



WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL



Machine Id
7982
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (19 LTR)

RECOMMENDATION

The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. 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		GFL0107158	WC0875083	GFL0086484
Sample Date		Client Info		27 Dec 2023	10 Nov 2023	18 Jul 2023
Machine Age	hrs	Client Info		11596	11088	0
Oil Age	hrs	Client Info		600	568	0
Filter Age	hrs	Client Info		0	568	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				MARGINAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	16	33	30
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>30	4	3	3
Lead	ppm	ASTM D5185(m)	>30	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>150	<1	1	1
Tin	ppm	ASTM D5185(m)	>5	0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

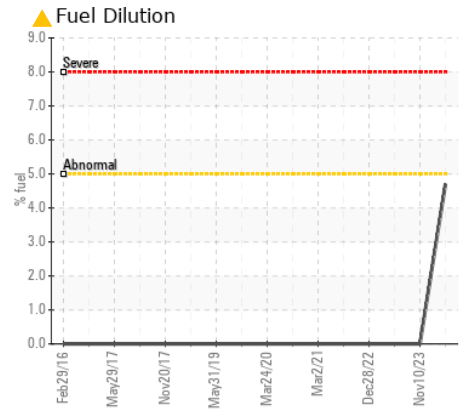
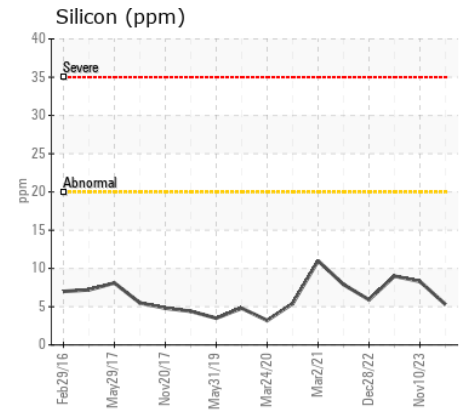
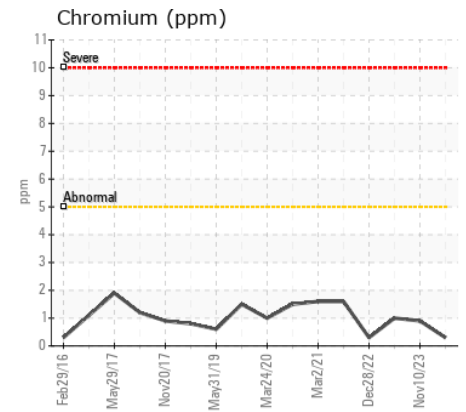
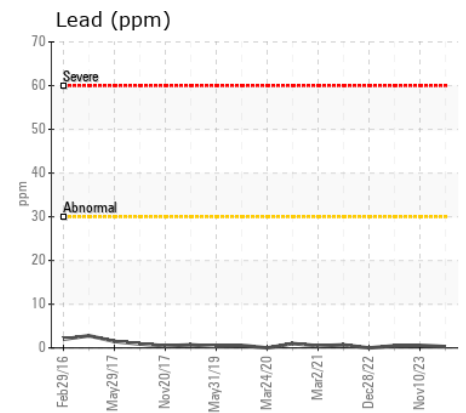
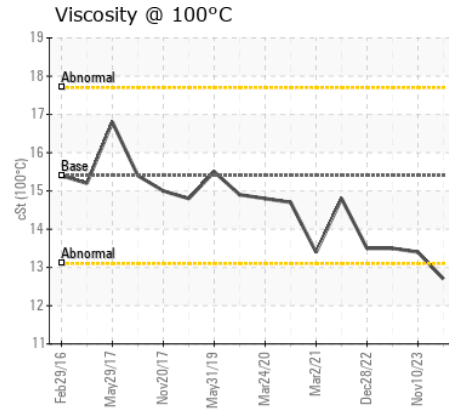
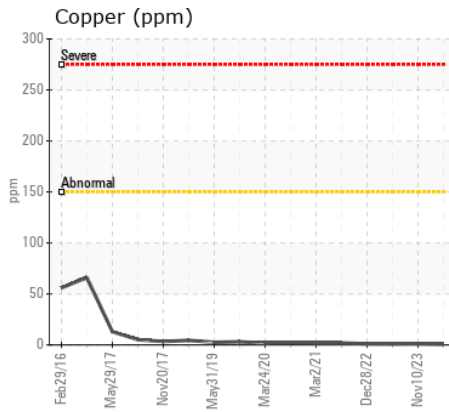
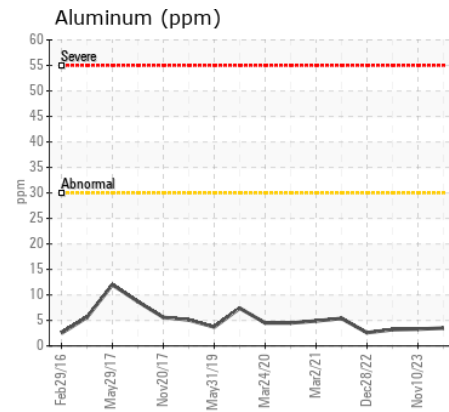
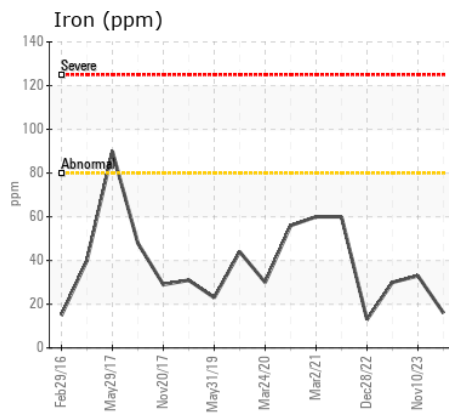
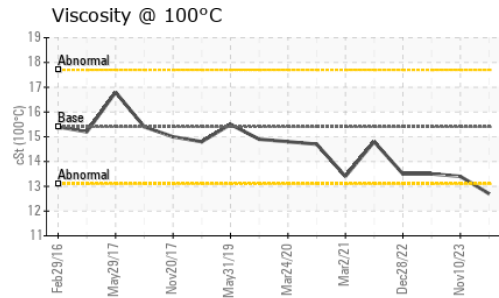
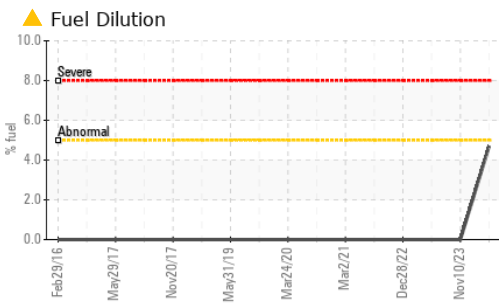
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>20	5	8	9
Potassium	ppm	ASTM D5185(m)	>20	0	1	2
Fuel	%	ASTM D7593*	>5	▲ 4.7	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.4	0.8	0.7
Nitration	Abs/cm	ASTM D7624*	>20	9.1	11.3	11.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.5	24.1	24.3
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		6	9	9
Boron	ppm	ASTM D5185(m)	0	210	5	5
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	77	64	61
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	466	988	969
Calcium	ppm	ASTM D5185(m)	1070	1254	1076	1059
Phosphorus	ppm	ASTM D5185(m)	1150	966	1003	1031
Zinc	ppm	ASTM D5185(m)	1270	1146	1229	1176
Sulfur	ppm	ASTM D5185(m)	2060	2597	2354	2380
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.4	21.5	21.9
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	12.7	13.4	13.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0107158 **Received** : 04 Jan 2024
Lab Number : 02606482 **Diagnosed** : 05 Jan 2024
Unique Number : 5707568 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, 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.