



Machine Id

8419

Component

Natural Gas Engine

Fluid

PETRO CANADA DURON SHP 10W30 (--- GAL)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

WEAR

Iron ppm levels are marginal. All other component wear rates are normal.

CONTAMINATION

There is no indication of any contamination in the oil.

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 20 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

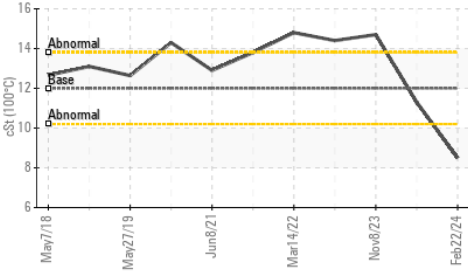
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0102592	GFL0094167	GFL0097617
Sample Date		Client Info		22 Feb 2024	12 Nov 2023	08 Nov 2023
Machine Age	hrs	Client Info		0	9422	1984
Oil Age	hrs	Client Info		0	600	1195
Filter Age	hrs	Client Info		0	600	1195
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

Iron	ppm	ASTM D5185(m)	>50	▲ 48	22	18
Chromium	ppm	ASTM D5185(m)	>4	<1	1	2
Nickel	ppm	ASTM D5185(m)	>2	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>9	7	4	2
Lead	ppm	ASTM D5185(m)	>30	<1	<1	4
Copper	ppm	ASTM D5185(m)	>35	6	1	5
Tin	ppm	ASTM D5185(m)	>4	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

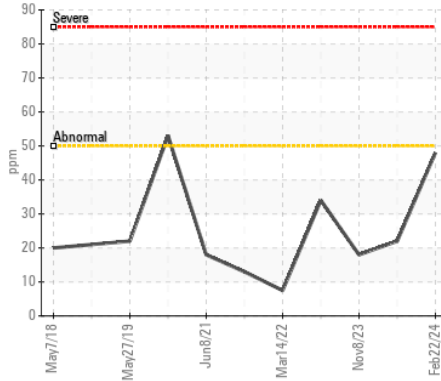
Silicon	ppm	ASTM D5185(m)	>+100	8	6	4
Potassium	ppm	ASTM D5185(m)	>20	2	5	1
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	ASTM D7844*		0.2	0.4	0
Nitration	Abs/cm	ASTM D7624*	>20	6.8	9.7	11.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.4	21.1	25.3
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

Sodium	ppm	ASTM D5185(m)		11	6	14
Boron	ppm	ASTM D5185(m)	2	▲ 34	2	8
Barium	ppm	ASTM D5185(m)	0	0	<1	<1
Molybdenum	ppm	ASTM D5185(m)	50	35	61	54
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	950	▲ 549	976	578
Calcium	ppm	ASTM D5185(m)	1050	▲ 670	1111	1660
Phosphorus	ppm	ASTM D5185(m)	995	▲ 683	1009	703
Zinc	ppm	ASTM D5185(m)	1180	▲ 672	1228	918
Sulfur	ppm	ASTM D5185(m)	2600	2200	2500	1916
Oxidation	Abs/.1mm	ASTM D7414*	>25	27.2	17.2	20.7
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	▲ 8.5	11.3	14.7

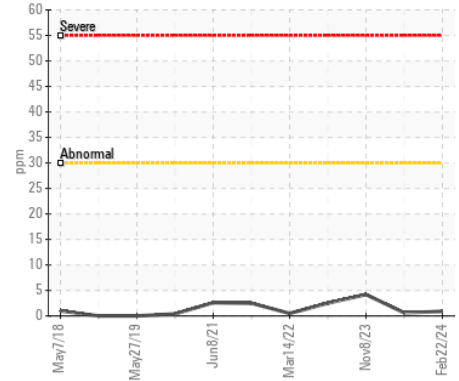
▲ Viscosity @ 100°C



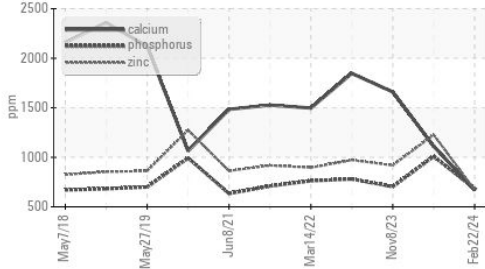
▲ Iron (ppm)



