February 2, 2022

Mitsubishi Chemicals

Subject: February vibration report

Most of the machines surveyed were found to be in good condition with the exception of the following:

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

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

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

Class III; Defect (s) present that may cause failure in short term (less than 2 months.). This should be addressed as soon as practical, with a high maintenance priority. Increase monitoring frequency.

Class IV; Defect (s) present that makes continued reliability unpredictable, and possibility of secondary damage is high. Repairs should be made ASAP. An unscheduled shutdown should be considered for repairs

Hi-Speed **Industrial Service** tests and inspects industrial machinery and equipment and makes recommendations concerning maintenance and repairs based on its experience in the field of industrial repair and maintenance. The information contained herein is provided as an opinion only, not as a guaranty or warranty of the matters discussed herein.

This completes our assessment of your equipment for this survey. Thank you for your business and don't hesitate to call if you have any comments or questions.

Sincerely,

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

Observations

ACN13B #2 Kettle Circulation Pump
Motor bearing data still shows outer race defects in the inboard bearing. The vibrations have not changed much recently. We will watch this carefully going forward. **Rated a Class II Defect.**

ACN22 ACN Ref Booster Pump #2
The motor and pump axial vibrations are still elevated 4x shaft speed. We suspect a pump issue. Ensure the pump is operating properly in the correct point on the performance curve. Inspect the unit for loose fasteners, alignment, and coupling wear at time allows. **Rated a Class I Defect.**

ACN29A ACN Cooling Tower Pump North
Pump data continues to suggest cavitation. Check for proper pump operation. **Rated a Class I Defect.**

ACN29C ACN Cooling Tower Pump South
Pump bearing data still shows non-synchronous harmonic peaks in the spectrum. Vibrations are most likely low amplitude bearing defect frequencies. A more detailed analysis could be provided if we had the bearing numbers in the database. **Rated a Class I Defect.**

ACN36 ACN West Tank Circulation Pump
The pump inboard horizontal and axial vibrations are still elevated, especially at 4x shaft speed. We suspect an impeller vane pass vibration, or possibly a coupling issue. Check to make sure the pump flow and pressure are at design levels. Inspect the coupling also. **Rated a Class I Defect.**

MON 36 Irganox Mix/Feed Pump
Non-synchronous harmonic vibrations are still strong in the pump. The pump could be worn. Inspect as time allows. **Rated a Class II Defect.**

MON32B ARC Reflux Pump S
The pump inboard vibrations show multiple shaft speed harmonics with the 5x shaft speed dominant. There are also a few non-synchronous peaks. We suspect slight wear in the pump and possible a process issue. We will continue to monitor for changes. **Rated a Class I Defect.**

MON 38CNM LBS Tails Pump N
Vibration data shows an increase in the floor between 2.5 and 3.0 KHz in the spectrum for the motor bearings. We suspect bearing defects are present. Ensure adequate bearing lubrication if applicable. Prepare to change out the motor in the future. **Rated a Class II Defect.**

MON 40 Acetone Pump

The motor inboard bearing vibrations have increased slightly again. A few peaks can possibly be attributed to rotor bar passing frequencies which generally are not usually a problem. We will keep a close eye on this unit. **Rated a Class I Defect.**

MON 55SM Hut Pump S

Vibration data for the motor bearings show possibly early defects are present. There is pulsing in the time waveform. Ensure the motor bearings are lubricated. We will watch for changes. **Rated a Class I Defect.**

MON 63E LBS Side Stream Pump East

Data still shows non-synchronous harmonic vibration peaks in the motor bearings. No immediate concern yet. **Rated a Class I Defect.**

MON 63W LBS Side Stream Pump West

Vibration data still shows synchronous and non-synchronous peaks in the spectrum for the motor bearings. We suspect bearing defects are present; however the database does not have the bearing defect frequencies in the analysis parameter fault frequency sets. Ensure adequate bearing lubrication if applicable. Prepare to change out the motor in the future. **Rated a Class II Defect.**

MON 65 Amide Reactor Circulation Primary

The motor is showing a large increase shaft speed vibration in the vertical measurements. Unit is mounted on spring isolators which could affect the amplitudes. Inspect all fasteners, structures and coupling. **Rated a Class III Defect.**
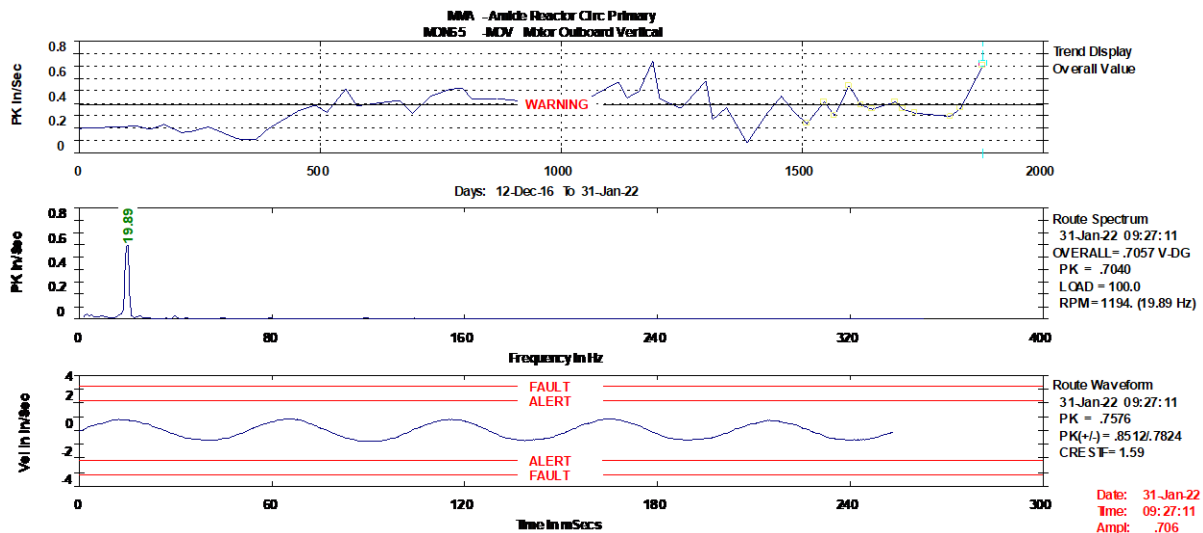
MON 81 Uninhibited MON Uninhibited Tank Pump S
Vibration data shows an increase in the floor between 2.5 and 3.0 KHz in the acceleration spectrum for the DE motor bearing. We suspect bearing defects are present. Ensure adequate bearing lubrication if applicable. Prepare to change out the motor in the future. The pump input bearing is also showing an increase in the acceleration noise floor and could indicate bearing wear, lubrication loss, or process issues. Inspect for defects. **Rated a Class II Defect.**

MON 84 WCM Tails Pump South
The pump drive end vibrations have dropped. No further action needed.

MON 85E Water Treatment Pump East
The pump inboard horizontal vibration is slightly elevated at 5x shaft speed. Ensure the pump is operating properly in the correct point on the performance curve. **Rated a Class I Defect.**

SAR 03 Turbine Compressor Main Blower
Vibrations in the compressor are normal. Nonrated this month.

SAR 10 Process Air Fan E
The fan bearings were recently replaced, and the high 1x RPM vibration has dropped significantly, however, the new bearings are showing excessive vibrations in the acceleration data. This could be due to many factors including excessive belt tension, sheave misalignment, cocked bearings, excessive axial loading, incorrect clearances, poor lubrication, lubrication contamination, improper lubrication, or possibly defective bearings. We still recommend inspecting for these issues as time allows. **Rated a Class II Defect.**

SAR1 13 Combustion Air Fan East
The fan bearing data still shows what looks to be low amplitude shaft speed harmonics which could indicate possible looseness. We need to confirm the shaft speed. Check all fasteners and perform a lift check on the fan shaft. **Rated a Class I Defect.**

SAR 14 Combustion Air Fan West
The data still indicates distress in the inboard motor bearing. We only see about 1.6 g's RMS overall for the horizontal measurements. The fan bearings show a raised noise floor in the acceleration spectrum and impacting in the time domain as well as a few low amplitude harmonics of the fundamental speed. This could be distress in the bearings, lubrication, mechanical looseness, or some other anomaly. Ensure the bearings are lubricated if applicable. We will keep an eye on this unit in the future. No other action is required at this time. **Rated a Class I Defect.**

SAR 39A Boiler Feed Water Pump
Large drop in motor drive end vertical vibration. No further action required.

SAR 39D Boiler Feed Water Pump
Motor bearings are in some distress. Ensure proper lubrication if applicable. **Rated a Class II Defect.**

SAR55B Neutralization Pump South
The data continues to show signs of early distress in the inboard motor bearing. Ensure the motor bearings are lubricated if applicable. We will keep an eye on this unit in the future. **Rated a Class I Defect.**

SAR 63 EM Spent Acid Feed Pump E
The pump inboard bearing vibration data still indicates slight issues that are most like bearing defects. Ensure the bearings are lubricated. **Rated a Class I Defect.**

SAR 66 B, C Vertical Cooling Tower Pumps
These units still have high vibrations at near ½" per second velocity overall. Vertical pumps are susceptible to imbalance and resonance. Some sheet metal covers prevent good bearing data to be collected. Inspect units for fastener and structure issues. Trim balancing might help. **Rated a Class I Defect.**

SAR78A Cooling Tower Fan #1
The motor continues have an elevated 1x RPM vibration in the axial measurements. Inspect the fasteners, structure, coupling and alignment as time allows. **Rated a Class I Defect.**

SAR 137A Contain Pit Pump North
The 5x RPM vibration has dropped. No further action needed.

