

January 29, 2021

Arkema

Subject: January week 4 vibration service report

Most of the machines surveyed were found to be in good condition except for the following:

QualiTest® uses a four-step rating system for defects.

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

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

<u>Class III</u>: 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.

<u>Class IV</u>; 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

> 7030 Ryburn Drive Millington, TN 38053 P. 901-873-5300 F. 901-873-5301

Weekly Route Critical Equipment Observations

C Concentrator Vacuum Pump 2130-1

Vibrations appear to be slightly elevated this survey. Pump outboard horizontal is at 0.179"/sec velocity peak. No actions required just yet.

Agitator, Hydrogenator C 7001-01

The highest motor overall vibration is at 0.159"/sec velocity peak for the inboard vertical. We will continue to monitor normally. Gearbox looks good. No immediate issue.

A/B Concentrator Vacuum Pump 57

The outboard pump bearing overall is 0.284"/sec peak velocity, with a dominant vibration at 16 orders, which is most likely vane pass. We will continue to watch for changes. **Rated a Class I Defect.**

Flash Vacuum Pump 2130-1

Vibrations are all under 0.1"/sec velocity peak overall. No actions required.

Air Compressor C-202

Rotor bar vibrations are the highest in the motor's recent history. The motor was most likely under high loading. The trend clearly shows that the vibrations vary considerably over time. Data shows main vibration at 42 orders which we believe is the number of rotor bars. We still believe these motors have possible weak rotor bar end connections that cause the vibrations to fluctuate higher due to loading. There are still blower case vibrations around 2.5-3 KHz. With a wide noise floor. We will continue to monitor this unit for changes. **Rated a Class II Defect.**



Instrument Air Compressor

The male and female shaft vibrations still seem to show gear mesh and harmonics as well as a beat vibration occasionally. They continue to vary over time. Both shafts have between 6 and 7 g's RMS overall in the data. The dominant vibration appears to be the second gear mesh harmonic at near 2500 Hz. We are still watching this unit closely and will be going forward. **Rated a Class I Defect for now.**

Air Compressor NASH A 201-08A

Highest vibration is still in the pump itself at 0.290"/sec velocity peak for the outboard vertical. The vibration spectrum is still dominated by a 20-order vibration, which is thought to be vane pass. **Rated a Class I Defect.**

D Hydrogenator Agitator 9002-10

Highest overall vibration is at 0.256"/sec velocity peak. This is about average for this unit. We will watch carefully during the next few surveys. No immediate concern.

H2 Monthly Equipment

H2 East Cooling Tower Pump

Pump inboard bearing horizontal vibration continue to be high. The vibration is still dominated by shaft speed at almost ½"/second velocity peak. Inspect the unit fasteners and structure, coupling and alignment. **Rated A Class I Defect.**

H2 FD Fan

Motor shaft speed vibration is highest the data. Overall is 0.291"/sec velocity peak. Fan bearings show slight looseness. Inspect the coupling and all fasteners as time allows. **Rated A Class I Defect.**

	Abbreviatec ********	l Last Measurem	ent Summary		
D S R R	atabase: Arkema. tation: PEROXII oute No. 6: ARM eport Date: 01-M	rbm)E IEMA WK4 'eb-21 07:18			
MEASUREMENT POI	NT OVERALL LE	VEL HFD	/ VHFD	MACHINE	SPEED
2130-1old - C	Concentrator Vacu OVERALL I	um Pump (29 EVEL 1-20	-Jan-21) KHz		
11	.060 In/	Sec . 568	G-s	1200.0 R	PM
21	.067 In/	'Sec .566	G-s		

	.117 In/Sec	.167 G-s	
71	.120 In/Sec	.856 G-s	
81	.179 In/Sec	.709 G-s	
83	.074 In/Sec	1.480 G-s	
7000-01	- AGITATOR, HYDROGENATOR C	(29-Jan-21)	
	OVERALL LEVEL	1-20 KHZ	
02	.045 In/Sec	.048 G-s	45.00 RPM
03	.040 In/Sec	.052 G-s	
11	.076 In/Sec	.756 G-s	1400.0 RPM
12	.093 In/Sec	.704 G-s	
13	.153 In/Sec	.321 G-s	
21	.086 In/Sec	.374 G-s	
22	.159 In/Sec	.130 G-s	
23	.157 In/Sec	.643 G-s	
31	.090 In/Sec	.702 G-s	
32	.100 In/Sec	.969 G-s	
33	.052 In/Sec	.369 G-s	
41	.089 In/Sec	.930 G-s	
42	.092 In/Sec	1.111 G-s	
51	.075 In/Sec	.587 G-s	375.0 RPM
53	.087 In/Sec	.363 G-s	
61	.038 In/Sec	.382 G-s	
71	.050 In/Sec	.538 G-s	45.00 RPM
81	.025 In/Sec	.390 G-s	
83	.058 In/Sec	.385 G-s	
57	- A/B Concentr Vac Pmp-va	r RPM (29-Jan-21)	
	OVERALL LEVEL	1-20 KHz	
11	OVERALL LEVEL .055 In/Sec	1-20 KHz .362 G-s	900.0 RPM
11 12	OVERALL LEVEL .055 In/Sec .054 In/Sec	1-20 KHz .362 G-s .215 G-s	900.0 RPM
11 12 21	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s	900.0 RPM
11 12 21 23	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s	900.0 RPM
11 12 21 23 71	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s	900.0 RPM
11 12 21 23 71 81	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s	900.0 RPM
11 12 21 23 71 81 83	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s	900.0 RPM
11 12 21 23 71 81 83	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s	900.0 RPM
11 12 21 23 71 81 83 2130-1	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec .074 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s	900.0 RPM
11 12 21 23 71 81 83 2130-1	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec - FLASH VAP VAC PUMP-var OVERALL LEVEL	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s speed (29-Jan-21) 1-20 KHz	900.0 RPM
11 12 21 23 71 81 83 2130-1 11	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec - FLASH VAP VAC PUMP-var OVERALL LEVEL .033 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s speed (29-Jan-21) 1-20 KHz .214 G-s	900.0 RPM 1200.0 RPM
11 12 21 23 71 81 83 2130-1 11 12	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec - FLASH VAP VAC PUMP-var OVERALL LEVEL .033 In/Sec .033 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s speed (29-Jan-21) 1-20 KHz .214 G-s .141 G-s	900.0 RPM 1200.0 RPM
11 12 21 23 71 81 83 2130-1 11 12 21	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec - FLASH VAP VAC PUMP-var OVERALL LEVEL .033 In/Sec .041 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s speed (29-Jan-21) 1-20 KHz .214 G-s .141 G-s .602 G-s	900.0 RPM 1200.0 RPM
11 12 21 23 71 81 83 2130-1 11 12 21 22	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec - FLASH VAP VAC PUMP-var OVERALL LEVEL .033 In/Sec .041 In/Sec .043 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s speed (29-Jan-21) 1-20 KHz .214 G-s .141 G-s .602 G-s .589 G-s	900.0 RPM 1200.0 RPM
11 12 21 23 71 81 83 2130-1 11 12 21 22 23	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec .074 In/Sec .033 In/Sec .033 In/Sec .041 In/Sec .043 In/Sec .049 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s speed (29-Jan-21) 1-20 KHz .214 G-s .141 G-s .602 G-s .589 G-s .472 G-s	900.0 RPM 1200.0 RPM
11 12 21 23 71 81 83 2130-1 11 12 21 22 23 71	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec .074 In/Sec .033 In/Sec .033 In/Sec .041 In/Sec .043 In/Sec .049 In/Sec .070 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s speed (29-Jan-21) 1-20 KHz .214 G-s .141 G-s .602 G-s .589 G-s .472 G-s .520 G-s	900.0 RPM 1200.0 RPM
11 12 21 23 71 81 83 2130-1 11 12 21 22 23 71 72	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec .074 In/Sec .074 In/Sec .033 In/Sec .041 In/Sec .041 In/Sec .049 In/Sec .076 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s speed (29-Jan-21) 1-20 KHz .214 G-s .141 G-s .602 G-s .589 G-s .472 G-s .520 G-s .573 G-s	900.0 RPM 1200.0 RPM
11 12 21 23 71 81 83 2130-1 11 12 21 22 23 71 72 81	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec .074 In/Sec .074 In/Sec .033 In/Sec .041 In/Sec .043 In/Sec .049 In/Sec .076 In/Sec .080 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s speed (29-Jan-21) 1-20 KHz .214 G-s .141 G-s .602 G-s .589 G-s .472 G-s .520 G-s .573 G-s .246 G-s	900.0 RPM 1200.0 RPM
