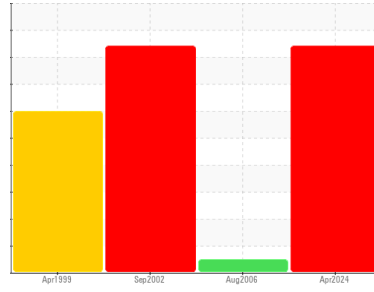




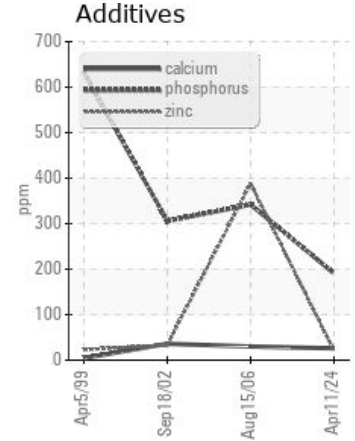
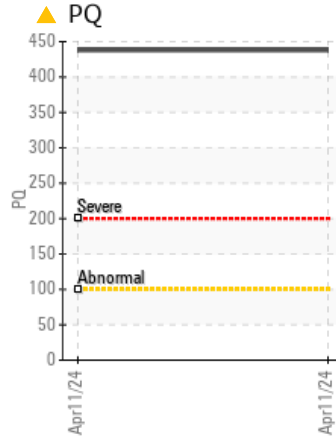
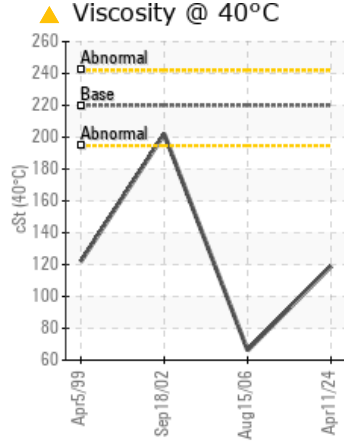
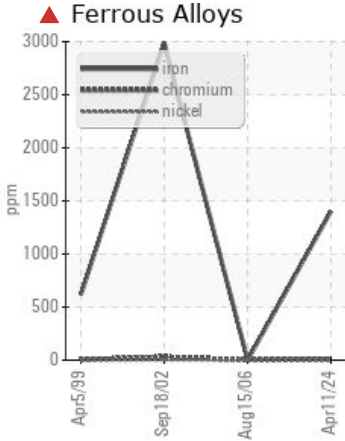
PROBLEM SUMMARY

Sample Rating Trend



Area
1 [2534809]
 Machine Id
01-0130-020-000-Tripper Cart #2 (1M28)
 Component
1 Gearbox
 Fluid
MOBIL MOBILGEAR SHC 220 (2 LTR)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. The fluid was specified as MOBIL MOBILGEAR SHC 220, however, a fluid match indicates that this fluid is ISO 100 Gear Oil. Please confirm the oil type and grade on your next sample.

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	NORMAL	SEVERE
PQ		ASTM D8184*	▲ 438	---	---
Iron	ppm	ASTM D5185(m) >200	▲ 1403	3	▲ 2989
Visc @ 40°C	cSt	ASTM D7279(m) 220	▲ 119	66.2	202

Customer Id: MACPEM
 Sample No.: WC0857995
 Lab Number: 02629010
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Kevin Marson +1 (289)291-4644 x4644
Kevin.Marson@wearcheck.com

To change component or sample information:
 Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Alert	---	---	?	The fluid was specified as MOBIL MOBILGEAR SHC 220, however, a fluid match indicates that this fluid is ISO 100 Gear Oil. Please confirm the oil type and grade on your next sample.
Check Fluid Source	---	---	?	Confirm the source of the lubricant being utilized for top-up/fill.

HISTORICAL DIAGNOSIS

NORMAL



15 Aug 2006 Diag:

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the component. The condition of oil is suitable for further service.

view report



WEAR



18 Sep 2002 Diag:

We advise that you inspect for the source(s) of wear. We recommend changing the oil and filter if you have not already done so. The iron level is severe. The chromium level is abnormal. High concentration of visible metal present. Maintenance activities at this time are strongly suggested. There is a moderate concentration of dirt present in the oil. Moderate concentration of visible dirt/debris present in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

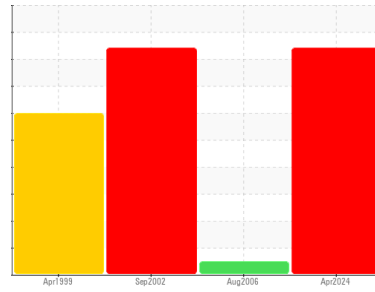
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area

1 [2534809]

Machine Id

01-0130-020-000-Tripper Cart #2 (1M28)

Component

1 Gearbox

Fluid

MOBIL MOBILGEAR SHC 220 (2 LTR)

DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. The fluid was specified as MOBIL MOBILGEAR SHC 220, however, a fluid match indicates that this fluid is ISO 100 Gear Oil. Please confirm the oil type and grade on your next sample.

Wear

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

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

Viscosity of sample indicates oil is within ISO 100 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0857995	WC699447	WC584333
Sample Date	Client Info		11 Apr 2024	15 Aug 2006	18 Sep 2002
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			SEVERE	NORMAL	SEVERE

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		▲ 438	---	---
Iron	ppm	ASTM D5185(m) >200	▲ 1403	3	▲ 2989
Chromium	ppm	ASTM D5185(m) >15	8	0	▲ 32
Nickel	ppm	ASTM D5185(m) >15	<1	0	3
Titanium	ppm	ASTM D5185(m)	1	0	<1
Silver	ppm	ASTM D5185(m)	0	0	<1
Aluminum	ppm	ASTM D5185(m) >25	17	<1	6
Lead	ppm	ASTM D5185(m) >100	<1	<1	3
Copper	ppm	ASTM D5185(m) >200	<1	10	4
Tin	ppm	ASTM D5185(m) >25	0	<1	3
Antimony	ppm	ASTM D5185(m) >5	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	0	<1
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	8	0	38
Barium	ppm	ASTM D5185(m)	<1	0	8
Molybdenum	ppm	ASTM D5185(m)	0	<1	5
Manganese	ppm	ASTM D5185(m)	9	0	31
Magnesium	ppm	ASTM D5185(m)	2	2	14
Calcium	ppm	ASTM D5185(m)	26	30	36
Phosphorus	ppm	ASTM D5185(m)	191	342	306
Zinc	ppm	ASTM D5185(m)	21	388	33
Sulfur	ppm	ASTM D5185(m)	6830	2088	4465
Lithium	ppm	ASTM D5185(m)	<1	---	---

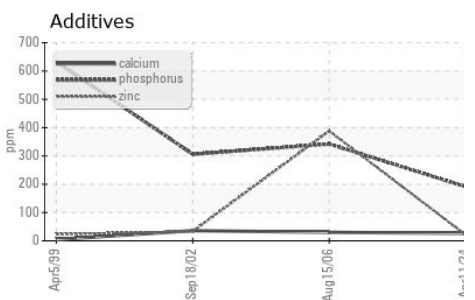
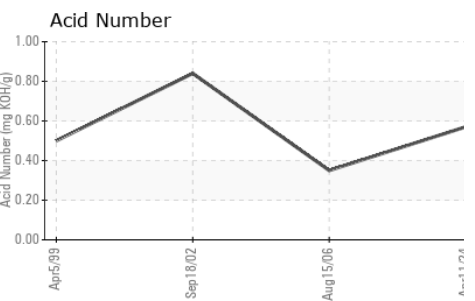
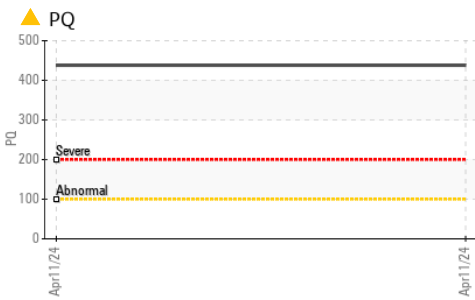
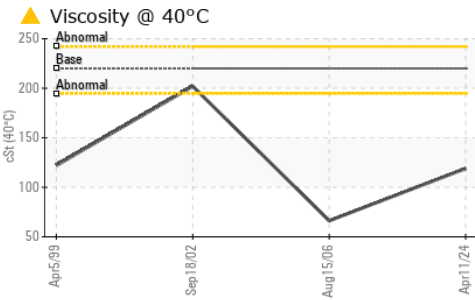
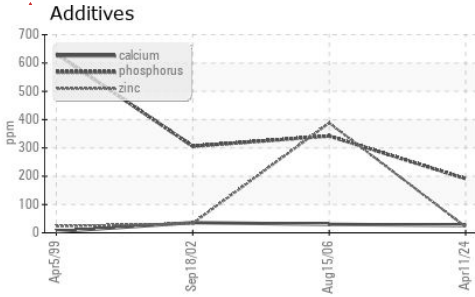
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	39	<1	▲ 56
Sodium	ppm	ASTM D5185(m)	4	<1	0
Potassium	ppm	ASTM D5185(m) >20	11	<1	4

