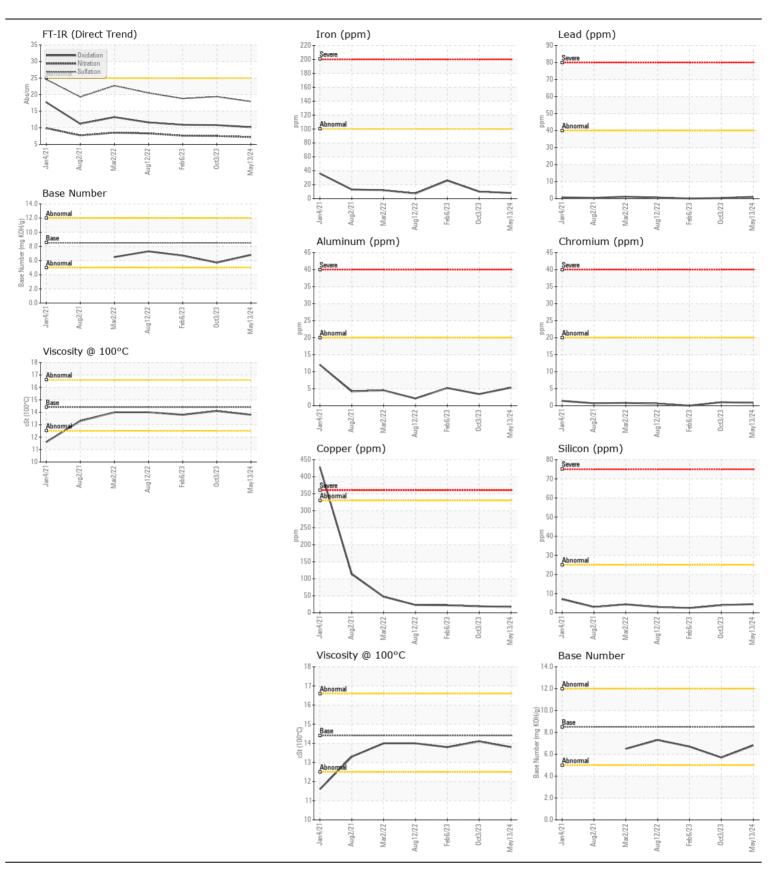
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id

M11926 Component Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Describe at the control interval to control Discourse (falls)	Sample Number		Client Info		DC0034062	DC0028254	DC0023080
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Date		Client Info		13 May 2024	03 Oct 2023	06 Feb 2023
	Machine Age	mls	Client Info		32783	30257	2535
	Oil Age	mls	Client Info		0	0	0
	Filter Age	mls	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	8	10	26
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m	>20	<1	1	0
	Nickel	ppm	ASTM D5185m	>4	0	<1	0
	Titanium	ppm	ASTM D5185m		<1	<1	0
	Silver	ppm	ASTM D5185m	>3	<1	0	0
	Aluminum	ppm	ASTM D5185m	>20	5	3	5
	Lead	ppm	ASTM D5185m	>40	1	<1	0
	Copper	ppm	ASTM D5185m	>330	17	19	22
	Tin	ppm	ASTM D5185m	>15	2	2	<1
	Vanadium	ppm	ASTM D5185m		<1	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4	4	2
	Potassium	ppm	ASTM D5185m	>20	5	18	9
There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.2	0.4	0.3
	Nitration	Abs/cm	*ASTM D7624	>20	7.2	7.5	7.6
	Sulfation	Abs/.1mm	*ASTM D7415	>30	17.9	19.4	18.8
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	2	20	2
	Boron	ppm	ASTM D5185m	250	1	<1	0
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	10	0	11	0
	Molybdenum	ppm	ASTM D5185m	100	2	4	3
	Manganese	ppm	ASTM D5185m		<1	<1	0
	Magnesium	ppm	ASTM D5185m	450	41	49	58
	Calcium	ppm	ASTM D5185m	3000	2444	2261	2397
	Phosphorus	ppm	ASTM D5185m	1150	948	882	886
	Zinc	ppm	ASTM D5185m	1350	1064	1107	1077
	Sulfur	ppm	ASTM D5185m	4250	4293	3538	3416
	Oxidation	Abs/.1mm	*ASTM D7414	>25	10.2	10.8	10.9
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.8	5.7	6.7
	Visc @ 100°C	cSt	ASTM D445	111	13.8	14.1	13.8





Certificate L2367

Laboratory Sample No. Unique Number: 11056962

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 06194839

: DC0034062

Received : 29 May 2024 **Tested** Diagnosed

: 30 May 2024

: 30 May 2024 - Wes Davis Test Package : MOB 1 (Additional Tests: TBN)

US 20781 Contact: June McClosky office@mmfleet.net T: (301)779-4545

5046 BUCHANAN ST.

HYATTSVILLE, MD

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)

F: x:

M&M FLEET