SAR161A-N SAR Cool Tower Fan W
There is still a slightly elevated motor axial vibration at 1x, 2x, and 3x RPM of motor shaft speed. Check the coupling and alignment and all fasteners. **Rated a Class I Defect.**

Previously reported equipment but not running this survey

ACN 07C ACH Product Feed Pump South
The vibration data still shows what looks to be outer race defects in the motor inboard bearing and non-synchronous frequencies in the inboard pump bearings which are also most likely bearing defect harmonics. There could be a little cavitation also. We will keep an eye on this unit in the future. No action is required at this time. **Rated a Class I Defect**

ACN 13A #2 Kettle Transfer Pump North
Vibration data still shows non-synchronous peaks in the spectrum for the motor bearings. We suspect race bearing defects are present since the frequencies match the overlay. Ensure adequate bearing lubrication if applicable. Prepare to change out the motor. **Rated a Class III Defect.**

ACN 14 ACH Off Grade Pump

The data still shows signs of slight distress in the motor bearings. We see 2 to 3 g's RMS overall for the horizontal measurements. There seems to be long intervals between collected data, and the defects seem to have been there for some time. We also see an elevated vertical vibration in the motor at shaft speed above 0.4:/second velocity peak. Inspect the coupling and fasteners and have the alignment checked and adjusted if needed. **Rated a Class II Defect**

ACN28B ACN Fan East

The motor drive end vertical vibration is still elevated at shaft speed. Inspect for loose fasteners and coupling or alignment issues. **Rated a Class I Defect.**

MON 45 EM ACH Ref Brine Pump East

Data for the motor outboard bearing shows possible outer race defects. We will watch this unit carefully going forward and recommend action as required. **Rated a Class II Defect.**

MON 55 MM Hut Pump Mid

Pump vibration data shows what looks to be cavitation. Check for proper operation. **Rated a Class I Defect.**

MON132 Decanter Feed Pump Spare

The pump inboard vertical inboard vibration is still slightly elevated 1x shaft speed. Inspect the unit for loose fasteners, alignment, and coupling wear at time allows. **Rated a Class I Defect.**

SAR 38 Drying Tower Pump-out

The pump inboard horizontal vibration is still slightly elevated, especially at 1x shaft speed. Inspect the unit for loose fasteners, alignment, and coupling wear as time allows. Also ensure the pump is operating properly in the correct point on the performance curve. **Rated a Class I Defect.**

SAR 39C Boiler Feed Water Pump Northeast

We still see a slight shaft speed vibration in the motor outboard. Inspect the motor and drivetrain as time allows. **Rated a Class I Defect.**

SAR 50A Drying Tower Circulation Pump West

We see a slight increase of the shaft speed vibration in the motor. Inspect the motor and motor cooling fan, and drivetrain as time allows. **Rated a Class I Defect.**

SAR222 Oleum Tower Drain Pump

Inboard pump bearing still has multiple synchronous and non-synchronous vibration peaks. Overall acceleration is over 3g's RMS. The bearing is in distress. Ensure they are lubricated properly. We will watch carefully going forward. <mark>Rated a Class II Defect.</mark>

February 2022 survey data

```
              Abbreviated Last Measurement Summary
              ***********************************

              Database:  Lucite Memphis MMA.rbm
              Area:      MMA
              Report Date:  02-Feb-22    08:41

MEASUREMENT POINT       OVERALL LEVEL        HFD / VHFD      EQUIPMENT SPEED
-----------------       -------------        ----------      ---------------

0126        - Carrier Ref Unit                (28-Sep-20)
                        OVERALL LEVEL    1K-20kHz
        MOH             .025 In/Sec      .358 G-s        1780.0 RPM
        MOP             .026 G-s
        MOV             .028 In/Sec      .091 G-s
        MOA             .028 In/Sec      .045 G-s
        MIH             .031 In/Sec      .396 G-s
        MIP             .031 G-s
        MIV             .022 In/Sec      .188 G-s
        MIA             .015 In/Sec      .123 G-s
        IIH             .176 In/Sec
        IIP            1.505 G-s
        IIV             .160 In/Sec
        IIA             .098 In/Sec
        OOH             .166 In/Sec
        OOP            2.072 G-s
        OOV             .196 In/Sec
        OOA             .098 In/Sec
        CIH             .085 In/Sec
        CIP             .622 G-s
        CIV             .088 In/Sec
        CIA             .063 In/Sec
        COH             .041 In/Sec
        COP             .245 G-s
        COV             .043 In/Sec
        COA             .048 In/Sec

ACN04       - Topping Col Circ Pump           (31-Jan-22)
                        OVERALL LEVEL    1K-20kHz
        MOH             .024 In/Sec      .180 G-s        1175.0 RPM
        MOP             .097 G-s
        MOV             .025 In/Sec      .073 G-s
        MOA             .025 In/Sec      .045 G-s
        MIH             .021 In/Sec      .350 G-s
        MIP             .223 G-s
        MIV             .025 In/Sec      .128 G-s
        MIA             .020 In/Sec      .110 G-s
```

	OVERALL LEVEL	1K-20KHz	
PIH	.091 In/Sec	.925 G-s	
PIP	1.122 G-s		
PIV	.069 In/Sec	.547 G-s	
PIA	.136 In/Sec	.660 G-s	
POH	.072 In/Sec	1.126 G-s	
POP	1.272 G-s		
POV	.090 In/Sec	.331 G-s	
POA	.130 In/Sec	.265 G-s	

ACN05A   - Topp Column Xfer Pmp W   (31-Jan-22)

	OVERALL LEVEL	1K-20kHz	
MOH	.079 In/Sec	1.663 G-s	3575.0 RPM
MOP	.147 G-s		
MOV	.046 In/Sec	.693 G-s	
MOA	.055 In/Sec	.499 G-s	
MIH	.113 In/Sec	1.947 G-s	
MIP	.266 G-s		
MIV	.043 In/Sec	.368 G-s	
MIA	.078 In/Sec	.319 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.165 In/Sec	.778 G-s	
PIP	.089 G-s		
PIV	.071 In/Sec	.374 G-s	
PIA	.079 In/Sec	.301 G-s	

ACN07B   - ACH Prod Feed Pump M   (31-Jan-22)

	OVERALL LEVEL	1K-20kHz	
MOH	.040 In/Sec	1.455 G-s	3575.0 RPM
MOP	.178 G-s		
MOV	.085 In/Sec	.298 G-s	
MOA	.079 In/Sec	.155 G-s	
MIH	.048 In/Sec	1.223 G-s	
MIP	.148 G-s		
MIV	.067 In/Sec	.200 G-s	
MIA	.060 In/Sec	.216 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.208 In/Sec	1.270 G-s	
PIP	.268 G-s		
PIV	.208 In/Sec	.789 G-s	
PIA	.162 In/Sec	.808 G-s	

ACN08   - ACH Blend Tank   (31-Jan-22)

