MOBIL LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FREIGHTLINER 159
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (18 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

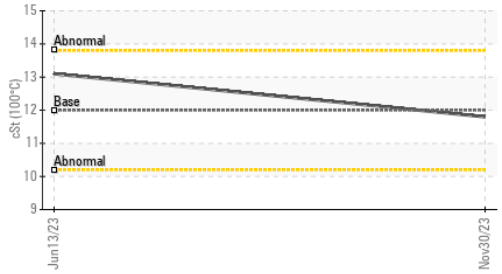
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

FLUID CONDITION

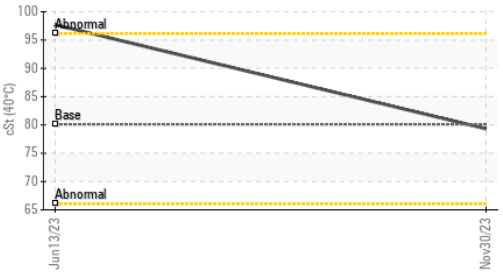
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0081953	PC0071668	---
Sample Date		Client Info		30 Nov 2023	13 Jun 2023	---
Machine Age	kms	Client Info		55071	26158	---
Oil Age	kms	Client Info		28913	26158	---
Filter Age	kms	Client Info		28913	26158	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---
Iron	ppm	ASTM D5185(m)	>80	81	99	---
Chromium	ppm	ASTM D5185(m)	>5	3	3	---
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	---
Titanium	ppm	ASTM D5185(m)		0	<1	---
Silver	ppm	ASTM D5185(m)	>3	0	0	---
Aluminum	ppm	ASTM D5185(m)	>30	7	14	---
Lead	ppm	ASTM D5185(m)	>30	0	<1	---
Copper	ppm	ASTM D5185(m)	>150	5	34	---
Tin	ppm	ASTM D5185(m)	>5	<1	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Silicon	ppm	ASTM D5185(m)	>20	9	34	---
Potassium	ppm	ASTM D5185(m)	>20	16	23	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>3	1	0.8	---
Nitration	Abs/cm	ASTM D7624*	>20	12.1	12.6	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.1	25.3	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---
Sodium	ppm	ASTM D5185(m)		4	7	---
Boron	ppm	ASTM D5185(m)	2	3	44	---
Barium	ppm	ASTM D5185(m)	0	<1	5	---
Molybdenum	ppm	ASTM D5185(m)	50	62	103	---
Manganese	ppm	ASTM D5185(m)	0	1	7	---
Magnesium	ppm	ASTM D5185(m)	950	942	672	---
Calcium	ppm	ASTM D5185(m)	1050	1090	1375	---
Phosphorus	ppm	ASTM D5185(m)	995	950	749	---
Zinc	ppm	ASTM D5185(m)	1180	1174	840	---
Sulfur	ppm	ASTM D5185(m)	2600	2467	2307	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	24.8	25.4	---
Visc @ 40°C	cSt	ASTM D7279(m)	80.1	79.3	97.7	---
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.8	13.1	---
Viscosity Index (VI)	Scale	ASTM D2270*	144	142	131	---

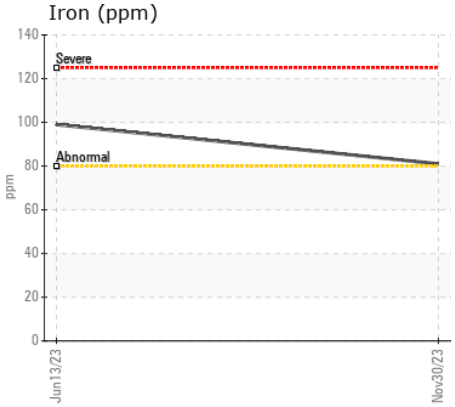
Viscosity @ 100°C



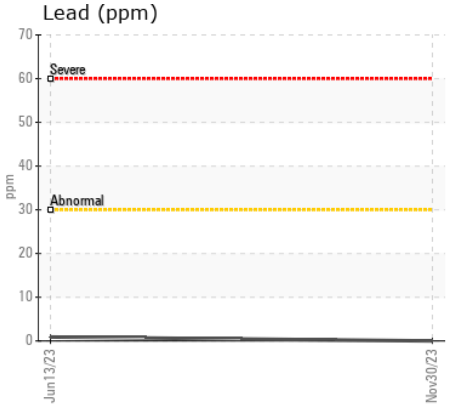
Viscosity @ 40°C



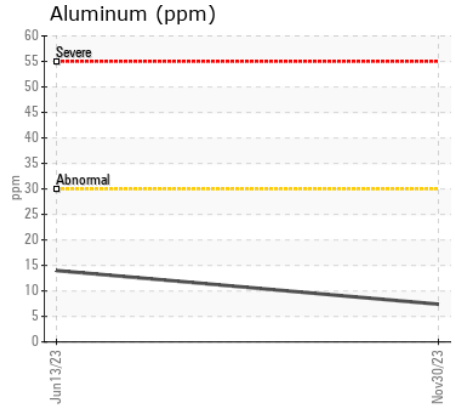
Iron (ppm)



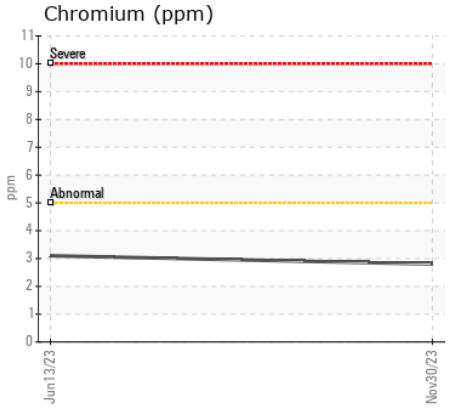
Lead (ppm)



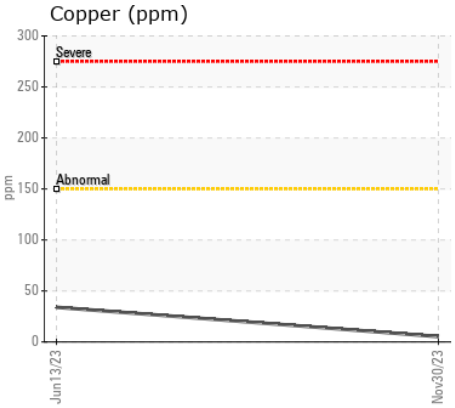
Aluminum (ppm)



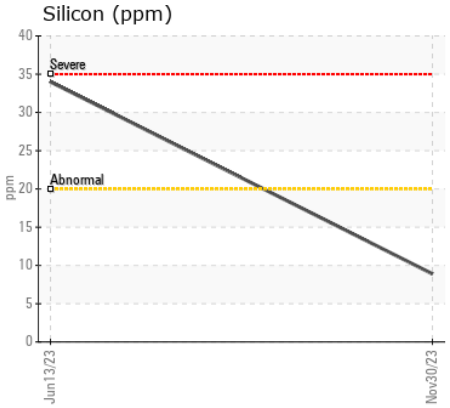
Chromium (ppm)



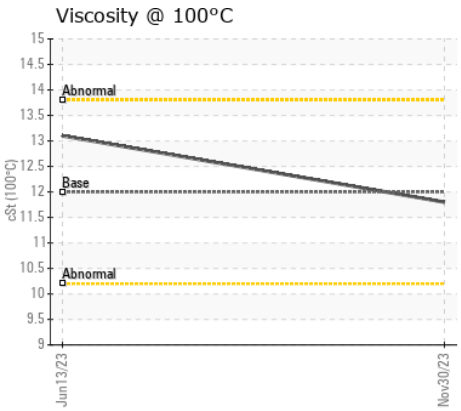
Copper (ppm)



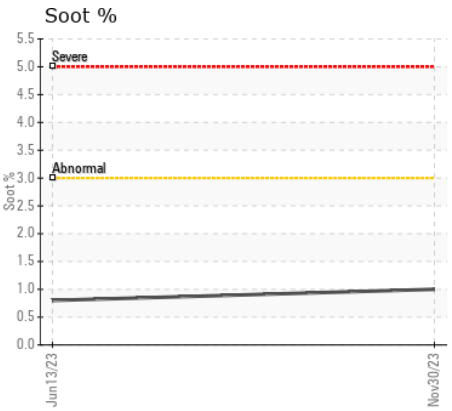
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9		
Sample No.	: PC0081953	**Recieved**	: 04 Jan 2024
Lab Number	: 02606435	**Diagnosed**	: 05 Jan 2024
Unique Number	: 5707521	**Diagnostician**	: Wes Davis
Test Package	: MOB 1 (Additional Tests: KV40, VI, Visual)		

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

ROSS TOWING & TRANSPORTATION SERVICES INC
995 POND MILLS RD
LONDON, ON
CA N6N 1C3
Contact: Dave Ross
chris@rosstowing.ca
T: (519)685-1212
F: (519)668-5790