



MILLINGTON, TN

July 9, 2019

Blues City Brewery

Subject: July vibration service

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,

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

Detailed Defects

HVAC Hot Water Circulator Pump

Some service appears to have been done on this unit; however, even more could be done to reduce the vibrations. Ensure the coupling and alignment are good, and that there is no soft foot or pipe strain.

Rated a Class I Defect.

Chill Water Circulator Pump 1

High vibrations near 2x line frequency could indicate an air gap issue in the motor. Air gap issues are variations in the distance between the surface of the rotor and stator. This could be caused by poor machining of the motor housing and end bells or possibly a soft foot. Unbalanced electrical phases can duplicate the vibration also. Start inspections with a precision alignment and soft foot check, followed by a motor phase and voltage analysis up to and including PDMA if necessary.

Rated a Class III Defect.

RO Water Pump 2

This unit still appears to have a vibration at vane pass. There could be wear in the pump, or there could be a flow issue. We recommend further inspection and adjustments of flow related controls, filters, screens or piping. Pump replacement might be considered to reduce the vibration.

Rated a Class II Defect.

Observations

Ammonia Compressor 3

The motor could be suffering from two issues. Plot data shows high frequency vibration peaks with 2 times line frequency sidebands. This is called a rotor bar issue. Some of the bars have weak or cracked end connections. As time progresses the vibrations usually tend to rise; ultimately, the bars will become loose and start to cause vibrations at shaft speed then with side bands. This motor also seems to have looseness, or excessive clearance in or around the bearings. Check the bearing clearances if possible for now.

Rated a Class II Defect.

Service Water Pump 8

1x RPM vibration still in most measurements. Inspect the coupling and laser align the shafts.

Rated a Class II Defect.

Boiler Feed Water Pumps South and Middle

Both pumps have vibrations at near 1/2"/sec velocity in them. Check for loose fasteners, poor shaft coupling or alignment.

Rated a Class II Defect.

Wort Transfer Pump A

Inspect unit for loose fasteners, worn coupling and alignment as time allows.

Rated a Class I Defect.

Second Floor North Hot Water Pump

Shaft speed vibration dominated the unit vibration data at almost 1/2" per second velocity peak. Inspect the unit base, structure, coupling and fasteners for issues. Have the shaft alignment checked as time allows. **Rated a Class II Defect.**

Air Compressor 4

The motor shaft end vertical measurement seems to have jumped at what appears to be the lobe passing frequency. Check the fasteners for the motor and compressor just to be sure. We will keep an eye on it closely. **Rated a Class II Defect.**

Sugar Tank Pump 4

A jump in the axial at 3x RPM could indicate a defective coupling insert if so equipped. Inspect the unit couplings for wear. Have the alignments checked as time becomes available.

Rated a Class II Defect.

Abbreviated Last Measurement Summary *****

Database: Blues_city.rbm
Station: POWER HOUSE
Report Date: 09-Jul-19 13:16

MEASUREMENT POINT -----	OVERALL LEVEL -----	HFD / VHFD -----
250 COMP - COMPRESSOR #3 - 250HP	(02-Jul-19) OVERALL LEVEL	
11 - MOTOR OUTBOARD HORIZ	.096 In/Sec	
12 - MOTOR OUTBOARD VERT	.099 In/Sec	
13 - MOTOR OUTBOARD AXIAL	.076 In/Sec	
21 - MOTOR INBOARD HORIZ	.131 In/Sec	
22 - MOTOR INBOARD VERT	.120 In/Sec	
23 - MOTOR INBOARD AXIAL	.066 In/Sec	
71 - CPLG END HORIZ	.197 In/Sec	
72 - CPLG END VERT	.075 In/Sec	
73 - CPLG END AXIAL	.190 In/Sec	
81 - OPP END HORIZ	.147 In/Sec	
82 - OPP END VERT	.125 In/Sec	
83 - OPP END AXIAL	.155 In/Sec	
150HP - COMPRESSOR #4 - 150HP	(02-Jul-19) OVERALL LEVEL	
11 - MOTOR OUTBOARD HORIZ	.062 In/Sec	
12 - MOTOR OUTBOARD VERT	.283 In/Sec	

13	- MOTOR OUTBOARD AXIAL	.290 In/Sec
21	- MOTOR INBOARD HORIZ	.258 In/Sec
22	- MOTOR INBOARD VERT	.649 In/Sec
23	- MOTOR INBOARD AXIAL	.121 In/Sec
71	- CPLG END HORIZ	.131 In/Sec
72	- CPLG END VERT	.318 In/Sec
73	- CPLG END AXIAL	.220 In/Sec
81	- OPP END HORIZ	.147 In/Sec
82	- OPP END VERT	.358 In/Sec
83	- OPP END AXIAL	.237 In/Sec

COMP 6 - COMPRESSOR #6		(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR OUTBOARD HORIZ	.141 In/Sec
12	- MOTOR OUTBOARD VERT	.064 In/Sec
13	- MOTOR OUTBOARD AXIAL	.037 In/Sec
21	- MOTOR INBOARD HORIZ	.198 In/Sec
22	- MOTOR INBOARD VERT	.084 In/Sec
23	- MOTOR INBOARD AXIAL	.077 In/Sec
71	- CPLG END HORIZ	.104 In/Sec
72	- CPLG END VERT	.126 In/Sec
73	- CPLG END AXIAL	.145 In/Sec
81	- OPP END HORIZ	.104 In/Sec
82	- OPP END VERT	.071 In/Sec
83	- OPP END AXIAL	.125 In/Sec

BFW - M - BOILER FEED WATER PUMP MIDDLE		(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR TOP N-S	.268 In/Sec
12	- MOTOR TOP E-W	.154 In/Sec
13	- MOTOR TOP VERT	.272 In/Sec
21	- MOTOR BOTTOM N-S	.231 In/Sec
22	- MOTOR BOTTOM E-W	.060 In/Sec
23	- MOTOR BOTTOM VERT	.085 In/Sec
71	- PUMP TOP N-S	.141 In/Sec
72	- PUMP TOP E-W	.124 In/Sec
73	- PUMP TOP VERT	.056 In/Sec
81	- PUMP BOTTOM N-S	.496 In/Sec
82	- PUMP BOTTOM E-W	.168 In/Sec
83	- PUMP BOTTOM VERT	.060 In/Sec

BFW - S - BOILER FEED WATER PUMP SOUTH		(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR TOP N-S	.149 In/Sec
12	- MOTOR TOP E-W	.085 In/Sec
13	- MOTOR TOP VERT	.167 In/Sec
21	- MOTOR BOTTOM N-S	.251 In/Sec
22	- MOTOR BOTTOM E-W	.063 In/Sec
23	- MOTOR BOTTOM VERT	.137 In/Sec
71	- PUMP TOP N-S	.579 In/Sec
72	- PUMP TOP E-W	.159 In/Sec
73	- PUMP TOP VERT	.076 In/Sec
81	- PUMP BOTTOM N-S	.423 In/Sec
82	- PUMP BOTTOM E-W	.281 In/Sec
83	- PUMP BOTTOM VERT	.070 In/Sec

FAN 3	- BOILER FAN #3 - 1780 RPM Max	(02-Jul-19)
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	OVERALL LEVEL
11 - MOTOR OUTBOARD HORIZ	.055 In/Sec
12 - MOTOR OUTBOARD VERT	.031 In/Sec
13 - MOTOR OUTBOARD AXIAL	.059 In/Sec
21 - MOTOR INBOARD HORIZ	.059 In/Sec
22 - MOTOR INBOARD VERT	.050 In/Sec
23 - MOTOR INBOARD AXIAL	.063 In/Sec
71 - FAN BEARING INBOARD HORIZ	.045 In/Sec
72 - FAN BEARING INBOARD VERT	.058 In/Sec
73 - FAN BEARING INBOARD AXIAL	.065 In/Sec
81 - FAN BEARING OUTBOARD HORIZ	.127 In/Sec
82 - FAN BEARING OUTBOARD VERT	.134 In/Sec
83 - FAN BEARING OUTBOARD AXIAL	.176 In/Sec

MAKEUP #2 - CHILLED WATER MAKEUP PUMP 2 (02-Jul-19)	
	OVERALL LEVEL
11 - MOTOR OUTBOARD HORIZ	.089 In/Sec
12 - MOTOR OUTBOARD VERT	.073 In/Sec
13 - MOTOR OUTBOARD AXIAL	.054 In/Sec
21 - MOTOR INBOARD HORIZ	.116 In/Sec
22 - MOTOR INBOARD VERT	.067 In/Sec
23 - MOTOR INBOARD AXIAL	.083 In/Sec
71 - PUMP CPLG END HORIZ	.290 In/Sec
72 - PUMP CPLG END VERT	.328 In/Sec
73 - PUMP CPLG END AXIAL	.228 In/Sec
81 - PUMP OPP END HORIZ	.219 In/Sec
82 - PUMP OPP END VERT	.261 In/Sec

YB PUMP 1 - YELLOW BOX FILTERED WATER (02-Jul-19)	
	OVERALL LEVEL
11 - MOTOR OUTBOARD HORIZ	.128 In/Sec
12 - MOTOR OUTBOARD VERT	.067 In/Sec
13 - MOTOR OUTBOARD AXIAL	.143 In/Sec
21 - MOTOR INBOARD HORIZ	.099 In/Sec
22 - MOTOR INBOARD VERT	.074 In/Sec
23 - MOTOR INBOARD AXIAL	.142 In/Sec
71 - PUMP CPLG END HORIZ	.207 In/Sec
72 - PUMP CPLG END VERT	.213 In/Sec
73 - PUMP CPLG END AXIAL	.176 In/Sec
81 - PUMP OPP END HORIZ	.084 In/Sec
82 - PUMP OPP END VERT	.140 In/Sec

SW PUMP 8 - SERVICE WATER PUMP 8 (02-Jul-19)	
	OVERALL LEVEL
11 - MOTOR OUTBOARD HORIZ	.124 In/Sec
12 - MOTOR OUTBOARD VERT	.205 In/Sec
13 - MOTOR OUTBOARD AXIAL	.547 In/Sec
21 - MOTOR INBOARD HORIZ	.143 In/Sec
22 - MOTOR INBOARD VERT	.319 In/Sec
23 - MOTOR INBOARD AXIAL	.730 In/Sec
71 - PUMP CPLG END HORIZ	.167 In/Sec
72 - PUMP CPLG END VERT	.177 In/Sec
73 - PUMP CPLG END AXIAL	.143 In/Sec
81 - PUMP OPP END HORIZ	.138 In/Sec
82 - PUMP OPP END VERT	.117 In/Sec

RO 2 - RO WATER PUMP 2 (02-Jul-19)	
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	OVERALL LEVEL
11 - MOTOR OUTBOARD HORIZ	.166 In/Sec
12 - MOTOR OUTBOARD VERT	.084 In/Sec
13 - MOTOR OUTBOARD AXIAL	.152 In/Sec
21 - MOTOR INBOARD HORIZ	.188 In/Sec
22 - MOTOR INBOARD VERT	.161 In/Sec
23 - MOTOR INBOARD AXIAL	.130 In/Sec
71 - PUMP CPLG END HORIZ	.771 In/Sec
72 - PUMP CPLG END VERT	.209 In/Sec
73 - PUMP CPLG END AXIAL	.279 In/Sec
81 - PUMP OPP END HORIZ	.236 In/Sec
82 - PUMP OPP END VERT	.242 In/Sec

ACOMP #7 - AMMONIA COMP - #7		(02-Jul-19)
		OVERALL LEVEL
11 - MOTOR OUTBOARD HORIZ		.066 In/Sec
12 - MOTOR OUTBOARD VERT		.092 In/Sec
13 - MOTOR OUTBOARD AXIAL		.078 In/Sec
21 - MOTOR INBOARD HORIZ		.184 In/Sec
22 - MOTOR INBOARD VERT		.041 In/Sec
23 - MOTOR INBOARD AXIAL		.067 In/Sec
71 - MALE - CPLG END HORIZ		.126 In/Sec
72 - MALE - CPLG END VERT		.129 In/Sec
73 - MALE-CPLG END AXIAL		.102 In/Sec
81 - MALE- OPP END HORIZ		.093 In/Sec
82 - MALE- OPP END VERT		.130 In/Sec
83 - MALE-OPP END AXIAL		.087 In/Sec
71F - FEMALE - CPLG END HORIZ		.110 In/Sec
72F - FEMALE- CPLG END VERT		.101 In/Sec
73F - FEMALE-CPLG END AXIAL		.097 In/Sec
81F - FEMALE- OPP END HORIZ		.066 In/Sec
82F - FEMALE- OPP END VERT		.088 In/Sec
83F - FEMALE- OPP END AXIAL		.086 In/Sec

