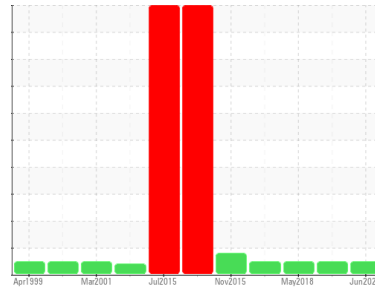




# OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

2  
Machine Id  
**02-0010-000-020**

Component

2 Gearbox

Fluid

SHELL OMALA S4 GXV 220 (6 LTR)

**HOPPER 1 GRP 2 (2M30)**

## 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		<b>WC0945374</b>	WC0707581	WC117160
Sample Date	Client Info		<b>26 Jun 2024</b>	21 Oct 2022	02 May 2018
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Not Chngd</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>47</b>	94	544
Iron	ppm	ASTM D5185(m) >200	<b>167</b>	203	523
Chromium	ppm	ASTM D5185(m) >15	<b>1</b>	2	4
Nickel	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >25	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m) >100	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m) >200	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >25	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m) >5	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	<b>6</b>	6	10
Barium	ppm	ASTM D5185(m)	<b>20</b>	29	2
Molybdenum	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185(m)	<b>3</b>	3	4
Magnesium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m)	<b>20</b>	27	13
Phosphorus	ppm	ASTM D5185(m)	<b>322</b>	387	213
Zinc	ppm	ASTM D5185(m)	<b>3</b>	3	13
Sulfur	ppm	ASTM D5185(m)	<b>5324</b>	5570	9010
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

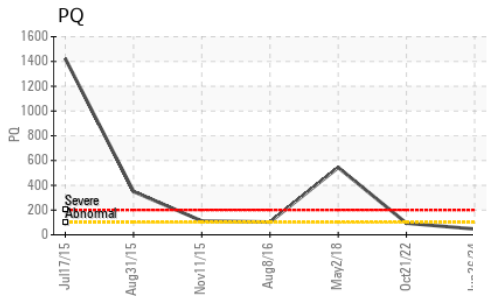
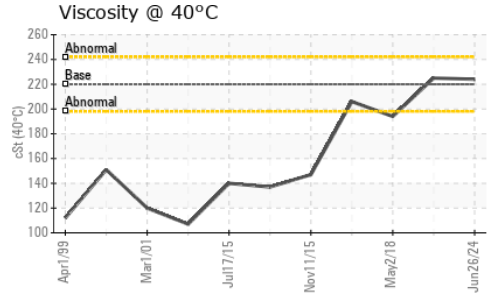
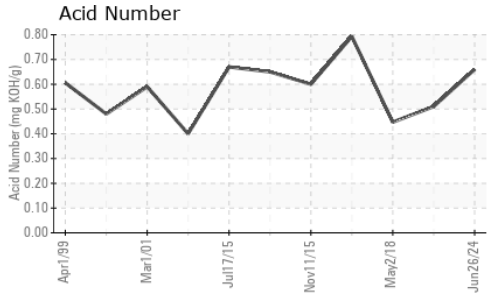
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	<b>3</b>	3	8
Sodium	ppm	ASTM D5185(m)	<b>5</b>	6	<1
Potassium	ppm	ASTM D5185(m) >20	<b>1</b>	1	<1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	<b>0.66</b>	0.51	0.447



# OIL ANALYSIS REPORT

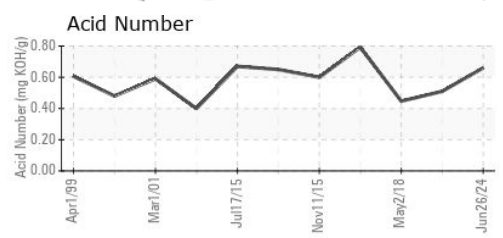
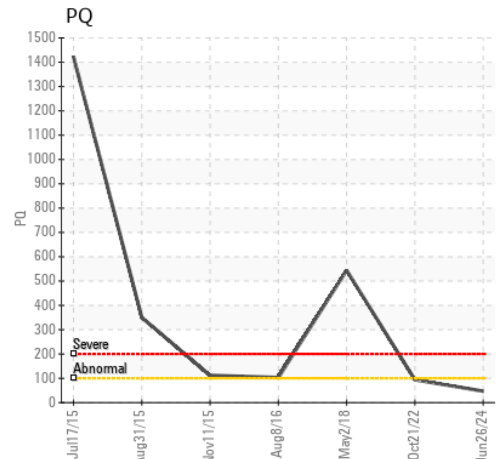
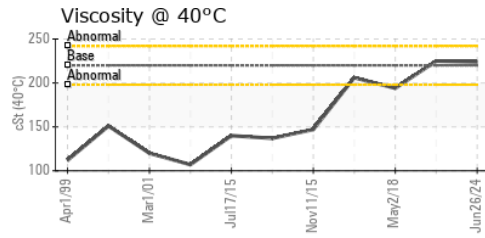
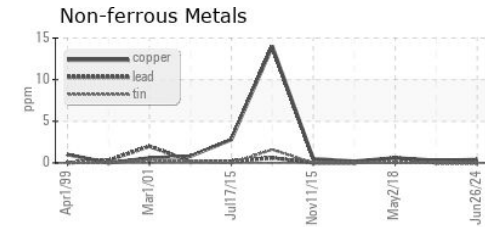
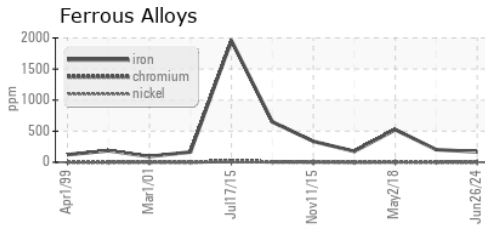


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	LIGHT
Debris	scalar	Visual*	NONE	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	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	224	225

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0945374 **Received** : 02 Jul 2024  
**Lab Number** : 02644999 **Tested** : 03 Jul 2024  
**Unique Number** : 5802538 **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.