FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
713013
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

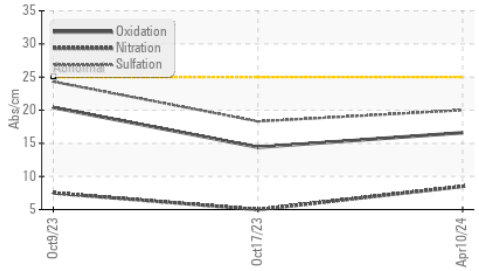
There is no indication of any contamination in the oil.

FLUID CONDITION

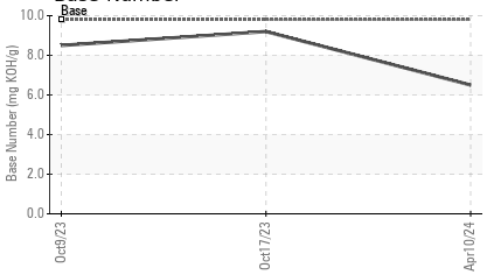
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0077754	GFL0077810	GFL0077812
Sample Date		Client Info		10 Apr 2024	17 Oct 2023	09 Oct 2023
Machine Age	hrs	Client Info		951	380	352
Oil Age	hrs	Client Info		0	0	352
Filter Age	hrs	Client Info		0	0	352
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>65	22	4	36
Chromium	ppm	ASTM D5185m	>5	<1	<1	1
Nickel	ppm	ASTM D5185m	>3	10	1	5
Titanium	ppm	ASTM D5185m	>5	0	0	<1
Silver	ppm	ASTM D5185m	>2	<1	<1	1
Aluminum	ppm	ASTM D5185m	>35	6	2	15
Lead	ppm	ASTM D5185m	>10	0	<1	<1
Copper	ppm	ASTM D5185m	>180	44	18	47
Tin	ppm	ASTM D5185m	>8	<1	1	3
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>15	14	18	▲ 102
Potassium	ppm	ASTM D5185m	>20	15	5	45
Fuel		WC Method	>3.0	<1.0	<1.0	0.4
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.5	5.0	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.0	18.3	24.3
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	2	4
Boron	ppm	ASTM D5185m	0	15	47	306
Barium	ppm	ASTM D5185m	0	<1	0	12
Molybdenum	ppm	ASTM D5185m	60	63	66	114
Manganese	ppm	ASTM D5185m	0	1	<1	4
Magnesium	ppm	ASTM D5185m	1010	918	933	654
Calcium	ppm	ASTM D5185m	1070	1088	1099	1392
Phosphorus	ppm	ASTM D5185m	1150	944	1037	694
Zinc	ppm	ASTM D5185m	1270	1138	1246	850
Sulfur	ppm	ASTM D5185m	2060	3208	3144	2363
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.6	14.4	20.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.5	9.2	8.5
Visc @ 100°C	cSt	ASTM D445	15.4	12.6	13.3	● 9.9

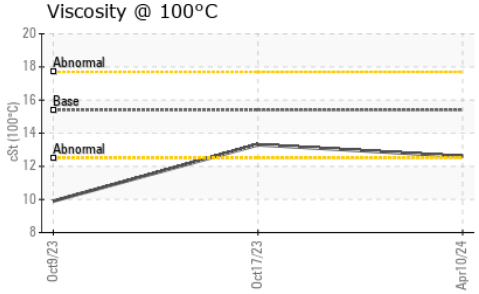
FT-IR (Direct Trend)



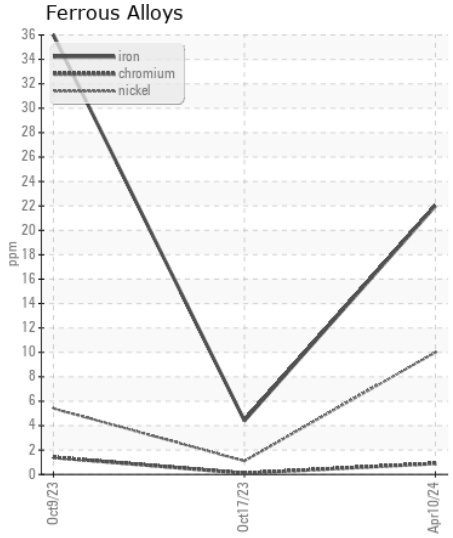
Base Number



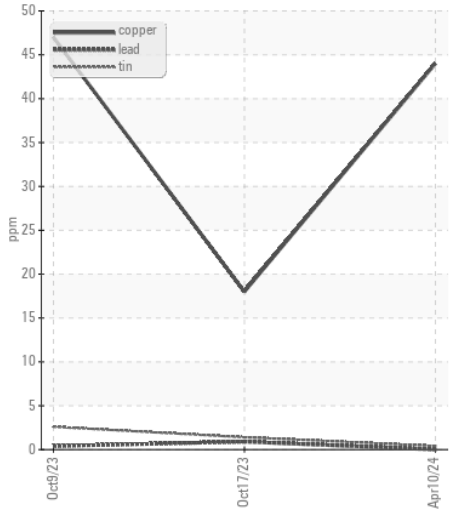
Viscosity @ 100°C



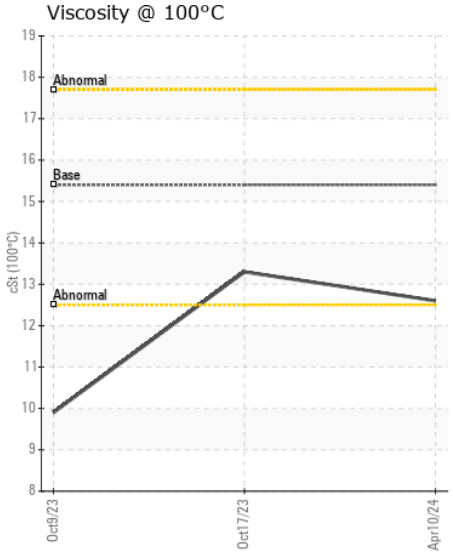
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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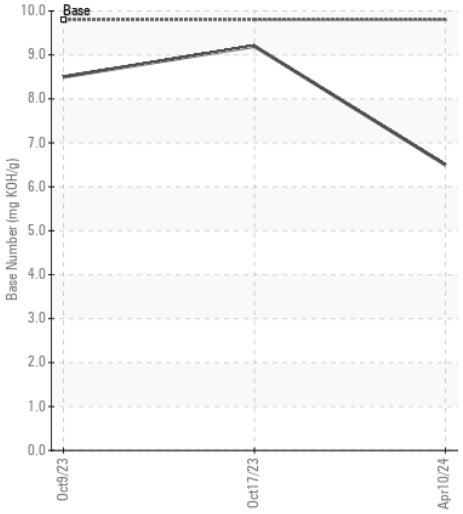

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0077754
Lab Number : 06151025
Unique Number : 10981103
Test Package : FLEET

Received : 16 Apr 2024
Tested : 17 Apr 2024
Diagnosed : 17 Apr 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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