FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Machine Id
4698M
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

Aluminum ppm levels are noted. All other component wear rates are normal.

CONTAMINATION

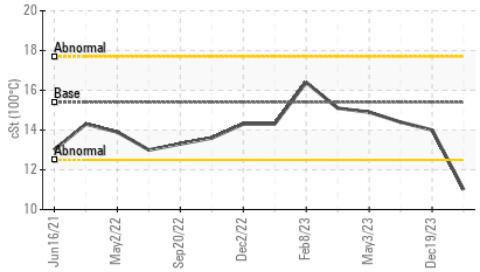
Light fuel dilution occurring.

FLUID CONDITION

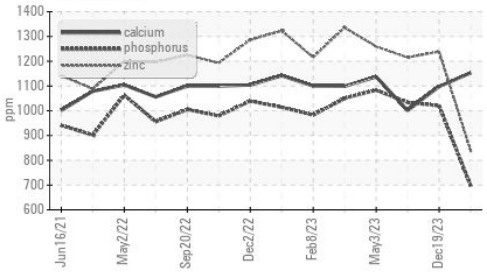
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0107658	GFL0107088	GFL0091548
Sample Date		Client Info		19 Feb 2024	19 Dec 2023	18 Sep 2023
Machine Age	hrs	Client Info		13086	12692	12491
Oil Age	hrs	Client Info		600	600	600
Filter Age	hrs	Client Info		600	600	600
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				ABNORMAL	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>100	49	21	20
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	6	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	▲ 9	<1	1
Lead	ppm	ASTM D5185m	>40	1	0	0
Copper	ppm	ASTM D5185m	>330	2	4	30
Tin	ppm	ASTM D5185m	>15	0	<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	10	4	21
Potassium	ppm	ASTM D5185m	>20	6	2	11
Fuel	%	ASTM D3524	>5	▲ 3.3	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	1.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	11.0	9.7	7.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.1	21.3	17.6
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	6	▲ 1152
Boron	ppm	ASTM D5185m	0	▲ 40	2	31
Barium	ppm	ASTM D5185m	0	0	<1	0
Molybdenum	ppm	ASTM D5185m	60	60	61	118
Manganese	ppm	ASTM D5185m	0	<1	1	<1
Magnesium	ppm	ASTM D5185m	1010	671	917	880
Calcium	ppm	ASTM D5185m	1070	1153	1098	1001
Phosphorus	ppm	ASTM D5185m	1150	▲ 698	1020	1034
Zinc	ppm	ASTM D5185m	1270	▲ 841	1239	1215
Sulfur	ppm	ASTM D5185m	2060	2394	2585	3791
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.4	16.3	12.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	5.6	6.9	14.0
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 11.0	14.0	14.4

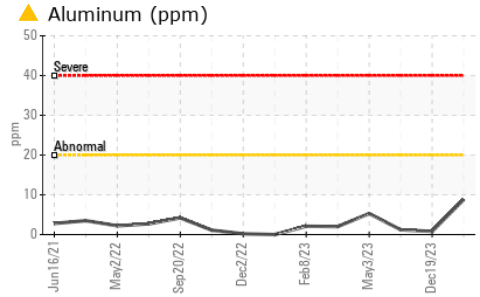
Viscosity @ 100°C



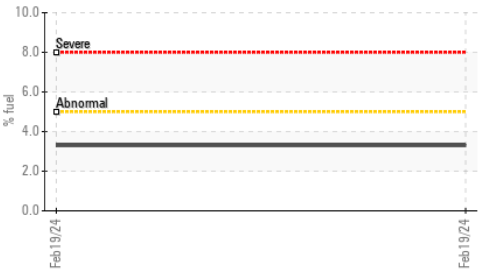
Additives



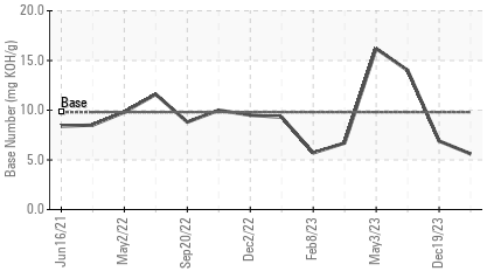
Aluminum (ppm)



