HI-SPEED INDUSTRIAL SERVICE

MILLINGTON, TN

August 17, 2020

Arkema

Subject: August week 2 vibration service 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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Weekly Peroxide Route Critical Equipment Observations

C Concentrator Vacuum Pump 2130-1
Vibrations appear to be normal this survey. No actions required.

Agitator, Hydrogenator C 7001-01
The highest motor overall is 0.182"/sec velocity peak for the inboard vertical vibration. Data shows multiple lower frequency harmonics of shaft speed as well as non-synchronous peaks in the upper frequencies. The bearings and fits in the replacement motor could be in some distress. A 3x RPM vibration is dominant and could indicate a coupling or alignment issue.
Motor is rated a Class I Defect.

A/B Concentrator Vacuum Pump 57
This unit's vibration has increased to 0.155"/sec velocity peak in the motor and is mostly 1. The speed has increased to near 900 RPM from around 600. We will continue to watch for changes.

Flash Vacuum Pump 2130-1
Vibrations appear to be normal this survey. No actions required.

Air Compressor C-201
Rotor bar vibrations are normal for this motor's history. The trend clearly shows that the vibrations vary considerably over time. We still believe these motors have possible weak rotor bar end connections that cause the vibrations to fluctuate higher due to loading. We will continue to monitor this unit for changes No actions required.

Air Compressor C-202
Rotor bar vibrations are normal for this motor's history. The trend clearly shows that the vibrations vary considerably over time. We are still watching an increase in acceleration for the compressor section. Rated a Class I Defect this survey. No immediate actions required at this time.

Air Compressor C-203
Rotor bar vibrations are higher for this motor's history. The trend clearly shows that the vibrations vary considerably over time. We still believe these motors have possible weak rotor bar end connections that cause the vibrations to fluctuate higher due to loading. No actions required.

Instrument Air Compressor
The male and female shaft vibrations still seem to show gear mesh and harmonics as well as a beat vibration occasionally. The female shaft inboard horizontal overall vibration has increased to near 10 g's RMS. Two harmonic vibrations at near 1500 and 1600 Hz are beating near 120 Hz. The beat is strong since the vibrations are close and of nearly equal amplitude. We will keep a close eye on this unit going forward. **Rated a Class I Defect for now.**

Air Compressor NASH A 201-08A
Highest vibration is still in the pump itself at just over 0.254"/sec velocity peak for the outboard vertical. The vibration spectrum is dominated by a 20-order vibration, which is thought to be vane pass. **Rated a Class I Defect.**

D Hydrogenator Agitator 9002-10
Vibration data shows an increase in vibrations this survey. Highest amplitude is 0.246"/sec velocity peak for the gearbox top bearing plate in the N/S direction. **Still rated a Class I Defect.**

Monthly Peroxide Route Equipment Observations

Middle Mix Bed Water Pump 191-07
The pump still suffers from vane pass. The vibration at 5 orders is 0.342"/sec velocity peak. Ensure the unit is operating in the best operating point in the curve if possible. **Rated a Class II Defect.**

Monthly Hydrogen Route Equipment Observations

ID Blower C1
Outboard blower bearing data is dominated by the fundamental and two harmonics. Recommend re-checking the bearings; including the feet bolts, structures, set clearances and check housing clearances. Trim balancing should be performed last. **Rated a Class I Defect.**

East cooling tower pump
Pump inboard vertical overall is at 0.425"/sec velocity peak and is dominated by shaft speed. Inspect the unit for loose fasteners and coupling issue. Check for soft foot and re-align. **Rated a Class II Defect.**

Semi-Annual 70% Peroxide Pump Equipment Observations

Surveyed equipment not reportable this survey.

Abbreviated Last Measurement Summary

Database: Arkema.rbm
Station: PEROXIDE
Route No. 4: ARK WK 2
Report Date: 17-Aug-20 07:11

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
2130-1old - C Concentrator Vacuum Pump	(14-Aug-20)	
	OVERALL LEVEL	1-20 KHz
11 - Motor OB HOR	.073 In/Sec	.429 G-s
21 - Motor IB HOR	.092 In/Sec	.393 G-s
23 - Motor IB AXIAL	.182 In/Sec	.181 G-s
71 - Compressor IB HOR	.134 In/Sec	1.125 G-s
81 - Compressor OB Horiz	.184 In/Sec	.618 G-s
83 - Compressor OB Axial	.095 In/Sec	1.454 G-s
7000-01 - AGITATOR,HYDROGENATOR C	(14-Aug-20)	
	OVERALL LEVEL	1-20 KHZ
01 - DRIVESHAFT BRG-NORTH-SOUTH	.043 In/Sec	.015 G-s
02 - DRIVESHAFT BRG-EAST-WEST	.048 In/Sec	.025 G-s
03 - DRIVESHAFT BRG-VERTICAL	.043 In/Sec	.029 G-s
11 - C Hydro Agitator MOTOR OB HORIZ	.107 In/Sec	.905 G-s
12 - C Hydro Agitator MOTOR OB VERT	.108 In/Sec	.753 G-s
13 - C Hydro Agitator Motor OB Axial	.174 In/Sec	.478 G-s
21 - C Hydro Agitator MOTOR IB HORIZ	.115 In/Sec	.188 G-s
22 - C Hydro Agitator MOTOR IB VERT	.182 In/Sec	.491 G-s
23 - C Hydro Agitator Motor IB Axial	.160 In/Sec	.692 G-s
31 - C Hydro Agitator GrBx In Horizon	.107 In/Sec	.612 G-s
32 - C Hydro Agitator GrBx In VERT	.092 In/Sec	.757 G-s
33 - C Hydro Agitator GrBx In Axial	.049 In/Sec	.286 G-s
41 - C Hydro Agitator GrBx Top HZ E-W	.049 In/Sec	.489 G-s
42 - C Hydro Agitator GrBx TOP HZ N-S	.033 In/Sec	.597 G-s
51 - C Hydro Agitator GrBx BOT HZ E-W	.021 In/Sec	.313 G-s
52 - C Hydro Agitator GrBx BOT HZ N-S	.023 In/Sec	.547 G-s
53 - C Hydro Agitator GrBx Top Axial	.048 In/Sec	.524 G-s
57 - A/B Concentr Vac Pmp-var RPM	(14-Aug-20)	
	OVERALL LEVEL	1-20 KHz
11 - Motor OB HOR	.146 In/Sec	.490 G-s
12 - Motor OB VERT	.076 In/Sec	.604 G-s
21 - Motor IB HOR	.155 In/Sec	.266 G-s
23 - Motor IB AXIAL	.055 In/Sec	.446 G-s
71 - Compressor IB HOR	.111 In/Sec	.695 G-s
81 - Compressor OB Horiz	.126 In/Sec	.775 G-s
83 - Compressor OB Axial	.042 In/Sec	1.019 G-s
2130-1 - FLASH VAP VAC PUMP-var speed	(14-Aug-20)	
	OVERALL LEVEL	1-20 KHz
11 - Motor OB HOR	.035 In/Sec	.193 G-s
12 - Motor OB VERT	.052 In/Sec	.391 G-s

21 - Motor IB HOR	.038 In/Sec	1.096 G-s
22 - Motor IB VERT	.043 In/Sec	.978 G-s
23 - Motor IB AXIAL	.059 In/Sec	.551 G-s
71 - Compressor IB HOR	.062 In/Sec	.413 G-s
72 - Compressor IB VERT	.068 In/Sec	.429 G-s
81 - Compressor OB Horiz	.077 In/Sec	.371 G-s
82 - Compressor OB VERT	.087 In/Sec	.322 G-s
83 - Compressor OB Axial	.043 In/Sec	.375 G-s

C-203 - C-203 Comp	(14-Aug-20)	
	OVERALL LEVEL	1-20 KHz
11 - MOTOR OB HOR	.027 In/Sec	.919 G-s
12 - MOTOR OB VERT	.134 In/Sec	4.883 G-s
21 - MOTOR IB HOR	.029 In/Sec	.952 G-s
22 - MOTOR IB VERT	.059 In/Sec	2.109 G-s
23 - MOTOR IB AXIAL	.056 In/Sec	2.078 G-s
	OVERALL LEVEL	1-20 KHZ
71M - COMP MALE SHAFT IB HOR	.038 In/Sec	1.727 G-s
72M - COMP MALE SHAFT IB VERT	.054 In/Sec	5.291 G-s
73M - COMP MALE SHAFT IB AXIAL	.058 In/Sec	1.374 G-s
81M - COMP MALE SHAFT OB HOR	.052 In/Sec	3.375 G-s
82M - COMP MALE SHAFT OB VERT	.051 In/Sec	1.989 G-s
71F - COMP FEMALE SHAFT IB HOR	.045 In/Sec	3.458 G-s
72F - COMP FEMALE SHAFT IB VERT	.057 In/Sec	1.496 G-s
73F - COMP FEMALE SHAFT IB AXIAL	.084 In/Sec	6.927 G-s
81F - COMP FEMALE SHAFT OB HOR	.041 In/Sec	1.766 G-s
82F - COMP FEMALE SHAFT OB VERT	.042 In/Sec	.885 G-s

