

REGULAR SESSION –WEDNESDAY AUGUST 5, 2020

STATE OF KANSAS)
) SS
CITY OF KANSAS CITY)

The Board of Public Utilities of Kansas City, Kansas (aka BPU, We, Us, Our) met remotely in Regular Session on Wednesday, August 5, 2020 at 6:00 P.M. The following Board Members were on the teleconference: Mr. Eidson, President; Robert L. Milan, Vice President; Mary Gonzales, Secretary; Jeff Bryant, Rose Mulvany Henry and Thomas Groneman.

Also on teleconference: William Johnson, General Manager; Angela Lawson, Deputy Chief Counsel; Lori Austin, Chief Financial Officer/Chief Administrative Officer; Jim Epp, Executive Director Water Operations; Johnnetta Hinson, Executive Director Customer Service; Jeremy Ash, Executive Director Electric Operations; Dong Quach, Executive Director Electric Production; Jerry Ohmes, Executive Director Electric Supply; Robert Kamp, IT Project Manager; David Mehlhaff, Chief Communications Officer; Dennis Dumovich, Director of Human Resources; Jody Franchett, Director Administrative Services and Paul Crocker, Supervisor Maintenance, Nearman Water Treatment.

A tape of this meeting is on file at the Board of Public Utilities.

Mr. Eidson called the Board Meeting to order at 6:00 P.M. He welcomed all that were listening or viewing the meeting. He stated the COVID-19 Pandemic had resulted in a State of Emergency disaster declared by the Governor which made it necessary to conduct the meeting using technology instead of in person. Those wishing to offer comments during the Visitors Comments section could click on the raised hand feature at the bottom of the application or window or press Star 9 and be connected by phone. As always, the public could email or call the BPU with any concerns. The Agenda could be found on the BPU website. If you were using Zoom, it would appear on your screen. Mr. Eidson introduced himself and the other Board Members along with the GM, and Legal Counsel.

Roll call was taken and all Board Members were present via teleconference.

Motion was made to approve the Agenda by Mr. Bryant, seconded by Mr. Groneman, and carried.

Motion was made to approve the Minutes of the Work Session of July 15, 2020 by Ms. Gonzales, seconded by Ms. Mulvany Henry, and carried.

Motion was made to approve the Minutes of the Regular Session of July 15, 2020 by Mr. Groneman, seconded by Mr. Bryant, and carried.

Mr. Eidson turned the meeting over to Mr. Johnson.

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Mr. Johnson asked Mr. Kamp if there were any visitors wishing to speak.

Mr. Kamp said no one had their hand raised via teleconference.

Item #7 – General Manager’s Reports

- i. COVID-19 Update/Cares Act: Mr. Johnson spoke to the Board about executive staff communications regarding the pandemic and the requirements of mask wearing/social distancing required at Level 3. He also briefed on these ongoing discussions:
 - a. Working with employees with kids in school.
 - b. Guidelines regarding employees getting tested.

Mr. Dumovich gave an update on company COVID -19 matters.

Mr. Johnson and Mr. Dumovich answered questions from the Board regarding communicating with employees about various protocols.

Mr. Johnson and Ms. Hinson also answered questions regarding customer service processes due to the continued closing of the lobby.

- ii. June 2020 Financials: Ms. Austin presented the June 2020 Financials
- iii. 2020 Second Quarter Financials: Ms. Austin gave a PowerPoint presentation on the second quarter financials (see attached).

Ms. Lawson confirmed that the June 2020 Financial approval could be encompassed in the approval of the Second Quarter Financials.

Motion was made to approve the 2020 Second Quarter Financial results by Ms. Gonzales, seconded by Jeff Bryant and carried.

- iv. Rosedale Reliability Project – Argentine Distribution: Mr. Jeremy Ash updated the Board on current areas of focus with the Rosedale area project.
 - a. In the Armourdale area around 8th and Douglas they were tying a couple of feeders together to improve reliability in that area. Work should be completed early in September.
 - b. Work in the Barber substation area around 17th and Lawrence down to the 10th and Douglas area is ongoing. They would be setting smaller steel poles, similar

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in size to the Leavenworth Road and Legends area that would carry the distribution facility. They would also have the opportunity to move the distribution underneath the transmission line. This meant that all of our facility would be on one side of the road, any of the crossings that needed to happen, would happen under the street and pop back up and feed the north side of the road. After the coms companies move their facilities the area would be cleaned up and be much more appealing. Work should hopefully be completed by Thanksgiving.

Mr. Ash answered questions from the Board.

- v. Water Maintenance Analysis: Mr. Paul Crocker gave a PowerPoint presentation to update the Board on predictive maintenance projects underway at the Nearman Water Treatment Plant. (see attached).

Mr. Crocker answered questions from the Board.

Revisit Item #6 Visitors

Mr. Carl Freese, 3312 Brown Avenue. Mr. Brown discussed with the Board his situation with his utility bill. He paid a bill that was not his and needed to have it switched to his account. He lived at the address from 2013 - 2016, then again this year.

Mr. Johnson said that Ms. Hinson, Executive Director of Customer Service, would follow-up with him.

Tamara Thierry, 2313 N. 21st St., was calling in support of Mr. Freese.

Item #8 Board Comments

Mr. Eidson thanked all for their presentations.

Mr. Groneman echoed Mr. Eidson's comments. He expressed appreciation for Mr. Crocker's expertise in his field. Also, he thanked the staff for their diligence during this time.

Mr. Milan echoed the previous comments.

2020 Second Quarter Financial Results

August 5, 2020

2020 Billed kWh (YTD Jan – June)

	(CY) 2020 YTD	(PY) 2019 YTD	
Electric			
Residential	258,066,195	262,522,945	
Commercial	429,749,834	457,422,597	
Industrial	246,993,453	285,559,654	
	934,809,482	1,005,505,196	-7.0%

Lower usage in 2020 compared to 2019 due to weather (more Residential) and also the COVID-19 shutdown of businesses.

Residential – down 1.7%

Commercial – down 6%

Industrial – down 13%

2020 Billed CCF's (YTD Jan – June)

	(CY) 2020 YTD	(PY) 2019 YTD	
Water			
Residential	1,667,712	1,620,776	
Commercial	1,097,182	1,153,806	
Industrial	926,459	998,117	
	3,691,353	3,772,699	-2.2%

Lower usage compared to 2019 due to business shutdowns due to COVID-19

Residential – Up 3% Commercial – Down 5% Industrial - Down 7%



Financial Results

Revenues – June 2020

	(CY) 2020 June	(PY) 2019 June		Budget 2020 June	(CY) 2020 June	
Electric	\$ 23.363	\$ 22.052		\$ 24.396	\$ 23.363	
Water	4.299	4.397		4.845	4.299	
Combined	\$ 27.662	\$ 26.449	4.6%	\$ 29.241	\$ 27.662	-5.4%

**Dollars in millions

Actual Compared to 2020 Budget

Electric down 4%

Water down 11%

Operating Expenses – June 2020

	(CY) 2020 June	(PY) 2019 June		Budget 2020 June	(CY) 2020 June	
Electric	\$ 18.168	\$ 15.949		\$ 18.566	\$ 18.168	
Water	2.564	2.826		3.131	2.564	
Combined	\$ 20.732	\$ 18.775	10.4%	\$ 21.697	\$ 20.732	-4.4%

**Dollars in millions

Variance – MTD comparing Budget to Actual for 2020

Electric

Production	- 16% down
Purchased Power	- 16% up
Fuel	- 6% up
T&D	- 22% down
G &A	- 13% down

Water

Production	- 27% down
T&D	- 33% down
G &A	- 4% up



Financial Results

Change in Net Position – June 2020

	(CY) 2020 June	(PY) 2019 June	Budget 2020 June	(CY) 2020 June
Electric	\$ 1.329	\$ 1.670	\$ 1.337	\$ 1.329
Water	0.927	0.891	1.015	0.927
Combined	\$ 2.256	\$ 2.561	\$ 2.352	\$ 2.256

**Dollars in millions



Financial Results

Revenues – Second Quarter 2020

	(CY) 2020 2nd Quarter	(PY) 2019 2nd Quarter		Budget 2020 2nd Quarter	(CY) 2020 2nd Quarter	
Electric	\$ 62.515	\$ 62.892		\$ 67.815	\$ 62.515	
Water	12.160	12.609		13.183	12.160	
Combined	\$ 74.675	\$ 75.501	-1.1%	\$ 80.998	\$ 74.675	-7.8%

**Dollars in millions

Actual Compared to 2020 Budget

Electric down 8%

Water down 8%



Financial Results

Revenues – 2020 YTD

	(CY) 2020 YTD	(PY) 2019 YTD		Budget 2020 YTD	(CY) 2020 YTD	
Electric	\$ 132.438	\$ 135.486		\$ 138.216	\$ 132.438	
Water	24.305	24.720		25.181	24.305	
Combined	\$ 156.743	\$ 160.206	-2.2%	\$ 163.397	\$ 156.743	-4.1%

**Dollars in millions

Variance – YTD comparing Budget to Actual for 2020

Electric: - *Down 4%*
 Residential (\$3.4M)
 Commercial (\$3.1M)
 Industrial (\$1.5M)

Water: *Down 2%*
 Residential (\$474K)
 Commercial (\$595K)
 Industrial \$637K

Through first 6 months we have recognized the full amount of \$5.6 million deferred revenue from the 2019 ERC

Operating Expenses – Second Quarter 2020

	(CY) 2020 2nd Quarter	(PY) 2019 2nd Quarter		Budget 2020 2nd Quarter	(CY) 2020 2nd Quarter	
Electric	\$ 47.285	\$ 48.952		\$ 56.596	\$ 47.285	
Water	7.910	9.118		9.479	7.910	
Combined	\$ 55.195	\$ 58.070	-5.0%	\$ 66.075	\$ 55.195	-16.5%

