



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
901072
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0111785	GFL0111775	GFL0101684
Sample Date		Client Info		15 Jun 2024	08 Mar 2024	28 Dec 2023
Machine Age	hrs	Client Info		13390	12860	12431
Oil Age	hrs	Client Info		530	600	0
Filter Age	hrs	Client Info		530	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>75	36	34	13
Chromium	ppm	ASTM D5185(m)	>5	2	1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	<1	0	<1
Aluminum	ppm	ASTM D5185(m)	>15	7	9	2
Lead	ppm	ASTM D5185(m)	>25	0	0	2
Copper	ppm	ASTM D5185(m)	>100	1	1	<1
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

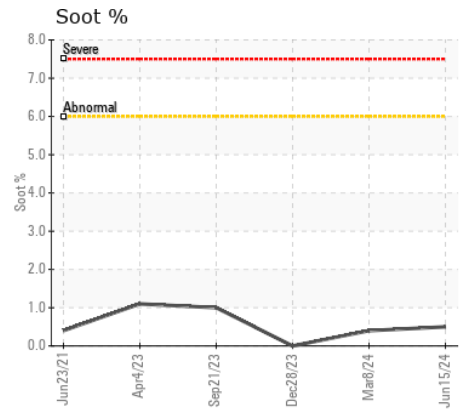
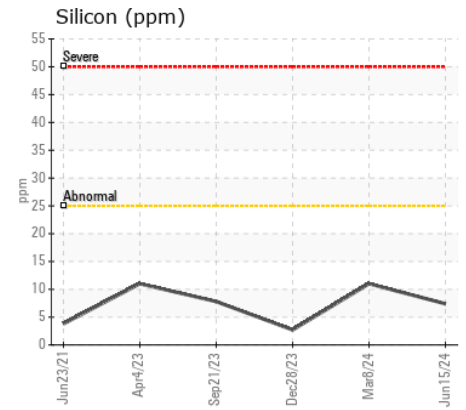
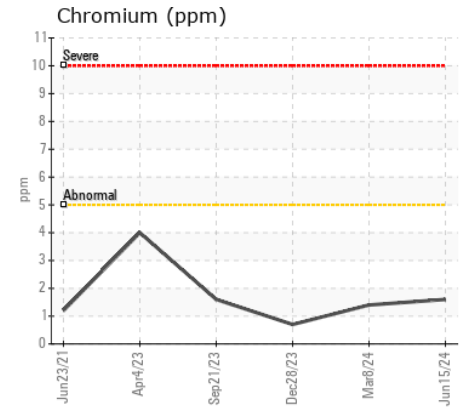
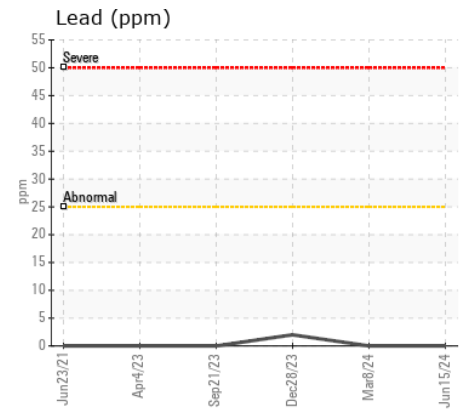
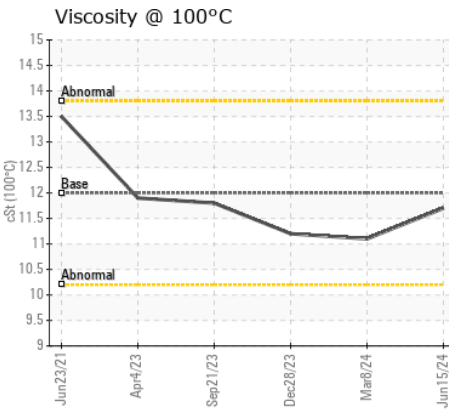
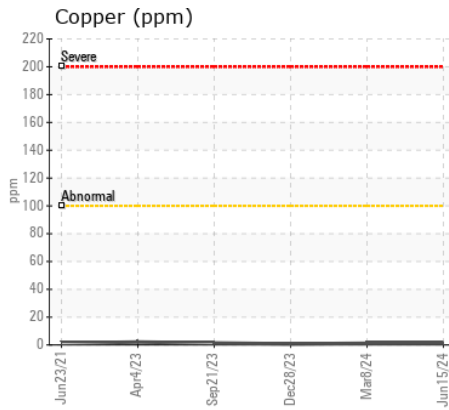
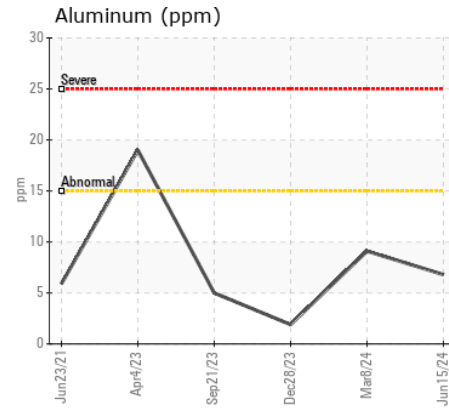
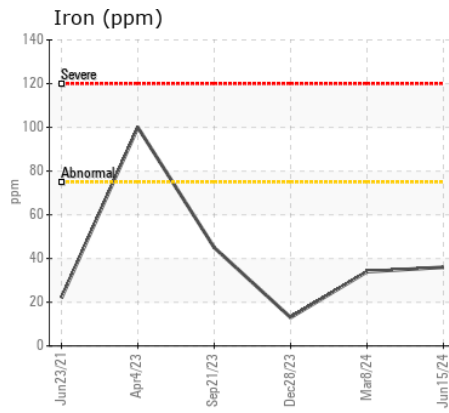
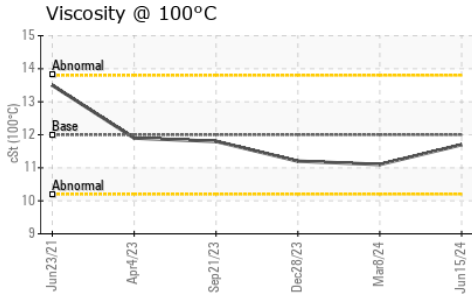
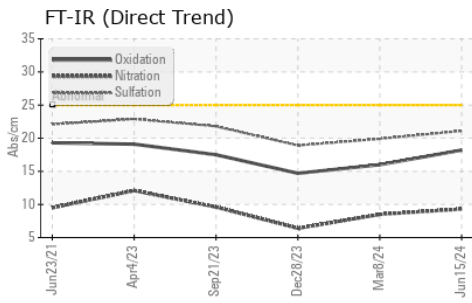
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	7	11	3
Potassium	ppm	ASTM D5185(m)	>20	10	1	3
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>6	0.5	0.4	0
Nitration	Abs/cm	ASTM D7624*	>20	9.3	8.5	6.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.1	19.9	18.9
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	5	3
Boron	ppm	ASTM D5185(m)	2	5	6	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	61	61	59
Manganese	ppm	ASTM D5185(m)	0	<1	0	0
Magnesium	ppm	ASTM D5185(m)	950	986	985	972
Calcium	ppm	ASTM D5185(m)	1050	1090	1082	1068
Phosphorus	ppm	ASTM D5185(m)	995	973	989	992
Zinc	ppm	ASTM D5185(m)	1180	1198	1150	1186
Sulfur	ppm	ASTM D5185(m)	2600	2380	2506	2692
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.2	16.0	14.7
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.7	11.1	11.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0111785
Lab Number : 02643993
Unique Number : 5801532
Test Package : MOB 1
Received : 25 Jun 2024
Tested : 25 Jun 2024
Diagnosed : 25 Jun 2024 - Wes Davis

GFL Environmental - 557 - Edson
 6615 - 4th Ave,
 Edson, AB
 CA T7E 1M5
 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.