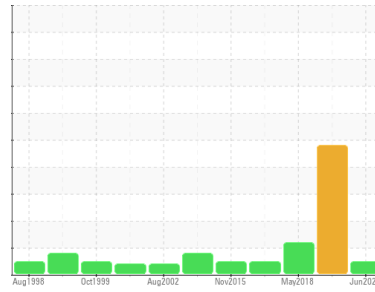




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

2

Machine Id

02-0020-000-010

HOPPER 2 GRP 1 (2M35)

Component

2 Gearbox

Fluid

SHELL OMALA S4 GXV 220 (6 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0945375	WC0707580	WC117164
Sample Date	Client Info		26 Jun 2024	21 Oct 2022	02 May 2018
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Not Chngd	N/A	N/A
Sample Status			NORMAL	SEVERE	ABNORMAL

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*		60	▲ 4215	365
Iron	ppm	ASTM D5185(m) >200	161	▲ 692	▲ 808
Chromium	ppm	ASTM D5185(m) >15	2	6	8
Nickel	ppm	ASTM D5185(m) >15	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	<1	<1	<1
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m) >25	<1	1	<1
Lead	ppm	ASTM D5185(m) >100	0	<1	<1
Copper	ppm	ASTM D5185(m) >200	<1	<1	2
Tin	ppm	ASTM D5185(m) >25	0	0	0
Antimony	ppm	ASTM D5185(m) >5	0	0	<1
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	14	17	9
Barium	ppm	ASTM D5185(m)	19	4	<1
Molybdenum	ppm	ASTM D5185(m)	0	0	<1
Manganese	ppm	ASTM D5185(m)	2	7	7
Magnesium	ppm	ASTM D5185(m)	1	<1	<1
Calcium	ppm	ASTM D5185(m)	22	6	3
Phosphorus	ppm	ASTM D5185(m)	385	417	381
Zinc	ppm	ASTM D5185(m)	4	4	7
Sulfur	ppm	ASTM D5185(m)	5079	5125	6731
Lithium	ppm	ASTM D5185(m)	<1	<1	1

CONTAMINANTS

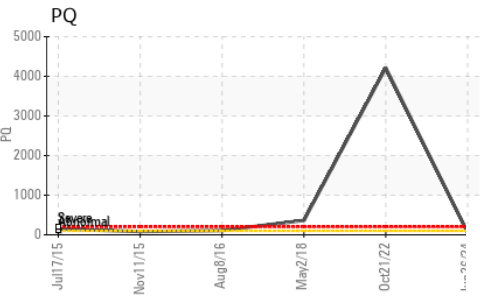
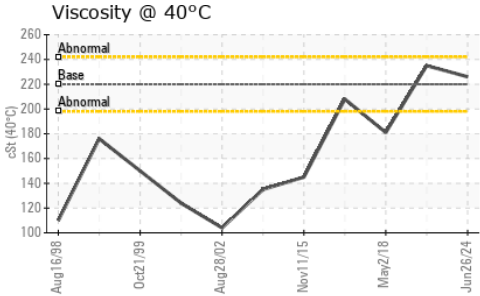
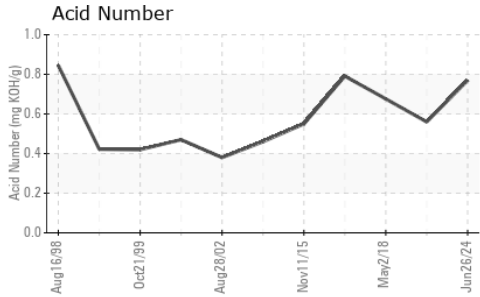
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	4	10	13
Sodium	ppm	ASTM D5185(m)	4	<1	<1
Potassium	ppm	ASTM D5185(m) >20	1	<1	<1

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.77	0.56	0.676



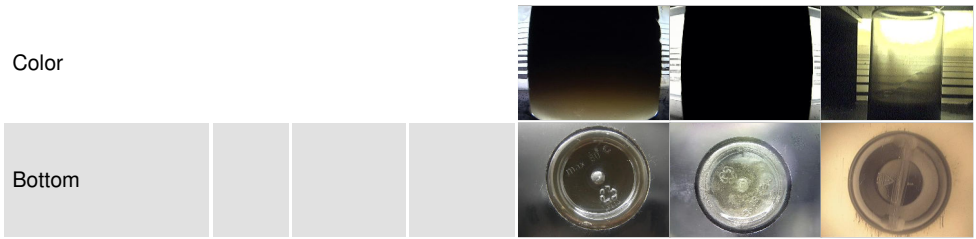
OIL ANALYSIS REPORT



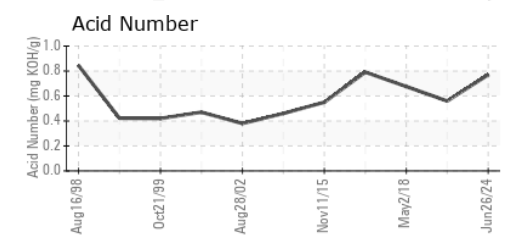
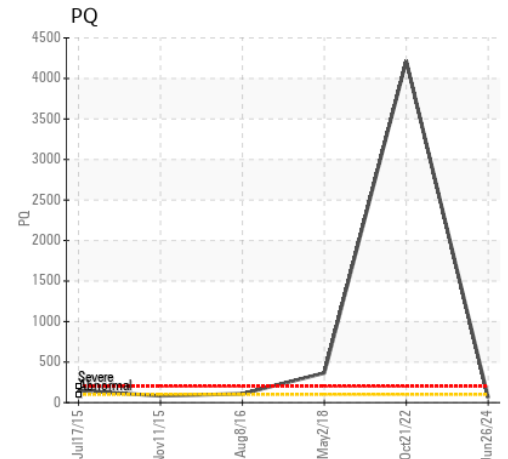
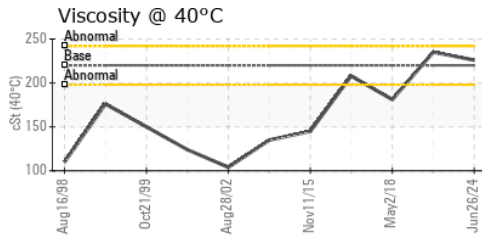
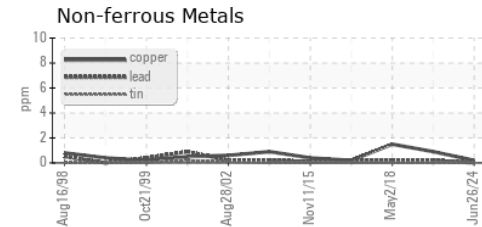
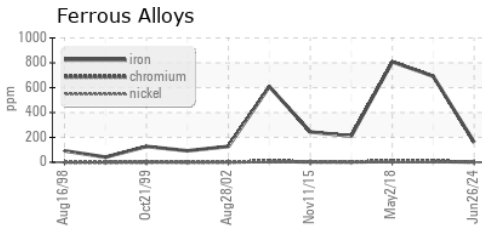
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	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	226	235 ▲ 181

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0945375 **Received** : 02 Jul 2024
Lab Number : 02644994 **Tested** : 03 Jul 2024
Unique Number : 5802533 **Diagnosed** : 03 Jul 2024 - Wes Davis
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.