

WEAR CONTAMINATION FLUID CONDITION

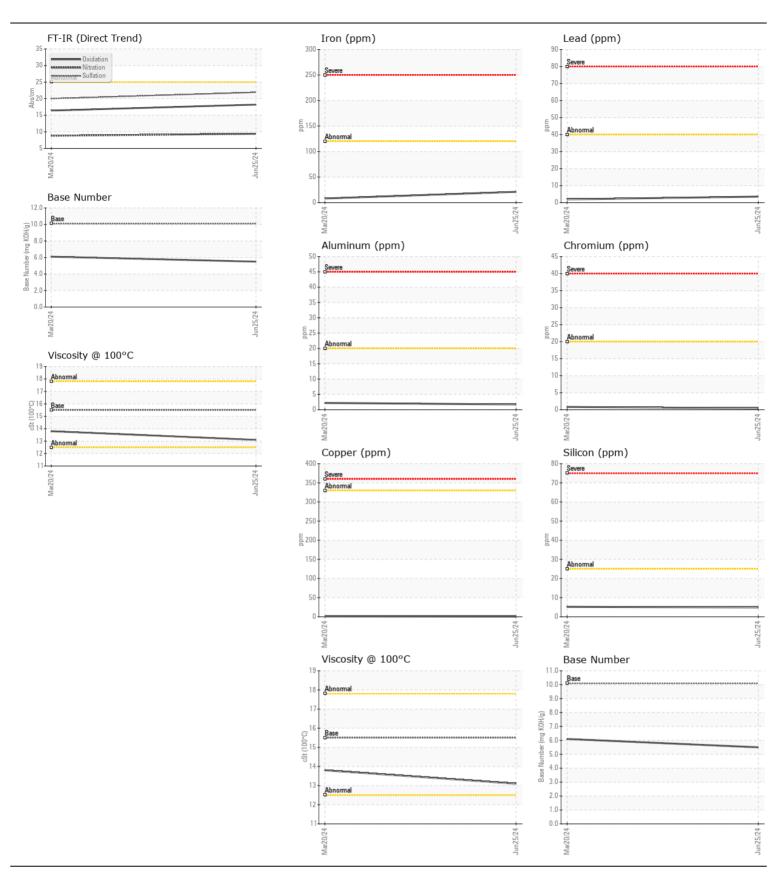
NORMAL NORMAL



Machine Id
MACK FL-26
Component
Diesel Engine

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

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0941105	WC0875551	
	Sample Date		Client Info		25 Jun 2024	20 Mar 2024	
	Machine Age	hrs	Client Info		23943	23290	
	Oil Age	hrs	Client Info		600	0	
	Filter Age	hrs	Client Info		600	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>120	21	8	
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m	>20	<1	<1	
	Nickel	ppm	ASTM D5185m		<1	1	
	Titanium	ppm	ASTM D5185m		0	<1	
	Silver	ppm	ASTM D5185m		0	<1	
	Aluminum	ppm	ASTM D5185m		2	2	
	Lead	ppm	ASTM D5185m		4	2	
	Copper	ppm	ASTM D5185m		<1	1	
	Tin	ppm	ASTM D5185m	>15	0	1	
	Vanadium	ppm	ASTM D5185m		0	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	5	5	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	2	2	
	Fuel		WC Method	>3.0	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>4	0.3	0.2	
	Nitration	Abs/cm	*ASTM D7624	>20	9.4	8.8	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.9	20.0	
	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	
	<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		8	2	
I LOID CONDITION	Boron	ppm	ASTM D5185m		5	6	
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	<1	
	Molybdenum	ppm	ASTM D5185m	66	65	79	
	Manganese	ppm	ASTM D5185m		<1	1	
	Magnesium	ppm	ASTM D5185m	1000	784	807	
	Calcium	ppm	ASTM D5185m		1188	1160	
	Phosphorus	ppm	ASTM D5185m		948	922	
	Zinc	ppm	ASTM D5185m		1091	1150	
	Sulfur	ppm	ASTM D5185m		2884	3128	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.2	16.4	
	Base Number (BN)		ASTM D2896		5.5	6.1	
	Visc @ 100°C	cSt	ASTM D445		13.1	13.8	





Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 06239948

: WC0941105 Unique Number : 11128782

Received **Tested** 

Diagnosed

: 18 Jul 2024 : 18 Jul 2024 - Wes Davis

: 18 Jul 2024

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

Test Package : MOB 1 ( Additional Tests: TBN ) To discuss this sample report, contact Customer Service at 1-800-237-1369. chris.conti@oakridgewaste.com

\* - 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)

T: F: