FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ATTENTION

Machine Id
212040
Component
Diesel Engine
Fluid
PETRO CANADA DURON UHP 5W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Note that there appears to be a discrepancy in the total time on this component, when compared to the historical data.

WEAR

All component wear rates are normal.

CONTAMINATION

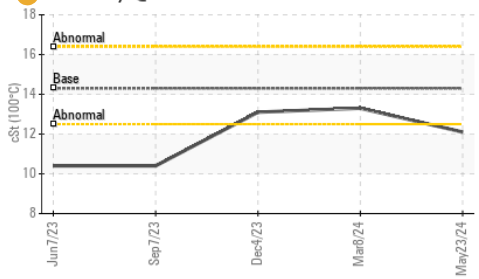
Light fuel dilution occurring. No other contaminants were detected in the oil.

FLUID CONDITION

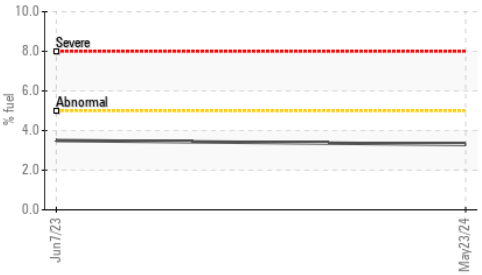
Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0086987	GFL0086912	GFL0086961
Sample Date		Client Info		23 May 2024	08 Mar 2024	04 Dec 2023
Machine Age	mls	Client Info		5219	8000	8000
Oil Age	mls	Client Info		4219	600	3000
Filter Age	mls	Client Info		4219	600	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		Not Changd	N/A	N/A
Sample Status				ATTENTION	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	30	27	20
Chromium	ppm	ASTM D5185m	>20	3	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	4	0	4
Aluminum	ppm	ASTM D5185m	>25	4	4	2
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	11	7	10
Tin	ppm	ASTM D5185m	>15	<1	0	0
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	>25	12	7	12
Potassium	ppm	ASTM D5185m	>20	3	18	<1
Fuel	%	ASTM D3524	>5	▲ 3.3	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.4	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.6	8.0	5.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.5	19.2	17.8
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	1	3
Boron	ppm	ASTM D5185m	65	12	7	15
Barium	ppm	ASTM D5185m	0	<1	0	0
Molybdenum	ppm	ASTM D5185m	65	47	57	48
Manganese	ppm	ASTM D5185m	0	2	<1	1
Magnesium	ppm	ASTM D5185m	1160	822	945	886
Calcium	ppm	ASTM D5185m	820	1089	1158	905
Phosphorus	ppm	ASTM D5185m	1160	1039	991	869
Zinc	ppm	ASTM D5185m	1260	1126	1217	1086
Sulfur	ppm	ASTM D5185m	3000	3448	3484	3050
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.8	15.6	13.1
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	8.5	8.6	8.9
Visc @ 100°C	cSt	ASTM D445	14.3	● 12.1	13.3	13.1

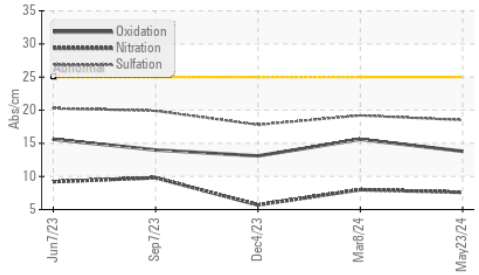
Viscosity @ 100°C



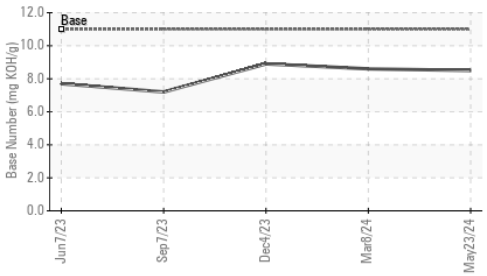
Fuel Dilution



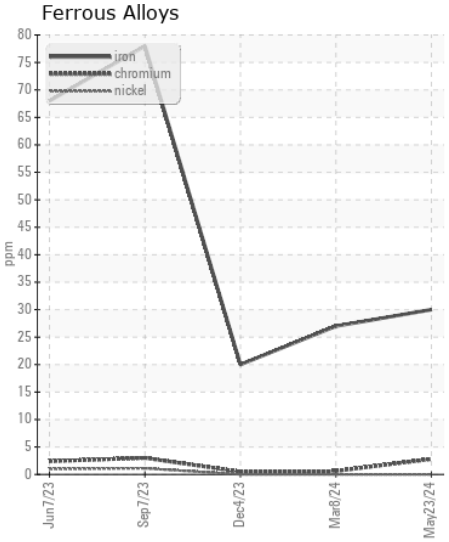
FT-IR (Direct Trend)



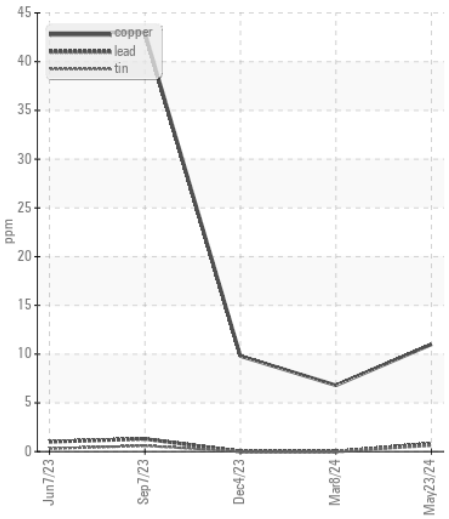
Base Number



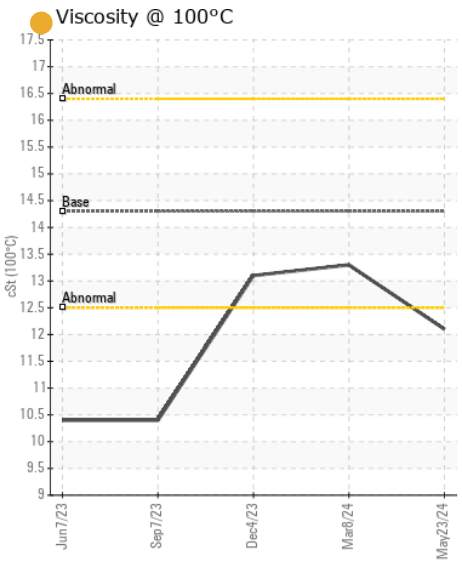
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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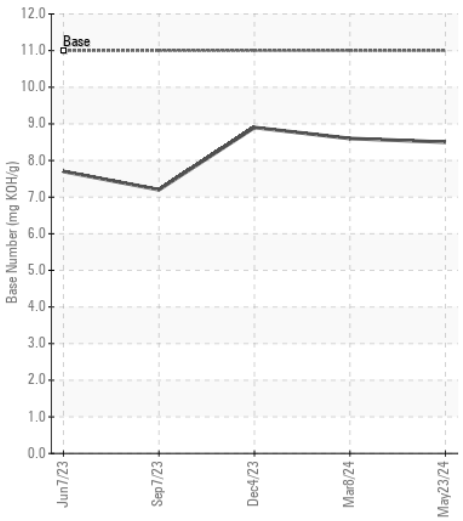

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0086987
Lab Number : 06194777
Unique Number : 11056900
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Received : 29 May 2024
Tested : 03 Jun 2024
Diagnosed : 03 Jun 2024 - Don Baldridge

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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