



Machine Id
9105
Component
Front Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (27 LTR)

RECOMMENDATION

We advise that you check for the source of the coolant leak. 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		GFL0112427	GFL0099592	GFL0077579
Sample Date		Client Info		19 Feb 2024	30 Nov 2023	25 Apr 2023
Machine Age	hrs	Client Info		24533	573073	541984
Oil Age	hrs	Client Info		317	0	541984
Filter Age	hrs	Client Info		317	0	541984
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>75	31	48	27
Chromium	ppm	ASTM D5185(m)	>5	2	3	1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>15	7	5	10
Lead	ppm	ASTM D5185(m)	>25	<1	2	<1
Copper	ppm	ASTM D5185(m)	>100	1	2	1
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

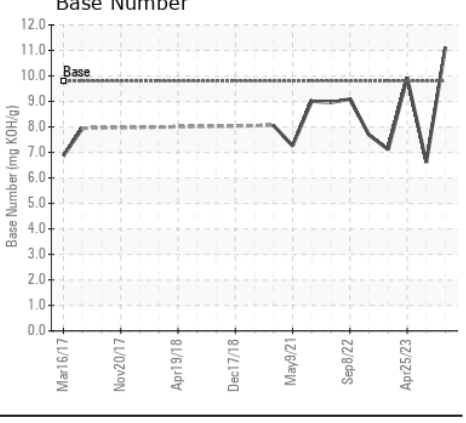
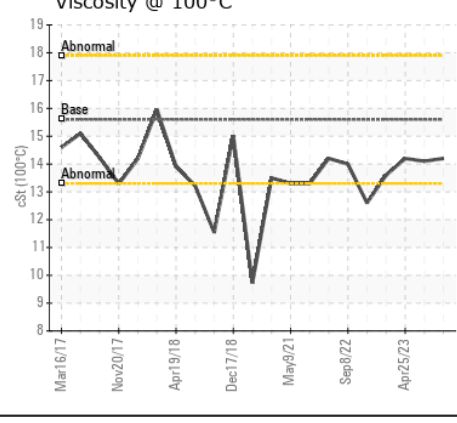
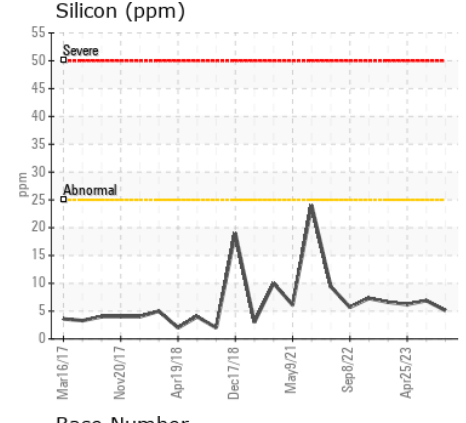
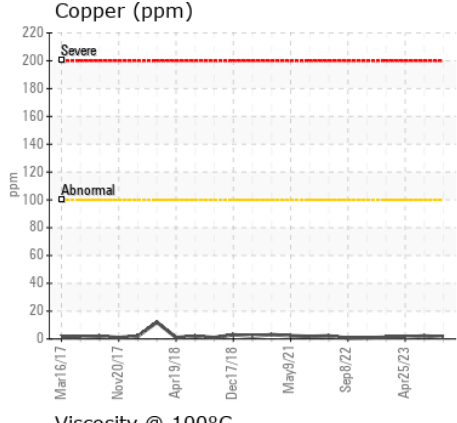
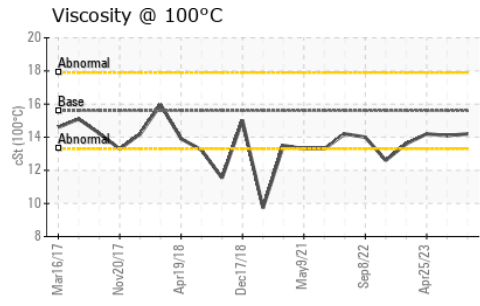
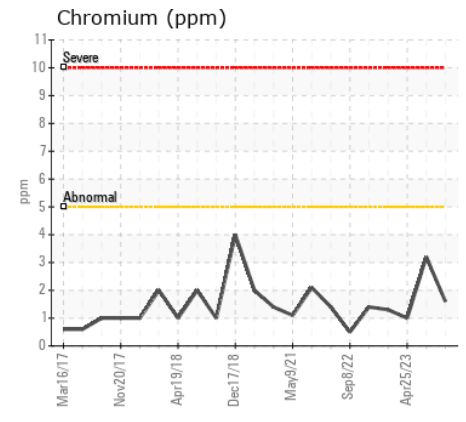
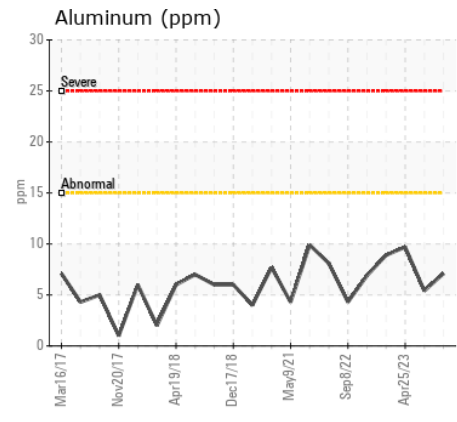
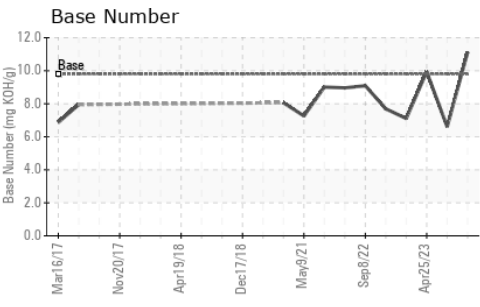
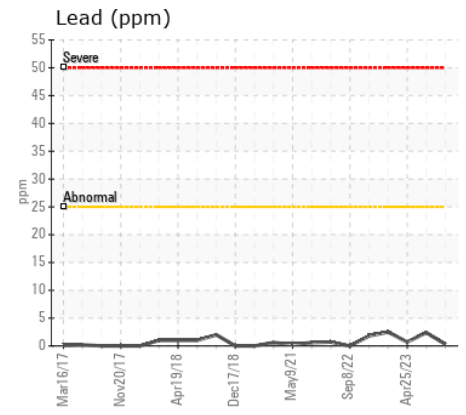
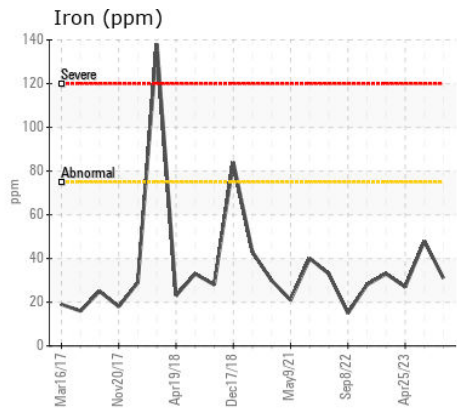
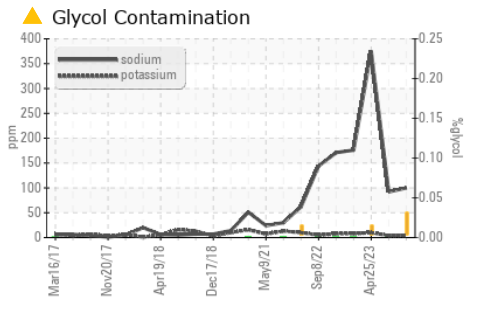
Test for glycol is positive. There is a light concentration of glycol present in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	7	6
Potassium	ppm	ASTM D5185(m)	>20	4	4	▲ 10
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		▲ 0.031	0.0	▲ 0.016
Soot %	%	ASTM D7844*	>6	0.9	1.3	0.6
Nitration	Abs/cm	ASTM D7624*	>20	9.6	12.1	9.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.3	24.8	20.9
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		● 100	92	● 375
Boron	ppm	ASTM D5185(m)	0	2	2	2
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	59	61	71
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	911	931	931
Calcium	ppm	ASTM D5185(m)	1070	1037	1030	1073
Phosphorus	ppm	ASTM D5185(m)	1150	970	918	1064
Zinc	ppm	ASTM D5185(m)	1270	1143	1164	1164
Sulfur	ppm	ASTM D5185(m)	2060	2579	2360	2527
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.6	21.9	16.0
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	11.12	6.61	9.93
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	14.2	14.1	14.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112427
Lab Number : 02618609
Unique Number : 5735719
Test Package : MOB 2 (Additional Tests: Glycol)
Received : 28 Feb 2024
Tested : 29 Feb 2024
Diagnosed : 29 Feb 2024 - Wes Davis

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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.