**Dollars in millions

Variance – 2nd Qtr comparing Budget to Actual for 2020

Electric

Production	- 14% down
Purchased Power	- 15% down
Fuel	- 19% down
T&D	- 19% down
G &A	- 26% down

Water

Production	- 23% down
T&D	- 23% down
G &A	- 18% down



Financial Results

Operating Expenses – 2020 YTD (Total)

	(CY) 2020 YTD	(PY) 2019 YTD		Budget 2020 YTD	(CY) 2020 YTD	
Electric	\$ 93.830	\$ 98.107		\$ 108.518	\$ 93.830	
Water	16.755	17.844		18.955	16.755	
Combined	\$ 110.585	\$ 115.951	-4.6%	\$ 127.473	\$ 110.585	-13.2%

**Dollars in millions

Actual Compared to 2020 Budget

Electric down 15%

Water down 12%

Operating Expenses – 2020 YTD less Depreciation

	(CY) 2020 YTD	(PY) 2019 YTD		Budget 2020 YTD	(CY) 2020 YTD	
Electric	\$ 80.473	\$ 83.998		\$ 94.188	\$ 80.473	
Water	12.869	13.939		15.065	12.869	
Combined	\$ 93.342	\$ 97.937	-4.7%	\$ 109.253	\$ 93.342	-14.6%

**Dollars in millions

Variance – YTD comparing Budget to Actual 2020

Electric:

Purchased Power (\$4.6M)
 Fuel (\$301K)
 Production (\$3.2M)
 T&D (\$2.8M)
 G&A (\$2.5M)

Water:

Production (\$564K)
 T&D (\$1.2M)
 G&A (\$436K)



Financial Results

Change in Net Position – Second Quarter 2020

	(CY) 2020 2nd Quarter	(PY) 2019 2nd Quarter	Budget 2020 2nd Quarter	(CY) 2020 2nd Quarter
Electric	\$ 3.491	\$ 1.083	\$ (1.711)	\$ 3.491
Water	2.220	1.652	1.754	2.220
Combined	\$ 5.711	\$ 2.735	\$ 0.043	\$ 5.711

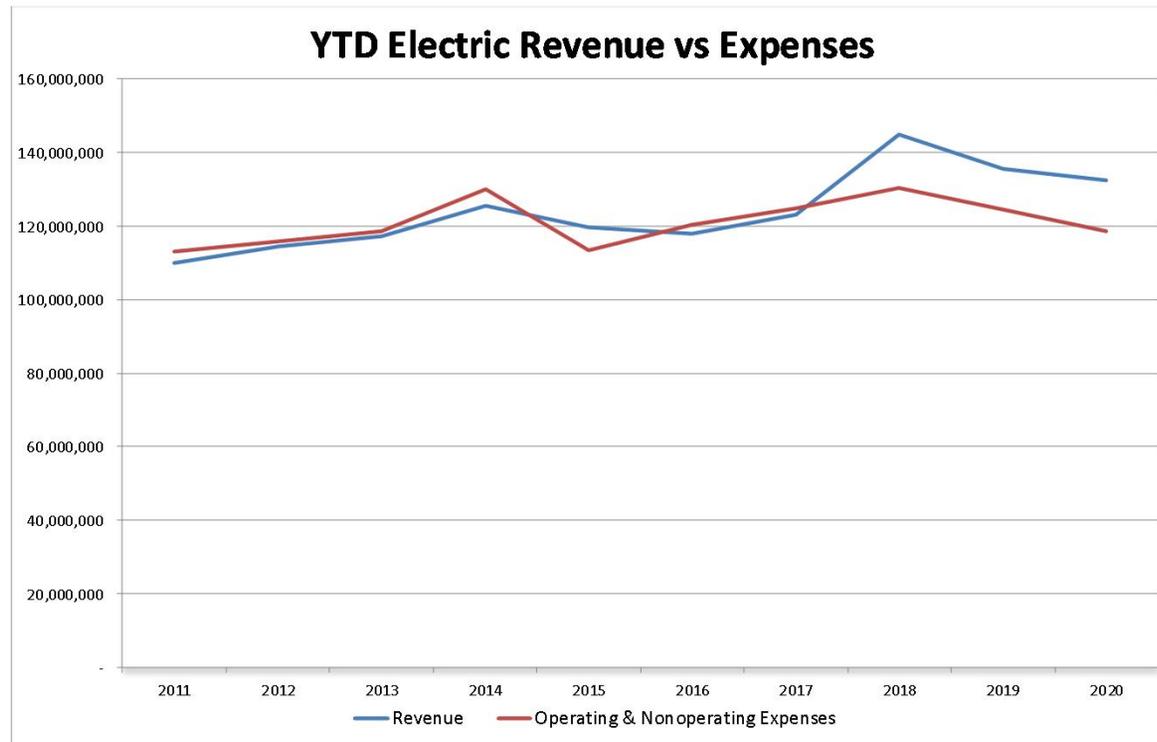
**Dollars in millions

Change in Net Position – 2020 YTD

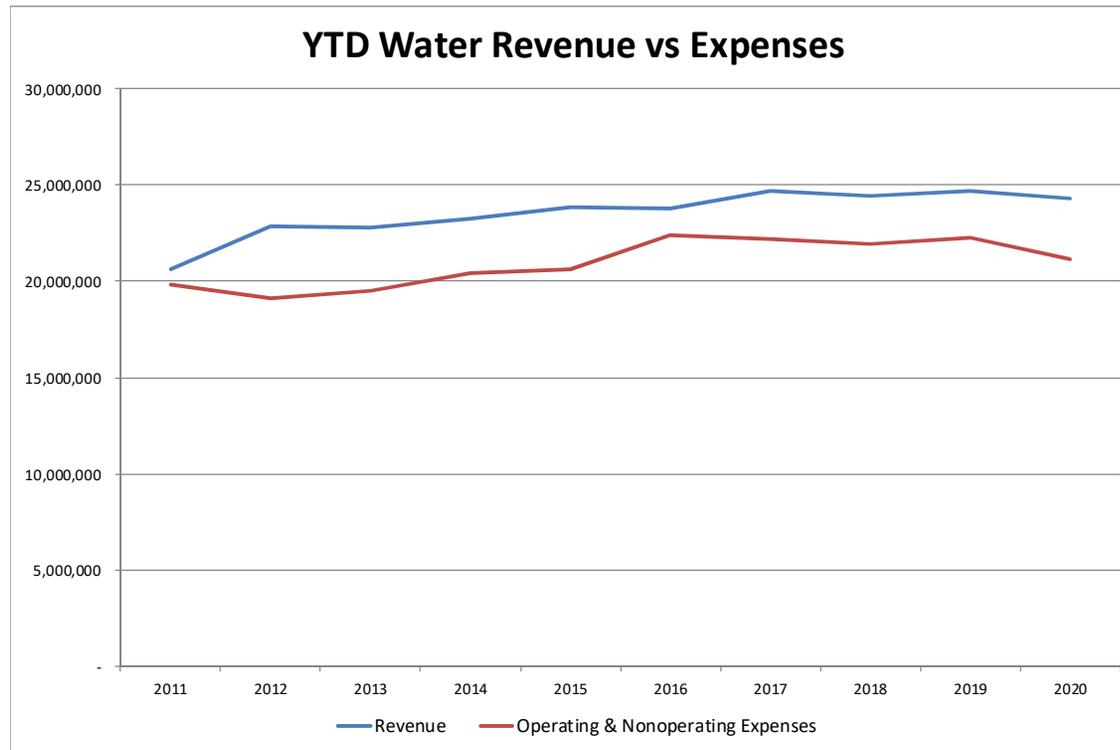
	(CY) 2020 YTD	(PY) 2019 YTD		Budget 2020 YTD	(CY) 2020 YTD
Electric	\$ 13.865	\$ 11.024		\$ 3.469	\$ 13.865
Water	3.233	2.619		2.072	3.233
Combined	\$ 17.098	\$ 13.643		\$ 5.541	\$ 17.098

**Dollars in millions

Financial Results – 10 Year Trend



Financial Results – 10 Year Trend



Cash Position

	(CY) 2020 June	(PY) 2019 June	2020 May
Combined (E&W)	\$ 45.67	\$ 40.61	\$ 46.11
Days Cash-on-Hand	76	70	78

**Dollars in millions

Balance Sheet: Notables

	(CY) 2020 June	(PY) 2019 June
Fuel Inventory	\$ 4.100	\$ 6.472
Bond Dollars 2016A (AQC)	\$ -	\$ 2.047
Bond Dollars 2016C (Elec T&D)	\$ 1.541	\$ 27.794

In May, 2020, we recognized a Regulatory Asset for Quindaro Units 1 and 2 in the amount of \$73.6 million. The annual amortization will be around \$3.6 million for 20 years and we began recognizing it in May, 2020.

**Dollars in millions



Financial Results

Capital Spending

	(CY) 2020 YTD	(PY) 2019 YTD	2020 Budget	
Electric	\$ 22.38	\$ 16.60	\$ 41.27	
Water	3.74	2.40	12.73	
Common	1.15	0.12	4.60	
Total YTD Capital	\$ 27.26	\$ 19.12	\$ 58.60	Remaining 53%

**Dollars in millions

Major projects in 2020:

- Rosedale Project - \$10.2M
- N1 Bottom Ash Handling System- \$3.0M
- Nearman 316B Project - \$156K
- Mill Liners - \$555K
- Water Leak, Valve, System Imp. - \$956K
- UG/CMIP Water Distribution - \$1.4M

Debt Coverage

Debt Coverage with PILOT

	(CY) 2020 June	(PY) 2019 June
Electric	2.03	2.32
Water	1.76	2.07
Combined	2.01	2.31

Debt Coverage w/o PILOT

	(CY) 2020 2nd Quarter	(PY) 2019 June
Electric	1.44	1.70
Water	1.33	1.63
Combined	1.44	1.72

Financial Guideline Target 1.6 to 2.1 times with PILOT

Moving towards Predictive Maintenance with Condition Monitoring technology

(Ultrasound and Vibration Analysis)

a work in progress

Paul Crocker: Supervisor of Maintenance at Nearman Water

Maintenance Strategies (brief overview)

- Run to Failure – use where appropriate (lights, noncritical assets)
- Preventive Maintenance – Where no suitable condition monitoring technologies are available (Chlorine and Ammonia handling assets) – typically risk and calendar or run hour based
- Proactive Maintenance – Tightening, Lubrication, Cleaning (TLC)
- Precision Maintenance – Laser Alignment, Precision greasing (Grease Meter and Ultrasound)
- Predictive Maintenance – Oil Analysis, Thermal Imaging, Ultrasonic (passive and active) technologies, Motor Current Signature Analysis, etc

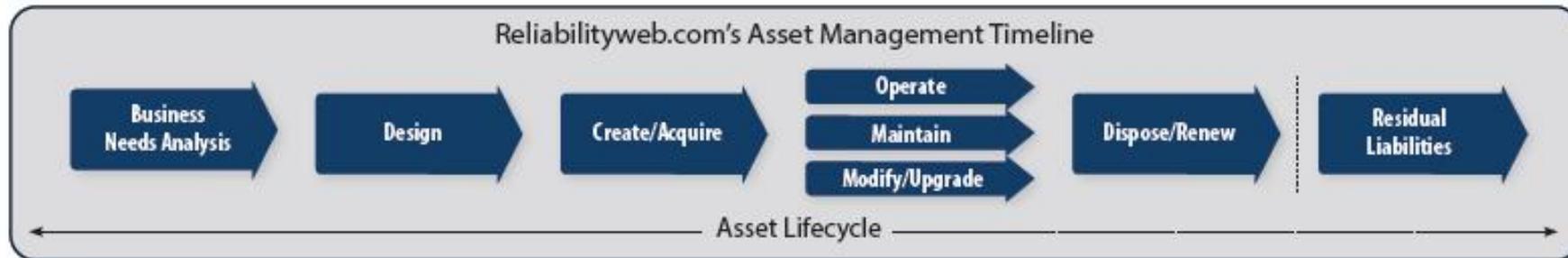
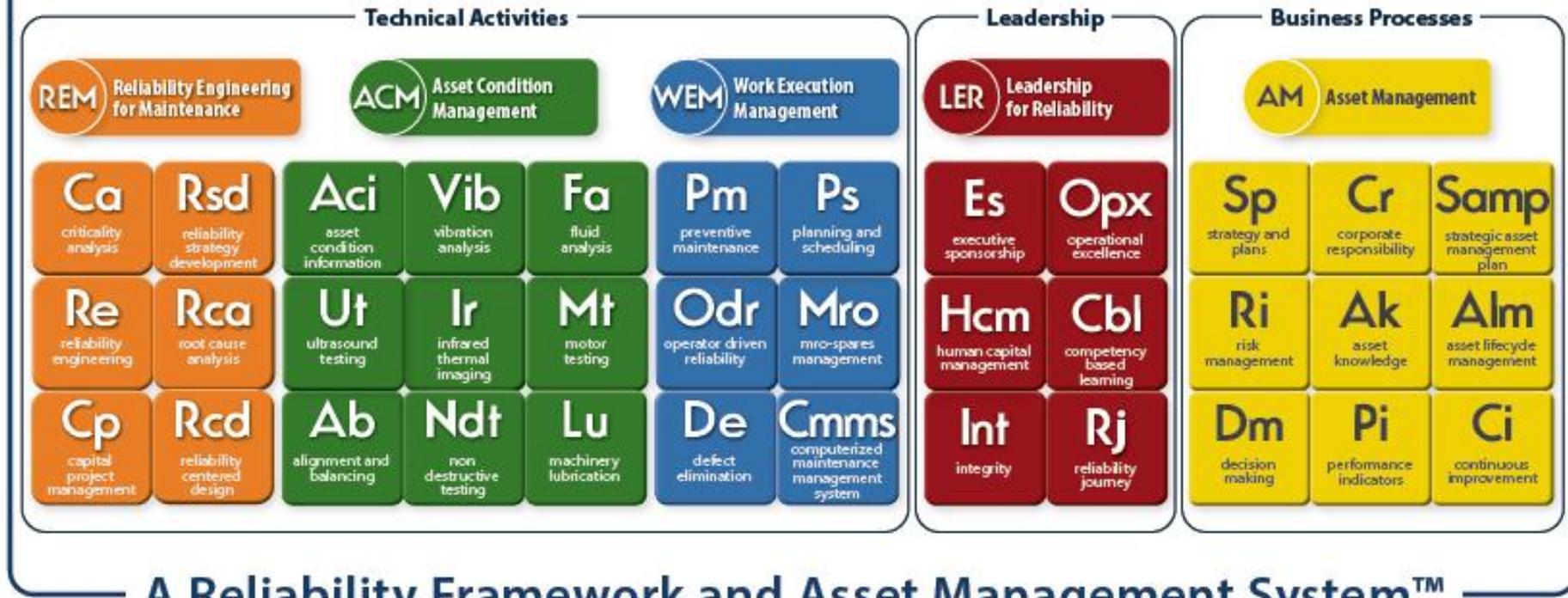
Predictive / Condition Based Maintenance

- Infrared – Thermal Imager or spot radiometer
- Oil Analysis – Samples taken at interval (run hour, or calendar based)
- Ultrasound – Active (Transducer and Transceiver) – Used for thickness testing (signal is emitted from the device and received back then analyzed) – Fish Finder technology
- Ultrasound – Passive (Structureborne and Airborne) – Inaudible sounds are generated by equipment heterodyned and analyzed – Can tell you something is wrong very quickly
 - Friction
 - Impacting
 - Turbulence
- Vibration Analysis – Transducer converts mechanical vibration to electrical signal for amplitude and frequency that is analyzed by an analyst

Why we do Condition Monitoring

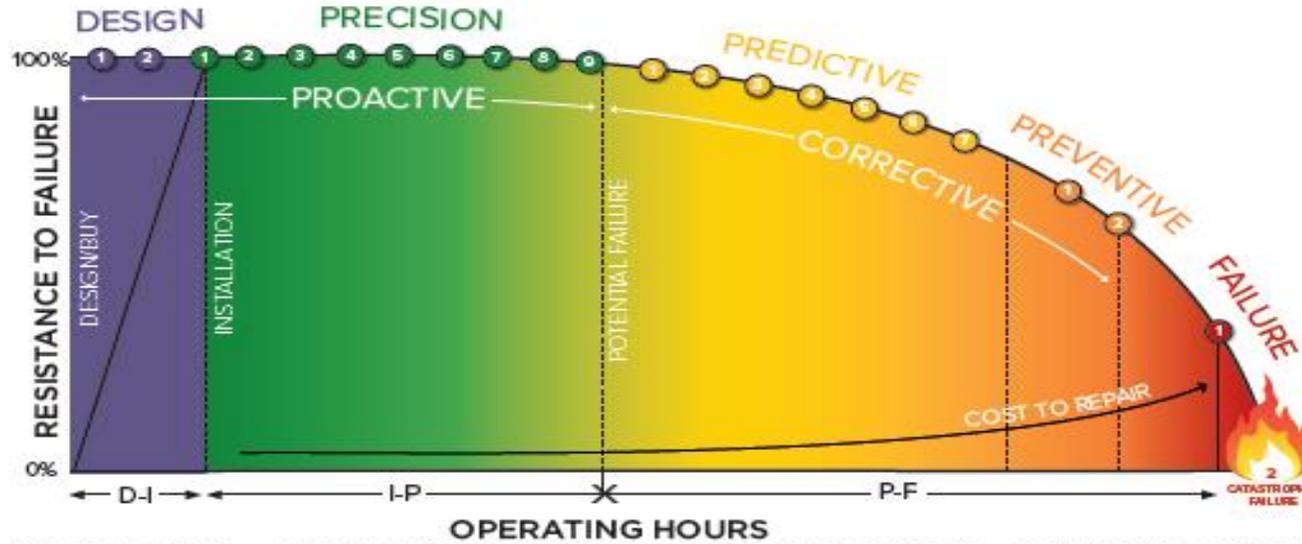


Uptime® Elements



HOW FAILURE OCCURS

D-I-P-F CURVE (DESIGN-INSTALLATION-POTENTIAL FAILURE-FAILURE)



Attribution/Inspiration: The D-I-P-F curve was originally developed by Doug Fluckowicz, Certified Reliability Leader, Author, RCM 24r (ISBN: 978-0-4828746-6-4) and further modified/involved by Brian Heinisa, Certified Reliability Leader

DESIGN/BUY

- 1 Design for Reliability (DFR)
- 2 Purchase for Purpose

PRECISION

- 1 Precision Commissioning
- 2 Precision Installation
- 3 Defect Elimination
- 4 Precision Alignment and Balancing
- 5 Work Processes and Procedures
- 6 Asset Condition Management
- 7 Lubrication Reliability
- 8 Clean to Inspect (5S)
- 9 Operate for Reliability

PREDICTIVE

- 1 Condition Directed Tasks
- 2 Ultrasound Testing (UT)
- 3 Fluid Analysis (FA)
- 4 Vibration Analysis (VIB)
- 5 Motor Testing (MT)
- 6 Infrared Imaging (IR)
- 7 Non Destructive Testing (NDT)

