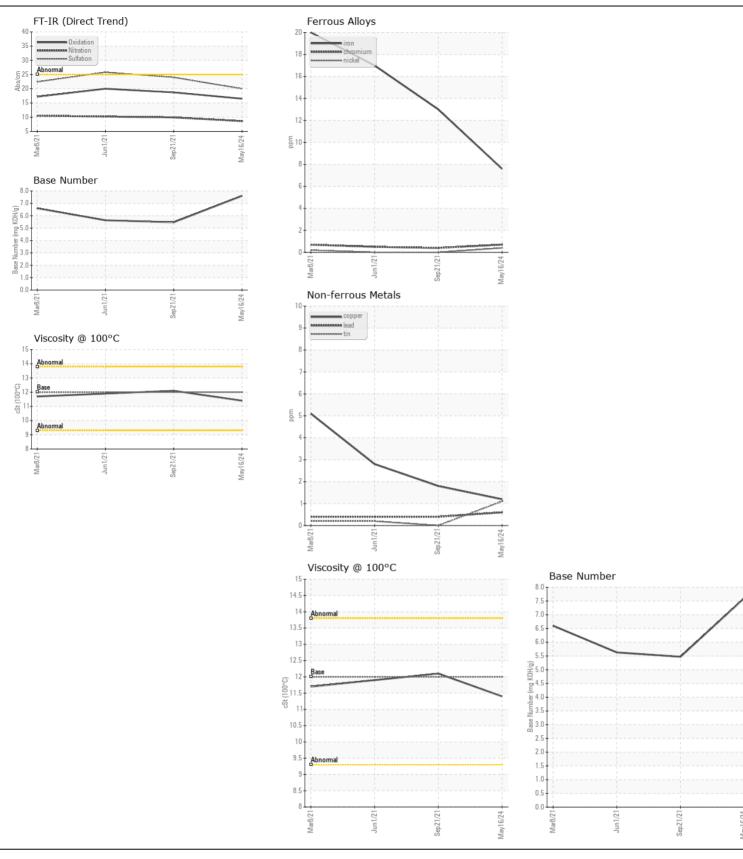
**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL NORMAL NORMAL** 

Machine Id

Truck 286
Component
Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		LW0009177	LW0003162	LW000172
	Sample Date		Client Info		16 May 2024	21 Sep 2021	01 Jun 202
	Machine Age	mls	Client Info		539589	516235	472562
	Oil Age	mls	Client Info		23354	50000	50000
	Filter Age	mls	Client Info		23354	25000	25000
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	nnm	ASTM D5185m	>100	8	13	17
WEAR	Chromium	ppm	ASTM D5185m		o <1	<1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	0	0
	Titanium	ppm	ASTM D5185m	>4	1	74	72
	Silver		ASTM D5185m	. 2	<1	<1	<1
	Aluminum	ppm	ASTM D5185m		2	4	2
	Lead	ppm	ASTM D5185m		<1	<1	<1
	Copper	ppm	ASTM D5185m	-	1	2	3
	Tin	ppm	ASTM D5185m		1	0	<1
	Vanadium	ppm	ASTM D5185m	/10	- <1	<1	1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	5	5	5
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		2	5	5
	Fuel		WC Method		<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844		0.3	0.2	0.3
	Nitration	Abs/cm	*ASTM D7624	>20	8.6	9.9	10.2
	Sulfation	Abs/.1mm	*ASTM D7415		20.0	24	25.8
	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
FLUID CONDITION	Sodium	ppm	ASTM D5185m		<1	1	3
	Boron	ppm	ASTM D5185m	2	17	8	21
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185m	0	0	0	0
	Molybdenum	ppm	ASTM D5185m	50	62	6	5
	Manganese	ppm	ASTM D5185m	0	<1	<1	<1
	Magnesium	ppm	ASTM D5185m	950	890	418	444
	Calcium	ppm	ASTM D5185m	1050	1356	1682	1610
	Phosphorus	ppm	ASTM D5185m	995	1095	934	939
	Zinc	ppm	ASTM D5185m	1180	1330	1153	1040
	Sulfur	ppm	ASTM D5185m	2600	3645	3157	3088
	Oxidation	Abs/.1mm	*ASTM D7414	>25	16.5	18.7	20
	Base Number (BN)	mg KOH/g	ASTM D2896		7.6	5.47	5.63
							11.9







Certificate L2367

Laboratory Sample No.

: LW0009177 Lab Number : 06189920 Unique Number : 11046672 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 23 May 2024 **Tested** : 25 May 2024

: 29 May 2024 - Sean Felton Diagnosed

LIV TRANSPORTATION, INC 9809 INDUSTRIAL DRIVE

BRIDGEVIEW, IL US 60455

Contact: BART KORLAGA BART@LIVTRANSPORTATION.COM

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (224)875-1049

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

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: