

July 20, 2020

ARKEMA

Subject: July week 3 vibration service report

Weekly Peroxide Route Critical Equipment Observations**C Concentrator Vacuum Pump 2130-1**

Vibrations appear to be normal this survey. No actions required.

A/B Concentrator Vacuum Pump 57

Exterior water is still on the pump unit this month. The motor has the dominant vibration for the first time for Hi-Speed. It is primarily at shaft speed with a little 16x RPM. Check the shaft coupling between the motor and the pump. Replace any suspect components. Ensure all the foot fasteners are tight and the frame is secure. **Rated a Class II Defect.**

Agitator, Hydrogenator C 7001-01

The highest motor overall is 0.231"/sec velocity peak for the outboard axial 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 still rated a Class I Defect now.**

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

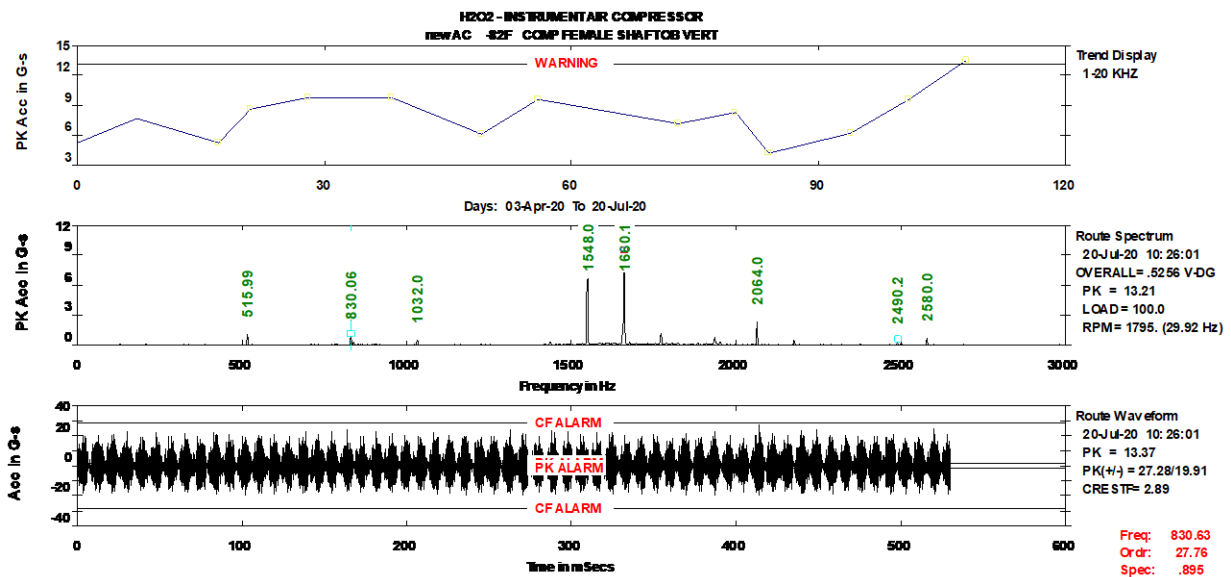
Rotor bar vibrations are normal for this motor's history. The trend clearly shows that the vibrations vary considerably over time. We are watching an increase in acceleration for the compressor section. Rated a Class I Defect this survey. No immediate actions required at this time.

Air Compressor C-203

Rotor bar vibrations are 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. No actions required.

Instrument Air Compressor new

The male and female shaft vibrations still seem to show gear mesh and harmonics as well as a beat vibration occasionally. The female shaft outboard vertical overall vibration is over 0.5"/sec velocity peak and 13 g's RMS. Two harmonic vibrations at near 1500 and 1600 Hz are beating near 120 Hz. The beat is very 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 II Defect for now.**



Air Compressor NASH A 201-08A

This unit was taped off and could not be surveyed.

D Hydrogenator Agitator 9002-10

This unit was taped off and could not be surveyed.

Monthly Route Equipment with issues: H2O2 Plant

The North Cooling Tower South Fan Motor has an overall motor speed vibration at 0.377"/

The South Cooling Tower North and South Fan motors have overall vibrations at motor speed of 0.36"/sec and at fan speed of 0.33"/sec velocity peak respectfully.

We will watch these carefully for changes. No action required.

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 do not hesitate to call if you have any comments or questions.

Sincerely,

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

Abbreviated Last Measurement Summary

Database: Arkema.rbm
Station: PEROXIDE
Route No. 5: ARK WK 3
Report Date: 20-Jul-20 13:20

MEASUREMENT POINT -----	OVERALL LEVEL -----	HFD / VHFD -----
2130-1old - C Concentrator Vacuum Pump	(20-Jul-20)	
	OVERALL LEVEL	1-20 KHz
11 - Motor OB HOR	.110 In/Sec	.574 G-s
21 - Motor IB HOR	.084 In/Sec	.375 G-s
23 - Motor IB AXIAL	.196 In/Sec	.143 G-s
71 - Compressor IB HOR	.114 In/Sec	1.007 G-s
81 - Compressor OB Horiz	.173 In/Sec	.553 G-s
83 - Compressor OB Axial	.104 In/Sec	2.029 G-s
 7000-01 - AGITATOR, HYDROGENATOR C	 (20-Jul-20)	
	OVERALL LEVEL	1-20 KHz
01 - DRIVESHAFT BRG-NORTH-SOUTH	.035 In/Sec	.037 G-s
02 - DRIVESHAFT BRG-EAST-WEST	.037 In/Sec	.033 G-s
03 - DRIVESHAFT BRG-VERTICAL	.045 In/Sec	.040 G-s
11 - C Hydro Agitator MOTOR OB HORIZ	.105 In/Sec	1.059 G-s
12 - C Hydro Agitator MOTOR OB VERT	.115 In/Sec	.792 G-s
13 - C Hydro Agitator Motor OB Axial	.231 In/Sec	.405 G-s
21 - C Hydro Agitator MOTOR IB HORIZ	.114 In/Sec	.221 G-s
22 - C Hydro Agitator MOTOR IB VERT	.187 In/Sec	.518 G-s
23 - C Hydro Agitator Motor IB Axial	.186 In/Sec	.695 G-s
31 - C Hydro Agitator GrBx In Horizon	.124 In/Sec	.573 G-s
32 - C Hydro Agitator GrBx In VERT	.089 In/Sec	.769 G-s
33 - C Hydro Agitator GrBx In Axial	.052 In/Sec	.387 G-s
41 - C Hydro Agitator GrBx Top HZ E-W	.055 In/Sec	.833 G-s
42 - C Hydro Agitator GrBx TOP HZ N-S	.031 In/Sec	.418 G-s
51 - C Hydro Agitator GrBx BOT HZ E-W	.020 In/Sec	.341 G-s
52 - C Hydro Agitator GrBx BOT HZ N-S	.022 In/Sec	.600 G-s
53 - C Hydro Agitator GrBx Top Axial	.048 In/Sec	.502 G-s
 57 - A/B Concentr Vac Pmp-var RPM	 (20-Jul-20)	
	OVERALL LEVEL	1-20 KHz
11 - Motor OB HOR	.172 In/Sec	.223 G-s
12 - Motor OB VERT	.150 In/Sec	.144 G-s
21 - Motor IB HOR	.213 In/Sec	.667 G-s
23 - Motor IB AXIAL	.079 In/Sec	.281 G-s
71 - Compressor IB HOR	.211 In/Sec	.645 G-s
81 - Compressor OB Horiz	.195 In/Sec	.790 G-s
83 - Compressor OB Axial	.082 In/Sec	.445 G-s
 2130-1 - FLASH VAP VAC PUMP-var speed	 (20-Jul-20)	
	OVERALL LEVEL	1-20 KHz
11 - Motor OB HOR	.041 In/Sec	.532 G-s
12 - Motor OB VERT	.032 In/Sec	.547 G-s
21 - Motor IB HOR	.038 In/Sec	1.309 G-s
22 - Motor IB VERT	.044 In/Sec	.787 G-s
23 - Motor IB AXIAL	.055 In/Sec	.541 G-s

71	- Compressor IB HOR	.060 In/Sec	.425 G-s
72	- Compressor IB VERT	.080 In/Sec	.489 G-s
81	- Compressor OB Horiz	.072 In/Sec	.300 G-s
82	- Compressor OB VERT	.086 In/Sec	.298 G-s
83	- Compressor OB Axial	.060 In/Sec	.585 G-s

C-203 - C-203 Comp

(20-Jul-20)

		OVERALL LEVEL	1-20 KHz
11	- MOTOR OB HOR	.023 In/Sec	.534 G-s
12	- MOTOR OB VERT	.051 In/Sec	.975 G-s
21	- MOTOR IB HOR	.028 In/Sec	.993 G-s
22	- MOTOR IB VERT	.029 In/Sec	.827 G-s
23	- MOTOR IB AXIAL	.031 In/Sec	.189 G-s
		OVERALL LEVEL	1-20 KHz
71M	- COMP MALE SHAFT IB HOR	.037 In/Sec	2.414 G-s
72M	- COMP MALE SHAFT IB VERT	.037 In/Sec	1.308 G-s
73M	- COMP MALE SHAFT IB AXIAL	.059 In/Sec	2.162 G-s
81M	- COMP MALE SHAFT OB HOR	.045 In/Sec	1.461 G-s
82M	- COMP MALE SHAFT OB VERT	.056 In/Sec	3.080 G-s
71F	- COMP FEMALE SHAFT IB HOR	.039 In/Sec	2.160 G-s
72F	- COMP FEMALE SHAFT IB VERT	.049 In/Sec	1.514 G-s
73F	- COMP FEMALE SHAFT IB AXIAL	.088 In/Sec	5.943 G-s
81F	- COMP FEMALE SHAFT OB HOR	.050 In/Sec	2.538 G-s
82F	- COMP FEMALE SHAFT OB VERT	.055 In/Sec	1.565 G-s

C-202 - C-202 Comp

(20-Jul-20)

		OVERALL LEVEL	1-20 KHz
11	- MOTOR OB HOR	.029 In/Sec	.455 G-s
12	- MOTOR OB VERT	.103 In/Sec	.886 G-s
21	- MOTOR IB HOR	.055 In/Sec	.439 G-s
22	- MOTOR IB VERT	.077 In/Sec	.226 G-s
23	- MOTOR IB AXIAL	.067 In/Sec	.759 G-s
		OVERALL LEVEL	1-20 KHz
71M	- COMP MALE SHAFT IB HOR	.044 In/Sec	1.924 G-s
72M	- COMP MALE SHAFT IB VERT	.046 In/Sec	1.991 G-s
73M	- COMP MALE SHAFT IB AXIAL	.088 In/Sec	1.558 G-s
81M	- COMP MALE SHAFT OB HOR	.044 In/Sec	3.743 G-s
82M	- COMP MALE SHAFT OB VERT	.054 In/Sec	1.786 G-s
71F	- COMP FEMALE SHAFT IB HOR	.035 In/Sec	1.381 G-s
72F	- COMP FEMALE SHAFT IB VERT	.067 In/Sec	2.444 G-s
73F	- COMP FEMALE SHAFT IB AXIAL	.055 In/Sec	4.849 G-s
81F	- COMP FEMALE SHAFT OB HOR	.043 In/Sec	1.356 G-s
82F	- COMP FEMALE SHAFT OB VERT	.056 In/Sec	1.061 G-s

C-201 - C-201 Comp

(20-Jul-20)

		OVERALL LEVEL	1-20 KHz
11	- MOTOR OB HOR	.090 In/Sec	.445 G-s
12	- MOTOR OB VERT	.108 In/Sec	.898 G-s
21	- MOTOR IB HOR	.102 In/Sec	.619 G-s
22	- MOTOR IB VERT	.041 In/Sec	.407 G-s
23	- MOTOR IB AXIAL	.069 In/Sec	.368 G-s
		OVERALL LEVEL	1-20 KHz
71M	- COMP MALE SHAFT IB HOR	.044 In/Sec	2.734 G-s
72M	- COMP MALE SHAFT IB VERT	.047 In/Sec	1.920 G-s
73M	- COMP MALE SHAFT IB AXIAL	.078 In/Sec	2.412 G-s
81M	- COMP MALE SHAFT OB HOR	.058 In/Sec	3.563 G-s
82M	- COMP MALE SHAFT OB VERT	.049 In/Sec	2.279 G-s

71F - COMP FEMALE SHAFT IB HOR	.049 In/Sec	2.171 G-s
72F - COMP FEMALE SHAFT IB VERT	.036 In/Sec	1.249 G-s
73F - COMP FEMALE SHAFT IB AXIAL	.073 In/Sec	5.919 G-s
81F - COMP FEMALE SHAFT OB HOR	.046 In/Sec	1.665 G-s
82F - COMP FEMALE SHAFT OB VERT	.047 In/Sec	1.767 G-s

new AC - INSTRUMENT AIR COMPRESSOR	(20-Jul-20)	
	OVERALL LEVEL	1-20 KHz
11 - MOTOR OB HOR	.136 In/Sec	1.357 G-s
12 - MOTOR OB VERT	.099 In/Sec	.625 G-s
13 - MOTOR OB AXIAL	.058 In/Sec	.530 G-s
21 - MOTOR IB HOR	.155 In/Sec	1.110 G-s
22 - MOTOR IB VERT	.093 In/Sec	1.315 G-s
23 - MOTOR IB AXIAL	.088 In/Sec	.947 G-s
	OVERALL LEVEL	1-20 KHz
71F - COMP FEMALE SHAFT IB HOR	.228 In/Sec	8.199 G-s
72F - COMP FEMALE SHAFT IB VERT	.181 In/Sec	4.749 G-s
73F - COMP FEMALE SHAFT IB AXIAL	.158 In/Sec	3.145 G-s
81F - COMP FEMALE SHAFT OB HOR	.126 In/Sec	2.822 G-s
82F - COMP FEMALE SHAFT OB VERT	.526 In/Sec	13.53 G-s
83F - COMP FEMALE SHAFT OB AXIAL	.162 In/Sec	3.853 G-s
71M - COMP MALE SHAFT IB HOR	.139 In/Sec	5.045 G-s
72M - COMP MALE SHAFT IB VERT	.217 In/Sec	5.960 G-s
73M - COMP MALE SHAFT IB AXIAL	.134 In/Sec	1.902 G-s
81M - COMP MALE SHAFT OB HOR	.198 In/Sec	5.365 G-s
82M - COMP MALE SHAFT OB VERT	.169 In/Sec	2.405 G-s
83M - COMP MALE SHAFT OB AXIAL	.301 In/Sec	4.087 G-s

NTC-SF - N CT-SOUTH FAN, N TWR	(20-Jul-20)	
	OVERALL LEVEL	1-20 KHz
1 - MOTOR OB HORIZ	.377 In/Sec	.518 G-s
2 - MOTOR IB HORIZ	.186 In/Sec	.431 G-s
3 - MOTOR IB AXIAL	.187 In/Sec	.418 G-s
	OVERALL LEVEL	1-20 KHz
4 - GEARBOX INPUT HORIZONTAL	.221 In/Sec	.436 G-s
5 - GEARBOX VERTICAL	.0074 In/Sec	.0012 G-s
6 - GEARBOX AXIAL	.280 In/Sec	.411 G-s
6L - GEARBOX AXIAL LOW FREQ	.280 In/Sec	.432 G-s

NCT - NF - N CT -NORTH FAN, N TWR	(20-Jul-20)	
	OVERALL LEVEL	1-20 KHz
7 - MOTOR OB HORIZ	.260 In/Sec	.385 G-s
8 - MOTOR IB HORIZ	.194 In/Sec	.392 G-s
9 - MOTOR IB AXIAL	.132 In/Sec	.328 G-s
	OVERALL LEVEL	1-20 KHz
10 - GEARBOX INPUT HORIZONTAL	.134 In/Sec	.344 G-s
11 - GEARBOX VERTICAL	.172 In/Sec	.300 G-s
12 - GEARBOX AXIAL	.128 In/Sec	.394 G-s

530-02 - PUMP,N.COOLING TWR,MIDDLE	(20-Jul-20)	
	OVERALL LEVEL	1-20 KHz
11 - MOT TOP N-S	.078 In/Sec	.561 G-s
12 - MOTOR TOP E-W	.156 In/Sec	.506 G-s

