

WEAR	
CONTAMINATION	
FLUID CONDITION	NORMAL

Machine Id M11925 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the	Sample Number		Client Info		DC0036422	DC0028289	DC0023064
component make and model with your next sample.	Sample Date		Client Info		17 May 2024	24 Aug 2023	11 Jan 2023
	Machine Age	mls	Client Info		31388	26051	2124
	Oil Age	mls	Client Info		0	0	0
	Filter Age Oil Changed	mls	Client Info		0	0 Observed	0 Channad
	-		Client Info	_	Changed	Changed	Changed
	Filter Changed Sample Status		Client Info		Changed NORMAL	Changed NORMAL	Changed NORMAL
	Sample Status				NORMAL	NORIVIAL	NORIVIAL
WEAR Metal levels are typical for a new component breaking in.	Iron	ppm	ASTM D5185m	>100	9	10	12
	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
	Nickel	ppm	ASTM D5185m	>4	0	0	0
	Titanium	ppm	ASTM D5185m		<1	0	0
	Silver	ppm	ASTM D5185m	>3	<1	0	0
	Aluminum	ppm	ASTM D5185m	>20	5	5	3
	Lead	ppm		>40	1	0	0
	Copper	ppm	ASTM D5185m	>330	20	26	41
	Tin	ppm	ASTM D5185m	>15	2	1	<1
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4	3	3
CONTAMINATION	Potassium	ppm	ASTM D5185m	-	5	4	4
There is no indication of any contamination in the oil.	Fuel	ppiii	WC Method	>5	<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.3	0.2	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	7.3	7.0	6.2
	Sulfation	Abs/.1mm	*ASTM D7415	>30	18.2	17.7	16.1
	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	4	1
	Boron	ppm	ASTM D5185m		1	0	2
The BN result indicates that there is suitable alkalinity remaining in the	Barium	ppm	ASTM D5185m		0	0	0
oil. The condition of the oil is suitable for further service.	Molybdenum	ppm	ASTM D5185m		2	<1	2
	Manganese	ppm	ASTM D5185m		- <1	<1	<1
	Magnesium	ppm	ASTM D5185m	450	26	36	20
	Calcium	ppm	ASTM D5185m		2442	2551	2211
	Phosphorus	ppm	ASTM D5185m		918	919	826
	Zinc	ppm	ASTM D5185m	1350	1050	1131	962
	Sulfur	ppm	ASTM D5185m	4250	4046	4433	3385
	Oxidation	Abs/.1mm	*ASTM D7414	>25	10.1	9.9	9.1

Base Number (BN) mg KOH/g ASTM D2896 8.5

ASTM D445 14.4

Visc @ 100°C cSt

6.1

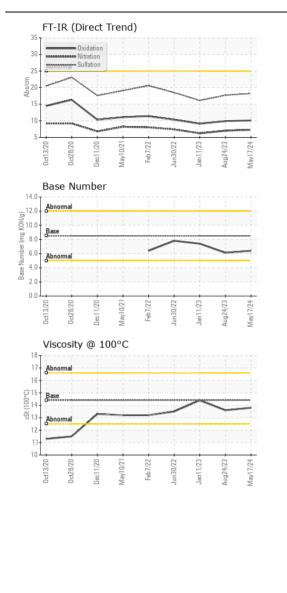
13.6

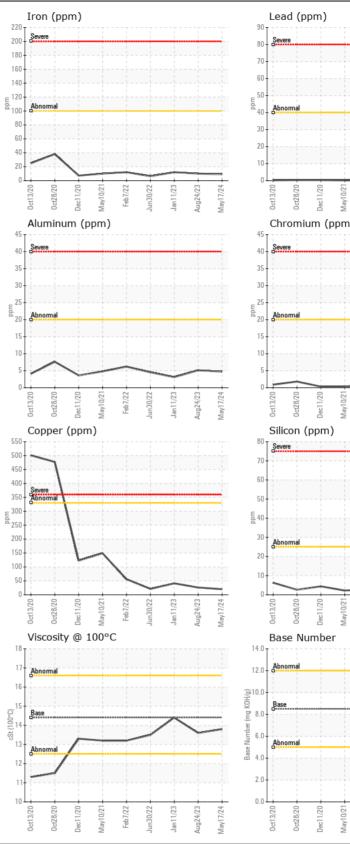
7.4

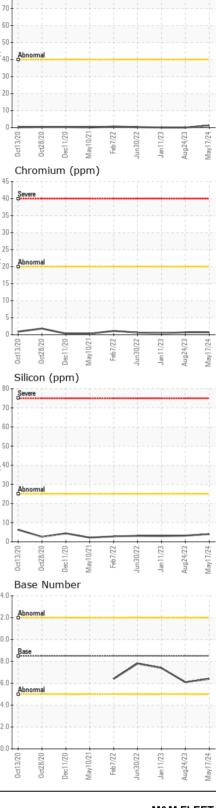
14.4

6.4

13.8







Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **M&M FLEET** Sample No. : DC0036422 Received 5046 BUCHANAN ST. : 29 May 2024 Lab Number : 06194821 Tested HYATTSVILLE, MD : 30 May 2024 : 30 May 2024 - Wes Davis US 20781 Unique Number : 11056944 Diagnosed Test Package : MOB 1 (Additional Tests: TBN) Contact: June McClosky Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. office@mmfleet.net * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (301)779-4545 F: x:

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