



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
321
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (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		LW0009418	LW0008977	LW0007806
Sample Date		Client Info		27 Jun 2024	11 Mar 2024	07 Sep 2023
Machine Age	mls	Client Info		810995	760673	624000
Oil Age	mls	Client Info		50322	1000	607000
Filter Age	mls	Client Info		25000	1000	0
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	49	15	14
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	8	4	1
Lead	ppm	ASTM D5185m	>40	4	0	<1
Copper	ppm	ASTM D5185m	>330	5	1	<1
Tin	ppm	ASTM D5185m	>15	5	0	1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

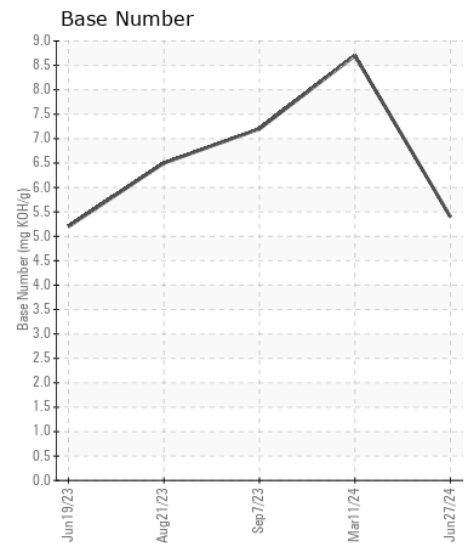
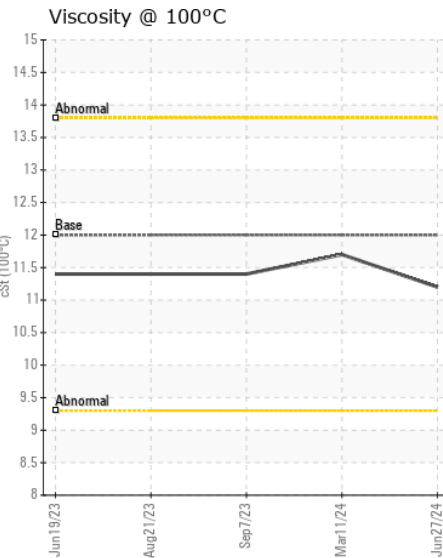
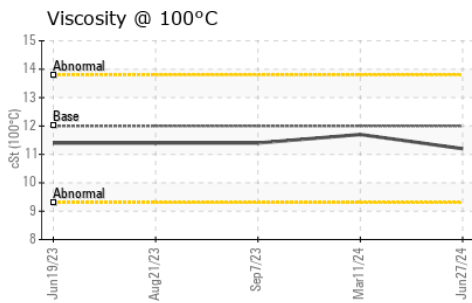
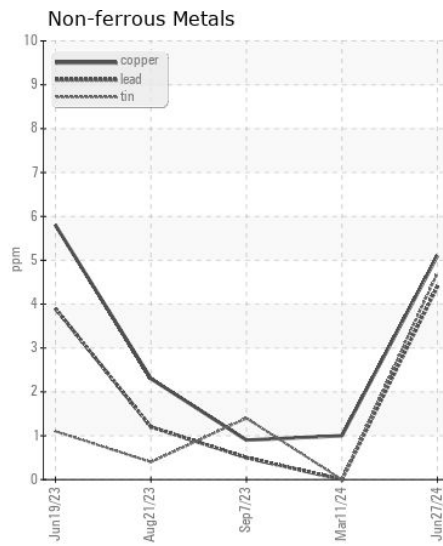
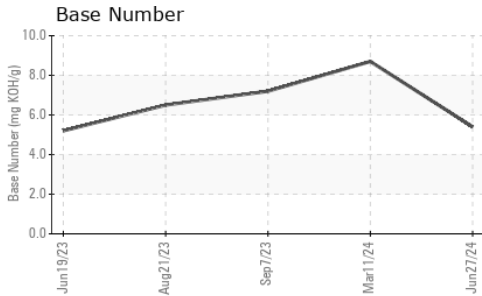
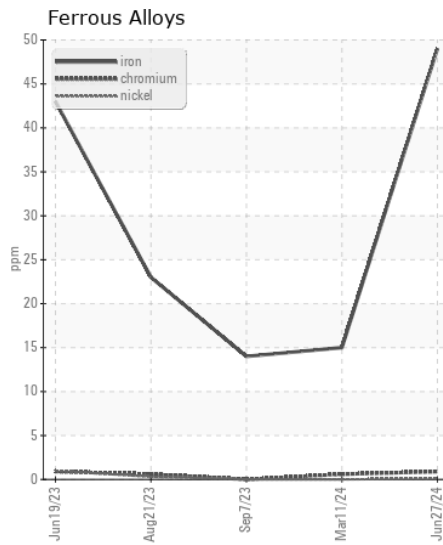
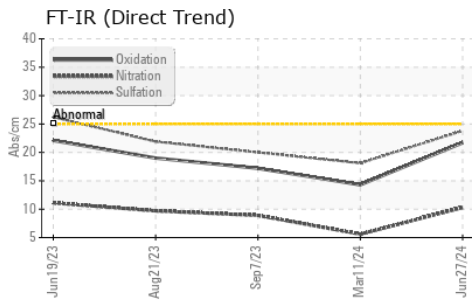
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	8	5	3
Potassium	ppm	ASTM D5185m	>20	6	3	0
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	0.5	0.2	0.4
Nitration	Abs/cm	*ASTM D7624	>20	10.3	5.6	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.8	18.1	20.0
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		13	3	8
Boron	ppm	ASTM D5185m	2	3	8	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	56	57	56
Manganese	ppm	ASTM D5185m	0	<1	0	0
Magnesium	ppm	ASTM D5185m	950	899	937	1049
Calcium	ppm	ASTM D5185m	1050	1123	1194	1164
Phosphorus	ppm	ASTM D5185m	995	965	1091	1013
Zinc	ppm	ASTM D5185m	1180	1250	1261	1301
Sulfur	ppm	ASTM D5185m	2600	2905	3256	2873
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.7	14.3	17.2
Base Number (BN)	mg KOH/g	ASTM D2896		5.4	8.7	7.2
Visc @ 100°C	cSt	ASTM D445	12.00	11.2	11.7	11.4



Certificate L2367

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

Sample No. : LW0009418

Lab Number : 06225584

Unique Number : 11103781

Test Package : FLEET

Received : 01 Jul 2024

Tested : 03 Jul 2024

Diagnosed : 03 Jul 2024 - Wes Davis

LIV TRANSPORTATION, INC

9809 INDUSTRIAL DRIVE

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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)