FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
4669M
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

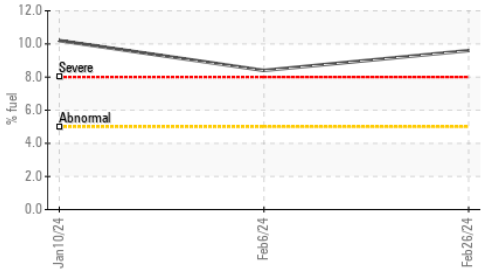
There is a high amount of fuel present in the oil.

FLUID CONDITION

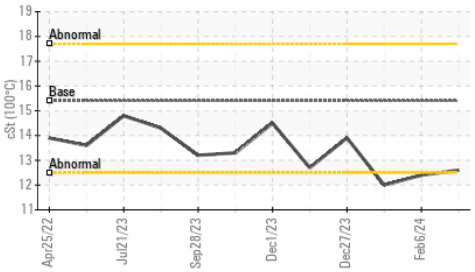
Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0104331	GFL0110072	GFL0104185
Sample Date		Client Info		26 Feb 2024	06 Feb 2024	10 Jan 2024
Machine Age	hrs	Client Info		17783	17587	115370
Oil Age	hrs	Client Info		600	600	113235
Filter Age	hrs	Client Info		600	600	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				SEVERE	SEVERE	SEVERE
Iron	ppm	ASTM D5185m	>80	9	6	2
Chromium	ppm	ASTM D5185m	>5	<1	<1	0
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	3	4	2
Lead	ppm	ASTM D5185m	>30	<1	<1	0
Copper	ppm	ASTM D5185m	>150	0	<1	0
Tin	ppm	ASTM D5185m	>5	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	3	4	2
Potassium	ppm	ASTM D5185m	>20	7	11	6
Fuel	%	ASTM D3524	>5	▲ 9.6	▲ 8.4	▲ 10.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	12.6	12.2	12.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.3	21.3	21.9
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	3
Boron	ppm	ASTM D5185m	0	2	<1	0
Barium	ppm	ASTM D5185m	0	0	<1	0
Molybdenum	ppm	ASTM D5185m	60	53	50	45
Manganese	ppm	ASTM D5185m	0	<1	0	0
Magnesium	ppm	ASTM D5185m	1010	993	770	774
Calcium	ppm	ASTM D5185m	1070	1050	891	835
Phosphorus	ppm	ASTM D5185m	1150	987	864	782
Zinc	ppm	ASTM D5185m	1270	1333	1035	1075
Sulfur	ppm	ASTM D5185m	2060	3134	2868	2448
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.5	23.6	25.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.7	7.4	7.1
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 12.6	▲ 12.4	▲ 12.0

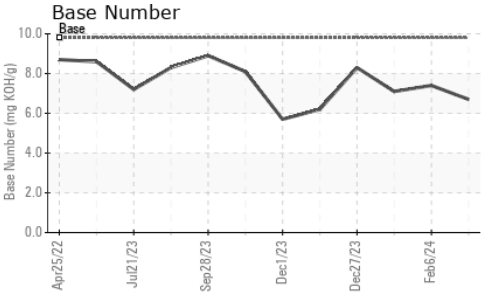
Fuel Dilution



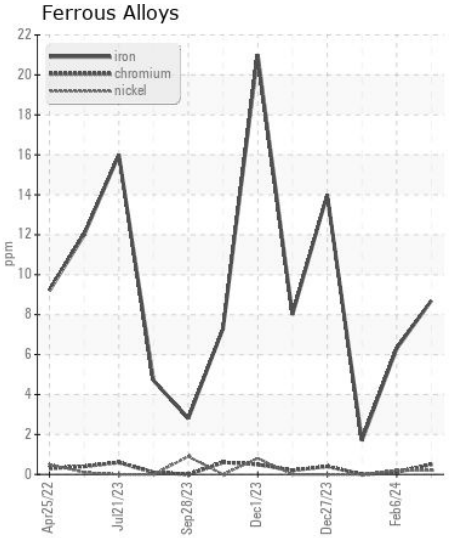
Viscosity @ 100°C



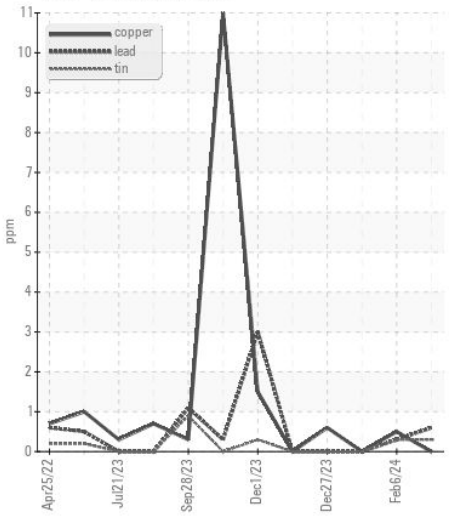
Base Number



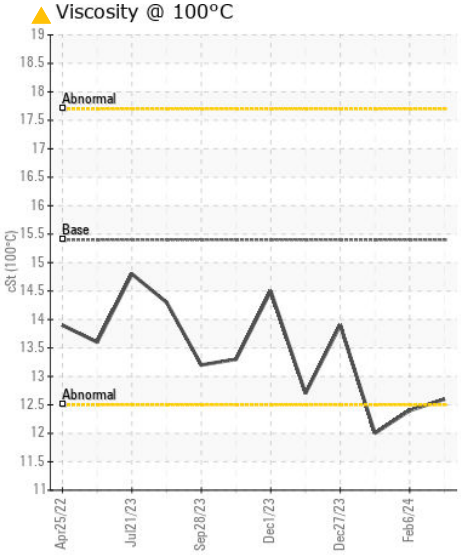
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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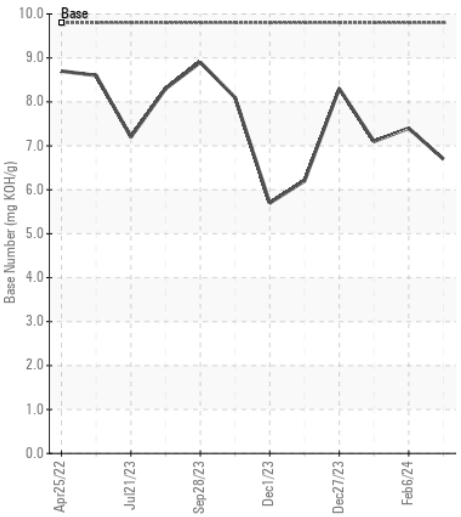

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0104331
Lab Number : 06104130
Unique Number : 10902360
Test Package : FLEET (Additional Tests: PercentFuel)

Received : 29 Feb 2024
Tested : 04 Mar 2024
Diagnosed : 04 Mar 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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