



Machine Id
Truck 267
Component
Diesel Engine
Fluid
PHILLIPS 66 Fleet Supreme EC 15W40 (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LW0009423	LW0009170	LW0009164
Sample Date		Client Info		27 Jun 2024	16 May 2024	01 Apr 2024
Machine Age	mls	Client Info		808460	791073	774240
Oil Age	mls	Client Info		17387	16833	25000
Filter Age	mls	Client Info		17387	16833	25000
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	16	24	36
Chromium	ppm	ASTM D5185m	>20	<1	1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	1	0
Aluminum	ppm	ASTM D5185m	>20	3	5	7
Lead	ppm	ASTM D5185m	>40	6	6	6
Copper	ppm	ASTM D5185m	>330	4	7	8
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

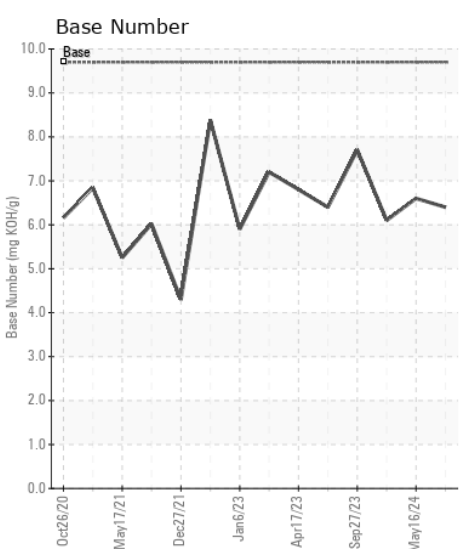
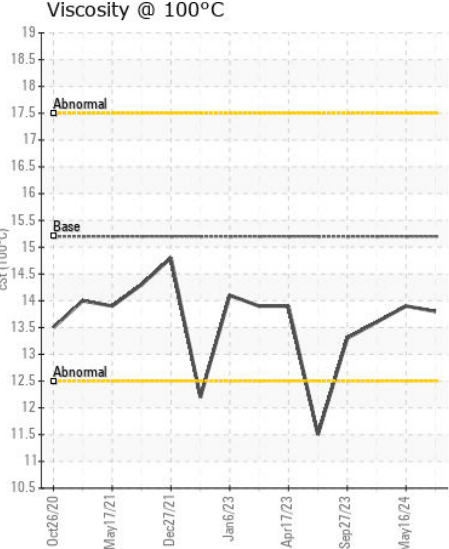
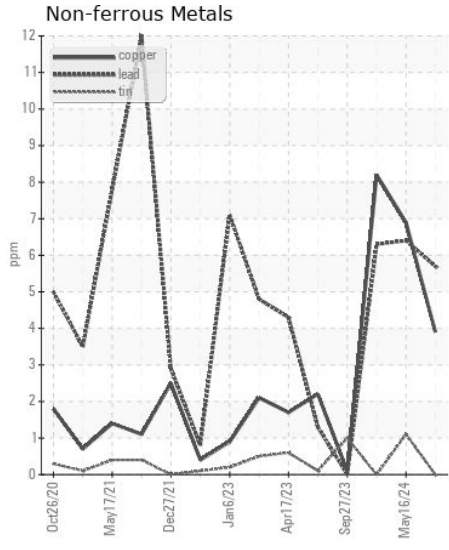
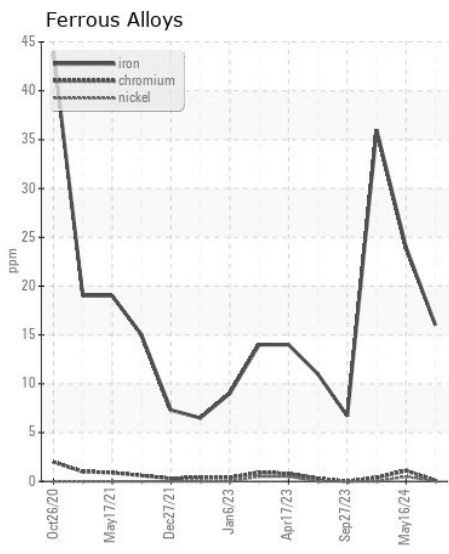
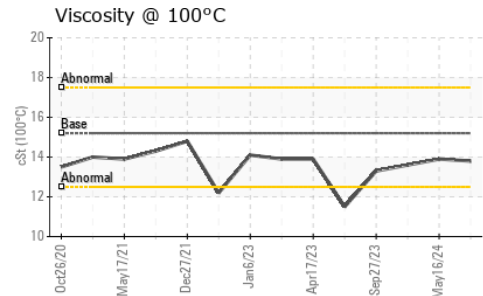
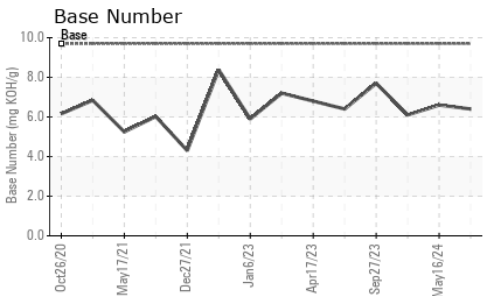
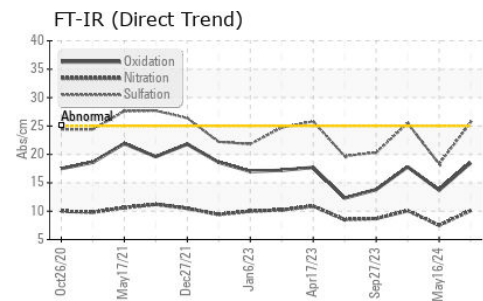
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	7	5
Potassium	ppm	ASTM D5185m	>20	4	8	12
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.3	0.6
Nitration	Abs/cm	*ASTM D7624	>20	10.1	7.5	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.6	18.3	25.5
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	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	2	3
Boron	ppm	ASTM D5185m		15	23	21
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		9	11	10
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		827	850	802
Calcium	ppm	ASTM D5185m		1345	1448	1449
Phosphorus	ppm	ASTM D5185m	1116	1115	1172	1108
Zinc	ppm	ASTM D5185m	1250	1318	1384	1305
Sulfur	ppm	ASTM D5185m		4109	4184	4204
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.5	13.7	17.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.7	6.4	6.6	6.1
Visc @ 100°C	cSt	ASTM D445	15.2	13.8	13.9	13.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LW0009423
Lab Number : 06225592
Unique Number : 11103789
Test Package : FLEET

Received : 01 Jul 2024
Tested : 03 Jul 2024
Diagnosed : 03 Jul 2024 - Wes Davis

LIV TRANSPORTATION, INC
 9809 INDUSTRIAL DRIVE
 BRIDGEVIEW, IL
 US 60455

Contact: BART KORLAGA
 BART@LIVTRANSPORTATION.COM
 T: (224)875-1049

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)