FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
1114M
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 aluminum level is abnormal. All other component wear rates are normal.

CONTAMINATION

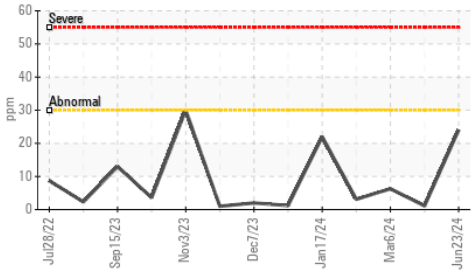
There is no indication of any contamination in the oil.

FLUID CONDITION

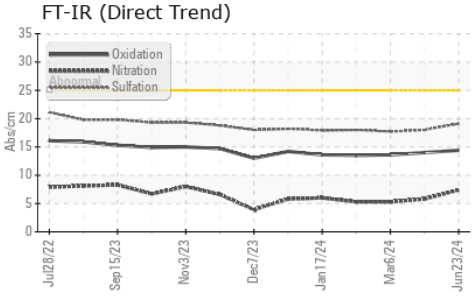
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0124757	GFL0104453	GFL0104294
Sample Date		Client Info		23 Jun 2024	11 Apr 2024	06 Mar 2024
Machine Age	hrs	Client Info		16081	15423	15152
Oil Age	hrs	Client Info		0	300	600
Filter Age	hrs	Client Info		0	300	600
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>80	24	3	5
Chromium	ppm	ASTM D5185m	>5	3	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	▲ 24	1	6
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m	>150	4	<1	<1
Tin	ppm	ASTM D5185m	>5	0	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	>20	10	6	4
Potassium	ppm	ASTM D5185m	>20	24	0	6
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	0.6	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.4	5.8	5.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.1	18.0	17.7
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		3	1	1
Boron	ppm	ASTM D5185m	0	2	2	1
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	59	60	54
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	998	1004	911
Calcium	ppm	ASTM D5185m	1070	1200	1064	979
Phosphorus	ppm	ASTM D5185m	1150	1060	1141	1031
Zinc	ppm	ASTM D5185m	1270	1337	1302	1256
Sulfur	ppm	ASTM D5185m	2060	3610	3807	3135
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.4	14.0	13.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.5	8.8	9.0
Visc @ 100°C	cSt	ASTM D445	15.4	14.4	14.2	14.4

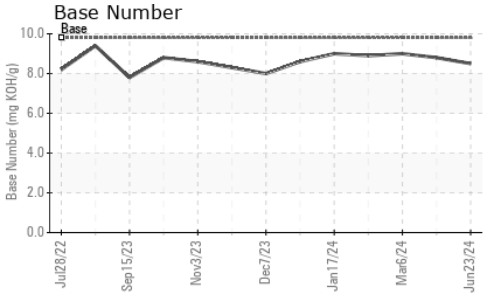
Aluminum (ppm)



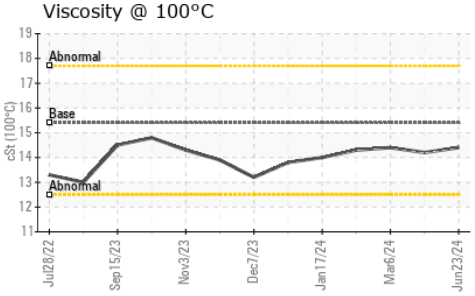
FT-IR (Direct Trend)



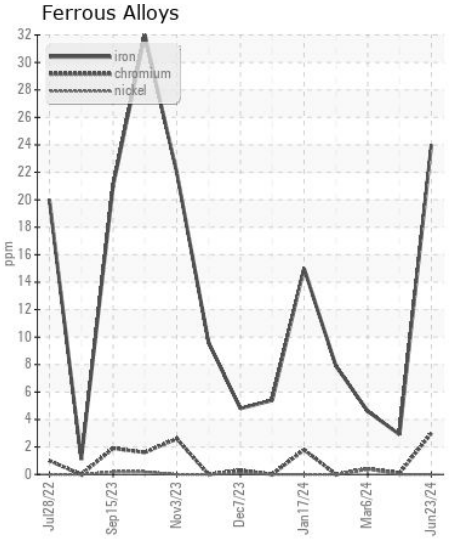
Base Number



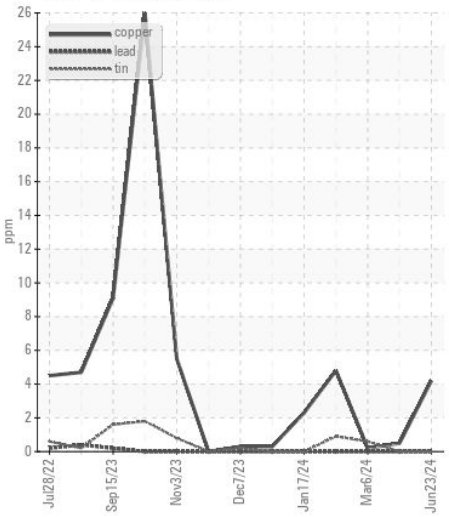
Viscosity @ 100°C



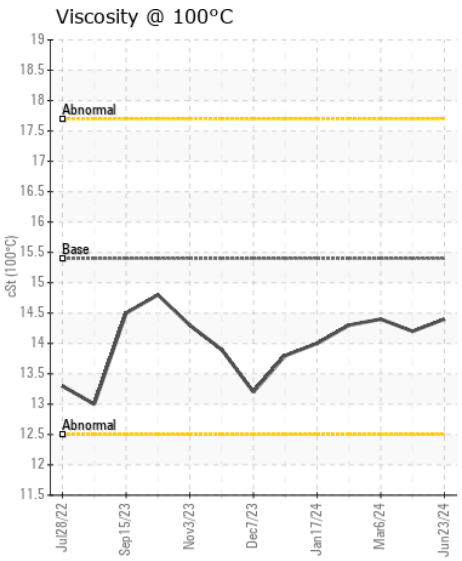
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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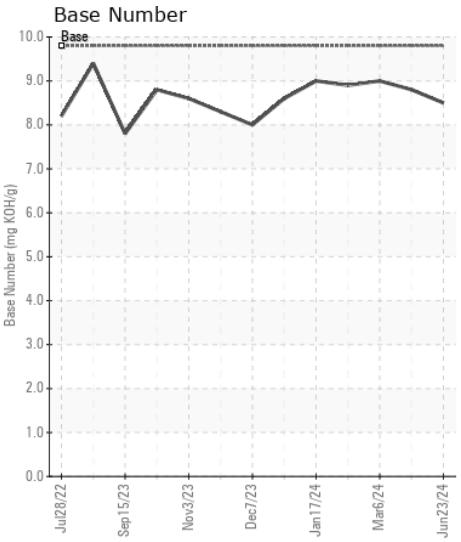

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0124757
Lab Number : 06231304
Unique Number : 11114797
Test Package : FLEET

Received : 09 Jul 2024
Tested : 10 Jul 2024
Diagnosed : 10 Jul 2024 - Don Baldridge

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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