



Machine Id
801038
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (23 LTR)

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		GFL0107145	GFL0094199	GFL0082008
Sample Date		Client Info		09 Jan 2024	13 Oct 2023	03 May 2023
Machine Age	hrs	Client Info		12752	12224	731003
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	27	32	27
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>30	5	4	3
Lead	ppm	ASTM D5185(m)	>30	<1	<1	0
Copper	ppm	ASTM D5185(m)	>150	1	2	1
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

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

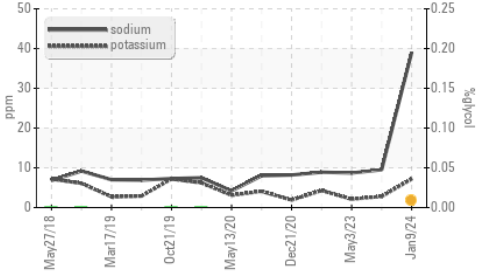
Silicon	ppm	ASTM D5185(m)	>20	7	9	5
Potassium	ppm	ASTM D5185(m)	>20	▲ 7	3	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		▲ 0.015	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.6	0.7	0.6
Nitration	Abs/cm	ASTM D7624*	>20	10.4	10.2	9.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.5	21.7	21.2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

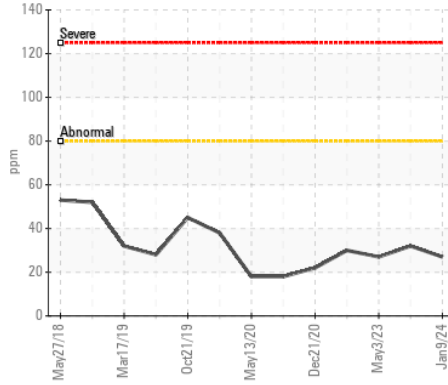
The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		▲ 39	10	9
Boron	ppm	ASTM D5185(m)	0	18	5	5
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	63	64	62
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	864	993	969
Calcium	ppm	ASTM D5185(m)	1070	1129	1108	1127
Phosphorus	ppm	ASTM D5185(m)	1150	980	985	1068
Zinc	ppm	ASTM D5185(m)	1270	1175	1232	1192
Sulfur	ppm	ASTM D5185(m)	2060	2444	2339	2471
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.5	17.5	17.3
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.9	13.9	13.6

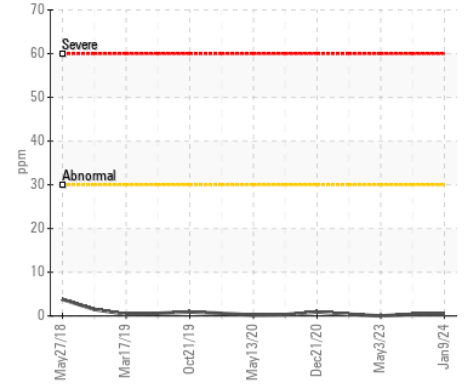
▲ Glycol Contamination



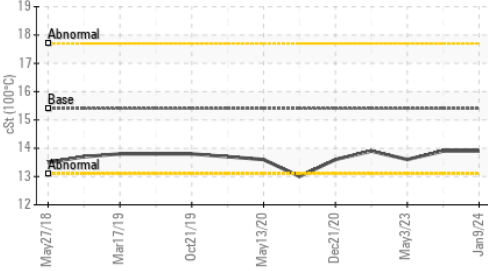
Iron (ppm)



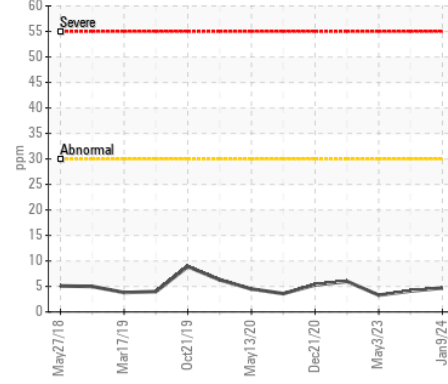
Lead (ppm)



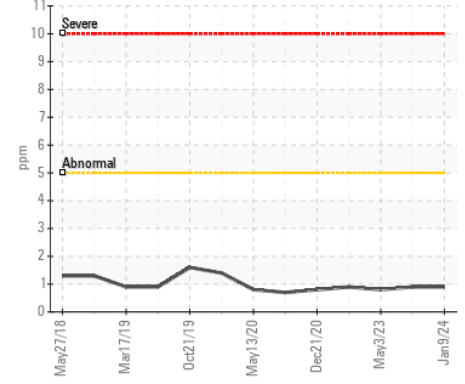
Viscosity @ 100°C



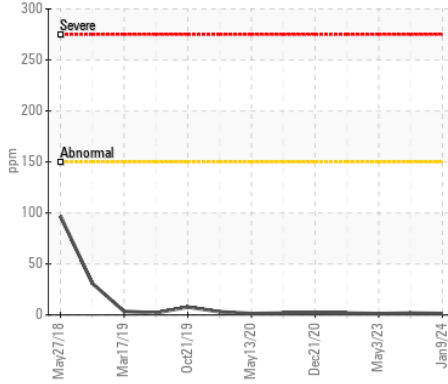
Aluminum (ppm)



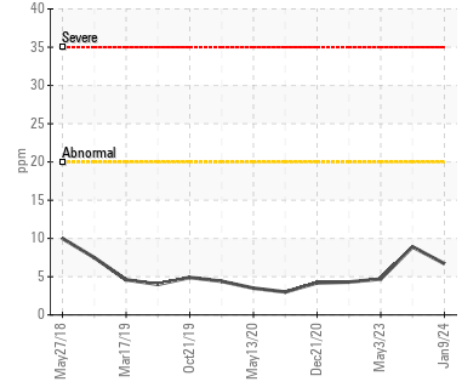
Chromium (ppm)



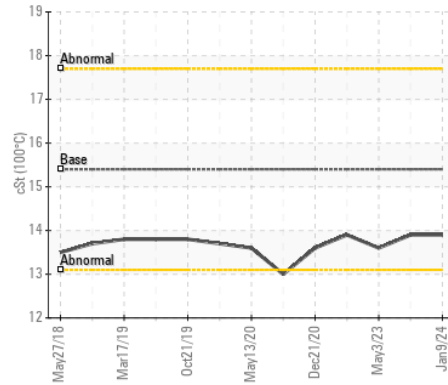
Copper (ppm)



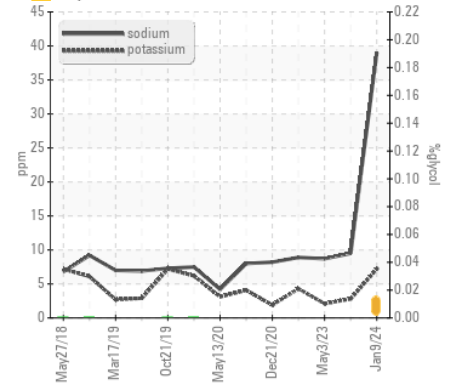
Silicon (ppm)



Viscosity @ 100°C



▲ Glycol Contamination



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0107145
Lab Number : 02608102
Unique Number : 5709188
Test Package : MOB 1 (Additional Tests: Glycol)

GFL Environmental - 217 - Aurora
 14131 BAYVIEW AVE, AURORA YARD
 AURORA, ON
 CA L4G 0K6
 Contact: Mike Havens
 MHavens@gflenv.com

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

T:
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