

April 16, 2021

Arkema

Subject: April week 2 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

The motor has the highest vibration amplitude of about 0.181"/second velocity peak overall in the axial measurement. No immediate concerns.

Agitator, Hydrogenator C 7001-01

All vibrations are under 0.11"/second velocity peak overall. We will continue to monitor normally. No immediate issue.

A/B Concentrator Vacuum Pump 57

The pump bearings overall are 0.24"/sec peak velocity or less. We will continue to watch for changes. No immediate concerns.

Flash Vacuum Pump 2130-1

All vibrations are below 0.1"/second velocity peak overall. No reportable issues.

Air Compressor C-201

Rotor bar vibrations are low 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. There are still blower case vibrations around 2.5-3 KHz. With a wide noise floor. The large jump in overall acceleration for the female outboard turbine shaft measurement reported last week has returned to normal. We will continue to monitor this unit closely for changes. **Rated a Class I Defect**.

Air Compressor C-202

Rotor bar vibrations are low 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. 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 I Defect.**

Air Compressor C-203

Rotor bar vibrations are low 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. There are still blower case vibrations around 2.5-3 KHz. With a wide noise floor. The turbine male shaft outboard vertical overall acceleration has risen to 8 g's RMS and is the highest value since I added the 1-20KHz trend just like the 201 compressor reported last week. The spectrum shows a rise in the noise floor and apparent non-synchronous harmonic peaks of about 6.9 orders. We will recommend a once over on the unit and oil analysis also at this time to be prudent. This could just be normal cyclical variations in vibration but rising higher over time as components wear. **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 14 g's RMS overall in the data with the male having the higher reading this survey. The dominant vibration appears to be the second gear mesh harmonic at near 2490 Hz (about 84 orders). We are still watching this unit closely and will be going forward. **Rated a Class II Defect.**

Air Compressor NASH A 201-08A

Highest vibration is still in the pump itself at 0.353"/sec velocity peak for the outboard vertical and has increased slightly. The vibration spectrum is still dominated by a 20-order vibration, which is thought to be vane pass. **Rated a Class II Defect.**

D Hydrogenator Agitator 9002

Highest overall vibration is at 0.29"/sec velocity peak for the gearbox. Vibrations are mostly subsynchronous to motor speed. This is still lower amplitude for this unit. **Rated a Class I Defect.**

H2O2 Monthly Route Equipment

Middle Mix Bed Water Pump 191-07

The pump continues to show a dominant vane pass vibration. Check the pump flow parameters for process variables as time allows. **Rated a Class I Defect.**

Database: Arkema.rbm Station: PEROXIDE Route No. 4: ARK WK 2 Report Date: 16-Apr-21 07:28

MEASUREMEN	T POINT	OVERALL LEVEL	HFD / VHFD	MACHINE SPEED
2130-1old	- C Conce	entrator Vacuum Pump	(15 - Apr - 21)	
		OVERALL LEVEL	1-20 KHz	
11		.076 In/Sec	.453 G-s	1200.0 RPM
21		.069 In/Sec	.461 G-s	
23		.181 In/Sec	.146 G-s	
71		.135 In/Sec	.822 G-s	
81		.166 In/Sec	.654 G-s	
83		.080 In/Sec	1.335 G-s	
7000-01	- AGITAT	OR, HYDROGENATOR C	(15-Apr-21)	
		OVERALL LEVEL	1-20 KHZ	
02		.052 In/Sec	.025 G-s	45.00 RPM
03		.046 In/Sec	.043 G-s	
11		.079 In/Sec	.677 G-s	1400.0 RPM
12		.068 In/Sec	.670 G-s	
13		.065 In/Sec	.266 G-s	
21		.082 In/Sec	.380 G-s	
22		.107 In/Sec	.223 G-s	
23		.073 In/Sec	.320 G-s	
31		.084 In/Sec	.365 G-s	
32		.072 In/Sec	.503 G-s	
33		.070 In/Sec	.228 G-s	
41		.080 In/Sec	.528 G-s	
42		.068 In/Sec	.645 G-s	
51		.074 In/Sec	.269 G-s	375.0 RPM
53		.060 In/Sec	.245 G-s	
61		.031 In/Sec	.246 G-s	
71		.066 In/Sec	.178 G-s	45.00 RPM
81		.028 In/Sec	.151 G-s	
83		.054 In/Sec	.330 G-s	
57	- A/B Cor	ncentr Vac Pmp-var R	PM (15-Apr-21)	
11		OVERALL LEVEL	1-20 KHZ	000 0 000
12		.063 IN/Sec	.094 G-S	900.0 RPM
12		.077 IN/Sec	.314 G-S	
21		.088 IN/Sec	.104 G-S	
23		.061 IN/Sec	.222 G-S	
71		.14/ 11/Sec	.050 G-S	
83		050 In/Sec	.907 G-S	
05		.030 117 560	1.291 6 5	
2130-1	- FLASH	VAP VAC PUMP-var spe	ed (15-Apr-21)	
		OVERALL LEVEL	1-20 KHz	
11		.043 In/Sec	.303 G-s	1200.0 RPM
12		.035 In/Sec	.182 G-s	