11 12 21 23 71 81 83 2130-1 11 12 21 22 23 71 72 81 82	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec .074 In/Sec .074 In/Sec .033 In/Sec .041 In/Sec .041 In/Sec .043 In/Sec .049 In/Sec .070 In/Sec .080 In/Sec .087 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s speed (29-Jan-21) 1-20 KHz .214 G-s .141 G-s .602 G-s .589 G-s .472 G-s .520 G-s .573 G-s .246 G-s .419 G-s	900.0 RPM 1200.0 RPM
11 12 21 23 71 81 83 2130-1 11 12 21 22 23 71 72 81 82 83	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec .074 In/Sec .074 In/Sec .033 In/Sec .033 In/Sec .041 In/Sec .043 In/Sec .049 In/Sec .076 In/Sec .080 In/Sec .040 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s speed (29-Jan-21) 1-20 KHz .214 G-s .141 G-s .602 G-s .589 G-s .472 G-s .520 G-s .573 G-s .246 G-s .419 G-s .595 G-s	900.0 RPM 1200.0 RPM
11 12 21 23 71 81 83 2130-1 11 12 21 22 23 71 71 81 82 83	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec .074 In/Sec .074 In/Sec .033 In/Sec .033 In/Sec .041 In/Sec .043 In/Sec .049 In/Sec .076 In/Sec .080 In/Sec .040 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s speed (29-Jan-21) 1-20 KHz .214 G-s .141 G-s .602 G-s .589 G-s .472 G-s .520 G-s .573 G-s .246 G-s .419 G-s .595 G-s	900.0 RPM 1200.0 RPM
11 12 21 23 71 81 83 2130-1 11 12 21 22 23 71 72 81 82 83 C-203	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec .074 In/Sec .074 In/Sec .033 In/Sec .033 In/Sec .041 In/Sec .041 In/Sec .049 In/Sec .076 In/Sec .080 In/Sec .040 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s speed (29-Jan-21) 1-20 KHz .214 G-s .141 G-s .602 G-s .589 G-s .472 G-s .520 G-s .573 G-s .246 G-s .419 G-s .595 G-s (29-Jan-21)	900.0 RPM 1200.0 RPM
11 12 21 23 71 81 83 2130-1 11 12 21 22 23 71 72 81 82 83 C-203	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec .074 In/Sec .074 In/Sec .033 In/Sec .033 In/Sec .041 In/Sec .043 In/Sec .049 In/Sec .076 In/Sec .080 In/Sec .040 In/Sec .040 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s speed (29-Jan-21) 1-20 KHz .214 G-s .141 G-s .602 G-s .589 G-s .472 G-s .520 G-s .573 G-s .246 G-s .419 G-s .595 G-s (29-Jan-21) 1-20 KHz	900.0 RPM 1200.0 RPM
11 12 21 23 71 81 83 2130-1 11 12 21 22 23 71 72 81 82 83 C-203 11	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec .074 In/Sec .033 In/Sec .033 In/Sec .041 In/Sec .043 In/Sec .049 In/Sec .080 In/Sec .040 In/Sec .040 In/Sec .040 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s speed (29-Jan-21) 1-20 KHz .214 G-s .141 G-s .602 G-s .589 G-s .573 G-s .246 G-s .419 G-s .595 G-s (29-Jan-21) 1-20 KHz 4.696 G-s	900.0 RPM 1200.0 RPM 3588.0 RPM
11 12 21 23 71 81 83 2130-1 11 12 21 22 23 71 72 81 82 83 C-203 11 12	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec .074 In/Sec .074 In/Sec .033 In/Sec .033 In/Sec .041 In/Sec .043 In/Sec .049 In/Sec .040 In/Sec .040 In/Sec .040 In/Sec .040 In/Sec .040 In/Sec .040 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s speed (29-Jan-21) 1-20 KHz .214 G-s .141 G-s .602 G-s .589 G-s .573 G-s .246 G-s .595 G-s (29-Jan-21) 1-20 KHz 4.696 G-s 6.288 G-s	900.0 RPM 1200.0 RPM 3588.0 RPM
11 12 21 23 71 81 83 2130-1 11 12 21 22 23 71 72 81 82 83 C-203 11 12 21	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec .074 In/Sec .074 In/Sec .033 In/Sec .033 In/Sec .041 In/Sec .049 In/Sec .049 In/Sec .040 In/Sec .040 In/Sec .040 In/Sec .040 In/Sec .040 In/Sec .043 In/Sec .040 In/Sec .040 In/Sec .043 In/Sec .040 In/Sec .040 In/Sec .060 In/Sec .063 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s speed (29-Jan-21) 1-20 KHz .214 G-s .141 G-s .602 G-s .589 G-s .472 G-s .520 G-s .573 G-s .246 G-s .595 G-s (29-Jan-21) 1-20 KHz 4.696 G-s 6.288 G-s 4.330 G-s	900.0 RPM 1200.0 RPM 3588.0 RPM
11 12 21 23 71 81 83 2130-1 11 12 21 22 23 71 72 81 82 83 C-203 11 12 21 22	OVERALL LEVEL .055 In/Sec .054 In/Sec .074 In/Sec .047 In/Sec .117 In/Sec .248 In/Sec .074 In/Sec .074 In/Sec .074 In/Sec .033 In/Sec .033 In/Sec .041 In/Sec .049 In/Sec .049 In/Sec .076 In/Sec .040 In/Sec .040 In/Sec .040 In/Sec .040 In/Sec .094 In/Sec .083 In/Sec .083 In/Sec .083 In/Sec .083 In/Sec	1-20 KHz .362 G-s .215 G-s .161 G-s .114 G-s .556 G-s .684 G-s .520 G-s speed (29-Jan-21) 1-20 KHz .214 G-s .141 G-s .602 G-s .589 G-s .472 G-s .520 G-s .573 G-s .246 G-s .595 G-s (29-Jan-21) 1-20 KHz 4.696 G-s 6.288 G-s 4.330 G-s 10.12 G-s	900.0 RPM 1200.0 RPM 3588.0 RPM

		OVERAI	L LEVEL	1-20 KHZ	
	71M	.057	In/Sec	2.827 G-s	
	72M	.053	In/Sec	2.459 G-s	
	73M	.060	In/Sec	4.281 G-s	
	81M	.075	In/Sec	3.445 G-s	
	82M	.087	In/Sec	4.649 G-s	
	71F	.070	In/Sec	3.346 G-s	
	72F	.084	In/Sec	2.747 G-s	
	73F	.117	In/Sec	8.005 G-s	
	81F	.049	In/Sec	1.573 G-s	
	82F	.077	In/Sec	2.863 G-s	
C-202	_	C-202 Comp		(29-Jan-21)	
		OVERAI	L LEVEL	1-20 KHz	
	11	.047	In/Sec	1.303 G-s	3588.0 RPM
	12	124	In/Sec	372 G-s	
	21	104	In/Sec	2 635 G-s	
	22	524	In/Sec	19 70 G-s	
	22	.524	In/Sec	6 437 C-s	
	25	OVERAL	LL LEVEL	1-20 KHZ	
	71M	.060	In/Sec	2.644 G-s	
	72M	.045	In/Sec	.810 G-s	
	73M	.076	In/Sec	2.750 G-s	
	81M	.064	In/Sec	3.040 G-s	
	82M	.075	In/Sec	2.740 G-s	
	71F	.050	In/Sec	2.174 G-s	
	72F	.065	In/Sec	1.823 G-s	
	73F	083	In/Sec	3 428 G-s	
	/ 31 ፑ	057	In/Sec	2 799 G-s	
	82F	.084	In/Sec	2.409 G-s	
a 001		0.001 0		(00 To 01)	
C-201	-	C-201 Comp	T T 101701	(29-Jan-21)	
C-201	-	C-201 Comp OVERAI	L LEVEL	(29-Jan-21) 1-20 KHz	2500 0 DDW
C-201	-	C-201 Comp OVERAI .128	L LEVEL In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s	3588.0 RPM
C-201	- 11 12	C-201 Comp OVERAI .128 .132	L LEVEL In/Sec In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s	3588.0 RPM
C-201	- 11 12 21	C-201 Comp OVERAI .128 .132 .100	L LEVEL In/Sec In/Sec In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s	3588.0 RPM
C-201	- 11 12 21 22	C-201 Comp OVERAI .128 .132 .100 .066	L LEVEL In/Sec In/Sec In/Sec In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s 2.118 G-s	3588.0 RPM
C-201	- 11 12 21 22 23	C-201 Comp OVERAI .128 .132 .100 .066 .134	L LEVEL In/Sec In/Sec In/Sec In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s 2.118 G-s 4.671 G-s	3588.0 RPM
C-201	11 12 21 22 23	C-201 Comp OVERAI .128 .132 .100 .066 .134 OVERAI	L LEVEL In/Sec In/Sec In/Sec In/Sec L LEVEL	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s 2.118 G-s 4.671 G-s 1-20 KHZ	3588.0 RPM
C-201	- 11 12 21 22 23 71M	C-201 Comp OVERAI .128 .132 .100 .066 .134 OVERAI .062	L LEVEL In/Sec In/Sec In/Sec In/Sec L LEVEL In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s 2.118 G-s 4.671 G-s 1-20 KHZ 2.608 G-s	3588.0 RPM
C-201	11 12 21 22 23 71M 72M	C-201 Comp OVERAI .128 .132 .100 .066 .134 OVERAI .062 .051	L LEVEL In/Sec In/Sec In/Sec In/Sec L LEVEL In/Sec In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s 2.118 G-s 4.671 G-s 1-20 KHZ 2.608 G-s 2.173 G-s	3588.0 RPM
C-201	- 11 12 21 22 23 71M 72M 73M	C-201 Comp OVERAI .128 .132 .100 .066 .134 OVERAI .062 .051 .081	L LEVEL In/Sec In/Sec In/Sec In/Sec L LEVEL In/Sec In/Sec In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s 2.118 G-s 4.671 G-s 1-20 KHZ 2.608 G-s 2.173 G-s 2.617 G-s	3588.0 RPM
C-201	11 12 21 22 23 71M 72M 73M 81M	C-201 Comp OVERAL .128 .132 .100 .066 .134 OVERAL .062 .051 .081 .122	L LEVEL In/Sec In/Sec In/Sec In/Sec L LEVEL In/Sec In/Sec In/Sec In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s 2.118 G-s 4.671 G-s 1-20 KHZ 2.608 G-s 2.173 G-s 2.617 G-s 7.301 G-s	3588.0 RPM
C-201	11 12 21 22 23 71M 72M 73M 81M 82M	C-201 Comp OVERAI .128 .132 .100 .066 .134 OVERAI .062 .051 .081 .122 .086	L LEVEL In/Sec In/Sec In/Sec In/Sec L LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s 2.118 G-s 4.671 G-s 1-20 KHZ 2.608 G-s 2.173 G-s 2.617 G-s 7.301 G-s 2.914 G-s	3588.0 RPM
C-201	11 12 21 22 23 71M 72M 73M 81M 82M 71F	C-201 Comp OVERAI .128 .132 .100 .066 .134 OVERAI .062 .051 .081 .122 .086 .092	L LEVEL In/Sec In/Sec In/Sec In/Sec L LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s 2.118 G-s 4.671 G-s 1-20 KHZ 2.608 G-s 2.173 G-s 2.617 G-s 7.301 G-s 2.914 G-s 3.390 G-s	3588.0 RPM
C-201	11 12 21 22 23 71M 72M 73M 81M 82M 71F 72F	C-201 Comp OVERAI .128 .132 .100 .066 .134 OVERAI .062 .051 .081 .122 .086 .092 .056	L LEVEL In/Sec In/Sec In/Sec In/Sec L LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s 2.118 G-s 4.671 G-s 1-20 KHZ 2.608 G-s 2.173 G-s 2.617 G-s 7.301 G-s 2.914 G-s 3.390 G-s 1.705 G-s	3588.0 RPM
C-201	11 12 21 22 23 71M 72M 73M 81M 82M 71F 72F 73F	C-201 Comp OVERAI .128 .132 .100 .066 .134 OVERAI .062 .051 .081 .122 .086 .092 .056 .071	L LEVEL In/Sec In/Sec In/Sec In/Sec L LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s 2.118 G-s 4.671 G-s 1-20 KHZ 2.608 G-s 2.173 G-s 2.617 G-s 7.301 G-s 2.914 G-s 3.390 G-s 1.705 G-s 3.952 G-s	3588.0 RPM
C-201	11 12 21 22 23 71M 72M 73M 81M 82M 71F 72F 73F 81F	C-201 Comp OVERAI .128 .132 .100 .066 .134 OVERAI .062 .051 .081 .122 .086 .092 .056 .071 .079	LL LEVEL In/Sec In/Sec In/Sec In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s 2.118 G-s 4.671 G-s 1-20 KHZ 2.608 G-s 2.173 G-s 2.617 G-s 7.301 G-s 2.914 G-s 3.390 G-s 1.705 G-s 3.952 G-s 3.402 G-s	3588.0 RPM
C-201	11 12 21 22 23 71M 72M 73M 81M 82M 71F 72F 73F 81F 82F	C-201 Comp OVERAL .128 .132 .100 .066 .134 OVERAL .062 .051 .081 .122 .086 .092 .056 .071 .079 .077	L LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s 2.118 G-s 4.671 G-s 1-20 KHZ 2.608 G-s 2.173 G-s 2.617 G-s 7.301 G-s 2.914 G-s 3.390 G-s 1.705 G-s 3.952 G-s 3.402 G-s 2.450 G-s	3588.0 RPM
C-201 new AC	11 12 21 22 23 71M 72M 73M 81M 82M 71F 72F 73F 81F 82F	C-201 Comp OVERAI .128 .132 .100 .066 .134 OVERAI .062 .051 .081 .122 .086 .092 .056 .071 .079 .077 INSTRUMENT AIR C	LL LEVEL In/Sec In/Sec In/Sec In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s 2.118 G-s 4.671 G-s 1-20 KHZ 2.608 G-s 2.173 G-s 2.617 G-s 7.301 G-s 2.914 G-s 3.390 G-s 1.705 G-s 3.952 G-s 3.402 G-s 2.450 G-s (29-Jan-21)	3588.0 RPM
C-201 new AC	11 12 21 22 23 71M 72M 73M 81M 82M 71F 72F 73F 81F 82F	C-201 Comp OVERAI .128 .132 .100 .066 .134 OVERAI .062 .051 .081 .122 .086 .092 .056 .071 .079 .077 INSTRUMENT AIR COVERAI	LL LEVEL In/Sec In/Sec In/Sec In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s 2.118 G-s 4.671 G-s 1-20 KHZ 2.608 G-s 2.173 G-s 2.617 G-s 7.301 G-s 2.914 G-s 3.390 G-s 1.705 G-s 3.952 G-s 3.402 G-s 2.450 G-s (29-Jan-21) 1-20 KHz	3588.0 RPM
C-201 new AC	11 12 21 22 23 71M 72M 73M 81M 82M 71F 72F 73F 81F 82F - 11	C-201 Comp OVERAI .128 .132 .100 .066 .134 OVERAI .062 .051 .081 .122 .086 .092 .056 .071 .079 .077 INSTRUMENT AIR COVERAI .153	LL LEVEL In/Sec In/Sec In/Sec In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s 2.118 G-s 4.671 G-s 1-20 KHZ 2.608 G-s 2.173 G-s 2.617 G-s 7.301 G-s 2.914 G-s 3.390 G-s 1.705 G-s 3.952 G-s 3.402 G-s 2.450 G-s (29-Jan-21) 1-20 KHz 1.080 G-s	3588.0 RPM 1780.0 RPM
C-201 new AC	11 12 21 22 23 71M 72M 73M 81M 82M 71F 72F 73F 81F 82F - 11 12	C-201 Comp OVERAI .128 .132 .100 .066 .134 OVERAI .062 .051 .081 .122 .086 .092 .056 .071 .079 .077 INSTRUMENT AIR COVERAI .153 .111	LL LEVEL In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s 2.118 G-s 4.671 G-s 1-20 KHZ 2.608 G-s 2.173 G-s 2.617 G-s 7.301 G-s 2.914 G-s 3.390 G-s 1.705 G-s 3.952 G-s 3.402 G-s 2.450 G-s (29-Jan-21) 1-20 KHz 1.080 G-s .808 G-s	3588.0 RPM 1780.0 RPM
C-201 new AC	11 12 21 22 23 71M 72M 73M 81M 82M 71F 72F 73F 81F 82F - 11 12 13	C-201 Comp OVERAI .128 .132 .100 .066 .134 OVERAI .062 .051 .081 .122 .086 .092 .056 .071 .079 .077 INSTRUMENT AIR CO OVERAI .153 .111 .055	LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec LL LEVEL In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s 2.118 G-s 4.671 G-s 1-20 KHZ 2.608 G-s 2.173 G-s 2.617 G-s 7.301 G-s 2.914 G-s 3.390 G-s 1.705 G-s 3.952 G-s 3.402 G-s 2.450 G-s (29-Jan-21) 1-20 KHz 1.080 G-s .808 G-s .377 G-s	3588.0 RPM 1780.0 RPM
C-201 new AC	11 12 21 22 23 71M 72M 72M 73M 81M 82M 71F 72F 73F 81F 82F 11 12 13 21	C-201 Comp OVERAI .128 .132 .100 .066 .134 OVERAI .062 .051 .081 .122 .086 .092 .056 .071 .079 .077 INSTRUMENT AIR CO OVERAI .153 .111 .055 .136	LL LEVEL In/Sec	(29-Jan-21) 1-20 KHz 3.843 G-s 4.354 G-s 1.772 G-s 2.118 G-s 4.671 G-s 1-20 KHZ 2.608 G-s 2.173 G-s 2.173 G-s 2.617 G-s 7.301 G-s 2.914 G-s 3.390 G-s 1.705 G-s 3.952 G-s 3.402 G-s 2.450 G-s (29-Jan-21) 1-20 KHz 1.080 G-s .808 G-s .377 G-s 1.253 G-s	3588.0 RPM 1780.0 RPM

