WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

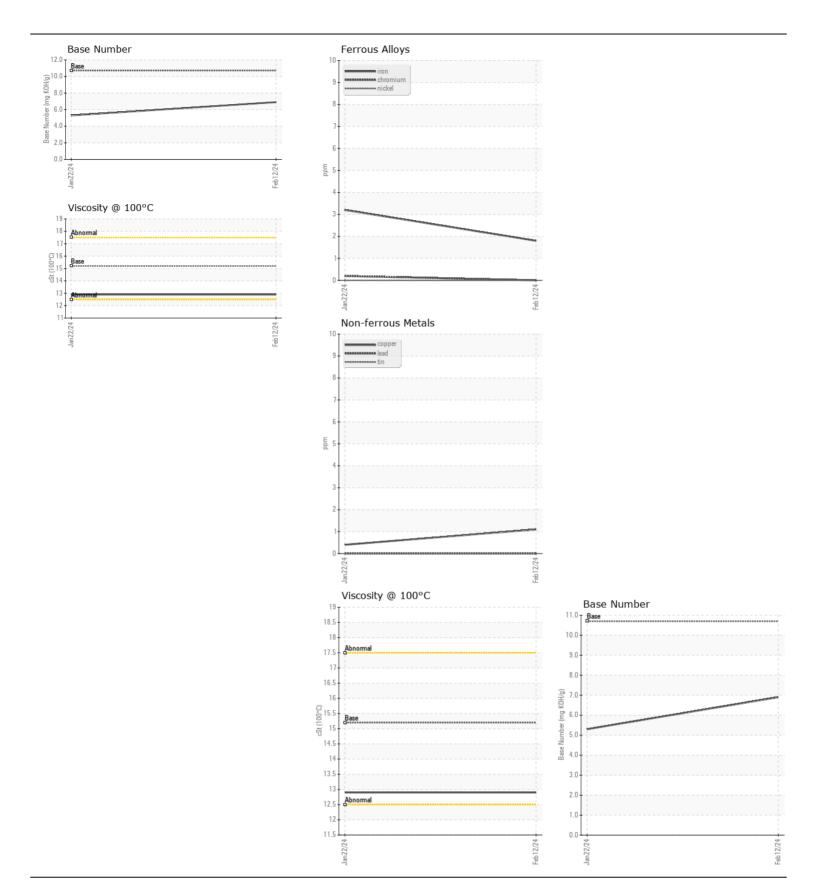


MACK 429115-SW4909

Component Diesel Engine

MOBIL DELVAC ELITE 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0111344	GFL0111354	
nesample at the next service interval to monitor.	Sample Date		Client Info		12 Feb 2024	22 Jan 2024	
	Machine Age	hrs	Client Info		13466	13305	
	Oil Age	hrs	Client Info		0	500	
	Filter Age	hrs	Client Info		0	500	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>120	2	3	
WEAT	Chromium	ppm	ASTM D5185m		0	<1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	0	
	Titanium	ppm	ASTM D5185m		0	<1	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m		2	3	
	Lead	ppm	ASTM D5185m	>40	0	0	
	Copper	ppm	ASTM D5185m		1	<1	
	Tin	ppm	ASTM D5185m		0	0	
	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	>25	3	4	
	Potassium	ppm	ASTM D5185m	>20	0	<1	
There is no indication of any contamination in the oil.	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	0.2	0.3	
	Nitration	Abs/cm	*ASTM D7624	>20	8.3	10.2	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	17.5	19.2	
	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		2	4	
TEGID CONDITION	Boron	ppm	ASTM D5185m		107	60	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185m		0	<1	
	Molybdenum	ppm	ASTM D5185m		118	120	
	Manganese	ppm	ASTM D5185m		0	<1	
	Magnesium	ppm	ASTM D5185m		668	618	
	Calcium	ppm	ASTM D5185m		1234	1163	
	Phosphorus	ppm	ASTM D5185m		724	673	
	Zinc	ppm	ASTM D5185m		820	760	
	Sulfur	ppm	ASTM D5185m		3190	2905	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.3	16.8	
	Base Number (BN)		ASTM D2896		6.9	5.3	
	Visc @ 100°C	cSt	ASTM D445		12.9	12.9	
	-						







Certificate L2367

Laboratory Sample No.

: GFL0111344 Lab Number : 06101342 Unique Number : 10899572 Test Package : FLEET

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 27 Feb 2024 : 28 Feb 2024 **Tested**

Diagnosed : 28 Feb 2024 - Don Baldridge

GFL Environmental - 981 - Port Arthur Hauling 1000 S Business Park Dr Port Arthur, TX

US 77640 Contact: MICHAEL KAY

mkay@gflenv.com T: (336)660-9331

* - 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)