

Machine Id
801189
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (20 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		GFL0110722	GFL0085672	GFL0077305
Sample Date		Client Info		06 Mar 2024	11 Oct 2023	17 Jul 2023
Machine Age	hrs	Client Info		8322	8322	8322
Oil Age	hrs	Client Info		8322	8322	8322
Filter Age	hrs	Client Info		8322	8322	8322
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	15	12	18
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	3	1	2
Lead	ppm	ASTM D5185(m)	>40	0	0	0
Copper	ppm	ASTM D5185(m)	>330	3	2	2
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.

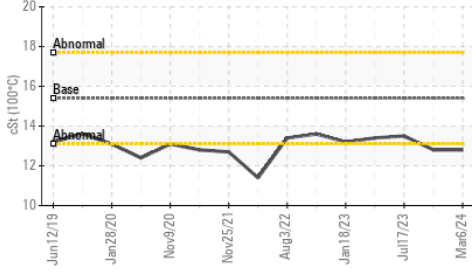
Silicon	ppm	ASTM D5185(m)	>25	4	5	6
Potassium	ppm	ASTM D5185(m)	>20	4	<1	1
Fuel	%	ASTM D7593*	>5	▲ 3.7	▲ 2.4	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.3	0.2	0.3
Nitration	Abs/cm	ASTM D7624*	>20	9.2	8.8	9.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.7	19.7	20.3
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

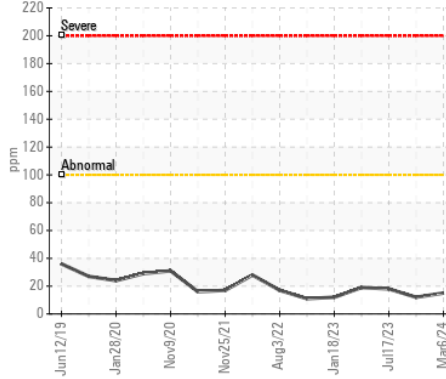
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		1	1	1
Boron	ppm	ASTM D5185(m)	0	2	2	2
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	55	57	57
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	889	923	941
Calcium	ppm	ASTM D5185(m)	1070	982	1024	1023
Phosphorus	ppm	ASTM D5185(m)	1150	933	938	1013
Zinc	ppm	ASTM D5185(m)	1270	1101	1171	1170
Sulfur	ppm	ASTM D5185(m)	2060	2391	2361	2402
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.9	16.3	17.1
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ 12.8	▲ 12.8	13.5

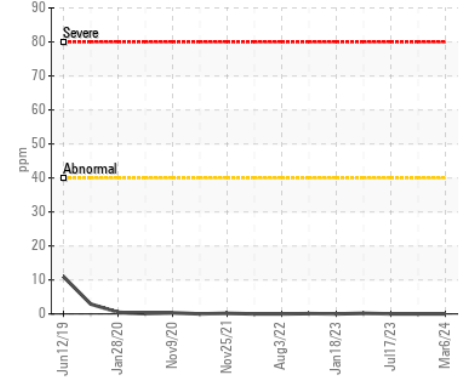
▲ Viscosity @ 100°C



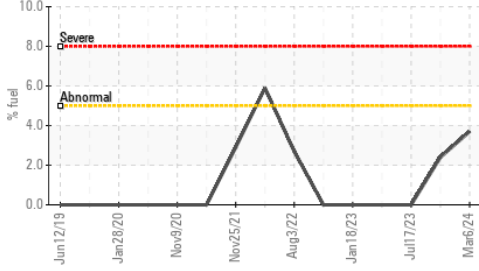
Iron (ppm)



