

Infrared Thermography Report



JULY 2020

All electrical panels were scanned using a  P60 infrared camera. The following report only contains defects that were found during the survey. Below is our classification system for each defect included in this report. If there are any questions or comments, please feel free to contact us at any time.



employs a three-tier defect rating system:

CLASS I: A defect or defects are present that are likely to cause a problem in the long term (2-6 months). Should be addressed in the normal course of maintenance scheduling.

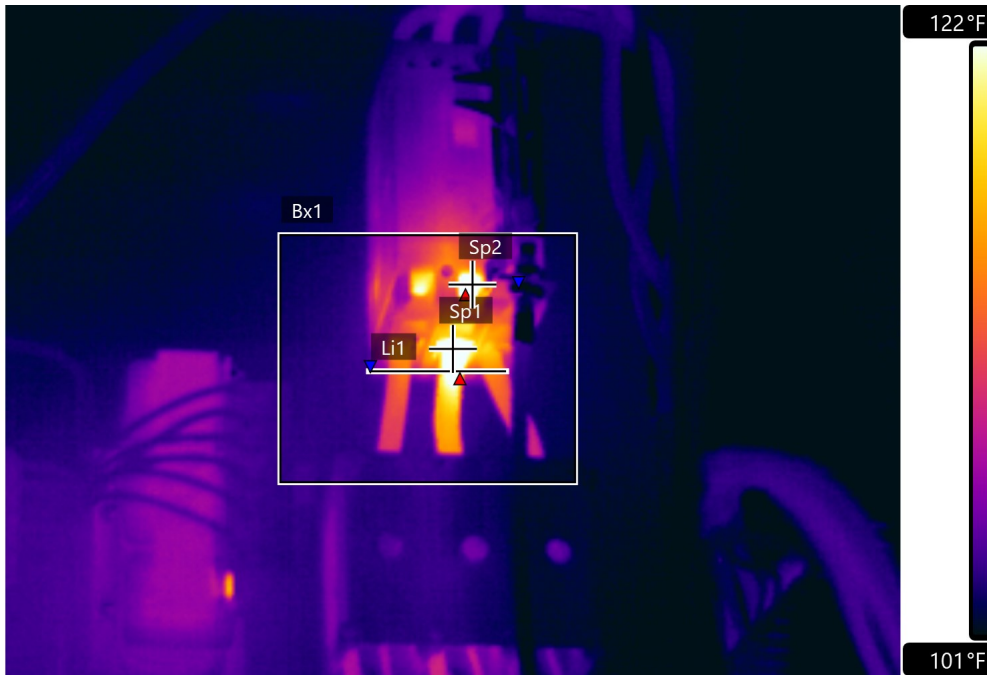
CLASS II: A defect or defects are present that are likely to cause a failure in the short term (less than 2 months). Should be addressed as soon as practical, on a high maintenance priority. Consideration should be given to increase monitoring frequency.

CLASS III: A defect or defects are present that make continued component reliability unpredictable and likelihood of secondary damage is high. Consideration should be given to an unscheduled shutdown to correct.

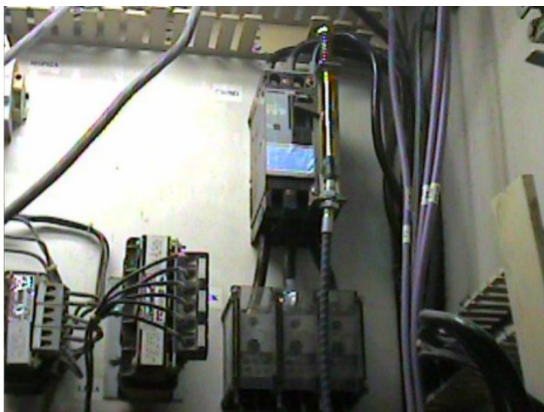


tests and inspects industrial machinery and equipment and makes recommendations concerning maintenance and repairs based on its experience in the field of industrial repair and maintenance. The information contained herein is provided as an opinion only, not as a guaranty or warranty of the matters discussed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

Component	Main Breaker
Equipment/Bucket ID	VFD Cascade Kiln Jack



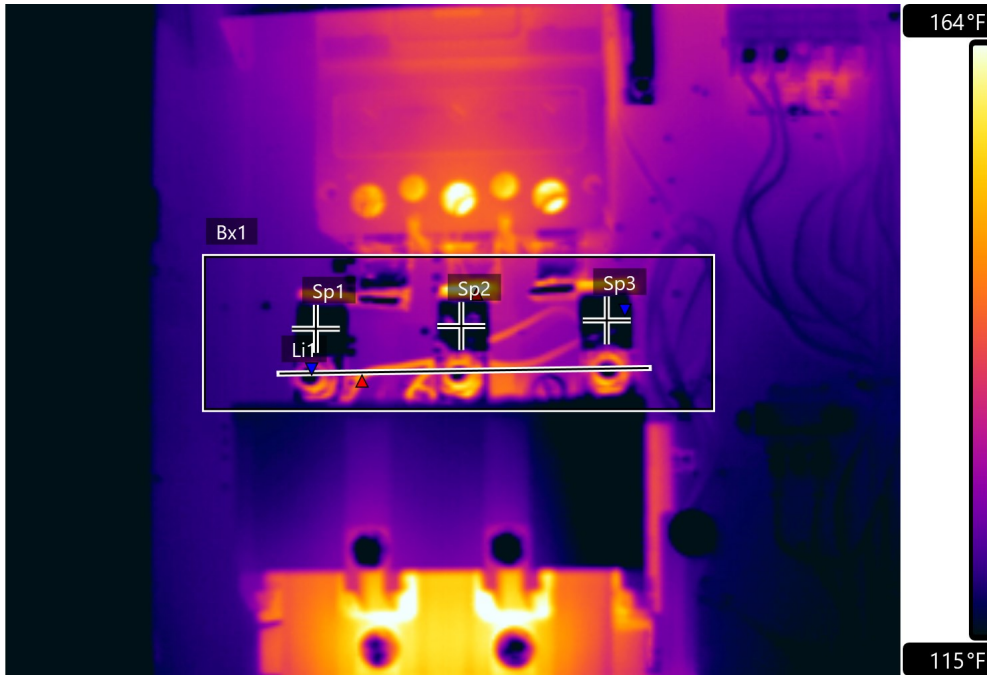
Sp1	130.0 °F
Sp2	133.4 °F
Li1 Minimum	104.2 °F
Li1 Maximum	124.8 °F
Bx1 Minimum	96.9 °F
Bx1 Maximum	142.8 °F



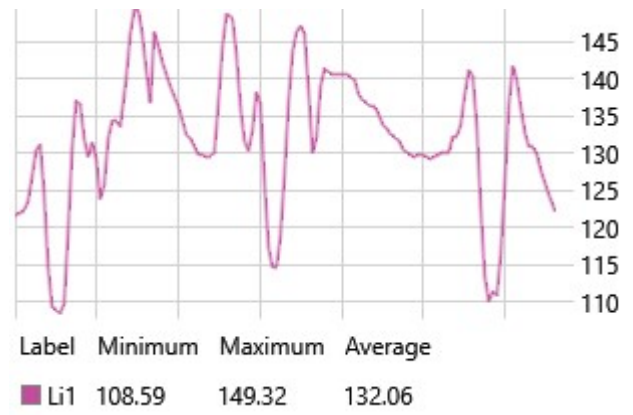
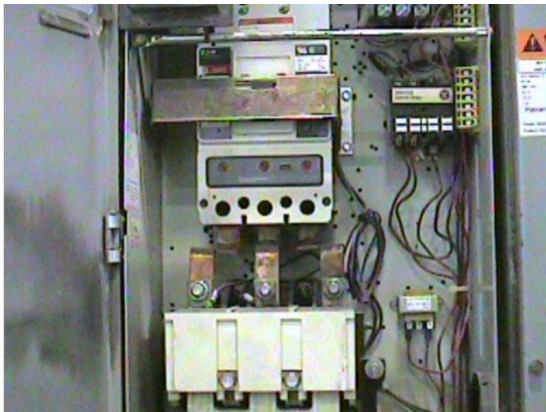
Fault	Faulty Breaker/Connection
Defect Rating	CLASS I

Recommendations	There still appears to be an issue even after repairs were made to connections. This breaker is LIKELY the issue here. It is recommended to replace the breaker as soon as time allows.
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Component	
Equipment/Bucket ID	Vacuum Pump #1



