FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
727012-518
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- LTR)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

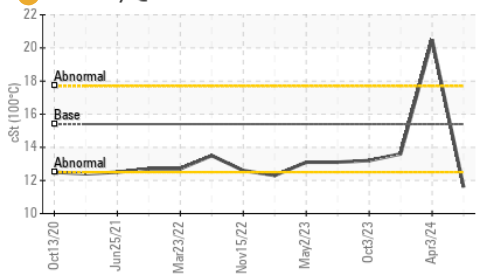
Fuel content negligible. There is no indication of any contamination in the oil.

FLUID CONDITION

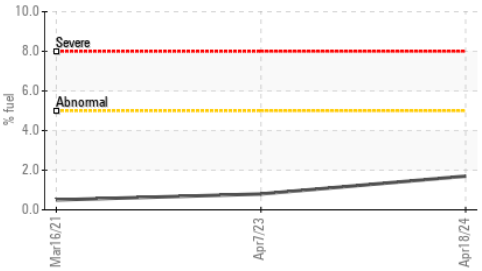
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0119059	GFL0104892	GFL0077784
Sample Date		Client Info		18 Apr 2024	03 Apr 2024	30 Oct 2023
Machine Age	mls	Client Info		164175	373688	20786
Oil Age	mls	Client Info		164175	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				ATTENTION	SEVERE	NORMAL
Iron	ppm	ASTM D5185m	>100	4	25	0
Chromium	ppm	ASTM D5185m	>20	<1	0	0
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	<1	0	<1
Lead	ppm	ASTM D5185m	>40	0	1	0
Copper	ppm	ASTM D5185m	>330	<1	6	0
Tin	ppm	ASTM D5185m	>15	0	0	0
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	3	1	4
Potassium	ppm	ASTM D5185m	>20	16	0	<1
Fuel	%	ASTM D3524	>5	1.7	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	▲ 8.3	0
Nitration	Abs/cm	*ASTM D7624	>20	7.9	49.6	4.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.4	82.8	17.0
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	<1	0
Boron	ppm	ASTM D5185m	0	7	0	12
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	63	55	56
Manganese	ppm	ASTM D5185m	0	<1	0	0
Magnesium	ppm	ASTM D5185m	1010	956	924	874
Calcium	ppm	ASTM D5185m	1070	1138	1084	982
Phosphorus	ppm	ASTM D5185m	1150	1067	955	1006
Zinc	ppm	ASTM D5185m	1270	1272	1213	1180
Sulfur	ppm	ASTM D5185m	2060	3437	3022	3018
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.2	125.0	12.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.6	▲ 0.0	9.3
Visc @ 100°C	cSt	ASTM D445	15.4	● 11.6	▲ 20.5	13.6

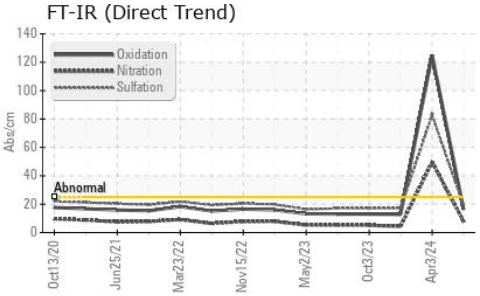
Viscosity @ 100°C



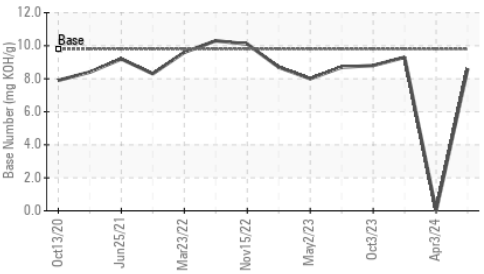
Fuel Dilution



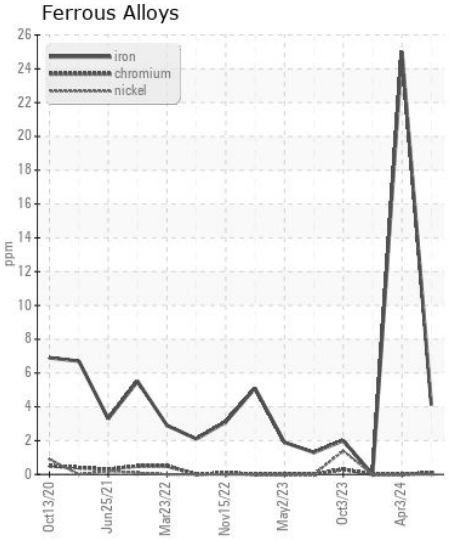
FT-IR (Direct Trend)



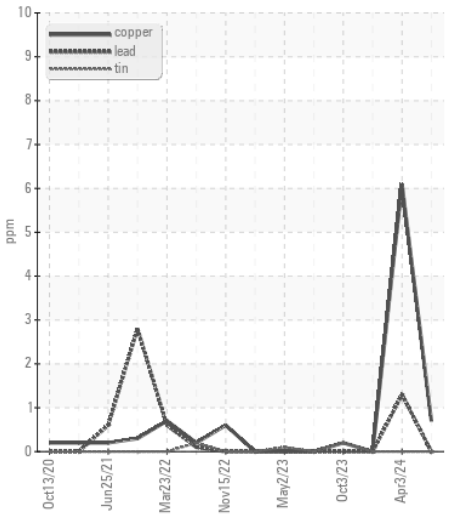
Base Number



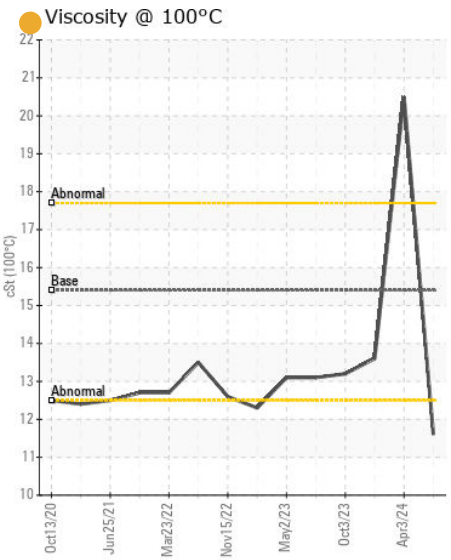
Ferrous Alloys



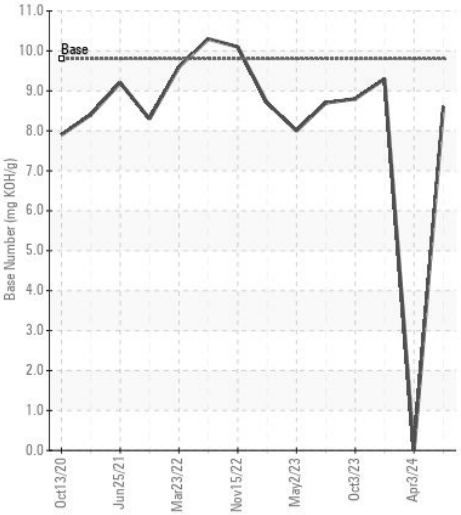
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0119059
Lab Number : 06158931
Unique Number : 10994354
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Received : 24 Apr 2024
Tested : 26 Apr 2024
Diagnosed : 26 Apr 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)

GFL Environmental - 650 - West Point Hauling
7825 Parham Landing Road
West Point, VA
US 23181
Contact: Jason Smith
jasonsmith@gflenv.com
T: (804)843-9288
F: