FLEET LUBE 360™ OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
414059
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- LTR)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core).

CONTAMINATION

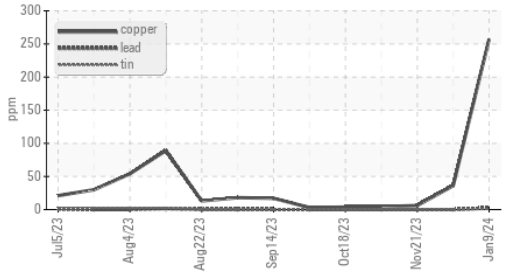
There is no indication of any contamination in the oil.

FLUID CONDITION

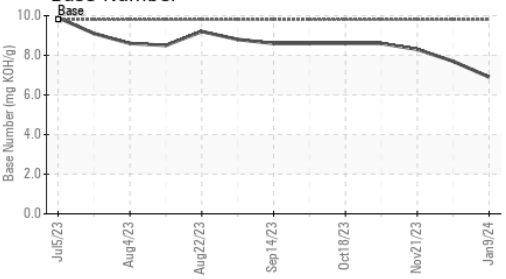
The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0100223	GFL0100190	GFL0100228
Sample Date		Client Info		09 Jan 2024	18 Dec 2023	21 Nov 2023
Machine Age	hrs	Client Info		1316	1174	1017
Oil Age	hrs	Client Info		150	150	400
Filter Age	hrs	Client Info		150	150	400
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>120	19	14	11
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	2	<1	1
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	2	2
Lead	ppm	ASTM D5185m	>40	3	0	0
Copper	ppm	ASTM D5185m	>330	▲ 257	36	6
Tin	ppm	ASTM D5185m	>15	<1	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
Silicon	ppm	ASTM D5185m	>25	8	7	5
Potassium	ppm	ASTM D5185m	>20	13	8	10
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0.3	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.3	7.6	6.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5	19.2	19.1
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
Sodium	ppm	ASTM D5185m		4	3	<1
Boron	ppm	ASTM D5185m	0	1	<1	1
Barium	ppm	ASTM D5185m	0	0	0	2
Molybdenum	ppm	ASTM D5185m	60	63	54	58
Manganese	ppm	ASTM D5185m	0	<1	<1	0
Magnesium	ppm	ASTM D5185m	1010	986	921	883
Calcium	ppm	ASTM D5185m	1070	1010	1005	1014
Phosphorus	ppm	ASTM D5185m	1150	1041	938	930
Zinc	ppm	ASTM D5185m	1270	1264	1163	1150
Sulfur	ppm	ASTM D5185m	2060	2695	2761	4391
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	15.6	14.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.9	7.7	8.3
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	13.3	13.5

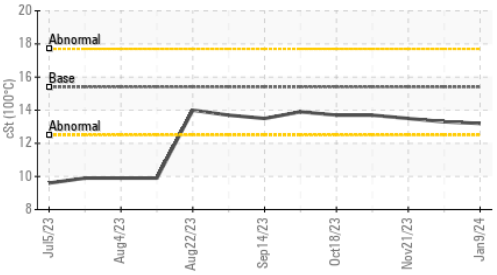
Non-ferrous Metals



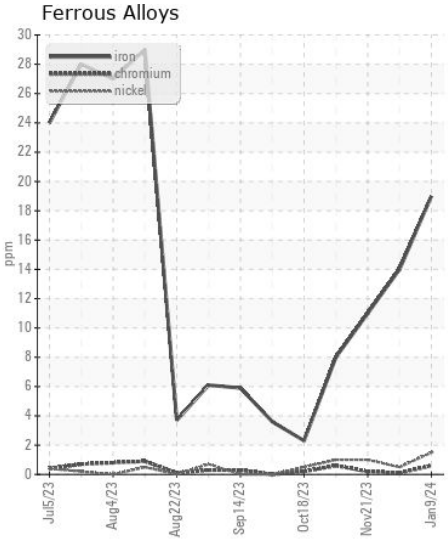
Base Number



Viscosity @ 100°C



Ferrous Alloys



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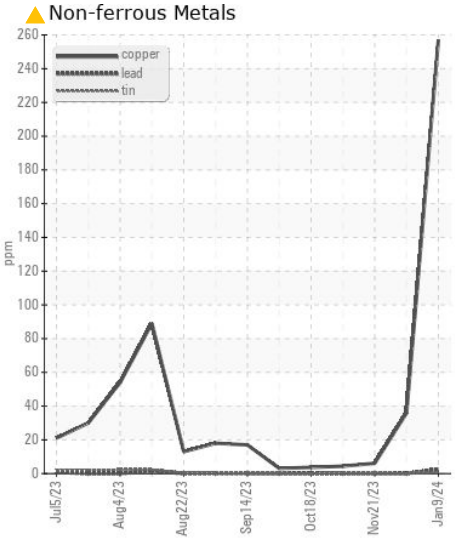

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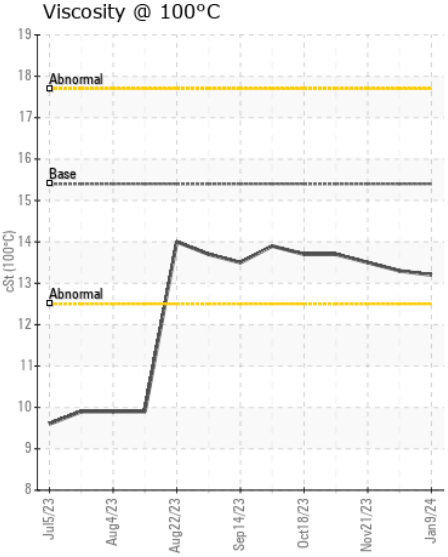

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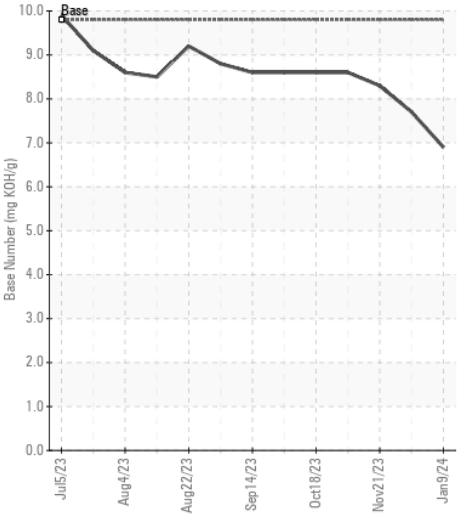

Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: GFL0100223	**Recieved**	: 16 Jan 2024
Lab Number	: 06060698	**Diagnosed**	: 17 Jan 2024
Unique Number	: 10832080	**Diagnostician**	: Jonathan Hester
Test Package	: FLEET		

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)

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