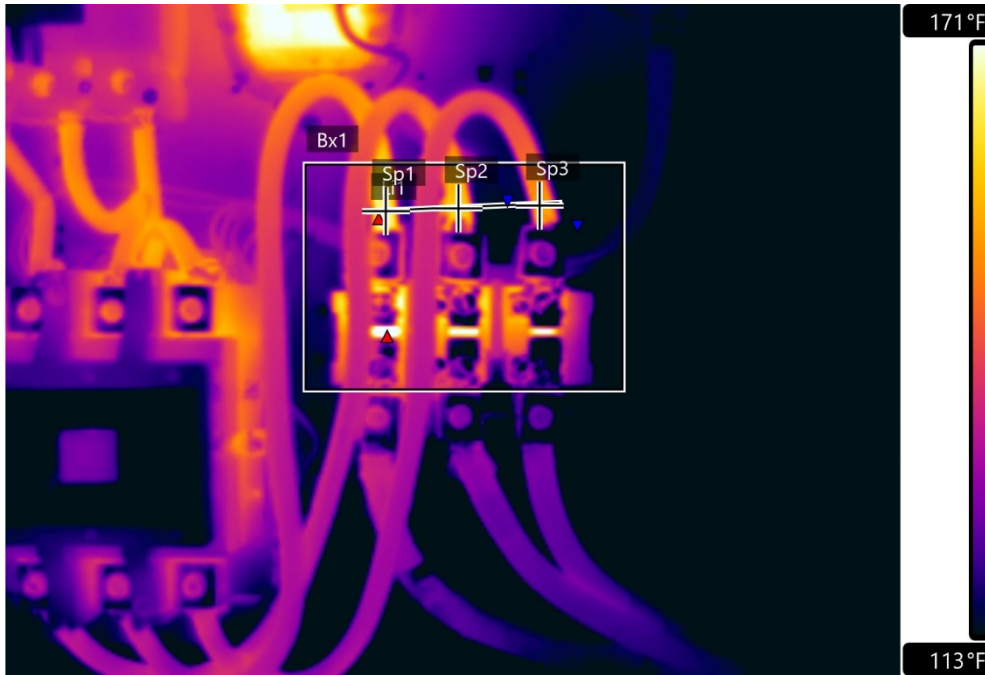
Sp1	101.7 °F
Sp2	118.9 °F
Sp3	101.5 °F
Li1 Minimum	108.6 °F
Li1 Maximum	149.3 °F
Bx1 Minimum	97.7 °F
Bx1 Maximum	167.1 °F



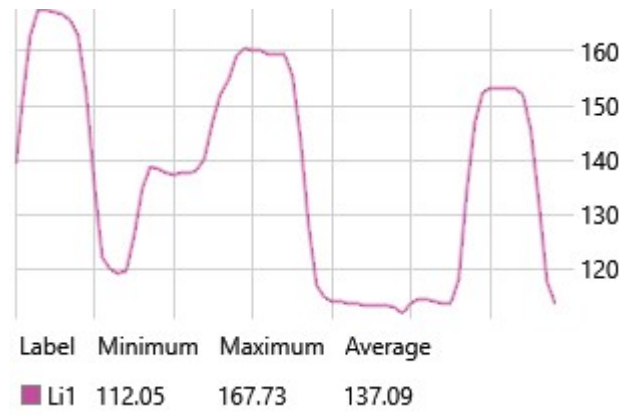
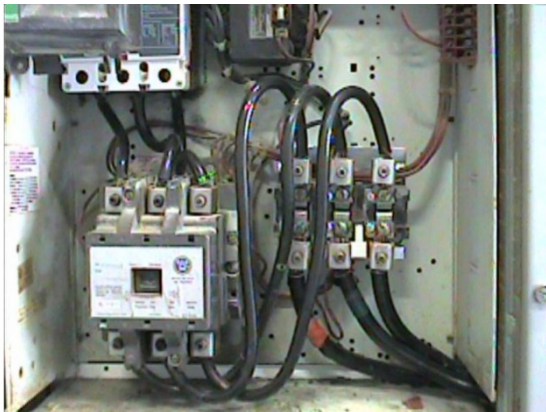
Fault	None
Defect Rating	N/A

Recommendations
This is a recheck after repair. Issue appears to have been resolved. No further actions needed.

Component	
Equipment/Bucket ID	Whitewater Loop Pump #1



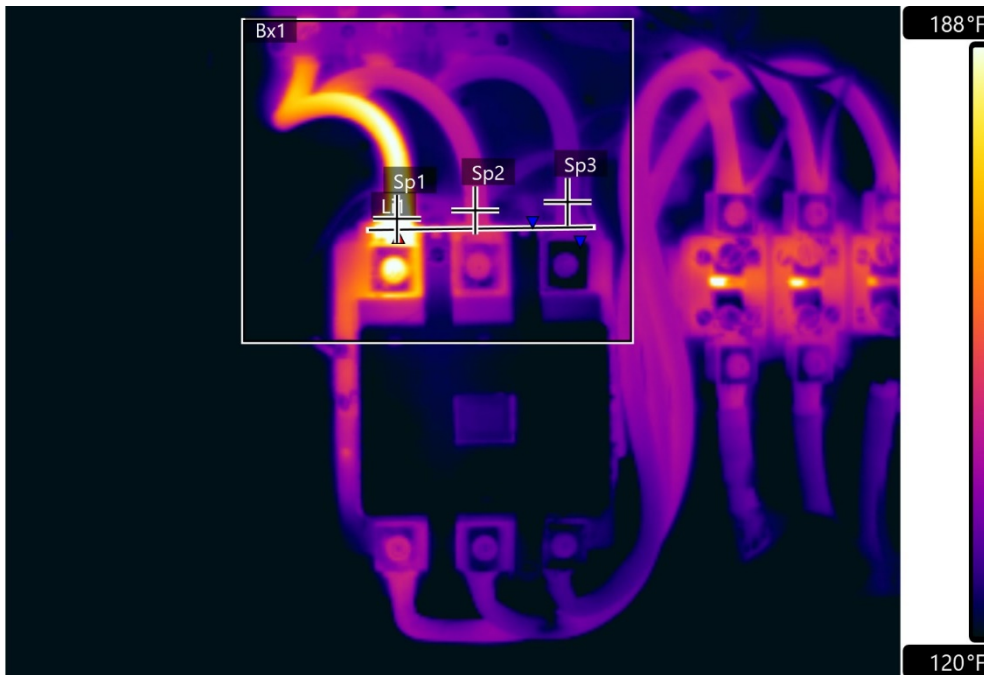
Sp1	166.9 °F
Sp2	159.4 °F
Sp3	153.5 °F
Li1 Minimum	112.0 °F
Li1 Maximum	167.7 °F
Bx1 Minimum	97.7 °F
Bx1 Maximum	204.4 °F



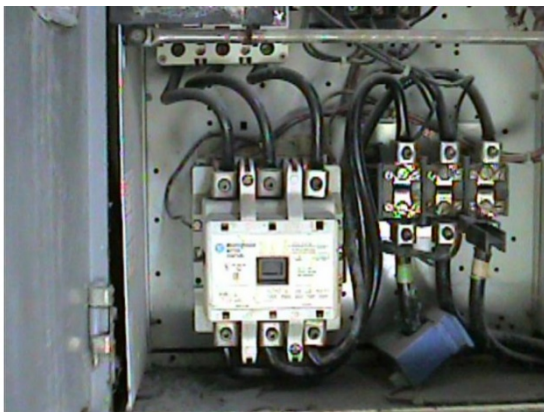
Fault	None
Defect Rating	N/A

Recommendations	This is a recheck after repair. Issue appears to have been resolved. No further actions needed.
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Component	A Phase Connection
Equipment/Bucket ID	MCC-4C1/ North Well Water Pump



Sp1	200.2 °F
Sp2	146.4 °F
Sp3	134.7 °F
Li1 Minimum	123.5 °F
Li1 Maximum	207.5 °F
Bx1 Minimum	112.1 °F
Bx1 Maximum	207.5 °F



Fault	Loose/Dirty Connection
Defect Rating	CLASS III

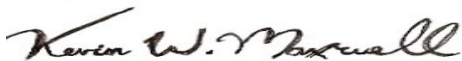
Recommendations	A phase connection appears to be faulty. Inspect, clean, and tighten connection ASAP . Wire will likely need to be replaced.
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Summary

Image Date&Time	Page number
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7/16/2020 7:18:28 AM	6

This concludes our survey report. Please feel free to contact us at any time for question or comments.

Thank you for your business,



ITC Certified Level II Infrared Thermographer

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