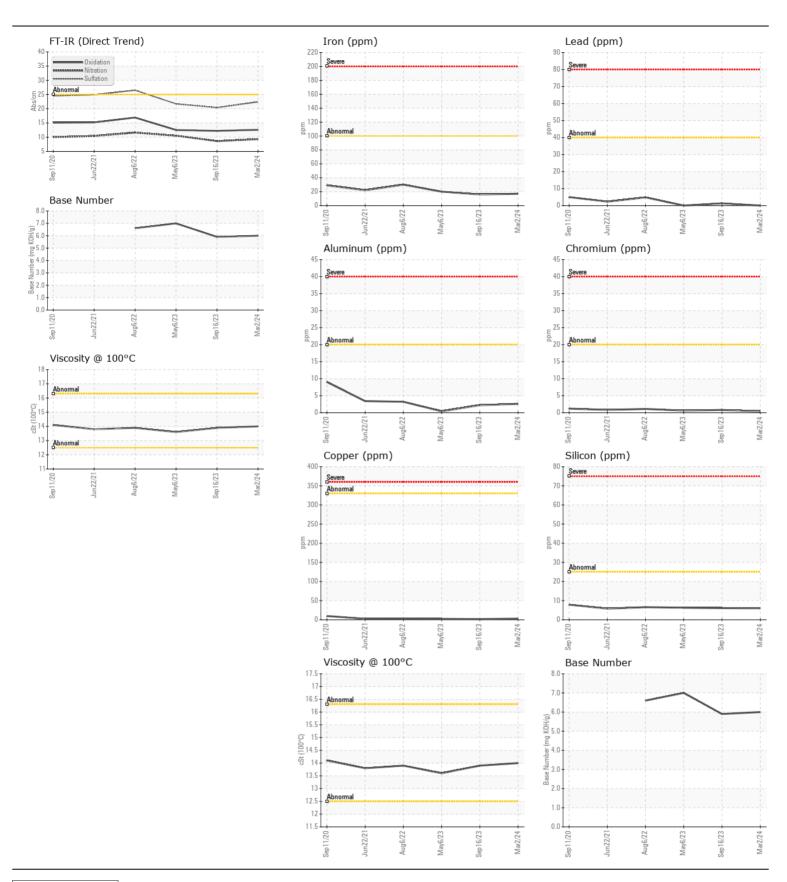
WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

Machine Id **A-398** 

Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		DC0020447	DC0029737	DC002554
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Date		Client Info		02 Mar 2024	16 Sep 2023	06 May 202
	Machine Age	hrs	Client Info		10781	9767	8968
	Oil Age	hrs	Client Info		1014	799	875
	Filter Age	hrs	Client Info		1014	799	875
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	17	16	20
	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	<1	0
	Titanium	ppm	ASTM D5185m		0	<1	0
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m		3	2	<1
	Lead	ppm	ASTM D5185m	>40	0	1	0
	Copper	ppm	ASTM D5185m	>330	3	2	2
	Tin	ppm	ASTM D5185m	>15	0	<1	0
	Vanadium	ppm	ASTM D5185m		0	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	<b>\25</b>	6	6	6
CONTAININATION	Potassium	ppm	ASTM D5185m		4	6	2
There is no indication of any contamination in the oil.	Fuel	ррпп	WC Method		<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	70.L	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	1.4	0.8	1.1
	Nitration	Abs/cm	*ASTM D7624		9.3	8.6	10.5
	Sulfation	Abs/.1mm	*ASTM D7415		22.4	20.4	21.7
	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	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	2	2
LOID CONDITION	Boron		ASTM D5185m		1	<1	<1
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 ppm	ASTM D5185m		0	11	0
	Molybdenum	ppm	ASTM D5185m		4	3	2
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		62	55	41
	Calcium	ppm	ASTM D5185m		2349	2284	2423
	Phosphorus	ppm	ASTM D5185m		934	890	912
	Zinc	ppm	ASTM D5185m		1097	1096	1107
	Sulfur	ppm	ASTM D5185m		4256	3666	4377
	Oxidation	Abs/.1mm	*ASTM D7414	>25	12.6	12.2	12.5
	Base Number (BN)			7 20	6.0	5.9	7.0







Certificate L2367

Laboratory Sample No.

Lab Number : 06146452

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : DC0020447

Received **Tested** Unique Number: 10976530 Diagnosed

Test Package : MOB 1 ( Additional Tests: TBN )

: 12 Apr 2024 : 12 Apr 2024 - Wes Davis

: 11 Apr 2024

**THOMAS BENNETT & HUNTER INC** 70 JOHN ST WESTMINSTER, MD

jstephan@tbhconcrete.com

US 21157 Contact: JOE STEPHAN

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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