	OVERALL LEVEL	1K-20kHz	
MOH	.075 In/Sec	.246 G-s	3575.0 RPM
MOP	.018 G-s		
MOV	.135 In/Sec	.086 G-s	
MOA	.149 In/Sec	.074 G-s	
MIH	.029 In/Sec	.534 G-s	
MIP	.072 G-s		
MIV	.134 In/Sec	.167 G-s	
MIA	.077 In/Sec	.088 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.080 In/Sec	.473 G-s	
PIP	.110 G-s		
PIV	.047 In/Sec	.234 G-s	
PIA	.062 In/Sec	.164 G-s	

```
ACN09        - ACH Flash Tank Pump          (31-Jan-22)
                        OVERALL LEVEL      1K-20kHz
      MOH              .075 In/Sec       .498 G-s          3575.0 RPM
      MOP              .030 G-s
      MOV              .113 In/Sec       .131 G-s
      MOA              .091 In/Sec       .094 G-s
    * MIV              .068 In/Sec       .831 G-s
    * MIA              .108 In/Sec      1.139 G-s
                        OVERALL LEVEL      1K-20KHz
      PIH              .047 In/Sec       .186 G-s
      PIP              .019 G-s
      PIV              .050 In/Sec       .161 G-s
      PIA              .041 In/Sec       .145 G-s

ACN10        - #1 Kettle Circ Pmp          (31-Jan-22)
                        OVERALL LEVEL      1K-20kHz
      MOH              .021 In/Sec       .510 G-s          1775.0 RPM
      MOP              .244 G-s
      MOV              .035 In/Sec       .240 G-s
      MOA              .024 In/Sec       .143 G-s
      MIH              .029 In/Sec       .586 G-s
      MIP              .306 G-s
      MIV              .032 In/Sec       .233 G-s
      MIA              .028 In/Sec       .170 G-s
                        OVERALL LEVEL      1K-20KHz
      PIH              .045 In/Sec       .537 G-s
      PIP              .335 G-s
      PIV              .058 In/Sec       .181 G-s
      PIA              .047 In/Sec       .320 G-s

ACN11        - #2 Kettle Circ Pump          (31-Jan-22)
                        OVERALL LEVEL      1K-20kHz
      MOH              .020 In/Sec       .928 G-s          1775.0 RPM
      MOP              .433 G-s
      MOV              .040 In/Sec       .125 G-s
      MOA              .036 In/Sec       .169 G-s
      MIH              .021 In/Sec      1.381 G-s
      MIP              .591 G-s
      MIV              .049 In/Sec       .132 G-s
      MIA              .031 In/Sec       .125 G-s
                        OVERALL LEVEL      1K-20KHz
      PIH              .049 In/Sec       .297 G-s
      PIP              .176 G-s
      PIV              .081 In/Sec       .237 G-s
      PIA              .030 In/Sec       .206 G-s
    * POV              .104 In/Sec       .200 G-s
    * POA              .038 In/Sec       .253 G-s

ACN12        - #1 Kettle Xfer Pump          (31-Jan-22)
                        OVERALL LEVEL      1K-20kHz
      MOH              .084 In/Sec       .438 G-s          3575.0 RPM
      MOP              .049 G-s
      MOV              .129 In/Sec       .201 G-s
      MOA              .078 In/Sec       .118 G-s
      MIH              .062 In/Sec       .567 G-s
      MIP              .125 G-s
```

```
        MIV              .119 In/Sec       .295 G-s
        MIA              .047 In/Sec       .169 G-s
                         OVERALL LEVEL     1K-20KHz
        PIH              .072 In/Sec       .117 G-s
        PIP              .015 G-s
        PIV              .123 In/Sec       .212 G-s
        PIA              .044 In/Sec       .129 G-s


ACN13B      - #2 Kettle Xfer Pump S        (31-Jan-22)
                         OVERALL LEVEL     1K-20kHz
        MOH              .054 In/Sec      1.908 G-s        3575.0 RPM
        MOP              .329 G-s
        MOV              .066 In/Sec       .675 G-s
        MOA              .043 In/Sec       .477 G-s
        MIH              .085 In/Sec      3.608 G-s
        MIP              .987 G-s
        MIV              .074 In/Sec       .912 G-s
        MIA              .047 In/Sec       .768 G-s
                         OVERALL LEVEL     1K-20KHz
        PIH              .058 In/Sec       .628 G-s
        PIP              .076 G-s
        PIV              .064 In/Sec       .196 G-s
        PIA              .050 In/Sec       .175 G-s


ACN16       - ACH Scrb Circ PumpN          (24-Nov-21)
                         OVERALL LEVEL     1K-20KHz
      * POV              .132 In/Sec       .412 G-s        1780.0 RPM
      * POA              .202 In/Sec       .396 G-s


AC17        - Carrier Ref Unit             (31-Jan-22)
                         OVERALL LEVEL     1K-20kHz
        MOH              .018 In/Sec       .233 G-s        1780.0 RPM
        MOP              .031 G-s
        MOV              .021 In/Sec       .090 G-s
        MOA              .013 In/Sec       .040 G-s
        MIH              .022 In/Sec       .242 G-s
        MIP              .031 G-s
        MIV              .020 In/Sec       .139 G-s
        MIA              .013 In/Sec       .080 G-s
        IIH              .210 In/Sec
        IIP              .831 G-s
        IIV              .150 In/Sec
        IIA              .193 In/Sec
        OOH              .198 In/Sec
        OOP             1.326 G-s
        OOV              .047 In/Sec
        OOA              .141 In/Sec
        CIH              .059 In/Sec
        CIP              .588 G-s
        CIV              .088 In/Sec
        CIA              .087 In/Sec
        COH              .053 In/Sec
        COP              .404 G-s
        COV              .049 In/Sec
        COA              .053 In/Sec


ACN17DP     - DP Comp                       (31-Jan-22)
```

```
                    OVERALL LEVEL
        21              .029 Mils                              1775.0 RPM
        22              .141 Mils
        27              .014 Mils
        23              .049 Mils
        24              .039 Mils


ACN22       - ACN Ref Unit Booster #2        (31-Jan-22)
                    OVERALL LEVEL    1K-20kHz
        MOH             .137 In/Sec     .317 G-s       3575.0 RPM
        MOP             .017 G-s
        MOV             .145 In/Sec     .131 G-s
        MOA             .308 In/Sec     .058 G-s
        MIH             .105 In/Sec     .277 G-s
        MIP            .0038 G-s
        MIV             .144 In/Sec     .069 G-s
        MIA             .263 In/Sec     .049 G-s
                    OVERALL LEVEL    1K-20KHz
        PIH             .064 In/Sec     .545 G-s
        PIP             .082 G-s
        PIV             .294 In/Sec     .320 G-s
        PIA             .278 In/Sec     .246 G-s
        POH             .101 In/Sec     .380 G-s
        POP             .069 G-s
        POV             .238 In/Sec     .344 G-s
        POA             .298 In/Sec     .206 G-s


ACN23       - ACH Scrb Circ Pump S          (31-Jan-22)
                    OVERALL LEVEL    1K-20kHz
        MOH             .020 In/Sec     .371 G-s       1780.0 RPM
        MOP             .173 G-s
        MOV             .043 In/Sec     .288 G-s
        MOA             .035 In/Sec     .378 G-s
        MIH             .020 In/Sec     .571 G-s
        MIP             .277 G-s
        MIV             .041 In/Sec     .350 G-s
        MIA             .023 In/Sec     .455 G-s
                    OVERALL LEVEL    1K-20KHz
        PIH             .090 In/Sec     .372 G-s
        PIP             .281 G-s
        PIV             .095 In/Sec     .197 G-s
        PIA             .067 In/Sec     .158 G-s


ACN28A      - ACN Fan W                      (31-Jan-22)
                    OVERALL LEVEL    1K-20kHz
        MOH             .136 In/Sec    1.164 G-s       1775.0 RPM
        MOP             .267 G-s
        MOV             .272 In/Sec     .414 G-s
        MOA             .232 In/Sec     .135 G-s
        MIH             .223 In/Sec    2.050 G-s
        MIP             .404 G-s
        MIV             .203 In/Sec    1.049 G-s
        MIA             .218 In/Sec     .251 G-s


ACN28BDP   - Cooling Twr Fan E               (31-Jan-22)
                    OVERALL LEVEL
        26              .042 Mils                              1775.0 RPM
```

```
ACN29A      - ACN Cool Twr Pump N          (31-Jan-22)
                        OVERALL LEVEL     1K-20kHz
        MOH             .065 In/Sec       .987 G-s           1775.0 RPM
        MOP             .300 G-s
        MOV             .057 In/Sec       .365 G-s
        MOA             .042 In/Sec       .388 G-s
        MIH             .043 In/Sec       .665 G-s
        MIP             .344 G-s
        MIV             .079 In/Sec      1.024 G-s
        MIA             .063 In/Sec       .578 G-s
                        OVERALL LEVEL     1K-20KHz
        PIH             .183 In/Sec       .789 G-s
        PIP             .565 G-s
        PIV             .102 In/Sec       .279 G-s
        PIA             .143 In/Sec       .295 G-s
        POH             .088 In/Sec      1.256 G-s
        POP             .693 G-s
        POV             .090 In/Sec       .385 G-s
        POA             .132 In/Sec       .385 G-s


ACN28ADP    - Cooling Twr Fan W           (31-Jan-22)
                        OVERALL LEVEL
        28              .261 Mils                            1775.0 RPM


ACN29B      - ACN Cool Twr Pump M          (31-Jan-22)
                        OVERALL LEVEL     1K-20kHz
        MOH             .053 In/Sec       .710 G-s           1775.0 RPM
        MOP             .303 G-s
        MOV             .086 In/Sec       .301 G-s
        MOA             .080 In/Sec       .206 G-s
        MIH             .050 In/Sec       .924 G-s
        MIP             .400 G-s
        MIV             .043 In/Sec       .263 G-s
        MIA             .041 In/Sec       .310 G-s
                        OVERALL LEVEL     1K-20KHz
        PIH             .130 In/Sec       .680 G-s
        PIP             .429 G-s
        PIV             .081 In/Sec       .240 G-s
        PIA             .113 In/Sec       .224 G-s
        POH             .101 In/Sec      1.016 G-s
        POP             .561 G-s
        POV             .089 In/Sec       .401 G-s
        POA             .115 In/Sec       .485 G-s


ACN29C      - ACN Cool Twr Pump S          (31-Jan-22)
                        OVERALL LEVEL     1K-20kHz
        MOH             .051 In/Sec       .440 G-s           1775.0 RPM
        MOP             .122 G-s
        MOV             .088 In/Sec       .138 G-s
        MOA             .082 In/Sec       .112 G-s
        MIH             .042 In/Sec       .672 G-s
        MIP             .192 G-s
        MIV             .101 In/Sec       .135 G-s
        MIA             .049 In/Sec       .208 G-s
                        OVERALL LEVEL     1K-20KHz
        PIH             .141 In/Sec       .984 G-s
```

```
    PIP                .609 G-s
    PIV                .120 In/Sec        .288 G-s
    PIA                .097 In/Sec        .379 G-s
    POH                .094 In/Sec       1.245 G-s
    POP                .394 G-s
    POV                .106 In/Sec        .458 G-s
    POA                .113 In/Sec        .319 G-s


ACN30       - ACH Scrubber Xfer Pmp         (31-Jan-22)
                   OVERALL LEVEL    1K-20kHz
    MOH                .063 In/Sec        .465 G-s          1780.0 RPM
    MOP                .272 G-s
    MOV                .087 In/Sec        .179 G-s
