FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
922010
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

Valve wear is indicated. All other component wear rates are normal.

CONTAMINATION

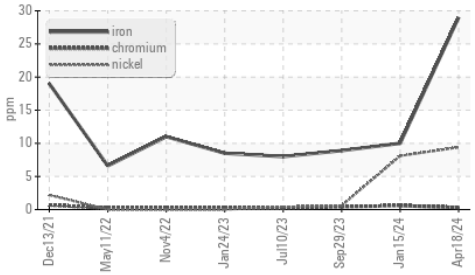
There is no indication of any contamination in the oil.

FLUID CONDITION

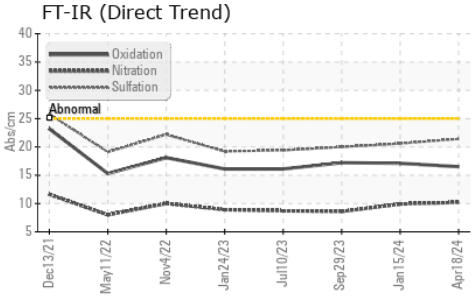
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0116139	GFL0104550	GFL0082512
Sample Date		Client Info		18 Apr 2024	15 Jan 2024	29 Sep 2023
Machine Age	hrs	Client Info		30647	30040	29444
Oil Age	hrs	Client Info		619	596	604
Filter Age	hrs	Client Info		619	596	604
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>120	29	10	9
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	▲ 9	▲ 8	<1
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	8	3	2
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	<1	1	<1
Tin	ppm	ASTM D5185m	>15	1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	10	4	4
Potassium	ppm	ASTM D5185m	>20	2	1	<1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	1.5	0.9	0.5
Nitration	Abs/cm	*ASTM D7624	>20	10.2	9.9	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	20.6	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		8	4	5
Boron	ppm	ASTM D5185m	0	2	0	2
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	60	53	60
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	947	900	927
Calcium	ppm	ASTM D5185m	1070	1034	975	1015
Phosphorus	ppm	ASTM D5185m	1150	1038	953	980
Zinc	ppm	ASTM D5185m	1270	1228	1141	1222
Sulfur	ppm	ASTM D5185m	2060	3316	2741	2876
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.5	17.1	17.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.7	6.9	7.0
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	13.6	13.3

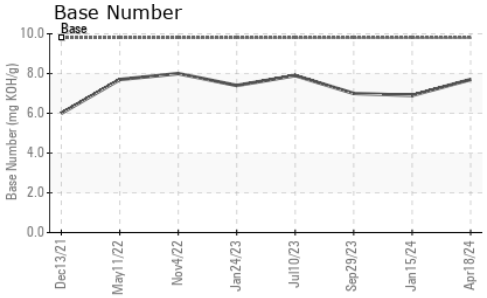
Ferrous Alloys



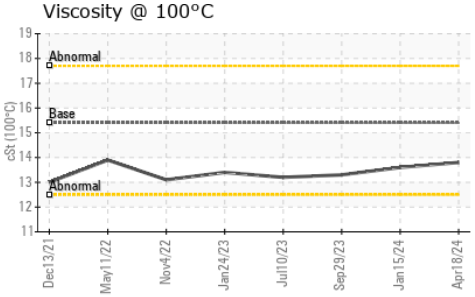
FT-IR (Direct Trend)



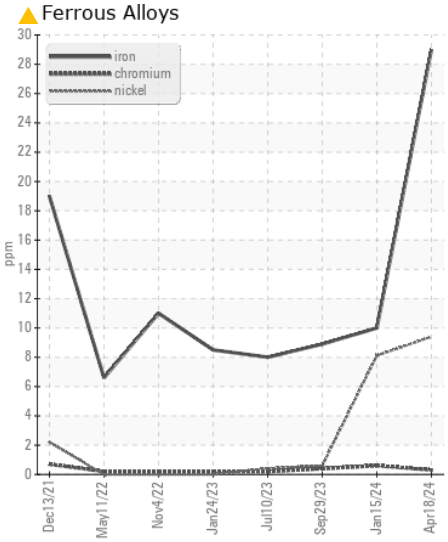
Base Number



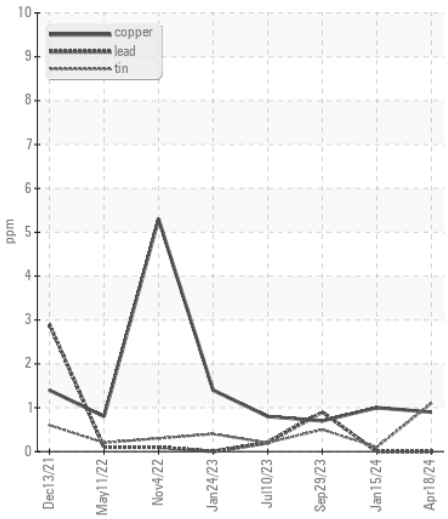
Viscosity @ 100°C



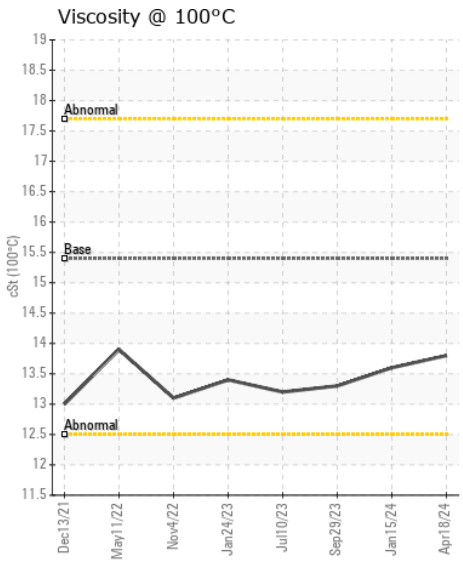
Ferrous Alloys



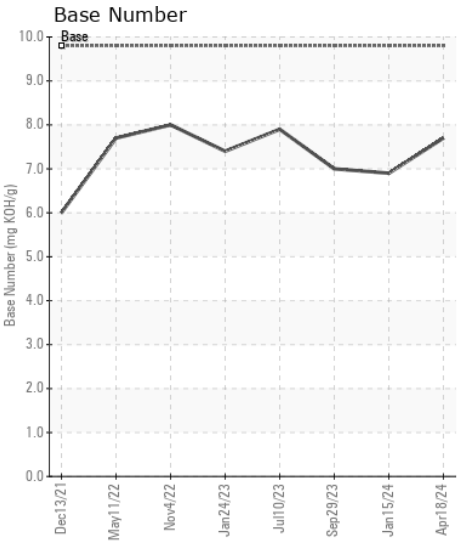
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0116139
Lab Number : 06156785
Unique Number : 10992208
Test Package : FLEET

Received : 22 Apr 2024
Tested : 23 Apr 2024
Diagnosed : 24 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)

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