



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
401023
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0117353	GFL0117334	GFL0077551
Sample Date		Client Info		04 May 2024	30 Mar 2024	24 Apr 2023
Machine Age	kms	Client Info		557960	553954	14374
Oil Age	kms	Client Info		0	0	83
Filter Age	kms	Client Info		0	0	83
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	12	37	56
Chromium	ppm	ASTM D5185(m)	>20	<1	1	2
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	2	6	4
Lead	ppm	ASTM D5185(m)	>40	0	1	10
Copper	ppm	ASTM D5185(m)	>330	14	71	401
Tin	ppm	ASTM D5185(m)	>15	0	<1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

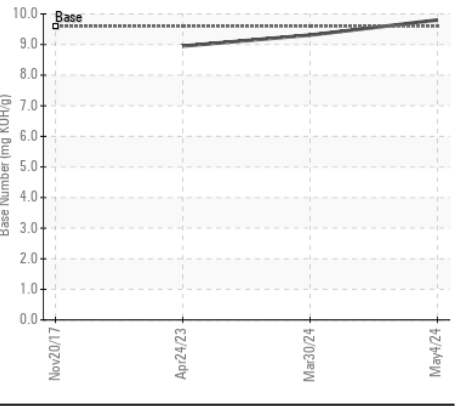
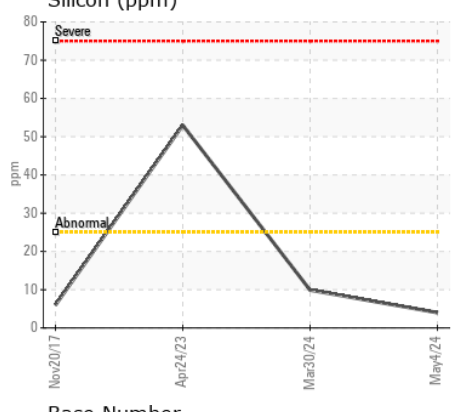
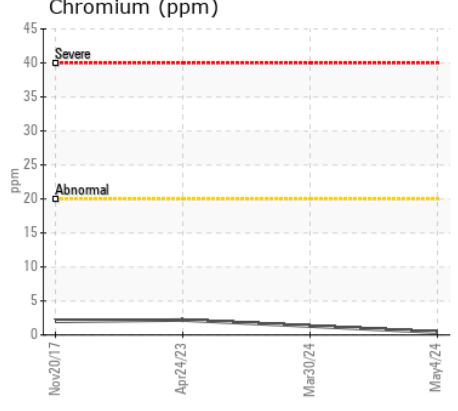
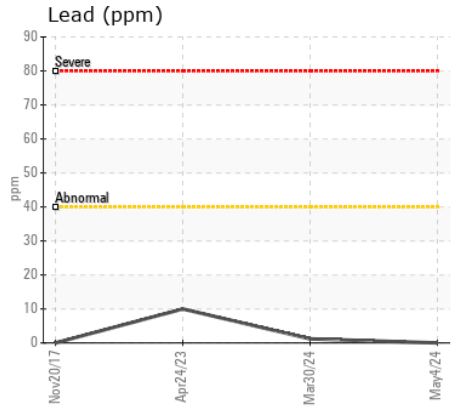
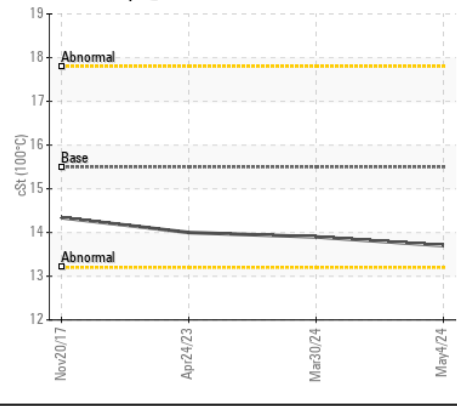
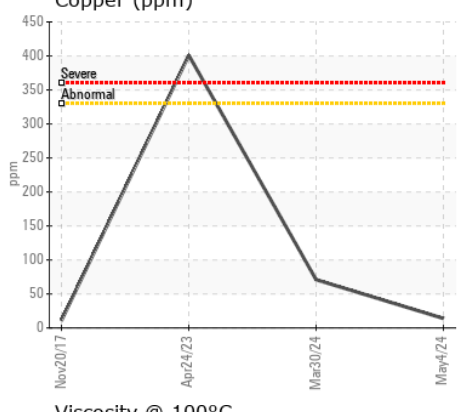
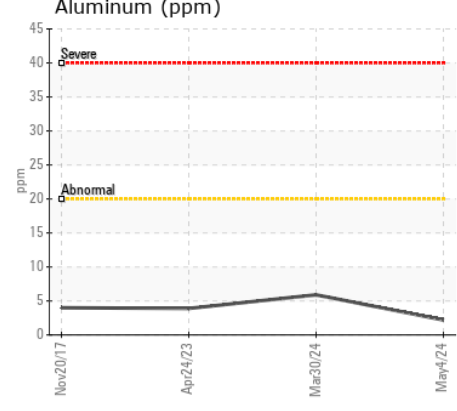
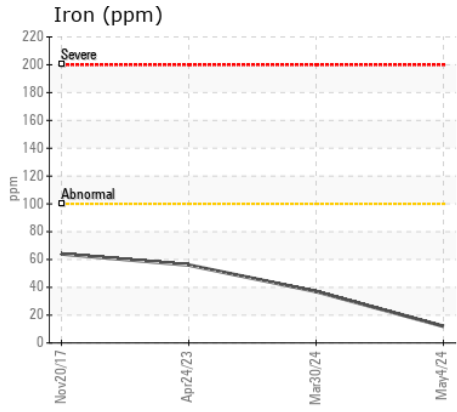
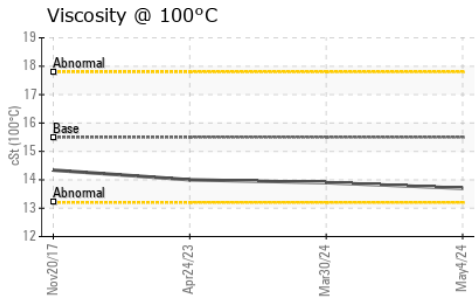
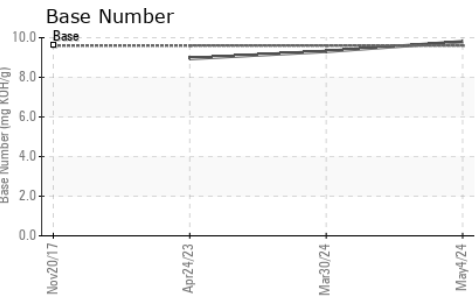
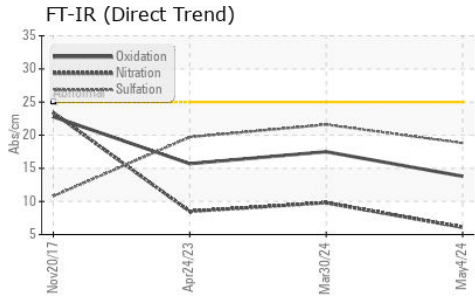
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	10	▲ 53
Potassium	ppm	ASTM D5185(m)	>20	<1	1	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	0.0
Soot %	%	ASTM D7844*	>3	0.2	0.9	0.6