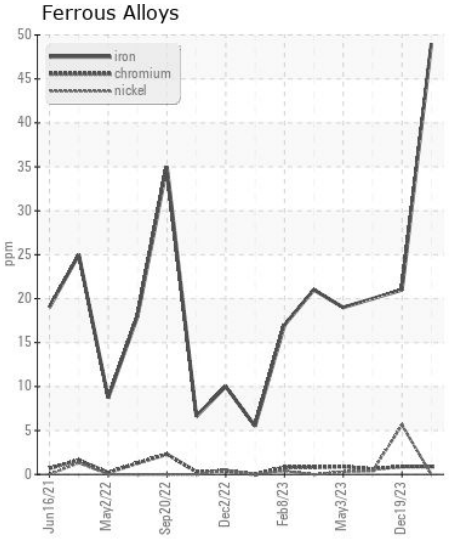
Fuel Dilution



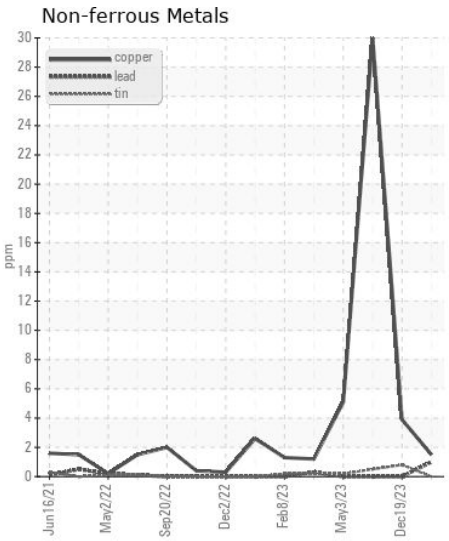
Base Number



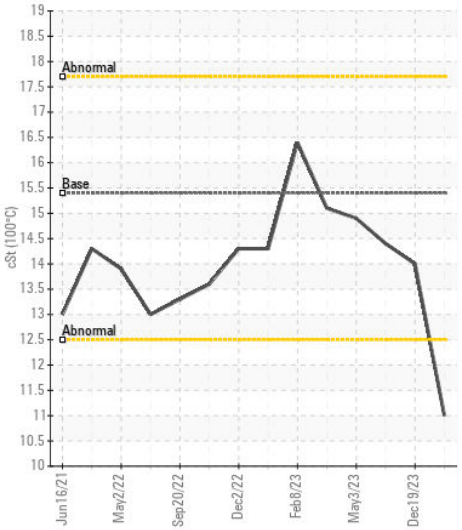
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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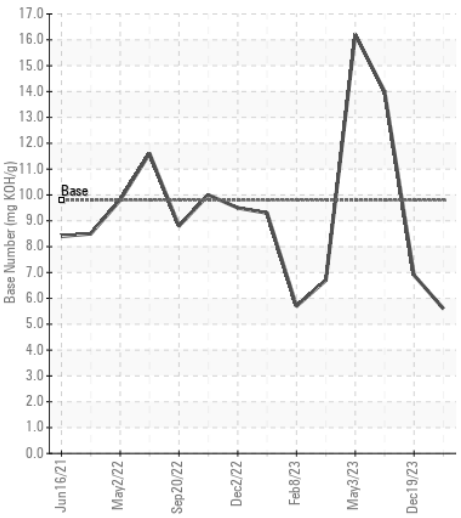

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0107658
Lab Number : 06099013
Unique Number : 10897243
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Received : 23 Feb 2024
Tested : 27 Feb 2024
Diagnosed : 27 Feb 2024 - Wes Davis

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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