sec	.818 G-s	
* POP	.018 G-s		
* POV	.046 In/Sec	.758 G-s	
* POA	.058 In/Sec	.925 G-s	

SAR54B - Weak Acid Xfer Pump N (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.167 In/Sec	.242 G-s	3575.0 RPM
MOP	.098 G-s		
MOV	.095 In/Sec	.182 G-s	
MOA	.092 In/Sec	.126 G-s	
MIH	.139 In/Sec	.426 G-s	
MIP	.071 G-s		

MIV	.092 In/Sec	.141 G-s	
MIA	.156 In/Sec	.033 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.122 In/Sec	.595 G-s	
PIP	.107 G-s		
PIV	.070 In/Sec	.571 G-s	
PIA	.104 In/Sec	.198 G-s	
* POH	.073 In/Sec	.586 G-s	
* POP	.070 G-s		
* POV	.058 In/Sec	.460 G-s	
* POA	.081 In/Sec	1.555 G-s	

SAR 56A - N Oleum Storage Tank Feed (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
M1H	.080 In/Sec	.150 G-s	1775.0 RPM
M1P	.038 G-s		
M1V	.141 In/Sec	.109 G-s	
M1A	.138 In/Sec	.081 G-s	
M2H	.069 In/Sec	.231 G-s	
M2P	.124 G-s		
M2V	.070 In/Sec	.067 G-s	
M2A	.048 In/Sec	.039 G-s	
	OVERALL LEVEL	1K-20KHz	
P1H	.052 In/Sec	.193 G-s	
P1P	.119 G-s		
P1V	.037 In/Sec	.062 G-s	
P1A	.046 In/Sec	.062 G-s	
P2H	.065 In/Sec	.147 G-s	
P2P	.110 G-s		
P2V	.035 In/Sec	.084 G-s	
P2A	.063 In/Sec	.051 G-s	

SAR 56B - M Oleum Storage Tank Feed (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
M1H	.166 In/Sec	.224 G-s	1775.0 RPM
M1P	.098 G-s		
M1V	.230 In/Sec	.080 G-s	
M1A	.051 In/Sec	.048 G-s	
M2H	.068 In/Sec	.222 G-s	
M2P	.030 G-s		
M2V	.140 In/Sec	.050 G-s	
M2A	.053 In/Sec	.089 G-s	
	OVERALL LEVEL	1K-20KHz	
P1H	.103 In/Sec	.297 G-s	
P1P	.216 G-s		
P1V	.042 In/Sec	.147 G-s	
P1A	.069 In/Sec	.154 G-s	
P2H	.059 In/Sec	.143 G-s	
P2P	.044 G-s		
P2V	.091 In/Sec	.050 G-s	
P2A	.069 In/Sec	.027 G-s	

SAR 56C - S Oleum Storage Tank Feed (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
M1H	.137 In/Sec	.163 G-s	1775.0 RPM
M1P	.064 G-s		
M1V	.049 In/Sec	.254 G-s	

	M1A	.054 In/Sec	.108 G-s	
	M2H	.034 In/Sec	.207 G-s	
	M2P	.154 G-s		
	M2V	.027 In/Sec	.136 G-s	
	M2A	.029 In/Sec	.067 G-s	
		OVERALL LEVEL	1K-20KHz	
	P1H	.186 In/Sec	.117 G-s	
	P1P	.036 G-s		
	P1V	.064 In/Sec	.075 G-s	
	P1A	.032 In/Sec	.096 G-s	
	P2H	.149 In/Sec	.149 G-s	
	P2P	.106 G-s		
	P2V	.045 In/Sec	.118 G-s	
	P2A	.036 In/Sec	.080 G-s	

SAR57A - Oleum Twr Circ Pump W (24-Nov-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.167 In/Sec	1.035 G-s	1775.0 RPM
	MOP	.056 G-s		
	MOV	.115 In/Sec	.142 G-s	
	MOA	.111 In/Sec	.196 G-s	
	MIH	.115 In/Sec	1.059 G-s	
	MIP	.407 G-s		
	MIV	.119 In/Sec	.803 G-s	
	MIA	.103 In/Sec	.584 G-s	
		OVERALL LEVEL	1K-20KHz	
*	PIH	.100 In/Sec	2.143 G-s	
*	PIP	2.292 G-s		
*	PIV	.082 In/Sec	.590 G-s	
*	PIA	.100 In/Sec	.590 G-s	

SAR57B - Oleum Twr Circ Pump E (20-Aug-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.208 In/Sec	.286 G-s	1775.0 RPM
	MOP	.125 G-s		
	MOV	.059 In/Sec	.107 G-s	
	MOA	.226 In/Sec	.087 G-s	
	MIH	.054 In/Sec	.397 G-s	
	MIP	.223 G-s		
	MIV	.058 In/Sec	.095 G-s	
	MIA	.069 In/Sec	.160 G-s	
		OVERALL LEVEL	1K-20KHz	
*	PIH	.118 In/Sec	3.005 G-s	
*	PIP	2.282 G-s		
*	PIV	.069 In/Sec	.797 G-s	
*	PIA	.100 In/Sec	1.060 G-s	

SAR61NM - Spent Acid Circ Pmp N (21-Jul-21)

		OVERALL LEVEL	1K-20kHz	
*	MOH	.018 In/Sec	.176 G-s	1775.0 RPM
*	MOP	.040 G-s		
*	MOV	.015 In/Sec	.175 G-s	
	MIH	.013 In/Sec	.545 G-s	
	MIP	.261 G-s		
	MIV	.022 In/Sec	.205 G-s	
	MIA	.036 In/Sec	.116 G-s	
		OVERALL LEVEL	1K-20KHz	

	PIH	.018 In/Sec	.128 G-s	
	PIP	.027 G-s		
	PIV	.032 In/Sec	.087 G-s	
	PIA	.086 In/Sec	.127 G-s	
*	POH	.013 In/Sec	.120 G-s	
*	POP	.085 G-s		
*	POV	.016 In/Sec	.049 G-s	
*	POA	.019 In/Sec	.094 G-s	

SAR62 - Spent Acid Feed Pmp N (11-Jun-20)

	OVERALL LEVEL	1K-20kHz	
MOH	.018 In/Sec	.115 G-s	3575.0 RPM
MOP	.014 G-s		
MOV	.039 In/Sec	.268 G-s	
MOA	.033 In/Sec	.085 G-s	
MIH	.019 In/Sec	.112 G-s	
MIP	.0025 G-s		
MIV	.033 In/Sec	.052 G-s	
MIA	.032 In/Sec	.071 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.017 In/Sec	.103 G-s	
PIP	.017 G-s		
PIV	.035 In/Sec	.302 G-s	
PIA	.030 In/Sec	.080 G-s	
* POA	.144 In/Sec	.480 G-s	

SAR63EM - Spent Acid Feed Pmp E (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.038 In/Sec	.379 G-s	3575.0 RPM
MOP	.154 G-s		
MOV	.040 In/Sec	.104 G-s	
MOA	.069 In/Sec	.082 G-s	
MIH	.044 In/Sec	.510 G-s	
MIP	.205 G-s		
MIV	.054 In/Sec	.132 G-s	
MIA	.067 In/Sec	.108 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.082 In/Sec	.938 G-s	
PIP	.040 G-s		
PIV	.100 In/Sec	.730 G-s	
PIA	.103 In/Sec	1.072 G-s	
POH	.066 In/Sec	.711 G-s	
POP	.033 G-s		
POV	.082 In/Sec	.441 G-s	
POA	.055 In/Sec	.324 G-s	

SAR63WM - Spent Acid Feed Pmp W (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.032 In/Sec	.271 G-s	3575.0 RPM
MOP	.0036 G-s		
MOV	.025 In/Sec	.043 G-s	
MOA	.025 In/Sec	.046 G-s	
MIH	.030 In/Sec	.213 G-s	
MIP	.0058 G-s		
MIV	.038 In/Sec	.104 G-s	
MIA	.011 In/Sec	.108 G-s	
	OVERALL LEVEL	1K-20KHz	

PIH	.054 In/Sec	.588 G-s	
PIP	.127 G-s		
PIV	.049 In/Sec	.430 G-s	
PIA	.058 In/Sec	.475 G-s	
* POH	.105 In/Sec	.315 G-s	
* POP	.013 G-s		
* POV	.059 In/Sec	.268 G-s	
* POA	.037 In/Sec	.218 G-s	

