FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
924034-260283
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. 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). All other component wear rates are normal.

CONTAMINATION

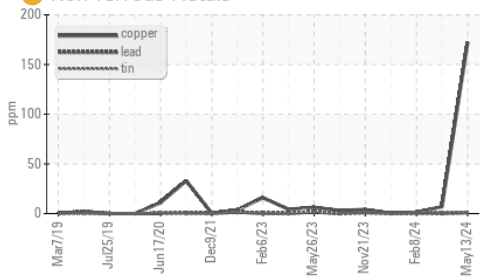
There is no indication of any contamination in the oil.

FLUID CONDITION

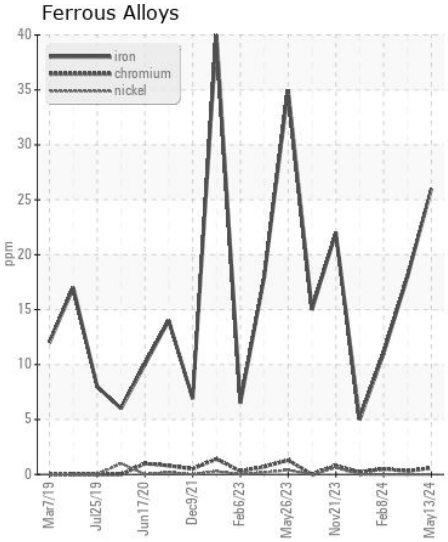
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0119400	GFL0119392	GFL0110879
Sample Date		Client Info		13 May 2024	25 Apr 2024	08 Feb 2024
Machine Age	hrs	Client Info		17738	17643	17448
Oil Age	hrs	Client Info		78529	78529	78529
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	26	18	11
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	3	2
Lead	ppm	ASTM D5185m	>40	1	0	<1
Copper	ppm	ASTM D5185m	>330	172	7	1
Tin	ppm	ASTM D5185m	>15	<1	<1	<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	0	0	2
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	0.3
Nitration	Abs/cm	*ASTM D7624	>20	9.2	8.2	7.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.9	19.7	18.8
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	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		4	4	12
Boron	ppm	ASTM D5185m	0	3	4	3
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	61	63	57
Manganese	ppm	ASTM D5185m	0	1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	966	971	971
Calcium	ppm	ASTM D5185m	1070	1056	1059	992
Phosphorus	ppm	ASTM D5185m	1150	1094	1104	1059
Zinc	ppm	ASTM D5185m	1270	1273	1300	1245
Sulfur	ppm	ASTM D5185m	2060	3377	3660	3185
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.7	15.7	14.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.8	8.1	8.5
Visc @ 100°C	cSt	ASTM D445	15.4	12.9	13.3	13.0

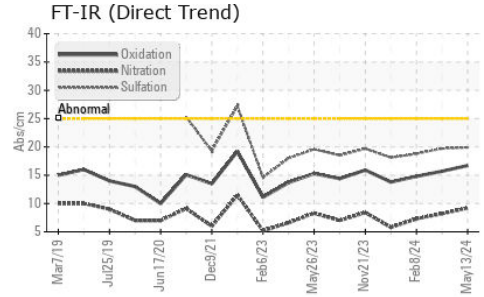
Non-ferrous Metals



Ferrous Alloys



FT-IR (Direct Trend)



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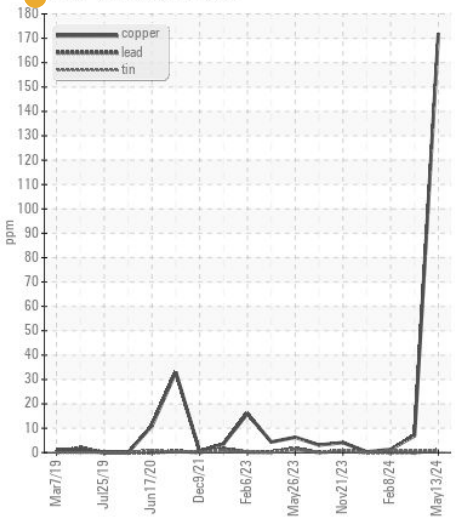
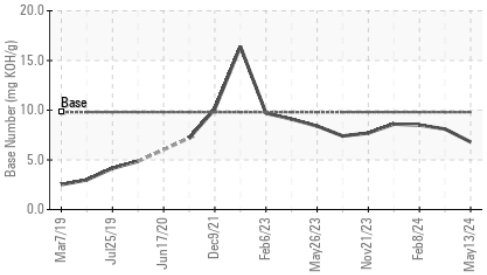
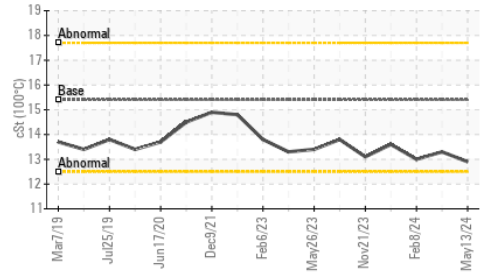


Base Number



Viscosity @ 100°C



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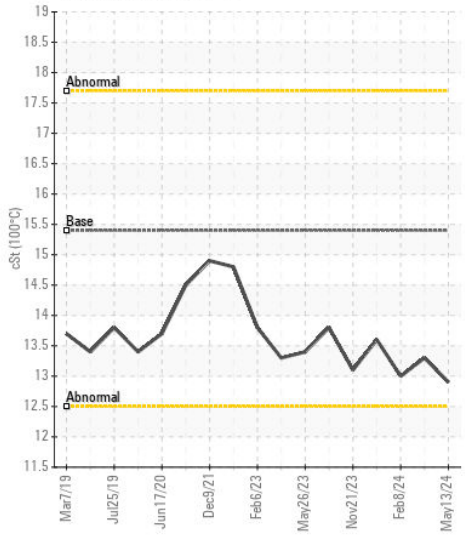
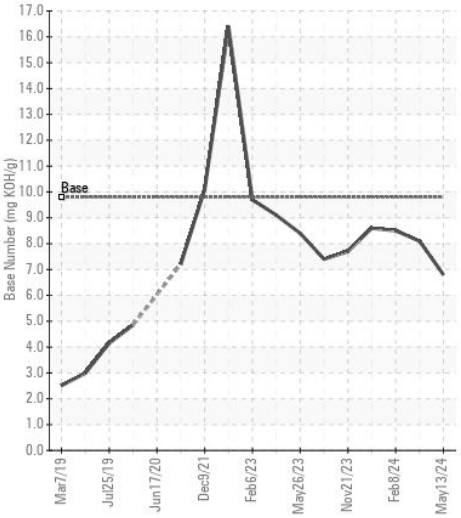


Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0119400
Lab Number : 06187127
Unique Number : 11043879
Test Package : FLEET

Received : 21 May 2024
Tested : 23 May 2024
Diagnosed : 23 May 2024 - Sean Felton

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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