	21	.037 In/Sec	1.705 G-s	
	22	.041 In/Sec	.545 G-s	
	23	.055 In/Sec	.994 G-s	
	71	.066 In/Sec	.463 G-s	
	72	.073 In/Sec	.485 G-s	
	81	082 In/Sec	390 G-s	
	82	079 Tn/Sec	444 G-s	
	83	042 In/Sec	561 G-s	
	63	.042 11/ Sec	.501 G-S	
c 202	c 202	Com	(15 3mm 21)	
C-203	- C-203		(15-Apr-21)	
		OVERALL LEVEL	1-20 KHZ	
	11	.046 In/Sec	1.165 G-S	3588.0 RPM
	12	.036 In/Sec	.750 G-s	
	21	.020 In/Sec	.346 G-s	
	22	.033 In/Sec	.972 G-s	
	23	.027 In/Sec	.895 G-s	
		OVERALL LEVEL	1-20 КНZ	
	71M	.037 In/Sec	1.533 G-s	
	72M	.041 In/Sec	1.096 G-s	
	73M	.063 In/Sec	3.017 G-s	
	81M	.081 In/Sec	4.254 G-s	
	82M	.068 In/Sec	8.165 G-s	
	71F	.054 In/Sec	2.327 G-s	
	72F	064 In/Sec	2 905 G-s	
	735	069 In/Sec	2.505 G S	
	7.5E 91도	051 In/Sec	2.010 G 3	
	01F 02F	053 TR/Sec	1 246 C-2	
	021	.055 11/560	1.240 G-S	
C-202	- C-202	Comp	(15 - 3n - 21)	
C-202	- C-202		(15-Apt-21)	
	11	OVERALL LEVEL	1-20 KHZ	2500 0 000
	11	.062 IN/Sec	1.154 G-S	3588.0 RPM
	12	.115 In/Sec	.858 G-S	
	21	.061 In/Sec	.077 G-s	
	22	.094 In/Sec	2.392 G-s	
	23	.053 In/Sec	.900 G-s	
		OVERALL LEVEL	1-20 KHZ	
	71M	.038 In/Sec	1.608 G-s	
	72M	.042 In/Sec	.868 G-s	
	73M	.067 In/Sec	1.960 G-s	
	81M	.066 In/Sec	3.298 G-s	
	82M	.069 In/Sec	4.357 G-s	
	71F	.041 In/Sec	2.955 G-s	
	72F	.064 In/Sec	.812 G-s	
	73F	.073 In/Sec	3.066 G-s	
	81F	.048 In/Sec	2.337 G-s	
	82F	.044 In/Sec	.801 G-s	
		· · · · · · · · · · · · · · · · · · ·		
C-201	- C-201	Comp	(15 - Apr - 21)	
		OVERALL LEVEL	1-20 KHz	
	11	.083 In/Sec	.645 G-s	3588.0 RPM
	12	076 Tn/Sec	402 6-9	SSSS.V MIM
	21	098 Tp/Soc	611 6-5	
	22	0.050 III 500	356 0-5	
	22	.040 III/Sec	1 570 0 - 5	
	23	OVERALL LEVEL	1_20 878	
	71.	OPE TH /OFF	1 427 C -	
	/ IM	.035 IN/Sec	1.43/ G-S	
	/2M	.048 In/Sec	3.668 G-S	

	73M	.075 I	n/Sec 2	2.281 G-s	
	81M	.096 I	n/Sec 7	7.049 G-s	
	82M	.061 I	n/Sec 2	2.822 G-s	
	71F	.059 I	n/Sec 2	2.657 G-s	
	72F	.063 I	n/Sec 2	2.231 G-s	
	73F	.088 T	n/Sec 5	5.455 G-s	
	81F	068 T	n/Sec 2	2 835 G-s	
	82F	063 T	n/Sec 2	2 656 G-s	
	021		,		
new AC		- INSTRUMENT AIR CO	MPRESSOR	(15-Apr-21)	
		OVERALL	LEVEL 1	L-20 KHz	
	11	.136 I	n/Sec 1	L.073 G-s	1780.0 RPM
	12	.102 I	n/Sec	.603 G-s	
	13	.058 I	n/Sec	.403 G-s	
	21	.173 I	n/Sec	.420 G-s	
	22	.071 I	n/Sec 1	L.189 G-s	
	23	.061 I	n/Sec	.214 G-s	
		OVERALL	LEVEL 1	L-20 KHZ	
	71F	.224 I	n/Sec 9	9.021 G-s	
	72F	.152 I	n/Sec 3	3.669 G-s	
	73F	.162 I	n/Sec 5	5.403 G-s	
	81F	.133 I	n/Sec 2	2.388 G-s	
	82F	.194 I	n/Sec 5	5.403 G-s	
	83F	.147 I	n/Sec 3	3.004 G-s	
	71M	.101 I	n/Sec 5	5.208 G-s	
	72M	.163 I	n/Sec 4	1.670 G-s	
	73M	.106 I	n/Sec 4	1.737 G-s	
	81M	.136 I	n/Sec 2	2.103 G-s	
	82M	.376 I	n/Sec 1	L4.53 G-s	
	83M	100 -	10	3 320 C-C	
	0.014	.190 1	n/Sec 3	J.JZU G-S	
	0.014	.190 1	n/Sec 3	5.520 G-S	
201-08A		.190 1 - COMPRESSOR,NASH A	n/Sec 3	(15-Apr-21)	
201-08A		.190 I - COMPRESSOR,NASH A OVERALL	n/Sec 3 201-08A LEVEL 1	(15-Apr-21) L-20 KHz	
201-08A	11	.190 I - COMPRESSOR,NASH A OVERALL .079 I	n/Sec 3 201-08A LEVEL 1 n/Sec	(15-Apr-21) L-20 KHz .126 G-s	506.3 RPM
201-08A	11 12	.190 I - COMPRESSOR,NASH A OVERALL .079 I .070 I	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s	506.3 RPM
201-08A	11 12 13	.190 I - COMPRESSOR,NASH A OVERALL .079 I .070 I .162 I	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .160 G-s	506.3 RPM
201-08A	11 12 13 21	.190 I - COMPRESSOR,NASH A OVERALL .079 I .070 I .162 I .073 I	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec n/Sec n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .160 G-s .147 G-s	506.3 RPM
201-08A	11 12 13 21 22	.190 I - COMPRESSOR,NASH A OVERALL .079 I .070 I .162 I .073 I .102 I	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec n/Sec n/Sec n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .160 G-s .147 G-s .141 G-s	506.3 RPM
201-08A	11 12 13 21 22 23	.190 I - COMPRESSOR,NASH A OVERALL .079 I .070 I .162 I .073 I .102 I .105 I	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .160 G-s .147 G-s .141 G-s .092 G-s	506.3 RPM
201-08A	11 12 13 21 22 23 71	- COMPRESSOR,NASH A OVERALL .079 I .070 I .162 I .073 I .102 I .165 I .172 I	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec 1	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .160 G-s .147 G-s .141 G-s .092 G-s L.470 G-s	506.3 RPM
201-08A	11 12 13 21 22 23 71 72	- COMPRESSOR,NASH A OVERALL .079 I .070 I .162 I .162 I .102 I .102 I .165 I .172 I .265 I	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec n/Sec n/Sec n/Sec 1 n/Sec 1 n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .160 G-s .147 G-s .141 G-s .092 G-s L.470 G-s .877 G-s	506.3 RPM
201-08A	11 12 13 21 22 23 71 72 73	- COMPRESSOR,NASH A OVERALL .079 I .070 I .162 I .162 I .102 I .165 I .172 I .265 I .173 I	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec 1 n/Sec n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .160 G-s .147 G-s .141 G-s .092 G-s L.470 G-s .877 G-s .393 G-s	506.3 RPM
201-08A	11 12 13 21 22 23 71 72 73 81	- COMPRESSOR,NASH A OVERALL .079 I .070 I .162 I .162 I .102 I .165 I .172 I .265 I .173 I .173 I .187 I	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .160 G-s .147 G-s .141 G-s .092 G-s L.470 G-s .877 G-s .393 G-s .246 G-s	506.3 RPM
201-08A	11 12 13 21 22 23 71 72 73 81 82	- COMPRESSOR,NASH A OVERALL .079 I .070 I .162 I .162 I .102 I .165 I .172 I .265 I .173 I .187 I .353 I	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .160 G-s .147 G-s .141 G-s .092 G-s L.470 G-s .877 G-s .393 G-s .246 G-s .307 G-s	506.3 RPM
201-08A	11 12 13 21 22 23 71 72 73 81 82 83	- COMPRESSOR,NASH A OVERALL .079 I .070 I .162 I .162 I .102 I .165 I .172 I .265 I .173 I .187 I .353 I .182 I	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .150 G-s .160 G-s .147 G-s .141 G-s .092 G-s L.470 G-s .877 G-s .393 G-s .246 G-s .307 G-s .267 G-s	506.3 RPM
201-08A	11 12 13 21 22 23 71 72 73 81 82 83	- COMPRESSOR, NASH A OVERALL .079 I .070 I .162 I .162 I .102 I .165 I .172 I .265 I .173 I .187 I .353 I .182 I	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .150 G-s .160 G-s .147 G-s .141 G-s .141 G-s .092 G-s L.470 G-s .877 G-s .393 G-s .246 G-s .307 G-s .267 G-s	506.3 RPM
201-08A 202-05	11 12 13 21 22 23 71 72 73 81 82 83	- COMPRESSOR, NASH A OVERALL .079 I .070 I .162 I .162 I .102 I .102 I .165 I .172 I .265 I .173 I .187 I .353 I .182 I - NASH SEAL LIQUID	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .150 G-s .160 G-s .147 G-s .141 G-s .141 G-s .092 G-s L.470 G-s .877 G-s .393 G-s .246 G-s .307 G-s .267 G-s .15-Apr-21)	506.3 RPM
201-08A 202-05	11 12 13 21 22 23 71 72 73 81 82 83	- COMPRESSOR, NASH A OVERALL .079 I .070 I .162 I .162 I .102 I .102 I .165 I .172 I .265 I .173 I .187 I .353 I .182 I - NASH SEAL LIQUID OVERALL	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .150 G-s .160 G-s .147 G-s .141 G-s .141 G-s .092 G-s L.470 G-s .877 G-s .393 G-s .246 G-s .307 G-s .267 G-s (15-Apr-21) L-20 KHz	506.3 RPM
201-08A 202-05	11 12 13 21 22 23 71 72 73 81 82 83	- COMPRESSOR, NASH A OVERALL .079 I .070 I .162 I .162 I .102 I .102 I .165 I .172 I .265 I .173 I .187 I .353 I .182 I - NASH SEAL LIQUID OVERALL .017 I	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .150 G-s .147 G-s .141 G-s .141 G-s .092 G-s L.470 G-s .877 G-s .393 G-s .246 G-s .307 G-s .267 G-s .15-Apr-21) L-20 KHz .109 G-s .299 G-s	506.3 RPM 1800.0 RPM
201-08A 202-05	11 12 13 21 22 23 71 72 73 81 82 83 11 21 23	- COMPRESSOR, NASH A OVERALL .079 I .070 I .162 I .073 I .102 I .165 I .172 I .265 I .173 I .187 I .353 I .182 I - NASH SEAL LIQUID OVERALL .017 I .017 I	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec n/Sec n/Sec n/Sec 1 n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .150 G-s .147 G-s .141 G-s .092 G-s L.470 G-s .393 G-s .246 G-s .307 G-s .267 G-s (15-Apr-21) L-20 KHz .109 G-s .229 G-s 093 G-s	506.3 RPM 1800.0 RPM
201-08A 202-05	11 12 13 21 22 23 71 72 73 81 82 83 11 21 23 71	- COMPRESSOR, NASH A OVERALL .079 I .070 I .162 I .162 I .102 I .102 I .165 I .172 I .265 I .173 I .187 I .353 I .182 I - NASH SEAL LIQUID OVERALL .017 I .017 I .022 I .022 I	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec n/Sec n/Sec n/Sec 1 n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .150 G-s .147 G-s .141 G-s .092 G-s L.470 G-s .877 G-s .393 G-s .246 G-s .307 G-s .267 G-s (15-Apr-21) L-20 KHz .109 G-s .229 G-s .093 G-s .051 G-s	506.3 RPM 1800.0 RPM
201-08A 202-05	11 12 13 21 22 23 71 72 73 81 82 83 11 21 23 71 72	- COMPRESSOR, NASH A OVERALL .079 I .070 I .162 I .162 I .102 I .102 I .165 I .172 I .265 I .173 I .187 I .353 I .182 I - NASH SEAL LIQUID OVERALL .017 I .017 I .022 I .030 I .016 J	n/Sec 3 201-08A LEVEL 1 n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .150 G-s .147 G-s .141 G-s .092 G-s L.470 G-s .393 G-s .246 G-s .307 G-s .267 G-s (15-Apr-21) L-20 KHz .109 G-s .229 G-s .051 G-s .037 G-s	506.3 RPM 1800.0 RPM
201-08A 202-05	11 12 13 21 22 23 71 72 73 81 82 83 11 21 23 71 72 71 72	- COMPRESSOR, NASH A OVERALL .079 I .070 I .162 I .162 I .102 I .102 I .165 I .172 I .173 I .187 I .353 I .187 I .353 I .182 I - NASH SEAL LIQUID OVERALL .017 I .017 I .022 I .030 I .016 I	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec n/Sec n/Sec n/Sec 1 n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .150 G-s .147 G-s .141 G-s .092 G-s L.470 G-s .877 G-s .393 G-s .246 G-s .307 G-s .267 G-s (15-Apr-21) L-20 KHz .109 G-s .229 G-s .033 G-s .037 G-s	506.3 RPM 1800.0 RPM
201-08A 202-05 9002-10	11 12 13 21 22 23 71 72 73 81 82 83 11 21 23 71 72	- COMPRESSOR, NASH A OVERALL .079 I .070 I .162 I .073 I .102 I .165 I .172 I .265 I .173 I .187 I .353 I .182 I - NASH SEAL LIQUID OVERALL .017 I .022 I .030 I .016 I	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec n/Sec n/Sec n/Sec 1 n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .160 G-s .147 G-s .141 G-s .092 G-s L.470 G-s .877 G-s .393 G-s .246 G-s .307 G-s .267 G-s (15-Apr-21) L-20 KHz .093 G-s .037 G-s .037 G-s .037 G-s	506.3 RPM 1800.0 RPM
201-08A 202-05 9002-10	11 12 13 21 22 23 71 72 73 81 82 83 11 21 23 71 72	- COMPRESSOR, NASH A OVERALL .079 I .070 I .162 I .073 I .102 I .165 I .172 I .265 I .173 I .187 I .353 I .182 I - NASH SEAL LIQUID OVERALL .017 I .022 I .030 I .016 I - D-HYDROGENATOR AG OVERALL	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .150 G-s .147 G-s .141 G-s .092 G-s L.470 G-s .877 G-s .393 G-s .246 G-s .307 G-s .267 G-s (15-Apr-21) L-20 KHz .093 G-s .037 G-s	506.3 RPM 1800.0 RPM
201-08A 202-05 9002-10	11 12 13 21 22 23 71 72 73 81 82 83 11 21 23 71 72 71 72 11	- COMPRESSOR, NASH A OVERALL .079 I .070 I .162 I .073 I .102 I .102 I .165 I .172 I .265 I .173 I .187 I .353 I .187 I .353 I .182 I - NASH SEAL LIQUID OVERALL .017 I .017 I .022 I .030 I .016 I - D-HYDROGENATOR AG OVERALL .079 I	n/Sec 3 201-08A LEVEL 1 n/Sec n/Sec n/Sec n/Sec n/Sec 1 n/Sec	(15-Apr-21) L-20 KHz .126 G-s .150 G-s .150 G-s .147 G-s .141 G-s .092 G-s L.470 G-s .877 G-s .393 G-s .246 G-s .307 G-s .267 G-s (15-Apr-21) L-20 KHz .093 G-s .051 G-s .037 G-s (15-Apr-21) L-20 KHz .071 G-s	506.3 RPM 1800.0 RPM 1185.0 RPM