530-03 - PUMP,N.COOLING TWR,SOUTH	(20-Jul-20)	
	OVERALL LEVEL	1-20 KHz
11 - MOT TOP N-S	.068 In/Sec	.507 G-s

12	- MOTOR TOP E-W	.139 In/Sec	.329 G-s
548-7	- IRON-FREE H2O BOOSTER PUMP	(20-Jul-20)	
		OVERALL LEVEL	1-20 KHz
11	- MOTOR OUTBOARD HORIZONTAL	.028 In/Sec	.346 G-s
21	- MOTOR INBOARD HORIZONTAL	.020 In/Sec	.556 G-s
23	- MOTOR INBOARD AXIAL	.050 In/Sec	.316 G-s
71	- PUMP HORIZONTAL	.045 In/Sec	.077 G-s
72	- PUMP VERTICAL	.038 In/Sec	.093 G-s
STC-NF	- S CT - NORTH FAN, S TWR	(20-Jul-20)	
		OVERALL LEVEL	1-20 KHz
1	- MOTOR OB HORIZ	.361 In/Sec	.483 G-s
2	- MOTOR IB HORIZ	.291 In/Sec	.267 G-s
3	- MOTOR IB AXIAL	.210 In/Sec	.113 G-s
		OVERALL LEVEL	1-20 KHz
6	- GEARBOX AXIAL	.263 In/Sec	.367 G-s
4	- GEARBOX INPUT HORIZONTAL	.226 In/Sec	.481 G-s
STC-MF	- S CT - MID FAN, S TWR	(20-Jul-20)	
		OVERALL LEVEL	1-20 KHz
1	- MOTOR OB HORIZ	.280 In/Sec	.438 G-s
2	- MOTOR IB HORIZ	.234 In/Sec	.113 G-s
3	- MOTOR IB AXIAL	.136 In/Sec	.226 G-s
		OVERALL LEVEL	1-20 KHz
6	- GEARBOX AXIAL	.106 In/Sec	.310 G-s
4	- GEARBOX INPUT HORIZONTAL	.120 In/Sec	.410 G-s
5	- GEARBOX VERTICAL	.093 In/Sec	.541 G-s
STC-SF	- S CT - SOUTH FAN, S TWR	(20-Jul-20)	
		OVERALL LEVEL	1-20 KHz
1	- MOTOR OB HORIZ	.252 In/Sec	.463 G-s
2	- MOTOR IB HORIZ	.272 In/Sec	.250 G-s
3	- MOTOR IB AXIAL	.331 In/Sec	.118 G-s
		OVERALL LEVEL	1-20 KHz
6	- GEARBOX AXIAL	.279 In/Sec	.521 G-s
4	- GEARBOX INPUT HORIZONTAL	.154 In/Sec	.520 G-s
5	- GEARBOX VERTICAL	.287 In/Sec	.689 G-s
SCT-1	- SOUTH CT PUMP - EAST	(20-Jul-20)	
		OVERALL LEVEL	1-20 KHz
11	- MOTOR OUTBOARD HORIZONTAL	.045 In/Sec	1.193 G-s
21	- MOTOR INBOARD HORIZONTAL	.044 In/Sec	1.187 G-s
23	- MOTOR INBOARD AXIAL	.056 In/Sec	.281 G-s
71	- PUMP HORIZONTAL	.161 In/Sec	.840 G-s
72	- PUMP VERTICAL	.176 In/Sec	1.135 G-s
SCT-2	- SOUTH CT PUMP - MID	(20-Jul-20)	
		OVERALL LEVEL	1-20 KHz
11	- MOTOR OUTBOARD HORIZONTAL	.031 In/Sec	.554 G-s
21	- MOTOR INBOARD HORIZONTAL	.043 In/Sec	.227 G-s
23	- MOTOR INBOARD AXIAL	.071 In/Sec	.593 G-s
71	- PUMP HORIZONTAL	.178 In/Sec	.829 G-s
72	- PUMP VERTICAL	.134 In/Sec	1.154 G-s
SCT-3	- SOUTH CT PUMP - WEST	(20-Jul-20)	
		OVERALL LEVEL	1-20 KHz

11	- MOTOR OUTBOARD HORIZONTAL	.051 In/Sec	1.455 G-s
21	- MOTOR INBOARD HORIZONTAL	.047 In/Sec	1.200 G-s
23	- MOTOR INBOARD AXIAL	.084 In/Sec	1.062 G-s
71	- PUMP HORIZONTAL	.218 In/Sec	.720 G-s
72	- PUMP VERTICAL	.176 In/Sec	.659 G-s

Clarification Of Vibration Units:

Acc	-->	G-s	PK	
Vel	-->	In/Sec	PK	Abbreviated Last Measurement

Summary

Database: Arkema.rbm
Station: PEROXIDE
Route No. 5: ARK WK 3
Report Date: 20-Jul-20 13:20

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
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2130-1old - C Concentrator Vacuum Pump	(20-Jul-20)	
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OVERALL LEVEL

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C-203 - C-203 Comp (20-Jul-20)
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OVERALL LEVEL

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OVERALL LEVEL	1-20 KHZ
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72F	- COMP FEMALE SHAFT IB VERT	.036 In/Sec	1.249 G-s
73F	- COMP FEMALE SHAFT IB AXIAL	.073 In/Sec	5.919 G-s
81F	- COMP FEMALE SHAFT OB HOR	.046 In/Sec	1.665 G-s
82F	- COMP FEMALE SHAFT OB VERT	.047 In/Sec	1.767 G-s

new AC - INSTRUMENT AIR COMPRESSOR

(20-Jul-20)

OVERALL LEVEL	1-20 KHZ
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11	- MOTOR OB HOR	.136 In/Sec	1.357 G-s
12	- MOTOR OB VERT	.099 In/Sec	.625 G-s
13	- MOTOR OB AXIAL	.058 In/Sec	.530 G-s
21	- MOTOR IB HOR	.155 In/Sec	1.110 G-s
22	- MOTOR IB VERT	.093 In/Sec	1.315 G-s
23	- MOTOR IB AXIAL	.088 In/Sec	.947 G-s

OVERALL LEVEL	1-20 KHZ
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71F	- COMP FEMALE SHAFT IB HOR	.228 In/Sec	8.199 G-s
72F	- COMP FEMALE SHAFT IB VERT	.181 In/Sec	4.749 G-s
73F	- COMP FEMALE SHAFT IB AXIAL	.158 In/Sec	3.145 G-s
81F	- COMP FEMALE SHAFT OB HOR	.126 In/Sec	2.822 G-s
82F	- COMP FEMALE SHAFT OB VERT	.526 In/Sec	13.53 G-s
83F	- COMP FEMALE SHAFT OB AXIAL	.162 In/Sec	3.853 G-s
71M	- COMP MALE SHAFT IB HOR	.139 In/Sec	5.045 G-s
72M	- COMP MALE SHAFT IB VERT	.217 In/Sec	5.960 G-s
73M	- COMP MALE SHAFT IB AXIAL	.134 In/Sec	1.902 G-s
81M	- COMP MALE SHAFT OB HOR	.198 In/Sec	5.365 G-s
82M	- COMP MALE SHAFT OB VERT	.169 In/Sec	2.405 G-s
83M	- COMP MALE SHAFT OB AXIAL	.301 In/Sec	4.087 G-s

NTC-SF - N CT-SOUTH FAN, N TWR

(20-Jul-20)

OVERALL LEVEL	1-20 KHz
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1	- MOTOR OB HORIZ	.377 In/Sec	.518 G-s
2	- MOTOR IB HORIZ	.186 In/Sec	.431 G-s
3	- MOTOR IB AXIAL	.187 In/Sec	.418 G-s

OVERALL LEVEL	1-20 KHZ
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4	- GEARBOX INPUT HORIZONTAL	.221 In/Sec	.436 G-s
5	- GEARBOX VERTICAL	.0074 In/Sec	.0012 G-s
6	- GEARBOX AXIAL	.280 In/Sec	.411 G-s
6L	- GEARBOX AXIAL LOW FREQ	.280 In/Sec	.432 G-s

NCT - NF - N CT -NORTH FAN, N TWR

(20-Jul-20)

OVERALL LEVEL	1-20 KHz
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7	- MOTOR OB HORIZ	.260 In/Sec	.385 G-s
8	- MOTOR IB HORIZ	.194 In/Sec	.392 G-s
9	- MOTOR IB AXIAL	.132 In/Sec	.328 G-s

OVERALL LEVEL	1-20 KHZ
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10	- GEARBOX INPUT HORIZONTAL	.134 In/Sec	.344 G-s
11	- GEARBOX VERTICAL	.172 In/Sec	.300 G-s

