WEAR CONTAMINATION FLUID CONDITION

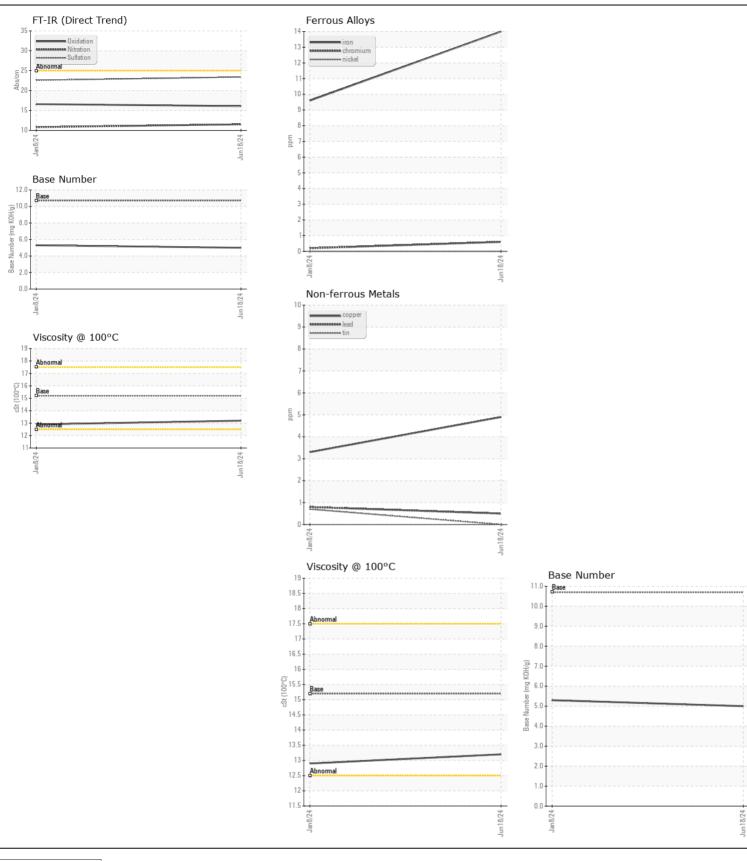
NORMAL NORMAL



MACK 127078-SWV109 Component Diesel Engine

MOBIL DELVAC ELITE 15W40 (--- GAL)

MODIL DELVACELITE 15W40 (GAL)						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		GFL0111293	GFL0095482	
Resample at the next service interval to monitor.	Sample Date		Client Info		18 Jun 2024	08 Jan 2024	
	Machine Age	hrs	Client Info		33067	33067	
	Oil Age	hrs	Client Info		33067	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 All component wear rates are normal.	Iron	ppm	ASTM D5185m	>120	14	10	
	Chromium	ppm	ASTM D5185m	>20	<1	<1	
	Nickel	ppm	ASTM D5185m	>5	0	0	
	Titanium	ppm	ASTM D5185m	>2	0	0	
	Silver	ppm	ASTM D5185m	>2	0	0	
	Aluminum	ppm	ASTM D5185m	>20	3	3	
	Lead	ppm	ASTM D5185m	>40	<1	<1	
	Copper	ppm	ASTM D5185m	>330	5	3	
	Tin	ppm	ASTM D5185m	>15	0	<1	
	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	4	3	
There is no indication of any contemination in the oil	Potassium	ppm	ASTM D5185m	>20	1	<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	2.5	2.1	
	Nitration	Abs/cm	*ASTM D7624	>20	11.5	10.8	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	23.4	22.6	
	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	
ELUID CONDITION			AOTM DE LOS				
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	3	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		28	42	
	Barium	ppm	ASTM D5185m		0	1	
	Molybdenum	ppm	ASTM D5185m		123	107	
	Manganese	ppm	ASTM D5185m		0	0	
	Magnesium	ppm	ASTM D5185m		626	621	
	Calcium	ppm	ASTM D5185m		1165	1168	
	Phosphorus	ppm	ASTM D5185m		644	663	
	Zinc	ppm	ASTM D5185m		802	753	
	Sulfur	ppm	ASTM D5185m	0.5	2729	2784	
	Oxidation	Abs/.1mm	*ASTM D7414		16.1	16.6	
	Base Number (BN)				5.0	5.3	
	Visc @ 100°C	cSt	ASTM D445	15.2	13.2	12.9	







Certificate L2367

Laboratory Sample No.

: GFL0111293 Lab Number : 06241413 Unique Number : 11130247 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 : 19 Jul 2024 **Tested** : 20 Jul 2024

Diagnosed : 20 Jul 2024 - Wes Davis

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)