



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
(MRU613)

Machine Id
9136

Component
Front Diesel Engine

Fluid
PETRO CANADA DURON XL SYN BLEND 15W40 (27 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0117278	GFL0099622	GFL0091587
Sample Date		Client Info		18 Apr 2024	25 Jan 2024	03 Nov 2023
Machine Age	hrs	Client Info		21477	20798	50291
Oil Age	hrs	Client Info		690	563	0
Filter Age	hrs	Client Info		690	563	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)	>120	10	10	8
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	2	2	1
Lead	ppm	ASTM D5185(m)	>40	0	<1	<1
Copper	ppm	ASTM D5185(m)	>330	1	2	<1
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

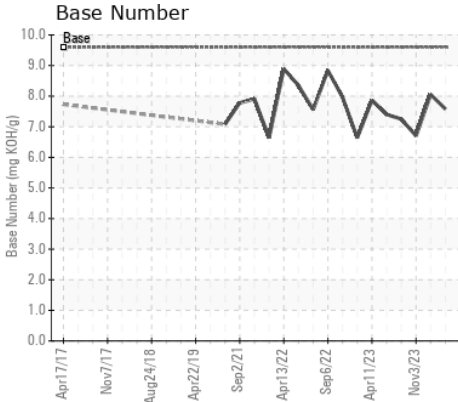
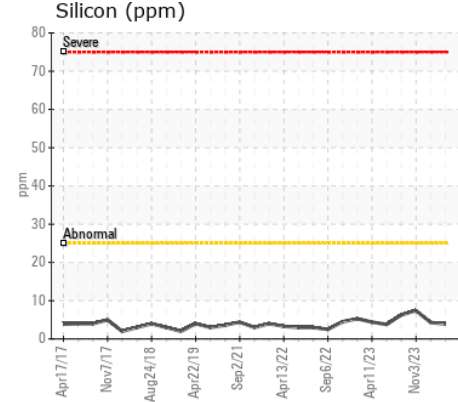
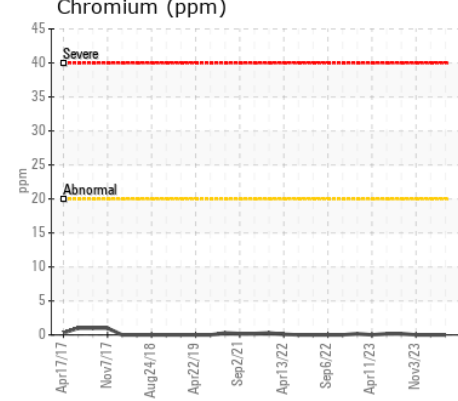
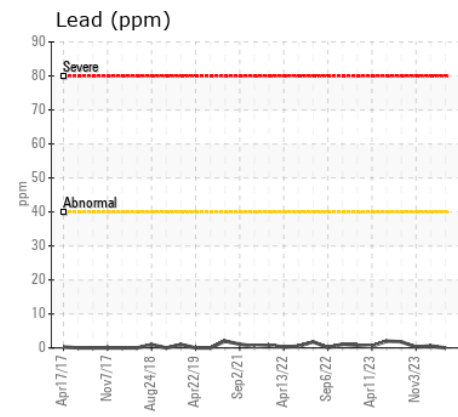
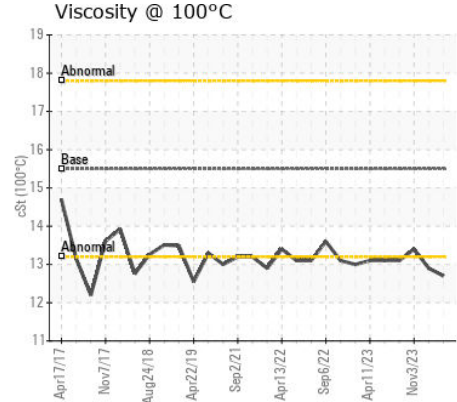
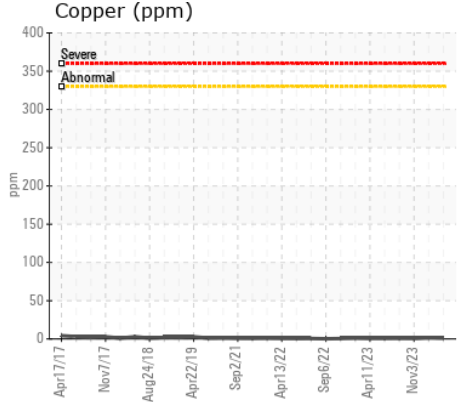
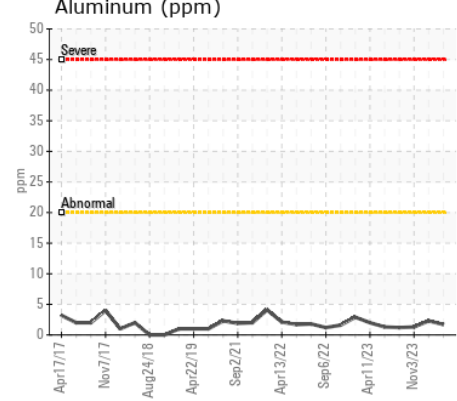
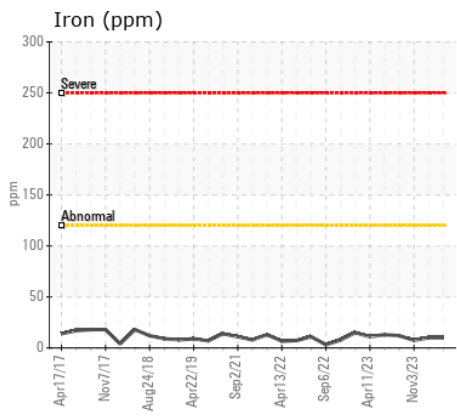
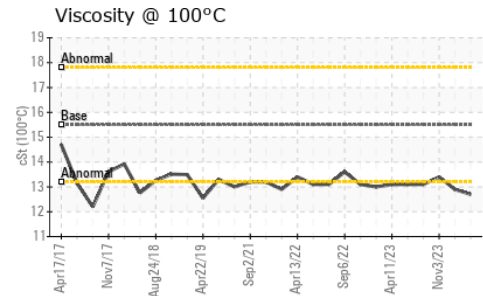
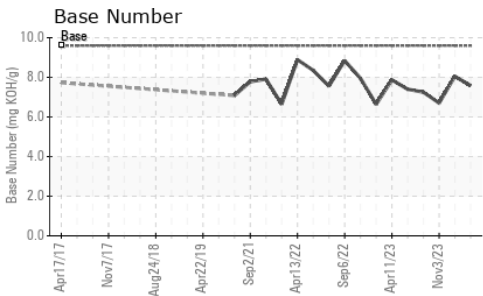
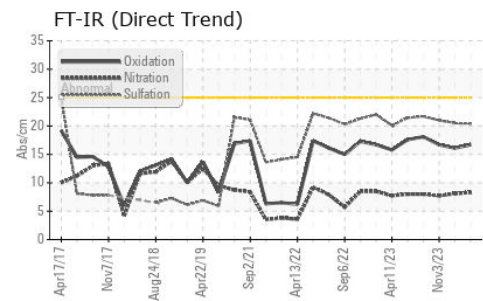
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	4	7
Potassium	ppm	ASTM D5185(m)	>20	0	<1	0
Fuel		WC Method	>3.0	<1.0	2.8	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.4	0.5	0.5
Nitration	Abs/cm	ASTM D7624*	>20	8.3	8.1	7.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.4	20.5	21.0
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)		4	4	2
Boron	ppm	ASTM D5185(m)	1	3	2	3
Barium	ppm	ASTM D5185(m)	1	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	55	57	56
Manganese	ppm	ASTM D5185(m)	1	0	0	0
Magnesium	ppm	ASTM D5185(m)	1010	906	903	900
Calcium	ppm	ASTM D5185(m)	1070	991	1044	1020
Phosphorus	ppm	ASTM D5185(m)	1150	904	950	928
Zinc	ppm	ASTM D5185(m)	1270	1108	1164	1110
Sulfur	ppm	ASTM D5185(m)	2060	2125	2501	2317
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.7	16.1	16.7
Base Number (BN)	mg KOH/g	ASTM D2896*	9.6	7.58	8.05	6.70
Visc @ 100°C	cSt	ASTM D7279(m)	15.5	12.7	12.9	13.4



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0117278
Lab Number : 02630888
Unique Number : 5772041
Test Package : MOB 2

Received : 23 Apr 2024
Tested : 23 Apr 2024
Diagnosed : 23 Apr 2024 - Kevin Marson

GFL Environmental - 550 - Rocky View County
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 Rocky View County, AB
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 Contact: GFL Calgary
 calgarymaintenance@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.