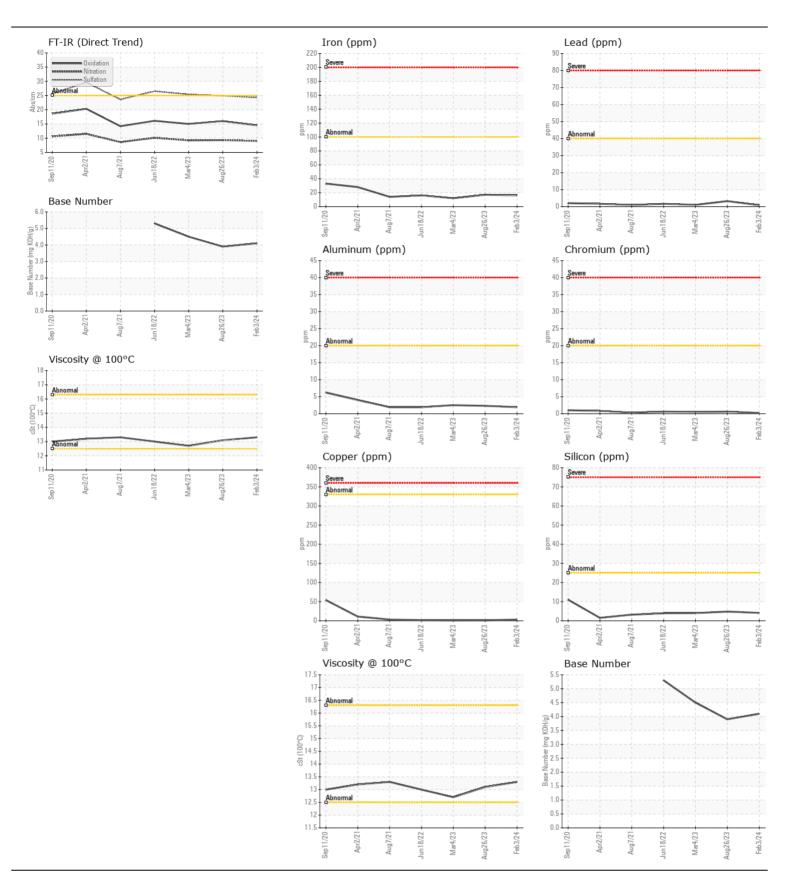
WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

Machine Id
A-401
Component
Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		DC0032166	DC0029743	DC002049
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Date		Client Info		03 Feb 2024	26 Aug 2023	04 Mar 202
	Machine Age	hrs	Client Info		10165	9225	8098
	Oil Age	hrs	Client Info		940	1127	922
	Filter Age	hrs	Client Info		940	1127	922
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAI
WEAR	Iron	ppm	ASTM D5185m	>100	16	17	12
	Chromium	ppm	ASTM D5185m		<1	<1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	<1	<1
	Titanium	ppm	ASTM D5185m		0	<1	0
	Silver	ppm	ASTM D5185m	>3	0	0	<1
	Aluminum	ppm	ASTM D5185m		2	2	2
	Lead	ppm	ASTM D5185m		<1	3	1
	Copper	ppm	ASTM D5185m	>330	3	1	1
	Tin	ppm	ASTM D5185m	>15	<1	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	Silicon	ppm	ASTM D5185m	>25	4	5	4
JOHN AMINATION	Potassium	ppm	ASTM D5185m		2	7	5
There is no indication of any contamination in the oil.	Fuel	pp	WC Method		- <1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.3	0.3	0.3
	Nitration	Abs/cm	*ASTM D7624	>20	9.0	9.3	9.2
	Sulfation	Abs/.1mm	*ASTM D7415	>30	24.3	24.9	25.4
	Silt	scalar	*Visual	NONE	NONE	NONE	NON
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORN
	Odor	scalar	*Visual	NORML	NORML	NORML	NORN
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
LUID CONDITION	Sodium	ppm	ASTM D5185m		7	21	6
	Boron	ppm	ASTM D5185m		<1	0	<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	ASTM D5185m		0	12	0
	Molybdenum	ppm	ASTM D5185m		4	4	3
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		57	50	43
	Calcium	ppm	ASTM D5185m		2265	2220	2436
	Phosphorus	ppm	ASTM D5185m		922	872	910
	Zinc	ppm	ASTM D5185m		1072	1073	1118
	Sulfur	ppm	ASTM D5185m		4116	3466	4454
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.5	16.0	15.0
	Base Number (BN)	mg KOH/g	ASTM D2896		4.1	3.9	4.5
	Visc @ 100°C	cSt	ASTM D445		13.3	13.1	12.7







Certificate L2367

Laboratory Sample No.

Lab Number : 06146456

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : DC0032166

Received **Tested** Unique Number: 10976534 Diagnosed Test Package : MOB 1 (Additional Tests: TBN)

: 11 Apr 2024 : 12 Apr 2024

: 12 Apr 2024 - Wes Davis

THOMAS BENNETT & HUNTER INC 70 JOHN ST WESTMINSTER, MD US 21157

Contact: JOE STEPHAN jstephan@tbhconcrete.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.

T: (410)848-9030 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (410)848-9032