



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Machine Id
5592

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (--- LTR)

RECOMMENDATION

Check for low coolant level. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0118979	GFL0102616	GFL0101695
Sample Date		Client Info		03 Jun 2024	06 Mar 2024	19 Dec 2023
Machine Age	hrs	Client Info		1186586	27612	27049
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				ATTENTION	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	10	11	8
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
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	0
Aluminum	ppm	ASTM D5185(m)	>20	2	3	3
Lead	ppm	ASTM D5185(m)	>40	1	0	<1
Copper	ppm	ASTM D5185(m)	>330	2	4	2
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

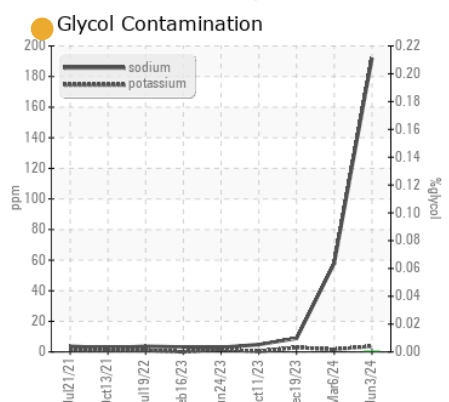
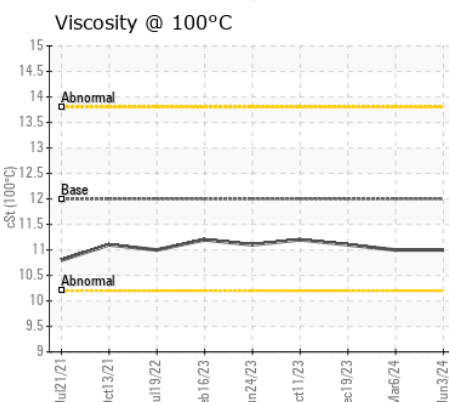
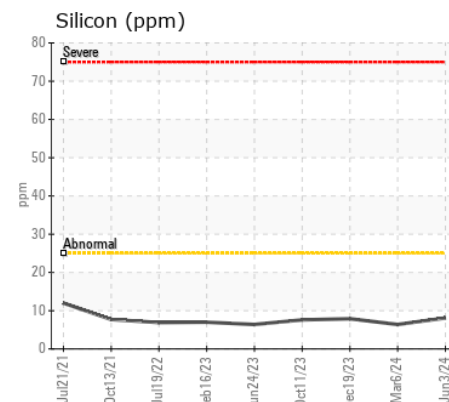
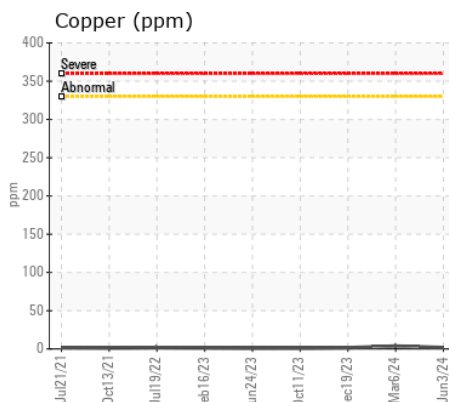
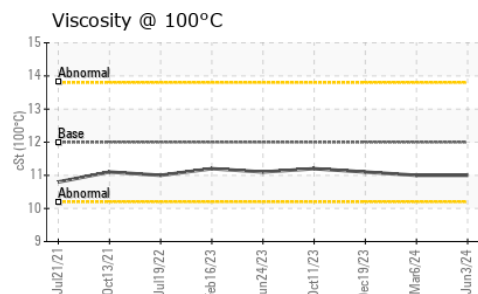
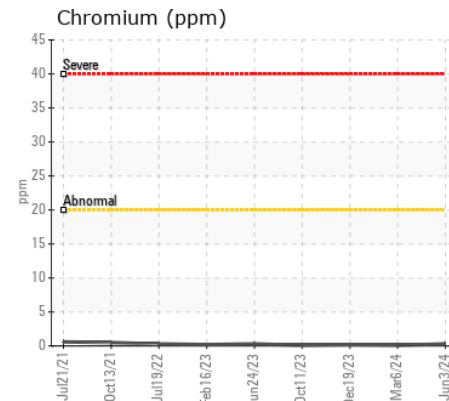
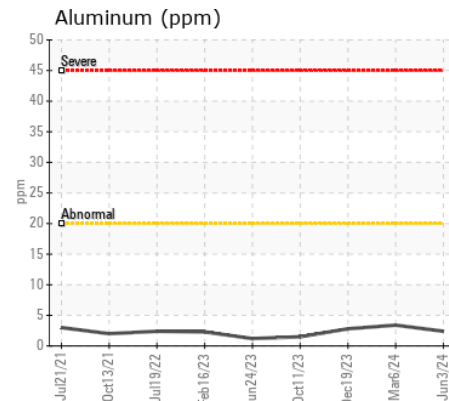
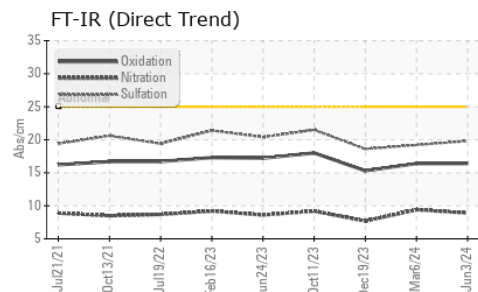
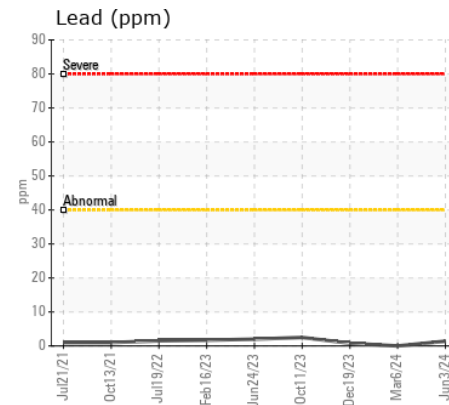
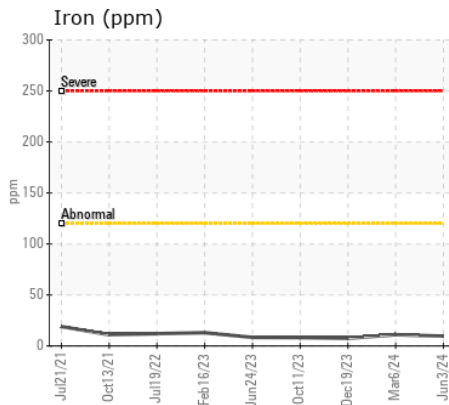
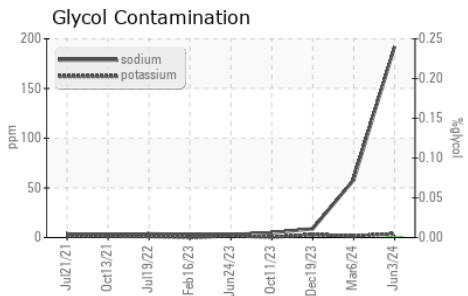
Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	8	6	8
Potassium	ppm	ASTM D5185(m)	>20	4	2	3
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.1	0.2	0.1
Nitration	Abs/cm	ASTM D7624*	>20	8.9	9.4	7.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.8	19.2	18.6
Silt	scalar	Visual*	NONE	VLITE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
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 (see recommendation).

Sodium	ppm	ASTM D5185(m)		192	58	9
Boron	ppm	ASTM D5185(m)	2	2	0	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	67	61	58
Manganese	ppm	ASTM D5185(m)	0	<1	0	0
Magnesium	ppm	ASTM D5185(m)	950	920	983	949
Calcium	ppm	ASTM D5185(m)	1050	1035	1047	1041
Phosphorus	ppm	ASTM D5185(m)	995	990	988	983
Zinc	ppm	ASTM D5185(m)	1180	1158	1178	1146
Sulfur	ppm	ASTM D5185(m)	2600	2436	2440	2593
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.4	16.4	15.3
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.0	11.0	11.1



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0118979 **Received** : 19 Jun 2024
Lab Number : 02642756 **Tested** : 19 Jun 2024
Unique Number : 5800295 **Diagnosed** : 20 Jun 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: Glycol, Visual)

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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.