FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
918001
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

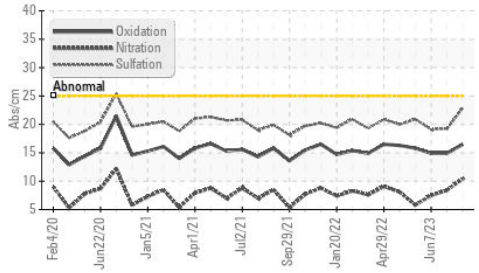
There is no indication of any contamination in the oil.

FLUID CONDITION

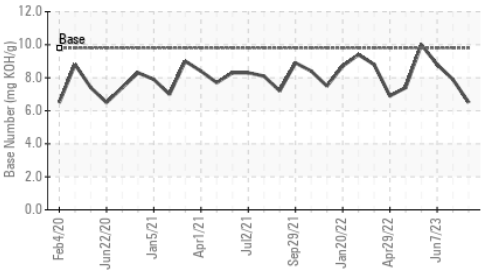
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0106951	GFL0073240	GFL0073256
Sample Date		Client Info		04 Apr 2024	02 Oct 2023	07 Jun 2023
Machine Age	hrs	Client Info		2960	2155	14433
Oil Age	hrs	Client Info		599	300	300
Filter Age	hrs	Client Info		599	300	300
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	48	12	7
Chromium	ppm	ASTM D5185m	>20	2	1	<1
Nickel	ppm	ASTM D5185m	>4	2	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	15	17	16
Lead	ppm	ASTM D5185m	>40	2	<1	2
Copper	ppm	ASTM D5185m	>330	2	<1	<1
Tin	ppm	ASTM D5185m	>15	1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	8	7	4
Potassium	ppm	ASTM D5185m	>20	4	13	7
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	2	0.7	0.4
Nitration	Abs/cm	*ASTM D7624	>20	10.4	8.4	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	19.2	19.1
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		2	3	3
Boron	ppm	ASTM D5185m	0	5	<1	<1
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	71	66	60
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	901	990	1003
Calcium	ppm	ASTM D5185m	1070	1105	1049	1136
Phosphorus	ppm	ASTM D5185m	1150	1021	1070	1027
Zinc	ppm	ASTM D5185m	1270	1189	1289	1326
Sulfur	ppm	ASTM D5185m	2060	2794	3311	3795
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.5	14.9	14.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.5	7.9	8.8
Visc @ 100°C	cSt	ASTM D445	15.4	12.9	13.2	13.3

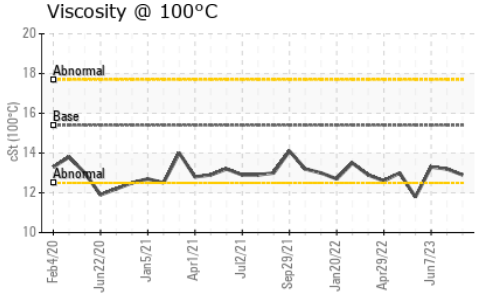
FT-IR (Direct Trend)



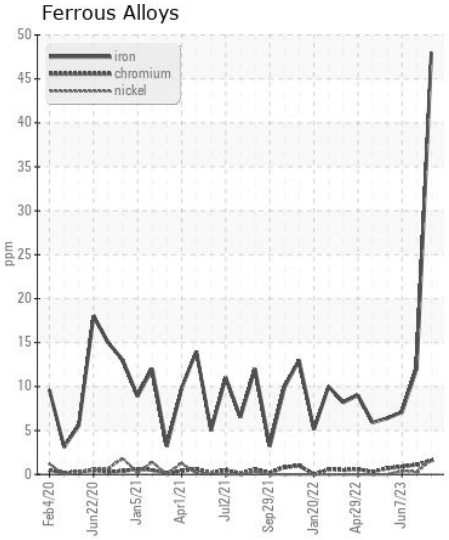
Base Number



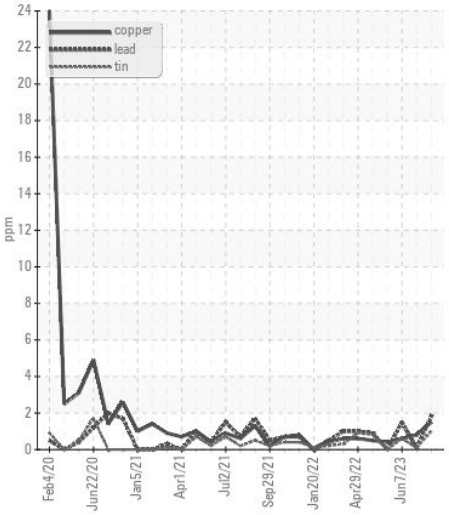
Viscosity @ 100°C



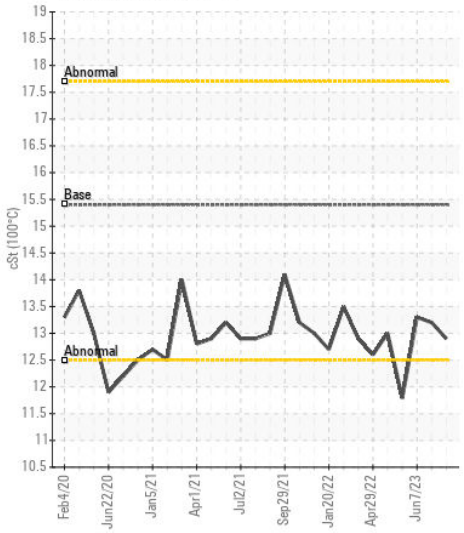
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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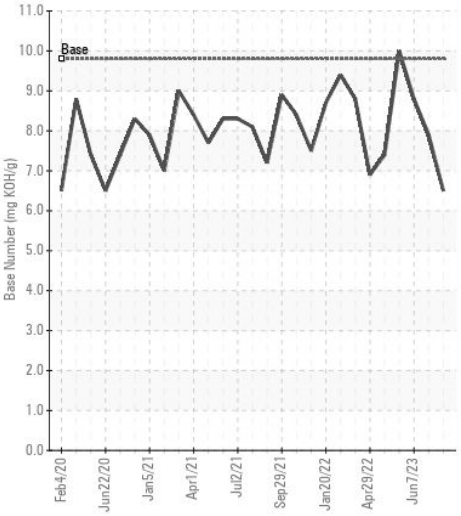

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0106951
Lab Number : 06148417
Unique Number : 10978495
Test Package : FLEET

Received : 15 Apr 2024
Tested : 16 Apr 2024
Diagnosed : 16 Apr 2024 - Wes Davis

GFL Environmental - 097 - Knoxville Hauling
1901 Sutherland Ave
Knoxville, TN
US 37921
Contact: Doug Weeden
dweeden@gflenv.com
T:
F:

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)