C-202 - C-202 Comp	(14-Aug-20)	
	OVERALL LEVEL	1-20 KHz
11 - MOTOR OB HOR	.034 In/Sec	.637 G-s
12 - MOTOR OB VERT	.102 In/Sec	.464 G-s
21 - MOTOR IB HOR	.058 In/Sec	.769 G-s
22 - MOTOR IB VERT	.106 In/Sec	2.602 G-s
23 - MOTOR IB AXIAL	.044 In/Sec	.222 G-s
	OVERALL LEVEL	1-20 KHZ
71M - COMP MALE SHAFT IB HOR	.047 In/Sec	3.021 G-s
72M - COMP MALE SHAFT IB VERT	.051 In/Sec	1.581 G-s
73M - COMP MALE SHAFT IB AXIAL	.081 In/Sec	1.924 G-s
81M - COMP MALE SHAFT OB HOR	.059 In/Sec	2.752 G-s
82M - COMP MALE SHAFT OB VERT	.053 In/Sec	1.801 G-s
71F - COMP FEMALE SHAFT IB HOR	.042 In/Sec	2.025 G-s
72F - COMP FEMALE SHAFT IB VERT	.059 In/Sec	.619 G-s
73F - COMP FEMALE SHAFT IB AXIAL	.061 In/Sec	3.196 G-s
81F - COMP FEMALE SHAFT OB HOR	.045 In/Sec	2.360 G-s
82F - COMP FEMALE SHAFT OB VERT	.054 In/Sec	1.215 G-s

C-201 - C-201 Comp	(14-Aug-20)	
	OVERALL LEVEL	1-20 KHz
11 - MOTOR OB HOR	.086 In/Sec	.350 G-s
12 - MOTOR OB VERT	.102 In/Sec	2.263 G-s
21 - MOTOR IB HOR	.096 In/Sec	.599 G-s
22 - MOTOR IB VERT	.038 In/Sec	.409 G-s
23 - MOTOR IB AXIAL	.050 In/Sec	.222 G-s
	OVERALL LEVEL	1-20 KHZ
71M - COMP MALE SHAFT IB HOR	.049 In/Sec	3.012 G-s
72M - COMP MALE SHAFT IB VERT	.034 In/Sec	1.459 G-s

73M - COMP MALE SHAFT IB AXIAL	.081 In/Sec	1.214 G-s
81M - COMP MALE SHAFT OB HOR	.070 In/Sec	5.180 G-s
82M - COMP MALE SHAFT OB VERT	.056 In/Sec	2.339 G-s
71F - COMP FEMALE SHAFT IB HOR	.055 In/Sec	2.762 G-s
72F - COMP FEMALE SHAFT IB VERT	.045 In/Sec	1.022 G-s
73F - COMP FEMALE SHAFT IB AXIAL	.049 In/Sec	1.560 G-s
81F - COMP FEMALE SHAFT OB HOR	.055 In/Sec	2.460 G-s
82F - COMP FEMALE SHAFT OB VERT	.039 In/Sec	.411 G-s