SAR66A - Vertical Cool Twr Pump #1 (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.092 In/Sec	.167 G-s	1195.0 RPM
MOP	.084 G-s		
MOV	.049 In/Sec	.468 G-s	
MOA	.103 In/Sec	.229 G-s	
MIH	.097 In/Sec	.825 G-s	
MIP	.327 G-s		
MIV	.084 In/Sec	.752 G-s	
MIA	.082 In/Sec	.360 G-s	
	OVERALL LEVEL	1K-20KHz	
* PIH	.082 In/Sec	.693 G-s	
* PIP	.337 G-s		
* PIV	.043 In/Sec	.330 G-s	
* PIA	.040 In/Sec	.130 G-s	

SAR66B - Vertical Cool Twr Pump #2 (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.244 In/Sec	.132 G-s	1195.0 RPM
MOP	.074 G-s		
MOV	.174 In/Sec	.099 G-s	
MOA	.467 In/Sec	.079 G-s	
MIH	.132 In/Sec	.169 G-s	
MIP	.100 G-s		
MIV	.205 In/Sec	.076 G-s	
MIA	.194 In/Sec	.064 G-s	
	OVERALL LEVEL	1K-20KHz	
* PIH	.085 In/Sec	.386 G-s	
* PIP	.236 G-s		
* PIV	.069 In/Sec	.123 G-s	
* PIA	.074 In/Sec	.087 G-s	

SAR66C - Vertical Cool Twr Pump #3 (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.398 In/Sec	.068 G-s	1195.0 RPM
MOP	.038 G-s		
MOV	.084 In/Sec	.014 G-s	
MOA	.252 In/Sec	.012 G-s	
MIH	.183 In/Sec	.056 G-s	
MIP	.031 G-s		
MIV	.125 In/Sec	.036 G-s	
MIA	.097 In/Sec	.026 G-s	

SAR66D - Vertical Cool Twr Pump #4 (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.180 In/Sec	.111 G-s	1195.0 RPM
MOP	.059 G-s		
MOV	.068 In/Sec	.074 G-s	

	MOA	.134 In/Sec	.063 G-s	
	MIH	.078 In/Sec	.054 G-s	
	MIP	.027 G-s		
	MIV	.087 In/Sec	.035 G-s	
	MIA	.087 In/Sec	.034 G-s	
		OVERALL LEVEL	1K-20KHz	
*	PIH	.061 In/Sec	.324 G-s	
*	PIP	.170 G-s		
*	PIV	.059 In/Sec	.240 G-s	
*	PIA	.039 In/Sec	.052 G-s	

SAR66E - Vertical Cool Twr Pump #5 (14-Sep-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.111 In/Sec	.266 G-s	1195.0 RPM
	MOP	.150 G-s		
	MOV	.593 In/Sec	.392 G-s	
	MOA	.581 In/Sec	.329 G-s	
	MIH	.043 In/Sec	.546 G-s	
	MIP	.323 G-s		
	MIV	.174 In/Sec	.661 G-s	
	MIA	.203 In/Sec	.360 G-s	
		OVERALL LEVEL	1K-20KHz	
*	PIH	.058 In/Sec	.425 G-s	
*	PIP	.230 G-s		
*	PIV	.051 In/Sec	.294 G-s	
*	PIA	.042 In/Sec	.100 G-s	

SAR70 - SAR Refrig Unit Carrier (11-Dec-18)

		OVERALL LEVEL	1K-20kHz	
	MOH	.087 In/Sec	.939 G-s	3575.0 RPM
	MOP	.136 G-s		
	MOV	.140 In/Sec	.237 G-s	
	MOA	.085 In/Sec	.279 G-s	
	MIH	.114 In/Sec	1.155 G-s	
	MIP	.170 G-s		
	MIV	.195 In/Sec	.460 G-s	
	MIA	.089 In/Sec	.477 G-s	
	CIH	.132 In/Sec		
	CIP	.044 G-s		
	CIV	.087 In/Sec		
	CIA	.103 In/Sec		
	COH	.108 In/Sec		
	COP	.039 G-s		
	COV	.116 In/Sec		
	COA	.076 In/Sec		

SAR78A - Cooling Tower Fan #1 (30-Nov-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.176 In/Sec	.477 G-s	1775.0 RPM
	MOP	.160 G-s		
	MOV	.325 In/Sec	.272 G-s	
	MOA	.390 In/Sec	.152 G-s	
	MIH	.127 In/Sec	.463 G-s	
	MIP	.225 G-s		
	MIV	.342 In/Sec	.223 G-s	
	MIA	.415 In/Sec	.211 G-s	

SAR78B - Cooling Tower Fan #2 (30-Nov-21)

		OVERALL LEVEL	1K-20kHz	
MOH	.106 In/Sec	1.875 G-s	1775.0 RPM	
MOP	.052 G-s			
MOV	.074 In/Sec	.474 G-s		
MOA	.188 In/Sec	.214 G-s		
MIH	.120 In/Sec	1.955 G-s		
MIP	.220 G-s			
MIV	.145 In/Sec	.987 G-s		
MIA	.166 In/Sec	.423 G-s		

SAR78C - Cooling Tower Fan #3 (30-Nov-21)

		OVERALL LEVEL	1K-20kHz	
MOH	.089 In/Sec	.678 G-s	1775.0 RPM	
MOP	.204 G-s			
MOV	.088 In/Sec	1.388 G-s		
MOA	.191 In/Sec	.383 G-s		
MIH	.086 In/Sec	1.303 G-s		
MIP	.378 G-s			
MIV	.155 In/Sec	.760 G-s		
MIA	.151 In/Sec	.312 G-s		
		OVERALL LEVEL	1K-20KHz	
* FIV	.087 In/Sec	.231 G-s		
* FIA	.148 In/Sec	.365 G-s		
* FOV	.091 In/Sec	.583 G-s		
* FOA	.159 In/Sec	.684 G-s		

SAR78D - Cooling Tower Fan #4 (30-Nov-21)

		OVERALL LEVEL	1K-20kHz	
MOH	.235 In/Sec	1.890 G-s	1775.0 RPM	
MOP	1.176 G-s			
MOV	.551 In/Sec	.583 G-s		
MOA	.653 In/Sec	.385 G-s		
MIH	.250 In/Sec	.952 G-s		
MIP	.536 G-s			
MIV	.863 In/Sec	.396 G-s		
MIA	.628 In/Sec	.278 G-s		

SAR127 - Final Twr Pumpout Drain Pmp (30-Aug-21)

		OVERALL LEVEL	1K-20kHz	
MOH	.127 In/Sec	.398 G-s	1775.0 RPM	
MOP	.066 G-s			
MOV	.019 In/Sec	.150 G-s		
MOA	.129 In/Sec	.120 G-s		
MIH	.018 In/Sec	.448 G-s		
MIP	.148 G-s			
MIV	.029 In/Sec	.114 G-s		
MIA	.019 In/Sec	.175 G-s		
		OVERALL LEVEL	1K-20KHz	
PIH	.054 In/Sec	.060 G-s		
PIP	.034 G-s			
PIV	.023 In/Sec	.123 G-s		
PIA	.032 In/Sec	.052 G-s		
* POH	.025 In/Sec	.273 G-s		
* POP	.125 G-s			
* POV	.024 In/Sec	.247 G-s		
* POA	.068 In/Sec	1.228 G-s		

SAR128 - Oleum Fume Scrub Blwr (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
* MOH	.118 In/Sec	.229 G-s	3575.0 RPM
* MOP	.024 G-s		
* MOV	.137 In/Sec	.137 G-s	
* MOA	.159 In/Sec	.079 G-s	
MIH	.043 In/Sec	.274 G-s	
MIP	.032 G-s		
MIV	.094 In/Sec	.157 G-s	
MIA	.070 In/Sec	.143 G-s	
	OVERALL LEVEL	1K-20KHz	
FIH	.031 In/Sec	.310 G-s	
FIP	.036 G-s		
FIV	.027 In/Sec	.281 G-s	
FIA	.049 In/Sec	.278 G-s	
FOH	.046 In/Sec	.450 G-s	
FOP	.075 G-s		
FOV	.063 In/Sec	.316 G-s	
FOA	.106 In/Sec	.167 G-s	