PREVENTIVE

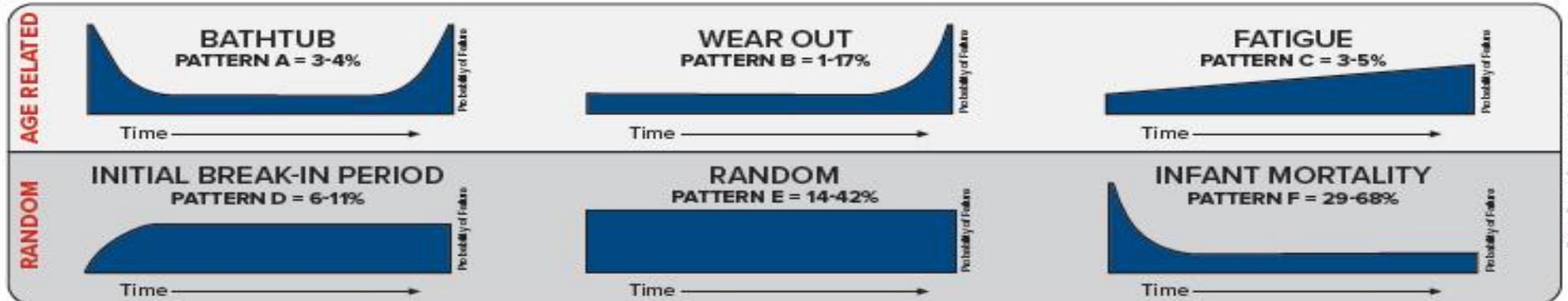
- 1 Time-Directed Tasks
- 2 Human Senses (audible noise, hot to touch, smell)

FAILURE

- 1 Functional Failure
- 2 Catastrophic Failure

FAILURE PATTERNS

Random failures account for 77-92% of total failures and age related failure characteristics for the remaining 8-23%.



Failure Pattern Percentage Source: RCM by Nowlan and Heap, US Navy, Bomberg



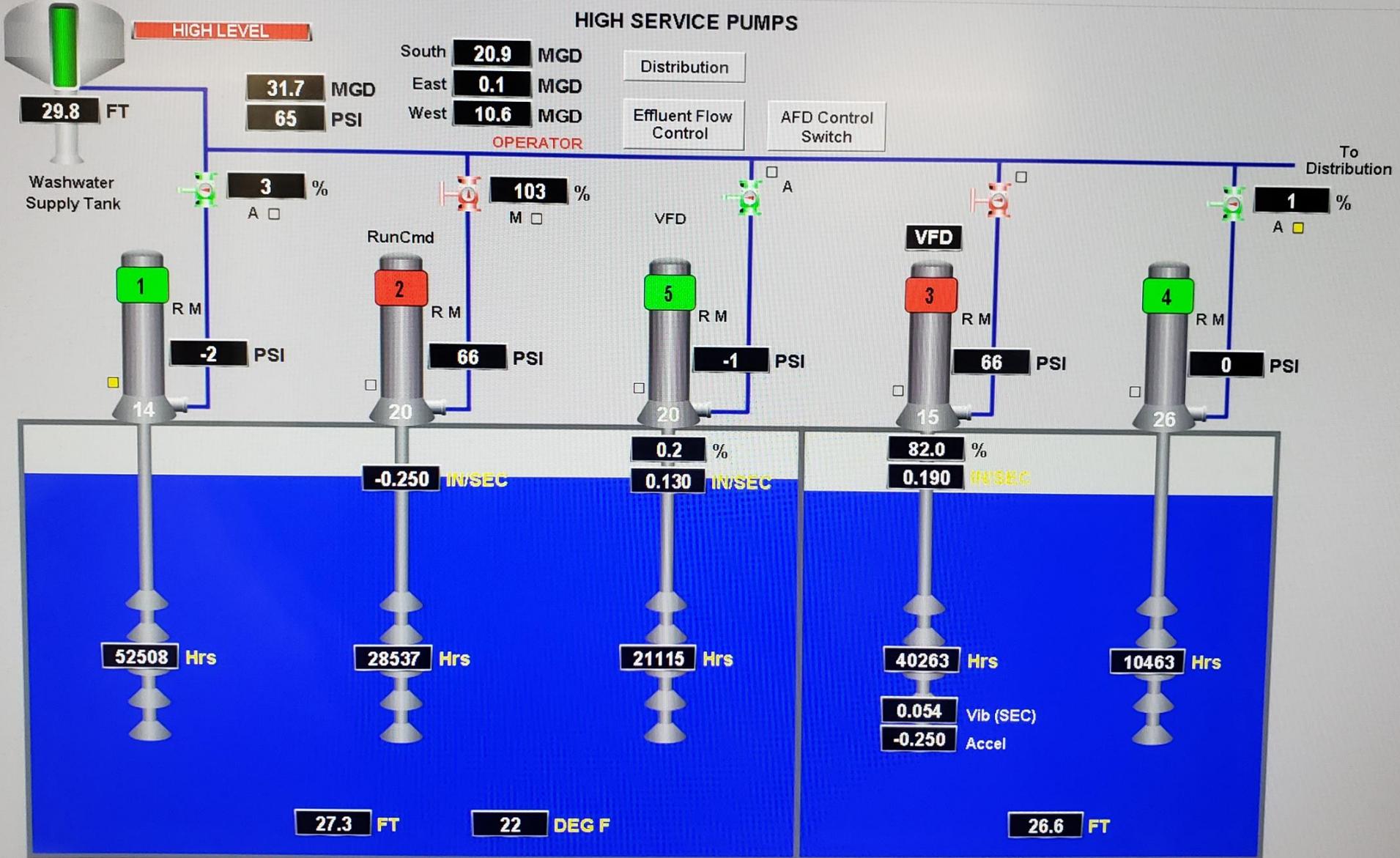
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Practical - Condition Based Maintenance

1. Control System – High Service Pump 3 Run Hours
2. WwInterfaces – Sends run hours from the control system historian to Maximo
3. Maximo PM module sees the hours and generates a WO to go do a condition assessment
4. Print the work order – Work with UAS4 and SDT 340 – set them up to record data
5. Upload and analyze collected Data in UAS4

HIGH SERVICE PUMPS



Search For 

Hide Inactive Interfaces

Tag Name - Wonderware ▲	Asset Number - Maximo	Meter Name - Maximo	IFace Active	New Read Date	New Read	Last Read Date	Last Read
AC_201.TotalRun_Maximo	AC201A	HOUR	Yes	8/4/2020 9:39:18 AM	9615.2	8/4/2020 5:00:00 AM	9608.9
AC_202.TotalRun_Maximo	AC202A	HOUR	Yes	8/4/2020 9:33:24 AM		6/25/2020 5:00:01 AM	12399.7
AC_203.TotalRun_Maximo	AC203	HOUR	Yes	8/4/2020 9:33:24 AM		2/11/2020 5:00:00 AM	32.4
Ammonia_MP1.TotalRun	AAMP1	HOURNR	Yes	8/4/2020 10:05:22 AM	34581.4	8/4/2020 5:00:00 AM	34575.3
Ammonia_MP3.TotalRun	534261	HOUR	Yes	8/3/2020 7:54:03 AM	3529.09	8/4/2020 5:00:00 AM	3529.09
CoagMixer_4A.TotalRun	COA-4	HOUR	Yes	8/4/2020 9:33:24 AM		6/25/2020 5:00:01 AM	31964.7
Col_1A.TotalRun	CLARIFE1AGRDR	HOUR	Yes	8/4/2020 10:31:42 AM	77449.2	8/4/2020 5:00:00 AM	77443.1
Col_1B.TotalRun	CLARIFE1BGRDR	HOUR	Yes	8/4/2020 10:28:54 AM	77135.5	8/4/2020 5:00:00 AM	77129.4
Col_2A.TotalRun	CLARIFE2AGRDR	HOUR	Yes	8/4/2020 9:49:40 AM	76202.3	8/4/2020 5:00:00 AM	76197.2
Col_2B.TotalRun	CLARIFE2BGRDR	HOUR	Yes	8/4/2020 9:36:33 AM	76108	8/4/2020 5:00:00 AM	76103
ControlEnc_Temp.Out	CONTROLENC_TEMP	TEMP F	Yes	8/4/2020 10:33:08 AM	87.22	8/4/2020 5:00:00 AM	79.76
CPoly_MP1.TotalRun	CPMP1	HOUR	Yes	8/4/2020 9:46:58 AM	49949	8/4/2020 5:00:00 AM	49944
CPoly_MP2.TotalRun	CPMP2	HOUR	Yes	8/4/2020 10:21:01 AM	51308.5	8/4/2020 5:00:00 AM	51302.4
CPoly_MP3.TotalRun	CPMP3	HOUR	Yes	7/1/2020 8:31:33 AM	48240.8	8/4/2020 5:00:00 AM	48240.8
CPolyBlend_PBU1.TotalRun	CPB-1	HOUR	Yes	8/4/2020 9:33:24 AM		2/11/2020 5:00:00 AM	13339.9
CPolyBlend_PBU2.TotalRun	CPB-2	HOUR	Yes	8/4/2020 9:33:24 AM		6/25/2020 5:00:01 AM	22128.1
Ferric_MP2.TotalRun	FEMP2	HOUR	Yes	8/3/2020 9:01:12 AM	48539.1	8/4/2020 5:00:00 AM	48539.1
Ferric_MP3.TotalRun	FEMP3	HOUR	Yes	8/4/2020 10:15:55 AM	52515.8	8/4/2020 5:00:00 AM	52509.7
Flocc_1A.TotalRun	FL1AGRDR	HOUR	Yes	8/4/2020 10:08:14 AM	74829.5	8/4/2020 5:00:00 AM	74823.4
Flocc_1B.TotalRun	FL1BGRDR	HOUR	Yes	8/4/2020 10:03:12 AM	76411.5	8/4/2020 5:00:00 AM	76405.4
Flocc_1C.TotalRun	FL1CGRDR	HOUR	Yes	8/4/2020 9:56:53 AM	76459.2	8/4/2020 5:00:00 AM	76454.2
Flocc_2A.TotalRun	FL2AGRDR	HOUR	Yes	8/4/2020 10:08:42 AM	74728.9	8/4/2020 5:00:00 AM	74722.8
Flocc_2B.TotalRun	FL2BGRDR	HOUR	Yes	8/4/2020 10:16:35 AM	73987.3	8/4/2020 5:00:00 AM	73981.2
Flocc_2C.TotalRun	FL2CGRDR	HOUR	Yes	8/4/2020 9:45:45 AM	73513	8/4/2020 5:00:00 AM	73507.9
FloccMixer_4A.TotalRun	FL-4	HOURNR	Yes	8/4/2020 9:33:24 AM		6/25/2020 5:00:01 AM	35169.8
Fluoride_MP1.TotalRun	FMP1	HOUR	Yes	8/4/2020 9:35:11 AM	78068.8	8/4/2020 5:00:00 AM	78063.7
FPoly_MP1.TotalRun	FAMP1	HOUR	Yes	7/2/2020 7:53:39 AM	21699.2	8/4/2020 5:00:00 AM	21699.2
FPoly_MP2.TotalRun	FAMP2	HOUR	Yes	8/4/2020 9:36:39 AM	21857.3	8/4/2020 5:00:00 AM	21851.8
HCW1_LWP1.TotalRun	LWP1	HOURNR	Yes	8/4/2020 10:10:23 AM	43621.2	8/4/2020 5:00:00 AM	43615.1
HCW1_LWP2.TotalRun	LWP2	HOUR	Yes	7/1/2020 8:46:13 AM	21434.4	8/4/2020 5:00:00 AM	21434.4

