

Machine Id
0149
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (24 LTR)

RECOMMENDATION

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

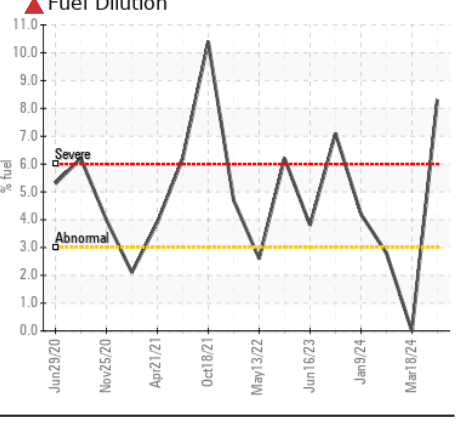
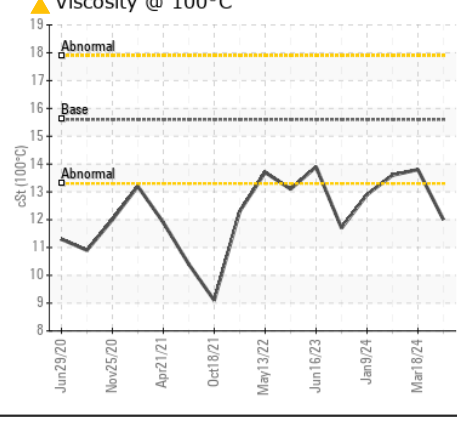
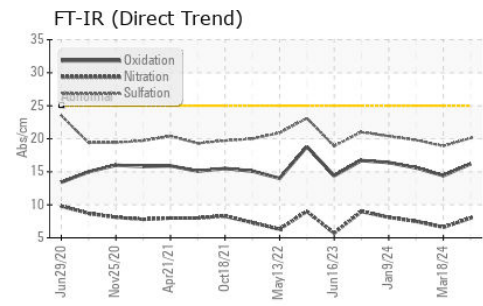
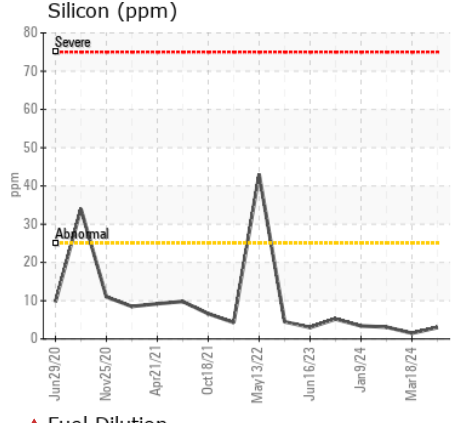
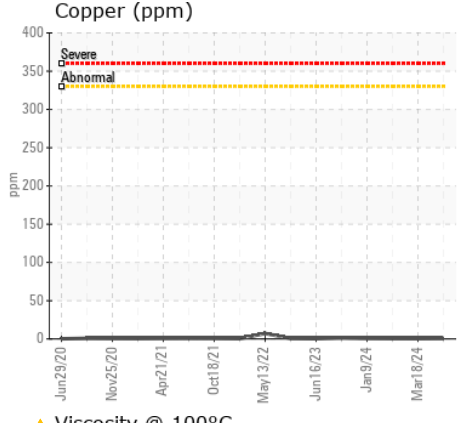
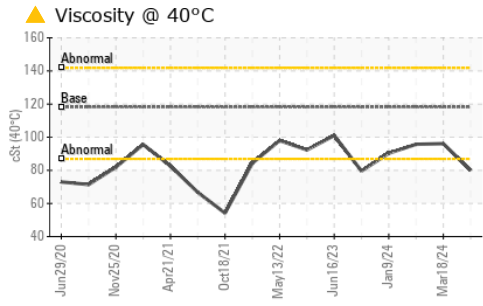
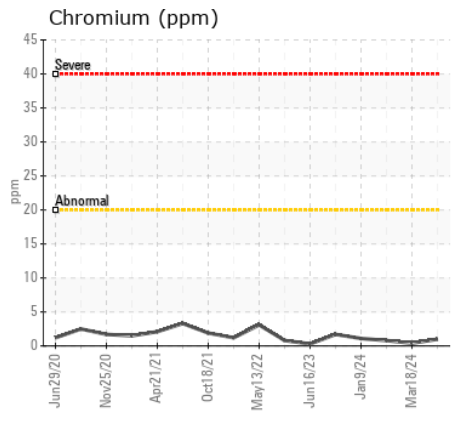
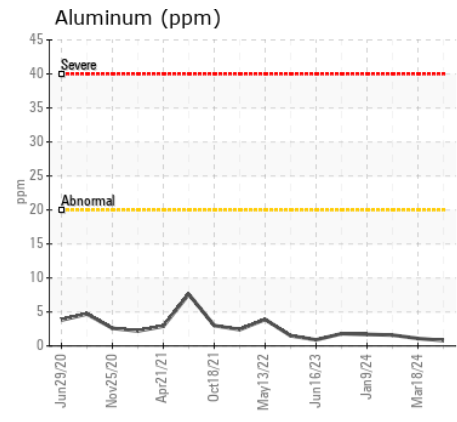
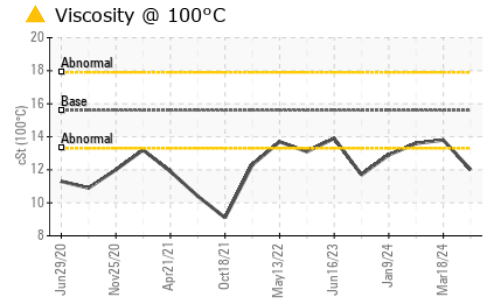
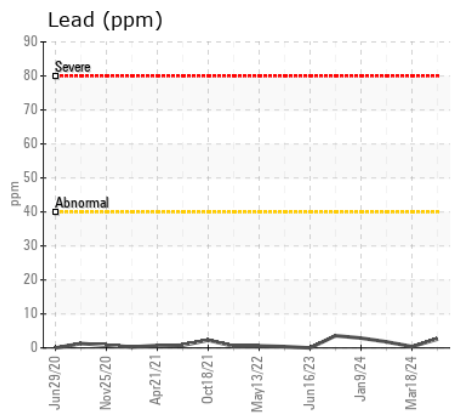
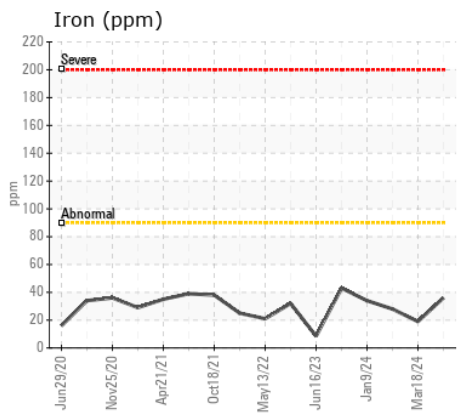
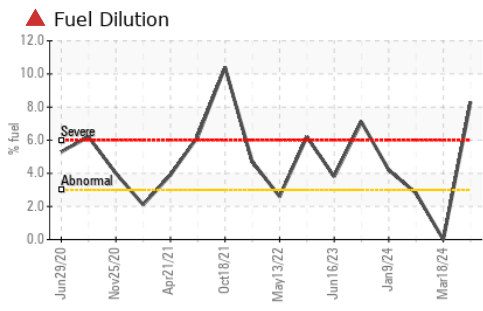
CONTAMINATION