800HP - AMMONIA COMP - 800HP		(02-Jul-19)
		OVERALL LEVEL
11 - MOTOR OUTBOARD HORIZ		.344 In/Sec
11H - MOTOR OUTBOARD HORIZ HIFREQ		.357 In/Sec
12 - MOTOR OUTBOARD VERT		.250 In/Sec
12H - MOTOR OUTBOARD VERT HIGH FREQ		.242 In/Sec
13 - MOTOR OUTBOARD AXIAL		.130 In/Sec
21 - MOTOR INBOARD HORIZ		.144 In/Sec
22 - MOTOR INBOARD VERT		.204 In/Sec
23 - MOTOR INBOARD AXIAL		.101 In/Sec
71 - MALE - CPLG END HORIZ		.139 In/Sec
72 - MALE - CPLG END VERT		.133 In/Sec
73 - MALE-CPLG END AXIAL		.155 In/Sec
81 - MALE- OPP END HORIZ		.167 In/Sec
82 - MALE- OPP END VERT		.138 In/Sec
83 - MALE-OPP END AXIAL		.113 In/Sec
71F - FEMALE - CPLG END HORIZ		.141 In/Sec
72F - FEMALE- CPLG END VERT		.119 In/Sec
73F - FEMALE-CPLG END AXIAL		.130 In/Sec
81F - FEMALE- OPP END HORIZ		.163 In/Sec
82F - FEMALE- OPP END VERT		.139 In/Sec
83F - FEMALE- OPP END AXIAL		.104 In/Sec

Vel	-->	In/Sec	PK	Abbreviated Last Measurement
Summary				

Database: Blues_city.rbm
Station: UPPER FLOORS
Report Date: 09-Jul-19 13:16

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
3MM-N - 3RD FLOOR MALT MILL #3 - N	(02-Jul-19)	
	OVERALL LEVEL	
11 - MOTOR OUTBOARD HORIZ	.132 In/Sec	
12 - MOTOR OUTBOARD VERT	.129 In/Sec	
13 - MOTOR OUTBOARD AXIAL	.256 In/Sec	
21 - MOTOR INBOARD HORIZ	.194 In/Sec	
22 - MOTOR INBOARD VERT	.203 In/Sec	
23 - MOTOR INBOARD AXIAL	.199 In/Sec	
1MH - SHAFT 1 - MOTOR END HORIZ	.280 In/Sec	
1MV - SHAFT 1 - MOTOR END VERT	.138 In/Sec	
3MM-S - 3RD FLOOR MALT MILL#2 - S	(02-Jul-19)	
	OVERALL LEVEL	
11 - MOTOR OUTBOARD HORIZ	.117 In/Sec	
12 - MOTOR OUTBOARD VERT	.175 In/Sec	
13 - MOTOR OUTBOARD AXIAL	.251 In/Sec	
21 - MOTOR INBOARD HORIZ	.166 In/Sec	
22 - MOTOR INBOARD VERT	.134 In/Sec	
23 - MOTOR INBOARD AXIAL	.231 In/Sec	
1MH - SHAFT 1 - MOTOR END HORIZ	.134 In/Sec	
1MV - SHAFT 1 - MOTOR END VERT	.087 In/Sec	
1OH - SHAFT 1 - OPP END HORIZ	.095 In/Sec	
2NHWP - 2ND FLOOR N. HOT WATER PUMP	(02-Jul-19)	
	OVERALL LEVEL	
11 - MOTOR OUTBOARD HORIZ	.185 In/Sec	
12 - MOTOR OUTBOARD VERT	.078 In/Sec	
13 - MOTOR OUTBOARD AXIAL	.125 In/Sec	
21 - MOTOR INBOARD HORIZ	.083 In/Sec	
22 - MOTOR INBOARD VERT	.105 In/Sec	
23 - MOTOR INBOARD AXIAL	.112 In/Sec	
71 - PUMP CPLG END HORIZ	.461 In/Sec	
72 - PUMP CPLG END VERT	.180 In/Sec	
73 - PUMP CPLG END AXIAL	.267 In/Sec	
81 - PUMP OPP END HORIZ	.348 In/Sec	
82 - PUMP OPP END VERT	.124 In/Sec	

Vel	-->	In/Sec	PK	Abbreviated Last Measurement
Summary				

Database: Blues_city.rbm

Station: BREWING 1ST FLOOR
Report Date: 09-Jul-19 13:16

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
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*** NO DATA Was Found That Meets the Report Specification ***
Abbreviated Last Measurement Summary

Database: Blues_city.rbm
Station: BREWING BASEMENT
Report Date: 09-Jul-19 13:16

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
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WORTA	- WORT TRANSFER PUMP A	(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR OUTBOARD HORIZ	.144 In/Sec
12	- MOTOR OUTBOARD VERT	.200 In/Sec
13	- MOTOR OUTBOARD AXIAL	.419 In/Sec
21	- MOTOR INBOARD HORIZ	.181 In/Sec
22	- MOTOR INBOARD VERT	.084 In/Sec
23	- MOTOR INBOARD AXIAL	.431 In/Sec
71	- PUMP CPLG END HORIZ	.102 In/Sec
72	- PUMP CPLG END VERT	.064 In/Sec
73	- PUMP CPLG END AXIAL	.118 In/Sec
81	- PUMP OPP END HORIZ	.066 In/Sec
82	- PUMP OPP END VERT	.062 In/Sec
KCP2	- KETTLE CIRC PUMP 2	(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR OUTBOARD HORIZ	.048 In/Sec
12	- MOTOR OUTBOARD VERT	.018 In/Sec
13	- MOTOR OUTBOARD AXIAL	.109 In/Sec
21	- MOTOR INBOARD HORIZ	.061 In/Sec
22	- MOTOR INBOARD VERT	.050 In/Sec
23	- MOTOR INBOARD AXIAL	.092 In/Sec
71	- PUMP CPLG END HORIZ	.048 In/Sec
72	- PUMP CPLG END VERT	.032 In/Sec
73	- PUMP CPLG END AXIAL	.034 In/Sec
81	- PUMP OPP END HORIZ	.058 In/Sec
82	- PUMP OPP END VERT	.039 In/Sec
BKP1	- BREW KETTLE PUMP (IN PIT)	(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR OUTBOARD HORIZ	.024 In/Sec
12	- MOTOR OUTBOARD VERT	.018 In/Sec
13	- MOTOR OUTBOARD AXIAL	.027 In/Sec
21	- MOTOR INBOARD HORIZ	.024 In/Sec
22	- MOTOR INBOARD VERT	.032 In/Sec
23	- MOTOR INBOARD AXIAL	.024 In/Sec
71	- PUMP CPLG END HORIZ	.218 In/Sec
72	- PUMP CPLG END VERT	.179 In/Sec
73	- PUMP CPLG END AXIAL	.010 In/Sec
81	- PUMP OPP END HORIZ	.062 In/Sec

.0079 In/Sec

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
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MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
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V4	- SUGAR TANK VIKING PUMP #4	(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR OB HORZ	.129 In/Sec
12	- MOTOR OB VERT	.194 In/Sec
13	- MOTOR OB AXIAL	.466 In/Sec
21	- MOTOR IB HORZ	.129 In/Sec
22	- MOTOR IB VERT	.320 In/Sec
23	- MOTOR IB AXIAL	.289 In/Sec
31	- GEARBOX INPUT HORZ	.205 In/Sec
32	- GEARBOX INPUT VERT	.385 In/Sec
33	- GEARBOX INPUT AXIAL	.500 In/Sec

61	- GEARBOX OUTPUT HORZ	.138 In/Sec
62	- GEARBOX OUTPUT VERT	.308 In/Sec
63	- GEARBOX OUTPUT AXIAL	.434 In/Sec
71	- PUMP IB HORZ	.131 In/Sec
72	- PUMP IB VERT	.323 In/Sec
73	- PUMP IB AXIAL	.175 In/Sec
81	- PUMP OB HORZ	.122 In/Sec
82	- PUMP OB VERT	.230 In/Sec

V5	- SUGAR TANK VIKING PUMP #5	(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR OB HORZ	.099 In/Sec
12	- MOTOR OB VERT	.039 In/Sec
13	- MOTOR OB AXIAL	.080 In/Sec
21	- MOTOR IB HORZ	.118 In/Sec
22	- MOTOR IB VERT	.041 In/Sec
23	- MOTOR IB AXIAL	.085 In/Sec
31	- GEARBOX INPUT HORZ	.101 In/Sec
32	- GEARBOX INPUT VERT	.090 In/Sec
33	- GEARBOX INPUT AXIAL	.080 In/Sec
61	- GEARBOX OUTPUT HORZ	.059 In/Sec
62	- GEARBOX OUTPUT VERT	.081 In/Sec

Clarification Of Vibration Units:
 Vel --> In/Sec PK Abbreviated Last Measurement
 Summary

Database: Blues_city.rbm
 Station: ALCOHOL PUMP ROOM
 Report Date: 09-Jul-19 13:16

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
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SK1 RO1 - SKID 1 - RO PUMP #1	(02-Jul-19)	
	OVERALL LEVEL	
11 - MOTOR OUTBOARD HORIZ	.067 In/Sec	
12 - MOTOR OUTBOARD VERT	.075 In/Sec	
13 - MOTOR OUTBOARD AXIAL	.128 In/Sec	
21 - MOTOR INBOARD HORIZ	.076 In/Sec	
22 - MOTOR INBOARD VERT	.103 In/Sec	
23 - MOTOR INBOARD AXIAL	.139 In/Sec	
SK1 RO4 - SKID 1 - RO PUMP #4	(02-Jul-19)	
	OVERALL LEVEL	
11 - MOTOR OUTBOARD HORIZ	.050 In/Sec	
12 - MOTOR OUTBOARD VERT	.060 In/Sec	
13 - MOTOR OUTBOARD AXIAL	.071 In/Sec	
21 - MOTOR INBOARD HORIZ	.044 In/Sec	
22 - MOTOR INBOARD VERT	.050 In/Sec	
23 - MOTOR INBOARD AXIAL	.068 In/Sec	
SK1 RO3 - SKID 1 - RO PUMP #3	(02-Jul-19)	
	OVERALL LEVEL	
11 - MOTOR OUTBOARD HORIZ	.173 In/Sec	

12	- MOTOR OUTBOARD VERT	.167 In/Sec
13	- MOTOR OUTBOARD AXIAL	.252 In/Sec
21	- MOTOR INBOARD HORIZ	.162 In/Sec
22	- MOTOR INBOARD VERT	.183 In/Sec
23	- MOTOR INBOARD AXIAL	.123 In/Sec
71	- PUMP CPLG END HORIZ	.109 In/Sec
72	- PUMP CPLG END VERT	.163 In/Sec
73	- PUMP CPLG END AXIAL	.148 In/Sec
81	- PUMP OPP END HORIZ	.099 In/Sec
82	- PUMP OPP END VERT	.139 In/Sec

SK1 RO2	- SKID 1 - RO PUMP #2	(02-Jul-19)
	OVERALL LEVEL	
11	- MOTOR OUTBOARD HORIZ	.067 In/Sec
12	- MOTOR OUTBOARD VERT	.057 In/Sec
13	- MOTOR OUTBOARD AXIAL	.071 In/Sec
21	- MOTOR INBOARD HORIZ	.066 In/Sec
22	- MOTOR INBOARD VERT	.059 In/Sec
23	- MOTOR INBOARD AXIAL	.059 In/Sec
71	- PUMP CPLG END HORIZ	.068 In/Sec
72	- PUMP CPLG END VERT	.024 In/Sec
73	- PUMP CPLG END AXIAL	.077 In/Sec
81	- PUMP OPP END HORIZ	.076 In/Sec
82	- PUMP OPP END VERT	.060 In/Sec

SK2 RO1	- SKID 2 - RO PUMP #1	(02-Jul-19)
	OVERALL LEVEL	
11	- MOTOR OUTBOARD HORIZ	.120 In/Sec
12	- MOTOR OUTBOARD VERT	.078 In/Sec
13	- MOTOR OUTBOARD AXIAL	.071 In/Sec
21	- MOTOR INBOARD HORIZ	.078 In/Sec
22	- MOTOR INBOARD VERT	.184 In/Sec
23	- MOTOR INBOARD AXIAL	.046 In/Sec

SK2 RO4	- SKID 2 - RO PUMP #4	(02-Jul-19)
	OVERALL LEVEL	
11	- MOTOR OUTBOARD HORIZ	.087 In/Sec
12	- MOTOR OUTBOARD VERT	.099 In/Sec
13	- MOTOR OUTBOARD AXIAL	.112 In/Sec
21	- MOTOR INBOARD HORIZ	.086 In/Sec
22	- MOTOR INBOARD VERT	.078 In/Sec
23	- MOTOR INBOARD AXIAL	.084 In/Sec

SK2 RO3	- SKID 2 - RO PUMP #3	(02-Jul-19)
	OVERALL LEVEL	
11	- MOTOR OUTBOARD HORIZ	.190 In/Sec
12	- MOTOR OUTBOARD VERT	.251 In/Sec
13	- MOTOR OUTBOARD AXIAL	.346 In/Sec
21	- MOTOR INBOARD HORIZ	.106 In/Sec
22	- MOTOR INBOARD VERT	.261 In/Sec
23	- MOTOR INBOARD AXIAL	.118 In/Sec
71	- PUMP CPLG END HORIZ	.144 In/Sec
72	- PUMP CPLG END VERT	.229 In/Sec
73	- PUMP CPLG END AXIAL	.218 In/Sec
81	- PUMP OPP END HORIZ	.137 In/Sec
82	- PUMP OPP END VERT	.180 In/Sec

SK2 RO2	- SKID 2 - RO PUMP #2	(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR OUTBOARD HORIZ	.091 In/Sec
12	- MOTOR OUTBOARD VERT	.037 In/Sec
13	- MOTOR OUTBOARD AXIAL	.061 In/Sec
21	- MOTOR INBOARD HORIZ	.066 In/Sec
22	- MOTOR INBOARD VERT	.049 In/Sec
23	- MOTOR INBOARD AXIAL	.051 In/Sec
71	- PUMP CPLG END HORIZ	.080 In/Sec
72	- PUMP CPLG END VERT	.034 In/Sec
73	- PUMP CPLG END AXIAL	.112 In/Sec
81	- PUMP OPP END HORIZ	.083 In/Sec
82	- PUMP OPP END VERT	.063 In/Sec

