



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
801031
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (22 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0117876	GFL0111722	WC0875113
Sample Date		Client Info		23 May 2024	14 Mar 2024	04 Dec 2023
Machine Age	hrs	Client Info		88443	13803	13269
Oil Age	hrs	Client Info		600	600	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				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	26	36	22
Chromium	ppm	ASTM D5185(m)	>5	<1	1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>30	2	3	2
Lead	ppm	ASTM D5185(m)	>30	0	0	0
Copper	ppm	ASTM D5185(m)	>150	<1	1	<1
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

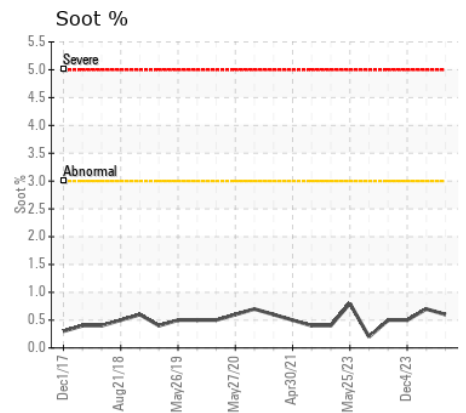
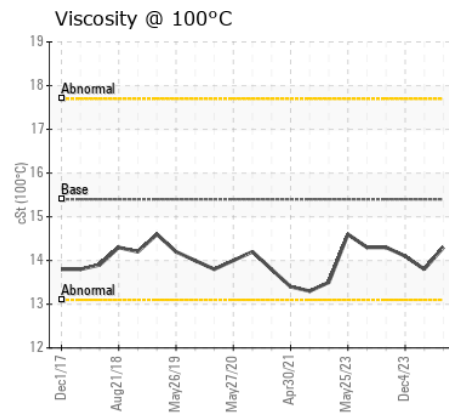
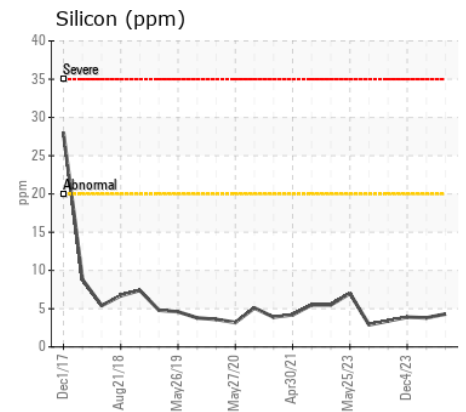
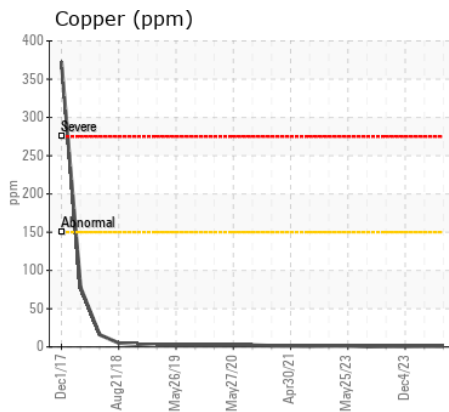
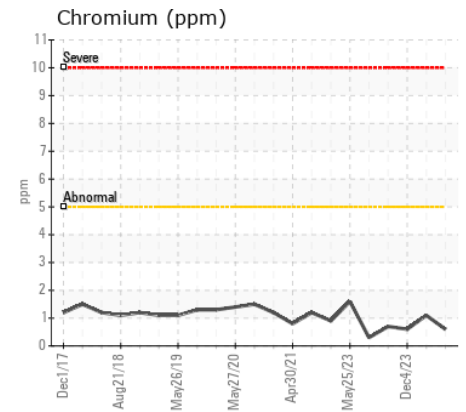
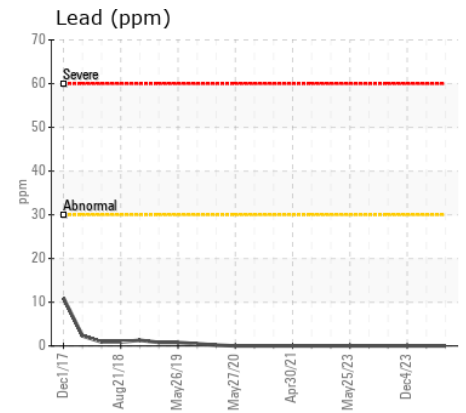
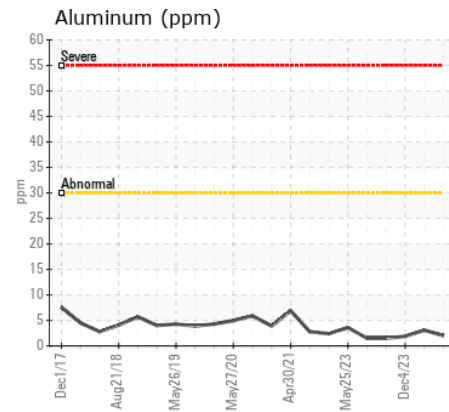
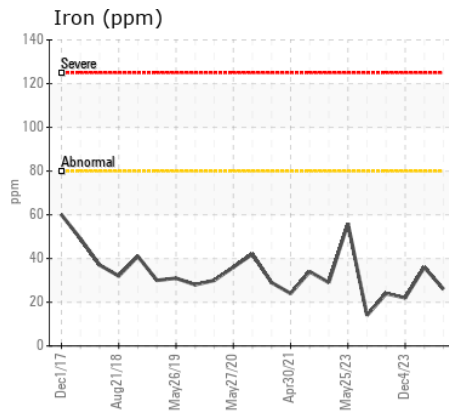
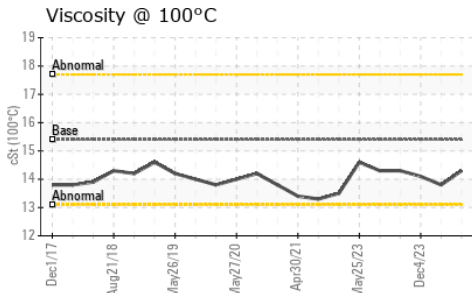
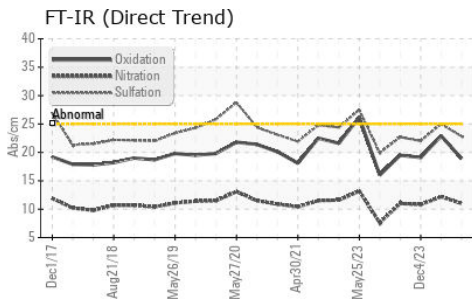
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	4	4	4
Potassium	ppm	ASTM D5185(m)	>20	<1	3	0
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.6	0.7	0.5
Nitration	Abs/cm	ASTM D7624*	>20	11.0	12.2	10.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.8	25.0	22.0
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		9	10	8
Boron	ppm	ASTM D5185(m)	0	6	10	15
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	61	64	64
Manganese	ppm	ASTM D5185(m)	0	<1	0	0
Magnesium	ppm	ASTM D5185(m)	1010	976	972	972
Calcium	ppm	ASTM D5185(m)	1070	1098	1115	1114
Phosphorus	ppm	ASTM D5185(m)	1150	1029	1032	1015
Zinc	ppm	ASTM D5185(m)	1270	1229	1224	1238
Sulfur	ppm	ASTM D5185(m)	2060	2411	2528	2479
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.9	22.9	19.1
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.3	13.8	14.1



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0117876
Lab Number : 02637889
Unique Number : 5787051
Test Package : MOB 1

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.

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