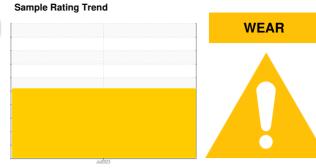


GREASE ANALYSIS

ONE-TIME TEST POINTS HAMMER MILL 8

East Grease

LUBRICATION ENG ALMAPLEX 1275 (--- GAL)



DIAGNOSIS

Recommendation

We recommend that you re-grease the component if this has not already been done. We recommend an early resample to monitor this condition.

PQ levels are abnormal. Iron ppm levels are abnormal. The high ferrous density (PQ) index indicates that abnormal wear is occurring.

Grease Condition

The grease is no longer serviceable as a result of the abnormal and/or severe wear.

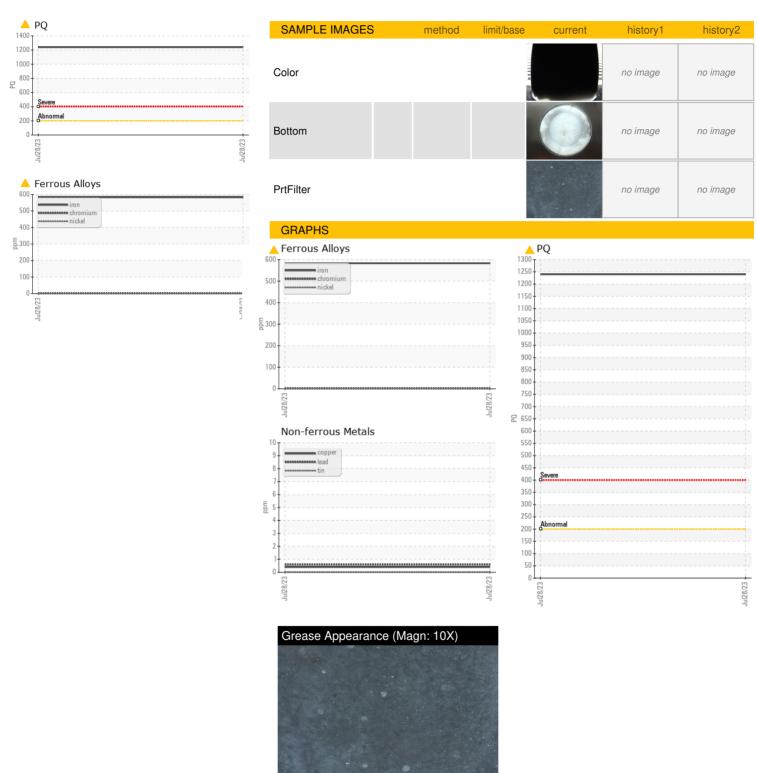
Contaminants

Moderate concentration of visible dirt/debris present in the grease. High concentration of visible dirt/debris present in the grease.

aAL)						
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0802580		
Sample Date		Client Info		28 Jul 2023		
Machine Age	hrs	Client Info		0		
Grease Age	hrs	Client Info		0		
Grease Serviced		Client Info		Not Changd		
Sample Status				ABNORMAL		
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG		
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*	>200	<u> </u>		
Iron	ppm	ASTM D5185(m)	>250	<u> </u>		
Chromium	ppm	ASTM D5185(m)	>10	2		
Nickel	ppm	ASTM D5185(m)	>5	<1		
Cadmium	ppm	ASTM D5185(m)		0		
Titanium	ppm	ASTM D5185(m)		8		
Vanadium	ppm	ASTM D5185(m)		<1		
Lead	ppm	ASTM D5185(m)	>25	<1		
Copper	ppm	ASTM D5185(m)	>75	<1		
Tin	ppm	ASTM D5185(m)	>5	0		
Silver	ppm	ASTM D5185(m)	>5	0		
ADDITIVES		method	limit/base		for the American and	la la taur 10
ADDITIVES		memod	IIIIII/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	IIIIII/base	<1	nistory i	nistory2
	ppm ppm		iiiiii/base		, i	
Boron		ASTM D5185(m)	IIIIIVoase	<1		
Boron Magnesium	ppm	ASTM D5185(m) ASTM D5185(m)	IIIIIVDase	<1 73		
Boron Magnesium Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	iimi/base	<1 73 3		
Boron Magnesium Manganese Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	iimi/base	<1 73 3 0		
Boron Magnesium Manganese Molybdenum Phosphorus	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	iimivbase	<1 73 3 0 15		
Boron Magnesium Manganese Molybdenum Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185(m)	limit/base	<1 73 3 0 15		
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony	ppm ppm ppm ppm ppm	ASTM D5185(m)		<1 73 3 0 15 27 319		
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)		<1 73 3 0 15 27 319 current		
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)		<1 73 3 0 15 27 319 current		
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) METHOD ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		<1 73 3 0 15 27 319 current 502		history2
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)		<1 73 3 0 15 27 319 current 502 19 35		history2
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium	ppm	ASTM D5185(m)		<1 73 3 0 15 27 319 current 502 19 35 5		history2
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium	ppm	ASTM D5185(m)		<1 73 3 0 15 27 319 current 502 19 35 5 54	history1	
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur	ppm	ASTM D5185(m)	limit/base	<1 73 3 0 15 27 319 current 502 19 35 5 54 597		
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS	ppm	ASTM D5185(m)	limit/base	<1 73 3 0 15 27 319	history1 history1 history1	history2 history2
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS	ppm	ASTM D5185(m) METHOD METHOD ASTM D5185(m)	limit/base	<1 73 3 0 15 27 319	history1 history1 history1	history2 history2 history2
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS Silicon Potassium	ppm	ASTM D5185(m)	limit/base limit/base >150	<1 73 3 0 15 27 319 current 502 19 35 5 54 597 current 130 25	history1 history1 history1	history2 history2 history2
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS Silicon Potassium GREASE CONDIT	ppm	ASTM D5185(m) METHOD METHOD ASTM D5185(m) METHOD METHOD ASTM D5185(m) METHOD	limit/base limit/base >150 limit/base	<1 73 3 0 15 27 319	history1 history1 history1 history1 history1	history2 history2 history2 history2 history2



GREASE ANALYSIS





CALA ISO 17025:2017 Accredited Laboratory

Laboratory

Sample No. Lab Number : 02576011 Unique Number : 5629071

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

: WC0802580

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Received **Tested**

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

: 15 Aug 2023 Diagnosed Test Package : GRS 1 (Additional Tests: BottomAnalysis)

: 16 Aug 2023 : 21 Aug 2023 - Bill Quesnel

2072 RIVERSIDE DRIVE EAST, BOX 2518

WINDSOR, ON **CA N8Y 4S5** Contact: Matt Morand matt.morand@pernod-ricard.com

HIRAM WALKER & SONS LTD.

T: (519)561-5359 F: (519)971-5719

Validity of results and interpretation are based on the sample and information as supplied.