	22	055 Tr /000	507 C -	
	23	.055 In/Sec	.597 G-S	
	71 M	102 TP/Sec	1-20 KHZ	
	/1M 70M	.193 In/Sec	0.151 G-S	
	/ 2M	.132 In/Sec	2.852 G-S	
	/3M	.177 In/Sec	5.017 G-s	
	81M	.134 In/Sec	2.434 G-s	
	82M	.274 In/Sec	6.292 G-s	
	83M	.215 In/Sec	5.451 G-s	
	71F	.131 In/Sec	4.562 G-s	
	72F	.185 In/Sec	6.729 G-s	
	73F	.112 In/Sec	4.167 G-s	
	81F	.233 In/Sec	7.254 G-s	
	82F	.198 In/Sec	2.679 G-s	
	83F	.173 In/Sec	2.784 G-s	
201-08	A - COMPRESSO	R NASH A 201-08A	(29-Jan-21)	
201 00		OVERALL LEVEL	1-20 KHz	
	11		107 6-8	506 3 PPM
	12	078 In/Sec	141 6-8	500.5 RFM
	13	131 In/Sec	111 G-s	
	21	.131 11/Sec	122 C -	
	21	.078 IN/Sec	.132 G-S	
	22	.104 IN/Sec	.129 G-S	
	23	.136 In/Sec	.111 G-S	
	/1	.151 In/Sec	1.3// G-S	
	72	.269 In/Sec	1.219 G-S	
	73	.148 In/Sec	.344 G-s	
	81	.167 In/Sec	.305 G-s	
	82	.290 In/Sec	.318 G-s	
		161 70/000		
	83	.151 IN/Sec	.461 G-S	
202-05	83 - NASH SEAI	LIQUID PUMP-A	.461 G-s (29-Jan-21)	
202-05	83 - NASH SEAI	LIQUID PUMP-A OVERALL LEVEL	.461 G-S (29-Jan-21) 1-20 KHz	
202-05	83 - NASH SEAI 11	. LIQUID PUMP-A OVERALL LEVEL .018 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S	1800.0 RPM
202-05	83 - NASH SEAI 11 21	.151 IN/Sec LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S	1800.0 RPM
202-05	83 - NASH SEAI 11 21 23	.151 IN/Sec LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S .183 G-S	1800.0 RPM
202-05	83 - NASH SEAI 11 21 23 71	.151 IN/Sec LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S .183 G-S .043 G-S	1800.0 RPM
202-05	83 - NASH SEAI 11 21 23 71 72	.151 IN/Sec LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec .022 In/Sec .016 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S .183 G-S .043 G-S .040 G-S	1800.0 RPM
202-05	83 - NASH SEAI 11 21 23 71 72	.151 IN/Sec LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .022 In/Sec .022 In/Sec .016 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S .183 G-S .043 G-S .040 G-S	1800.0 RPM
202-05 9002-1	83 - NASH SEAI 11 21 23 71 72 .0 - D-HYDROGE	.151 IN/Sec LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec .022 In/Sec .016 In/Sec .016 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S .183 G-S .043 G-S .040 G-S (29-Jan-21)	1800.0 RPM
202-05 9002-1	83 - NASH SEAI 11 21 23 71 72 .0 - D-HYDROGE	.151 IN/Sec LIQUID PUMP-A OVERALL LEVEL .018 IN/Sec .016 IN/Sec .022 IN/Sec .016 IN/Sec .016 IN/Sec ENATOR AGITATOR OVERALL LEVEL	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S .183 G-S .043 G-S .043 G-S .040 G-S (29-Jan-21) 1-20 KHz	1800.0 RPM
202-05 9002-1	83 - NASH SEAI 11 21 23 71 72 .0 - D-HYDROGE 11	.151 IN/Sec LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec .016 In/Sec NATOR AGITATOR OVERALL LEVEL .087 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S .183 G-S .043 G-S .043 G-S .040 G-S (29-Jan-21) 1-20 KHz .045 G-S	1800.0 RPM 1185.0 RPM
202-05 9002-1	 83 - NASH SEAI 11 21 23 71 72 0 - D-HYDROGE 11 21 	.151 IN/Sec . LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec .016 In/Sec ENATOR AGITATOR OVERALL LEVEL .087 In/Sec .090 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S .183 G-S .043 G-S .040 G-S (29-Jan-21) 1-20 KHz .045 G-S .138 G-S	1800.0 RPM 1185.0 RPM
202-05 9002-1	 83 - NASH SEAI 11 21 23 71 72 0 - D-HYDROGE 11 21 23 	LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec .022 In/Sec .016 In/Sec CNATOR AGITATOR OVERALL LEVEL .087 In/Sec .090 In/Sec .063 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S .183 G-S .043 G-S .040 G-S (29-Jan-21) 1-20 KHz .045 G-S .138 G-S .043 G-S	1800.0 RPM 1185.0 RPM
202-05 9002-1	 83 - NASH SEAI 11 21 23 71 72 0 - D-HYDROGE 11 21 23 	LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec .022 In/Sec .016 In/Sec CNATOR AGITATOR OVERALL LEVEL .087 In/Sec .090 In/Sec .063 In/Sec OVERALL LEVEL	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S .183 G-S .043 G-S .040 G-S (29-Jan-21) 1-20 KHz .045 G-S .138 G-S .043 G-S 1-20 KHZ	1800.0 RPM 1185.0 RPM
202-05 9002-1	 83 - NASH SEAI 11 21 23 71 72 0 - D-HYDROGE 11 21 23 31 	LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec .022 In/Sec .016 In/Sec .016 In/Sec .016 In/Sec .087 In/Sec .090 In/Sec .063 In/Sec OVERALL LEVEL .148 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S .183 G-S .043 G-S .040 G-S (29-Jan-21) 1-20 KHz .045 G-S .138 G-S .043 G-S 1-20 KHZ .559 G-S	1800.0 RPM 1185.0 RPM
202-05 9002-1	83 - NASH SEAI 11 21 23 71 72 .0 - D-HYDROGE 11 21 23 31 31 31L	LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec .022 In/Sec .016 In/Sec .016 In/Sec .016 In/Sec .087 In/Sec .090 In/Sec .063 In/Sec .048 In/Sec .201 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S .183 G-S .043 G-S .040 G-S (29-Jan-21) 1-20 KHz .045 G-S .138 G-S .043 G-S 1-20 KHZ .559 G-S .564 G-S	1800.0 RPM 1185.0 RPM
202-05 9002-1	 83 - NASH SEAI 11 21 23 71 72 0 - D-HYDROGE 11 21 23 31 311 311 	LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec .022 In/Sec .016 In/Sec .016 In/Sec .016 In/Sec .090 In/Sec .090 In/Sec .063 In/Sec OVERALL LEVEL .148 In/Sec .201 In/Sec OVERALL LEVEL	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S .183 G-S .043 G-S .040 G-S (29-Jan-21) 1-20 KHz .045 G-S .138 G-S .043 G-S 1-20 KHZ .559 G-S .564 G-S 1-20 KHz	1800.0 RPM 1185.0 RPM
202-05 9002-1	 83 - NASH SEAI 11 21 23 71 72 0 - D-HYDROGE 11 21 23 31 311 51 	LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec .022 In/Sec .016 In/Sec ENATOR AGITATOR OVERALL LEVEL .087 In/Sec .063 In/Sec OVERALL LEVEL .148 In/Sec .201 In/Sec OVERALL LEVEL .160 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S .183 G-S .043 G-S .040 G-S (29-Jan-21) 1-20 KHz .045 G-S .138 G-S .043 G-S 1-20 KHZ .559 G-S .564 G-S 1-20 KHz .176 G-S	1800.0 RPM 1185.0 RPM
202-05 9002-1	 83 - NASH SEAI 11 21 23 71 72 0 - D-HYDROGE 11 21 23 31 311 31L 51 511 	LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec .022 In/Sec .016 In/Sec .016 In/Sec .016 In/Sec .087 In/Sec .090 In/Sec .063 In/Sec .063 In/Sec .004 In/Sec .201 In/Sec .201 In/Sec .217 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S .183 G-S .043 G-S .040 G-S (29-Jan-21) 1-20 KHz .045 G-S .138 G-S .043 G-S 1-20 KHZ .559 G-S .564 G-S 1-20 KHz .176 G-S .159 G-S	1800.0 RPM 1185.0 RPM
202-05 9002-1	 83 - NASH SEAI 11 21 23 71 72 0 - D-HYDROGE 11 21 23 31 311 31L 51 511 52 	LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec .022 In/Sec .016 In/Sec .016 In/Sec .016 In/Sec .087 In/Sec .090 In/Sec .063 In/Sec .003 In/Sec .004 In/Sec .201 In/Sec .201 In/Sec .217 In/Sec .196 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S .183 G-S .043 G-S .040 G-S (29-Jan-21) 1-20 KHz .045 G-S .138 G-S .043 G-S 1-20 KHZ .559 G-S .564 G-S 1-20 KHz .176 G-S .159 G-S .240 G-S	1800.0 RPM 1185.0 RPM 100.0 RPM
202-05 9002-1	 83 - NASH SEAI 11 21 23 71 72 0 - D-HYDROGE 11 21 23 31 31L 51 51 52 52L 	LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec .022 In/Sec .016 In/Sec COVERALL LEVEL .087 In/Sec .063 In/Sec .063 In/Sec .000 In/Sec .201 In/Sec .201 In/Sec .201 In/Sec .217 In/Sec .196 In/Sec .256 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S .183 G-S .043 G-S .040 G-S (29-Jan-21) 1-20 KHz .045 G-S .138 G-S .043 G-S 1-20 KHZ .559 G-S .564 G-S 1-20 KHz .176 G-S .159 G-S .240 G-S .272 G-S	1800.0 RPM 1185.0 RPM 100.0 RPM
202-05 9002-1	 83 - NASH SEAI 11 21 23 71 72 0 - D-HYDROGE 11 21 23 31 31L 51 51 52 52L 53 	LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec .022 In/Sec .016 In/Sec .016 In/Sec .016 In/Sec .090 In/Sec .090 In/Sec .063 In/Sec .003 In/Sec OVERALL LEVEL .148 In/Sec .201 In/Sec .201 In/Sec .217 In/Sec .196 In/Sec .256 In/Sec .093 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S .183 G-S .043 G-S .040 G-S (29-Jan-21) 1-20 KHz .045 G-S .138 G-S .043 G-S 1-20 KHZ .559 G-S .564 G-S 1-20 KHz .176 G-S .159 G-S .240 G-S .272 G-S .521 G-S	1800.0 RPM 1185.0 RPM 100.0 RPM
202-05 9002-1	 83 - NASH SEAI 11 21 23 71 72 0 - D-HYDROGE 11 21 23 31 31L 51 51 51 52 52L 53 53L 	LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec .022 In/Sec .016 In/Sec .016 In/Sec .016 In/Sec .016 In/Sec .090 In/Sec .090 In/Sec .063 In/Sec .003 In/Sec .201 In/Sec .201 In/Sec .217 In/Sec .196 In/Sec .256 In/Sec .029 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-S .119 G-S .183 G-S .043 G-S .040 G-S (29-Jan-21) 1-20 KHz .045 G-S .138 G-S .043 G-S 1-20 KHZ .559 G-S .564 G-S 1-20 KHz .176 G-S .159 G-S .240 G-S .272 G-S .521 G-S .556 G-S	1800.0 RPM 1185.0 RPM 100.0 RPM
202-05 9002-1	 83 - NASH SEAI 11 21 23 71 72 0 - D-HYDROGE 11 21 23 31 31L 51 51 51 52 52L 53 53L 61 	LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec .022 In/Sec .016 In/Sec .016 In/Sec .016 In/Sec .090 In/Sec .090 In/Sec .090 In/Sec .090 In/Sec .201 In/Sec .201 In/Sec .201 In/Sec .217 In/Sec .196 In/Sec .256 In/Sec .029 In/Sec .029 In/Sec .178 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-s .119 G-s .183 G-s .043 G-s .043 G-s .040 G-s (29-Jan-21) 1-20 KHz .045 G-s .138 G-s .043 G-s 1-20 KHZ .559 G-s .564 G-s 1-20 KHz .176 G-s .159 G-s .240 G-s .272 G-s .521 G-s .556 G-s .127 G-s	1800.0 RPM 1185.0 RPM 100.0 RPM
202-05 9002-1	 83 - NASH SEAI 11 21 23 71 72 0 - D-HYDROGE 11 21 23 31 31L 51 51 51 52 52L 53 53L 61 61L 	LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec .022 In/Sec .016 In/Sec .016 In/Sec .016 In/Sec .016 In/Sec .090 In/Sec .090 In/Sec .090 In/Sec .003 In/Sec .201 In/Sec .201 In/Sec .196 In/Sec .256 In/Sec .093 In/Sec .029 In/Sec .178 In/Sec .145 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-s .119 G-s .183 G-s .043 G-s .040 G-s (29-Jan-21) 1-20 KHz .045 G-s .138 G-s .043 G-s 1-20 KHZ .559 G-s .564 G-s 1-20 KHz .176 G-s .159 G-s .240 G-s .272 G-s .521 G-s .556 G-s .127 G-s .127 G-s	1800.0 RPM 1185.0 RPM 100.0 RPM
202-05 9002-1	 83 - NASH SEAI 11 21 23 71 72 0 - D-HYDROGE 11 21 23 31 31L 51 51 52 52L 53 53L 61 61L 81 	LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec .022 In/Sec .016 In/Sec .022 In/Sec .016 In/Sec .016 In/Sec .090 In/Sec .090 In/Sec .090 In/Sec .001 In/Sec .201 In/Sec .201 In/Sec .201 In/Sec .196 In/Sec .256 In/Sec .093 In/Sec .029 In/Sec .178 In/Sec .145 In/Sec .030 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-s .119 G-s .183 G-s .043 G-s .043 G-s .040 G-s (29-Jan-21) 1-20 KHz .045 G-s .138 G-s .043 G-s 1-20 KHZ .559 G-s .564 G-s 1-20 KHz .176 G-s .159 G-s .240 G-s .272 G-s .521 G-s .521 G-s .127 G-s .127 G-s .025 G-s	1800.0 RPM 1185.0 RPM 100.0 RPM
202-05 9002-1	 83 - NASH SEAI 11 21 23 71 72 0 - D-HYDROGE 11 21 23 31 31L 51 51 51 52 52L 53 53L 61 61L 81 82 	LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .016 In/Sec .022 In/Sec .022 In/Sec .022 In/Sec .016 In/Sec .016 In/Sec .016 In/Sec .090 In/Sec .090 In/Sec .090 In/Sec .001 In/Sec .201 In/Sec .201 In/Sec .201 In/Sec .196 In/Sec .256 In/Sec .029 In/Sec .178 In/Sec .145 In/Sec .030 In/Sec .038 In/Sec	.461 G-S (29-Jan-21) 1-20 KHz .127 G-s .119 G-s .183 G-s .043 G-s .040 G-s (29-Jan-21) 1-20 KHz .045 G-s .138 G-s .043 G-s 1-20 KHZ .559 G-s .564 G-s 1-20 KHz .176 G-s .159 G-s .240 G-s .272 G-s .521 G-s .521 G-s .127 G-s .127 G-s .025 G-s .014 G-s	1800.0 RPM 1185.0 RPM 100.0 RPM

83		.026	In/Sec	.184 G-s	
Clarific	cation Of Vib	ration	Units:		
Acc	> G-s	F	к		
Vel	> In/	Sec F	к	Abb	reviated Last Measurement
Summary					
	*	******	*******	*****	**
	Database Station:	: Arke HYDR	ema.rbm ROGEN		
	Route No	. 1:	H2 MONTHLY	•	
	Report D	ate: 0	1-Feb-21	07:18	
MEASUREMEN	NT POINT	OVERALI	LEVEL	HFD / VHFD	MACHINE SPEED
D03	DIND MEA	CIDC WE	10m D23	(20 Tap 21)	
PZA	- FOMP MEA	OVEDAT	ISI PZA	(29-Jan-21)	
11		OVERAL 069	TP/Soc	1-20 KHZ	2595 0 DDM
21		.000	In/Sec	.030 G-S	5585.0 RPM
21		.047	In/Sec	.250 G-S	
23		.094	In/Sec	.151 G-S	
71		.200	In/Sec	.405 G-S	
12		.152	In/Sec	.440 G-S	
P1A	- PUMP BFW	WEST P1	A	(29-Jan-21)	
		OVERAL	L LEVEL	1-20 KHz	
11		.062	In/Sec	.143 G-s	3600.0 RPM
21		.089	In/Sec	.739 G-s	
23		.187	In/Sec	.269 G-s	
71		.097	In/Sec	.703 G-s	
72		.098	In/Sec	.755 G-s	
81		.157	In/Sec	.644 G-s	
82		.144	In/Sec	.502 G-s	
83		.061	In/Sec	1.038 G-s	
C2	- FD BLOWER	c2		(29-Jan-21)	
		OVERAL	L LEVEL	1-20 KHz	
11		.291	In/Sec	.334 G-s	3600.0 RPM
21		.266	In/Sec	.332 G-s	
23		.159	In/Sec	.141 G-s	
71		.223	In/Sec	1.564 G-s	
81		.222	In/Sec	1.251 G-s	
C1	- ID -BLOWE	R C1		(29-Jan-21)	
		OVERAL	L LEVEL	1-20 KHz	
11		.121	In/Sec	.412 G-s	1800.0 RPM
21		.128	In/Sec	.388 G-s	
23		.167	In/Sec	.319 G-s	
71		.119	In/Sec	.707 G-s	
72		.093	In/Sec	.869 G-s	
81		.219	In/Sec	1.086 G-s	
82		.212	In/Sec	.928 G-s	
CTPE	- EAST COOT	TNG TOW		(29Tan-21)	
	2	OVERAT	L LEVEL	1-20 KHz	
11		252	In/Sec	340 G-9	1750 0 RPM
					_,

21	.093 In/Sec	.232 G-s	
23	.168 In/Sec	.333 G-s	
71	.170 In/Sec	.515 G-s	
72	.484 In/Sec	.577 G-s	
CTPW	- WEST COOLING TOWER PUMP	(29-Jan-21)	
	OVERALL LEVEL	1-20 KHz	
11	.087 In/Sec	.238 G-s	1750.0 RPM
21	.064 In/Sec	.426 G-s	
23	.075 In/Sec	.793 G-s	
71	.185 In/Sec	1.028 G-s	
72	.178 In/Sec	1.075 G-s	
	ation of Wibration Units.		
Clarific	action of vibration units:		
Acc	> G-S PK		
Vel	> In/Sec PK		