



Machine Id
512008
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (37 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0108183	GFL0084222	GFL0060971
Sample Date		Client Info		26 Feb 2024	28 Aug 2023	03 Oct 2022
Machine Age	kms	Client Info		244374	190359	49935
Oil Age	kms	Client Info		0	60000	0
Filter Age	kms	Client Info		0	60000	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	25	16	51
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	1	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	3	1	18
Lead	ppm	ASTM D5185(m)	>40	2	2	12
Copper	ppm	ASTM D5185(m)	>330	13	12	350
Tin	ppm	ASTM D5185(m)	>15	1	1	8
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

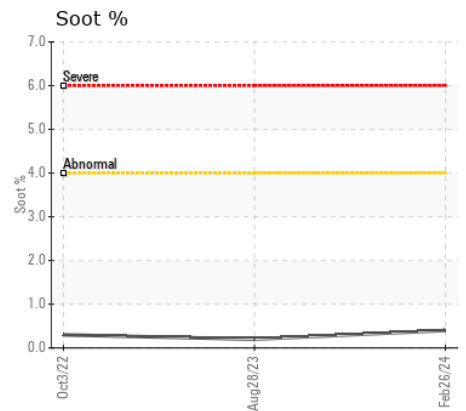
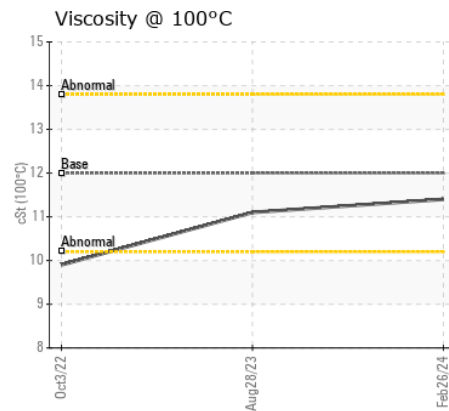
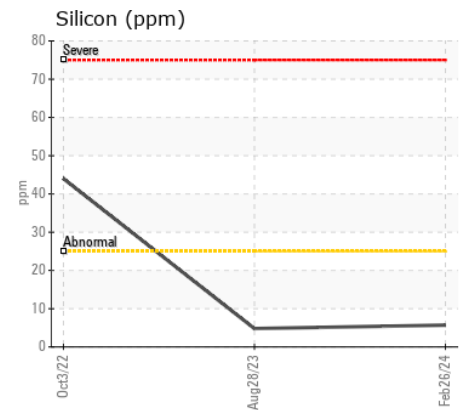
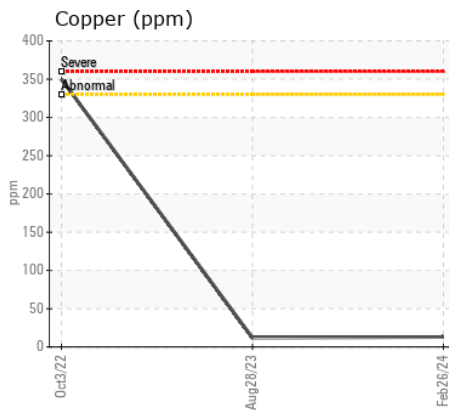
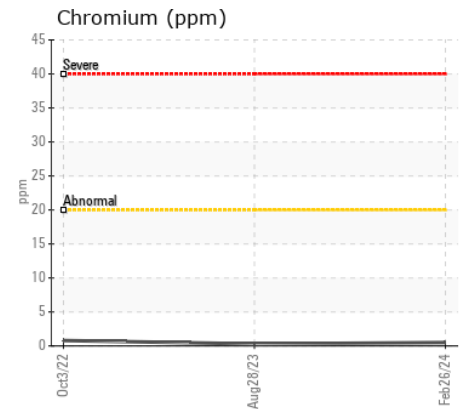
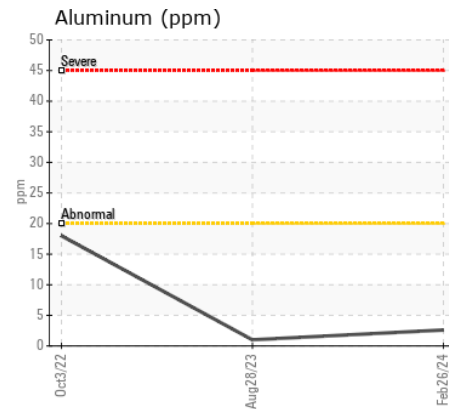
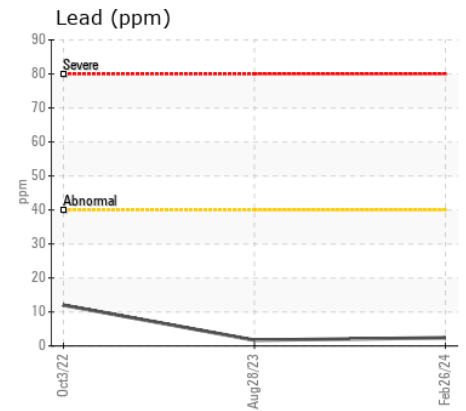
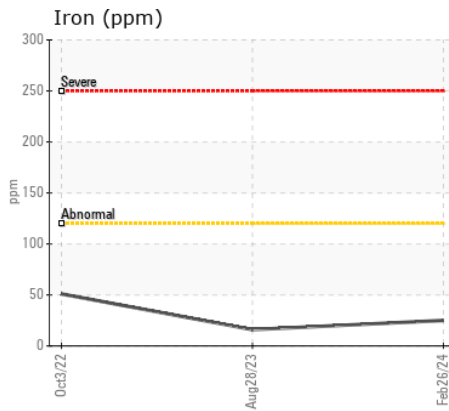
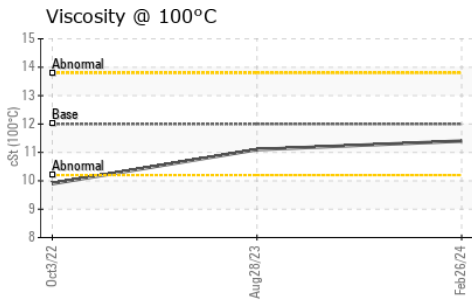
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	6	5	44
Potassium	ppm	ASTM D5185(m)	>20	2	<1	47
Fuel		WC Method	>3.0	<1.0	<1.0	0.7
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.4	0.2	0.3
Nitration	Abs/cm	ASTM D7624*	>20	11.4	9.4	12.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.5	22.7	25.3
Silt	scalar	Visual*	NONE	NONE	---	---
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.

Sodium	ppm	ASTM D5185(m)		2	2	4
Boron	ppm	ASTM D5185(m)	2	3	4	41
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	50	64	64	128
Manganese	ppm	ASTM D5185(m)	0	<1	<1	6
Magnesium	ppm	ASTM D5185(m)	950	982	976	717
Calcium	ppm	ASTM D5185(m)	1050	1172	1147	1617
Phosphorus	ppm	ASTM D5185(m)	995	930	984	715
Zinc	ppm	ASTM D5185(m)	1180	1223	1197	768
Sulfur	ppm	ASTM D5185(m)	2600	2412	2340	1838
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.3	18.0	25.9
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.4	11.1	9.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0108183 **Received** : 28 Feb 2024
Lab Number : 02618576 **Tested** : 28 Feb 2024
Unique Number : 5735686 **Diagnosed** : 28 Feb 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: 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.