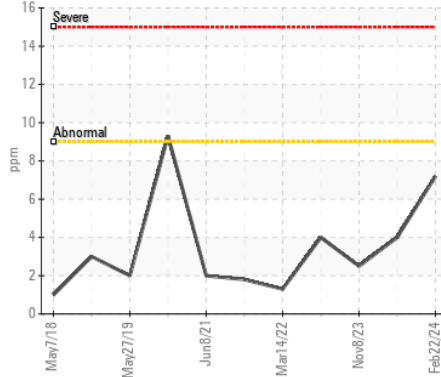
▲ Lead (ppm)



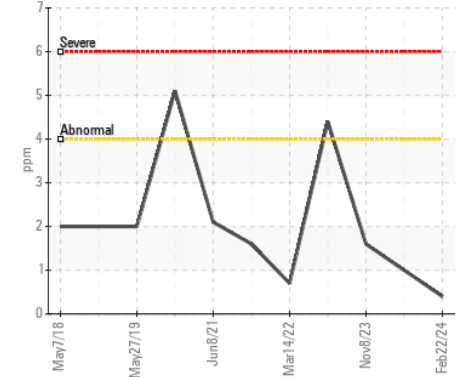
▲ Additives



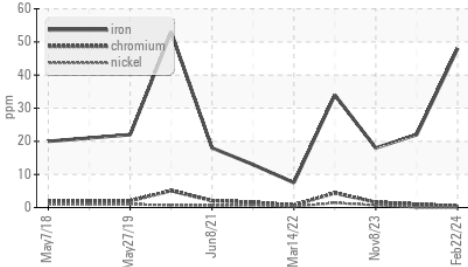
▲ Aluminum (ppm)



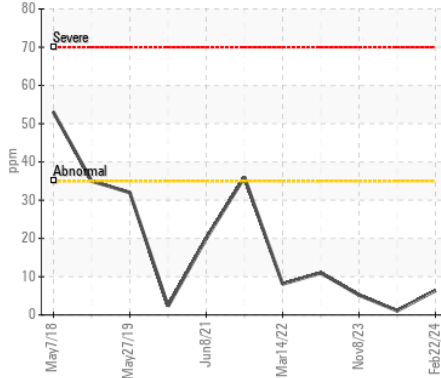
▲ Chromium (ppm)



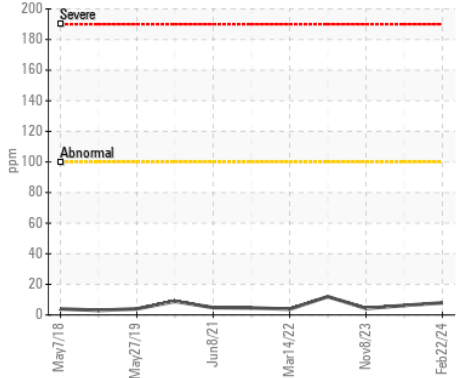
▲ Ferrous Alloys



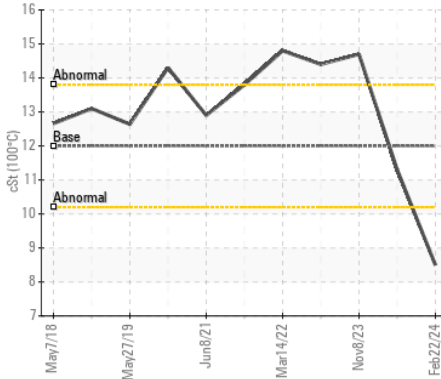
▲ Copper (ppm)



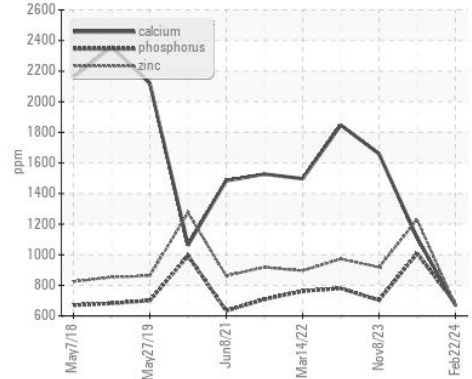
▲ Silicon (ppm)



▲ Viscosity @ 100°C



▲ Additives



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0102592
Lab Number : 02617613
Unique Number : 5734723
Test Package : MOB 1

GFL Environmental - 554 - Edmonton SW
 8409 -15th Street NW
 Edmonton, AB
 CA T6P 0B8
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 tgreig@gflenv.com
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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.