



Area
020
Machine Id
10759
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (34 QTS)

RECOMMENDATION

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0103795	GFL0103802	GFL0091175
Sample Date		Client Info		22 Feb 2024	30 Nov 2023	17 Aug 2023
Machine Age	hrs	Client Info		17878	17302	0
Oil Age	hrs	Client Info		576	801	600
Filter Age	hrs	Client Info		576	801	600
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				SEVERE	SEVERE	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	31	32	32
Chromium	ppm	ASTM D5185m	>5	1	1	2
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>15	6	4	4
Lead	ppm	ASTM D5185m	>25	1	1	3
Copper	ppm	ASTM D5185m	>100	<1	<1	1
Tin	ppm	ASTM D5185m	>4	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

Test for glycol is positive. There is a high concentration of glycol present in the oil.

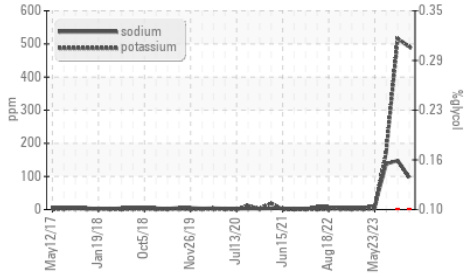
Silicon	ppm	ASTM D5185m	>25	11	13	10
Potassium	ppm	ASTM D5185m	>20	▲ 491	▲ 516	▲ 175
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		◆ 0.10	◆ 0.10	NEG
Soot %	%	*ASTM D7844	>6	0.9	1	1.2
Nitration	Abs/cm	*ASTM D7624	>20	10.3	10.6	10.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.2	23.0	22.4
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

FLUID CONDITION

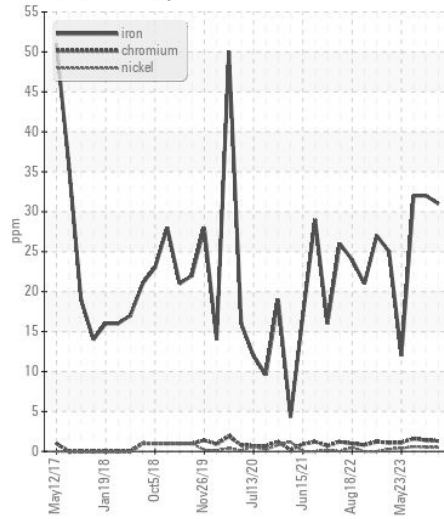
The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		▲ 97	▲ 148	▲ 138
Boron	ppm	ASTM D5185m	0	7	4	4
Barium	ppm	ASTM D5185m	0	0	2	0
Molybdenum	ppm	ASTM D5185m	60	61	63	68
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	1010	894	884	950
Calcium	ppm	ASTM D5185m	1070	1025	1080	1151
Phosphorus	ppm	ASTM D5185m	1150	1018	977	1057
Zinc	ppm	ASTM D5185m	1270	1202	1194	1301
Sulfur	ppm	ASTM D5185m	2060	2870	4472	3309
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.0	18.0	18.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.0	8.2	7.9
Visc @ 100°C	cSt	ASTM D445	15.4	13.5	13.8	14.5

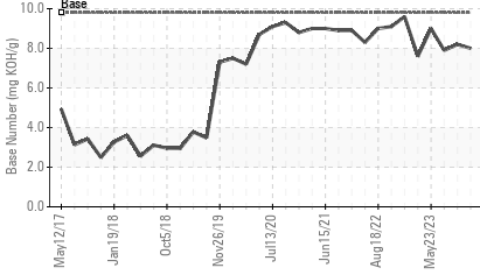
Glycol Contamination



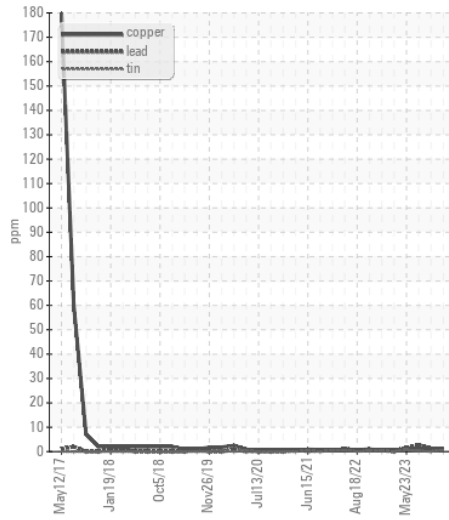
Ferrous Alloys



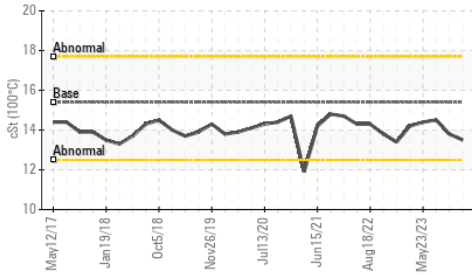
Base Number



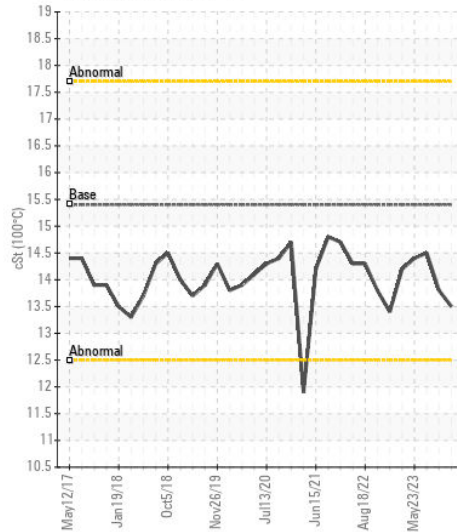
Non-ferrous Metals



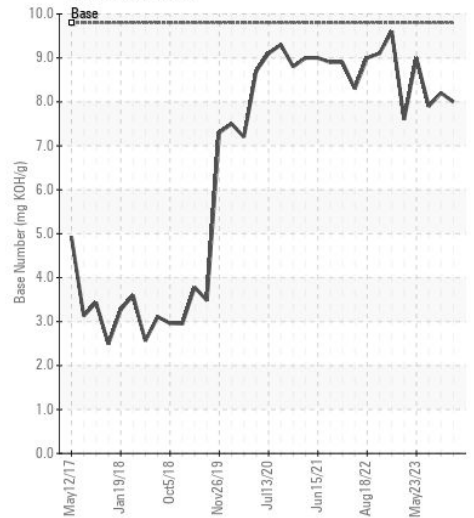
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0103795
Lab Number : 06098146
Unique Number : 10896376
Test Package : FLEET

Received : 23 Feb 2024
Tested : 26 Feb 2024
Diagnosed : 26 Feb 2024 - Wes Davis

GFL Environmental - 020 - Alamance
 703 East Gilbreath St
 Graham, NC
 US 27253
 Contact:

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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