

WEAR CONTAMINATION FLUID CONDITION

ATTENTION ABNORMAL NORMAL

Machine Id

8575229

Component

Diesel Fngine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		RPL0019028		
We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Resample at the next service interval to monitor.	Sample Date		Client Info		03 Jun 2024		
	Machine Age	hrs	Client Info		1158		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		Not Changd		
	Sample Status				ABNORMAL		
WEAR	Iron	nnm	ASTM D5185m	. 100	E0		
VEAN	Iron Chromium	ppm	ASTM D5185m		58 4		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1		
	Titanium	ppm	ASTM D5185m	>4	<1		
	Silver	ppm	ASTM D5185m	\3	<1		
	Aluminum	ppm	ASTM D5185m		<u>26</u>		
	Lead	ppm	ASTM D5185m		3		
	Copper	ppm	ASTM D5185m		31		
	Tin	ppm	ASTM D5185m		3		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
ONTAMINATION	Silicon	ppm	ASTM D5185m		<u>4</u> 40		
Elemental levels of silicon (Si) and aluminum (Al) indicate aluminasilicate (coarse dirt) ingress. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components.	Potassium	ppm	ASTM D5185m		86		
	Fuel		WC Method		<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol	21	WC Method	0	NEG		
	Soot %	%	*ASTM D7844		0.3		
	Nitration	Abs/cm	*ASTM D7624	>20	12.8		
	Sulfation Silt	Abs/.1mm	*ASTM D7415	>30 NONE	26.5 NONE		
	Debris	scalar scalar	*Visual *Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
LUID CONDITION	Sodium	ppm	ASTM D5185m		6		
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.	Boron	ppm	ASTM D5185m		22		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		12		
	Manganese	ppm	ASTM D5185m		6		
	Magnesium	ppm	ASTM D5185m		762		
	Calcium	ppm	ASTM D5185m		1333		
	Dhaanharua	ppm	ASTM D5185m	1100	709		
	Phosphorus						
	Zinc	ppm	ASTM D5185m		860		

Base Number (BN) mg KOH/g ASTM D2896 10.3

ppm ASTM D5185m 4000

ASTM D445 11.9

Abs/.1mm *ASTM D7414 >25

Sulfur

Oxidation

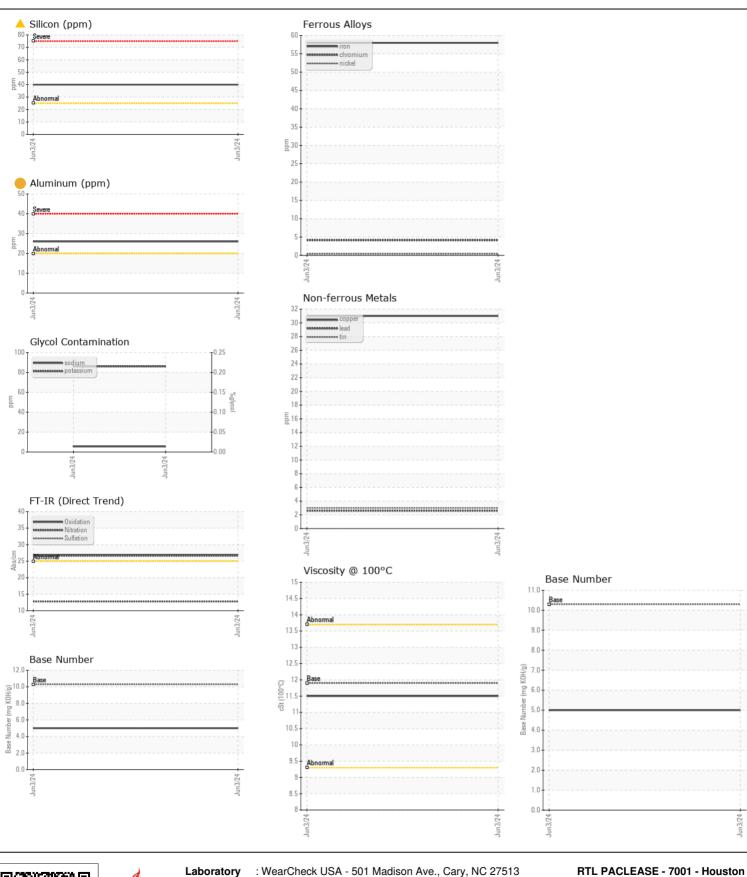
Visc @ 100°C cSt

2890

26.9

5.0

11.5







Certificate L2367

Laboratory Sample No.

Lab Number : 06225510

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : RPL0019028

Received **Tested** Unique Number : 11103707 Diagnosed Test Package: FLEET (Additional Tests: KV40)

: 03 Jul 2024 : 03 Jul 2024 - Don Baldridge

: 01 Jul 2024

6300 N. Loop East Houston, TX US 77026 Contact: RODNEY BRIGGS briggsr@rushenterprises.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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