new AC - INSTRUMENT AIR COMPRESSOR	(14-Aug-20)	
	OVERALL LEVEL	1-20 KHz
11 - MOTOR OB HOR	.137 In/Sec	1.032 G-s
12 - MOTOR OB VERT	.107 In/Sec	.614 G-s
13 - MOTOR OB AXIAL	.060 In/Sec	.522 G-s
21 - MOTOR IB HOR	.148 In/Sec	1.138 G-s
22 - MOTOR IB VERT	.082 In/Sec	1.098 G-s
23 - MOTOR IB AXIAL	.056 In/Sec	1.066 G-s
	OVERALL LEVEL	1-20 KHZ
71F - COMP FEMALE SHAFT IB HOR	.296 In/Sec	10.21 G-s
72F - COMP FEMALE SHAFT IB VERT	.161 In/Sec	3.943 G-s
73F - COMP FEMALE SHAFT IB AXIAL	.157 In/Sec	2.751 G-s
81F - COMP FEMALE SHAFT OB HOR	.159 In/Sec	4.197 G-s
82F - COMP FEMALE SHAFT OB VERT	.246 In/Sec	7.079 G-s
83F - COMP FEMALE SHAFT OB AXIAL	.183 In/Sec	4.045 G-s
71M - COMP MALE SHAFT IB HOR	.118 In/Sec	4.644 G-s
72M - COMP MALE SHAFT IB VERT	.183 In/Sec	6.195 G-s
73M - COMP MALE SHAFT IB AXIAL	.144 In/Sec	5.485 G-s
81M - COMP MALE SHAFT OB HOR	.170 In/Sec	4.681 G-s
82M - COMP MALE SHAFT OB VERT	.197 In/Sec	3.425 G-s
83M - COMP MALE SHAFT OB AXIAL	.197 In/Sec	5.175 G-s

201-08A - COMPRESSOR,NASH A 201-08A	(14-Aug-20)	
	OVERALL LEVEL	1-20 KHz
11 - Nash Compr A Motor OB Horiz	.058 In/Sec	.123 G-s
12 - Nash Compr A Motor OB Vertical	.061 In/Sec	.129 G-s
13 - Nash Compr A Motor OB Axial	.134 In/Sec	.074 G-s
21 - Nash Compr A Motor IB Horiz	.062 In/Sec	.089 G-s
22 - Nash Compr A Motor IB VERT	.063 In/Sec	.095 G-s
23 - Nash Compr A Motor IB AXIAL	.117 In/Sec	.118 G-s
71 - Nash Compr A COMP IB HORIZ	.128 In/Sec	.607 G-s
72 - Nash Compr A Compressor IB Verti	.211 In/Sec	.848 G-s
73 - Nash Compr A COMP IB AXIAL	.122 In/Sec	.212 G-s
81 - Nash Compr A COMP OB HORIZ	.144 In/Sec	.519 G-s
82 - Nash Compr A Compressor OB Verti	.254 In/Sec	.765 G-s
83 - Nash Compr A Compressor OB Axial	.134 In/Sec	.441 G-s

202-05 - NASH SEAL LIQUID PUMP-A	(14-Aug-20)	
	OVERALL LEVEL	1-20 KHz
11 - MOTOR OUTBOARD HORIZ	.016 In/Sec	.039 G-s
21 - MOTOR INBOARD HORIZ	.017 In/Sec	.090 G-s
23 - MOTOR INBOARD AXIAL	.027 In/Sec	.077 G-s
71 - PUMP HORIZ	.043 In/Sec	.082 G-s
72 - PUMP VERT	.018 In/Sec	.053 G-s

9002-10 - D-HYDROGENATOR AGITATOR	(14-Aug-20)	
	OVERALL LEVEL	1-20 KHz
11 - MOTOR OUTBOARD HORIZONTAL	.084 In/Sec	.100 G-s

21	- MOTOR INBOARD HORIZONTAL	.087 In/Sec	.051 G-s
23	- MOTOR INBOARD AXIAL	.045 In/Sec	.064 G-s
31	- GEARBOX INPUT SHAFT -HORIZONTAL	.179 In/Sec	.631 G-s
51	- GEARBOX TOP PLATE- E-W	.212 In/Sec	.206 G-s
52	- GEARBOX TOP PLATE- N-S	.246 In/Sec	.343 G-s
53	- GEARBOX OUTPUT TOP -VERTICAL	.127 In/Sec	.654 G-s
61	- GEARBOX BOTTOM E-W-HORIZONTAL	.155 In/Sec	.189 G-s
81	- AGIT INTERMED BRG @ SEAL- N-S	.038 In/Sec	.023 G-s
82	- AGIT INTERMED BRG @ SEAL- E-W	.040 In/Sec	.028 G-s
83	- AGIT INTERMED BRG @ SEAL- VERT	.042 In/Sec	.183 G-s

9003-01 - D-HYDRO PRIMARY FILT FD PUMP (14-Aug-20)

		OVERALL LEVEL	1-20 KHz
11	- MOTOR OUTBOARD HORIZONTAL	.048 In/Sec	.185 G-s
21	- MOTOR INBOARD HORIZONTAL	.053 In/Sec	.417 G-s
23	- MOTOR INBOARD AXIAL	.048 In/Sec	.285 G-s
71	- PUMP HORIZONTAL	.094 In/Sec	.205 G-s
72	- PUMP VERTICAL	.096 In/Sec	.228 G-s

9001-01 - D-HYDRO SECOND. FILT FD PUMP (14-Aug-20)

		OVERALL LEVEL	1-20 KHz
11	- MOTOR OUTBOARD HORIZONTAL	.079 In/Sec	.289 G-s
21	- MOTOR INBOARD HORIZONTAL	.065 In/Sec	.398 G-s
23	- MOTOR INBOARD AXIAL	.050 In/Sec	.190 G-s
71	- PUMP HORIZONTAL	.068 In/Sec	.241 G-s
72	- PUMP VERTICAL	.066 In/Sec	.255 G-s

192-03 - Two Stage Water Pump A-WEST (14-Aug-20)

		OVERALL LEVEL	1-20 KHz
11	- MOTOR OUTBOARD HORIZONTAL	.069 In/Sec	.194 G-s
21	- MOTOR IB HORIZ	.066 In/Sec	.363 G-s
23	- motor inboard axial	.043 In/Sec	.164 G-s
71	- PUMP HORIZONTAL	.119 In/Sec	.684 G-s
72	- PUMP VERTICAL	.059 In/Sec	.547 G-s

191-07 - M MIX BED WATER PUMP 191-07 (14-Aug-20)

		OVERALL LEVEL	1-20 KHz
11	- Chilled H2O Pump Motor OB Horizo	.166 In/Sec	.822 G-s
21	- Chilled H2O Pump Motor IB Horizo	.146 In/Sec	.752 G-s
23	- MOTOR INBOARD	.078 In/Sec	.159 G-s
71	- Chilled H2O Pump IB Horizontal	.368 In/Sec	.257 G-s
72	- PUMP VERTICAL	.101 In/Sec	.388 G-s

Clarification Of Vibration Units:
Acc --> G-s PK
Vel --> In/Sec PK

Abbreviated Last Measurement Summary

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Database: Arkema.rbm
Station: PEROXIDE 70% H202 PUMPS
Route No. 1: 70% PUMPS
Report Date: 17-Aug-20 07:12

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD

260-48	- 265H STABILITY TANK	(14-Aug-20)		
		OVERALL LEVEL	1-20 KHz	
11	- MOTOR OUTBOARD HORIZONTAL	.012 In/Sec	.201 G-s	
21	- MOTOR INBOARD HORIZONTAL	.012 In/Sec	.251 G-s	
23	- MOTOR INBOARD AXIAL	.035 In/Sec	.231 G-s	
71	- PUMP HORIZONTAL	.027 In/Sec	.291 G-s	
72	- PUMP VERTICAL	.025 In/Sec	.333 G-s	
404-13	- 265J STABILITY TANK	(14-Aug-20)		
		OVERALL LEVEL	1-20 KHz	
11	- MOTOR OUTBOARD HORIZONTAL	.072 In/Sec	.352 G-s	
21	- MOTOR INBOARD HORIZONTAL	.071 In/Sec	.175 G-s	
23	- MOTOR INBOARD AXIAL	.074 In/Sec	.674 G-s	
71	- PUMP HORIZONTAL	.136 In/Sec	.738 G-s	
72	- PUMP VERTICAL	.134 In/Sec	1.158 G-s	
357-12	- K STORAGE TANK PUMP	(14-Aug-20)		
		OVERALL LEVEL	1-20 KHz	
11	- MOTOR OUTBOARD HORIZONTAL	.081 In/Sec	.259 G-s	
21	- MOTOR INBOARD HORIZONTAL	.068 In/Sec	.282 G-s	
23	- MOTOR INBOARD AXIAL	.047 In/Sec	.559 G-s	
71	- PUMP HORIZONTAL	.085 In/Sec	.451 G-s	
72	- PUMP VERTICAL	.041 In/Sec	.475 G-s	
56	- A PRODUCT PUMP	(14-Aug-20)		
		OVERALL LEVEL	1-20 KHz	
11	- MOTOR OUTBOARD HORIZONTAL	.043 In/Sec	.058 G-s	
21	- MOTOR INBOARD HORIZONTAL	.027 In/Sec	.101 G-s	
23	- MOTOR INBOARD AXIAL	.033 In/Sec	.111 G-s	
71	- PUMP HORIZONTAL	.073 In/Sec	.049 G-s	
72	- PUMP VERTICAL	.061 In/Sec	.042 G-s	

Clarification Of Vibration Units:
Acc --> G-s PK
Vel --> In/Sec PK

Abbreviated Last Measurement Summary

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Database: Arkema.rbm
Station: HYDROGEN
Route No. 1: H2 MONTHLY
Report Date: 17-Aug-20 07:12

MEASUREMENT POINT		OVERALL LEVEL	HFD / VHFD
P2A	- PUMP MEA CIRC WEST P2A	(14-Aug-20)	
		OVERALL LEVEL	1-20 KHz
11	- West MEA Circ Pmp Mtr OB Horizon	.075 In/Sec	.209 G-s
21	- West MEA Circ Pmp Mtr IB Horizon	.042 In/Sec	.080 G-s
23	- motor inboard axial	.038 In/Sec	.132 G-s
71	- West MEA Circ Pmp Pump IB Horizo	.195 In/Sec	.398 G-s
72	- pump vertical	.117 In/Sec	.609 G-s
P1A	- PUMP BFW WEST P1A	(14-Aug-20)	

		OVERALL LEVEL	1-20 KHz
11	- Mtr OB Horizo	.110 In/Sec	.499 G-s
21	- Mtr IB Horizo	.118 In/Sec	.999 G-s
23	- motor axial	.113 In/Sec	.327 G-s
71	- Pump IB HORIZ	.073 In/Sec	.305 G-s
72	- Pump IB Vertical	.081 In/Sec	.385 G-s
81	- Pump OB HORIZ	.096 In/Sec	.208 G-s
82	- Pump OB Vertical	.104 In/Sec	.223 G-s
83	- OB Axial	.052 In/Sec	.387 G-s

C2 - FD BLOWER C2 (14-Aug-20)

		OVERALL LEVEL	1-20 KHz
11	- F.D.Fan Motor OB Horizontal	.114 In/Sec	.315 G-s
21	- F.D.Fan Motor I Horizontal	.122 In/Sec	.734 G-s
23	- F.D.Fan Motor AXIAL INBOARD	.084 In/Sec	.284 G-s
71	- F.D.Fan Coupling End Brg Horizon	.077 In/Sec	1.485 G-s
81	- F.D.Fan Fan End Brg Horizon	.128 In/Sec	1.042 G-s

C1 - ID -BLOWER C1 (14-Aug-20)

		OVERALL LEVEL	1-20 KHz
11	- I.D.Fan Motor OB Horizontal	.149 In/Sec	.227 G-s
21	- I.D.Fan Motor IB Horizontal	.165 In/Sec	.233 G-s
23	- motor inboard axial	.189 In/Sec	.183 G-s
71	- I.D.Fan Coupling End Horizontal	.125 In/Sec	.832 G-s
72	- I.D.Fan Coupling End VERTICAL	.108 In/Sec	1.142 G-s
81	- I.D.Fan Fan End Horizontal	.269 In/Sec	.983 G-s
82	- I.D.Fan Fan End VERTICAL	.258 In/Sec	1.200 G-s

CTPE - EAST COOLING TOWER PUMP (14-Aug-20)

		OVERALL LEVEL	1-20 KHz
11	- MOTOR OUTBOARD HORIZONTAL	.218 In/Sec	.459 G-s
21	- MOTOR INBOARD HORIZONTAL	.063 In/Sec	.339 G-s
23	- MOTOR INBOARD AXIAL	.182 In/Sec	.724 G-s
71	- PUMP HORIZONTAL	.177 In/Sec	1.219 G-s
72	- PUMP VERTICAL	.425 In/Sec	.938 G-s

CTPW - WEST COOLING TOWER PUMP (14-Aug-20)

		OVERALL LEVEL	1-20 KHz
11	- MOTOR OUTBOARD HORIZONTAL	.165 In/Sec	.670 G-s
21	- MOTOR INBOARD HORIZONTAL	.089 In/Sec	.460 G-s
23	- MOTOR INBOARD AXIAL	.119 In/Sec	.615 G-s
71	- PUMP HORIZONTAL	.199 In/Sec	1.206 G-s
72	- PUMP VERTICAL	.083 In/Sec	1.337 G-s

Clarification Of Vibration Units:

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