Close

New...

Edit...

Delete...

Start Center | Not secure | abwpmaweb01.corp.bpu.local/maximo/

BPU Home | Weather | Max Prod | UAS Cloud | 2020 SMRP Abstracts | Asset Management | Maint & Reliability | Maximo | On-Line Training | Chlorine Breakpoint | Technology

Welcome, Paul Crocker | Paul Crocker

WATER PROD MAINTPERSON V.2.0 | WATER PROD KPI's and Result Sets

Find Navigation Item

Go To Applications

- My Recent Applications
- Administration
- Analytics
- Assets
- Change
- Contracts
- Inventory
- Planning
- Preventive Maintenance
- Purchasing
- Release
- Self Service
- Service Desk
- System Configuration
- Task Management
- Work Orders

WO Completion Performance

[Create a New Work Order](#)

Shortcuts to Applications

- Work Order Tracking
- Assets
- Inventory
- Quick Reporting
- Labor Reporting

WO Completed within 10 Days of Target Start

Last Run: 8/4/20 10:00 AM [Update](#)

Status	Last Reading	Actual	Target	Variance
—	82.2	82.2	80	2.2

Past 30 Days (%)

A semi-circular gauge chart with a scale from 0 to 100. The needle points to 82.2. The scale is divided into segments: 0-20 (red), 20-30 (dark red), 30-40 (orange), 40-50 (yellow), 50-60 (light green), 60-70 (green), 70-80 (dark green), 80-90 (teal), 90-100 (blue). The needle is positioned between the 80 and 90 marks.

MECHANICS

Work Order	Lead	Status	Asset Tag	Description	Calculated Priority	Scheduled Start
245993	DDSMITH	APPR	WDDC1	WDDC1, Double Door Check Valve for filter 1 Filter to Waste Valve not working and makes a mess	3	8/23/20 8:00 AM
260589	DOBRIEN	APPR	COA-4GEAR	Change and Filter Fluid COA-4, INJ-4, and FL-4 before next operation	2	8/20/20 8:15 AM
262161	DOBRIEN	APPR	BFP207	Rebuild BFP207, 1st check, 2nd check, and relief valve	3	9/8/20 8:00 AM
254002	DDSMITH	HOLD	Y2K	West Basin Change Oil Floors, Filter Clarifiers with Y2K Cart,	2	5/7/20 8:15 AM
259738	DOBRIEN	INPRG		On-Line Training with SDT Webinars	2	
262244	DOBRIEN	INPRG	CPDT1DISCHEV	Clean CPDT1 and CPDT2 tanks - assist operations with outlet ball valve disassembly and cleaning	2	
262247	DDSMITH	INPRG		Disassemble, clean and reassemble ABB AV1 Positioners	2	
263101	DOBRIEN	INPRG	AHU301	AHU301 making a lot of noise, belt dust on floor, and floppy belt	3	

[Set Chart Options](#) | 1 - 8 of 8

ELEC/TECHS

Work Order	Lead	Status	Asset Tag	Description	Calculated Priority	Scheduled Start
248314	JBOLZ	APPR	LIGHTING	Install LED lamp between Caustic Bulk Tanks, to improve illumination in that area	1	
258204	JBOLZ	APPR	SUS-3 RIGHT	SUS East Breaker Cleaning - after Actiflo shut down	2	8/16/20 8:00 AM
258773	JBOLZ	APPR	PEFLOWEAST	PLANT EFFLUENT FLOW EAST - ZERO and CHECK	4	
258779	JBOLZ	APPR	PEFLOWWEST	PLANT EFFLUENT FLOW WEST - ZERO and CHECK	4	
259628	JBOLZ	APPR	RM1AGEAR	East Rapid Mixer Replacement Project	2	
250726	LSTEAN	INPRG	PRV402	PRV-402 needs replaced bad vibration from blower wheel, found work order 230883	2	



Work Order Details

263125: HS3 Condition Assessment UE, Vib, Temp, RPM

Asset: HS3 HSP-3 8 MGD
BPU Tag: HS3
Location: PD_HS PUMP DATA

Sched Start:	8/4/20
Sched Finish:	8/4/20
Target Start:	8/4/20
Target Finish:	8/4/20
Actual Start:	
Actual Finish:	
Report Date:	8/4/20
Reported By:	PCROCKER

Site:	WPROC
Priority:	2
Work Type:	PM
Status:	APPR
Parent:	
Failure Class:	
Problem Code:	
GL Account:	W-3900-65200-4326

Job Plan:	SDT340
Supervisor:	
Lead:	
Vendor:	
Owner:	
Owner Group:	
Service:	
Service Group:	
Classification:	PA CD NI

Task IDs

Task ID	Description	Status	Measurement Point	Value	Date	Observations
10	Download Route with Asset to be assessed from UAS4 to SDT340	APPR		0		
20	Obtain readings in route	APPR		0		
30	Upload Readings to UAS4 then clear readings from 340	APPR		0		

Planned Labor

Task ID	Craft	Skill Level	Labor	Vendor	Contract	Qty	Hours	Rate	Line Cost
			PCROCKER			1	01:00	44.51	44.51
Total Planned Labor:									44.51

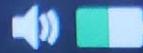
SDT 340 Data Collector – 5 tools in one

- Structure born Ultrasound Tool (Contact Probe, Magnet, and Grease zerk adapter)
- Airborne Ultrasound – Flex Wand
- Vibration - Accelerometer
- RPM - Photo tachometer
- Temperature - Radiometer



SDT 340

16:32



RS2T

.../MOTOR/M1V UE/

ST TIME FFT

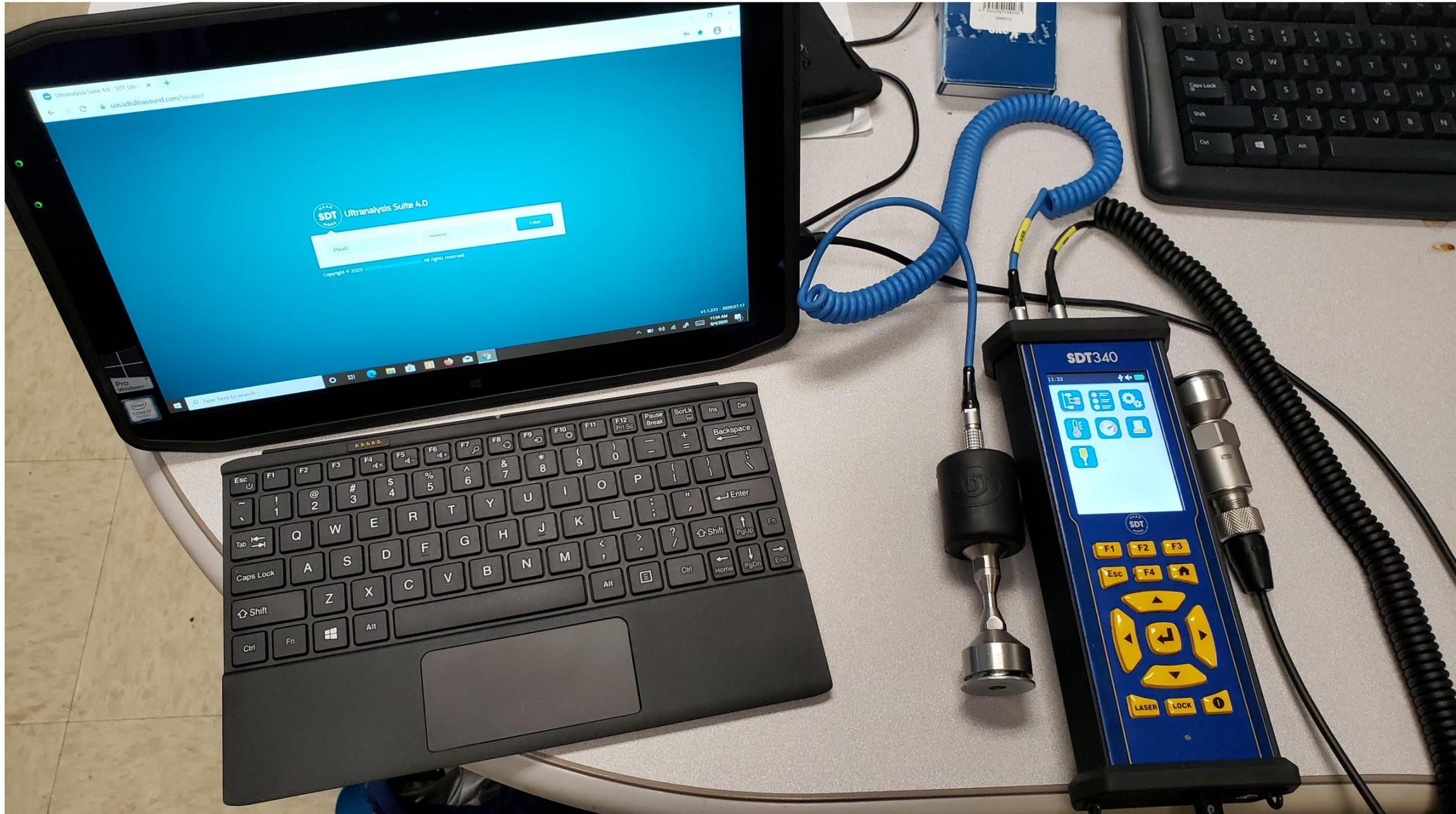
A = 40 dB

5 sec

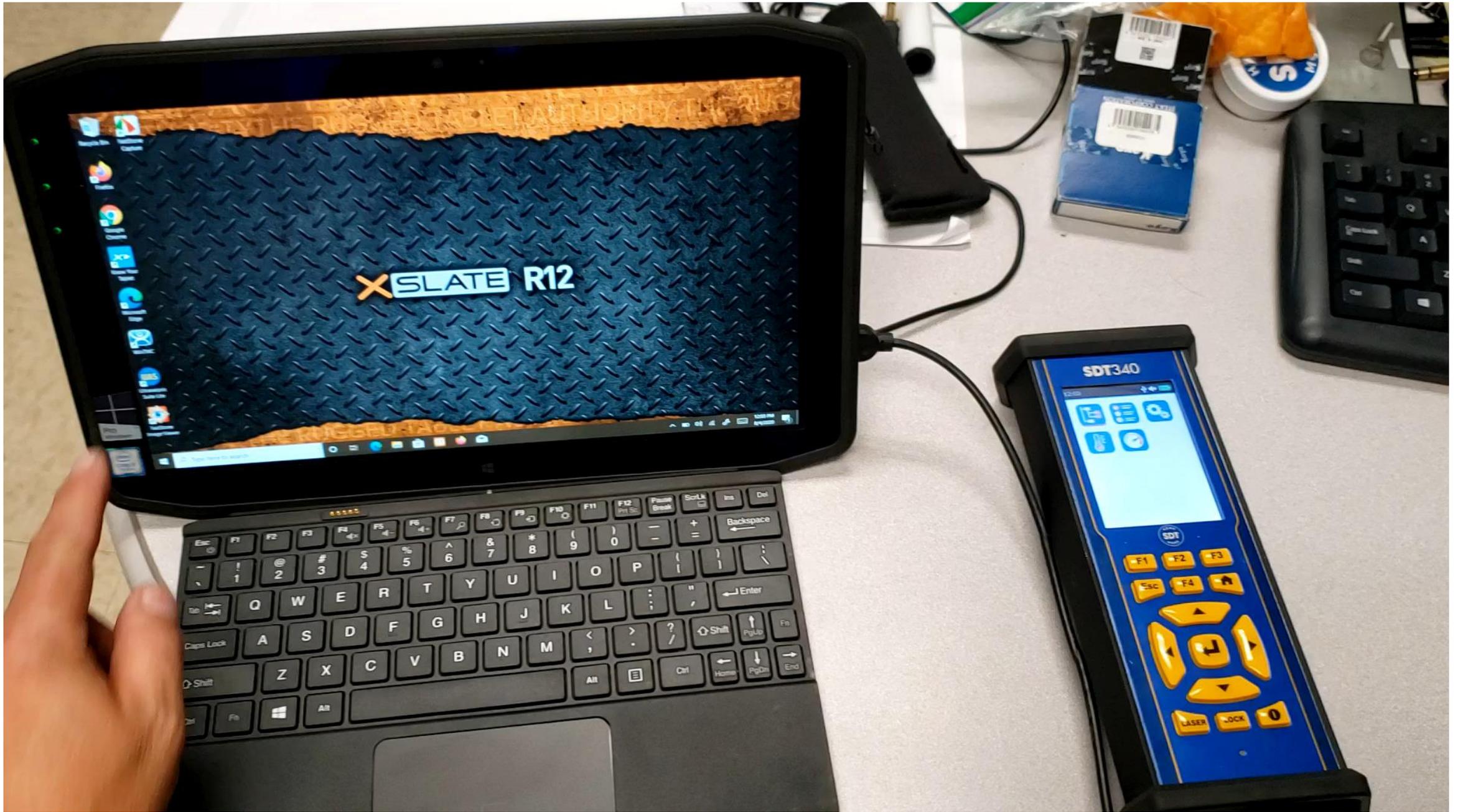
RMS	36.7 dB μ V	43.2 dB μ V
MAX RMS	37.7 dB μ V	43.9 dB μ V
PEAK	50.5 dB μ V	56.1 dB μ V
CF	4.9	4.4