21		.089	In/Sec	.190 G-s	
23		.046	In/Sec	.057 G-s	
		OVERA	LL LEVEL	1-20 KHZ	
31		.162	In/Sec	.874 G-s	
31 T		188	In/Sec	798 G-s	
011		OVERA	T.T. T.EVET.	1-20 KHz	
51		220		241 G-s	
511		231	In/Sec	244 G-s	100 0 RPM
52		221	In/Sec	308 G-s	100.0 1014
521		290		323 6-8	
53		.290	In/Sec	.323 G-S	
531		.133	In/Sec	431 G-s	
61		184	In/Sec	.451 G S	
611		161		122 C-s	
91		. 101	In/Sec	031 6-8	
01		.034		.031 G-S	
02		.030	In/Sec	.023 G-S	
63		.030	In/Sec	.150 G-S	
9003-01	- ספטעש-ט	DDTMADY	יים חודם	DIIMD (15-7-21)	
2002-01	D-HIDRO		T.T. T.EVET	1_20 Kur	
11		04544		140 C-C	1800 0 DDM
21		000. CNO		.140 G-S	TOOD'O KEM
21		.043	In/Sec	.190 G-S	
23		.044	In/Sec	.033 G-S	
71		.007	In/Sec	.214 G-S	
12		.073	In/Sec	.235 G-S	
9001-01	- D-HYDRO	SECOND.	FILT FD	PUMP (15-Apr-21)	
		OVERA	LL LEVEL	1-20 KHz	
11		.053	In/Sec	.220 G-s	1800.0 RPM
21		.067	In/Sec	.287 G-s	
23		.036	In/Sec	.126 G-s	
71		.067	In/Sec	.245 G-s	
72		.105	In/Sec	.259 G-s	
100 00	T			······································	
192-03	- Two Sta	ge water	Pump A-1	WEST $(15 - Apr - 21)$	
		OVERA	TT 18AET	1-20 KHZ	1765 0 55%
11		.072	In/Sec	.1/3 G-s	1765.0 RPM
21		.077	In/Sec	.392 G-S	
23		.058	In/Sec	.208 G-S	
71		.130	In/Sec	.616 G-s	
72		.057	In/Sec	.821 G-s	
191-07		ה אמיידים		1 - 07 (15 - Apr - 21)	
	M MIA D		OHE 19. T.T. T.RVRT	1-20 KH-	
11		106		348 C-9	3600 0 RDM
21		127	In/Sec	658 G-9	JUVV.J KEM
22		100		563 6-5	
23		.100		248 6-5	
71		.413		245 G-8	
71 72				. 233 5-8	
71 72		.215	III/Sec		
71 72		.215			
71 72 Clarific	ation Of V	ibration	Units:		
71 72 Clarific Acc	ation Of V > G	.215 ibration -s	Units:		