WEAR CONTAMINATION **FLUID CONDITION**

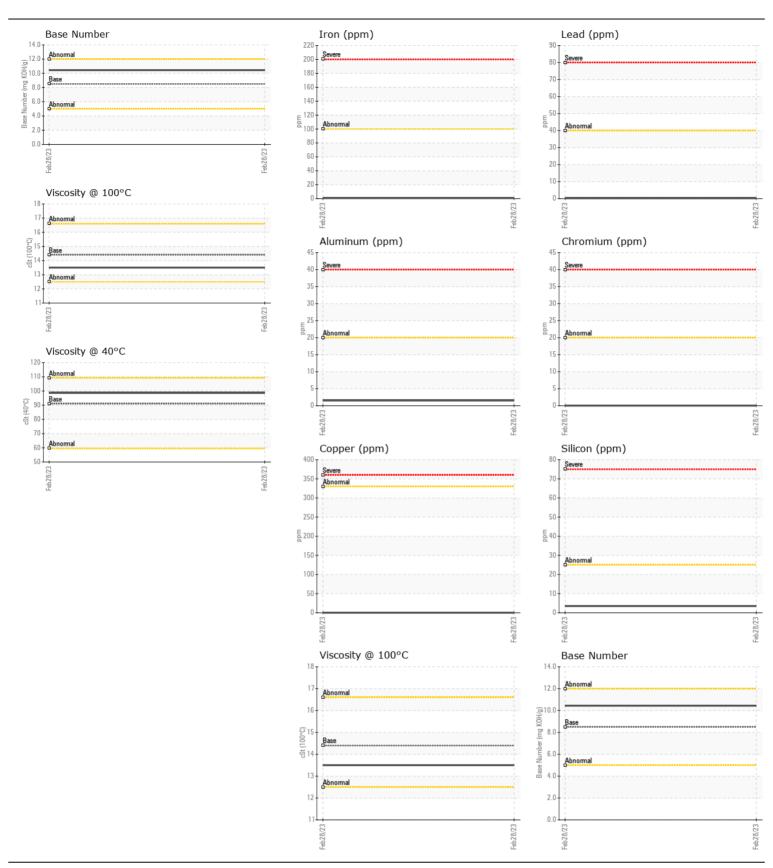
NORMAL NORMAL NORMAL

ABC93535 (S/N SR010218B)

Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0772541		
Resample at the next service interval to monitor.	Sample Date		Client Info		28 Feb 2023		
	Machine Age	hrs	Client Info		677		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
/EAR	Iron	nnm	ASTM D5185m	> 100	<1		
ZEAN	Chromium	ppm	ASTM D5185m		0		
All component wear rates are normal.	Nickel	ppm					
		ppm	ASTM D5185m	>4	0		
	Titanium Silver	ppm	ASTM D5185m	. 0	<1		
		ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		2		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m		0		
	Tin	ppm	ASTM D5185m	>15	0		
	Vanadium	ppm	ASTM D5185m	NONE	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4		
	Potassium	ppm	ASTM D5185m	>20	1		
There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	7.6		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	16.6		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water		*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>44	1		
	Boron	ppm	ASTM D5185m		78		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium		ASTM D5185m		0		
	Molybdenum	ppm ppm	ASTM D5185m		78		
	Manganese	ppm	ASTM D5185m	100	/o <1		
	Magnesium	• • • • • • • • • • • • • • • • • • • •	ASTM D5185m	150	59		
	Calcium	ppm ppm	ASTM D5185m		2091		
	Phosphorus		ASTM D5185m		981		
	Zinc	ppm	ASTM D5185m		1235		
	Sulfur	ppm		1350	4078		
	Oxidation	ppm Abc/1mm	ASTM D5185m				
		Abs/.1mm	*ASTM D7414		12.2		
	Base Number (BN)		ASTM D2896		10.44		
	Visc @ 40°C Visc @ 100°C	cSt cSt	ASTM D445 ASTM D445		98.6 13.5		
	Mec to Hiller,	CST	ASTIVITIA45	144	135		

Contact/Location: CHUCK WISHARD - HIAPLA





Certificate L2367

Report Id: HIAPLA [WUSCAR] 05796719 (Generated: 01/17/2024 10:53:09) Rev: 1

Laboratory Sample No. Lab Number **Unique Number**

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

: WC0772541 : 05796719 : 10386403

Recieved : 20 Mar 2023 Diagnosed

: 23 Mar 2023 Diagnostician : Doug Bogart Test Package : MOB 2 (Additional Tests: KV40, VI)

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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