12	- GEARBOX AXIAL	.128 In/Sec	.394 G-s
530-02 - PUMP,N.COOLING TWR,MIDDLE (20-Jul-20)			
	OVERALL LEVEL		1-20 KHz
11	- MOT TOP N-S	.078 In/Sec	.561 G-s
12	- MOTOR TOP E-W	.156 In/Sec	.506 G-s
530-03 - PUMP,N.COOLING TWR,SOUTH (20-Jul-20)			
	OVERALL LEVEL		1-20 KHz
11	- MOT TOP N-S	.068 In/Sec	.507 G-s
12	- MOTOR TOP E-W	.139 In/Sec	.329 G-s
548-7 - IRON-FREE H2O BOOSTER PUMP (20-Jul-20)			
	OVERALL LEVEL		1-20 KHz
11	- MOTOR OUTBOARD HORIZONTAL	.028 In/Sec	.346 G-s
21	- MOTOR INBOARD HORIZONTAL	.020 In/Sec	.556 G-s
23	- MOTOR INBOARD AXIAL	.050 In/Sec	.316 G-s
71	- PUMP HORIZONTAL	.045 In/Sec	.077 G-s
72	- PUMP VERTICAL	.038 In/Sec	.093 G-s
STC-NF - S CT - NORTH FAN, S TWR (20-Jul-20)			
	OVERALL LEVEL		1-20 KHz
1	- MOTOR OB HORIZ	.361 In/Sec	.483 G-s
2	- MOTOR IB HORIZ	.291 In/Sec	.267 G-s
3	- MOTOR IB AXIAL	.210 In/Sec	.113 G-s
	OVERALL LEVEL		1-20 KHz
6	- GEARBOX AXIAL	.263 In/Sec	.367 G-s
4	- GEARBOX INPUT HORIZONTAL	.226 In/Sec	.481 G-s
STC-MF - S CT - MID FAN, S TWR (20-Jul-20)			
	OVERALL LEVEL		1-20 KHz
1	- MOTOR OB HORIZ	.280 In/Sec	.438 G-s
2	- MOTOR IB HORIZ	.234 In/Sec	.113 G-s
3	- MOTOR IB AXIAL	.136 In/Sec	.226 G-s
	OVERALL LEVEL		1-20 KHz
6	- GEARBOX AXIAL	.106 In/Sec	.310 G-s
4	- GEARBOX INPUT HORIZONTAL	.120 In/Sec	.410 G-s
5	- GEARBOX VERTICAL	.093 In/Sec	.541 G-s
STC-SF - S CT - SOUTH FAN, S TWR (20-Jul-20)			
	OVERALL LEVEL		1-20 KHz
1	- MOTOR OB HORIZ	.252 In/Sec	.463 G-s
2	- MOTOR IB HORIZ	.272 In/Sec	.250 G-s
3	- MOTOR IB AXIAL	.331 In/Sec	.118 G-s
	OVERALL LEVEL		1-20 KHz
6	- GEARBOX AXIAL	.279 In/Sec	.521 G-s
4	- GEARBOX INPUT HORIZONTAL	.154 In/Sec	.520 G-s
5	- GEARBOX VERTICAL	.287 In/Sec	.689 G-s
SCT-1 - SOUTH CT PUMP - EAST (20-Jul-20)			
	OVERALL LEVEL		1-20 KHz
11	- MOTOR OUTBOARD HORIZONTAL	.045 In/Sec	1.193 G-s
21	- MOTOR INBOARD HORIZONTAL	.044 In/Sec	1.187 G-s
23	- MOTOR INBOARD AXIAL	.056 In/Sec	.281 G-s
71	- PUMP HORIZONTAL	.161 In/Sec	.840 G-s
72	- PUMP VERTICAL	.176 In/Sec	1.135 G-s

SCT-2	- SOUTH CT PUMP - MID	(20-Jul-20)	
		OVERALL LEVEL	1-20 KHz
11	- MOTOR OUTBOARD HORIZONTAL	.031 In/Sec	.554 G-s
21	- MOTOR INBOARD HORIZONTAL	.043 In/Sec	.227 G-s
23	- MOTOR INBOARD AXIAL	.071 In/Sec	.593 G-s
71	- PUMP HORIZONTAL	.178 In/Sec	.829 G-s
72	- PUMP VERTICAL	.134 In/Sec	1.154 G-s

SCT-3	- SOUTH CT PUMP - WEST	(20-Jul-20)	
		OVERALL LEVEL	1-20 KHz
11	- MOTOR OUTBOARD HORIZONTAL	.051 In/Sec	1.455 G-s
21	- MOTOR INBOARD HORIZONTAL	.047 In/Sec	1.200 G-s
23	- MOTOR INBOARD AXIAL	.084 In/Sec	1.062 G-s
71	- PUMP HORIZONTAL	.218 In/Sec	.720 G-s
72	- PUMP VERTICAL	.176 In/Sec	.659 G-s

Clarification Of Vibration Units:

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