WEAR CONTAMINATION **FLUID CONDITION**

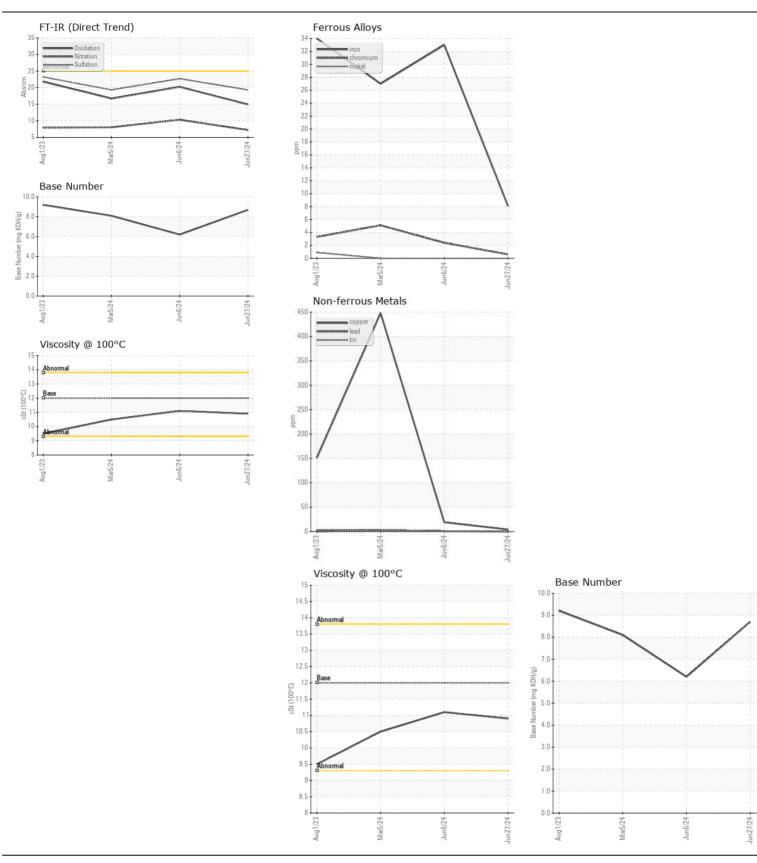
NORMAL NORMAL **NORMAL**

Machine Id

336

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		LW0009424	LW0009194	LW000778
	Sample Date		Client Info		27 Jun 2024	06 Jun 2024	05 Mar 202
	Machine Age	mls	Client Info		269489	269489	0
	Oil Age	mls	Client Info		50000	50000	0
	Filter Age	mls	Client Info		25000	25000	0
	Oil Changed		Client Info		Changed	Changed	N/A
	Filter Changed		Client Info		Changed	Changed	N/A
	Sample Status				NORMAL	NORMAL	ABNORMA
VEAR	Iron	ppm	ASTM D5185m	\100	8	33	27
WE/III	Chromium	ppm	ASTM D5185m		<1	2	5
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	0	0
	Titanium	ppm	ASTM D5185m		0	1	0
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m		7	32	72
	Lead	ppm	ASTM D5185m		0	<1	3
	Copper	ppm	ASTM D5185m		4	19	<u>448</u>
	Tin	ppm	ASTM D5185m		<1	<1	2
	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		ACTM DE10Em	. 05	Δ	7	3
ONTAMINATION	Potassium	ppm	ASTM D5185m ASTM D5185m		4 11	58	138
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	>0.2	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	~3	0.3	0.8	0.4
	Nitration	Abs/cm	*ASTM D7624	>20	7.2	10.3	8.0
	Sulfation	Abs/.1mm	*ASTM D7024		19.3	22.7	19.3
	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		*Visual	>0.2	NEG	NEG	NEG
LUD CONDITION							
LUID CONDITION	Sodium	ppm	ASTM D5185m	0	<1	4	2
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m		6	<1	4
oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		58	61	56
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		934	996	979
	Calcium	ppm	ASTM D5185m		1133	1271	1285
	Phosphorus	ppm	ASTM D5185m		1058	1079	971
	Zinc	ppm	ASTM D5185m		1284	1322	1179
	Sulfur Oxidation	ppm Abo/ 1mm	ASTM D5185m *ASTM D7414		3311	2782	2580
	Base Number (BN)	Abs/.1mm		>20	14.9 8.7	20.2 6.2	16.7 8.1
	Dase Mulliper (DIV)	IIIU NUT/0	MO 1 W D2090		0.7	0.2	0.1







Certificate L2367

Laboratory Sample No.

: LW0009424 Lab Number : 06225577 Unique Number : 11103774 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 01 Jul 2024 **Tested** : 03 Jul 2024

: 03 Jul 2024 - Wes Davis Diagnosed

LIV TRANSPORTATION, INC

9809 INDUSTRIAL DRIVE BRIDGEVIEW, IL US 60455

Contact: BART KORLAGA

BART@LIVTRANSPORTATION.COM

To discuss this sample report, contact Customer Service at 1-800-237-1369.

T: (224)875-1049

* - 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)

Report Id: LIVBRI [WUSCAR] 06225577 (Generated: 07/03/2024 00:13:54) Rev: 1