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0078397	PC0080342	PC0082733
Sample Date		Client Info		27 May 2024	18 Mar 2024	07 Feb 2024
Machine Age	kms	Client Info		1164205	1150720	1144286
Oil Age	kms	Client Info		13400	16263	9829
Filter Age	kms	Client Info		13400	16263	9829
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				SEVERE	NORMAL	MARGINAL
Iron	ppm	ASTM D5185(m)	>90	36	19	28
Chromium	ppm	ASTM D5185(m)	>20	1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	0	<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	<1	1	2
Lead	ppm	ASTM D5185(m)	>40	3	<1	2
Copper	ppm	ASTM D5185(m)	>330	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	3	2	3
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Fuel	%	ASTM D7593*	>3.0	▲ 8.3	<1.0	▲ 2.8
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>6	0.5	0.2	0.4
Nitration	Abs/cm	ASTM D7624*	>20	8.0	6.6	7.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.1	18.9	19.8
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		6	4	4
Boron	ppm	ASTM D5185(m)	0	1	2	5
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	59	58	60
Manganese	ppm	ASTM D5185(m)	0	<1	<1	0
Magnesium	ppm	ASTM D5185(m)	1010	979	984	990
Calcium	ppm	ASTM D5185(m)	1070	1062	1083	1142
Phosphorus	ppm	ASTM D5185(m)	1150	996	969	1000
Zinc	ppm	ASTM D5185(m)	1270	1199	1167	1201
Sulfur	ppm	ASTM D5185(m)	2060	2279	2412	2574
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.2	14.4	15.6
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	▲ 80.0	96.1	95.7
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	▲ 12.0	13.8	13.6
Viscosity Index (VI)	Scale	ASTM D2270*	139	144	145	143



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0078397 **Received** : 05 Jun 2024
Lab Number : 02639827 **Tested** : 07 Jun 2024
Unique Number : 5788989 **Diagnosed** : 07 Jun 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, KV40, PercentFuel, VI)

Metrobus Transit
 25 Messenger Drive
 St. John's, NL
 CA A1B 0H6
 Contact: Danny Oliver
 danny.oliver@metrobus.com
 T: (709)570-2025
 F:

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.