WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

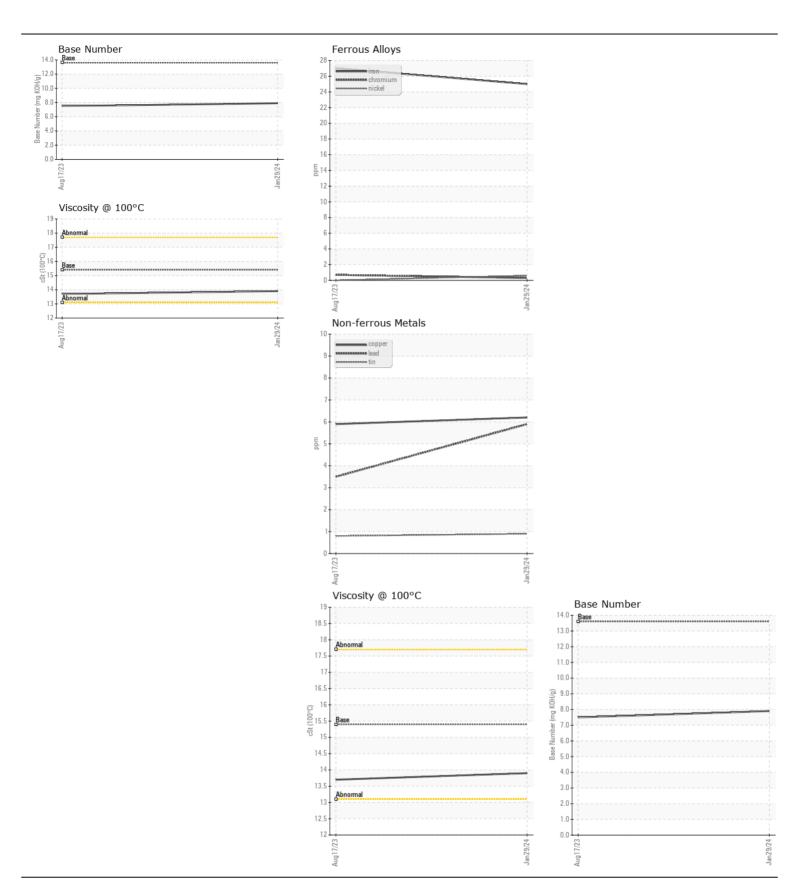
Machine Id

TMG16SED0227

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		JR0199761	JR0180357	
	Sample Date		Client Info		29 Jan 2024	17 Aug 2023	
	Machine Age	hrs	Client Info		10683	10170	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m		25	27	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	<1	<1	
	Nickel	ppm	ASTM D5185m	>4	<1	0	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m	>20	9	11	
	Lead	ppm	ASTM D5185m		6	4	
	Copper	ppm	ASTM D5185m	>330	6	6	
	Tin	ppm	ASTM D5185m	>15	<1	<1	
	Vanadium	ppm	ASTM D5185m		<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Ciliana		ACTM DE10E	٥٦	44	4.4	
CONTAMINATION	Silicon	ppm		>25	11	14	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		4	1.0	
	Fuel		WC Method	>5	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol	0/	WC Method	0	NEG	NEG	
	Soot % Nitration	%	*ASTM D7844 *ASTM D7624		0.9	1.3	
		Abs/cm		>20	9.9	9.8	
	Sulfation Silt	Abs/.1mm	*ASTM D7415		25.7 NONE	24.6	
	Debris	scalar	*Visual	NONE		NONE	
	Sand/Dirt	scalar	*Visual *Visual	NONE	NONE	NONE	
		scalar	*Visual		NONE NORML	NONE	
	Appearance Odor	scalar scalar	*Visual	NORML NORML	NORML	NORML NORML	
	Emulsified Water		*Visual	>0.2	NEG	NEG	
<u> </u>	Linuisilieu watei	Scalai	Visuai	>0.2		INLG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		3	3	
	Boron	ppm	ASTM D5185m		96	104	
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		0	0	
	Molybdenum	ppm	ASTM D5185m		248	251	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m		811	873	
	Calcium	ppm	ASTM D5185m		1402	1652	
	Phosphorus	ppm	ASTM D5185m		889	932	
	Zinc	ppm	ASTM D5185m		1099	1196	
	Sulfur	ppm	ASTM D5185m		3065	3847	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	19.0	18.1	
	Base Number (BN)				7.9	7.5	
	Visc @ 100°C	cSt		15.4	13.9	13.7	

Contact/Location: DAVID ZIEG - JAMASH







Laboratory Sample No. **Unique Number**

Lab Number

: JR0199761 : 06075503 : 10857594

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 31 Jan 2024 Diagnosed

: 01 Feb 2024

Diagnostician : Wes Davis Test Package : CONST (Additional Tests: TBN)

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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