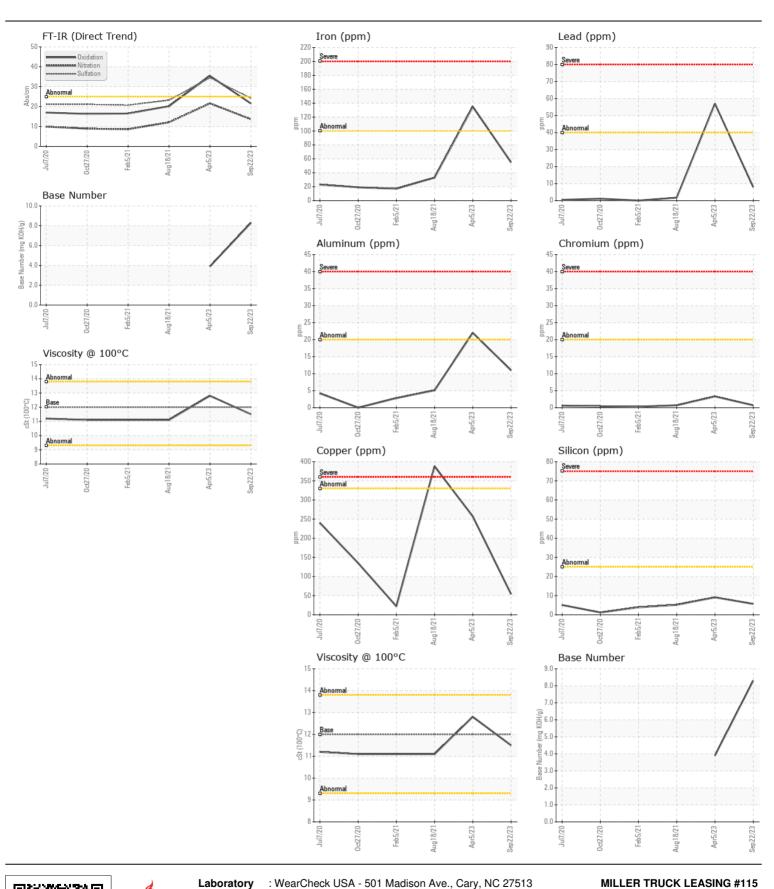
**WEAR** CONTAMINATION **FLUID CONDITION**  **NORMAL NORMAL NORMAL** 

Machine Id 391340

Component
Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		PCA0099234	PCA0085329	PCA005577
	Sample Date		Client Info		22 Sep 2023	05 Apr 2023	18 Aug 202
	Machine Age	mls	Client Info		149381	134413	84938
	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 Sample Status		Client Info		Changed NORMAL	Changed ABNORMAL	Change of ABNORMA
VEAR	Iron	ppm	ASTM D5185m	>100	55	<u> </u>	33
	Chromium	ppm	ASTM D5185m	>20	<1	3	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>4	<1	4	2
	Titanium	ppm	ASTM D5185m		0	0	<1
	Silver	ppm	ASTM D5185m	>3	<1	0	<1
	Aluminum	ppm	ASTM D5185m	>20	11	<u>^</u> 22	5
	Lead	ppm	ASTM D5185m	>40	8	<u></u> 57	2
	Copper	ppm	ASTM D5185m	>330	54	257	<b>△</b> 388
	Tin	ppm	ASTM D5185m	>15	2	6	0
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NON
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NON
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	6	9	5
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	6	20	4
	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	1.7	<b>△</b> 3.7	1.4
	Nitration	Abs/cm	*ASTM D7624	>20	13.6	21.6	12.1
	Sulfation	Abs/.1mm	*ASTM D7415	>30	24.2	34.5	23.2
	Silt	scalar	*Visual	NONE	NONE	NONE	NONI
	Debris	scalar	*Visual	NONE	NONE	NONE	NON
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NON
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORN
<u></u>	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
LUID CONDITION	Sodium	ppm	ASTM D5185m		3	6	2
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m	2	12	6	4
oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		67	73	58
	Manganese	ppm	ASTM D5185m		1	4	1
	Magnesium	ppm	ASTM D5185m		916	1126	998
	Calcium	ppm	ASTM D5185m		1140	1232	1097
	Phosphorus	ppm	ASTM D5185m		991	1151	1058
	Zinc	ppm	ASTM D5185m		1257	1506	1150
	Sulfur	ppm	ASTM D5185m		3131	3228	2553
	Oxidation	Abs/.1mm	*ASTM D7414	>25	21.5	35.4	20.2
	Base Number (BN)	mg KOH/g	ASTM D2896		8.3	3.9	
	Visc @ 100°C	cSt	ASTM D445	12.00	11.5	12.8	11.1





Certificate L2367

Laboratory Sample No.

Lab Number : 06187283 Unique Number : 11044035

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0099234

Received **Tested** Diagnosed Test Package : MOB 1 ( Additional Tests: TBN )

: 23 May 2024 - Wes Davis

: 22 May 2024

: 23 May 2024

Contact: MARTIN RUCCI mrucci@millertransgroup.com

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)

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US 08701

T: