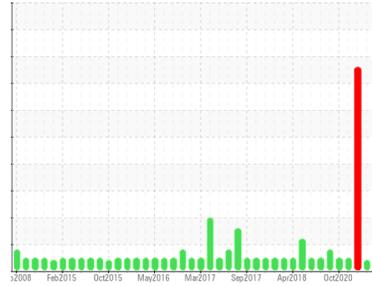




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area

**3**

Machine Id

**03-1050-030-000 CORE REFINER FRONT BEARING LUBE (3A1M1A)**

Component

**3 Hydraulic System**

Fluid

**SHELL TELLUS S2 MX 68 (820 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

### 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>WC0855136</b>	WC0625228	WC0582674
Sample Date	Client Info		<b>07 Dec 2023</b>	10 Feb 2022	19 Jul 2021
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>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	ATTENTION	SEVERE

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.05	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>2</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>20	<b>2</b>	1	<1
Tin	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185(m)		<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>&lt;1</b>	<1	2
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)		<b>63</b>	64	65
Calcium	ppm	ASTM D5185(m)		<b>13</b>	13	11
Phosphorus	ppm	ASTM D5185(m)		<b>284</b>	297	297
Zinc	ppm	ASTM D5185(m)		<b>342</b>	354	344
Sulfur	ppm	ASTM D5185(m)		<b>651</b>	670	646
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

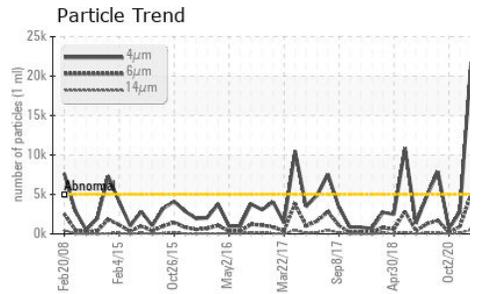
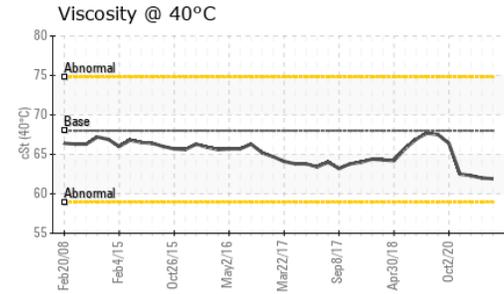
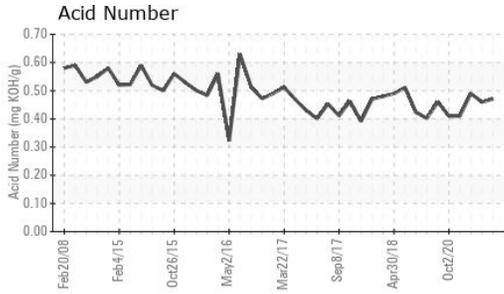
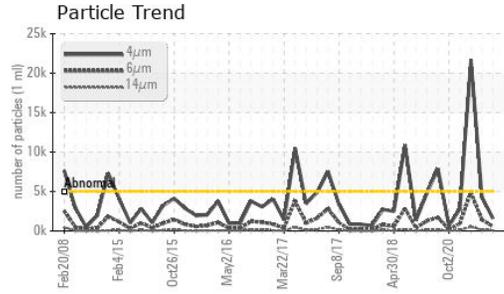
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>1585</b>	4284	▲ 21654
Particles >6µm	ASTM D7647	>1300	<b>569</b>	▲ 1440	▲ 4896
Particles >14µm	ASTM D7647	>160	<b>65</b>	147	▲ 534
Particles >21µm	ASTM D7647	>40	<b>16</b>	30	▲ 163
Particles >38µm	ASTM D7647	>10	<b>1</b>	0	▲ 20
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>18/16/13</b>	▲ 19/18/14	▲ 22/19/16



# OIL ANALYSIS REPORT

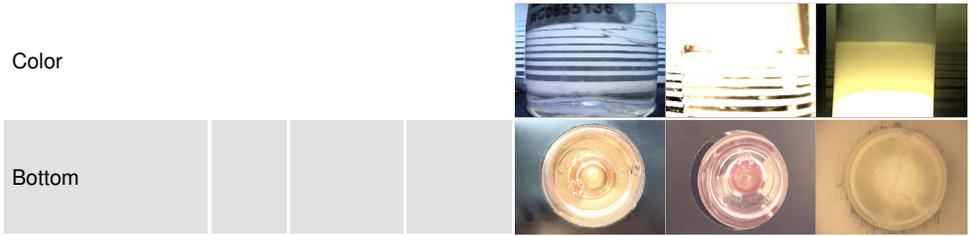


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>0.47</b>	0.46	0.49

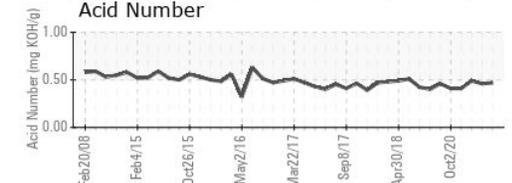
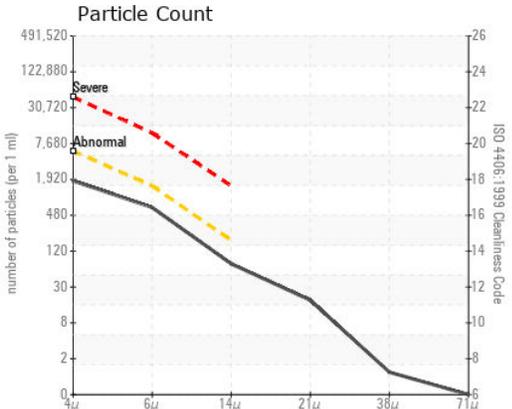
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	▲ LAYRD
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	<b>NEG</b>	NEG	▲ 1%
Free Water	scalar	Visual*		<b>NEG</b>	NEG	▲ >10%

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68.0	<b>61.9</b>	62.0	62.3

### SAMPLE IMAGES



### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0855136 **Received** : 11 Dec 2023  
**Lab Number** : **02602302** **Diagnosed** : 12 Dec 2023  
**Unique Number** : 5695387 **Diagnostician** : Kevin Marson  
**Test Package** : IND 2

**Roseburg Pembroke MDF Inc.**  
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 Contact: Dan Havis  
 danielh@rtfco.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.