FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
913005
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

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

WEAR

Valve wear is indicated.

CONTAMINATION

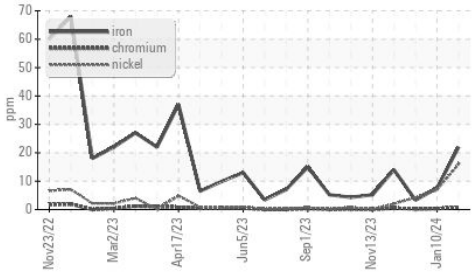
There is no indication of any contamination in the oil.

FLUID CONDITION

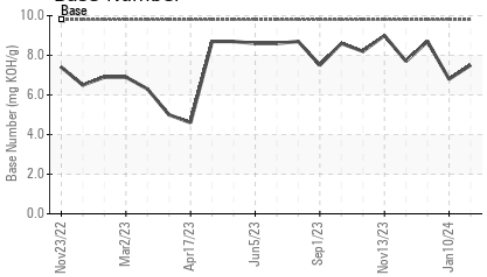
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0100271	GFL0100218	GFL0100188
Sample Date		Client Info		09 Feb 2024	10 Jan 2024	15 Dec 2023
Machine Age	hrs	Client Info		47098	3920	47098
Oil Age	hrs	Client Info		600	600	600
Filter Age	hrs	Client Info		600	600	600
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>120	22	8	3
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	▲ 16	7	4
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	<1	1
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	17	10	9
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
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	8	4	4
Potassium	ppm	ASTM D5185m	>20	6	0	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	0.6	0.4	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.3	6.7	5.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.7	18.2	18.1
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		4	2	2
Boron	ppm	ASTM D5185m	0	2	<1	4
Barium	ppm	ASTM D5185m	0	8	0	0
Molybdenum	ppm	ASTM D5185m	60	93	59	57
Manganese	ppm	ASTM D5185m	0	0	0	<1
Magnesium	ppm	ASTM D5185m	1010	1420	971	890
Calcium	ppm	ASTM D5185m	1070	1543	1038	995
Phosphorus	ppm	ASTM D5185m	1150	1368	1049	914
Zinc	ppm	ASTM D5185m	1270	1798	1243	1178
Sulfur	ppm	ASTM D5185m	2060	4494	2970	2882
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.5	14.2	13.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.5	6.8	8.7
Visc @ 100°C	cSt	ASTM D445	15.4	14.04	13.8	14.2

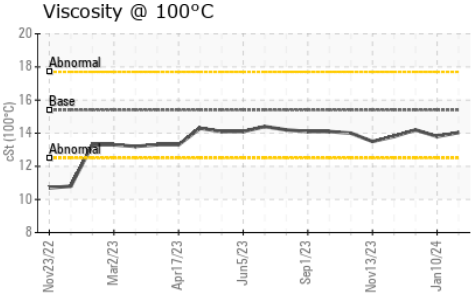
Ferrous Alloys



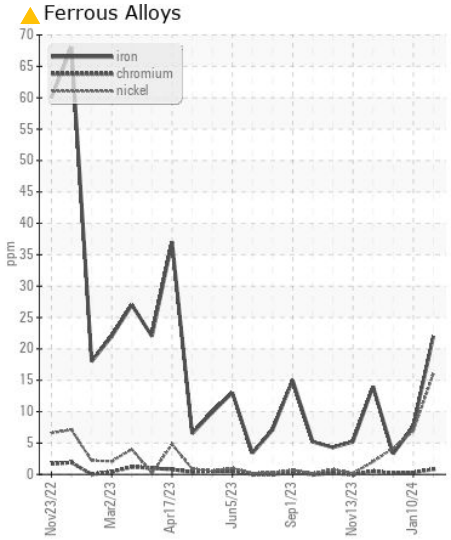
Base Number



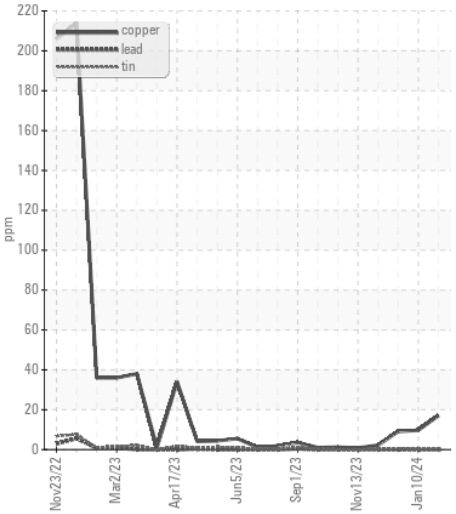
Viscosity @ 100°C



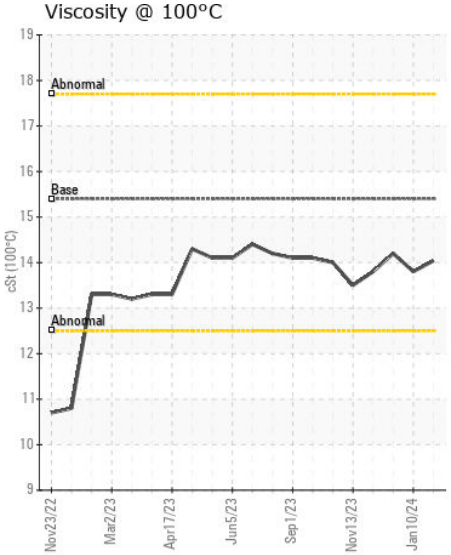
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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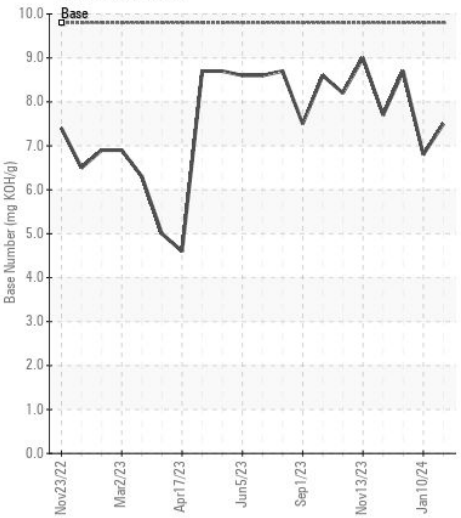

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0100271
Lab Number : 06088483
Unique Number : 10875928
Test Package : FLEET

Received : 14 Feb 2024
Tested : 19 Feb 2024
Diagnosed : 19 Feb 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)

GFL Environmental - 166 - Phenix City
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US 36869
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F:

Report Id: GFL166 [WUSCAR] 06088483 (Generated: 02/20/2024 06:31:22) Rev: 1

Submitted By: DARRIN WRIGHT