Clarification Of Vibration Units:
 Vel --> In/Sec PK Abbreviated Last Measurement
 Summary

Database: Blues_city.rbm
 Station: UNUSED / REMOVED
 Report Date: 09-Jul-19 13:16

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
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*** NO DATA Was Found That Meets the Report Specification ***
 Abbreviated Last Measurement Summary

Database: Blues_city.rbm
 Station: ADMINISTRATIVE AREA
 Report Date: 09-Jul-19 13:16

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
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HVAC COLD	- HVAC COLD GLYCOL CIRC PUMP	(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR OUTBOARD HORIZ	.075 In/Sec
12	- MOTOR OUTBOARD VERT	.064 In/Sec
13	- MOTOR OUTBOARD AXIAL	.097 In/Sec
21	- MOTOR INBOARD HORIZ	.103 In/Sec
22	- MOTOR INBOARD VERT	.064 In/Sec
23	- MOTOR INBOARD AXIAL	.092 In/Sec
71	- PUMP CPLG END HORIZ	.173 In/Sec
72	- PUMP CPLG END VERT	.132 In/Sec
73	- PUMP CPLG END AXIAL	.076 In/Sec
81	- PUMP OPP END HORIZ	.218 In/Sec
82	- PUMP OPP END VERT	.134 In/Sec

HVAC HOT	- HVAC HOT WATER CIRC PUMP	(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR OUTBOARD HORIZ	.217 In/Sec
12	- MOTOR OUTBOARD VERT	.206 In/Sec
13	- MOTOR OUTBOARD AXIAL	.386 In/Sec

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHF
CHILL 1 - CHILL WATER CIRC PUMP #1	(02-Jul-19)	
	OVERALL LEVEL	
11 - MOTOR OUTBOARD HORIZ	.754 In/Sec	
12 - MOTOR OUTBOARD VERT	.076 In/Sec	
13 - MOTOR OUTBOARD AXIAL	.114 In/Sec	
21 - MOTOR INBOARD HORIZ	.788 In/Sec	
22 - MOTOR INBOARD VERT	.202 In/Sec	
23 - MOTOR INBOARD AXIAL	.177 In/Sec	
71 - PUMP CPLG END HORIZ	.222 In/Sec	
72 - PUMP CPLG END VERT	.098 In/Sec	
73 - PUMP CPLG END AXIAL	.145 In/Sec	
81 - PUMP OPP END HORIZ	.151 In/Sec	
82 - PUMP OPP END VERT	.105 In/Sec	
W COOL A - CHILL WATER WORT COOL SIDE A	(02-Jul-19)	
	OVERALL LEVEL	
11 - MOTOR OUTBOARD HORIZ	.250 In/Sec	
12 - MOTOR OUTBOARD VERT	.218 In/Sec	
13 - MOTOR OUTBOARD AXIAL	.233 In/Sec	
21 - MOTOR INBOARD HORIZ	.225 In/Sec	
22 - MOTOR INBOARD VERT	.157 In/Sec	
23 - MOTOR INBOARD AXIAL	.275 In/Sec	
71 - PUMP CPLG END HORIZ	.163 In/Sec	
72 - PUMP CPLG END VERT	.126 In/Sec	
73 - PUMP CPLG END AXIAL	.128 In/Sec	
81 - PUMP OPP END HORIZ	.066 In/Sec	
82 - PUMP OPP END VERT	.070 In/Sec	
WARM GLY 1 - WARM GLYCOL PUMP #1	(02-Jul-19)	
	OVERALL LEVEL	
11 - MOTOR OUTBOARD HORIZ	.027 In/Sec	
12 - MOTOR OUTBOARD VERT	.045 In/Sec	
13 - MOTOR OUTBOARD AXIAL	.118 In/Sec	
21 - MOTOR INBOARD HORIZ	.073 In/Sec	
22 - MOTOR INBOARD VERT	.092 In/Sec	

23	- MOTOR INBOARD AXIAL	.093 In/Sec
71	- PUMP CPLG END HORIZ	.190 In/Sec
72	- PUMP CPLG END VERT	.130 In/Sec
73	- PUMP CPLG END AXIAL	.165 In/Sec
81	- PUMP OPP END HORIZ	.075 In/Sec
82	- PUMP OPP END VERT	.074 In/Sec

WARM GLY 5 - WARM GLYCOL PUMP #5		(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR OUTBOARD HORIZ	.043 In/Sec
12	- MOTOR OUTBOARD VERT	.041 In/Sec
13	- MOTOR OUTBOARD AXIAL	.057 In/Sec
21	- MOTOR INBOARD HORIZ	.034 In/Sec
22	- MOTOR INBOARD VERT	.033 In/Sec
23	- MOTOR INBOARD AXIAL	.051 In/Sec
71	- PUMP CPLG END HORIZ	.074 In/Sec
72	- PUMP CPLG END VERT	.027 In/Sec
73	- PUMP CPLG END AXIAL	.074 In/Sec
81	- PUMP OPP END HORIZ	.040 In/Sec
82	- PUMP OPP END VERT	.023 In/Sec

COLD GLY 1 - COLD GLYCOL PUMP #1		(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR OUTBOARD HORIZ	.077 In/Sec
12	- MOTOR OUTBOARD VERT	.023 In/Sec
13	- MOTOR OUTBOARD AXIAL	.058 In/Sec
21	- MOTOR INBOARD HORIZ	.078 In/Sec
22	- MOTOR INBOARD VERT	.045 In/Sec
23	- MOTOR INBOARD AXIAL	.058 In/Sec
71	- PUMP CPLG END HORIZ	.096 In/Sec
72	- PUMP CPLG END VERT	.077 In/Sec
73	- PUMP CPLG END AXIAL	.058 In/Sec
81	- PUMP OPP END HORIZ	.042 In/Sec
82	- PUMP OPP END VERT	.058 In/Sec

COLD GLY 4 - COLD GLYCOL PUMP #4		(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR OUTBOARD HORIZ	.135 In/Sec
12	- MOTOR OUTBOARD VERT	.035 In/Sec
13	- MOTOR OUTBOARD AXIAL	.118 In/Sec
21	- MOTOR INBOARD HORIZ	.123 In/Sec
22	- MOTOR INBOARD VERT	.064 In/Sec
23	- MOTOR INBOARD AXIAL	.082 In/Sec
71	- PUMP CPLG END HORIZ	.054 In/Sec
72	- PUMP CPLG END VERT	.035 In/Sec
73	- PUMP CPLG END AXIAL	.055 In/Sec
81	- PUMP OPP END HORIZ	.035 In/Sec
82	- PUMP OPP END VERT	.066 In/Sec

