FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
723033-303003
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

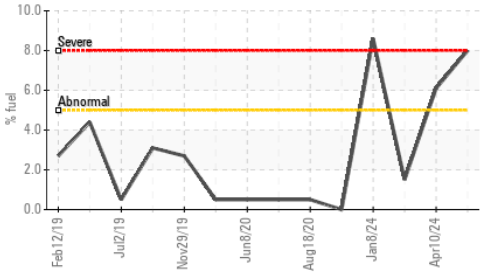
There is a high amount of fuel present in the oil.

FLUID CONDITION

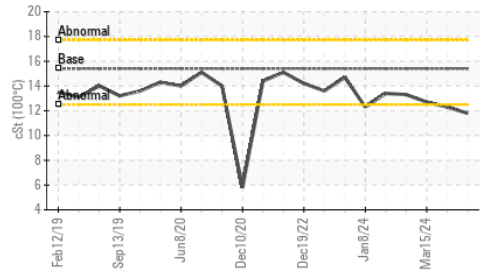
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0118812	GFL0114183	GFL0114155
Sample Date		Client Info		18 Apr 2024	10 Apr 2024	15 Mar 2024
Machine Age	hrs	Client Info		21602	21552	21421
Oil Age	hrs	Client Info		21605	21320	21189
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				SEVERE	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>80	28	19	43
Chromium	ppm	ASTM D5185m	>5	2	1	3
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>30	3	1	3
Lead	ppm	ASTM D5185m	>30	2	2	3
Copper	ppm	ASTM D5185m	>150	99	31	▲ 173
Tin	ppm	ASTM D5185m	>5	2	<1	2
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	7	5	13
Potassium	ppm	ASTM D5185m	>20	7	16	18
Fuel	%	ASTM D3524	>5	▲ 8.0	▲ 6.1	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.4	0.6
Nitration	Abs/cm	*ASTM D7624	>20	8.1	7.3	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2	19.3	20.0
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	8	9
Boron	ppm	ASTM D5185m	0	<1	0	<1
Barium	ppm	ASTM D5185m	0	<1	0	4
Molybdenum	ppm	ASTM D5185m	60	57	54	56
Manganese	ppm	ASTM D5185m	0	1	<1	2
Magnesium	ppm	ASTM D5185m	1010	823	852	885
Calcium	ppm	ASTM D5185m	1070	980	1001	1059
Phosphorus	ppm	ASTM D5185m	1150	989	949	960
Zinc	ppm	ASTM D5185m	1270	1117	1135	1166
Sulfur	ppm	ASTM D5185m	2060	2923	3193	3143
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.6	15.0	16.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.8	8.4	8.0
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 11.8	▲ 12.3	12.7

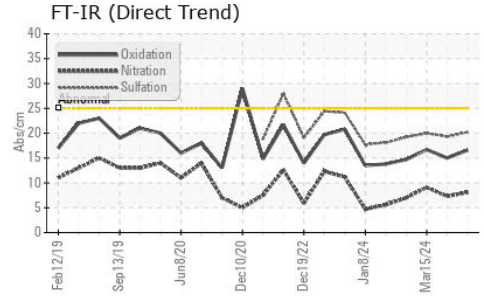
Fuel Dilution



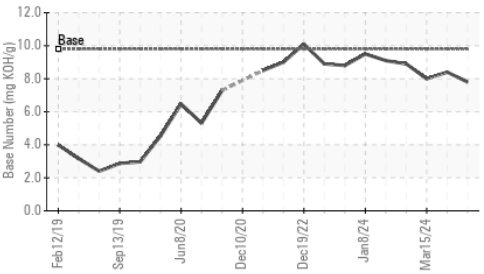
Viscosity @ 100°C



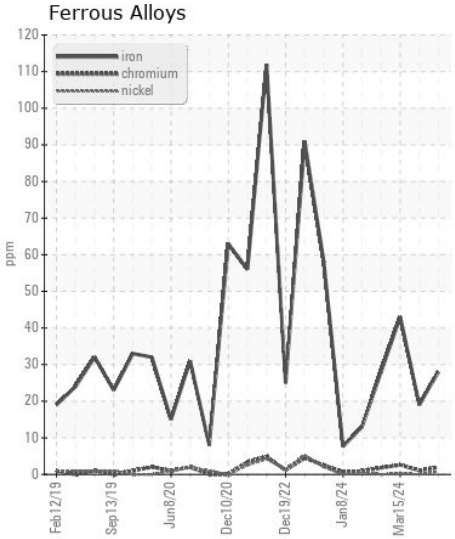
FT-IR (Direct Trend)



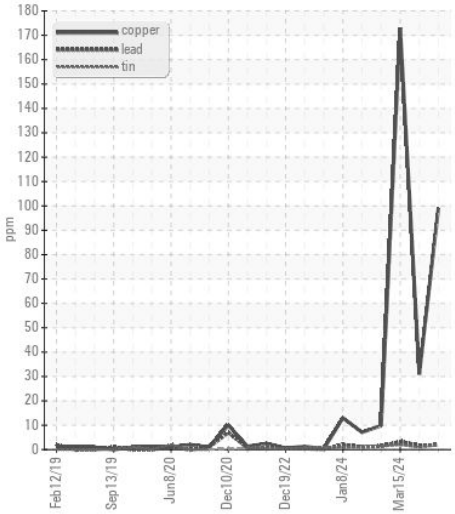
Base Number



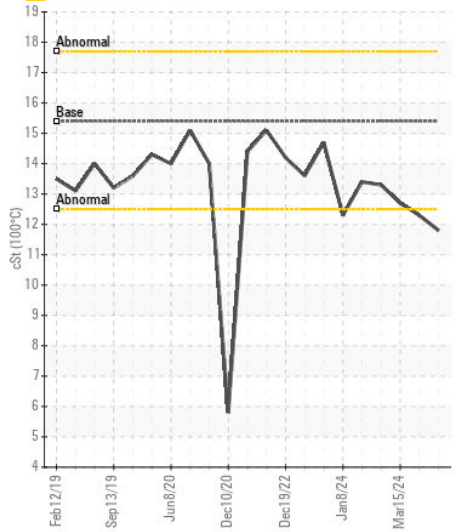
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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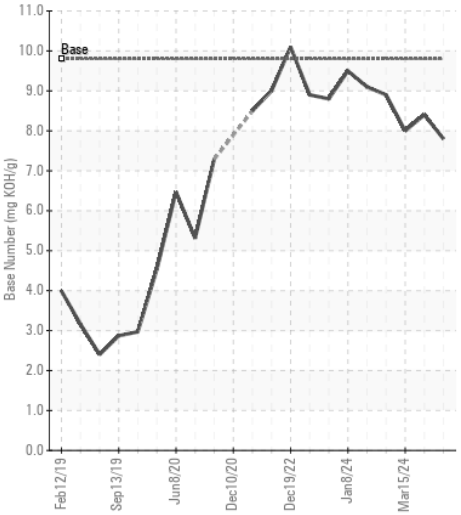

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0118812
Lab Number : 06156749
Unique Number : 10992172
Test Package : FLEET (Additional Tests: PercentFuel)

Received : 22 Apr 2024
Tested : 25 Apr 2024
Diagnosed : 25 Apr 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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