

Machine Id
76
Component
Rear Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (--- GAL)

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		PC0083569	PC0071671	PC0071654
Sample Date		Client Info		17 May 2024	14 Dec 2023	25 May 2023
Machine Age	kms	Client Info		71528	64782	57766
Oil Age	kms	Client Info		8000	8000	8000
Filter Age	kms	Client Info		8000	8000	8000
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	MARGINAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>200	41	51	30
Chromium	ppm	ASTM D5185(m)	>20	6	9	2
Nickel	ppm	ASTM D5185(m)	>2	0	<1	0
Titanium	ppm	ASTM D5185(m)	>2	<1	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>30	3	6	2
Lead	ppm	ASTM D5185(m)	>30	3	5	3
Copper	ppm	ASTM D5185(m)	>30	1	2	1
Tin	ppm	ASTM D5185(m)	>15	2	4	1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

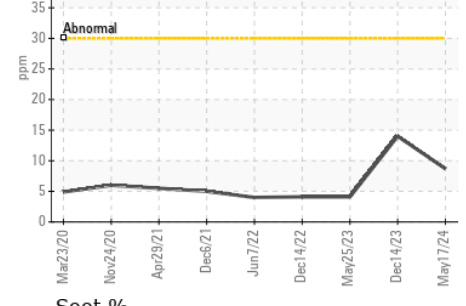
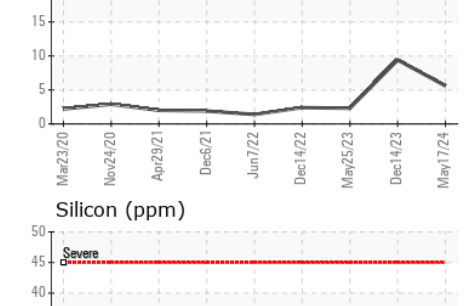
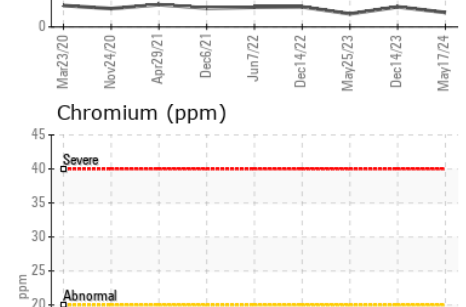
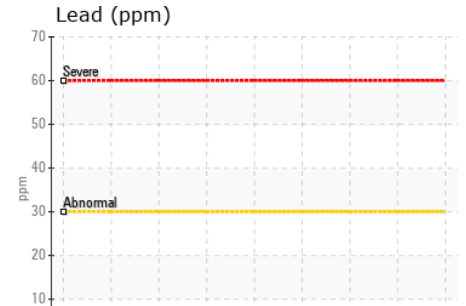
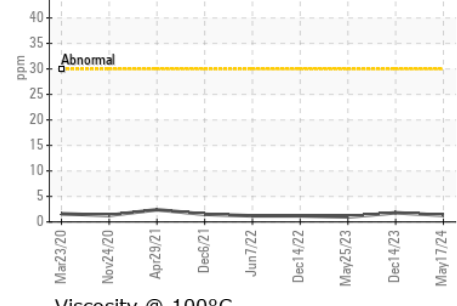
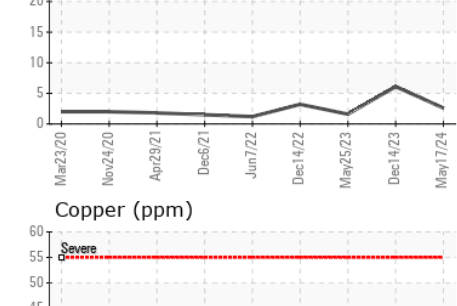
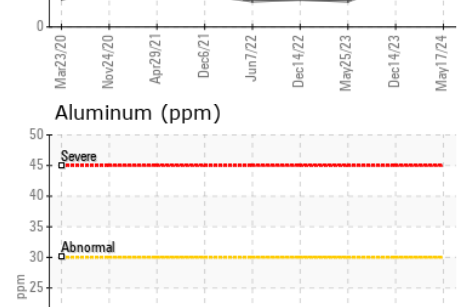
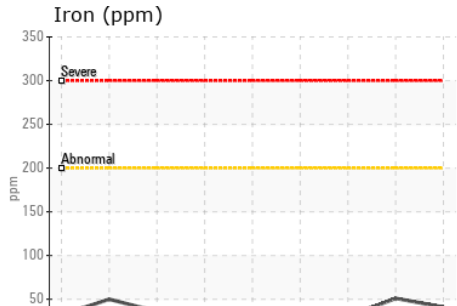
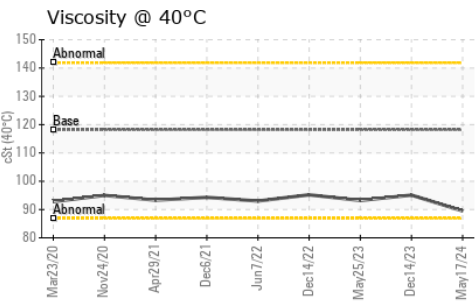
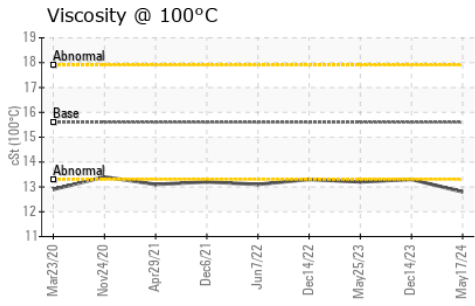
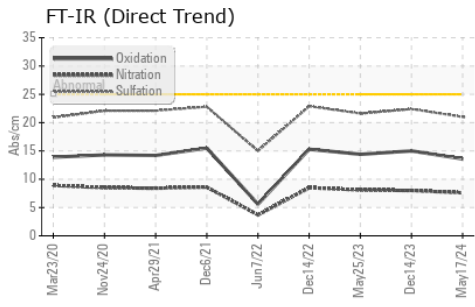
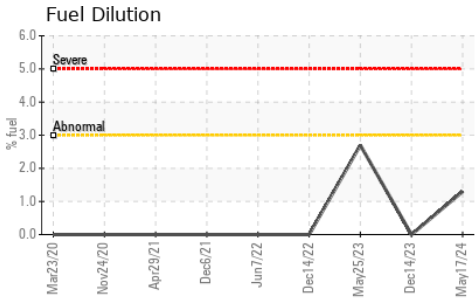
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>30	9	14	4
Potassium	ppm	ASTM D5185(m)	>20	<1	1	<1
Fuel	%	ASTM D7593*	>3.0	1.3	<1.0	▲ 2.7
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	1.5	2	1.8
Nitration	Abs/cm	ASTM D7624*	>20	7.6	8.0	8.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.0	22.4	21.6
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)		3	4	2
Boron	ppm	ASTM D5185(m)	0	8	3	2
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	59	59	58
Manganese	ppm	ASTM D5185(m)	0	<1	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	920	956	943
Calcium	ppm	ASTM D5185(m)	1070	1095	1085	1048
Phosphorus	ppm	ASTM D5185(m)	1150	972	1000	1058
Zinc	ppm	ASTM D5185(m)	1270	1142	1181	1162
Sulfur	ppm	ASTM D5185(m)	2060	2517	2590	2555
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.6	15.0	14.4
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	89.5	95.1	93.2
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	12.8	13.3	13.2
Viscosity Index (VI)	Scale	ASTM D2270*	139	140	139	140



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0083569 **Received** : 28 May 2024
Lab Number : **02637916** **Tested** : 29 May 2024
Unique Number : 5787078 **Diagnosed** : 29 May 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, KV40, PercentFuel, VI, Visual)
 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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