FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
428013-1161
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. Resample at the next service interval to monitor. (Customer Sample Comment: Sample)

WEAR

All component wear rates are normal.

CONTAMINATION

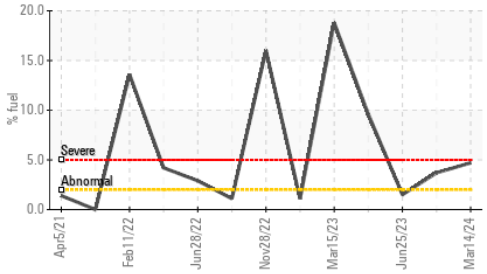
There is a moderate amount of fuel present in the oil.

FLUID CONDITION

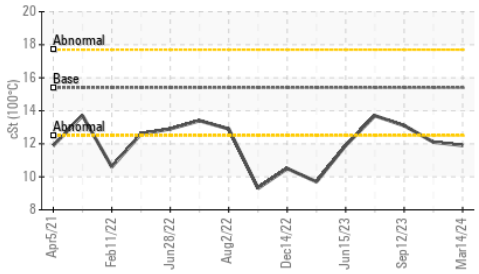
Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0116263	GFL0100041	GFL0062248
Sample Date		Client Info		14 Mar 2024	27 Nov 2023	12 Sep 2023
Machine Age	hrs	Client Info		13704	13647	13167
Oil Age	hrs	Client Info		430	372	500
Filter Age	hrs	Client Info		430	372	500
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		Not Changd	Not Changd	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	27	18	27
Chromium	ppm	ASTM D5185m	>20	1	<1	2
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	1	4
Lead	ppm	ASTM D5185m	>40	3	3	9
Copper	ppm	ASTM D5185m	>330	<1	0	<1
Tin	ppm	ASTM D5185m	>15	0	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	4	3	4
Potassium	ppm	ASTM D5185m	>20	<1	<1	2
Fuel	%	ASTM D3524	>2.0	▲ 4.7	▲ 3.7	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.5	0.6
Nitration	Abs/cm	*ASTM D7624	>20	11.0	10.3	11.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7	21.1	23.1
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		5	5	4
Boron	ppm	ASTM D5185m	0	10	16	9
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	67	72	61
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	1010	896	1005	922
Calcium	ppm	ASTM D5185m	1070	1135	1273	1195
Phosphorus	ppm	ASTM D5185m	1150	1000	1152	1035
Zinc	ppm	ASTM D5185m	1270	1200	1460	1285
Sulfur	ppm	ASTM D5185m	2060	3251	3347	2949
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.0	17.6	20.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.6	7.0	6.9
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 11.9	▲ 12.1	13.1

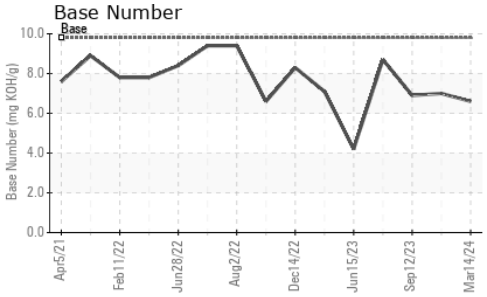
Fuel Dilution



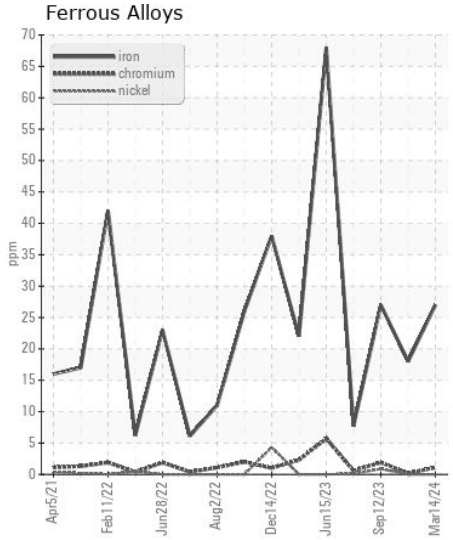
Viscosity @ 100°C



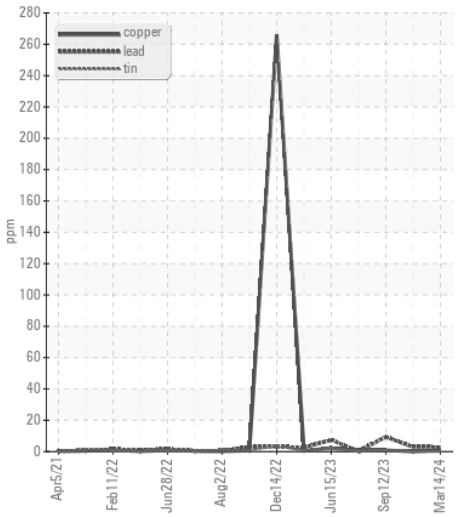
Base Number



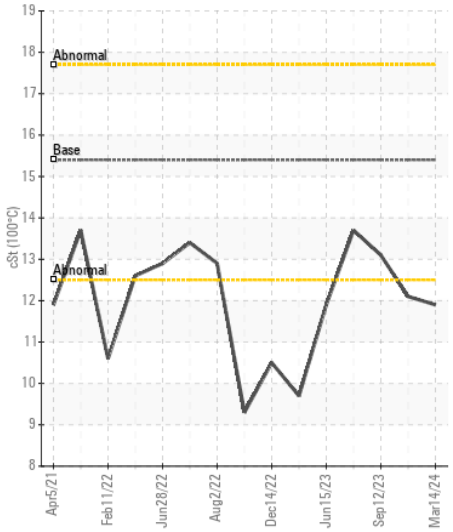
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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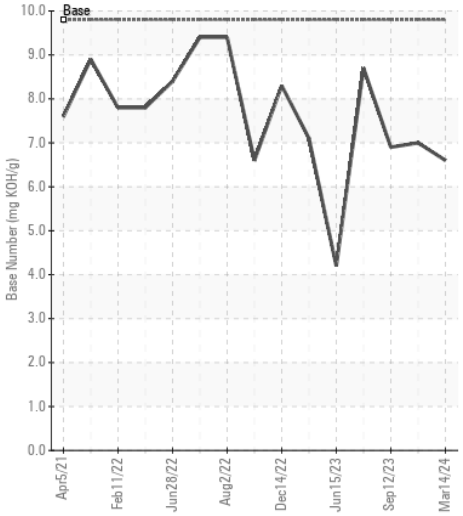

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0116263
Lab Number : 06122899
Unique Number : 10937050
Test Package : FLEET (Additional Tests: PercentFuel)

Received : 19 Mar 2024
Tested : 22 Mar 2024
Diagnosed : 22 Mar 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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Report Id: GFL626 [WUSCAR] 06122899 (Generated: 03/22/2024 10:48:55) Rev: 1

Submitted By: also GFL632 and GFL638 - Glenda Standen