    MOA                .156 In/Sec        .196 G-s
    MIH                .083 In/Sec        .598 G-s
    MIP                .378 G-s
    MIV                .126 In/Sec        .313 G-s
    MIA                .136 In/Sec        .206 G-s
                   OVERALL LEVEL    1K-20KHz
    PIH                .066 In/Sec        .075 G-s
    PIP                .037 G-s
    PIV                .081 In/Sec        .108 G-s
    PIA                .101 In/Sec        .044 G-s
    POH                .052 In/Sec        .121 G-s
    POP                .038 G-s
    POV                .062 In/Sec        .107 G-s
    POA                .066 In/Sec        .074 G-s


ACN36       - ACH Neut Tank Circ Pmp        (31-Jan-22)
                   OVERALL LEVEL    1K-20kHz
    MIH                .097 In/Sec       2.717 G-s          3575.0 RPM
    MIP                .330 G-s
    MIV                .134 In/Sec        .787 G-s
    MIA                .069 In/Sec        .333 G-s
                   OVERALL LEVEL    1K-20KHz
    PIH                .366 In/Sec        .312 G-s
    PIP                .064 G-s
    PIV                .223 In/Sec        .343 G-s
    PIA                .285 In/Sec        .228 G-s


MON 32A    - ARC Reflux Pmp N              (31-Jan-22)
                   OVERALL LEVEL    1K-20kHz
    M1V                .123 In/Sec        .246 G-s          3520.0 RPM
    M1A                .065 In/Sec        .093 G-s
    M2H                .065 In/Sec        .437 G-s
    M2P                .072 G-s
    M2V                .092 In/Sec        .145 G-s
    M2A                .057 In/Sec        .084 G-s
                   OVERALL LEVEL    1K-20KHz
    P1H                .075 In/Sec        .397 G-s
    P1P                .034 G-s
    P1V                .172 In/Sec        .211 G-s
    P1A                .088 In/Sec        .227 G-s
    P2H                .068 In/Sec        .409 G-s
    P2P                .052 G-s
    P2V                .170 In/Sec        .309 G-s
    P2A                .081 In/Sec        .210 G-s
```

```
                    OVERALL LEVEL     1K-20kHz
        M1H             .056 In/Sec       .429 G-s
        M1P             .117 G-s


MON 32B      - ARC Reflux Pmp S              (31-Jan-22)
                    OVERALL LEVEL     1K-20kHz
        M1H             .055 In/Sec       .299 G-s           3520.0 RPM
        M1P             .049 G-s
        M1V             .086 In/Sec       .170 G-s
        M1A             .060 In/Sec       .117 G-s
        M2H             .035 In/Sec       .332 G-s
        M2P             .079 G-s
        M2V             .086 In/Sec       .126 G-s
        M2A             .049 In/Sec       .103 G-s
                    OVERALL LEVEL     1K-20KHz
        P1H             .374 In/Sec       .493 G-s
        P1P             .095 G-s
        P1V             .419 In/Sec       .548 G-s
        P1A             .290 In/Sec       .747 G-s
        P2H             .184 In/Sec       .761 G-s
        P2P             .135 G-s
        P2V             .213 In/Sec       .411 G-s
        P2A             .154 In/Sec       .950 G-s


MON36        - Irganox Mix/Feed Pump         (31-Jan-22)
                    OVERALL LEVEL     1K-20kHz
        MOH             .080 In/Sec       .257 G-s           1750.0 RPM
        MOP             .095 G-s
        MOV             .064 In/Sec       .180 G-s
        MOA             .074 In/Sec       .177 G-s
      * MIH             .059 In/Sec       .263 G-s
      * MIP             .185 G-s
      * MIV             .050 In/Sec       .388 G-s
      * MIA             .053 In/Sec       .378 G-s
        IIH             .058 In/Sec
        IIP             .351 G-s
        IIV             .057 In/Sec
        IIA             .054 In/Sec
                    OVERALL LEVEL     1K-20KHz
        POH             .178 In/Sec       .850 G-s
        POP             .572 G-s
        POV             .111 In/Sec       .867 G-s
        POA             .128 In/Sec       .740 G-s


MON38A       - LBS Reflux Pmp S              (31-Jan-22)
                    OVERALL LEVEL     1K-20kHz
        MOH             .049 In/Sec       .384 G-s           3575.0 RPM
        MOP             .060 G-s
        MOV             .038 In/Sec       .261 G-s
        MOA             .062 In/Sec       .084 G-s
        MIH             .042 In/Sec       .637 G-s
        MIP             .065 G-s
        MIV             .066 In/Sec       .142 G-s
        MIA             .053 In/Sec       .130 G-s
                    OVERALL LEVEL     1K-20KHz
        PIH             .075 In/Sec       .972 G-s
        PIP             .094 G-s
```

```
        PIV                  .054 In/Sec        .493 G-s
        PIA                  .064 In/Sec        .328 G-s


MON38B        - LBS Reflux Pmp N                (31-Jan-22)
                        OVERALL LEVEL      1K-20kHz
        MOH                  .171 In/Sec        .462 G-s           3575.0 RPM
        MOP                  .083 G-s
        MOV                  .115 In/Sec        .132 G-s
        MOA                  .058 In/Sec        .132 G-s
        MIH                  .132 In/Sec        .481 G-s
        MIP                  .063 G-s
        MIV                  .112 In/Sec        .101 G-s
        MIA                  .048 In/Sec        .081 G-s
                        OVERALL LEVEL      1K-20KHz
        PIH                  .113 In/Sec        .761 G-s
        PIP                  .112 G-s
        PIV                  .141 In/Sec        .474 G-s
        PIA                  .113 In/Sec        .308 G-s


MON38CNM      - LBS Tails Pump N                (31-Jan-22)
                        OVERALL LEVEL      1K-20kHz
        MOH                  .067 In/Sec        .641 G-s           3575.0 RPM
        MOP                  .084 G-s
        MOV                  .082 In/Sec        .250 G-s
        MOA                  .058 In/Sec        .141 G-s
        MIH                  .099 In/Sec       1.532 G-s
        MIP                  .197 G-s
        MIV                  .075 In/Sec        .380 G-s
        MIA                  .046 In/Sec        .175 G-s
                        OVERALL LEVEL      1K-20KHz
        PIH                  .087 In/Sec        .435 G-s
        PIP                  .020 G-s
        PIV                  .099 In/Sec        .268 G-s
        PIA                  .071 In/Sec        .260 G-s


MON38CSM      - LBS Tails Pump S                (31-Jan-22)
                        OVERALL LEVEL      1K-20kHz
        MOH                  .042 In/Sec        .441 G-s           3575.0 RPM
        MOP                  .062 G-s
        MOV                  .062 In/Sec        .114 G-s
        MOA                  .049 In/Sec        .120 G-s
        MIH                  .055 In/Sec        .859 G-s
        MIP                  .180 G-s
        MIV                  .045 In/Sec        .251 G-s
        MIA                  .044 In/Sec        .205 G-s
                        OVERALL LEVEL      1K-20KHz
        PIH                  .101 In/Sec        .461 G-s
        PIP                  .101 G-s
        PIV                  .070 In/Sec        .238 G-s
        PIA                  .056 In/Sec        .203 G-s


MON40         - Acetone Pump                    (31-Jan-22)
                        OVERALL LEVEL      1K-20kHz
        MOH                  .035 In/Sec       1.245 G-s           3575.0 RPM
        MOP                  .151 G-s
        MOV                  .068 In/Sec        .637 G-s
        MOA                  .062 In/Sec        .554 G-s
```

```
         MIH              .094 In/Sec      2.894 G-s
         MIP              .331 G-s
         MIV              .141 In/Sec       .461 G-s
         MIA              .035 In/Sec       .290 G-s
                          OVERALL LEVEL    1K-20KHz
         PIH              .155 In/Sec       .948 G-s
         PIP              .112 G-s
         PIV              .155 In/Sec       .529 G-s
         PIA              .136 In/Sec       .683 G-s


MON43A       - Amide Reactor Circ Pmp #1N    (31-Jan-22)
                          OVERALL LEVEL    1K-20kHz
         MOH              .078 In/Sec       .699 G-s            1785.0 RPM
         MOP              .108 G-s
         MOV              .119 In/Sec       .200 G-s
         MOA              .147 In/Sec       .157 G-s
         MIH              .102 In/Sec       .726 G-s
         MIP              .023 G-s
         MIV              .117 In/Sec       .196 G-s
         MIA              .134 In/Sec       .250 G-s
                          OVERALL LEVEL    1K-20KHz
         PIH              .195 In/Sec       .405 G-s
         PIP              .247 G-s
         PIV              .219 In/Sec       .188 G-s
         PIA              .191 In/Sec       .209 G-s


MON43B       - Amide Reactor Circ Pmp #2S    (31-Jan-22)
                          OVERALL LEVEL    1K-20kHz
         MOH              .141 In/Sec       .364 G-s            1785.0 RPM
         MOP              .089 G-s
         MOV              .206 In/Sec       .112 G-s
         MOA              .163 In/Sec       .079 G-s
         MIH              .091 In/Sec       .162 G-s
         MIP              .042 G-s
         MIV              .130 In/Sec       .065 G-s
         MIA              .091 In/Sec       .044 G-s
                          OVERALL LEVEL    1K-20KHz
         PIH              .229 In/Sec       .404 G-s
         PIP              .254 G-s
         PIV              .154 In/Sec       .221 G-s
         PIA              .207 In/Sec       .141 G-s


MON45WM     - ACH Ref Brine Pump W          (31-Jan-22)
                          OVERALL LEVEL    1K-20kHz
         MOH              .125 In/Sec      2.711 G-s            1750.0 RPM
         MOP             1.002 G-s
         MOV              .106 In/Sec       .779 G-s
         MOA              .059 In/Sec       .273 G-s
         MIH              .113 In/Sec      1.960 G-s
         MIP              .932 G-s
         MIV              .097 In/Sec       .879 G-s
         MIA              .073 In/Sec       .383 G-s
                          OVERALL LEVEL    1K-20KHz
         PIH              .159 In/Sec       .808 G-s
         PIP              .501 G-s
         PIV              .093 In/Sec       .446 G-s
         PIA              .062 In/Sec       .402 G-s
```

```
        POH              .133 In/Sec      1.369 G-s
        POP              .755 G-s
        POV              .085 In/Sec       .355 G-s
        POA              .061 In/Sec       .337 G-s


MON50        - Decanter Feed Pump            (31-Jan-22)
                         OVERALL LEVEL    1K-20kHz
        MOH              .066 In/Sec       .398 G-s           3575.0 RPM
        MOP              .087 G-s
        MOV              .100 In/Sec       .273 G-s
        MOA              .110 In/Sec       .128 G-s
        MIH              .065 In/Sec       .454 G-s
        MIP              .087 G-s
        MIV              .169 In/Sec       .250 G-s
        MIA              .123 In/Sec       .091 G-s
                         OVERALL LEVEL    1K-20KHz
        PIH              .290 In/Sec       .898 G-s
        PIP              .244 G-s
        PIV              .288 In/Sec       .309 G-s
        PIA              .241 In/Sec       .995 G-s


MON55NM     - HUT Pump N                     (31-Jan-22)
                         OVERALL LEVEL    1K-20kHz
        MOH              .031 In/Sec       .271 G-s           1775.0 RPM
        MOP              .181 G-s
        MOV              .046 In/Sec       .337 G-s
        MOA              .036 In/Sec       .193 G-s
        MIH              .027 In/Sec       .898 G-s
        MIP              .653 G-s
        MIV              .051 In/Sec       .347 G-s
        MIA              .022 In/Sec       .522 G-s
                         OVERALL LEVEL    1K-20KHz
        PIH              .175 In/Sec       .184 G-s
        PIP              .104 G-s
        PIV              .144 In/Sec       .129 G-s
        PIA              .133 In/Sec       .082 G-s
        POH              .141 In/Sec       .237 G-s
        POP              .134 G-s
        POV              .135 In/Sec       .149 G-s
        POA              .137 In/Sec       .090 G-s


MON55SM     - HUT Pump S                     (31-Jan-22)
                         OVERALL LEVEL    1K-20kHz
        MOH              .056 In/Sec      3.340 G-s           1775.0 RPM
        MOP             1.680 G-s
        MOV              .061 In/Sec      1.151 G-s
        MOA              .052 In/Sec       .435 G-s
        MIH              .043 In/Sec      1.857 G-s
        MIP             1.042 G-s
        MIV              .071 In/Sec       .723 G-s
        MIA              .050 In/Sec       .651 G-s
                         OVERALL LEVEL    1K-20KHz
        PIH              .419 In/Sec       .810 G-s
        PIP              .581 G-s
        PIV              .247 In/Sec       .452 G-s
        PIA              .253 In/Sec       .354 G-s
        POH              .207 In/Sec       .999 G-s
```

```
POP                 .788 G-s
POV                 .158 In/Sec      .273 G-s
POA                 .306 In/Sec      .304 G-s


MON56      - Inhibited Mon Xfer Pump E      (31-Jan-22)
                    OVERALL LEVEL    1K-20kHz
MOH                 .044 In/Sec      .209 G-s         3575.0 RPM
MOP                 .055 G-s
MOV                 .042 In/Sec      .098 G-s
MOA                 .038 In/Sec      .072 G-s
MIH                 .076 In/Sec      .391 G-s
MIP                 .045 G-s
MIV                 .028 In/Sec      .086 G-s
MIA                 .092 In/Sec      .062 G-s
                    OVERALL LEVEL    1K-20KHz
PIH                 .061 In/Sec      .850 G-s
PIP                 .170 G-s
PIV                 .044 In/Sec      .520 G-s
PIA                 .058 In/Sec      .290 G-s


MON 63E    - LBS Side Stream Pump E       (31-Jan-22)
                    OVERALL LEVEL    1K-20kHz
M1H                 .077 In/Sec      1.013 G-s        3515.0 RPM
M1P                 .043 G-s
M1V                 .103 In/Sec      .380 G-s
M1A                 .107 In/Sec      .178 G-s
M2H                 .096 In/Sec      1.491 G-s
M2P                 .041 G-s
M2V                 .127 In/Sec      .613 G-s
M2A                 .074 In/Sec      .239 G-s
                    OVERALL LEVEL    1K-20KHz
P1H                 .198 In/Sec      .604 G-s
P1P                 .063 G-s
P1V                 .119 In/Sec      .496 G-s
P1A                 .096 In/Sec      .169 G-s
P2H                 .182 In/Sec      .460 G-s
P2P                 .034 G-s
P2V                 .103 In/Sec      .189 G-s
P2A                 .186 In/Sec      .167 G-s


MON 63W    - LBS Side Stream Pump W       (31-Jan-22)
                    OVERALL LEVEL    1K-20kHz
M1H                 .091 In/Sec      1.714 G-s        3515.0 RPM
M1P                 .037 G-s
M1V                 .086 In/Sec      .922 G-s
M1A                 .097 In/Sec      1.084 G-s
M2H                 .086 In/Sec      1.700 G-s
M2P                 .062 G-s
M2V                 .137 In/Sec      .759 G-s
M2A                 .088 In/Sec      .467 G-s
                    OVERALL LEVEL    1K-20KHz
P1H                 .207 In/Sec      .601 G-s
P1P                 .223 G-s
P1V                 .151 In/Sec      .931 G-s
P1A                 .150 In/Sec      .553 G-s
P2H                 .151 In/Sec      .464 G-s
P2P                 .034 G-s
```

```
        P2V                  .093 In/Sec        .350 G-s
        P2A                  .162 In/Sec        .400 G-s


MON65        - Amide Reactor Circ Primary     (31-Jan-22)
                     OVERALL LEVEL     1K-20kHz
        MOH              .330 In/Sec      .559 G-s           1180.0 RPM
        MOP              .313 G-s
        MOV              .706 In/Sec      .189 G-s
        MOA              .104 In/Sec      .104 G-s
        MIH              .261 In/Sec      .184 G-s
        MIP              .064 G-s
        MIV              .646 In/Sec      .028 G-s
        MIA              .149 In/Sec      .013 G-s
                     OVERALL LEVEL     1K-20KHz
        PIH              .227 In/Sec      .143 G-s
        PIP              .081 G-s
        PIV              .181 In/Sec      .060 G-s
        PIA              .092 In/Sec      .068 G-s


MON67SM      - PTZ Xfer Pump S               (31-Jan-22)
                     OVERALL LEVEL     1K-20kHz
        MOH              .135 In/Sec     1.076 G-s           3575.0 RPM
        MOP              .0039 G-s
        MOV              .142 In/Sec      .536 G-s
        MOA              .091 In/Sec      .175 G-s
        MIH              .143 In/Sec     1.006 G-s
        MIP              .023 G-s
        MIV              .086 In/Sec      .398 G-s
        MIA              .088 In/Sec      .106 G-s
                     OVERALL LEVEL     1K-20KHz
        PIH              .059 In/Sec      .365 G-s
        PIP              .019 G-s
        PIV              .045 In/Sec      .315 G-s
        PIA              .052 In/Sec      .344 G-s


MON68A       - #1 Reactor H2O Circ Pump      (31-Jan-22)
                     OVERALL LEVEL     1K-20kHz
        MOH              .066 In/Sec      .377 G-s           1180.0 RPM
        MOP              .114 G-s
        MOV              .097 In/Sec      .356 G-s
        MOA              .076 In/Sec      .029 G-s
        MIH              .066 In/Sec      .225 G-s
        MIP              .105 G-s
        MIV              .078 In/Sec      .059 G-s
        MIA              .070 In/Sec      .031 G-s
                     OVERALL LEVEL     1K-20KHz
        PIH              .044 In/Sec      .174 G-s
        PIP              .102 G-s
        PIV              .055 In/Sec      .278 G-s
        PIA              .048 In/Sec      .252 G-s


MON73W       - Skim Tub Xfer Pmp W           (31-Jan-22)
                     OVERALL LEVEL     1K-20kHz
        MOH              .042 In/Sec      .216 G-s           1020.0 RPM
        MOP              .067 G-s
        MOV              .069 In/Sec      .153 G-s
        MOA              .042 In/Sec      .085 G-s
```

```
          MIH              .060 In/Sec         .361 G-s
          MIP              .175 G-s
          MIV              .064 In/Sec         .153 G-s
          MIA              .062 In/Sec         .067 G-s
                           OVERALL LEVEL      1K-20KHz
          PIH              .053 In/Sec         .142 G-s
          PIP              .128 G-s
          PIV              .033 In/Sec         .098 G-s
          PIA              .027 In/Sec         .075 G-s


MON81        - Uninhibited Mon Tank Pump S    (31-Jan-22)
                           OVERALL LEVEL      1K-20kHz
          MOH              .060 In/Sec         .506 G-s          3575.0 RPM
          MOP              .042 G-s
          MOV              .061 In/Sec         .387 G-s
          MOA              .041 In/Sec         .202 G-s
          MIH              .080 In/Sec        1.248 G-s
          MIP              .135 G-s
          MIV              .066 In/Sec         .466 G-s
          MIA              .104 In/Sec         .281 G-s
                           OVERALL LEVEL      1K-20KHz
          PIH              .329 In/Sec        1.265 G-s
          PIP              .078 G-s
          PIV              .140 In/Sec         .893 G-s
          PIA              .135 In/Sec         .503 G-s
          POH              .208 In/Sec         .727 G-s
          POP              .034 G-s
          POV              .285 In/Sec         .422 G-s
          POA              .136 In/Sec         .248 G-s


MON80        - Uninhibited Mon Tank Pump N    (31-Jan-22)
                           OVERALL LEVEL      1K-20kHz
          MOH              .085 In/Sec         .227 G-s          3575.0 RPM
          MOP              .020 G-s
          MOV              .081 In/Sec         .670 G-s
          MOA              .183 In/Sec         .068 G-s
          MIH              .167 In/Sec         .248 G-s
          MIP              .0050 G-s
          MIV              .201 In/Sec         .176 G-s
          MIA              .193 In/Sec         .044 G-s
                           OVERALL LEVEL      1K-20KHz
          PIH              .188 In/Sec         .064 G-s
          PIP              .0014 G-s
          PIV              .055 In/Sec         .094 G-s
          PIA              .062 In/Sec         .085 G-s
          POH              .109 In/Sec         .066 G-s
          POP              .0015 G-s
          POV              .034 In/Sec         .102 G-s
          POA              .071 In/Sec         .051 G-s


MON84        - WCM Tails Pump S               (31-Jan-22)
                           OVERALL LEVEL      1K-20kHz
          MOH              .060 In/Sec         .590 G-s          3575.0 RPM
          MOP              .021 G-s
          MOV              .100 In/Sec         .158 G-s
          MOA              .079 In/Sec         .059 G-s
          MIH              .050 In/Sec         .245 G-s
```

```
        MIP               .073 G-s
        MIV               .071 In/Sec      .083 G-s
        MIA               .050 In/Sec      .092 G-s
                      OVERALL LEVEL     1K-20KHz
        PIH               .131 In/Sec      .462 G-s
        PIP               .055 G-s
        PIV               .143 In/Sec      .402 G-s
        PIA               .140 In/Sec      .436 G-s


MON85E      - Water Treatment Pmp E        (31-Jan-22)
                      OVERALL LEVEL     1K-20kHz
        MOH               .129 In/Sec      .533 G-s          1775.0 RPM
        MOP               .173 G-s
        MOV               .092 In/Sec      .172 G-s
        MOA               .077 In/Sec      .194 G-s
        MIH               .110 In/Sec      .452 G-s
        MIP               .254 G-s
        MIV               .213 In/Sec      .399 G-s
        MIA               .116 In/Sec      .284 G-s
                      OVERALL LEVEL     1K-20KHz
        PIH               .306 In/Sec      .583 G-s
        PIP               .376 G-s
        PIV               .153 In/Sec      .370 G-s
        PIA               .151 In/Sec      .361 G-s
        POH               .240 In/Sec      .389 G-s
        POP               .162 G-s
        POV               .151 In/Sec      .301 G-s
        POA               .140 In/Sec      .239 G-s


MON85W      - Water Treatment Pmp W        (31-Jan-22)
                      OVERALL LEVEL     1K-20kHz