COLD GLY 5 - COLD GLYCOL PUMP #5		(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR OUTBOARD HORIZ	.188 In/Sec
12	- MOTOR OUTBOARD VERT	.223 In/Sec
13	- MOTOR OUTBOARD AXIAL	.317 In/Sec
21	- MOTOR INBOARD HORIZ	.268 In/Sec
22	- MOTOR INBOARD VERT	.290 In/Sec
23	- MOTOR INBOARD AXIAL	.250 In/Sec

71	- PUMP CPLG END HORIZ	.093 In/Sec
72	- PUMP CPLG END VERT	.036 In/Sec
73	- PUMP CPLG END AXIAL	.049 In/Sec
81	- PUMP OPP END HORIZ	.035 In/Sec
82	- PUMP OPP END VERT	.034 In/Sec

COLD GLY 6 - COLD GLYCOL PUMP #6		(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR OUTBOARD HORIZ	.049 In/Sec
12	- MOTOR OUTBOARD VERT	.025 In/Sec
13	- MOTOR OUTBOARD AXIAL	.051 In/Sec
21	- MOTOR INBOARD HORIZ	.082 In/Sec
22	- MOTOR INBOARD VERT	.044 In/Sec
23	- MOTOR INBOARD AXIAL	.073 In/Sec
71	- PUMP CPLG END HORIZ	.038 In/Sec
72	- PUMP CPLG END VERT	.019 In/Sec
73	- PUMP CPLG END AXIAL	.076 In/Sec
81	- PUMP OPP END HORIZ	.031 In/Sec
82	- PUMP OPP END VERT	.026 In/Sec

PACK GLY 2 - PACKAGING COLD GLYCOL PUMP 2		(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR OUTBOARD HORIZ	.016 In/Sec
12	- MOTOR OUTBOARD VERT	.030 In/Sec
13	- MOTOR OUTBOARD AXIAL	.102 In/Sec
21	- MOTOR INBOARD HORIZ	.026 In/Sec
22	- MOTOR INBOARD VERT	.015 In/Sec
23	- MOTOR INBOARD AXIAL	.015 In/Sec
71	- PUMP CPLG END HORIZ	.037 In/Sec
72	- PUMP CPLG END VERT	.037 In/Sec
73	- PUMP CPLG END AXIAL	.056 In/Sec
81	- PUMP OPP END HORIZ	.023 In/Sec
82	- PUMP OPP END VERT	.017 In/Sec

Clarification Of Vibration Units:

Vel	-->	In/Sec	PK	Abbreviated Last Measurement
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Summary

Database: Blues_city.rbm
 Station: GOVERNMENT CELLAR
 Report Date: 09-Jul-19 13:16

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
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NANO 126 - NANO SKID PUMP 126		(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR OUTBOARD HORIZ	.159 In/Sec
12	- MOTOR OUTBOARD VERT	.148 In/Sec
13	- MOTOR OUTBOARD AXIAL	.163 In/Sec
21	- MOTOR INBOARD HORIZ	.085 In/Sec
22	- MOTOR INBOARD VERT	.115 In/Sec
23	- MOTOR INBOARD AXIAL	.100 In/Sec
71	- PUMP CPLG END HORIZ	.099 In/Sec
72	- PUMP CPLG END VERT	.078 In/Sec

73	- PUMP CPLG END AXIAL	.076 In/Sec
81	- PUMP OPP END HORIZ	.199 In/Sec
82	- PUMP OPP END VERT	.071 In/Sec

NANO 127 - NANO SKID PUMP 127		(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR OUTBOARD HORIZ	.100 In/Sec
12	- MOTOR OUTBOARD VERT	.091 In/Sec
13	- MOTOR OUTBOARD AXIAL	.171 In/Sec
21	- MOTOR INBOARD HORIZ	.115 In/Sec
22	- MOTOR INBOARD VERT	.114 In/Sec
23	- MOTOR INBOARD AXIAL	.212 In/Sec
71	- PUMP CPLG END HORIZ	.210 In/Sec
72	- PUMP CPLG END VERT	.212 In/Sec
73	- PUMP CPLG END AXIAL	.134 In/Sec
81	- PUMP OPP END HORIZ	.119 In/Sec
82	- PUMP OPP END VERT	.200 In/Sec

NANO 128 - NANO SKID PUMP 128		(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR OUTBOARD HORIZ	.265 In/Sec
12	- MOTOR OUTBOARD VERT	.126 In/Sec
13	- MOTOR OUTBOARD AXIAL	.134 In/Sec
21	- MOTOR INBOARD HORIZ	.295 In/Sec
22	- MOTOR INBOARD VERT	.095 In/Sec
23	- MOTOR INBOARD AXIAL	.133 In/Sec
71	- PUMP CPLG END HORIZ	.110 In/Sec
72	- PUMP CPLG END VERT	.180 In/Sec
73	- PUMP CPLG END AXIAL	.097 In/Sec
81	- PUMP OPP END HORIZ	.104 In/Sec
82	- PUMP OPP END VERT	.103 In/Sec

NANO 129 - NANO SKID PUMP 129		(02-Jul-19)
		OVERALL LEVEL
11	- MOTOR OUTBOARD HORIZ	.143 In/Sec
12	- MOTOR OUTBOARD VERT	.102 In/Sec
13	- MOTOR OUTBOARD AXIAL	.145 In/Sec
21	- MOTOR INBOARD HORIZ	.093 In/Sec
22	- MOTOR INBOARD VERT	.121 In/Sec
23	- MOTOR INBOARD AXIAL	.112 In/Sec
71	- PUMP CPLG END HORIZ	.085 In/Sec
72	- PUMP CPLG END VERT	.099 In/Sec
73	- PUMP CPLG END AXIAL	.095 In/Sec
81	- PUMP OPP END HORIZ	.088 In/Sec
82	- PUMP OPP END VERT	.107 In/Sec

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

Last Monitored Machine List

Database: Blues_city.rbm
 Station: POWER HOUSE
 Report Date: 09-Jul-19 12:59
 Report Interval: 09-Jun-19 To 09-Jul-19

PERIODIC VIBRATION TECHNOLOGY

Collected Machine...

