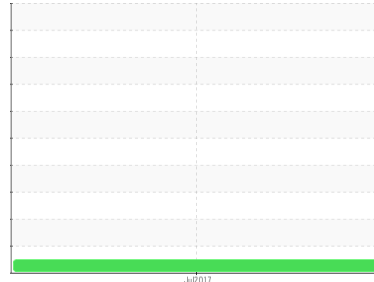


GREASE ANALYSIS

Sample Rank Trend



NORMAL



Machine Id
WEC30-300970 NDE EBRL NO. 1034MC3 BRG GREASE

Component
ABB AM1630L4ABAFTH Non-Drive End Grease
Fluid
KLUBERPLEX BEM 41-132 (55 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal. The direct-reading & analytical ferrographic results are normal indicating no abnormal wear in the system.

Grease Condition

Linear Sweep Voltammetry (RULER – ASTM D6971) testing indicates normal levels of anti-oxidants present in the oil. The condition of the grease is acceptable for the time in service.

Contaminants

There is no indication of any contamination in the grease.

SAMPLE INFORMATION	method	limit/base	current	history 1	history 2
Sample Number			WC981218	---	---
Sample Date			21 Jul 2017	---	---
Machine Age	hrs		5682	---	---
Grease Age	hrs		0	---	---
Grease Serviced			N/A	---	---
Sample Status			NORMAL	---	---

WEAR METALS	method	limit/base	current	history 1	history 2
PQ	In-house	>200	223	---	---
Iron	ppm ASTM D5185	>250	52	---	---
Chromium	ppm ASTM D5185	>10	0.7	---	---
Nickel	ppm ASTM D5185	>5	0.0	---	---
Cadmium	ppm ASTM D5185		0.0	---	---
Titanium	ppm ASTM D5185		0.0	---	---
Vanadium	ppm ASTM D5185		0.0	---	---
Lead	ppm ASTM D5185	>25	1.2	---	---
Copper	ppm ASTM D5185	>75	3.2	---	---
Tin	ppm ASTM D5185	>5	0.0	---	---
Silver	ppm ASTM D5185	>5	0.0	---	---

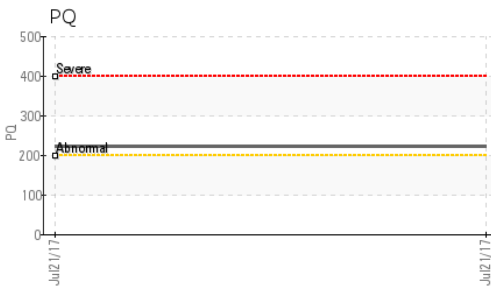
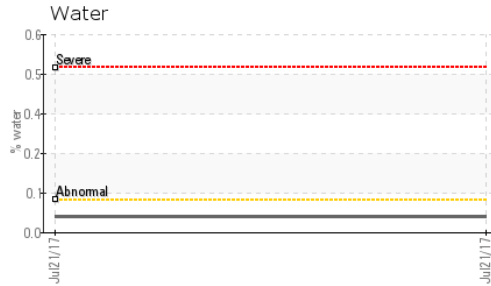
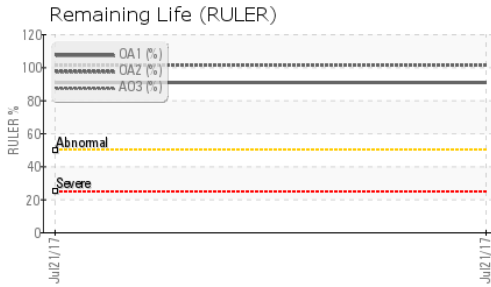
ADDITIVES	method	limit/base	current	history 1	history 2
Boron	ppm ASTM D5185	0	0.1	---	---
Magnesium	ppm ASTM D5185	0	0.0	---	---
Manganese	ppm ASTM D5185	0	0.2	---	---
Molybdenum	ppm ASTM D5185	400	624	---	---
Phosphorus	ppm ASTM D5185	120	128	---	---
Zinc	ppm ASTM D5185	0	5.3	---	---
Antimony	ppm ASTM D5185	0	0.0	---	---

THICKENER/SOAP	method	limit/base	current	history 1	history 2
Aluminum	ppm ASTM D5185	0	4.0	---	---
Barium	ppm ASTM D5185	0	0.1	---	---
Calcium	ppm ASTM D5185	0	6.1	---	---
Sodium	ppm ASTM D5185	5	9.9	---	---
Lithium	ppm ASTM D5185	550	599	---	---
Sulfur	ppm ASTM D5185	850	1003	---	---

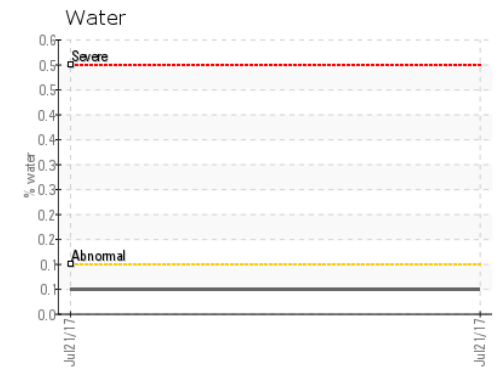
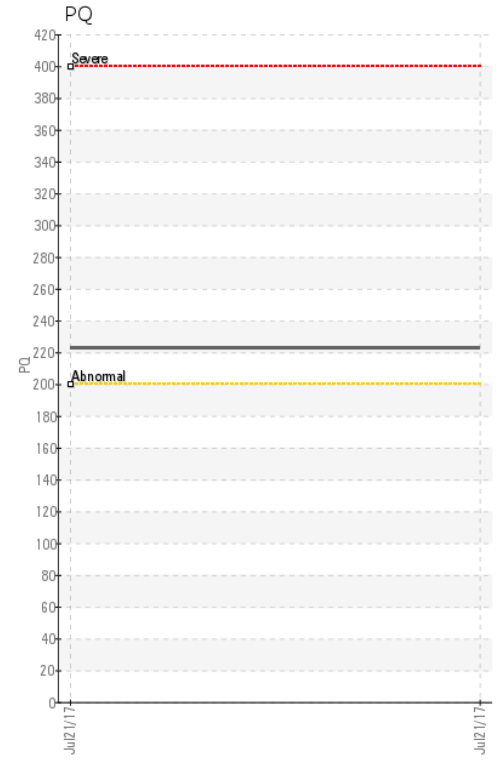
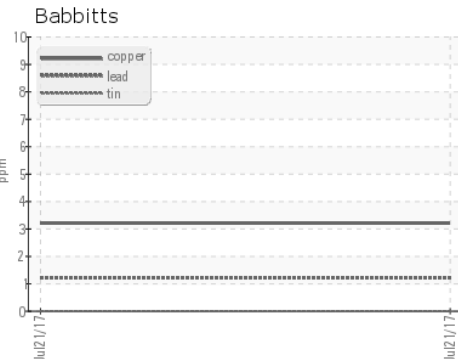
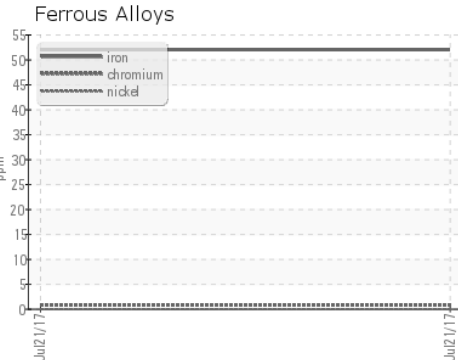
CONTAMINANTS	method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185	>150	5.5	---	---
Potassium	ppm ASTM D5185		0.0	---	---
Water	% ASTM D6304	>0.1	0.048	---	---
ppm Water	ppm ASTM D6304	>1000	482.1	---	---

GREASE CONDITION	method	limit/base	current	history 1	history 2
Grease Color	Visual	Yellow	Tan	---	---
Oil Separation (Bleed)	% SKF Method	>+/-25%	-7.7	---	---
Anti-Oxidant 1	% ASTM D6971	<25%	91	---	---
Anti-Oxidant 2	% ASTM D6971	<25%	101	---	---

GREASE ANALYSIS



SAMPLE IMAGES		method	limit/base	current	history 1	history 2
Color					no image	no image
Bottom					no image	no image
PrtFilter					no image	no image



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC1234567 **Received** : 18 Aug 2017
Lab Number : 01234567 **Diagnosed** : 19 Sep 2017
Unique Number : 12345678 **Diagnostician** : Bill Quesnel
Test Package : GRS 3 (Additional Tests: BottomAnalysis, IPI, TBN)

Cusany Logistics Inc.
 1212 Industrial Place
 Centerville, OH
 USA 75900
 Contact: Jim Leduc
 jim.leduc@cusanylogisticsinc.com
 T: (305)555-1212
 F: (305)555-1222

To discuss diagnosis or test data, contact Technical Support at 1-800-268-2131.
 To change component or sample information, contact Customer Service at 1-800-268-2131.

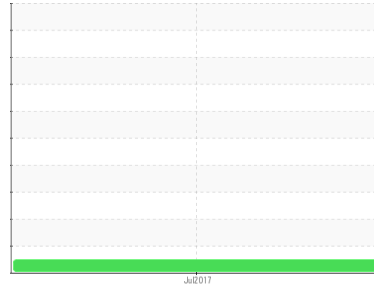
FERROGRAPHY REPORT

Sample Rank Trend

NORMAL



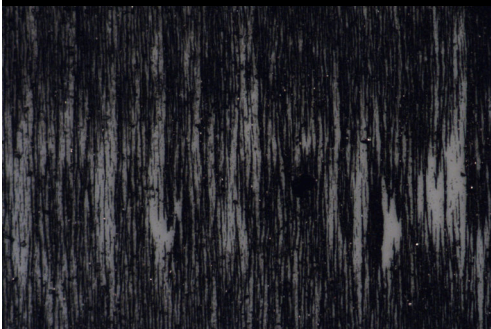
Machine Id
WEC30-300970 NDE EBRL NO. 1034MC3 BRG GREASE
Component
ABB AM1630L4ABAFTH Non-Drive End Grease
Fluid
KLUBERPLEX BEM 41-132 (55 GAL)



Magn: 200x Illum: BC



Magn: 50x Illum: RW



Magn: 100x Illum: RW

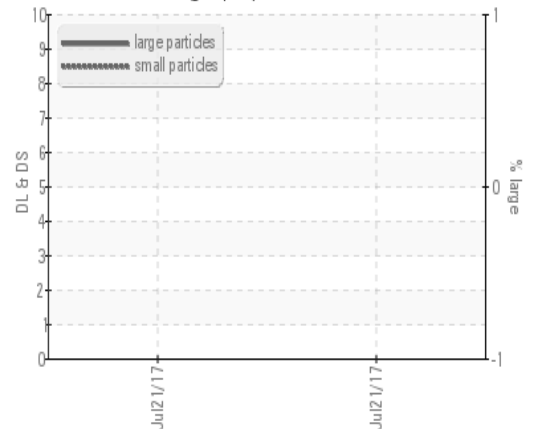


FERROGRAPHY		method	limit/base	current	history 1	history 2
Ferrous Rubbing	Scale 0-10	ASTM D7684		3		
Ferrous Sliding	Scale 0-10	ASTM D7684				
Ferrous Cutting	Scale 0-10	ASTM D7684				
Ferrous Rolling	Scale 0-10	ASTM D7684		2		
Ferrous Break-in	Scale 0-10	ASTM D7684				
Ferrous Spheres	Scale 0-10	ASTM D7684				
Ferrous Black Oxides	Scale 0-10	ASTM D7684				
Ferrous Red Oxides	Scale 0-10	ASTM D7684				
Ferrous Corrosive	Scale 0-10	ASTM D7684		1		
Ferrous Other	Scale 0-10	ASTM D7684				
Nonferrous Rubbing	Scale 0-10	ASTM D7684				
Nonferrous Sliding	Scale 0-10	ASTM D7684				
Nonferrous Cutting	Scale 0-10	ASTM D7684				
Nonferrous Rolling	Scale 0-10	ASTM D7684				
Nonferrous Other	Scale 0-10	ASTM D7684				
Carbonaceous Material	Scale 0-10	ASTM D7684				
Sand/Dirt	Scale 0-10	ASTM D7684		2		
Fibres	Scale 0-10	ASTM D7684				
Spheres	Scale 0-10	ASTM D7684				
Other	Scale 0-10	ASTM D7684				

WEAR

All component wear rates are normal. The direct-reading & analytical ferrographic results are normal indicating no abnormal wear in the system.

DR Ferrography



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