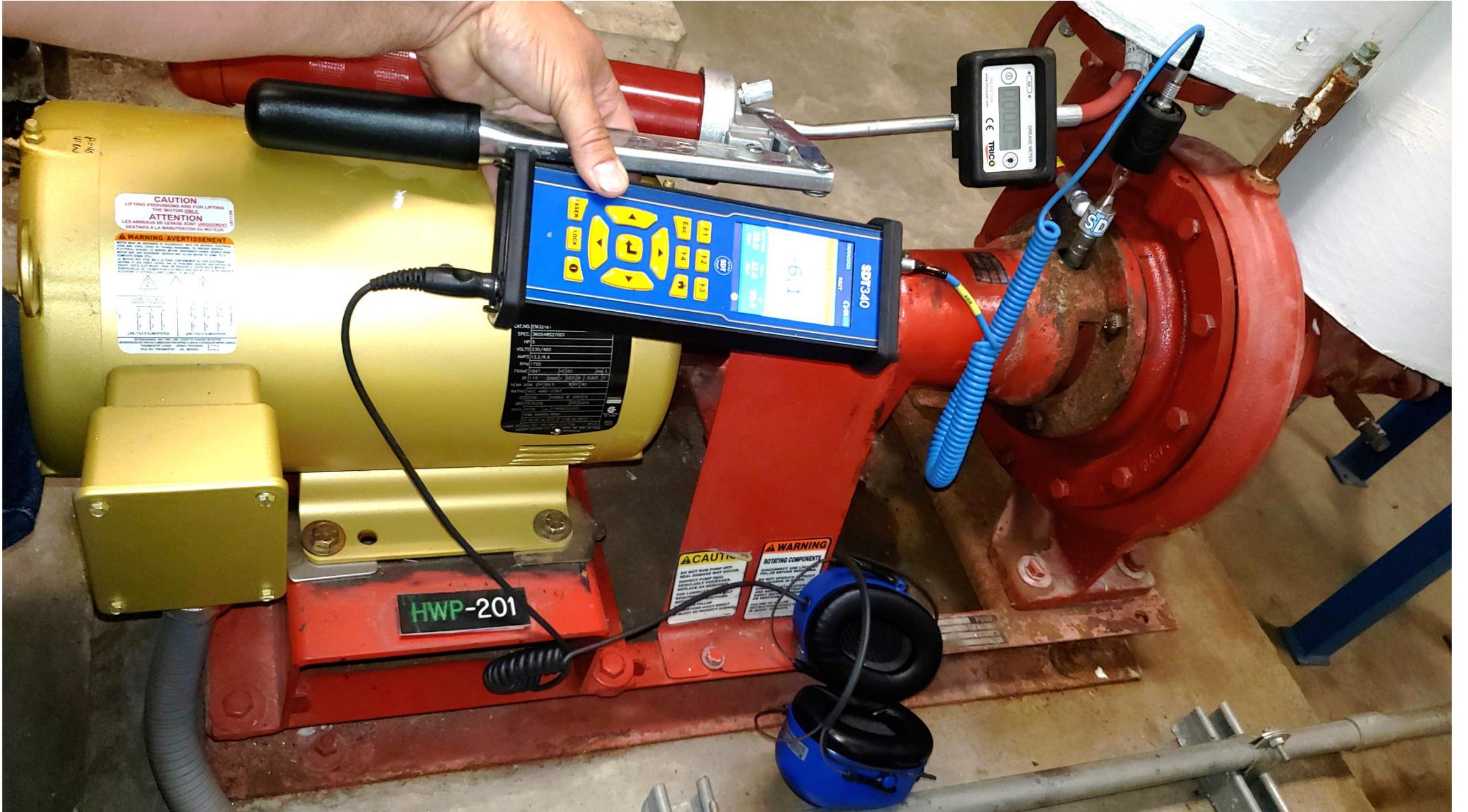


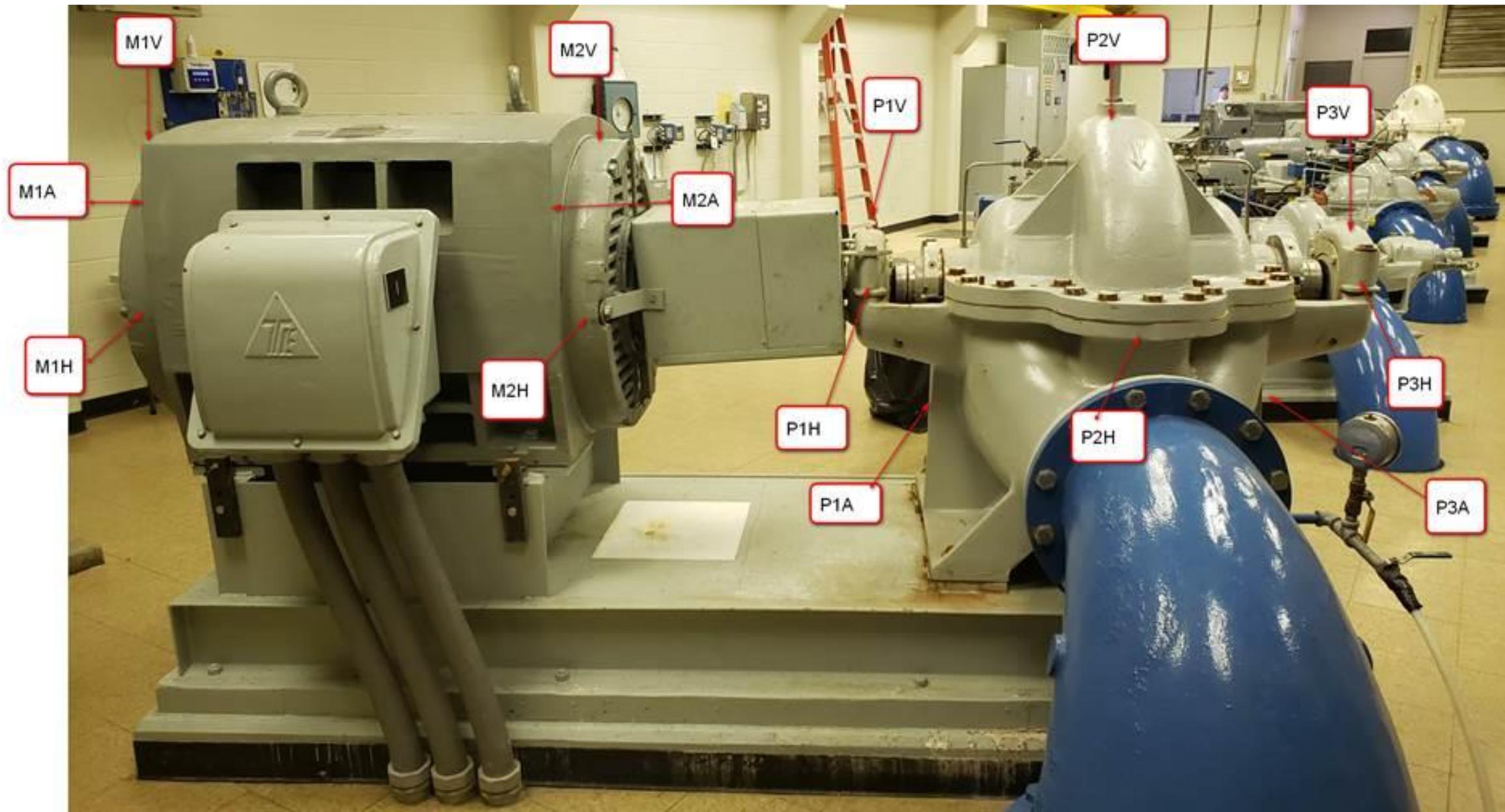




Login to UAS4

- Show the start center
- Show the asset location tree
- Show HS3 readings that were taken 8/4/20









TANK 1
AQUA AMMONIA
19%

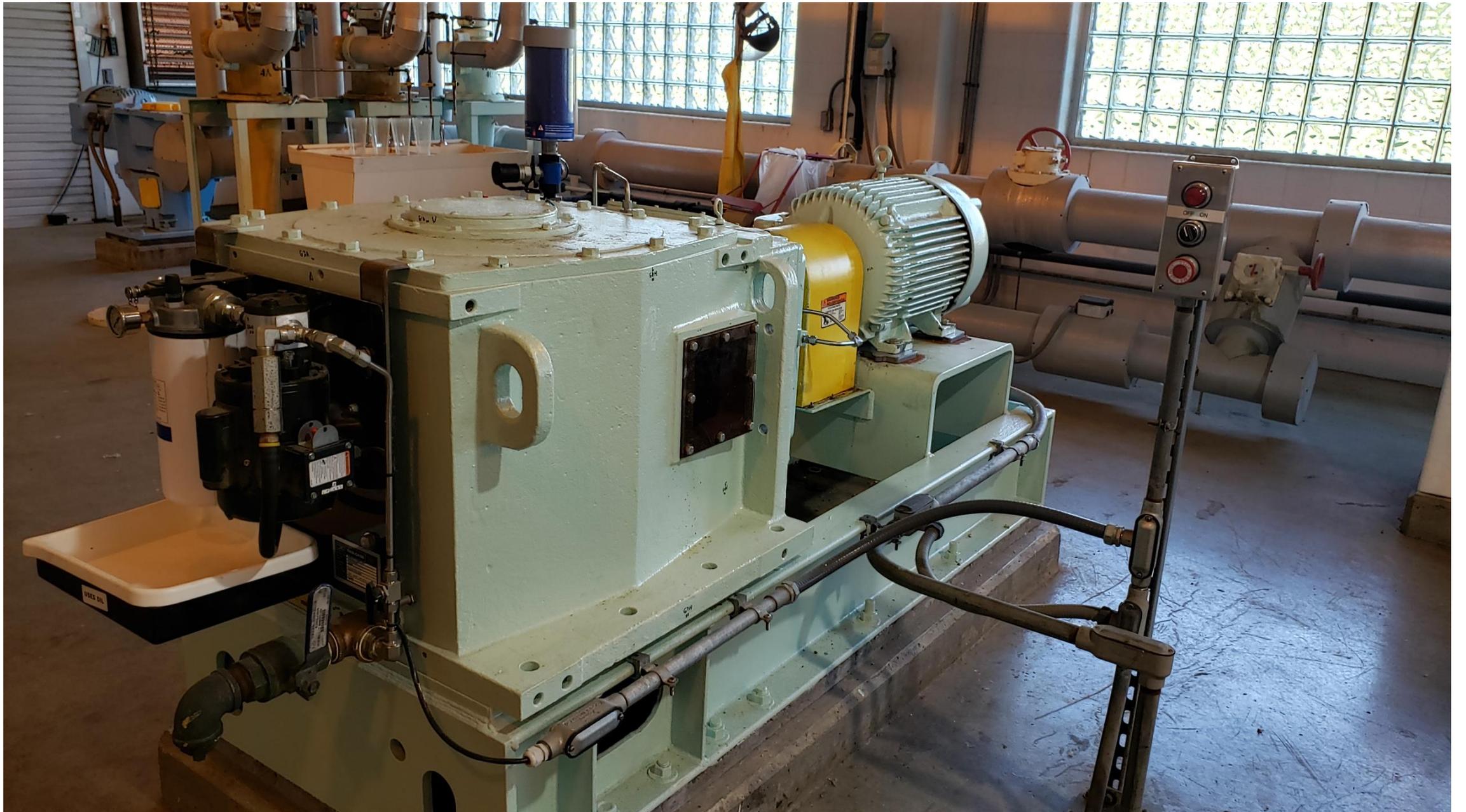






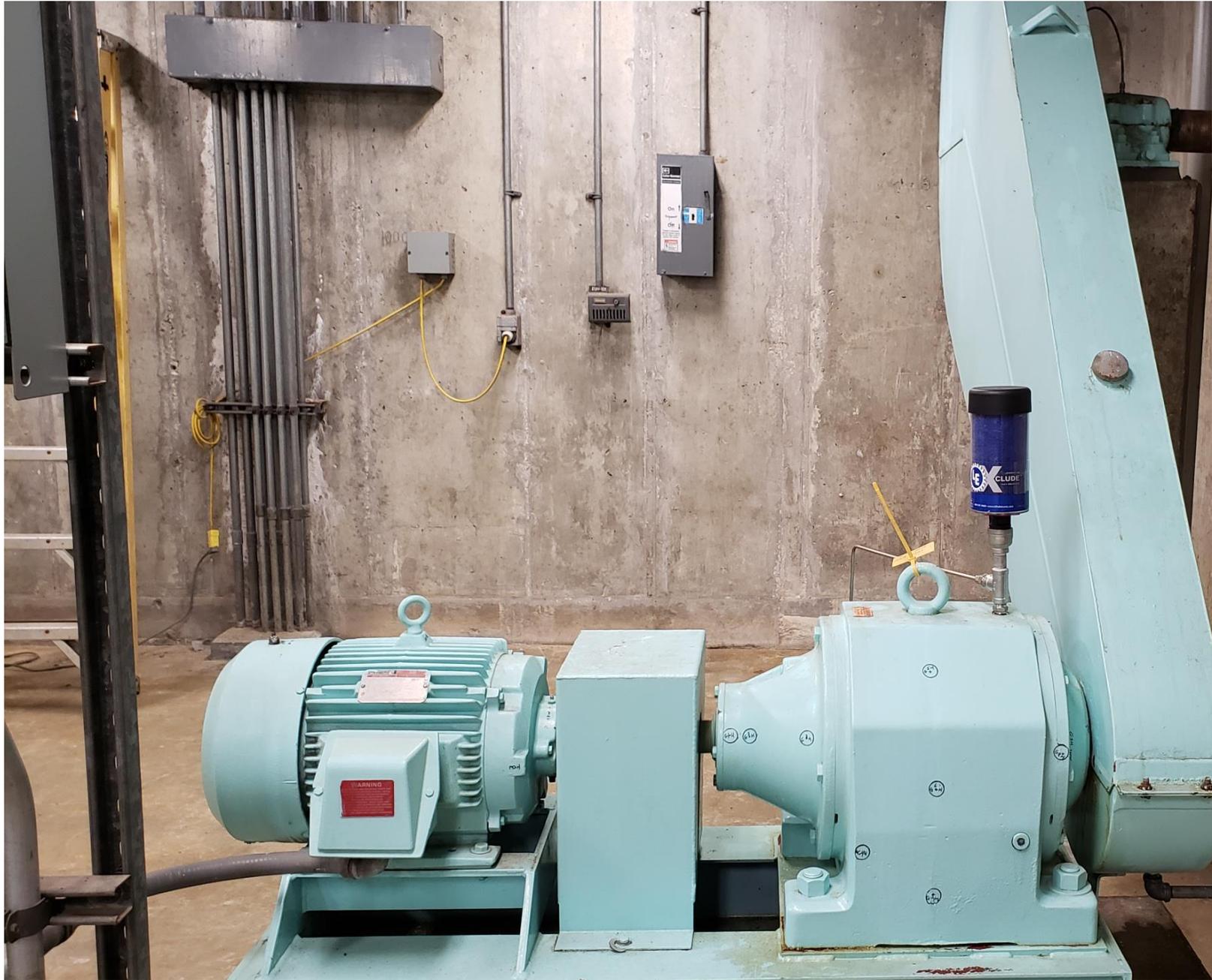
Found before it failed by oil analysis







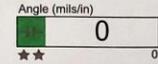




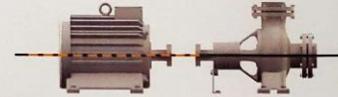
Date: 05/05/2020
 Company: BPU Nearman Water
 Operator: Doug Smith, Seth Bradley,
 Measurement: Horizontal
 File name: FL-1A gearbox rebuild 5-5-20
 Detector serial: Demo

HORIZONTAL REPORT

VERTICAL

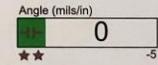


Feet Values
 MF1 0
 MF2 0

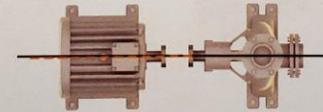


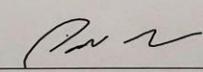
*as found results

HORIZONTAL



Feet Values
 MF1 2
 MF2 4



Signature: 

Max : 127.9 °F

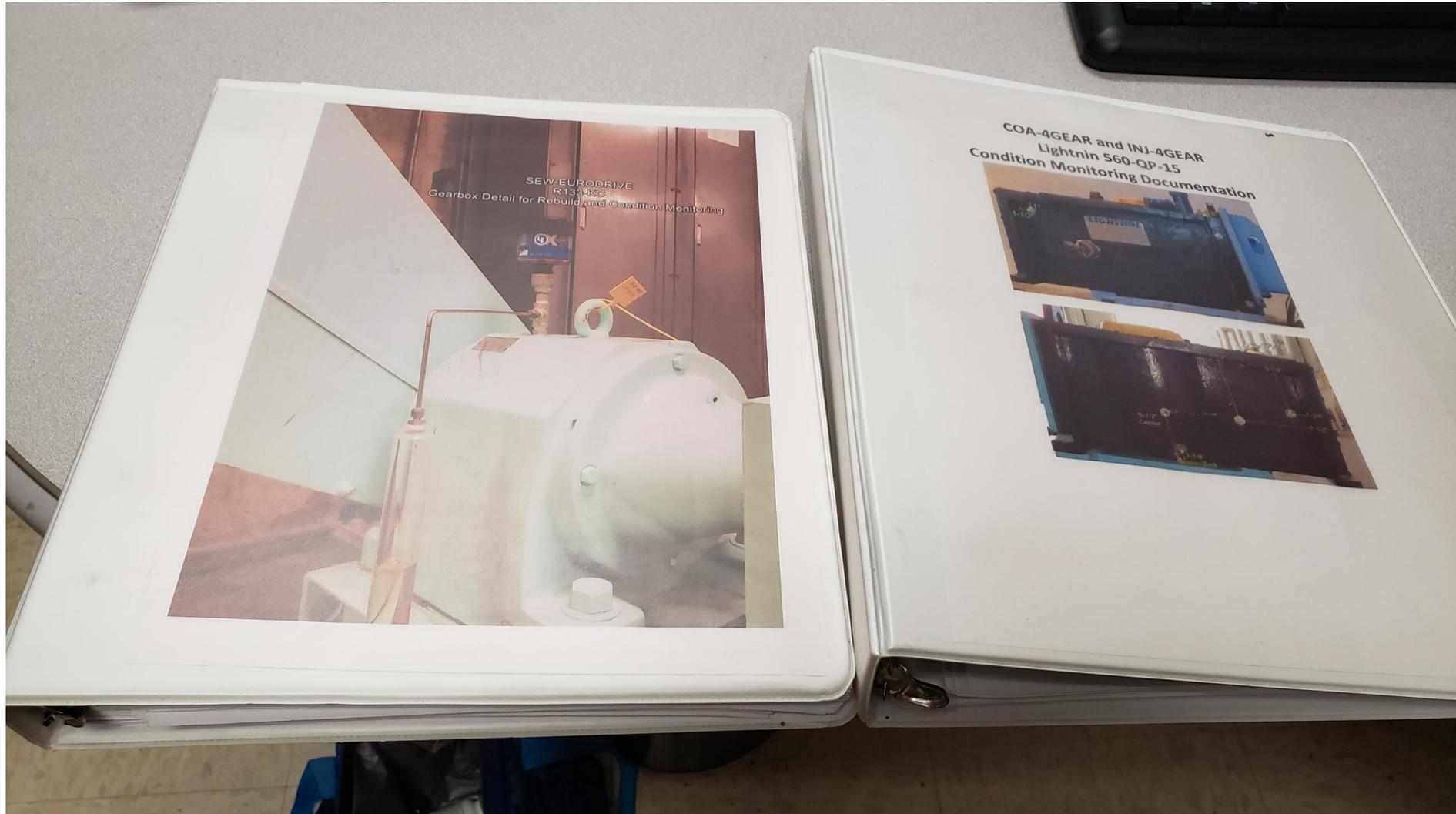
Min : 67.1 °F

70.2 °F

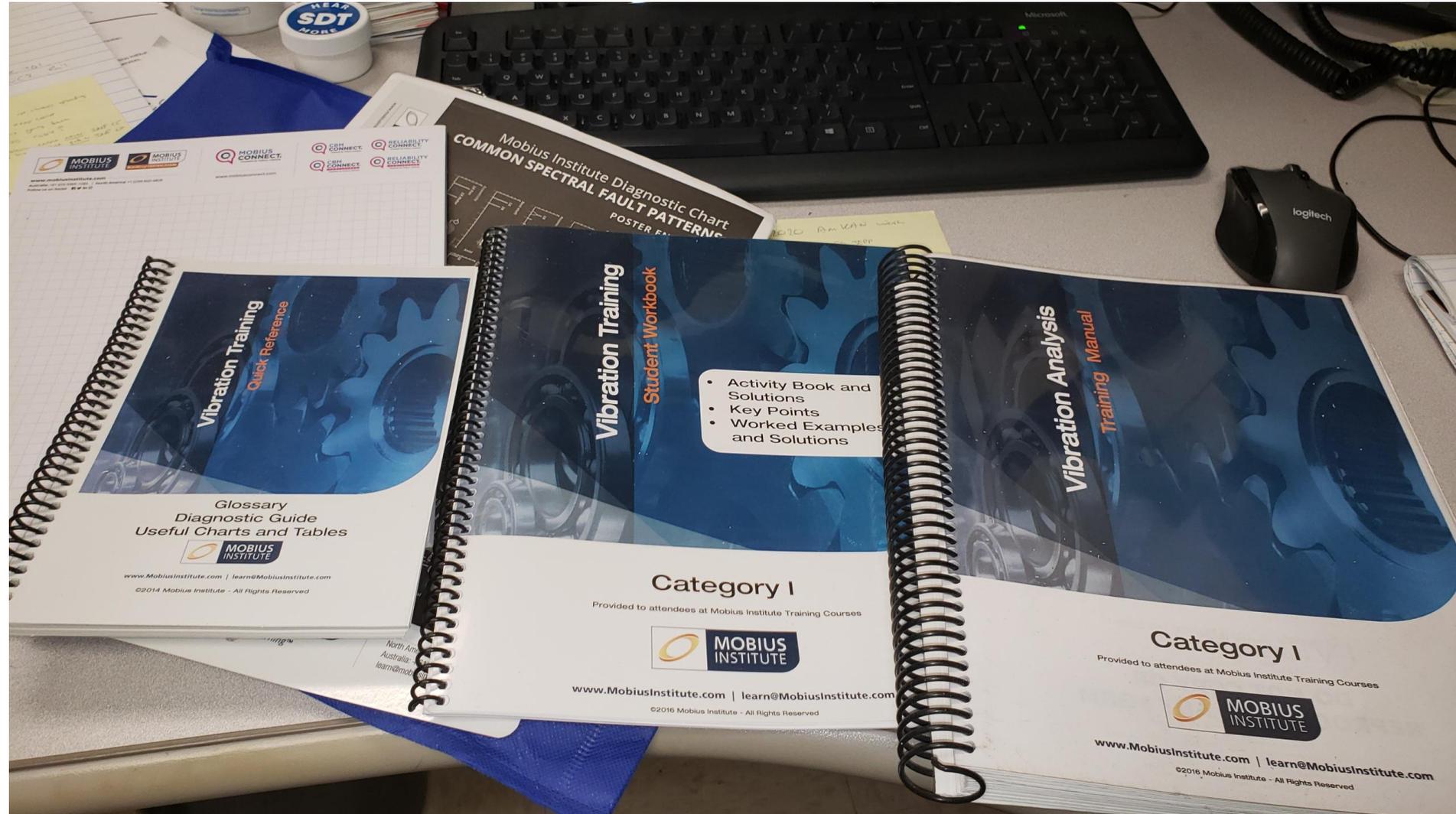




Gearbox CDM Programs Developed



VIB Level I Training (In Progress)



Thank you – The End

QUESTIONS AND COMMENTS WELCOME!!!!

Paul Crocker

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Nearman Water Treatment Plant

X9251

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