MACHINE ID	DESCRIPTION	NUMBER OF POINTS	LATEST DATE
250 COMP	COMPRESSOR #3 - 250HP	12 OUT OF 12	02-Jul-19
150HP	COMPRESSOR #4 - 150HP	12 OUT OF 12	02-Jul-19
COMP 6	COMPRESSOR #6	12 OUT OF 12	02-Jul-19
BFW - M	BOILER FEED WATER PUMP MIDDLE	12 OUT OF 12	02-Jul-19
BFW - S	BOILER FEED WATER PUMP SOUTH	12 OUT OF 12	02-Jul-19
FAN 3	BOILER FAN #3 - 1780 RPM Max	12 OUT OF 12	02-Jul-19
MAKEUP #2	CHILLED WATER MAKEUP PUMP 2	11 OUT OF 12	02-Jul-19
YB PUMP 1	YELLOW BOX FILTERED WATER	11 OUT OF 12	02-Jul-19
SW PUMP 8	SERVICE WATER PUMP 8	11 OUT OF 12	02-Jul-19
RO 2	RO WATER PUMP 2	11 OUT OF 12	02-Jul-19
ACOMP #7	AMMONIA COMP - #7	18 OUT OF 18	02-Jul-19
800HP	AMMONIA COMP - 800HP	20 OUT OF 20	02-Jul-19

Missed Machine...

MACHINE ID	DESCRIPTION	
175 COMP	COMPRESSOR #2 - 175HP	0 OUT OF 12
COMP 1	COMPRESSOR #1	0 OUT OF 12
COMP 5	COMPRESSOR #5	0 OUT OF 12
BFW - N	BOILER FEED WATER PUMP NORTH	0 OUT OF 13
FAN 1	BOILER FAN #1	0 OUT OF 9
FAN 2	BOILER FAN #2	0 OUT OF 6
CR PUMP 1	CARBON RECIRC PUMP	0 OUT OF 12
MAKEUP #1	CHILLED WATER MAKEUP PUMP 1	0 OUT OF 12
MAKEUP #3	CHILLED WATER MAKEUP PUMP 3	0 OUT OF 12
SW PUMP 1	SERVICE WATER PUMP 1	0 OUT OF 12
SW PUMP 2	SERVICE WATER PUMP 2	0 OUT OF 12
SW PUMP 3	SERVICE WATER PUMP 3	0 OUT OF 12
SW PUMP 4	SERVICE WATER PUMP 4	0 OUT OF 12
SW PUMP 5	SERVICE WATER PUMP 5	0 OUT OF 12
SW PUMP 6	SERVICE WATER PUMP 6	0 OUT OF 12
RO 1	RO WATER PUMP 1	0 OUT OF 12
600HP	AMMONIA COMP - 600HP	0 OUT OF 18
CW PUMP 1	CHILLED WATER FEED PUMP	0 OUT OF 12

Monitored Point Total = 154 OUT OF 372

Monitored Machine Total = 12 OUT OF 30

Last Monitored Machine List

Database: Blues_city.rbm
 Station: UPPER FLOORS

Report Date: 09-Jul-19 12:59
Report Interval: 09-Jun-19 To 09-Jul-19

PERIODIC VIBRATION TECHNOLOGY

Collected Machine...

MACHINE ID	DESCRIPTION	NUMBER OF POINTS	LATEST DATE
3MM-N	3RD FLOOR MALT MILL #3 - N	8 OUT OF 60	02-Jul-19
3MM-S	3RD FLOOR MALT MILL#2 - S	9 OUT OF 60	02-Jul-19
2NHWP	2ND FLOOR N. HOT WATER PUMP	11 OUT OF 12	02-Jul-19

Missed Machine...

MACHINE ID	DESCRIPTION	
4GB	4th FLOOR GRAIN BLOWER	0 OUT OF 12
2SHWP	2ND FLOOR S. HOT WATER PUMP	0 OUT OF 12
GF-VP2	GALLERY DA VAC PUMP-SKID 2	0 OUT OF 12
GF-DP2	GALLERY DA DISCH PUMP-SKID 2	0 OUT OF 6
GF-CP2	GALLERY DA CIRC PUMP- SKID 2	0 OUT OF 6
GF-VP1	GALLERY DA VAC PUMP-SKID 1	0 OUT OF 12
GF-DP1	GALLERY DA DISCH PUMP-SKID 1	0 OUT OF 6
GF-CP1	GALLERY DA CIRC PUMP- SKID 1	0 OUT OF 6

Monitored Point Total = 28 OUT OF 204

Monitored Machine Total = 3 OUT OF 11

Last Monitored Machine List

Database: Blues_city.rbm
Station: BREWING 1ST FLOOR
Report Date: 09-Jul-19 12:59
Report Interval: 09-Jun-19 To 09-Jul-19

PERIODIC VIBRATION TECHNOLOGY

No Collected Machine...

Missed Machine...

MACHINE ID	DESCRIPTION	
LT-L1	LAUDER TUN - LEFT SIDE	0 OUT OF 15
LT-R1	LAUDER TUN - RIGHT SIDE	0 OUT OF 15

Last Monitored Machine List

Database: Blues_city.rbm
Station: BREWING BASEMENT
Report Date: 09-Jul-19 12:59
Report Interval: 09-Jun-19 To 09-Jul-19

PERIODIC VIBRATION TECHNOLOGY

Collected Machine...

MACHINE ID	DESCRIPTION	NUMBER OF POINTS	LATEST DATE
WORTA	WORT TRANSFER PUMP A	11 OUT OF 12	02-Jul-19
KCP2	KETTLE CIRC PUMP 2	11 OUT OF 12	02-Jul-19
BKP1	BREW KETTLE PUMP (IN PIT)	11 OUT OF 12	02-Jul-19

Missed Machine...

MACHINE ID	DESCRIPTION	
CIP1	CIP PUMP @ WORT TRANS PUMP	0 OUT OF 12
MASH TRANS	MASH TUN TRANSFER PUMP	0 OUT OF 12
TNK 63 PMP	TANK 63 SUCROSE PUMP	0 OUT OF 12
KCP1	KETTLE CIRC PUMP 1	0 OUT OF 12
SGB-A	SPENT GRAIN BLOWER A	0 OUT OF 12

Monitored Point Total = 33 OUT OF 96

Monitored Machine Total = 3 OUT OF 8

Last Monitored Machine List

Database: Blues_city.rbm

Station: GRAIN TRANSFER

Report Date: 09-Jul-19 12:59

Report Interval: 09-Jun-19 To 09-Jul-19

PERIODIC VIBRATION TECHNOLOGY

No Collected Machine...

Missed Machine...

MACHINE ID	DESCRIPTION	
VB-E	VACUUM BLOWER EAST	0 OUT OF 12
VB-W	VACUUM BLOWER WEST	0 OUT OF 12
GUB-N	GRAIN UNLOAD BLOWER NORTH	0 OUT OF 12
GUB-S	GRAIN UNLOAD BLOWER SOUTH	0 OUT OF 12

Last Monitored Machine List

Database: Blues_city.rbm

Station: SUGAR PUMPS

Report Date: 09-Jul-19 12:59

Report Interval: 09-Jun-19 To 09-Jul-19

PERIODIC VIBRATION TECHNOLOGY

Collected Machine...

