FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
841M
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (3 GAL)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

Piston, ring and cylinder wear is indicated.

CONTAMINATION

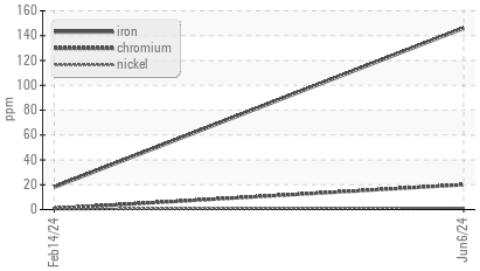
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

FLUID CONDITION

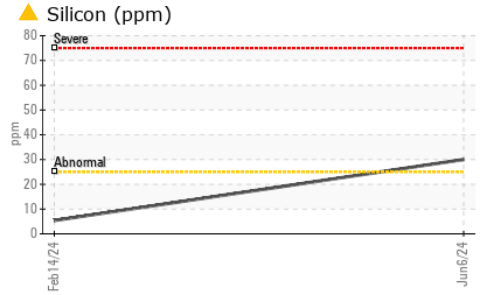
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0124764	GFL0106677	---
Sample Date		Client Info		06 Jun 2024	14 Feb 2024	---
Machine Age	hrs	Client Info		8180	7262	---
Oil Age	hrs	Client Info		918	0	---
Filter Age	hrs	Client Info		918	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	NORMAL	---
Iron	ppm	ASTM D5185m	>100	▲ 146	18	---
Chromium	ppm	ASTM D5185m	>20	▲ 20	<1	---
Nickel	ppm	ASTM D5185m	>2	1	<1	---
Titanium	ppm	ASTM D5185m	>2	<1	<1	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>25	● 7	3	---
Lead	ppm	ASTM D5185m	>40	11	<1	---
Copper	ppm	ASTM D5185m	>330	11	1	---
Tin	ppm	ASTM D5185m	>15	3	0	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>25	▲ 30	5	---
Potassium	ppm	ASTM D5185m	>20	6	1	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.8	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	16.8	7.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.7	19.1	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---
Sodium	ppm	ASTM D5185m		31	2	---
Boron	ppm	ASTM D5185m	0	18	1	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	60	45	62	---
Manganese	ppm	ASTM D5185m	0	2	0	---
Magnesium	ppm	ASTM D5185m	1010	530	1057	---
Calcium	ppm	ASTM D5185m	1070	1889	1117	---
Phosphorus	ppm	ASTM D5185m	1150	1019	1108	---
Zinc	ppm	ASTM D5185m	1270	1256	1365	---
Sulfur	ppm	ASTM D5185m	2060	3300	3124	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	30.9	15.7	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	5.8	8.2	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	14.0	---

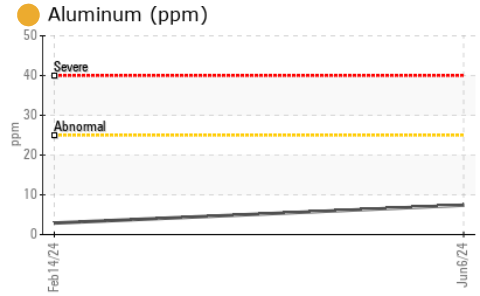
Ferrous Alloys



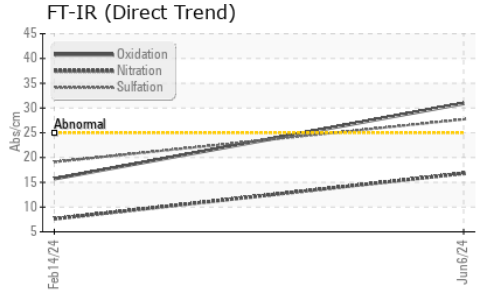
Silicon (ppm)



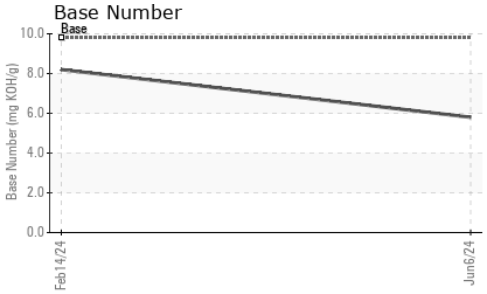
Aluminum (ppm)



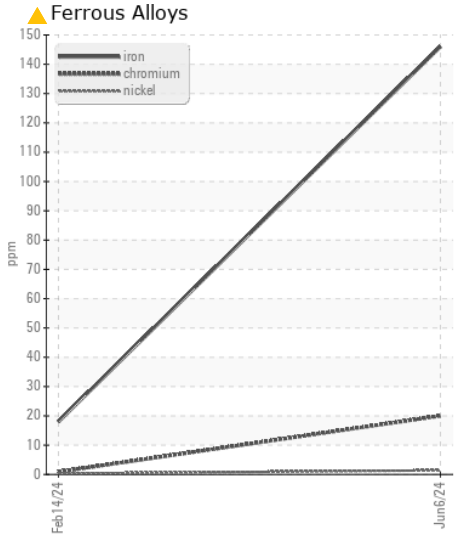
FT-IR (Direct Trend)



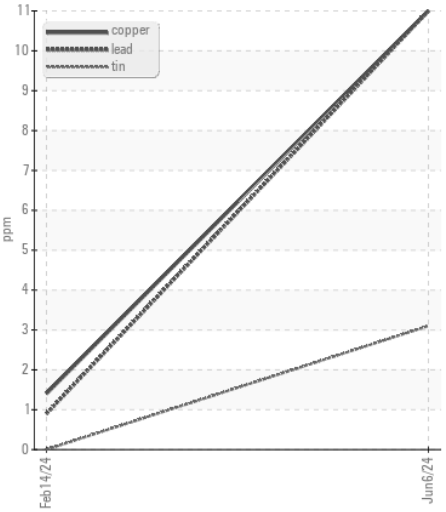
Base Number



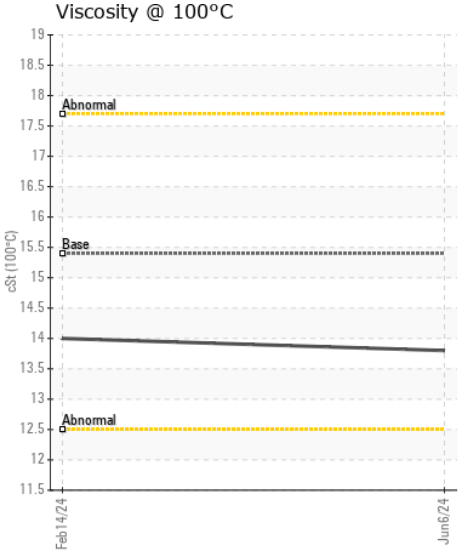
Ferrous Alloys



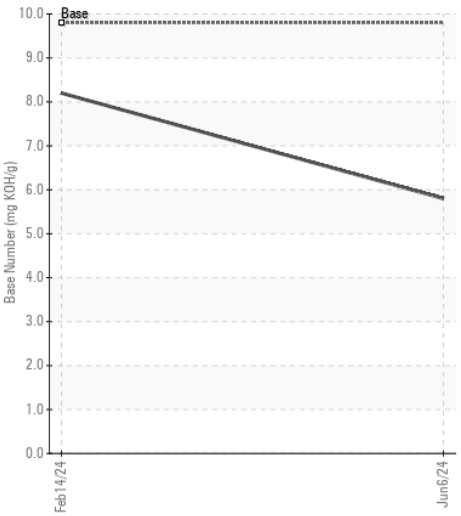
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0124764
Lab Number : 06224347
Unique Number : 11102544
Test Package : FLEET

Received : 01 Jul 2024
Tested : 02 Jul 2024
Diagnosed : 02 Jul 2024 - Jonathan Hester

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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