

## Machine Id **FREIGHTLINER 528517** mponer

## **Diesel Engine**

MOBIL 15W40 (--- QTS)

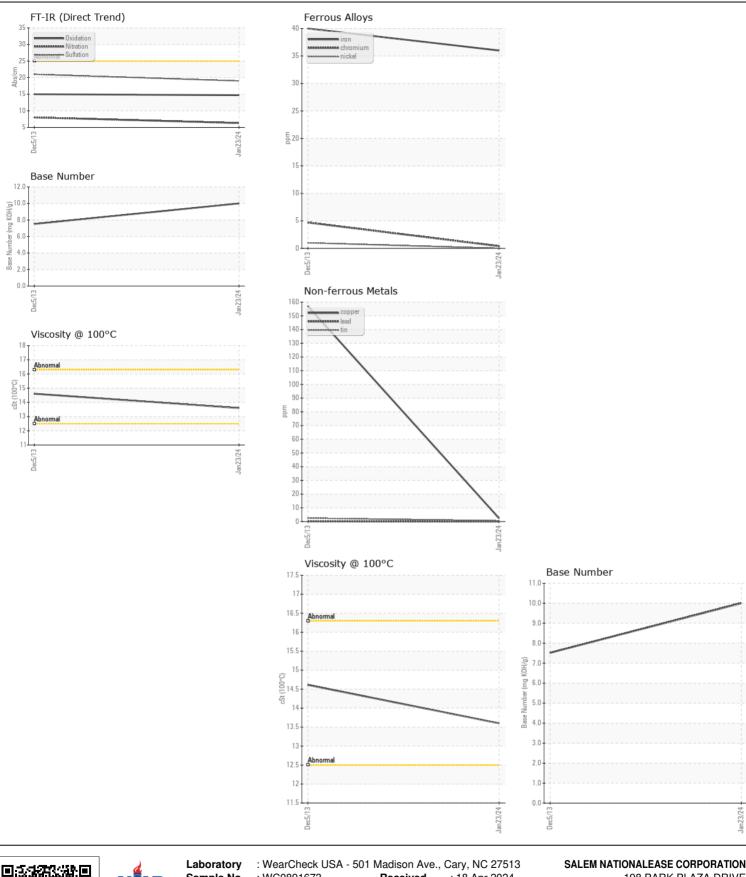
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0891673	WCMFA83198	
	Sample Date		Client Info		23 Jan 2024	05 Dec 2013	
	Machine Age	mls	Client Info		453212	55737	
	Oil Age	mls	Client Info		0	0	
	Filter Age	mls	Client Info		0	0	
	Oil Changed		Client Info		N/A	N/A	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				NORMAL	ABNORMAL	
WEAR	Iron	ppm	ASTM D5185m	>200	36	40	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	<1	5	
	Nickel	ppm	ASTM D5185m	>2	0	1	
	Titanium	ppm	ASTM D5185m	>2	0	0	
	Silver	ppm	ASTM D5185m	>2	0	<1	
	Aluminum	ppm	ASTM D5185m	>30	12	40	
	Lead	ppm	ASTM D5185m	>30	0	<1	
	Copper	ppm	ASTM D5185m	>30	2	🔺 157	
	Tin	ppm	ASTM D5185m	>15	<1	2	
	Vanadium	ppm	ASTM D5185m		0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>30	4	3	
	Potassium	ppm	ASTM D5185m		2	<b>A</b> 83	
There is no indication of any contamination in the oil.	Fuel		WC Method		<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.3	0.9	
	Nitration	Abs/cm	*ASTM D7624		6.3	8.	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.0	21.	
	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	
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>118	3	4	
	Boron	ppm	ASTM D5185m	2.10	5	5	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m		60	5	
	Manganese	ppm	ASTM D5185m		<1	2	
	Magnesium	ppm	ASTM D5185m		930	58	
	Calcium	ppm	ASTM D5185m		1036	2280	
	Phosphorus	ppm	ASTM D5185m		1051	955	
	Zinc	ppm	ASTM D5185m		1219	1188	
	Sulfur	ppm	ASTM D5185m		3803	1447	
	Oxidation	Abs/.1mm	*ASTM D3103/11	>25	14.7	15.	
	Base Number (BN)			20	10.0	7.52	
	Dase Multiber (DIV)	ing KON/g	A01101D2030		10.0	1.52	

Visc @ 100°C cSt

ASTM D445

14.61

13.6



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 SALEM NATIONALEASE CORPORATION Sample No. Received 198 PARK PLAZA DRIVE : WC0891673 : 18 Apr 2024 Lab Number : 06153600 Tested WINSTON SALEM, NC : 19 Apr 2024 Diagnosed Unique Number : 10983678 : 19 Apr 2024 - Wes Davis US 27105 Test Package : FLEET **Contact: Audrey Hopkins** Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. Audrey.Hopkins@salemcorp.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (336)767-9642 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: x:

Contact/Location: Audrey Hopkins - SALWIN Page 2 of 2