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	0.35	0.840

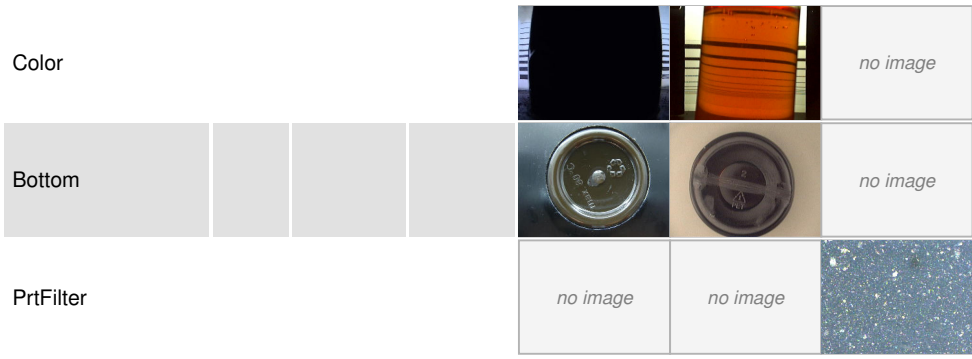
OIL ANALYSIS REPORT



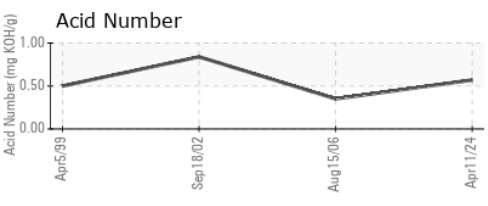
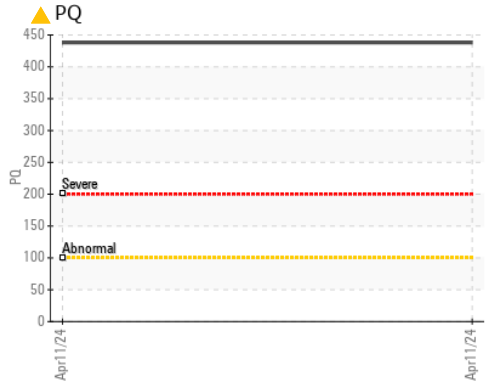
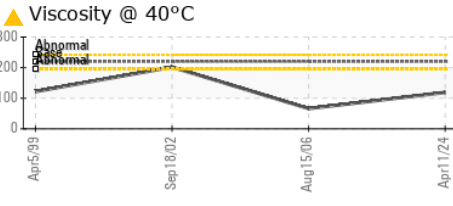
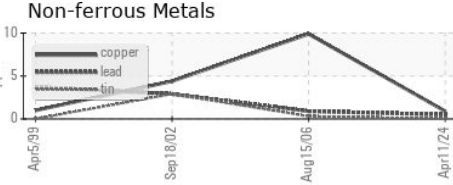
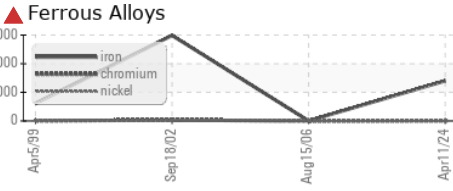
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	220	▲ 119	66.2 202

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0857995 **Received** : 15 Apr 2024
Lab Number : 02629010 **Tested** : 16 Apr 2024
Unique Number : 5762142 **Diagnosed** : 17 Apr 2024 - Kevin Marson
Test Package : IND 2 (Additional Tests: TAN Man)

Roseburg Pembroke MDF Inc.
 777 Fibreboard Drive
 Pembroke, ON
 CA K8A 6W5
 Contact: Dan Havis
 danielh@rfpco.com
 T: (613)732-3939
 F: (613)732-2869

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.