        MOH               .095 In/Sec      .624 G-s          1775.0 RPM
        MOP               .086 G-s
        MOV               .111 In/Sec      .086 G-s
        MOA               .096 In/Sec      .153 G-s
        MIH               .071 In/Sec      .752 G-s
        MIP               .425 G-s
        MIV               .143 In/Sec      .353 G-s
        MIA               .081 In/Sec      .565 G-s
                      OVERALL LEVEL     1K-20KHz
        PIH               .129 In/Sec      .916 G-s
        PIP               .562 G-s
        PIV               .145 In/Sec      .434 G-s
        PIA               .111 In/Sec      .267 G-s
        POH               .076 In/Sec      .991 G-s
        POP               .594 G-s
        POV               .127 In/Sec      .573 G-s
        POA               .047 In/Sec      .142 G-s


MON118      - Tempered H20 Pmp             (31-Jan-22)
                      OVERALL LEVEL     1K-20kHz
        MOH               .057 In/Sec      .210 G-s          865.0 RPM
        MOP               .135 G-s
        MOV               .026 In/Sec      .098 G-s
        MOA               .059 In/Sec      .034 G-s
        MIH               .055 In/Sec      .161 G-s
        MIP               .086 G-s
```

```
            MIV                 .029 In/Sec           .090 G-s
            MIA                 .041 In/Sec           .063 G-s
                            OVERALL LEVEL       1K-20KHz
            PIH                 .048 In/Sec           .057 G-s
            PIP                 .033 G-s
            PIV                 .022 In/Sec           .024 G-s
            PIA                 .041 In/Sec           .022 G-s
            POH                 .032 In/Sec           .072 G-s
            POP                 .050 G-s
            POV                 .024 In/Sec           .034 G-s
            POA                 .031 In/Sec           .025 G-s


  MON169      - A/B Booster Pump W            (31-Jan-22)
                            OVERALL LEVEL       1K-20kHz
            MOH                 .060 In/Sec           .669 G-s          1020.0 RPM
            MOP                 .181 G-s
            MOV                 .038 In/Sec           .199 G-s
            MOA                 .050 In/Sec           .270 G-s
            MIH                 .033 In/Sec           .445 G-s
            MIP                 .202 G-s
            MIV                 .034 In/Sec           .278 G-s
            MIA                 .047 In/Sec           .177 G-s
                            OVERALL LEVEL       1K-20KHz
            PIH                 .036 In/Sec           .106 G-s
            PIP                 .066 G-s
            PIV                 .031 In/Sec           .083 G-s
            PIA                 .032 In/Sec           .048 G-s


  SAR03       - Turb Comp Main Blower         (31-Jan-22)
                            OVERALL LEVEL
            5                   .332 Mils                               4700.0 RPM
            6                   .317 Mils
            7                   .214 Mils
            8                   .295 Mils
            9                   .294 Mils
            10                  .242 Mils
            11                  .272 Mils
            12                  .308 Mils
            15                  .013 Mils
            16                  .025 Mils


  SAR10       - Process Air Fan E             (31-Jan-22)
                            OVERALL LEVEL       1K-20kHz
            MOH                 .096 In/Sec           .363 G-s          1775.0 RPM
            MOP                 .179 G-s
            MOV                 .049 In/Sec           .454 G-s
            MOA                 .060 In/Sec           .124 G-s
            MIH                 .081 In/Sec           .877 G-s
            MIP                 .457 G-s
            MIV                 .064 In/Sec           .232 G-s
            MIA                 .042 In/Sec           .284 G-s
                            OVERALL LEVEL       1K-20KHz
            FIH                 .090 In/Sec          4.649 G-s
            FIP                2.471 G-s
            FIV                 .096 In/Sec          1.709 G-s
            FIA                 .099 In/Sec           .827 G-s
            FOH                 .113 In/Sec          6.546 G-s
```

```
        FOP                3.968 G-s
        FOV                 .089 In/Sec        2.115 G-s
        FOA                 .111 In/Sec        1.205 G-s


SAR11      - Recycle Fan W                (31-Jan-22)
                        OVERALL LEVEL     1K-20kHz
        MOH                 .035 In/Sec         .870 G-s          1775.0 RPM
        MOP                 .455 G-s
        MOV                 .047 In/Sec         .157 G-s
        MOA                 .052 In/Sec         .233 G-s
        MIH                 .031 In/Sec         .911 G-s
        MIP                 .626 G-s
        MIV                 .052 In/Sec         .369 G-s
        MIA                 .047 In/Sec         .198 G-s
                        OVERALL LEVEL     1K-20KHz
        FIH                 .020 In/Sec         .010 G-s
        FIP                 .0062 G-s
        FIV                 .016 In/Sec         .0079 G-s
        FIA                 .016 In/Sec         .0047 G-s
        FOH                 .022 In/Sec         .014 G-s
        FOP                 .0073 G-s
        FOV                 .013 In/Sec         .017 G-s
        FOA                 .020 In/Sec         .0044 G-s


SAR12      - Recycle Fan E                (31-Jan-22)
                        OVERALL LEVEL     1K-20kHz
        MOH                 .052 In/Sec         .323 G-s          1775.0 RPM
        MOP                 .053 G-s
        MOV                 .053 In/Sec         .199 G-s
        MOA                 .044 In/Sec         .060 G-s
        MIH                 .059 In/Sec        1.028 G-s
        MIP                 .585 G-s
        MIV                 .048 In/Sec         .736 G-s
        MIA                 .036 In/Sec         .253 G-s
                        OVERALL LEVEL     1K-20KHz
        FIH                 .035 In/Sec         .131 G-s
        FIP                 .064 G-s
        FIV                 .026 In/Sec         .184 G-s
        FIA                 .022 In/Sec         .042 G-s
        FOH                 .044 In/Sec         .207 G-s
        FOP                 .071 G-s
        FOV                 .028 In/Sec         .218 G-s
        FOA                 .032 In/Sec         .248 G-s


SAR13      - Combustion Air Fan E         (31-Jan-22)
                        OVERALL LEVEL     1K-20kHz
        MOH                 .057 In/Sec         .610 G-s          1100.0 RPM
        MOP                 .305 G-s
        MOV                 .095 In/Sec         .542 G-s
        MOA                 .115 In/Sec         .183 G-s
        MIH                 .056 In/Sec         .633 G-s
        MIP                 .337 G-s
        MIV                 .058 In/Sec         .241 G-s
        MIA                 .032 In/Sec         .257 G-s
                        OVERALL LEVEL     1K-20KHz
        FIH                 .054 In/Sec         .220 G-s
        FIP                 .132 G-s
```

```
FIV            .100 In/Sec       .230 G-s
FIA            .056 In/Sec       .209 G-s
FOH            .093 In/Sec       .626 G-s
FOP            .295 G-s
FOV            .066 In/Sec       .254 G-s
FOA            .091 In/Sec       .114 G-s


SAR14      - Combustion Air Fan W        (31-Jan-22)
                  OVERALL LEVEL    1K-20kHz
MOH            .121 In/Sec      1.160 G-s           1100.0 RPM
MOP            .215 G-s
MOV            .064 In/Sec       .686 G-s
MOA            .053 In/Sec       .343 G-s
MIH            .116 In/Sec      1.580 G-s
MIP            .620 G-s
MIV            .088 In/Sec      1.017 G-s
MIA            .057 In/Sec       .745 G-s
                  OVERALL LEVEL    1K-20KHz
FIH            .116 In/Sec      1.823 G-s
FIP            .998 G-s
FIV            .049 In/Sec       .884 G-s
FIA            .054 In/Sec       .288 G-s
FOH            .133 In/Sec       .785 G-s
FOP            .513 G-s
FOV            .056 In/Sec       .388 G-s
FOA            .048 In/Sec       .175 G-s


SAR15      - Process Air Fan W           (31-Jan-22)
                  OVERALL LEVEL    1K-20kHz
MOH            .079 In/Sec       .954 G-s           1180.0 RPM
MOP            .417 G-s
MOV            .059 In/Sec       .446 G-s
MOA            .058 In/Sec       .241 G-s
MIH            .072 In/Sec      2.268 G-s
MIP            .599 G-s
MIV            .064 In/Sec       .194 G-s
MIA            .050 In/Sec       .182 G-s
                  OVERALL LEVEL    1K-20KHz
FIH            .076 In/Sec       .835 G-s
FIP            .484 G-s
FIV            .033 In/Sec       .526 G-s
FIA            .046 In/Sec       .378 G-s
FOH            .086 In/Sec      1.065 G-s
FOP            .660 G-s
FOV            .048 In/Sec       .598 G-s
FOA            .040 In/Sec       .375 G-s


SAR37A     - Interpass Twr Circ Pump N   (31-Jan-22)
                  OVERALL LEVEL    1K-20kHz
MOH            .057 In/Sec       .763 G-s           1775.0 RPM
MOP            .401 G-s
MOV            .044 In/Sec       .337 G-s
MOA            .073 In/Sec       .225 G-s
MIH            .049 In/Sec       .734 G-s
MIP            .279 G-s
MIV            .046 In/Sec       .173 G-s
MIA            .047 In/Sec       .206 G-s
```

```
SAR39A      - Boiler Feed H2O Pmp NW          (31-Jan-22)
                        OVERALL LEVEL      1K-20kHz
        MOH             .042 In/Sec       .468 G-s           3575.0 RPM
        MOP             .037 G-s
        MOV             .104 In/Sec       .291 G-s
        MOA             .068 In/Sec       .093 G-s
        MIH             .033 In/Sec       .462 G-s
        MIP             .029 G-s
        MIV             .103 In/Sec       .171 G-s
        MIA             .063 In/Sec       .147 G-s
                        OVERALL LEVEL      1K-20KHz
        PIH             .060 In/Sec       .342 G-s
        PIP             .015 G-s
        PIV             .075 In/Sec       .222 G-s
        PIA             .031 In/Sec       .202 G-s
        POH             .033 In/Sec       .367 G-s
        POP             .016 G-s
        POV             .052 In/Sec       .190 G-s
        POA             .035 In/Sec       .243 G-s

SAR39D      - Boiler Feed H2O Pmp SE          (31-Jan-22)
                        OVERALL LEVEL      1K-20kHz
        MOH             .178 In/Sec       4.012 G-s          3575.0 RPM
        MOP             .087 G-s
        MOV             .097 In/Sec       1.328 G-s
        MOA             .044 In/Sec       .447 G-s
        MIH             .091 In/Sec       2.521 G-s
        MIP             .574 G-s
        MIV             .090 In/Sec       .949 G-s
        MIA             .074 In/Sec       1.070 G-s
                        OVERALL LEVEL      1K-20KHz
        PIH             .029 In/Sec       .323 G-s
        PIP             .022 G-s
        PIV             .071 In/Sec       .215 G-s
        PIA             .034 In/Sec       .167 G-s
        POH             .021 In/Sec       .284 G-s
        POP             .068 G-s
        POV             .049 In/Sec       .272 G-s
        POA             .040 In/Sec       .162 G-s

SAR50A      - Drying Tower Circ Pump W        (10-Dec-21)
                        OVERALL LEVEL      1K-20KHz
      * PIV             .129 In/Sec       .0021 G-s          1775.0 RPM
                        OVERALL LEVEL      1K-20kHz
      * PIA             .783 In/Sec       .0024 G-s

SAR50B      - Drying Tower Circ Pump E        (31-Jan-22)
                        OVERALL LEVEL      1K-20kHz
        MOH             .061 In/Sec       1.754 G-s          1775.0 RPM
        MOP             1.017 G-s
        MOV             .136 In/Sec       .484 G-s
        MOA             .129 In/Sec       .326 G-s
        MIH             .044 In/Sec       .753 G-s
        MIP             .442 G-s
        MIV             .090 In/Sec       .371 G-s
        MIA             .150 In/Sec       .203 G-s
```

```
                    OVERALL LEVEL    1K-20KHz
      * POV              .108 In/Sec      .283 G-s
      * POA              .192 In/Sec      .208 G-s


SAR55A      - Neutralization Pump N      (31-Jan-22)
                    OVERALL LEVEL    1K-20kHz
      MOH              .082 In/Sec      .660 G-s          3575.0 RPM
      MOP              .063 G-s
      MOV              .130 In/Sec      .406 G-s
      MOA              .172 In/Sec      .143 G-s
      MIH              .108 In/Sec      .582 G-s
      MIP              .065 G-s
      MIV              .101 In/Sec      .268 G-s
      MIA              .158 In/Sec      .210 G-s
                    OVERALL LEVEL    1K-20KHz
      PIH              .092 In/Sec      .261 G-s
      PIP              .036 G-s
      PIV              .067 In/Sec      .139 G-s
      PIA              .057 In/Sec      .139 G-s


SAR55B      - Neutralization Pump S      (31-Jan-22)
                    OVERALL LEVEL    1K-20kHz
      MOH              .068 In/Sec     1.619 G-s          3575.0 RPM
      MOP              .109 G-s
      MOV              .086 In/Sec      .281 G-s
      MOA              .045 In/Sec      .580 G-s
      MIH              .054 In/Sec     1.414 G-s
      MIP              .279 G-s
      MIV              .077 In/Sec      .506 G-s
      MIA              .043 In/Sec      .305 G-s
                    OVERALL LEVEL    1K-20KHz
      PIH              .050 In/Sec      .479 G-s
      PIP              .145 G-s
      PIV              .045 In/Sec      .203 G-s
      PIA              .036 In/Sec      .182 G-s


SAR59A      - Scrub Twr Circ Pmp W      (31-Jan-22)
                    OVERALL LEVEL    1K-20kHz
      MOH              .029 In/Sec      .268 G-s          1775.0 RPM
      MOP              .093 G-s
      MOV              .049 In/Sec      .098 G-s
      MOA              .049 In/Sec      .076 G-s
      MIH              .028 In/Sec      .319 G-s
      MIP              .163 G-s
      MIV              .047 In/Sec      .163 G-s
      MIA              .031 In/Sec      .091 G-s
                    OVERALL LEVEL    1K-20KHz
      PIH              .127 In/Sec      .374 G-s
      PIP              .280 G-s
      PIV              .091 In/Sec      .198 G-s
      PIA              .099 In/Sec      .181 G-s
      POH              .098 In/Sec      .288 G-s
      POP              .168 G-s
      POV              .105 In/Sec      .129 G-s
      POA              .124 In/Sec      .103 G-s


SAR59B      - Scrub Twr Circ Pmp M      (31-Jan-22)
```

```
                      OVERALL LEVEL      1K-20kHz
         MOH              .059 In/Sec       .752 G-s           1775.0 RPM
         MOP              .092 G-s
         MOV              .069 In/Sec       .183 G-s
         MOA              .066 In/Sec       .106 G-s
         MIH              .061 In/Sec       .723 G-s
         MIP              .368 G-s
         MIV              .069 In/Sec       .604 G-s
         MIA              .050 In/Sec       .394 G-s
                      OVERALL LEVEL      1K-20KHz
         PIH              .302 In/Sec       .500 G-s
         PIP              .323 G-s
         PIV              .111 In/Sec       .441 G-s
         PIA              .121 In/Sec       .224 G-s
         POH              .182 In/Sec       .357 G-s
         POP              .110 G-s
         POV              .096 In/Sec       .125 G-s
         POA              .135 In/Sec       .081 G-s


SAR59C      - Scrub Twr Circ Pmp E        (31-Jan-22)
                      OVERALL LEVEL      1K-20kHz
         MOH              .032 In/Sec       .334 G-s           1775.0 RPM
         MOP              .029 G-s
         MOV              .038 In/Sec       .173 G-s
         MOA              .043 In/Sec       .087 G-s
         MIH              .030 In/Sec       .548 G-s
         MIP              .219 G-s
         MIV              .032 In/Sec       .105 G-s
         MIA              .021 In/Sec       .072 G-s
                      OVERALL LEVEL      1K-20KHz
         PIH              .124 In/Sec       .558 G-s
         PIP              .322 G-s
         PIV              .073 In/Sec       .243 G-s
         PIA              .063 In/Sec       .246 G-s
         POH              .167 In/Sec       .212 G-s
         POP              .064 G-s
         POV              .077 In/Sec       .077 G-s
         POA              .067 In/Sec       .047 G-s


SAR54C      - Weak Acid Xfer Pump S        (31-Jan-22)
                      OVERALL LEVEL      1K-20kHz
         MOH              .090 In/Sec       .149 G-s           3575.0 RPM
         MOP              .0096 G-s
         MOV              .071 In/Sec       .095 G-s
         MOA              .054 In/Sec       .047 G-s
         MIH              .087 In/Sec       .288 G-s
         MIP              .023 G-s
         MIV              .073 In/Sec       .108 G-s
         MIA              .062 In/Sec       .061 G-s
                      OVERALL LEVEL      1K-20KHz
         PIH              .103 In/Sec       .336 G-s
         PIP              .0080 G-s
         PIV              .065 In/Sec       .164 G-s
         PIA              .069 In/Sec       .135 G-s


SAR54B      - Weak Acid Xfer Pump N        (31-Jan-22)
                      OVERALL LEVEL      1K-20kHz
```

```
        MOH                 .180 In/Sec        .238 G-s              3575.0 RPM
        MOP                 .034 G-s
        MOV                 .086 In/Sec        .188 G-s
        MOA                 .136 In/Sec        .102 G-s
        MIH                 .128 In/Sec        .249 G-s
        MIP                 .022 G-s
        MIV                 .204 In/Sec        .110 G-s
        MIA                 .144 In/Sec        .125 G-s
                            OVERALL LEVEL      1K-20KHz
        PIH                 .081 In/Sec        .259 G-s
        PIP                 .041 G-s
        PIV                 .086 In/Sec        .246 G-s
        PIA                 .056 In/Sec        .128 G-s


SAR 56A      - N Oleum Storage Tank Feed      (31-Jan-22)
                            OVERALL LEVEL      1K-20kHz
        M1H                 .075 In/Sec        .099 G-s              1775.0 RPM
        M1P                 .014 G-s
        M1V                 .054 In/Sec        .054 G-s
        M1A                 .070 In/Sec        .027 G-s
        M2H                 .076 In/Sec        .309 G-s
        M2P                 .087 G-s
        M2V                 .050 In/Sec        .084 G-s
        M2A                 .044 In/Sec        .082 G-s
                            OVERALL LEVEL      1K-20KHz
        P1H                 .088 In/Sec        .202 G-s
        P1P                 .119 G-s
        P1V                 .036 In/Sec        .073 G-s
        P1A                 .056 In/Sec        .060 G-s
        P2H                 .071 In/Sec        .077 G-s
        P2P                 .035 G-s
        P2V                 .036 In/Sec        .055 G-s
        P2A                 .079 In/Sec        .043 G-s


SAR 56B      - M Oleum Storage Tank Feed      (31-Jan-22)
                            OVERALL LEVEL      1K-20kHz
        M1H                 .077 In/Sec        .348 G-s              1775.0 RPM
        M1P                 .140 G-s
        M1V                 .070 In/Sec        .093 G-s
        M1A                 .150 In/Sec        .074 G-s
        M2H                 .070 In/Sec        .486 G-s
        M2P                 .075 G-s
        M2V                 .063 In/Sec        .167 G-s
        M2A                 .090 In/Sec        .062 G-s
                            OVERALL LEVEL      1K-20KHz
        P1H                 .098 In/Sec        .076 G-s
        P1P                 .050 G-s
        P1V                 .038 In/Sec        .062 G-s
        P1A                 .056 In/Sec        .036 G-s
        P2H                 .051 In/Sec        .067 G-s
        P2P                 .036 G-s
        P2V                 .036 In/Sec        .045 G-s
        P2A                 .047 In/Sec        .034 G-s


SAR 56C      - S Oleum Storage Tank Feed      (31-Jan-22)
                            OVERALL LEVEL      1K-20kHz
        M1H                 .062 In/Sec        .261 G-s              1775.0 RPM
```

```
         M1P                .080 G-s
         M1V                .043 In/Sec        .309 G-s
         M1A                .036 In/Sec        .045 G-s
         M2H                .032 In/Sec        .223 G-s
         M2P                .155 G-s
         M2V                .038 In/Sec        .122 G-s
         M2A                .030 In/Sec        .061 G-s
                         OVERALL LEVEL      1K-20KHz
         P1H                .093 In/Sec        .036 G-s
         P1P                .010 G-s
         P1V                .067 In/Sec        .027 G-s
         P1A                .034 In/Sec        .011 G-s
         P2H                .117 In/Sec        .168 G-s
         P2P                .122 G-s
         P2V                .048 In/Sec        .138 G-s
         P2A                .041 In/Sec        .077 G-s


  SAR57B      - Oleum Twr Circ Pump E        (31-Jan-22)
                         OVERALL LEVEL      1K-20kHz
         MOH                .051 In/Sec        .563 G-s          1775.0 RPM
         MOP                .271 G-s
         MOV                .073 In/Sec        .125 G-s
         MOA                .079 In/Sec        .093 G-s
         MIH                .049 In/Sec        .395 G-s
         MIP                .191 G-s
         MIV                .069 In/Sec        .130 G-s
         MIA                .073 In/Sec        .132 G-s


  SAR63EM     - Spent Acid Feed Pmp E        (31-Jan-22)
                         OVERALL LEVEL      1K-20kHz
         MOH                .048 In/Sec        .463 G-s          3575.0 RPM
         MOP                .123 G-s
         MOV                .036 In/Sec        .116 G-s
         MOA                .059 In/Sec        .102 G-s
         MIH                .039 In/Sec        .561 G-s
         MIP                .200 G-s
         MIV                .061 In/Sec        .187 G-s
         MIA                .039 In/Sec        .147 G-s
                         OVERALL LEVEL      1K-20KHz
         PIH                .076 In/Sec       1.280 G-s
         PIP                .043 G-s
         PIV                .086 In/Sec        .668 G-s
         PIA                .084 In/Sec        .632 G-s
         POH                .059 In/Sec       1.171 G-s
         POP                .053 G-s
         POV                .076 In/Sec        .679 G-s
         POA                .061 In/Sec        .563 G-s


  SAR63WM     - Spent Acid Feed Pmp W        (31-Jan-22)
                         OVERALL LEVEL      1K-20kHz
         MOH                .035 In/Sec        .321 G-s          3575.0 RPM
         MOP               .0056 G-s
         MOV                .034 In/Sec        .061 G-s
         MOA                .040 In/Sec        .065 G-s
         MIH                .039 In/Sec        .634 G-s
         MIP                .015 G-s
         MIV                .030 In/Sec        .216 G-s
```

```
        MIA                 .028 In/Sec        .038 G-s
                            OVERALL LEVEL      1K-20KHz
        PIH                 .090 In/Sec        .830 G-s
        PIP                 .134 G-s
        PIV                 .066 In/Sec        .482 G-s
        PIA                 .068 In/Sec        .450 G-s


SAR66B     - Vertical Cool Twr Pump #2      (31-Jan-22)
                            OVERALL LEVEL      1K-20kHz
        MOH                 .271 In/Sec        .140 G-s        1195.0 RPM
        MOP                 .066 G-s
        MOV                 .166 In/Sec        .138 G-s
        MOA                 .498 In/Sec        .121 G-s
        MIH                 .137 In/Sec        .165 G-s
        MIP                 .092 G-s
        MIV                 .195 In/Sec        .099 G-s
        MIA                 .203 In/Sec        .094 G-s


SAR66C     - Vertical Cool Twr Pump #3      (31-Jan-22)
                            OVERALL LEVEL      1K-20kHz
        MOH                 .474 In/Sec        .093 G-s        1195.0 RPM
        MOP                 .046 G-s
        MOV                 .097 In/Sec        .050 G-s
        MOA                 .262 In/Sec        .036 G-s
        MIH                 .203 In/Sec        .083 G-s
        MIP                 .035 G-s
        MIV                 .144 In/Sec        .046 G-s
        MIA                 .084 In/Sec        .046 G-s


SAR66D     - Vertical Cool Twr Pump #4      (31-Jan-22)
                            OVERALL LEVEL      1K-20kHz
        MOH                 .190 In/Sec        .104 G-s        1195.0 RPM
        MOP                 .045 G-s
        MOV                 .056 In/Sec        .073 G-s
        MOA                 .133 In/Sec        .055 G-s
        MIH                 .081 In/Sec        .063 G-s
        MIP                 .031 G-s
        MIV                 .079 In/Sec        .284 G-s
        MIA                 .083 In/Sec        .026 G-s


SAR66E     - Vertical Cool Twr Pump #5      (31-Jan-22)
                            OVERALL LEVEL      1K-20kHz
        MOH                 .114 In/Sec        .277 G-s        1195.0 RPM
        MOP                 .183 G-s
        MOV                 .121 In/Sec        .536 G-s
        MOA                 .149 In/Sec        .417 G-s
        MIH                 .053 In/Sec        .686 G-s
        MIP                 .379 G-s
        MIV                 .075 In/Sec        .702 G-s
        MIA                 .088 In/Sec        .543 G-s


SAR78A     - Cooling Tower Fan #1           (31-Jan-22)
                            OVERALL LEVEL      1K-20kHz
        MOH                 .180 In/Sec        .420 G-s        1775.0 RPM
        MOP                 .179 G-s
        MOV                 .327 In/Sec        .224 G-s
        MOA                 .398 In/Sec        .154 G-s
```

```
         MIH                .110 In/Sec        .459 G-s
         MIP                .230 G-s
         MIV                .326 In/Sec        .233 G-s
         MIA                .406 In/Sec        .170 G-s


  SAR78B      - Cooling Tower Fan #2          (31-Jan-22)
                           OVERALL LEVEL     1K-20kHz
         MOH                .079 In/Sec        .824 G-s          1775.0 RPM
         MOP                .152 G-s
         MOV                .113 In/Sec        .226 G-s
         MOA                .160 In/Sec        .228 G-s
         MIH                .121 In/Sec       2.380 G-s
         MIP                .405 G-s
         MIV                .131 In/Sec        .522 G-s
         MIA                .178 In/Sec        .359 G-s


  SAR78C      - Cooling Tower Fan #3          (31-Jan-22)
                           OVERALL LEVEL     1K-20kHz
         MOH                .085 In/Sec        .600 G-s          1775.0 RPM
         MOP                .209 G-s
         MOV                .078 In/Sec       1.123 G-s
         MOA                .165 In/Sec        .531 G-s
         MIH                .076 In/Sec       1.520 G-s
         MIP                .674 G-s
         MIV                .157 In/Sec        .772 G-s
         MIA                .162 In/Sec       1.091 G-s


  SAR128      - Oleum Fume Scrub Blwr         (31-Jan-22)
                           OVERALL LEVEL     1K-20kHz
         MIH                .074 In/Sec        .063 G-s          3575.0 RPM
         MIP                .0096 G-s
         MIV                .058 In/Sec        .050 G-s
         MIA                .072 In/Sec        .037 G-s
                           OVERALL LEVEL     1K-20KHz
         FIH                .040 In/Sec        .330 G-s
         FIP                .025 G-s
         FIV                .043 In/Sec        .291 G-s
         FIA                .068 In/Sec        .211 G-s
         FOH                .067 In/Sec        .424 G-s
         FOP                .046 G-s
         FOV                .099 In/Sec        .298 G-s
         FOA                .128 In/Sec        .168 G-s


  SAR135      - Spent Acid Circ Pmp E         (31-Jan-22)
                           OVERALL LEVEL     1K-20kHz
         MOH                .052 In/Sec        .197 G-s          1775.0 RPM
         MOP                .030 G-s
         MOV                .076 In/Sec        .042 G-s
         MOA                .058 In/Sec        .045 G-s
         MIH                .054 In/Sec        .384 G-s
         MIP                .207 G-s
         MIV                .060 In/Sec        .084 G-s
         MIA                .068 In/Sec        .035 G-s
                           OVERALL LEVEL     1K-20KHz
         PIH                .040 In/Sec        .106 G-s
         PIP                .072 G-s
         PIV                .031 In/Sec        .077 G-s
```

```
        PIA                 .038 In/Sec      .065 G-s
        POH                 .031 In/Sec      .191 G-s
        POP                 .021 G-s
        POV                 .020 In/Sec      .050 G-s
        POA                 .020 In/Sec      .033 G-s


   SAR137A    - Contain Pit Pump N         (31-Jan-22)
                       OVERALL LEVEL    1K-20kHz
        MOH                 .040 In/Sec      .317 G-s        1775.0 RPM
        MOP                 .128 G-s
        MOV                 .150 In/Sec      .117 G-s
        MOA                 .089 In/Sec      .080 G-s


   SAR156     - Spent Acid Feed Booster N   (31-Jan-22)
                       OVERALL LEVEL    1K-20kHz
        MIH                 .025 In/Sec      .265 G-s        1020.0 RPM
        MIP                 .188 G-s
        MIV                 .057 In/Sec      .072 G-s
        MIA                 .030 In/Sec      .076 G-s
                       OVERALL LEVEL    1K-20KHz
        PIH                 .058 In/Sec      .034 G-s
        PIP                 .030 G-s
        PIV                 .030 In/Sec      .024 G-s
        PIA                 .063 In/Sec      .027 G-s


   SAR161A    - N SAR Cool Twr Fan W        (31-Jan-22)
                       OVERALL LEVEL    1K-20kHz
        MOH                 .206 In/Sec     1.124 G-s        1775.0 RPM
        MOP                 .128 G-s
        MOV                 .320 In/Sec      .314 G-s
        MOA                 .340 In/Sec      .293 G-s
        MIH                 .174 In/Sec      .931 G-s
        MIP                 .205 G-s
        MIV                 .261 In/Sec      .336 G-s
        MIA                 .311 In/Sec      .337 G-s


   SAR161B    - N SAR Cool Twr Fan Middle   (31-Jan-22)
                       OVERALL LEVEL    1K-20kHz
        MOH                 .113 In/Sec     1.047 G-s        1775.0 RPM
        MOP                 .465 G-s
        MOV                 .149 In/Sec      .661 G-s
        MOA                 .179 In/Sec      .380 G-s
        MIH                 .162 In/Sec     1.033 G-s
        MIP                 .478 G-s
        MIV                 .139 In/Sec      .218 G-s
        MIA                 .138 In/Sec      .493 G-s


   SAR161C    - N SAR Cool Twr Fan E        (31-Jan-22)
                       OVERALL LEVEL    1K-20kHz
        MOH                 .092 In/Sec      .371 G-s        1775.0 RPM
        MOP                 .112 G-s
        MOV                 .127 In/Sec      .098 G-s
        MOA                 .219 In/Sec      .097 G-s
        MIH                 .225 In/Sec      .401 G-s
        MIP                 .138 G-s
        MIV                 .172 In/Sec      .183 G-s
        MIA                 .220 In/Sec      .133 G-s
```

```
SAR222      - Oleum Twr Drain Pmp          (30-Aug-21)
                        OVERALL LEVEL     1K-20kHz
        MOH             .047 In/Sec       .473 G-s          3575.0 RPM
        MOP             .013 G-s
        MOV             .092 In/Sec       .951 G-s
        MOA             .076 In/Sec       .693 G-s
        MIH             .048 In/Sec       .514 G-s
        MIP             .017 G-s
        MIV             .101 In/Sec       .560 G-s
        MIA             .064 In/Sec       .253 G-s
                        OVERALL LEVEL     1K-20KHz
        PIH             .203 In/Sec      3.247 G-s
        PIP             .014 G-s
        PIV             .181 In/Sec      1.417 G-s
    *   POH             .157 In/Sec      2.925 G-s
    *   POP             .018 G-s
    *   POV             .150 In/Sec      2.260 G-s
        POA             .140 In/Sec      1.249 G-s

SAR231A    - Final Twr Circ Pump N        (31-Jan-22)
                        OVERALL LEVEL     1K-20kHz
        MOH             .141 In/Sec       .870 G-s          1775.0 RPM
        MOP             .277 G-s
        MOV             .085 In/Sec       .300 G-s
        MOA             .164 In/Sec       .182 G-s
        MIH             .089 In/Sec       .928 G-s
        MIP             .393 G-s
        MIV             .038 In/Sec       .270 G-s
        MIA             .102 In/Sec       .230 G-s

SAR233     - InterpassTwr Drain Pmp1      (08-Mar-21)
                        OVERALL LEVEL     1K-20KHz
    *   POH             .034 In/Sec       .181 G-s          3575.0 RPM
    *   POP             .015 G-s
    *   POV             .030 In/Sec       .202 G-s

    ----------------------------------------------------------------------------
    Clarification Of Vibration Units:
        Acc      -->  G-s       RMS
        Vel      -->  In/Sec    PK
        Dsp      -->  Mils      P-P

      * - Indicates Data Has Date/Time Different From Equipment Date/Time
```