

Machine Id
423008
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0113117	GFL0081484	GFL0046705
Sample Date		Client Info		29 Feb 2024	01 Jun 2023	05 Apr 2022
Machine Age	kms	Client Info		476938	1507	397045
Oil Age	kms	Client Info		14902	0	9679
Filter Age	kms	Client Info		14902	0	9679
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	22	14	17
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	2	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	<1	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	5	5	3
Lead	ppm	ASTM D5185(m)	>40	6	<1	2
Copper	ppm	ASTM D5185(m)	>330	3	214	2
Tin	ppm	ASTM D5185(m)	>15	<1	1	<1
Vanadium	ppm	ASTM D5185(m)		0	<1	0

CONTAMINATION

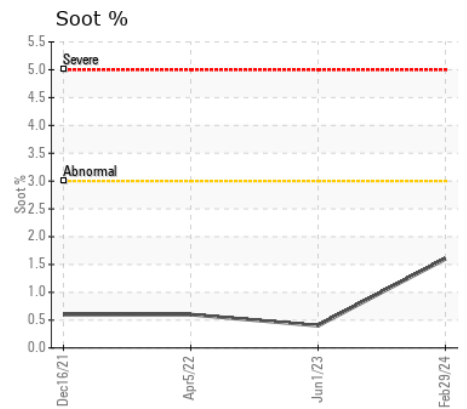
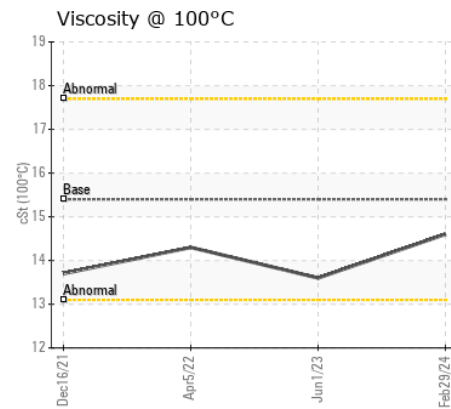
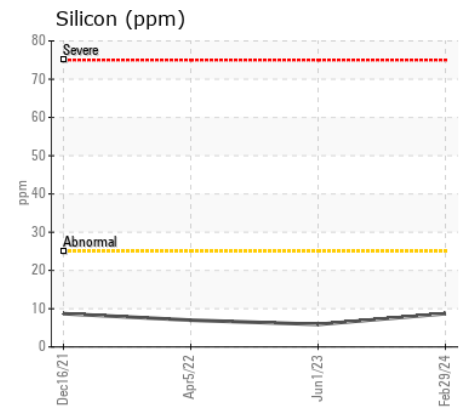
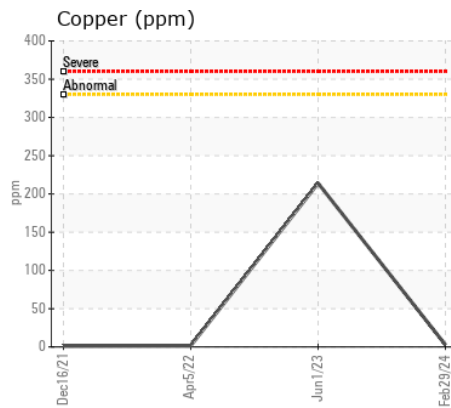
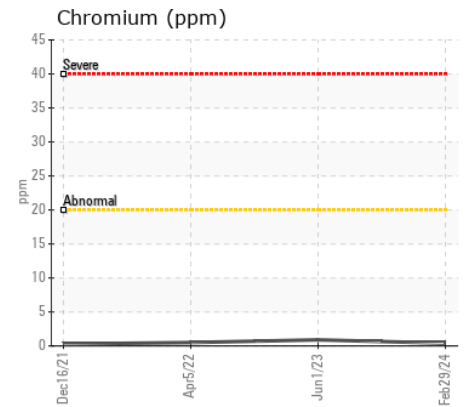
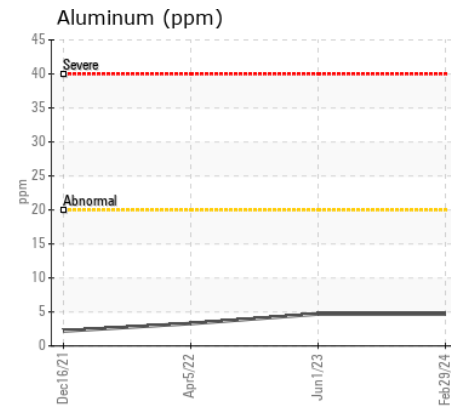
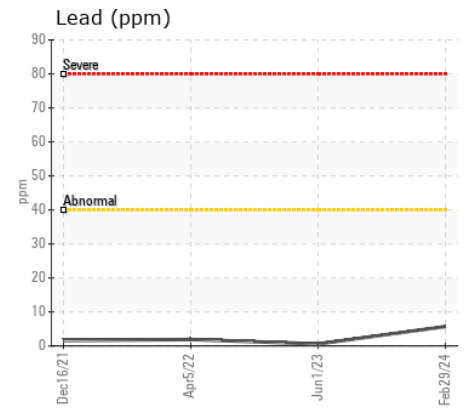
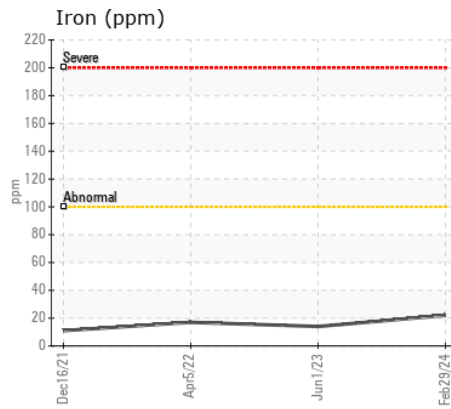
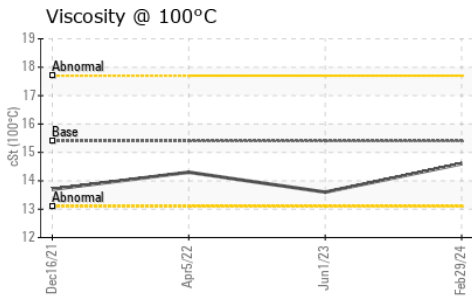
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	9	6	7
Potassium	ppm	ASTM D5185(m)	>20	2	11	2
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	1.6	0.4	0.6
Nitration	Abs/cm	ASTM D7624*	>20	14.6	8.5	11.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.6	20.0	23.3
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)		3	4	2
Boron	ppm	ASTM D5185(m)	0	2	<1	9
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	63	64	53
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	1001	997	948
Calcium	ppm	ASTM D5185(m)	1070	1140	1125	1200
Phosphorus	ppm	ASTM D5185(m)	1150	1023	1029	1043
Zinc	ppm	ASTM D5185(m)	1270	1231	1230	1177
Sulfur	ppm	ASTM D5185(m)	2060	2654	3202	2577
Oxidation	Abs/.1mm	ASTM D7414*	>25	25.7	15.7	20.4
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.6	13.6	14.3



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0113117
Lab Number : 02619811
Unique Number : 5736921
Test Package : MOB 1
Received : 05 Mar 2024
Tested : 05 Mar 2024
Diagnosed : 05 Mar 2024 - Kevin Marson

GFL Environmental - 582 - Nanaimo
 3469 Aqua Terra Rd.,
 Cassidy, BC
 CA V0R 1H0
 Contact: GFL Tech
 wcgfldemo@gmail.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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F: