

Machine Id
401134
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		GFL0096827	GFL0073053	GFL0073073
Sample Date		Client Info		07 Jun 2024	21 Apr 2023	14 Feb 2023
Machine Age	hrs	Client Info		0	4456	3260
Oil Age	hrs	Client Info		0	600	600
Filter Age	hrs	Client Info		0	600	600
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	33	16	31
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		<1	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	3	1	2
Lead	ppm	ASTM D5185(m)	>40	0	0	0
Copper	ppm	ASTM D5185(m)	>330	1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

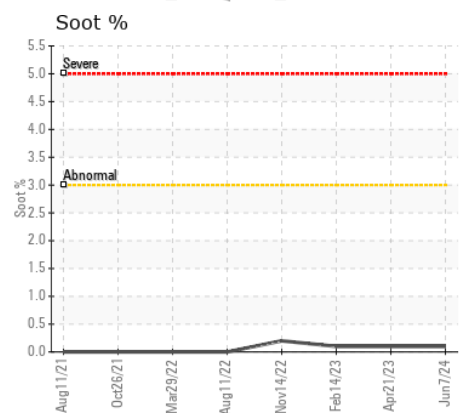
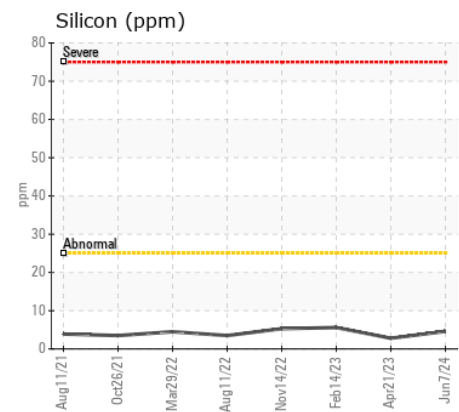
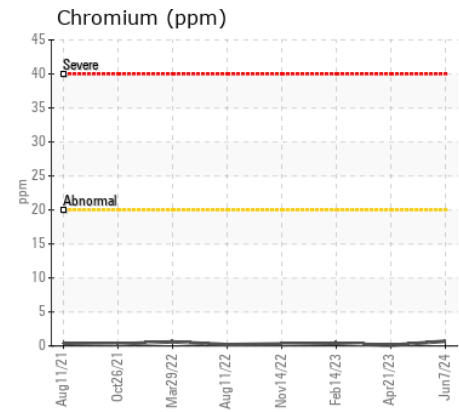
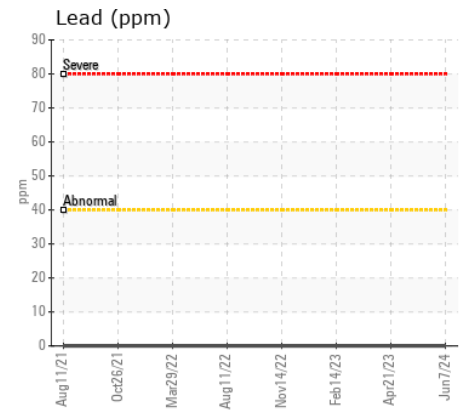
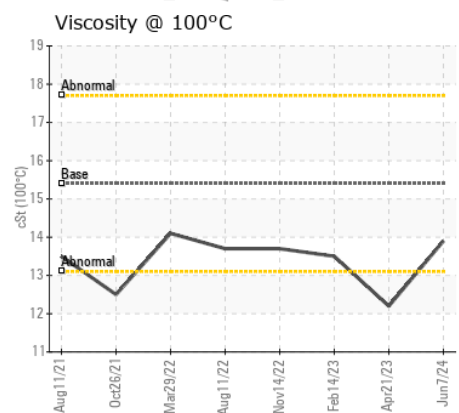
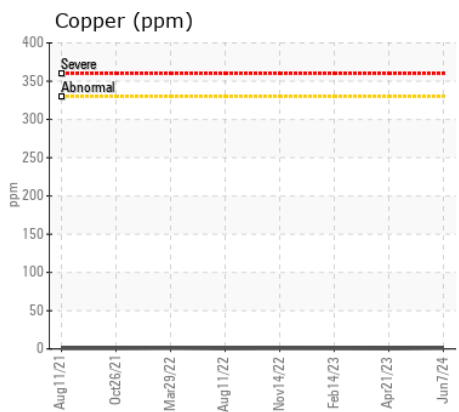
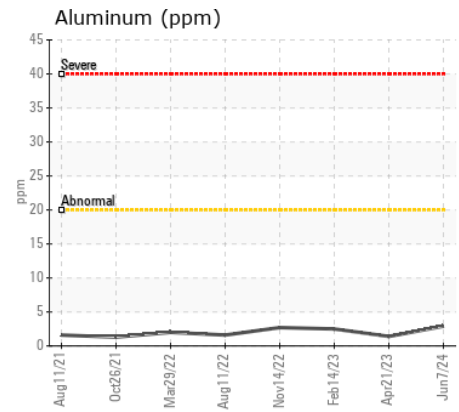
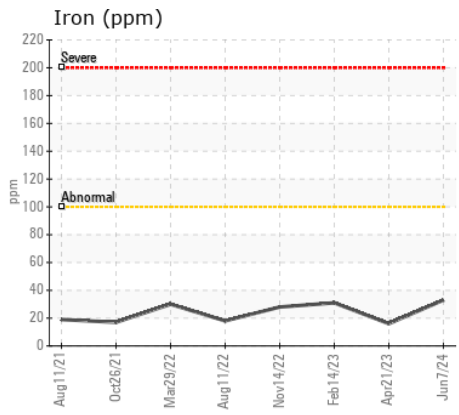
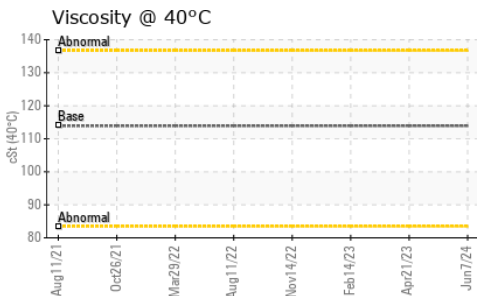
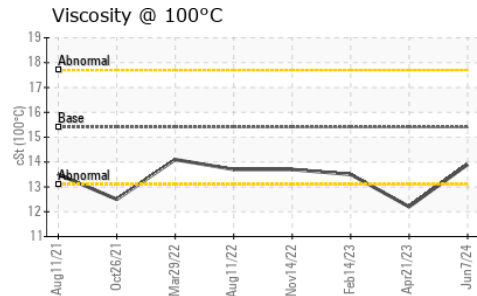
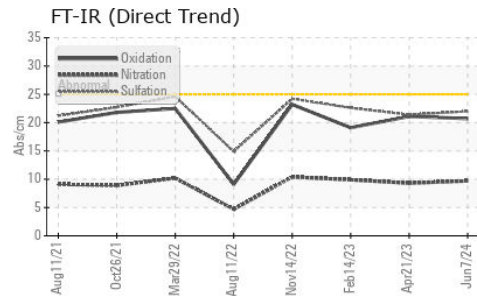
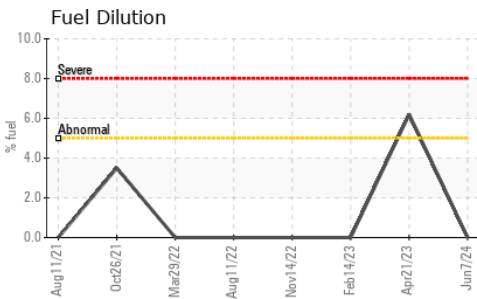
Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	3	6
Potassium	ppm	ASTM D5185(m)	>20	1	0	3
Fuel	%	ASTM D7593*	>5	0.0	▲ 6.2	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.1	0.1	0.1
Nitration	Abs/cm	ASTM D7624*	>20	9.7	9.3	9.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.0	21.4	22.6
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	VLITE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
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)		2	2	3
Boron	ppm	ASTM D5185(m)	0	3	4	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	62	57	59
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	996	916	939
Calcium	ppm	ASTM D5185(m)	1070	1130	1026	1081
Phosphorus	ppm	ASTM D5185(m)	1150	971	1004	997
Zinc	ppm	ASTM D5185(m)	1270	1255	1126	1170
Sulfur	ppm	ASTM D5185(m)	2060	2285	2339	2410
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.7	21.1	19.1
Visc @ 40°C	cSt	ASTM D7279(m)	113.9	103	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.9	▲ 12.2	13.5
Viscosity Index (VI)	Scale	ASTM D2270*	142	136	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0096827
Lab Number : 02642262
Unique Number : 5799801
Test Package : MOB 1 (Additional Tests: KV40, PercentFuel, VI, Visual)
Received : 17 Jun 2024
Tested : 18 Jun 2024
Diagnosed : 18 Jun 2024 - Wes Davis
 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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