FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Area
(29KM2B)
Machine Id
923034-260317
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

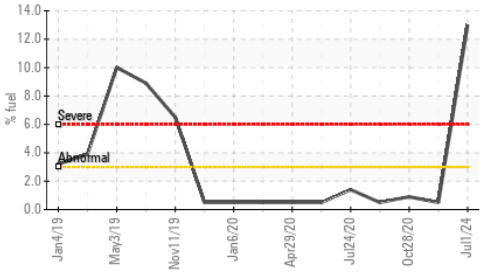
There is a high amount of fuel present in the oil.

FLUID CONDITION

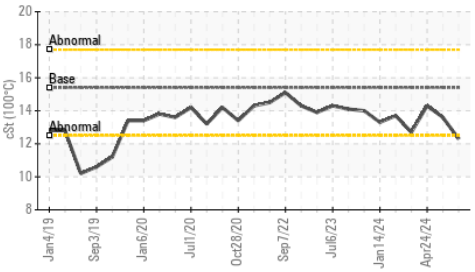
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0124136	GFL0117229	GFL0117162
Sample Date		Client Info		01 Jul 2024	13 May 2024	24 Apr 2024
Machine Age	hrs	Client Info		21749	21956	21511
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				SEVERE	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>75	56	25	12
Chromium	ppm	ASTM D5185m	>5	3	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>15	3	4	2
Lead	ppm	ASTM D5185m	>25	8	1	<1
Copper	ppm	ASTM D5185m	>100	2	1	<1
Tin	ppm	ASTM D5185m	>4	<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	7	4	4
Potassium	ppm	ASTM D5185m	>20	2	2	0
Fuel	%	ASTM D3524	>3.0	▲ 13.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	1.8	1.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	15.7	9.8	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	29.2	21.8	19.4
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		6	18	6
Boron	ppm	ASTM D5185m	0	5	4	16
Barium	ppm	ASTM D5185m	0	0	<1	0
Molybdenum	ppm	ASTM D5185m	60	57	64	55
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	942	986	596
Calcium	ppm	ASTM D5185m	1070	1117	1105	1761
Phosphorus	ppm	ASTM D5185m	1150	1024	1126	856
Zinc	ppm	ASTM D5185m	1270	1255	1307	1059
Sulfur	ppm	ASTM D5185m	2060	3053	3585	3099
Oxidation	Abs/.1mm	*ASTM D7414	>25	29.2	16.4	16.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	5.1	8.5	6.4
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 12.3	13.6	14.3

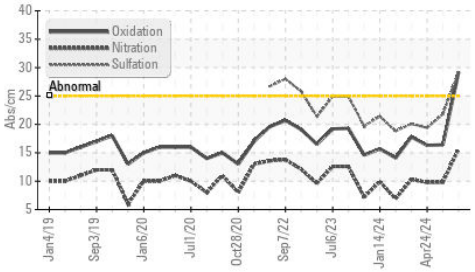
Fuel Dilution



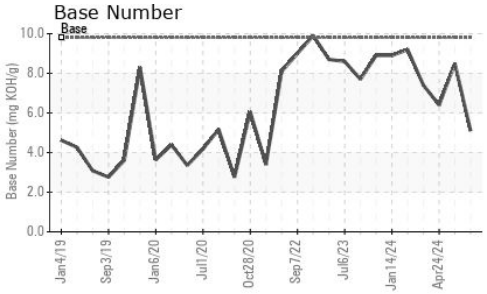
Viscosity @ 100°C



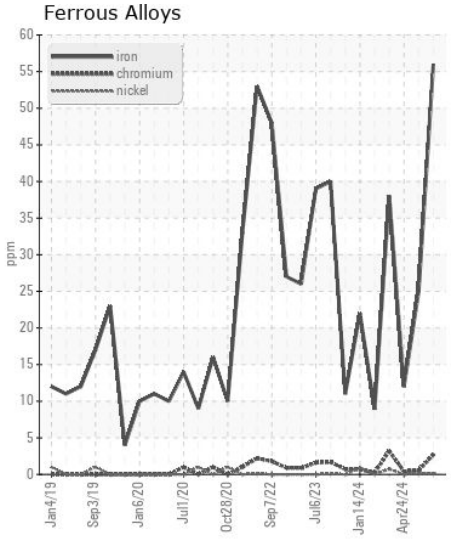
FT-IR (Direct Trend)



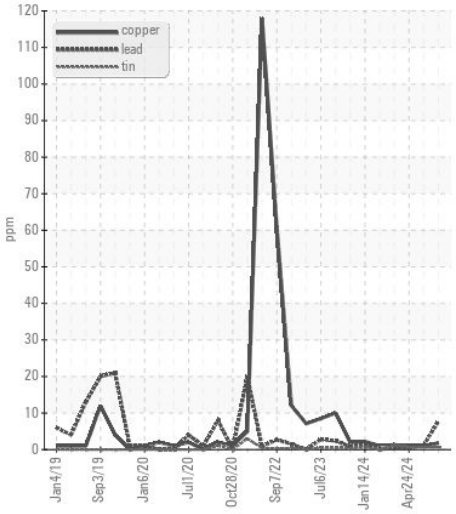
Base Number



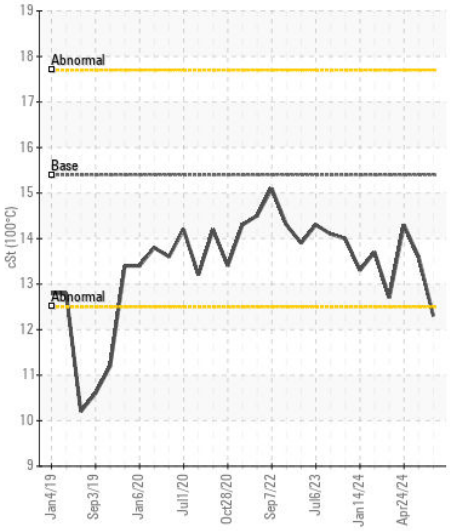
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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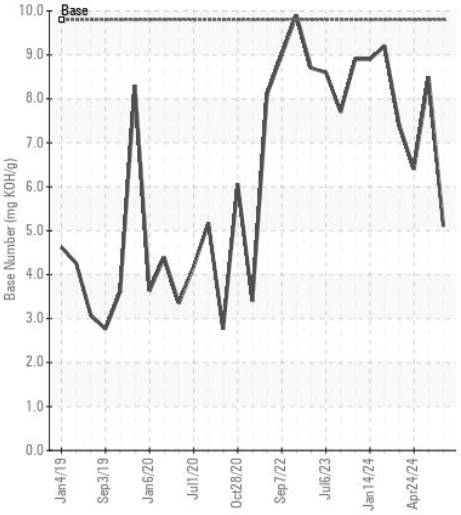

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0124136
Lab Number : 06228310
Unique Number : 11111803
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Received : 05 Jul 2024
Tested : 09 Jul 2024
Diagnosed : 09 Jul 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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