

WEAR CONTAMINATION FLUID CONDITION

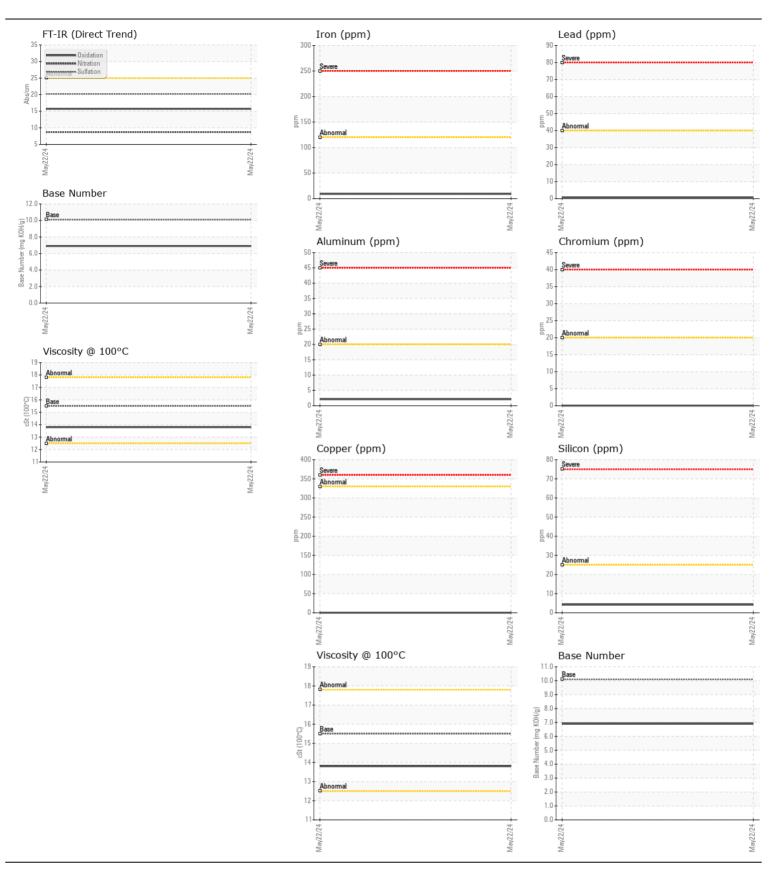
NORMAL NORMAL



Machine Id
MACK RO-27
Component
Diesel Engine

GIBRALTAR 15W/40 SUPER S-3 LX (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
RECOMMENDATION	Sample Number		Client Info	LIIIIUADII	WC0875389		
Resample at the next service interval to monitor.	Sample Date		Client Info		22 May 2024		
	Machine Age	hrs	Client Info		12737		
	Oil Age	hrs	Client Info		600		
	Filter Age	hrs	Client Info		600		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m		9		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		0		
	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		2		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m		0		
	Tin	ppm	ASTM D5185m	>15	<1		
	Vanadium	ppm	ASTM D5185m	NONE	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4		
	Potassium	ppm	ASTM D5185m		<1		
There is no indication of any contamination in the oil.	Fuel	1-1-	WC Method	>3.0	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>4	0.4		
	Nitration	Abs/cm	*ASTM D7624	>20	8.7		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG		
ELUID CONDITION	Codium		ACTM DE10Em				
FLUID CONDITION	Sodium Boron	ppm	ASTM D5185m ASTM D5185m		10		
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		
	Molybdenum	ppm	ASTM D5185m	66	62		
	Manganese	ppm	ASTM D5185m	00	<1		
	Magnesium	ppm	ASTM D5185m	1000	903		
	Calcium	ppm	ASTM D5185m		1105		
	Phosphorus	ppm	ASTM D5185m		1039		
	Zinc	ppm	ASTM D5185m		1275		
	Sulfur	ppm	ASTM D5185m		3473		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.7		
	Base Number (BN)				6.9		
	Visc @ 100°C	cSt	ASTM D445		13.8		





Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

: WC0875389 Lab Number : 06188919 Unique Number : 11045671

Received **Tested** Diagnosed Test Package : MOB 1 ( Additional Tests: TBN )

: 23 May 2024 : 24 May 2024

: 24 May 2024 - Wes Davis

**OAKRIDGE WASTE** 307 WHITE ST DANBURY, CT US 06810 Contact: CHRIS CONTI

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To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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