Nitration	Abs/cm	ASTM D7624*	>20	6.1	9.8	8.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.8	21.6	19.7
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 condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		3	3	8
Boron	ppm	ASTM D5185(m)	1	13	2	3
Barium	ppm	ASTM D5185(m)	1	0	<1	4
Molybdenum	ppm	ASTM D5185(m)	60	58	61	57
Manganese	ppm	ASTM D5185(m)	1	<1	<1	3
Magnesium	ppm	ASTM D5185(m)	1010	890	975	901
Calcium	ppm	ASTM D5185(m)	1070	1035	1082	1074
Phosphorus	ppm	ASTM D5185(m)	1150	941	952	975
Zinc	ppm	ASTM D5185(m)	1270	1094	1194	1121
Sulfur	ppm	ASTM D5185(m)	2060	2413	2209	2291
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.8	17.5	15.7
Base Number (BN)	mg KOH/g	ASTM D2896*	9.6	9.80	9.31	8.95
Visc @ 100°C	cSt	ASTM D7279(m)	15.5	13.7	13.9	14.0



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0117353
Lab Number : 02635987
Unique Number : 5785149
Test Package : MOB 2
Received : 16 May 2024
Tested : 17 May 2024
Diagnosed : 17 May 2024 - Wes Davis

GFL Environmental - 550 - Rocky View County
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 Rocky View County, AB
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 calgarymaintenance@gflenv.com
 T: (403)369-6163

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.