

Machine Id
801030
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (19 LTR)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0122325	GFL0117914	GFL0107150
Sample Date		Client Info		27 Jun 2024	04 Apr 2024	10 Jan 2024
Machine Age	kms	Client Info		102796	12582	102796
Oil Age	kms	Client Info		0	600	0
Filter Age	kms	Client Info		0	600	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	47	33	31
Chromium	ppm	ASTM D5185(m)	>20	2	1	1
Nickel	ppm	ASTM D5185(m)	>4	<1	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	3	2	3
Lead	ppm	ASTM D5185(m)	>40	0	0	<1
Copper	ppm	ASTM D5185(m)	>330	1	<1	1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

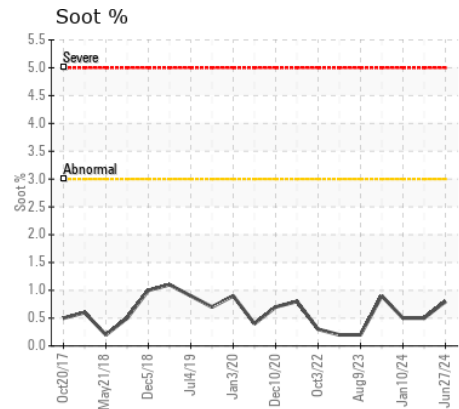
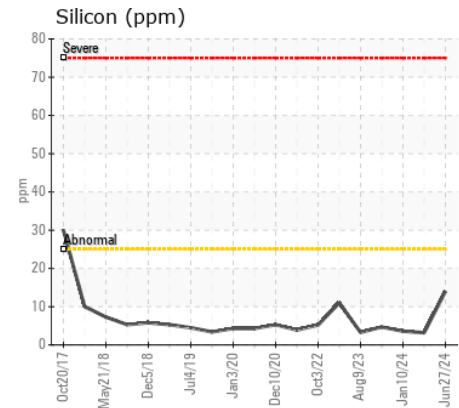
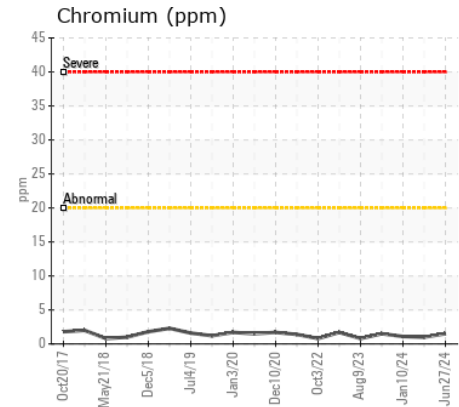
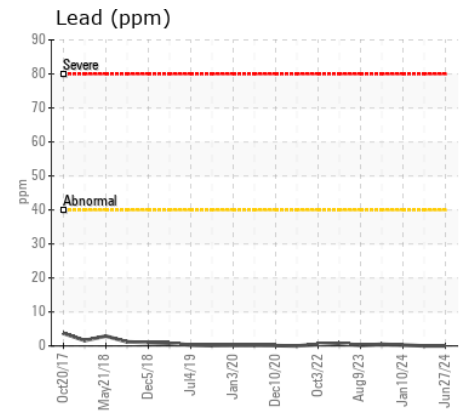
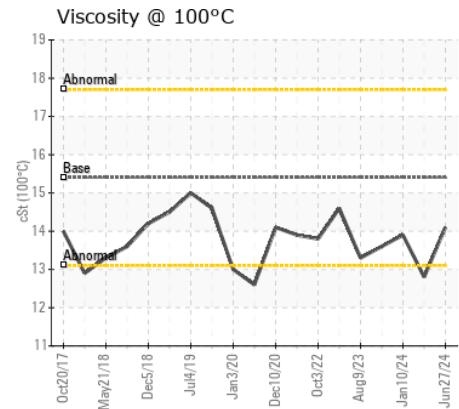
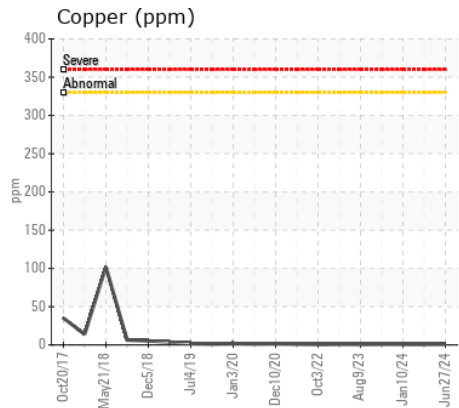
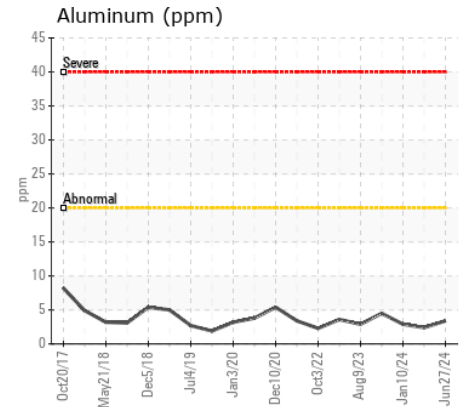
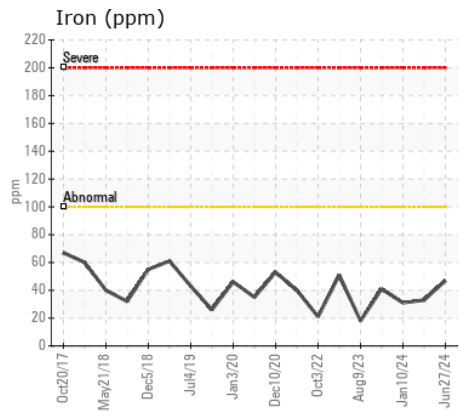
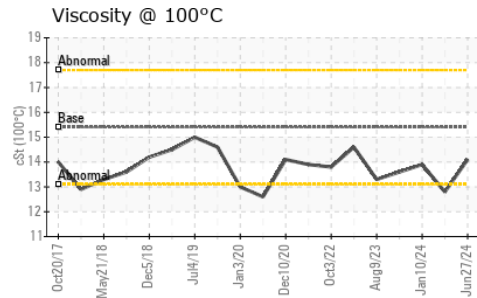
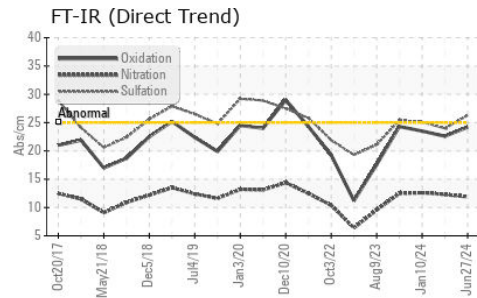
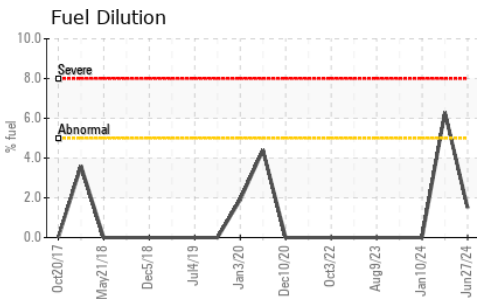
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>25	14	3	4
Potassium	ppm	ASTM D5185(m)	>20	2	2	2
Fuel	%	ASTM D7593*	>5	1.5	▲ 6.3	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.8	0.5	0.5
Nitration	Abs/cm	ASTM D7624*	>20	11.9	12.3	12.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.3	24.0	25.1
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)		10	7	8
Boron	ppm	ASTM D5185(m)	0	43	7	11
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	75	61	62
Manganese	ppm	ASTM D5185(m)	0	<1	<1	0
Magnesium	ppm	ASTM D5185(m)	1010	784	968	958
Calcium	ppm	ASTM D5185(m)	1070	1259	1061	1116
Phosphorus	ppm	ASTM D5185(m)	1150	1043	972	1020
Zinc	ppm	ASTM D5185(m)	1270	1289	1192	1209
Sulfur	ppm	ASTM D5185(m)	2060	2458	2293	2481
Oxidation	Abs/.1mm	ASTM D7414*	>25	24.2	22.6	23.5
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.1	▲ 12.8	13.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0122325 **Received** : 03 Jul 2024
Lab Number : 02645166 **Tested** : 04 Jul 2024
Unique Number : 5802705 **Diagnosed** : 04 Jul 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: PercentFuel)

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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.