SAR135 - Spent Acid Circ Pmp E (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.029 In/Sec	.150 G-s	1775.0 RPM
MOP	.024 G-s		
MOV	.039 In/Sec	.036 G-s	
MOA	.045 In/Sec	.027 G-s	
MIH	.044 In/Sec	.299 G-s	
MIP	.176 G-s		
MIV	.046 In/Sec	.038 G-s	
MIA	.040 In/Sec	.040 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.022 In/Sec	.091 G-s	
PIP	.094 G-s		
PIV	.024 In/Sec	.058 G-s	
PIA	.022 In/Sec	.055 G-s	
POH	.022 In/Sec	.115 G-s	
POP	.068 G-s		
POV	.024 In/Sec	.063 G-s	
POA	.023 In/Sec	.054 G-s	

SAR137A - Contain Pit Pump N (24-Nov-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.106 In/Sec	.255 G-s	1775.0 RPM
MOP	.103 G-s		
MOV	.406 In/Sec	.124 G-s	
MOA	.133 In/Sec	.074 G-s	
* MIH	.118 In/Sec	.181 G-s	
* MIP	.081 G-s		
* MIV	.088 In/Sec	.116 G-s	
* MIA	.151 In/Sec	.215 G-s	

SAR137B - Contain Pit PumpS (27-Apr-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.052 In/Sec	.277 G-s	1775.0 RPM
MOP	.157 G-s		
MOV	.065 In/Sec	.106 G-s	

	MOA	.103 In/Sec	.260 G-s	
*	MIH	.050 In/Sec	.217 G-s	
*	MIP	.116 G-s		
*	MIV	.147 In/Sec	.087 G-s	
*	MIA	.079 In/Sec	.128 G-s	
		OVERALL LEVEL	1K-20KHz	
*	PIH	.466 In/Sec	.176 G-s	
*	PIP	.103 G-s		
*	PIV	.079 In/Sec	.111 G-s	
*	PIA	.094 In/Sec	.187 G-s	
*	POH	.301 In/Sec	.485 G-s	
*	POP	.313 G-s		
*	POV	.395 In/Sec	.543 G-s	
*	POA	.449 In/Sec	.048 G-s	

SAR156 - Spent Acid Feed Booster N (14-Sep-21)

		OVERALL LEVEL	1K-20kHz	
	MIH	.060 In/Sec	.323 G-s	1109.0 RPM
	MIP	.206 G-s		
	MIV	.042 In/Sec	.222 G-s	
	MIA	.046 In/Sec	.228 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.168 In/Sec	.074 G-s	
	PIP	.050 G-s		
	PIV	.033 In/Sec	.099 G-s	
	PIA	.070 In/Sec	.112 G-s	
*	POA	.025 In/Sec	.100 G-s	1311.0 RPM

SAR157 - Spent Acid Feed Booster S (24-Nov-21)

		OVERALL LEVEL	1K-20kHz	
*	MOH	.044 In/Sec	.442 G-s	1180.0 RPM
*	MOP	.237 G-s		
*	MOV	.078 In/Sec	.630 G-s	
	MIH	.048 In/Sec	.389 G-s	1100.0 RPM
	MIP	.241 G-s		
	MIV	.052 In/Sec	.110 G-s	
	MIA	.114 In/Sec	.029 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.049 In/Sec	.084 G-s	
	PIP	.054 G-s		
	PIV	.053 In/Sec	.062 G-s	
	PIA	.052 In/Sec	.073 G-s	
*	POH	.031 In/Sec	.053 G-s	1180.0 RPM
*	POP	.033 G-s		
*	POV	.030 In/Sec	.078 G-s	
*	POA	.019 In/Sec	.046 G-s	1445.0 RPM

SAR161A - N SAR Cool Twr Fan W (14-Sep-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.119 In/Sec	1.018 G-s	1775.0 RPM
	MOP	.381 G-s		
	MOV	9.260 In/Sec	.251 G-s	
	MOA	.340 In/Sec	.409 G-s	
	MIH	3.356 In/Sec	1.034 G-s	
	MIP	.426 G-s		
	MIV	.199 In/Sec	.487 G-s	
	MIA	3.355 In/Sec	.259 G-s	

		OVERALL LEVEL	1K-20KHz	
*	FIV	.213 In/Sec	.284 G-s	
*	FIA	.131 In/Sec	.367 G-s	
*	FOV	.184 In/Sec	.425 G-s	
*	FOA	.172 In/Sec	.429 G-s	

SAR161B - N SAR Cool Twr Fan Middle (14-Sep-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.197 In/Sec	1.110 G-s	1775.0 RPM
	MOP	.510 G-s		
	MOV	.143 In/Sec	.487 G-s	
	MOA	.207 In/Sec	.255 G-s	
	MIH	.125 In/Sec	.901 G-s	
	MIP	.235 G-s		
	MIV	.131 In/Sec	.158 G-s	
	MIA	.137 In/Sec	.404 G-s	

SAR161C - N SAR Cool Twr Fan E (14-Sep-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.105 In/Sec	.296 G-s	1775.0 RPM
	MOP	.110 G-s		
	MOV	.136 In/Sec	.115 G-s	
	MOA	.246 In/Sec	.066 G-s	
	MIH	.430 In/Sec	.419 G-s	
	MIP	.200 G-s		
	MIV	.160 In/Sec	.162 G-s	
	MIA	.408 In/Sec	.116 G-s	

SAR222 - Oleum Twr Drain Pmp (30-Aug-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.047 In/Sec	.473 G-s	3575.0 RPM
	MOP	.013 G-s		
	MOV	.092 In/Sec	.951 G-s	
	MOA	.076 In/Sec	.693 G-s	
	MIH	.048 In/Sec	.514 G-s	
	MIP	.017 G-s		
	MIV	.101 In/Sec	.560 G-s	
	MIA	.064 In/Sec	.253 G-s	
		OVERALL LEVEL	1K-20KHz	
	PIH	.203 In/Sec	3.247 G-s	
	PIP	.014 G-s		
	PIV	.181 In/Sec	1.417 G-s	
*	POH	.157 In/Sec	2.925 G-s	
*	POP	.018 G-s		
*	POV	.150 In/Sec	2.260 G-s	
	POA	.140 In/Sec	1.249 G-s	

SAR231A - Final Twr Circ Pump N (30-Nov-21)

		OVERALL LEVEL	1K-20kHz	
	MOH	.158 In/Sec	.940 G-s	1775.0 RPM
	MOP	.450 G-s		
	MOV	.047 In/Sec	.304 G-s	
	MOA	.168 In/Sec	.184 G-s	
	MIH	.097 In/Sec	.827 G-s	
	MIP	.323 G-s		
	MIV	.036 In/Sec	.185 G-s	
	MIA	.103 In/Sec	.189 G-s	

	OVERALL LEVEL	1K-20KHz	
* PIH	.053 In/Sec	1.533 G-s	
* PIP	.792 G-s		
* PIV	.083 In/Sec	.397 G-s	
* PIA	.094 In/Sec	.325 G-s	
* POH	.098 In/Sec	1.372 G-s	
* POP	.802 G-s		
* POV	.108 In/Sec	.541 G-s	
* POA	.149 In/Sec	.448 G-s	

SAR231B - Final Twr Circ Pump S (16-Jun-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.063 In/Sec	.379 G-s	1775.0 RPM
MOP	.239 G-s		
MOV	.070 In/Sec	.723 G-s	
MOA	.035 In/Sec	.114 G-s	
MIH	.049 In/Sec	.391 G-s	
MIP	.207 G-s		
MIV	.044 In/Sec	.175 G-s	
MIA	.041 In/Sec	.080 G-s	
	OVERALL LEVEL	1K-20KHz	
* PIH	.060 In/Sec	1.115 G-s	
* PIP	.660 G-s		
* PIV	.070 In/Sec	.530 G-s	
* PIA	.126 In/Sec	.624 G-s	

SAR233 - InterpassTwr Drain Pmp1 (08-Mar-21)

	OVERALL LEVEL	1K-20kHz	
MOH	.043 In/Sec	.097 G-s	3575.0 RPM
MOP	.0015 G-s		
MOV	.077 In/Sec	.301 G-s	
MOA	.042 In/Sec	.115 G-s	
MIH	.042 In/Sec	.136 G-s	
MIP	.011 G-s		
MIV	.045 In/Sec	.181 G-s	
MIA	.032 In/Sec	.082 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.037 In/Sec	.041 G-s	
PIP	.0020 G-s		
PIV	.034 In/Sec	.178 G-s	
PIA	.041 In/Sec	.043 G-s	
* POH	.034 In/Sec	.181 G-s	
* POP	.015 G-s		
* POV	.030 In/Sec	.202 G-s	
* POA	.036 In/Sec	.273 G-s	

Clarification Of Vibration Units:

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

* - Indicates Data Has Date/Time Different From Equipment Date/Time