MACHINE ID	DESCRIPTION	NUMBER OF POINTS	LATEST DATE
-----	-----	-----	-----
V3	SUGAR TANK VIKING PUMP #3	17 OUT OF 19	02-Jul-19
V4	SUGAR TANK VIKING PUMP #4	17 OUT OF 19	02-Jul-19
V5	SUGAR TANK VIKING PUMP #5	11 OUT OF 18	02-Jul-19

No Missed Machine...

Monitored Point Total = 45 OUT OF 56
Monitored Machine Total = 3 OUT OF 3
Last Monitored Machine List

Database: Blues_city.rbm
Station: ALCOHOL PUMP ROOM
Report Date: 09-Jul-19 12:59
Report Interval: 09-Jun-19 To 09-Jul-19

PERIODIC VIBRATION TECHNOLOGY

Collected Machine...

MACHINE ID	DESCRIPTION	NUMBER OF POINTS	LATEST DATE
-----	-----	-----	-----
SK1 RO1	SKID 1 - RO PUMP #1	6 OUT OF 6	02-Jul-19
SK1 RO4	SKID 1 - RO PUMP #4	6 OUT OF 6	02-Jul-19
SK1 RO3	SKID 1 - RO PUMP #3	11 OUT OF 12	02-Jul-19
SK1 RO2	SKID 1 - RO PUMP #2	11 OUT OF 12	02-Jul-19
SK2 RO1	SKID 2 - RO PUMP #1	6 OUT OF 6	02-Jul-19
SK2 RO4	SKID 2 - RO PUMP #4	6 OUT OF 6	02-Jul-19
SK2 RO3	SKID 2 - RO PUMP #3	11 OUT OF 12	02-Jul-19
SK2 RO2	SKID 2 - RO PUMP #2	11 OUT OF 12	02-Jul-19

No Missed Machine...

Monitored Point Total = 68 OUT OF 72
Monitored Machine Total = 8 OUT OF 8
Last Monitored Machine List

Database: Blues_city.rbm
Station: UNUSED / REMOVED
Report Date: 09-Jul-19 12:59
Report Interval: 09-Jun-19 To 09-Jul-19

PERIODIC VIBRATION TECHNOLOGY

No Collected Machine...

Missed Machine...

MACHINE ID	DESCRIPTION
-----	-----

CC-1 CEREAL COOKER 0 OUT OF 15
 MT-1 MASH TUN 0 OUT OF 15
 Last Monitored Machine List

Database: Blues_city.rbm
 Station: ADMINISTRATIVE AREA
 Report Date: 09-Jul-19 13:00
 Report Interval: 09-Jun-19 To 09-Jul-19

PERIODIC VIBRATION TECHNOLOGY

Collected Machine...

MACHINE ID	DESCRIPTION	NUMBER OF POINTS	LATEST DATE
HVAC COLD	HVAC COLD GLYCOL CIRC PUMP	11 OUT OF 12	02-Jul-19
HVAC HOT	HVAC HOT WATER CIRC PUMP	11 OUT OF 12	02-Jul-19

No Missed Machine...

Monitored Point Total = 22 OUT OF 24
 Monitored Machine Total = 2 OUT OF 2
 Last Monitored Machine List

Database: Blues_city.rbm
 Station: FILTER CELLAR
 Report Date: 09-Jul-19 13:00
 Report Interval: 09-Jun-19 To 09-Jul-19

PERIODIC VIBRATION TECHNOLOGY

Collected Machine...

MACHINE ID	DESCRIPTION	NUMBER OF POINTS	LATEST DATE
CHILL 1	CHILL WATER CIRC PUMP #1	11 OUT OF 12	02-Jul-19
W COOL A	CHILL WATER WORT COOL SIDE A	11 OUT OF 12	02-Jul-19
WARM GLY 1	WARM GLYCOL PUMP #1	11 OUT OF 12	02-Jul-19
WARM GLY 5	WARM GLYCOL PUMP #5	11 OUT OF 12	02-Jul-19
COLD GLY 1	COLD GLYCOL PUMP #1	11 OUT OF 12	02-Jul-19
COLD GLY 4	COLD GLYCOL PUMP #4	11 OUT OF 12	02-Jul-19
COLD GLY 5	COLD GLYCOL PUMP #5	11 OUT OF 12	02-Jul-19
COLD GLY 6	COLD GLYCOL PUMP #6	11 OUT OF 12	02-Jul-19
PACK GLY 2	PACKAGING COLD GLYCOL PUMP 2	11 OUT OF 12	02-Jul-19

Missed Machine...

MACHINE ID	DESCRIPTION	
CHILL 2	CHILL WATER CIRC PUMP #2	0 OUT OF 12
CHILL 3	CHILL WATER CIRC PUMP #3	0 OUT OF 12
W COOL B	CHILL WATER WORT COOL SIDE B	0 OUT OF 12
WARM GLY 2	WARM GLYCOL PUMP #2	0 OUT OF 12

WARM GLY 3	WARM GLYCOL PUMP #3	0 OUT OF 12
WARM GLY 4	WARM GLYCOL PUMP #4	0 OUT OF 12
COLD GLY 2	COLD GLYCOL PUMP #2	0 OUT OF 12
COLD GLY 3	COLD GLYCOL PUMP #3	0 OUT OF 12
PACK GLY 1	PACKAGING COLD GLYCOL PUMP 1	0 OUT OF 12

Monitored Point Total = 99 OUT OF 216

Monitored Machine Total = 9 OUT OF 18

Last Monitored Machine List

Database: Blues_city.rbm

Station: GOVERNMENT CELLAR

Report Date: 09-Jul-19 13:00

Report Interval: 09-Jun-19 To 09-Jul-19

PERIODIC VIBRATION TECHNOLOGY

Collected Machine...

MACHINE ID	DESCRIPTION	NUMBER OF POINTS	LATEST DATE
-----	-----	-----	-----
NANO 126	NANO SKID PUMP 126	11 OUT OF 12	02-Jul-19
NANO 127	NANO SKID PUMP 127	11 OUT OF 12	02-Jul-19
NANO 128	NANO SKID PUMP 128	11 OUT OF 12	02-Jul-19
NANO 129	NANO SKID PUMP 129	11 OUT OF 12	02-Jul-19

No Missed Machine...

Monitored Point Total = 44 OUT OF 48

Monitored Machine Total = 4 OUT OF 4

Last Monitored Machine List

Database: Blues_city.rbm

The Entire Database

Report Date: 09-Jul-19 13:00

Report Interval: 09-Jun-19 To 09-Jul-19

 ***** OVERALL SUMMARY *****

PERIODIC VIBRATION TECHNOLOGY

Collected Machine...

Monitored Point Total = 493 OUT OF 1088

Monitored Machine Total = 44 OUT OF 84