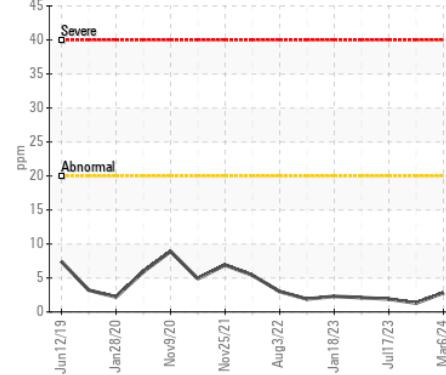
Lead (ppm)



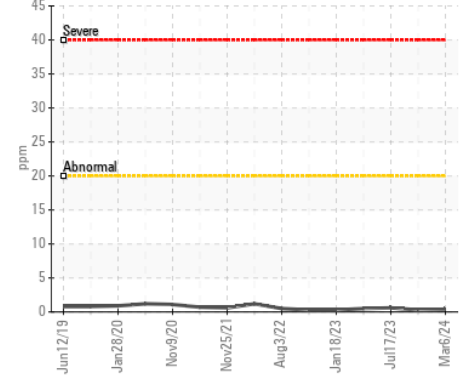
▲ Fuel Dilution



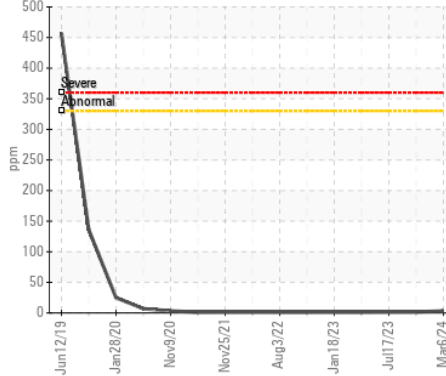
Aluminum (ppm)



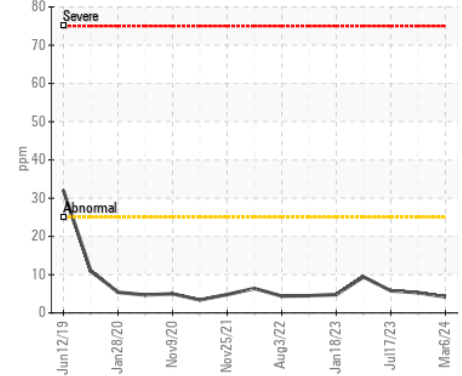
Chromium (ppm)



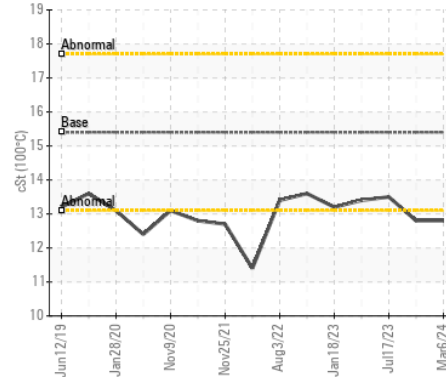
Copper (ppm)



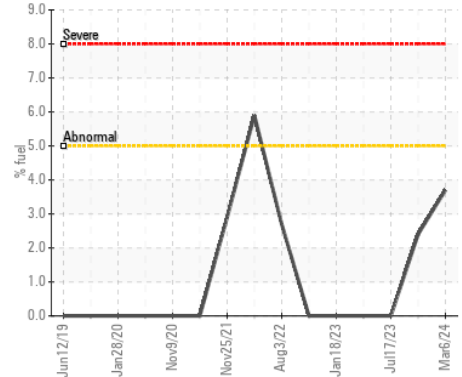
Silicon (ppm)



▲ Viscosity @ 100°C



▲ Fuel Dilution



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0110722 **Received** : 08 Mar 2024
Lab Number : 02620796 **Tested** : 12 Mar 2024
Unique Number : 5737906 **Diagnosed** : 12 Mar 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: FUELDILUTION, PercentFuel)

GFL Environmental - 221 - Windsor
 905 Tecumseh Road W
 Windsor, ON
 CA N8W 4J5
 Contact: Rhys Marotte
 rmarotte@gflenv.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.

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