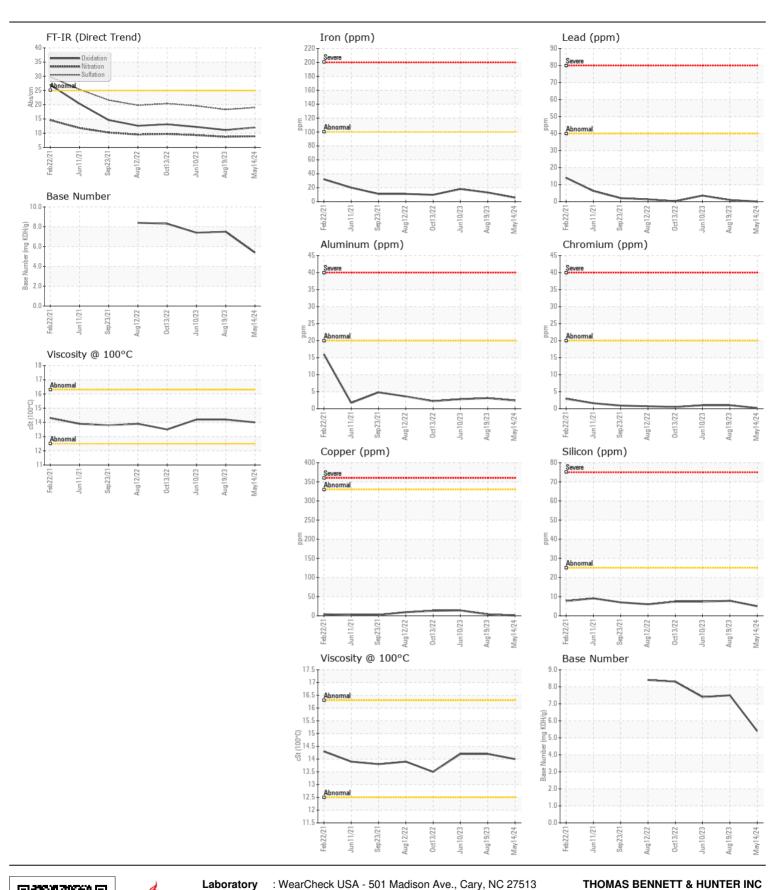
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL **NORMAL**

Machine Id A-370
Component
Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		DC0031958	DC0022573	DC002258
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Date		Client Info		14 May 2024	19 Aug 2023	10 Jun 202
	Machine Age	hrs	Client Info		22864	21192	20885
	Oil Age	hrs	Client Info		941	317	768
	Filter Age	hrs	Client Info		941	317	768
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	ATTENTIO
WEAR	Iron	ppm	ASTM D5185m	>100	6	13	18
WLAII	Chromium	ppm	ASTM D5185m		<1	1	1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		2	2	2
	Titanium	ppm	ASTM D5185m	7 7	0	<1	<1
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m		2	3	3
	Lead	ppm	ASTM D5185m		0	<1	4
	Copper	ppm	ASTM D5185m		<1	4	14
	Tin	ppm	ASTM D5185m		0	<1	<1
	Vanadium	ppm	ASTM D5185m		0	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Ciliana		ACTM DE10E	05	_		
CONTAMINATION	Silicon	ppm	ASTM D5185m		5 3	8 5	7
There is no indication of any contamination in the oil.	Potassium Fuel	ppm	ASTM D5185m WC Method			<1.0	<1.0
	Water		WC Method		<1.0 NEG	NEG	NEG
	Glycol		WC Method	>0.2	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	~3	0.7	0.7	0.7
	Nitration	Abs/cm	*ASTM D7624	>20	8.9	8.7	9.3
	Sulfation	Abs/.1mm	*ASTM D7415		19.0	18.3	19.6
	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
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
TI LUD CONDITION	O "		AOTM DE LOS			40	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	19	163
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		3	2	<1
	Barium	ppm	ASTM D5185m		0	11 4	0
	Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m		3 0	4 <1	19 <1
	Magnesium	ppm	ASTM D5185m		60	48	54
	Calcium	ppm	ASTM D5185m		2315	2257	2527
	Phosphorus	ppm	ASTM D5185m		847	904	966
	Zinc	ppm	ASTM D5185m		1139	1089	1239
	Sulfur	ppm	ASTM D5185m		3637	3680	4756
	Oxidation	Abs/.1mm	*ASTM D7414	>25	12.0	11.1	12.2
	Base Number (BN)		ASTM D2896		5.4	7.5	7.4
	()	0 - 3				14.2	14.2







Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : DC0031958 Lab Number : 06221037

Unique Number: 11099234 Test Package : MOB 1 (Additional Tests: TBN)

Received **Tested** Diagnosed

: 26 Jun 2024 : 27 Jun 2024

: 27 Jun 2024 - Wes Davis

70 JOHN ST WESTMINSTER, MD US 21157

Contact: JOE STEPHAN jstephan@tbhconcrete.com T: (410)848-9030

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)

F: (410)848-9032